

## UBS Investment Research

## Asian Equities - Outlook 2009



5 December 2008

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Asian Equities Research

Global Equities Research

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## UBS's Asian Key Themes and Stock Picks

**■ A collection of our latest global, regional, country and sector views**

UBS equities research has launched a series of products globally titled *Outlook 2009*. UBS's team of strategists, economists and analysts in Asia outlines the key themes that are likely to drive markets, what may surprise on the upside or downside, and the catalysts for 2009.

**■ Uncertainties prevail, but 2009 should be better than 2008**

We believe 2009 could prove to be a better year for Asian equities than 2008. GDP growth trends and the outlook for corporate profit appear weak and will likely worsen before improving. But at close to book value, we think Asian equity valuations are already discounting much of the bad news. We believe Asian equities will reach a favourable inflection point and rally when credit conditions ease, followed by a bottoming out of the global growth cycle. Our economics team expects 4.9% GDP growth in 2009 and 6.3% in 2010 for Asia.

**■ Stock selection and alpha generation**

Asia ex-Japan equities have fallen 59.2% since the start of the year (down 63.1% from the peak on 29 October 2007), which could mark 2008 as the worst year in 40 years. While the near-term outlook remains unclear, we expect a move away from macro factors and towards stock selection as the year progresses. The UBS Asian research team identifies the most preferred and least preferred stocks in its universe, focusing on stocks that will likely generate alpha and drive outperformance in 2009.

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## Global Asset Allocation / Global Strategy

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UBS Investment Research

Global Asset Allocation - Outlook 2009

Outlook 2009

1 December 2008

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■ **What is in: Yield plays**

De-leveraging and disinflation will remain key themes in 2009. An important implication is a world of low nominal yields, probably extending into 2010. Consequently, corporate bonds will draw investor interest, particularly as financial conditions stabilize. Within equities, companies and sectors with robust margins and above-average operating RoE, cash flow, and dividends are likely to remain in favour over the investment horizon. At shorter intervals, all risk assets will benefit when extreme risk aversion recedes.

■ **What is out: REITs, commodities, cash**

Inflation and re-leveraging plays are unlikely to work well in 2009. As a result, we believe REITs and cyclical commodities will again under-perform. Fears that bond yields will rise due to massive new government issuance are likely to prove unfounded. Cash yields are deeply negative in real terms.

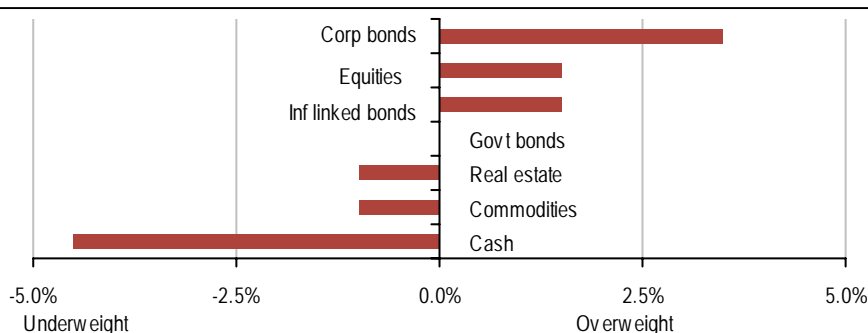
■ **Catalysts for stronger markets**

The catalysts for a durable reversal of market fortunes include: falling inter-bank, corporate, and mortgage interest rates, increased credit issuance, a slowing pace of US home price declines, and a bottoming of purchasing manager indices. Inflection points are likely to occur in H1 2009, but caution is warranted for now: Markets will have to overcome a 'tsunami' of bad economic and corporate earnings releases through early next year. Market recoveries are likely to be sporadic and uneven into early 2009.

■ **Revised allocations**

We retain our current overweight recommendation to corporate bonds and a smaller overweight to US equities. We'll be watching the aforementioned catalysts to extend those positions next year. Inflation-linked bonds discount too high a probability of extended deflation—we increase our allocation to overweight and trim cash holdings further. We retain underweight allocations to REITs and cyclical commodities.

**Asset class tilts**



Source: UBS

*This is an extract from the Outlook 2009 Document from UBS' Global Equity strategist.*

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## Outlook 2009

In what follows, we lay out our thinking for the asset allocation decision in 2009. We address the following four questions:

### Key questions

- What are the key investment themes?
- What is our central thesis for 2009?
- What might be some of the key surprises?
- What are the likely catalysts for a reversal of market fortunes?

This work builds on our existing macroeconomic outlooks for 2009-2010 and has been completed in collaboration with our colleagues in global equity and credit strategy, and with input from our sector and stock coverage teams.

Our key investment conclusions include:

- **Overweight corporate bonds:** De-leveraging and high corporate bond yields in a world of otherwise low nominal returns produce attractive risk-adjusted and relative return prospects for corporate credit. We favour investment-grade corporate bonds at present, but look to extend into high-yield bonds as the economic and financial environment stabilizes.
- **Overweight equities:** We retain a small overweight to US equities, but are watching key catalysts for an opportunity to extend our equity position, including into Asia. As an investment thesis, we recommend sectors with relatively high operating leverage, cash flows, and dividends.
- **Overweight inflation-linked bonds:** Inflation is highly unlikely to return in 2009, but ‘linkers’ currently discount too high a probability of sustained deflation. We increase our allocation to inflation-linked bonds by 200 basis points, with a corresponding reduction in cash.
- **Underweight REITs and cyclical commodities:** Leverage plays remain ‘out’, which will remain an obstacle for REITs. Cyclical commodities, including industrial metals and energy are unlikely to sustain durable recoveries in the prevailing weak economic environment.

### Investment conclusions

## What are the key investment themes?

Here’s our pick for the key investment themes in 2009:

- **Valuations meet reality:** The speed and extent of the Q3/Q4 sell-off has created what appear to be extremely attractive valuations in global equity markets. But, unfortunately, that’s not the full picture. The rapid deterioration of global economic fundamentals and doubts about the policy response cloud the picture significantly, particularly for earnings. Investors drawn by valuations will be confronted in the Q4 earnings season next month with a ‘tsunami’ of bad earnings reports and downbeat corporate outlooks, given the extraordinary deterioration of the global economy now under way. At some point, the bad news will be discounted, setting the stage for a more durable recovery of risk assets. But when? We offer some guidance on catalysts for that turning point below.

### Themes for 2009

- **Bear market rally or real McCoy?** Markets rarely move in a straight line. The latest ‘bounce’ in equity markets from very depressed market levels is therefore unsurprising. Additional support might be found in the latest financial rescue packages, a rescue of the ‘Detroit-3’, or increased visibility on fiscal stimulus in the US and elsewhere. But can market recoveries be sustained in the absence of a credible economic recovery? Expect choppy market conditions into Q1 2009.
- **Operating leverage & capital structure seniority.** Despite the upside *trading opportunity* offered by ‘beta’ when markets eventually recover, the underlying drivers of *investment* returns in 2009-2010 are likely to be found in companies that maintain above-average *operating* RoE, characterized by durable margins and an efficient use of capital (asset turnover). Equally, the bias against leverage will transfer risk-adjusted rewards to senior positions in the capital structure—especially to corporate bonds.
- **Low nominal returns.** Recession, disinflation and easy money imply low nominal returns. Provided growth expectations stabilize, stocks should do well—especially those with high and sustainable cash flows and dividend yields. But we see corporate bonds as the real winners as other sources of ‘reliable’ income become ever-more scarce.

Finally, it is also worth mentioning themes that are *not* likely to work in 2009:

- **Inflation plays.** In 2009 inflation is ‘dead’ given global recession, mounting spare capacity, and weak commodity prices.<sup>1</sup> That is not to say that inflation-linked bonds are a bad investment. They currently discount persistent deflation, which we doubt will occur. They are good value at lower risk.
- **Supply-related jump in yields.** Governments are going to run up massive deficits in 2009 and beyond. The US government will issue almost four times as many Treasury securities in fiscal year 2009 as in 2008 (about \$1.75 trillion in our view). The same is true across much of the OECD, and in some emerging economies (e.g., China) public finances will also deteriorate. But yields aren’t likely to rise for that reason, at least not yet. As recent plunging government bond yields attest, risk aversion and, above all, a lousy business cycle trump supply concerns. So does easy monetary policy. In addition, the US government does not face a warranted credit risk premium at its current level of indebtedness of about 60% of GDP. The same is true for the UK, German or French governments. Italy is a different story. But, overall, we believe that when government bond yields eventually begin to rise, it will be because growth expectations have improved and risk premiums have declined, not because investors can’t digest the big supply in the pipeline.<sup>2</sup>

#### What probably won’t work in 2009

<sup>1</sup> Inflation is not ‘dead’ forever. At some point, the combination of extraordinary monetary and fiscal stimulus will re-awaken inflation fears. And policy may respond too late or too slowly to those incipient inflation pressures. That is highly unlikely to be a driver of market returns in 2009, however, given an outlook for recession followed by below-trend growth.

<sup>2</sup> It is crucial to recall that a recession is defined as a period of excess aggregate savings. That is why real yields fall in recessions. Nominal bond yields also benefit from falling inflation. Hence, the only way in which government yields can move higher is if a credit or exchange rate risk premium emerges and is more significant than the real rate and inflation expectations effects.



- **Leverage, commodities and REITs.** De-leveraging, in virtually all manifestations except government borrowing, will not end soon. Investment strategies predicated on the return of leverage are unlikely to work well in 2009. That's one important reason why REITs, despite their strong under-performance in the past year, will remain out of favour. Similarly, cyclical commodities (including most industrial metals and energy) will be on the sidelines, at least for the first half of 2009, while the global economy struggles through its deepest post-war recession.

## What is our central thesis for 2009?

Our central thesis for 2009, therefore, is a challenging start to the year as earnings slump as the recession deepens, followed by uneven valuation-driven gains in equity markets thereafter. Early in the year, it is difficult to exaggerate the importance of the Q4 2008 earnings season. The final quarter of 2008 may go down as the single worst quarter of global growth since records have been kept. The earnings impact is likely to be reflected across firms in most sectors and countries. Corporate guidance will also be affected. We therefore expect that investors will remain risk averse going into 2009 as they await the outcome of the Q4 2008 earnings season.

The balance of the year is then likely to be characterized by anticipation of a bottoming in the business and earnings cycles. Equity and credit markets should recover, albeit sporadically and unevenly. Eventually, robust gains are likely as a value-driven rotation back into risk assets takes place.<sup>3</sup>

Overall, 2009 should produce better investment results across most equity and credit markets, with both posting positive returns of 10-20% for the full year. Although volatility is likely to come down from today's extraordinary levels, it will remain episodically high, given a still uncertain and fragile economic environment.

## What may surprise on the upside or downside?

The risks to our outlook are, we believe, pretty evenly distributed, though the variance is almost certainly wider than usual.

Upside surprises include a more rapid restoration of functioning credit markets than has yet to unfold, perhaps the consequence of further state-led capital injections into banks or as a result of improving growth expectations. The latter, in turn, are likely to depend on the size, timeliness, and effectiveness of fiscal stimulus in a number of countries, not least in the US and China.

The downside risks are mostly macroeconomic as well. Credit markets may remain 'frozen'. Fiscal policy initiatives may prove to be too timid. Household savings rates may rise faster than we anticipate. And, of course, 'exogenous' shocks, such as unanticipated energy supply disruptions or geo-political events could rattle markets at this still-fragile juncture.

**Challenging start to 2009**

**Robust returns as risk aversion fades**

**Upside surprises: Improving credit markets, fiscal stimulus**

**Downside surprises: Sharp rise in savings rates**

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<sup>3</sup> In essence, equity valuations must normalize via a reduction in risk aversion (i.e., the equity risk premium) as it becomes apparent that the policy response will result in a healing in credit markets and hence a change in expectations about future growth and profits.

## What are the catalysts for market recovery?

Given the inherent tension between valuations (attractive) and fundamentals (rotten), investors will naturally seek out key cyclical indicators as catalysts for a durable market reversal. Few of these catalysts are, by definition, leading indicators—the best are probably contemporaneous.<sup>4</sup> Here's our list:

### Market indicators

- **Narrowing inter-bank spreads.** To be sure, 'TED' and Libor spreads have already narrowed, but they remain well above historic norms. Functioning bank credit markets are a *sine qua non* for the resumption of more normal credit allocation, which must be established before expectations for growth and earnings can improve on a sustained basis.
- **Narrowing corporate bond spreads.** Credit facilitation must also occur outside the banking system. The non-financial corporate sector must be able to roll over its obligations with greater ease and, hopefully, on the more generous terms on offer via concerted easing by the Fed and other central banks. A key sub-indicator in this regard includes the out-performance of lower quality corporate bonds (e.g., high yield) relative to investment grade, a sign that credit improvement is more broad-based (and not a function of just risk re-allocation).
- **Declining mortgage rates.** The household sector, too, needs to meet its financial obligations, which mortgage re-financing can facilitate via an improvement in household cash flow. As well, falling mortgage rates would provide hope for a demand-led reduction in housing over-supply and, hence, a stabilization of house prices and collateral values.<sup>5</sup>
- **Increased issuance of corporate bonds, commercial paper.** In addition to falling borrowing costs, a greater supply of credit—via banks and capital markets—would be a key sign of the credit system un-freezing, which in turn could begin to improve growth and earnings expectations.
- **Falling volatility, unwinding of risk-aversion trades.** A decline in equity implied volatility and a weaker Japanese yen (or US dollar) would be signs that investor risk aversion is abating.

### Fundamental indicators:

- **Slowing pace of house price declines in US.** Investors will watch house prices (especially Case-Shiller) and home sales (new and existing) for signs that the wealth and collateral value destruction in US residential real estate is coming to an end.

<sup>4</sup> The reason, of course, is that the markets—including equity and credit—are forward-looking and hence among the class of leading indicators.

<sup>5</sup> At the time of writing, mortgage rates have fallen in response to the announcements last week by the Fed to purchase credit (ABS) assets. Those trends are worth watching, particularly if matched by falling corporate credit spreads (not yet in widespread evidence).

### Catalysts for market recovery

- **A bottoming of PMIs.** Purchasing manager indices are among the most reliable cyclical indicators. Typically, 'bear markets' in equities coincide with a slowing in the pace of the decline of PMIs (second derivative turning positive). Specifically, our work suggests the bottom of bear markets in the US has typically been reached as the ISM index is falling, *and before it has stopped falling*. The speed of inventory corrections suggests this could occur in Q1 2009.

Finally, it is important to cite a few widely followed indicators that will, in all probability, *not* factor into the investment outcome because they typically lag both the business and investment cycles:

#### Lagging indicators

- GDP growth
- Corporate earnings
- Policy rates
- Labour markets

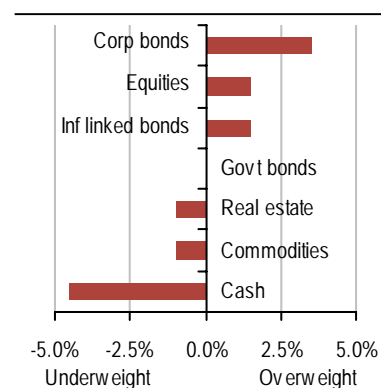
# Asset allocation overview

**Table 1: Overview of global asset allocation recommendations**

	Benchmark	Current	Previous*	Load (x)	Prev load (x*)
<b>Equities</b>					
N. America	27.0%	28.5%	28.5%	1.06	1.06
Japan	4.5%	4.5%	4.5%	1.00	1.00
United Kingdom	5.0%	5.0%	5.0%	1.00	1.00
Europe	9.5%	9.5%	9.5%	1.00	1.00
Asia	3.0%	3.0%	3.0%	1.00	1.00
Rest of world	1.0%	1.0%	1.0%	1.00	1.00
<b>Total equities</b>	<b>50.0%</b>	<b>51.5%</b>	<b>51.5%</b>	<b>1.03</b>	<b>1.03</b>
<b>Government</b>					
United States	7.0%	7.5%	7.5%	1.07	1.07
Europe	9.0%	9.0%	9.0%	1.00	1.00
UK	2.0%	2.0%	2.0%	1.00	1.00
Japan	3.5%	3.0%	3.0%	0.86	0.86
Dollar bloc	1.0%	1.0%	1.0%	1.00	1.00
<b>Total gov't bond</b>	<b>22.5%</b>	<b>22.5%</b>	<b>22.5%</b>	<b>1.00</b>	<b>1.00</b>
<b>Inflation indexed</b>					
United States	1.0%	2.0%	1.0%	2.00	1.00
UK	1.0%	1.0%	0.5%	1.00	0.50
Europe	0.5%	1.0%	0.5%	2.00	1.00
<b>Total infl. indexed</b>	<b>2.5%</b>	<b>4.0%</b>	<b>2.0%</b>	<b>1.60</b>	<b>0.80</b>
<b>Corporate bonds</b>					
US inv. grade	6.0%	8.5%	8.5%	1.42	1.42
US high yield	1.5%	1.5%	1.5%	1.00	1.00
Euro inv. grade	2.0%	2.5%	2.5%	1.25	1.25
Sterling inv. grade	0.5%	1.0%	1.0%	2.00	2.00
<b>Total corp. bonds</b>	<b>10.0%</b>	<b>13.5%</b>	<b>13.5%</b>	<b>1.35</b>	<b>1.35</b>
<b>Commodities</b>					
Energy	1.0%	0.5%	0.5%	0.50	0.50
Industrial metals	1.0%	0.5%	0.5%	0.50	0.50
Precious metals	1.0%	1.0%	1.0%	1.00	1.00
Agriculture	1.0%	1.0%	1.0%	1.00	1.00
Livestock	1.0%	1.0%	1.0%	1.00	1.00
<b>Total commodities</b>	<b>5.0%</b>	<b>4.0%</b>	<b>4.0%</b>	<b>0.80</b>	<b>0.80</b>
<b>Listed real estate</b>					
United States	2.5%	2.5%	2.5%	1.00	1.00
Europe	0.5%	0.25%	0.25%	0.50	0.50
UK	0.5%	0.0%	0.0%	0.00	0.00
Japan	0.5%	0.25%	0.25%	0.50	0.50
Asia	1.0%	1.0%	1.0%	1.00	1.00
<b>Total real estate</b>	<b>5.0%</b>	<b>4.0%</b>	<b>4.0%</b>	<b>0.80</b>	<b>0.80</b>
<b>Cash</b>	<b>5.0%</b>	<b>0.5%</b>	<b>2.5%</b>	<b>0.10</b>	<b>0.50</b>

Source: UBS estimates

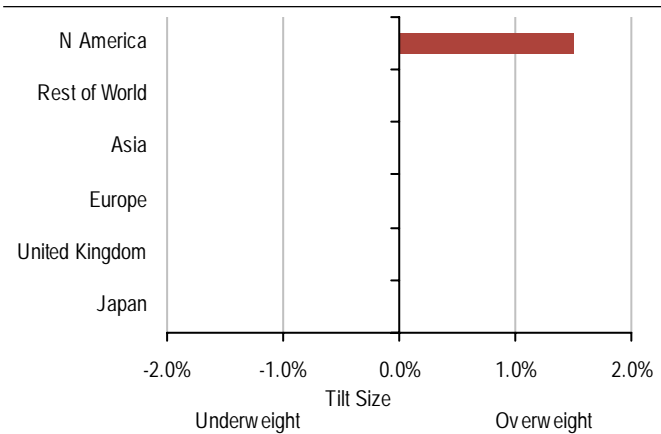
Note: Load (x) = current weight / benchmark weight; \* current as of 1 December 2008, previous as of 14 November 2008

**Chart 1: Asset class tilts**


Source: UBS

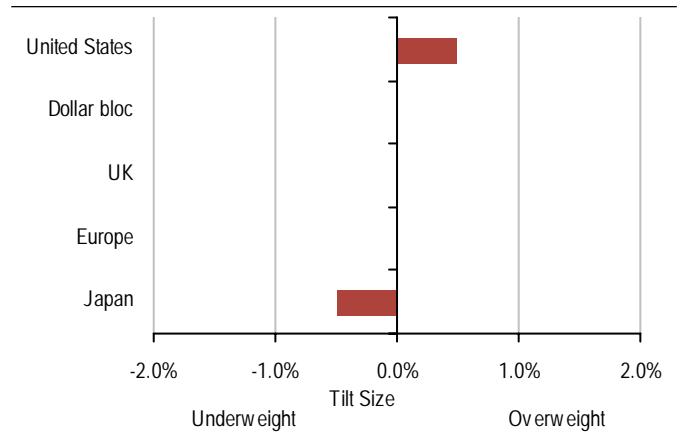
# Asset class tilts by region

**Chart 2: Equities**



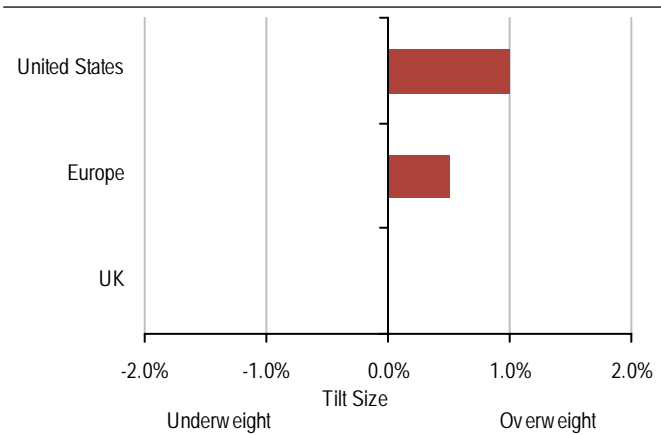
Source: UBS. Note: Calculated as current weight minus benchmark weight

**Chart 3: Government bonds**



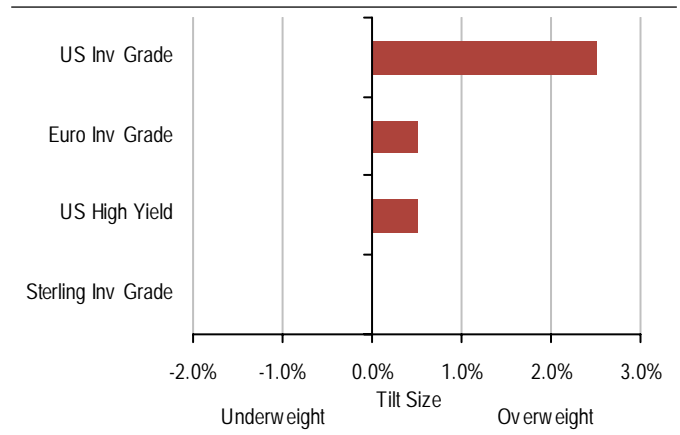
Source: UBS. Note: Calculated as current weight minus benchmark weight

**Chart 4: Inflation-indexed bonds**



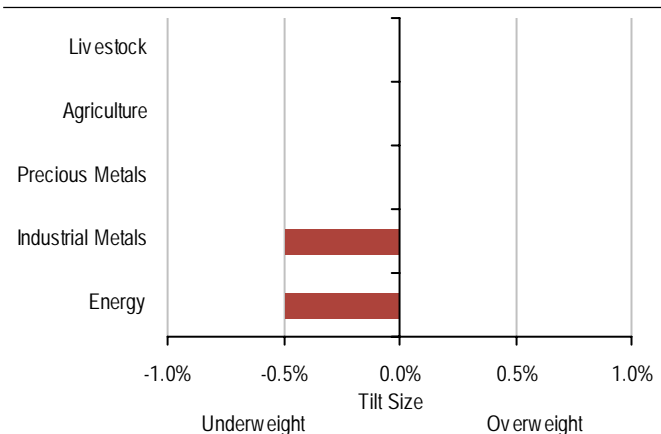
Source: UBS. Note: Calculated as current weight minus benchmark weight

**Chart 5: Corporate bonds**



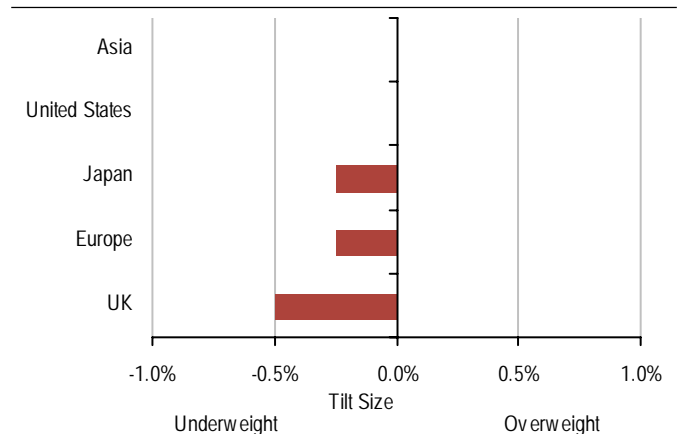
Source: UBS. Note: Calculated as current weight minus benchmark weight

**Chart 6: Commodities**



Source: UBS. Note: Calculated as current weight minus benchmark weight

**Chart 7: Listed real estate**



Source: UBS. Note: Calculated as current weight minus benchmark weight

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### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## Light at the end of the tunnel

### ■ The light is not a train

2009 is a year that pits growth and financial strain against valuation and policy in a high stakes tug of war. While macro and earnings news is likely to be poor, we do expect stabilization. With valuation support, gains in global equities are likely this year, and 'traditional' expectations for single-digit returns seem unrealistic – higher double-digit returns are probable, as multiples bear the burden of support.

### ■ Separating 'cheap' from 'value'

'Cheap' sections of the market have reflected cyclicity, earnings risks, and higher volatility, and, therefore, have not offered 'value'. But, stabilization in markets will change risk-reward dynamics. We expect improved risk appetite and a market re-rating will lead to rotation, but we believe making that move is still premature.

### ■ 'Not now' does not mean 'not ever'

The cost of moving into cyclical positions is higher portfolio volatility, while the cost of defensive positions is the premium level of valuations. With falling uncertainty, we believe cyclical sectors will offer more compelling 'value' than they do today.

### ■ Regional and sector preferences

Our sector preferences remain unchanged. We are overweight Consumer Staples, Telcos, and Technology. Regionally, we still favor the US against underweight positions in Europe and, to a lesser extent, the UK. Within Europe, we see somewhat better prospects for the UK and have trimmed our underweight here. Finally, we have made several changes to our Global Top 40 list.

1 December 2008

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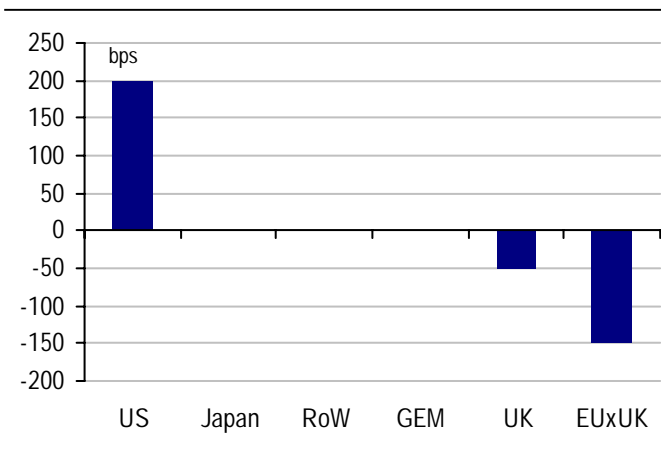
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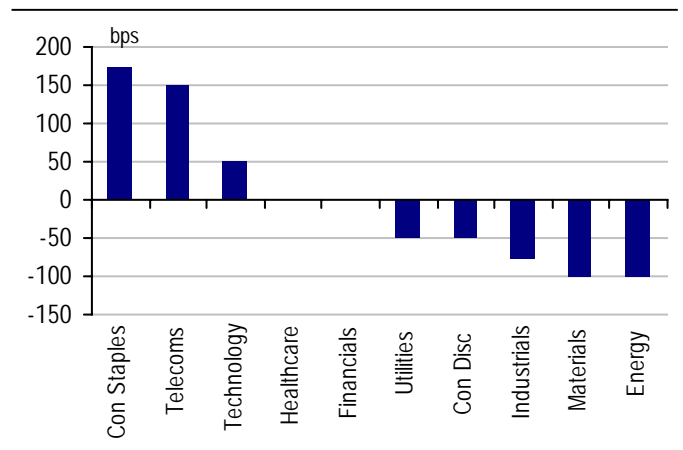
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Chart 1: Recommended Regional Allocation



Source: UBS Global Equity Strategy

Chart 2: Recommended Sector Allocation



Source: UBS Global Equity Strategy

*This is an extract from the Outlook 2009 Document from UBS' Global Equity strategist.*

This report has been prepared by UBS Securities LLC

**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES. UK Takeover Panel Disclosure: UBS Limited is acting as advisor to British Govt. in relation to its stake in British Energy Group**

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## Outlook 2009 – Summary

### What is the outlook for Global Equity Strategy and our central thesis for 2009?

2009 pits investors in a tug of war between growth and financial strains on the one side, against valuations and policy easing on the other. Weak global demand and margin pressures imply weak earnings, which require expanding multiples to drive returns as they have not in 2008. Cheap absolute valuations and high relative yields offer plenty of fundamental scope for multiples to expand to offset earnings weakness as per a more normal cycle. ‘Traditional’ expectations for single-digit returns are likely too low given the starting point on valuations. However, the key to realizing this re-rating will be stabilization and moderating today’s extreme volatility and risk aversion, restoring investor confidence and allowing risk premiums to fall, even moderately.

### What are the key themes for 2009?

As valuations have failed to support markets during 2008, the ‘cheap’ sections of the market should not be confused with ‘value’ given valuations reflect cyclicity, earnings risks, and higher volatility. As such, trying to pick a bottom has been fraught with difficulty. At some point in 2009, we believe a moderation in volatility and lengthening of investment horizons will warrant a rotation into ‘cheap’ equity and cyclical risk. While we think cyclical risk is likely to remain high for now, not now does not mean not ever. Timing this rotation will be key, in our view.

### What may surprise on the upside or downside?

We believe the key downside risk to markets in 2009 is simply that risk aversion persists, further translating earnings weakness into market weakness. Persistent tightness in credit markets would be a potential driver of this outcome. To the upside, the scale of any re-rating has the potential to surprise, especially given the extent to which multiples have compressed in recent years.

### What are the key potential catalysts in 2009

In short, investor confidence must be restored – through monetary and fiscal policy, as well as underlying economic and earnings data. On page 7, we list some potential catalysts we believe could serve as signposts for an improvement in conditions required to foster a re-rating and pro-cyclical rotation.

### Key region and sector ideas

We retain our relatively defensive sector posture for now. We are overweight Consumer Staples, Telcos, and (somewhat more cyclical) Technology stocks. Our biggest underweight positions are in Materials and Energy, and we remain modestly underweight Utilities, Industrials, and Consumer Discretionary sectors.

Regionally, we retain our preference for the US against underweight positions in Europe and UK. Within Europe, we see the balance shifting in favor of the UK. Hence, we’ve trimmed back our UK underweight and extended it on Europe ex-UK. Finally, we stay neutral Emerging Markets, where we remain reluctant to buy into weakness at this time. Like other markets, cheap valuations alone do not yet offer sufficient risk-reward, in our view.



## Light at the end of the tunnel

Goodbye, adiós, adieu, arrivederci, auf wiedersehen, sayonara. In any language, the message to 2008 is clear – good riddance! It has been a year of unprecedented outcomes in the recent history of financial markets: failures and collapses of banks and investment banks, locked-up credit markets, a surge in equity market volatility, sharp declines in global market indexes, recapitalization of large parts of the global financial system, and so on. Thus, we look ahead to 2009 with, perhaps, more interest than is often the case during this annual ritual of assessing market prospects for the year ahead.

Of course, despite the turmoil and the wake of destruction that 2008 leaves behind, considerable uncertainty and challenges still lie ahead. The world is faced with a global recession, an outcome that is now unavoidable, and growth is expected to remain weak through 2010. The financial system remains fragile, with issues related to capitalization levels, asset quality, and long-term growth and profitability prospects still uncertain. Earnings in the non-financial sector appear challenged given the weakness in global demand and the pressure that is likely to come from compressing profit margins.

Yet, despite these obvious challenges, we see reasons to have hope. Across a range of metrics, valuations in global equity markets look appealing. Multiples have fallen to multi-decade lows, large chunks of the equity market are trading with extremely low PE and PBV multiples and high dividend yields. Policy – fiscal and monetary – is now being aggressively eased around the world to stabilize the financial system and to stimulate growth.

The challenge for investors is to determine just how this tug of war between growth and financial strain on one side against valuation and policy on the other is likely to play out. Does the light at the end of the tunnel offer a glimpse of hope or is it the proverbial train heading our way? In this report, we address these competing factors. In particular, we believe there are several key dynamics and questions that are at the center of the investment decision for global equity investors:

- **Can multiples save us?** With earnings weakness in 2009 highly likely – indeed a base case forecast by UBS strategists and analysts alike – the burden of market resilience will fall to multiple expansion. Given disappointment on this front over the last year, uncertainty about the prospects for support in 2009 is naturally high. Will multiples provide support this year? If so, how?
- **When is the right time to rotate in to cyclical exposure?** Over the last year, defensive sectors have decisively outperformed cyclicals. Moreover, volatility in these sectors has been lower, providing both outperformance and lower volatility, a win-win from a portfolio construction standpoint. With cyclical headwinds apt to linger, will there be a right time to rotate in 2009?
- **Can the US continue to outperform? What about Emerging Markets?** US markets have posted solid relative returns, particularly in US dollar terms over the course of the last year. European markets have lagged due to a variety of factors, but has this differential run its course? Emerging markets, as a result of significant underperformance, now trade at a steep discount to developed equities. Is it time to turn up the risk dial and re-engage?

2008 – a rough year

And, challenges remain

Valuation and policy support

## Conclusions

- **The light is not a train.** While macro and earnings news are likely to be poor for the next several months, we do expect stabilization. With valuation support, gains in stocks are likely in 2009 and ‘traditional’ expectations for single-digit returns seem unrealistic – higher double-digit returns are probable, even if longer-term upside may be more modest this cycle. Before more sustainable gains are upon us, volatility is apt to linger. Importantly, though, stabilization in markets suggests risk-reward dynamics will change.
- **Don’t confuse cheap with value.** We have argued for much of the last year that valuations, alone, would not be a catalyst for a sustainable market recovery. Indeed, attractive valuations have been a signal about market vulnerability, not opportunity. Therefore, identifying what areas of the market – in regions, sectors, and stocks – that are compensating investors for taking risk will be a key source of outperformance.
- **‘Not now’ does not mean ‘not ever’.** Valuations suggest that cyclical sectors offer attractive relative value when compared to the defensive part of the equity universe. But we believe it is still premature to make that rotation. Growth and earnings concerns, coupled with high volatility, make these parts of the market unattractive. Moreover, Q4 earnings are likely to be very weak. Put differently, the cost of moving in to cyclical allocations is higher volatility. Similarly, the cost of being defensive is the high level of multiples. As volatility falls cyclical sectors will offer more compelling ‘value’.
- Consistent with this expectation, **we retain our relatively defensive sector posture for now.** We are overweight Consumer Staples, Telcos, and (somewhat more cyclical) Technology stocks. Our biggest underweight positions are in Materials and Energy, and we remain underweight Utilities, Industrials, and Consumer Discretionary sectors.
- Regionally, **we retain our preference for the US against underweight positions in Europe and UK.** While many of the advantages that have favored the US have diminished, there has been little sign yet of an overshoot to justify a pro-European bias. Within Europe, we see the balance shifting in favor of the UK. Hence, we’ve cut back some of our UK underweight and extended our Europe ex-UK underweight. Finally, **we stay neutral Emerging Markets**, where we remain reluctant to buy into weakness at this time. Like other markets, cheap valuations alone do not yet offer sufficient risk-reward, in our view.
- In our **Global Top 40** list we have made several changes. We are adding and removing 11 names. The stocks being added are: McDonald’s, State Street, United Technologies, Intel, Telefonica, HSBC, Anglo American, Seven & I, Takeda Pharma, Japan Tobacco, Central Japan Railways. The names being removed are: Campbell Soup, PepsiCo, National Bank of Greece, K+S, GlaxoSmithKline, Xstrata, Toyota, Mizuho, Komatsu, Nintendo, Pekao. Details on the complete list can be found on page 20.

## The scope for multiple expansion

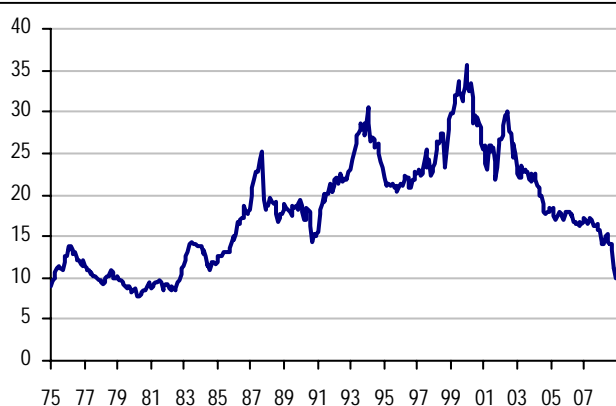
The collapse in a range of valuation multiples across global equity markets is fairly well documented. Indeed, after starting 2008 at what appeared to be 'reasonable' levels (around 15x on a trailing basis), the PE for the world has collapsed this year, particularly since August (Chart 3). Similar trends have occurred with forward multiples. Moreover, with steep declines in earnings expectations for the next year, measures on a forward-looking basis appear more realistic than had been the case.

Valuations, though, have not been enough to support markets. As we have noted over the course of this year, valuations have not been the source of problems for investors and, therefore, will likely struggle to be the sole catalyst for a sustained rebound in markets. However, given the outlook for a weak earnings environment over the course of the next year or two (Chart 4), multiples must become the sole driver of market upside. Indeed, earnings expectations have dropped, but are likely to fall further and realized earnings are apt to decline over the course of 2009. Moreover, the Q4 earnings news to be released in early 2009 is likely to be poor.

### A collapse in valuation multiples

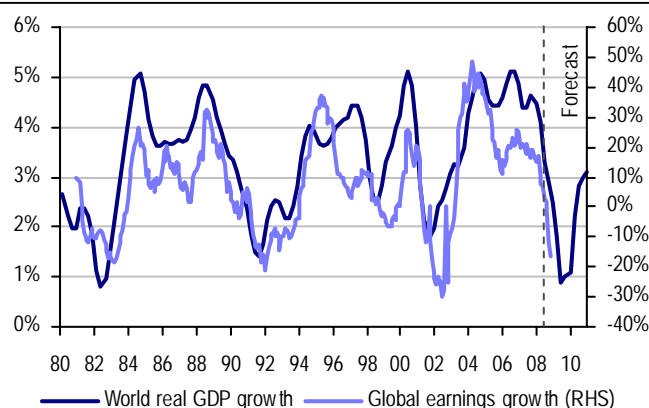
### Valuation carries the burden for returns in 2009

Chart 3: World trailing PE multiple



Source: Datastream and UBS

Chart 4: Global GDP and earnings growth



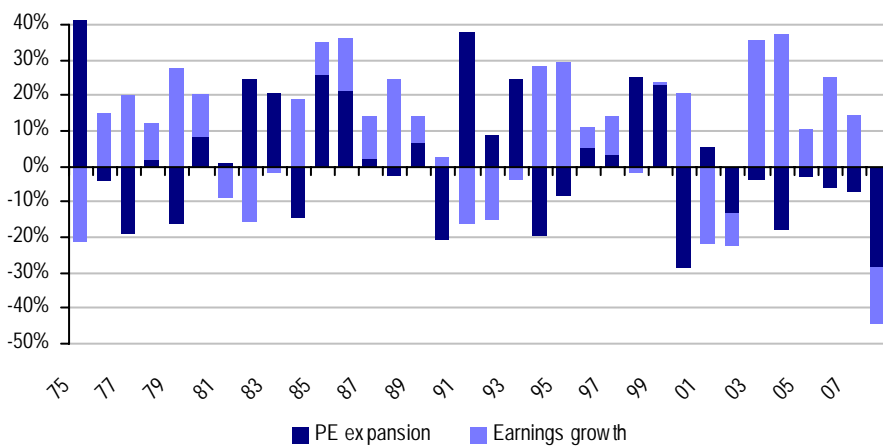
Source: Nigem, MSCI, and UBS

In this environment of macro uncertainty, extremely high risk aversion, and still-tight credit conditions, is it appropriate to expect multiple expansion? After all, some of the same arguments for valuation support could have been – and were – made at this time last year. The issue, therefore, boils down to a few key factors, in our view: 1) is the expectation for expansion wrong or has that anticipation simply been too early? and 2) if we are right to believe that PE multiples will, in fact, move higher in 2009, what will be the triggers for this re-rating?

On the former, it appears difficult to envisage a sharp recovery in multiples at a time when earnings are likely to drop and growth is slowing. However, this is not unusual. As Chart 5 shows, changes in earnings and multiples tend to be inversely related to each other. We believe the early 1990s provide the best analogy to the current situation, when multiples moved higher as earnings compressed in a slow growth environment. In fact, it's relatively common for multiples to expand while earnings contract, and vice versa. Thus, the combination of these events in 2008, and the magnitude of them, has been the real surprise this year.

### History on our side

**Chart 5: Changes in PE multiple and earnings**



Source: MSCI and UBS

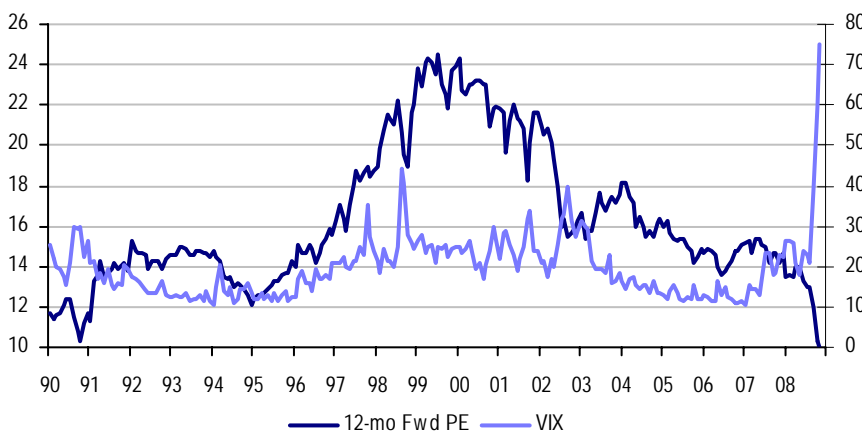
Just because multiple compression was coincident with earnings weakness in 2008, does not mean that we should not anticipate a more ‘normal’ outcome in 2009. If 2008 has truly been a year of extraordinary events that are unlikely to be repeated, it is probably somewhat unfair to expect a repeat of what we’ve seen this past year. In fact, it seems likely that PE (and other valuation multiples) do provide support for markets and offset further declines in earnings over the course of 2009.

**PEs likely to drive returns**

To be sure, this is in part simply a function of a low starting PE. But also, relative value is supportive, with extremely low interest rates (Treasury bills sub-10bps yield, 10-yr Treasuries around 3.25%) compared to earnings and dividend yields – even allowing for a drop in both if earnings and dividends come under pressure. Moreover, given the starting point, even modest PE expansion will likely provide material support. That is, one point of multiple re-rating, given a PE of around 10x, equates to roughly 10% market upside.

**Interest rate support**

**Chart 6: S&P500 PE and volatility**



Source: Datastream, IBES, and UBS

If multiple expansion is possible, what will be the trigger? On face value, the willingness to ‘pay’ higher multiples relates to confidence. Put differently, expansion of valuations is related to a falling discount rate – with particular focus on the equity risk premium. Only with improved confidence are risk premiums apt to fall, leading to valuation support. Related to the issue of confidence is market volatility. The rise in market volatility has been unprecedented in recent months and the impact on investors profound (Chart 6). The rise in volatility has coincided with the sharp compression in PEs, a somewhat unusual combination over long time periods. Further, as we detail in subsequent sections of this report, the rise in volatility has had a marked impact on returns within the equity markets. In particular, sectors with high (and rising) levels of volatility have seen greater degrees of multiple compression. Thus, alongside economic and fundamental support related to confidence, equity markets will likely need to see a decline in volatility before multiples can move higher. Until volatility falls, investors will be unable to capitalize on the ‘value’ that seems to exist at current valuations. However, until then, we believe being ‘cheap’ will not be enough.

In addition to lower volatility, below is a list of potential catalysts that we can look to as signposts for multiple expansion as they provide signals of broad fundamental support. Given the inherent tension between valuations and fundamentals, investors will naturally seek out these key indicators as catalysts for a sustained move in risk assets. Few are, by definition, leading and most are coincident indicators.

### Finding catalysts

**Table 1: Possible catalysts for improved market sentiment**

Catalyst	What to look for?
<b>Inter-bank spreads</b>	Additional narrowing of TED and Libor spreads would signal an unfreezing of the credit markets and a return to a more functioning financial system. This seems a necessary condition to facilitate higher risk appetite.
<b>Corporate bond spreads</b>	A reduction in corporate bond spreads would allow corporates to borrow and refinance at more generous rates and prevent the disruption to the normal course of business from financing worries. Outperformance of lower quality corporate bonds would be a related signal of improvement.
<b>Mortgage rates</b>	Households would be the biggest beneficiary of falling mortgage rates and potentially prevent further worsening in consumer spending by improving the ability to refinance. Further, lower rates would improve housing affordability, helping to boost housing demand which could put a “floor” on prices and begin to clear inventory.
<b>Bond issuance</b>	As well as lower costs of credit, the availability of credit needs to increase too. An increase in bank lending and the provision of credit to creditworthy borrowers would be a welcome sign.
<b>Volatility</b>	A decline in risk aversion will be critical to instilling confidence and could set the stage for equity multiples to expand and sector rotation to begin.
<b>House prices</b>	Since falling house prices led us into this financial crisis signs of prices stabilizing and the end of wealth destruction in housing would benefit both consumers and the asset-backed security markets.
<b>Economic activity</b>	Manufacturing indicators tend to be early barometers of the health of the economy, and a bottoming of the PMI indices would give some signal that the worst economic news is behind us.

Source: UBS

However, several widely followed indicators are unlikely to factor in to the investment outcome given their lagging nature. To that end, we would caution against focusing too closely on GDP, policy rates, and labor market data.

# The price of being defensive

During the extreme volatility we have seen in the last couple of months, a strong trend of defensive sector outperformance has emerged. As growth and earnings forecasts have been downgraded across the globe, those companies most leveraged to global growth have been most severely punished. The commodity story has deteriorated, with the Baltic Dry Index plunging 90% and oil and metals prices following. The emerging market story has also worsened, exacerbated by collapses in many EM currencies and bonds as well as equities. These popular “growth trades” of the last few years, initially touted as “safe havens” from US, financial, and housing weakness, have both come apart.

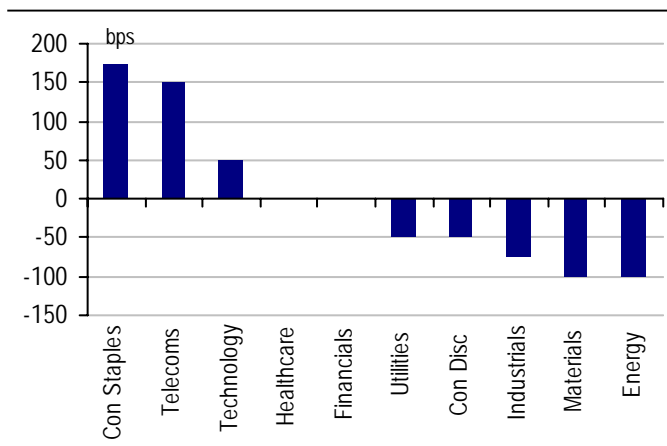
We have advocated a defensive stance in Global Equity Strategy for much of 2008, with our largest current overweights in Consumer Staples and Telecoms. While defensive sectors have performed reasonably well, the cost has increased dramatically in recent weeks. A period of extended outperformance by the defensive sectors (Chart 8), beyond historical precedent, has led to them now demanding a significant valuation premium.

This naturally begs the question of whether this defensive premium is justified, for more stable earnings growth than average and cleaner than average balance sheets. Put another way, are the discounted valuations in the cyclical sectors, namely Industrials, Materials, and Energy, compensating investors sufficiently for the risks to growth and earnings? Is it time to re-engage in the cyclicals?

We think it is too early to re-orientate portfolios to the more cyclical sectors for three main reasons:

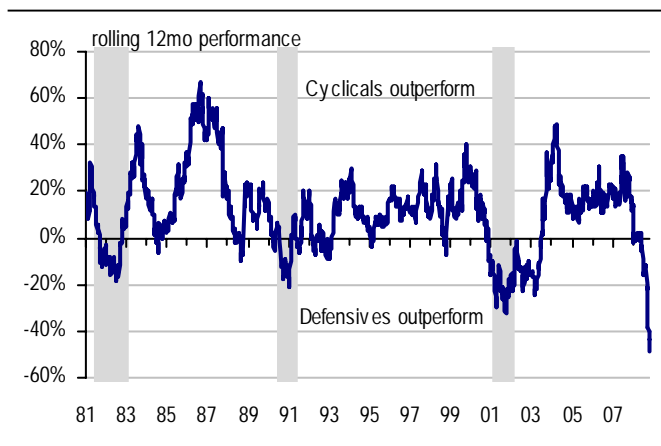
- (1) Cheap doesn't necessarily mean value.
- (2) Be wary of volatility.
- (3) “Not now” does not mean “not ever”.

**Chart 7: UBS recommended global sector weights**



Source: UBS Global Equity Strategy Team

**Chart 8: Cyclical versus defensive performance**



Note: Cyclical sectors defined as Industrials, Materials, Technology, and Consumer Discretionary. Defensives defined as Consumer Staples, Healthcare, Utilities, and Telcos.

Source: Datastream and UBS

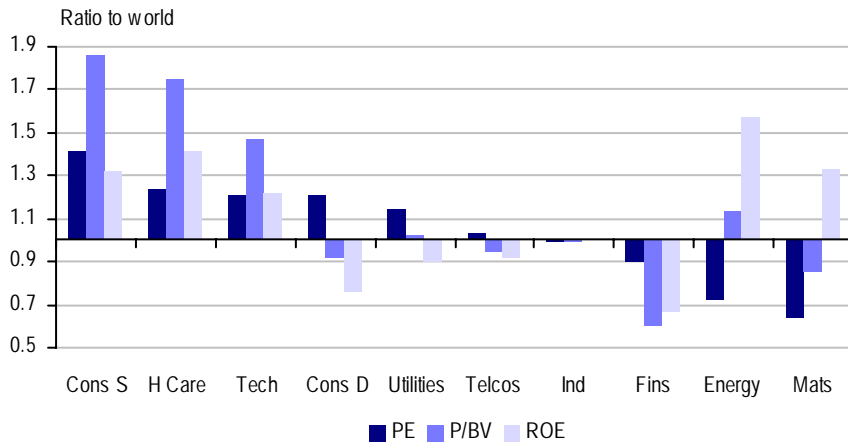
“Safe haven” plays

Massive defensive sector outperformance

## Cheap doesn't necessarily mean value

Chart 9 shows the valuations and return on equity of every sector relative to the world. The traditionally defensive sectors – Consumer Staples, Healthcare, and Utilities – are all trading at a premium to the world on a PE and a Price to Book basis with Telecoms trading around par. More cyclical sectors such as Energy and Materials (leaving the Financials aside) are trading at significant discounts to the world on a valuation basis. By building this defensive premium into prices, is the market thus offering value to those prepared to take cyclical risk?

**Chart 9: Global sector relative valuations**

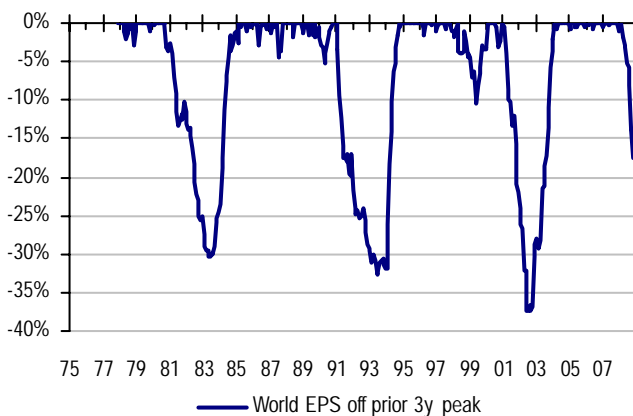


Note: PE is on 12 month trailing earnings.  
Source: Datastream and UBS

We think this valuation gap reflects the underlying reality in those industries more than wholesale mis-pricing. As we see it, cyclical sectors trade at a discount because of their leverage to the global growth cycle, with earnings and downgrades yet to reflect a full, let alone long, recession. These industries were the tour de force behind the growth cycle of 2003-2007, and most experienced the massive increase in profitability from the booms arising from Asian demand. As this growth engine slows and the sustainability of earnings is further called into question, investors are likely to prefer to pay a premium for stability and visibility rather than bid up depressed valuations in cyclical sectors.

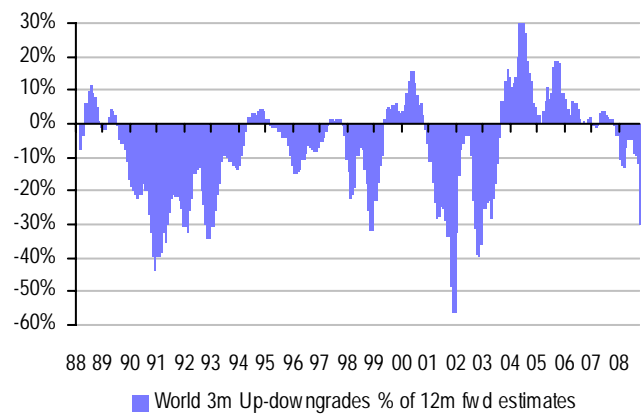
### Cheap reflects vulnerability

**Chart 10: World EPS relative to peak**



Source: MSCI and UBS

**Chart 11: World net upgrades/downgrades**



Source: IBES and UBS

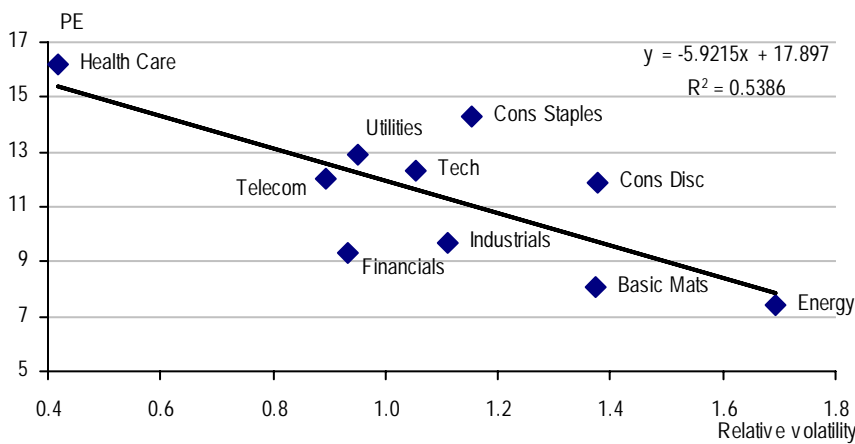
Within the defensive camp, earnings expectations in the Telecoms sector strike us as already-moderate, in stark contrast to peers and a function of a relatively lean operating environment during the cyclical upswing. Meanwhile, the fundamentals of the Utilities industry – premium valuations, exposure to commodity cyclicality, financial leverage, plus capex in excess of free cashflow that causes dividends to be paid from borrowing – strike us as higher risk in today’s conditions than many investors’ rules of thumb might suggest.

On the cyclical front, we view Technology, especially software, as the most attractive source of cyclical exposure in case our overall pro-defensive stance is too cautious. Low capital intensity and net cash balance sheets both overstate valuations on a simple PE basis that are in any case attractive on a relative to peers and relative to history basis. While cyclical, the workout from the dotcom bust has forced capex restraint and a more constructive payout discipline on the sector, avoiding the repetition of wholesale overcapacity at least outside of some semiconductor businesses. With the recovery in Tech spending relatively recent and this cycle’s excesses very “old economy” in nature, we do question whether this cycle isn’t something of a mirror image to dotcom.

**Be wary of volatility**

In recent years, defensive sectors have been the unpopular places to invest and, therefore, have not suffered as much from the sharp de-leveraging and capital outflows that have plagued the market. This has also generated extreme volatility in sectors that have seen the steepest outflows. Current valuations, in part, look to be reflecting this increased risk. We found a good fit between sector volatility (relative to the market) and current valuation, suggesting that those sectors which trade at a premium do so in part because they are less volatile and are being rewarded a type of “stability premium”. Sectors that trade cheaply do so in part to compensate for high volatility, and we view this as another reason perceptions of “value” in those sectors may be misguided. In other words, in volatility-adjusted terms, the value proposition of cyclicals does not look so strong.

**Chart 12: Sector valuation and volatility**



Note: Volatility is measured as the standard deviation of rolling 26 week returns of the sector relative to the standard deviation of rolling 26-week returns of the market.

Source: Datatstream and UBS

**Tech resilience**

**Volatility – the cost of buying cheap multiples**

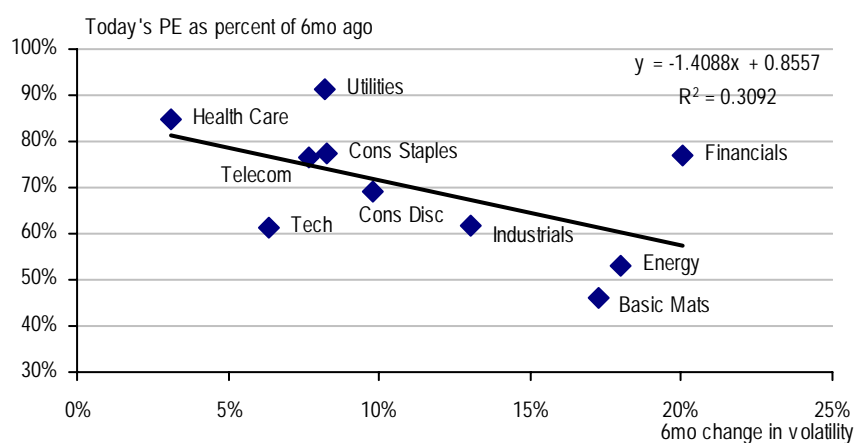


As Chart 12 above shows, Energy and Materials have both the lowest valuations and the highest volatility, followed by Industrials and Consumer Discretionary. Meanwhile, Healthcare, Telecoms, and Utilities trade at a low-volatility premium.

We have also found that, in addition to the level of volatility, the change in volatility has also been an important driver of changes in relative valuation. Chart 13 shows how the sectors with the biggest increase in volatility in the last six months have also witnessed the biggest contraction in multiples. Once again it is the cyclical sectors that have seen the volatility of their returns increase the most and who in turn have de-rated the most over the last six months as they have underperformed even their earnings weakness. The defensive sectors have fared much better – their volatility has not moved much and their PE contraction has been much more muted than the broader market.

### Changes matter too

**Chart 13: Change in sector valuation and volatility**



Source: Datastream and UBS

### “Not now” does not mean “not ever”

Choosing to maintain our defensive cyclical positioning for now does not mean that we do not expect the shift away from defensive sectors towards the cyclicals to occur at some point. On the contrary, the extent of the defensive outperformance and existing valuation gap almost guarantees that a normalisation of this trend will occur, particularly if we're right that 2009 is apt to be a year of reasonable market upside. Given the trends in volatility we have observed, we would clearly expect market stabilization to be accompanied by cyclical outperformance – perhaps even in the absence of a strong rebound in underlying economic growth data.

Historically, cyclical earnings tend to lead the economic downturn and, as growth deteriorates, cyclical sector PEs have tended to re-rate even as earnings continue to fall, allowing those sectors to outperform. Subsequently, as clarity about the end of the growth slowdown and the bottom for earnings emerges, overall equity markets have rallied, further benefiting cyclicals which typically are most exposed to a rebound in growth.

### We expect rotation in 2009

### Normal lead – lags?

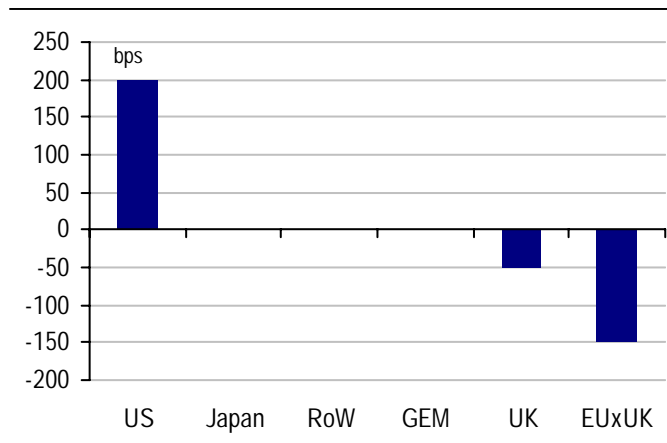
This time however, we have not seen this same outcome. The cyclical sectors have underperformed at the same time as growth has deteriorated yet at a faster pace. Investors appear unwilling to look to an earnings recovery either because a) they don't believe it will happen anytime soon or b) uncertainty about medium-term recovery prospects has kept them on the sidelines. For the time being, we do not see any reason for this stance to change. Equity markets remain extremely volatile, and the full extent and length of the economic slowdown is unclear.

When volatility does fall and investors are willing to add to risk positions, we think those sectors with 'cheap' valuations should be good places for investors to seek high returns (representing 'value'), taking advantage of the bigger opportunity for multiple expansion. The time to move into cyclicals will come, but we do not think that time is now.

**Remain patient**

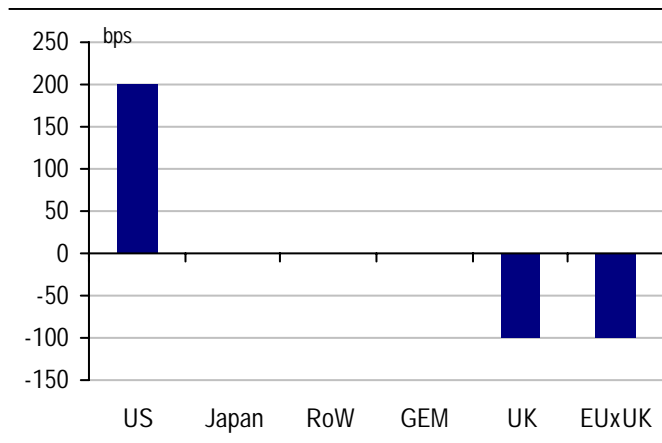
## Regional Allocations

Chart 14: Current Recommended Regional Allocation



Source: UBS Global Equity Strategy

Chart 15: Previous Recommended Regional Allocation



Source: UBS Global Equity Strategy

A summary of our regional recommendations is as follows:

- Some of the advantages enjoyed by US equities over Europe and the UK have diminished over the course of this year. However, there has been little sign yet of an overshoot to justify a net pro-European bias, and so we continue to favor the US market.
- Within Europe, we see the balance shifting in favor of the UK over Continental European markets. Consequently, we have slightly trimmed back some of our underweight of the UK and increased that of Europe ex UK.
- We stay neutral Emerging Markets, reluctant to buy back into weakness at this time. Cheap relative valuations are largely a function of risks to still-resilient earnings expectations. Meanwhile, the breadth of the sell-off in EM suggests that the catalyst for relative performance is likely to require a more positive absolute stance on equities that is still lacking today.
- We remain neutral on Japan, which remains supported by cheap assets but lacks the catalyst to realise this value for want of corporate reform, macro recovery, and sustainable higher profitability.

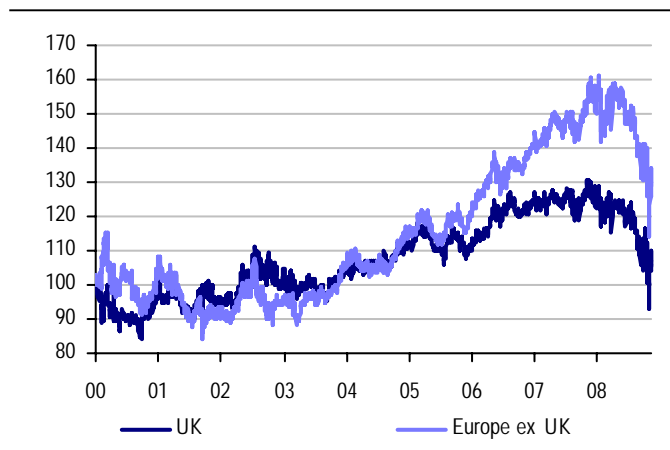
### Overweight US versus Pan-Europe

Since the last quarter of 2007, we have advocated an overweight position in US equities, funded out of Europe and the UK. Driving this recommendation was a combination of factors moving into alignment at the time. The US had materially underperformed through the cycle, driven by both a relative de-rating and a depreciating dollar. At the start of 2008, Euro investors had barely broken even investing in the S&P500 over the prior decade. Yet at the same time, we were seeing the first real signs of FX impacting competitiveness as models had long suggested it should. Neither was the market giving any credit for strong US corporate operating fundamentals, nor its market's defensive characteristics in a weakening world. Meanwhile, expectations that slowdown risks were geographically contained within the US while growth elsewhere would be resilient appeared unrealistic in unison.

### What has driven US outperformance?

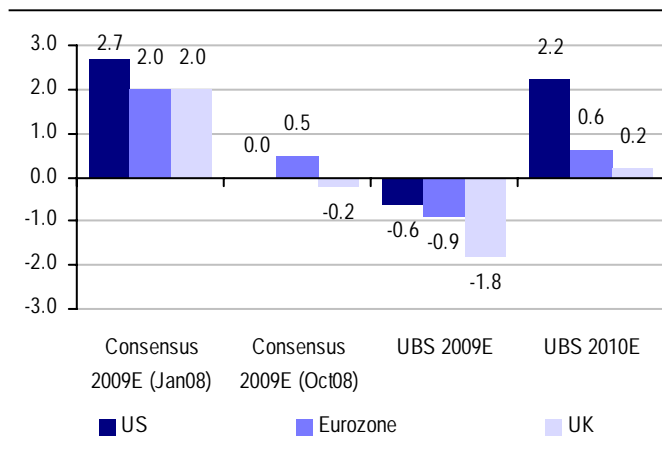
To be sure, much of this argument has since moderated as the US has outperformed, weakening the case for initiating new overweight positions. The position today is more fairly described as more neutral, but without signs yet of an overshoot to cause a net pro-EU bias. With much of the balance still tilted against Europe, we remain comfortable with our current preference for the US.

**Chart 16: European markets relative to US**



Note: Rebased to Jan 1 2000 = 100.  
Source: MSCI in common-currency terms

**Chart 17: Regional GDP growth forecasts**



Source: UBS and Consensus Economics

On the macro front, consensus growth expectations for both regions have moved over the course of this year to discount global weakness but with the Eurozone holding up better than the US. UBS economists disagree, foreseeing weaker growth everywhere but especially much weaker growth across Europe, below US levels throughout 2009 and 2010 (Chart 17).

**Europe still in rough shape**

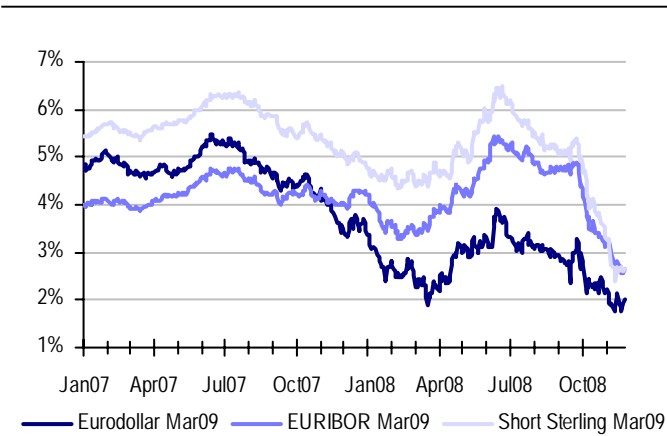
One related source of support this year has been the contrast between the accommodative actions of the Fed and the more hawkish rhetoric from the ECB and BoE (Chart 18). Very recently, the latter two have finally accepted the need for aggressive monetary easing, a policy shift that is clearly more positive for Europe even if much of the actual easing still needs to come and is thus unlikely to offer significant relief in the near term. However, nothing we have seen so far has done much to change our core belief that the US policy framework is simply more flexible and accommodative in a crisis. The relatively piecemeal European approach to bank recapitalization has re-highlighted tensions between “one-size-fits-all” regional solutions and the divergent interests of individual member-states. Meanwhile on the fiscal front, Europe’s policymakers have begun to openly consider national stimulus packages, while the Americans have already executed one tax rebate, and moved on to debating further measures.

**Policy differences**

Likewise, recent dollar appreciation has served to unwind much of the currency support argument available earlier this year, but without yet evidence of a substantial overshoot working the other way (Chart 19). To the extent that repatriation flows appear to be a significant factor supporting the dollar, these have the potential to be a relatively durable support for as long as macro prospects and investor sentiment remain fragile.

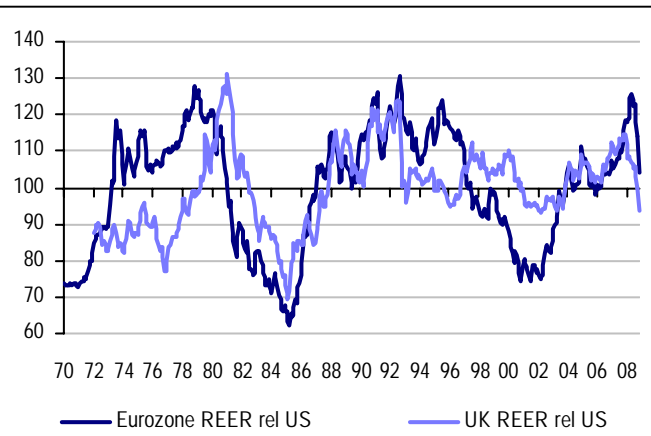
**US dollar appreciation**

**Chart 18: Market Interest Rate Expectations**



Source: Thomson Datastream

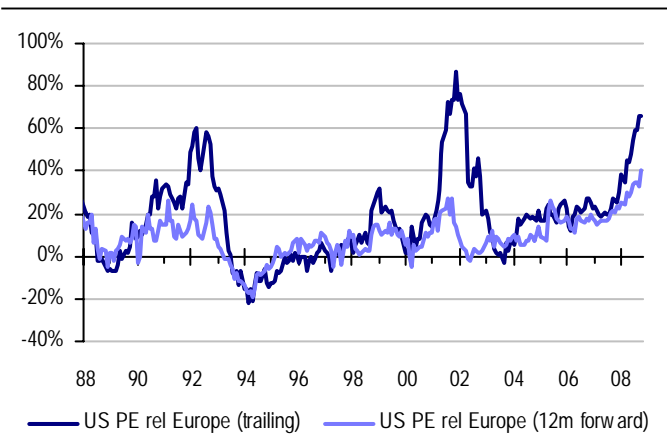
**Chart 19: Real Effective Exchange Rates**



Note: Rebased to 100 = historical average.  
Source: UBS and Thomson Datastream

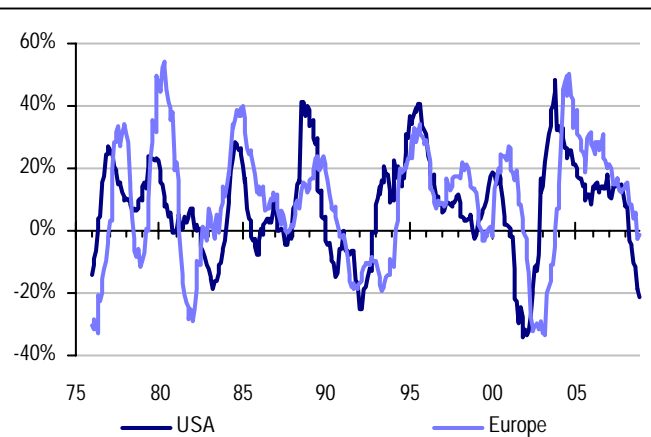
Turning to equity markets, relative valuations appear to have moved significantly in Europe’s favour, but we are cautious about reading too much into this (Chart 20). In general, valuation arguments have proved largely ineffectual of late. Meanwhile, weaker US earnings reflect a combination of traditional cyclical “first-in-first-out” effects and greater one-off financial write-downs (Chart 21).

**Chart 20: US PE premium to Europe**



Source: IBES, MSCI, and UBS

**Chart 21: FIFO: US earnings lead Europe (trailing yoy growth)**

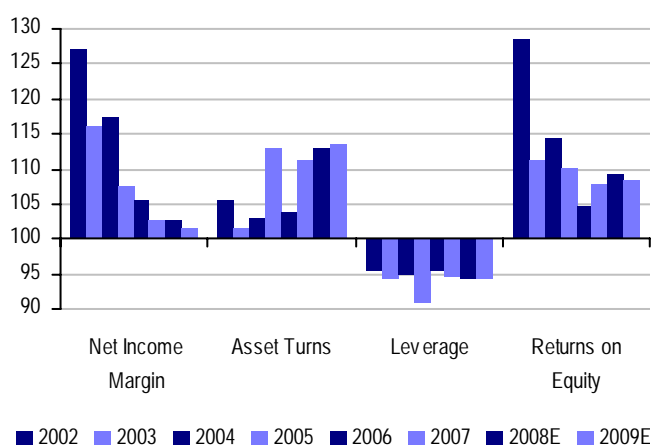


Source: MSCI and UBS

Finally, we continue to believe that US corporates, in aggregate, are better positioned on fundamental grounds to weather the storm. In an environment of capital rationing, opportunities for financial leverage will be scarce, and to finance growth, firms need to fall back on the traditional discipline of achieving superior rates of return on reinvested income. Despite buoyant profits through this cycle, European companies have proven unable to erode away higher US rates of return on equity. Within the mix, US corporates employ less financial leverage and earn higher profit margins that suggest lower levels of operating leverage (Chart 22). Combined, these show operating efficiencies that we believe deserve something of a quality premium in the current environment.

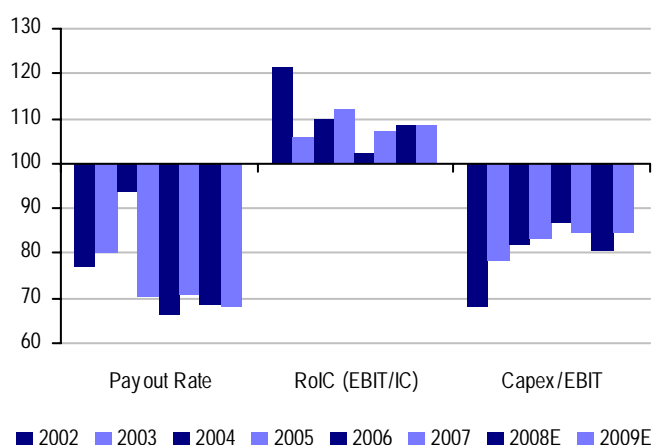
**Balance sheet health**

**Chart 22: US DuPont drivers of RoE, relative to Europe**



Source: UBS World Inc

**Chart 23: US returns on reinvestment, relative to Europe**



Source: UBS World Inc

## Within Europe, a preference for the the UK

Throughout 2008 we have held equal-sized underweight positions in the UK and continental Europe. However, we now think that there is an opportunity for the UK market to outperform Continental Europe. The main reasons are: i) we believe the UK is further into the slowdown than Europe; ii) there is more aggressive policy response in the UK; iii) Sterling can weaken further against the Euro, and iv) earnings momentum in the UK has held up better than that in Europe ex-UK.

As for valuations, PE multiples (based on our Global Profit Picture data) in the UK and Europe are roughly similar, trading at 8.6-8.7x 2009E earnings. However, ex-financials, Europe appears a bit more expensive (10.2x vs. 9.4x 2009E), bolstering the case for UK outperformance. Our economists point out that nearly half of the Eurozone’s exports go to Eastern Europe and the UK, areas where FX weakness creates negative translation effects to EU earnings. Meanwhile, 70% of the revenues of non-financial FTSE100 companies come from outside the UK, roughly split equally between Europe, North America, and the rest of the world creating positive translation effects to UK earnings in the event of the broad sterling weakness we expect. Thus, given the changes that are apt to benefit the market, especially in local currency terms, we have trimmed that position and have increased the magnitude of our Europe-ex UK underweight.

## Neutral Emerging Markets

Despite cutting the last instalment of our Emerging Market overweight in January, we have been surprised by the severity with which the downturn has impacted these markets (Chart 24). The sell-off has been broad-based not just across countries but across the full spectrum of EM asset classes as well, impacting FX and fixed income as well as equity (Chart 25). Even petrodollar-rich countries like Russia and the UAE have not been immune from liquidity stresses in their banking systems.

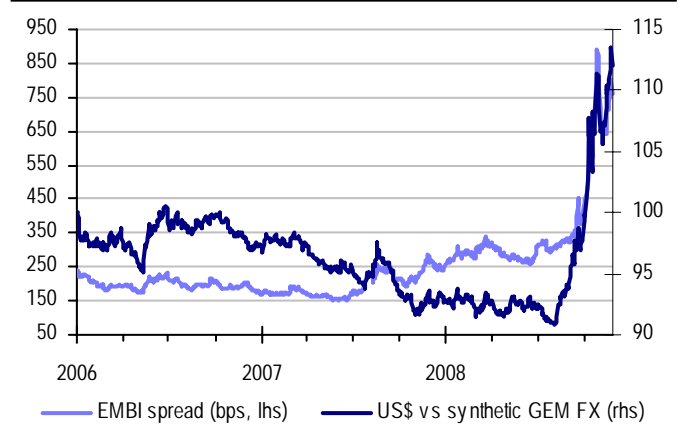
## The case for the UK against Europe

**Chart 24: Global Emerging Markets relative performance**



Source: MSCI

**Chart 25: EM FX and sovereign spreads**



Note: Synthetic FX derived from equity indices.

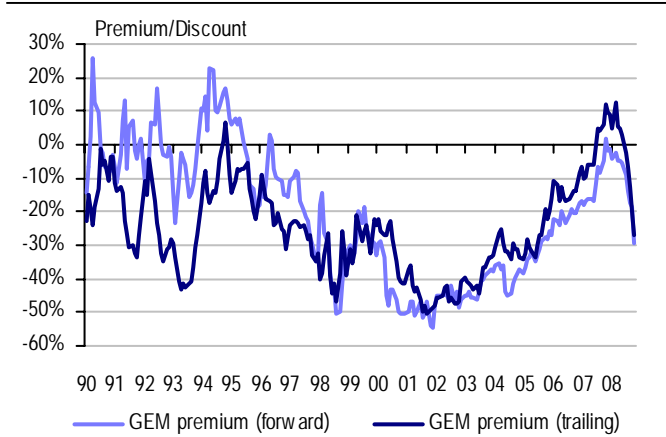
Source: Thomson Datastream and UBS

On the surface, the rout has created a potentially interesting opportunity, with relative valuations falling from par or a premium to a 20-30% discount on forward and trailing earnings respectively (Chart 26). We have elected to resist the buying temptation for now, for two reasons.

**Another case of assessing 'value'**

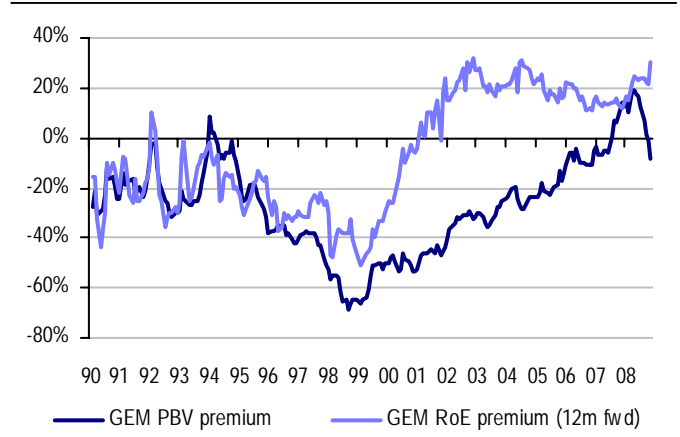
Firstly, cheap earnings simply reflect historically-expensive assets from which analysts still expect strong profitability (Chart 27). This residual echo of the “decoupling thesis” is hard to reconcile with the top-down observation of slowing (but still faster than World) growth across the EM complex, or with recent collapses in those commodity prices that assisted earnings on the way up. Earnings risks remain.

**Chart 26: GEM PE premium to World**



Source: UBS, MSCI, and IBES

**Chart 27: GEM PBV & RoE premium to World**



Source: UBS, MSCI, and IBES

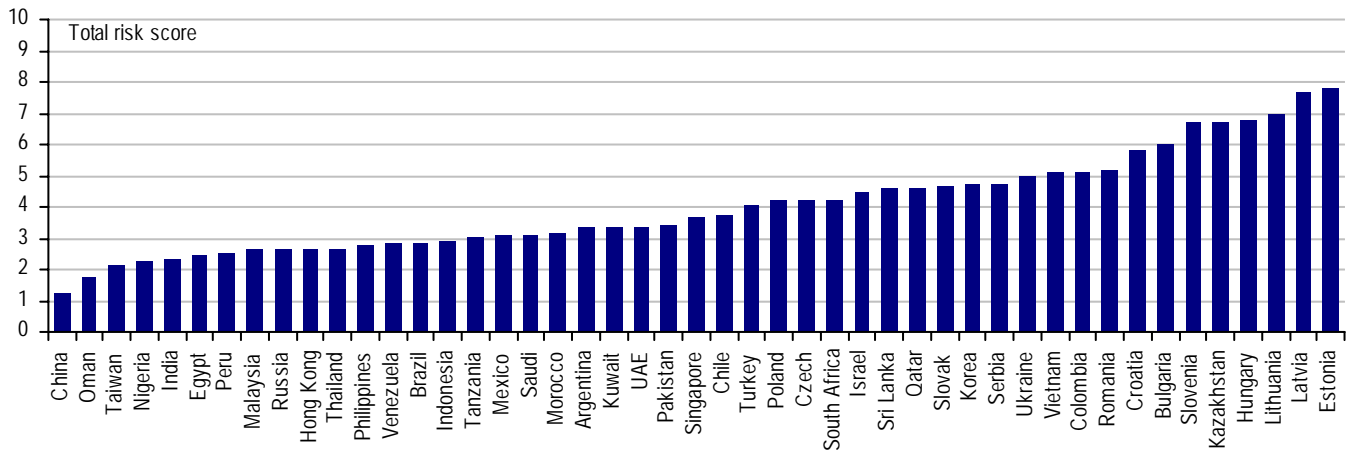
Secondly, the sheer breadth of the volatility is indicative of a qualitative shift, whereby investors are less prepared to take the structural improvements over the last decade at face value. To the extent that emerging market assets no longer represent a viable safe haven from developed market weakness but instead are now highly sensitive to shifts in risk aversion, the catalyst for a more positive relative stance on EM depends on being able to take a more positive absolute stance on global equities and risk assets in general, much like the cyclical sector rotation discussed above.

**When is the right time?**

Country focus

In the meantime, we continue to think that investors more adventurous than we should focus on opportunities across individual countries more than the region as a whole. It is noteworthy how many of the riskier situations are concentrated across the EMEA time zone (Chart 28). The preferred country exposures of our Asian and Latin American strategists are China and Brazil, respectively.

Chart 28: UBS Emerging Economics – Total Country Risk Index

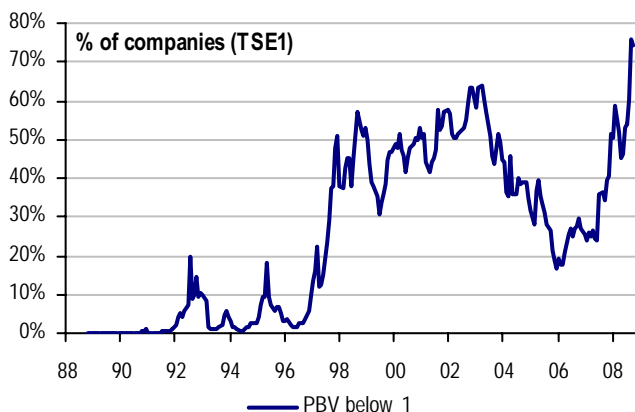


Note: Updated version of index, first published and described in Jonathan Anderson, "A More Systematic Look at EM Fragilities" (9 October 2008).  
Source: UBS

Neutral Japan

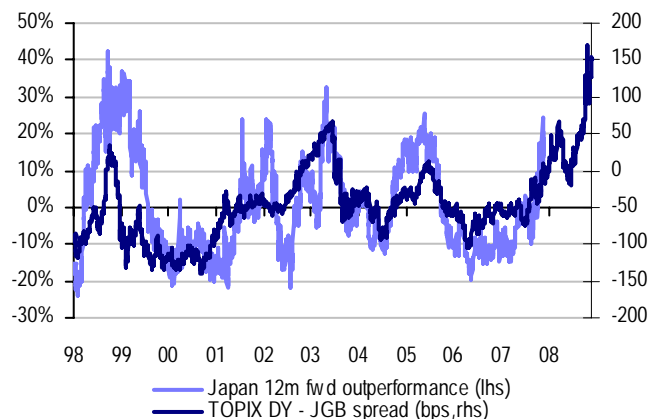
As the global weakness has impacted on Japanese markets, taking the TOPIX index to levels last seen in January 1984, the country’s already cheap valuations have become even cheaper. Three-quarters of the market now trades at a discount to book, as does the entire market on 2009E UBS book estimates (Chart 29). Dividend yields, which historically have tended to sit in excess of bond yields prior to periods of Japanese market outperformance, are now comfortably 150bps over 10 year JGBs (Chart 30).

Chart 29: % of Japanese stocks trading below book value



Source: UBS and Thomson Datastream

Chart 30: TOPIX & JGB yields vs market outcomes



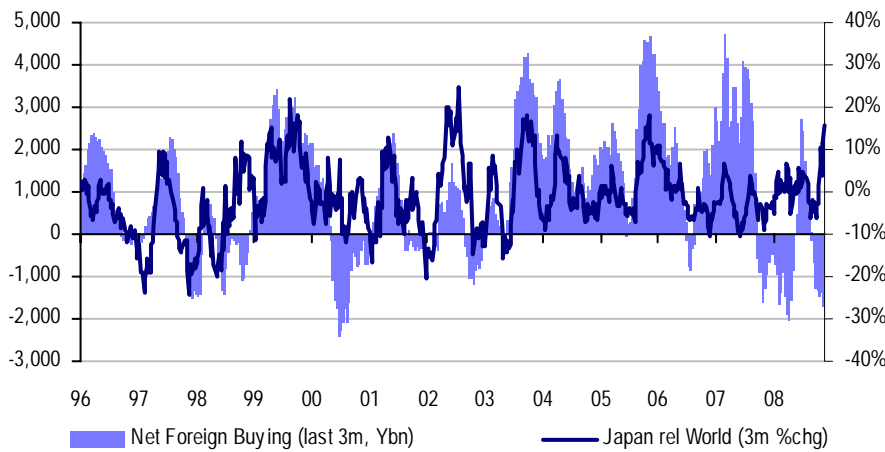
Source: UBS and Thomson Datastream



**Structural challenges remain**

The problem remains, however, of finding the catalyst to unlock this ‘value’ from simply being ‘cheap’. Despite the impetus from strong Asian growth, Japan’s macro recovery this cycle has been tentative at best, with the economy recently entering recession, and a contraction in GDP forecast in 2009. Restructuring this decade has achieved margin and profitability improvements coupled with corporate de-leveraging, but by no more than global peers, which leaves Japanese corporates in aggregate more indebted and less profitable than the global average. The failure of recent attempts at Western-style shareholder activism probably serves to conceal much of this ongoing restructuring, but in itself is indicative of still-mixed levels of shareholder-friendliness on the part of management. Finally in the nearer term, foreigners remain net sellers of Japanese equity (Chart 31). Until there is a meaningful shift in these factors – particularly a catalyst to result in significant re-rating – we retain our neutral allocation to Japan.

**Chart 31: Foreign net purchases of Japanese equity and market relative to World**



Source: TSE, MSCI, and UBS

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### ■ **Statement of Risk**

Investing in global equities poses country, industry, and company-specific risk. Valuations can be impacted by changes in the macroeconomic landscape as well as by financial market stability.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## Asian Strategy/Asian Economics

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**UBS Investment Research**  
**Asia Equity Strategy - Outlook 2009**

Asia

Equity Strategy

Equity Strategy

Equity outlook and opportunities in 2009

**■ Summary**

Barring a substantial rally in the next few weeks, 2008 will go down as the worst year for Asian equities in the last forty. However, we believe 2009 looks better. GDP and profit growth still look poor, and will likely worsen before improving. But at close to book value, Asian equity valuations are already discounting a lot of bad news, in our view.

**■ What are the likely key themes for 2009?**

We think credit holds the key for Asian equities. Until malfunctioning credit markets improve, saying equities are ‘cheap’ is a statement of fact. There is competing value in many asset classes in many other parts of the world. In Asia, we expect an equities rally to be led by better credit conditions, and thereafter by a bottoming in the global growth cycle. Key Asian themes as we move through the year include monetary and fiscal reflation, and cost disinflation.

**■ What may surprise on the upside or downside?**

We expect earnings growth to surprise on the downside, but reflationary measures could surprise on the upside.

**■ Market valuation & targets, highlighted stocks and sectors**

In the last two market recoveries Asian equities have re-priced to 1.6x book value within six to nine months of the low. This implies a level of 350 on the MSCI Asia ex-Japan index. We expect downside to 1x book, back to 1998 levels, if credit markets deteriorate again. We continue to prefer rate-sensitive stocks and sectors to economic cyclicals (overweight telecoms, financials, and underweight tech, industrials). We overweight China, Hong Kong and Singapore, and underweight India, Malaysia and Taiwan.

**3 December 2008**

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**Table 1: Asia ex-Japan Top 10 Stocks List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Bharti Airtel	BRTI.BO	24	Buy-ST Buy	651.15	1,000.00	16.2
Cathay Pacific	0293.HK	4	Buy	7.90	12.00	(11.7)
China Mobile	0941.HK	169	Buy	72.75	80.00	11.6
CNOOC	0883.HK	31	Buy	6.50	10.90	5.0
China Resources Power	0836.HK	7	Buy	14.60	22.60	36.2
ICBC	1398.HK	170	Buy	3.95	6.90	10.4
Kasikornbank	KBAN.BK	3	Buy	40.25	77.90	6.5
KT&G	033780.KS	8	Buy	77,000	107,000	14.3
SHK Properties	0016.HK	17	Buy	62.25	84.20	11.1
United Overseas Bank	UOBH.SI	12	Buy	12.70	16.00	8.9

Above data as at 1 December 2008. Source: UBS estimates

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**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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## Outlook 2009 - Summary

### What is our central thesis for 2009?

After the worst year in forty for Asian equities, 2009 looks likely to be a better year, in our opinion. GDP and profit growth still look poor and will likely get worse before getting better. However, at close to book value, Asian equity valuations are already discounting a lot of bad news.

### What are the likely key themes?

We think credit holds the key for Asian equities. Until malfunctioning credit markets improve, saying equities are 'cheap' is a merely a statement of observation. There is competing value in many asset classes in many other parts of the world. We expect a rally in Asian equities to be led by better credit conditions, thereafter by a bottoming in the global growth cycle. Key Asian themes as we move through the year include monetary and fiscal reflation, and cost disinflation.

### What may surprise on the upside or downside?

We expect earnings growth to surprise on the downside, but reflationary measures could surprise on the upside.

### What are the likely key catalysts?

The two key catalysts in our view for equity markets are that credit markets and the economy need to stabilise. The best proxy for a credit improvement is the credit spread on longer dated paper, in our view. Although equity markets will likely rally along with a narrowing in spreads, we view this indicator as a key source that credit markets are beginning to function again. The growth cycle must also show some signs of hitting bottom. We expect this to happen sometime in the first half. The most likely scenario we focus on is if the risk premium falls first, the growth story will follow. In the first instance we expect Asian equity markets to be propelled by falling risk premiums. Only later do we expect the growth situation to stabilise and help lift equities with it.

### Key stock/sector ideas

In the last two market recoveries, Asian equities have re-priced to 1.6x book within six-nine months of the low. This implies a level of 350 on the MSCI Asia ex-Japan index. We expect downside to 1x book, back to 1998 levels, if credit markets deteriorate again. We continue to prefer rate-sensitive stocks and sectors to economic cyclicals (overweight telecoms, financials, and underweight tech, industrials). We overweight China, Hong Kong, Singapore, and underweight India, Malaysia, Taiwan.

## Outlook for 2009

Barring a substantial rally in the next few weeks, 2008 will go down as the worst year for Asian equities in the last forty. We think 2009 will be marked by a very tough early year earnings season and deteriorating fundamentals, as we discussed recently in a number of reports. Nevertheless, risk premia are extremely high, and we expect these to fall, driving Asian equities higher. This is another way of saying falling bond spreads are likely to be the catalyst for the early stages of any rally in Asian equities. Thereafter, as we hit the bottom of the economic cycle, and the earnings picture becomes less clouded in gloom, we think fundamentals could drive equities higher. However, we are not at that point yet.

Our central thesis is Asian equities are inexpensive, trading as they are close to book value, and capable, we believe, of generating a sustainable ROE in excess of 13%. The growth outlook for Asian economies continues to deteriorate, as Duncan Wooldridge and our economics team has highlighted, but they also believe as we move into the first half of 2009, we may be closer to a bottom in the growth cycle. While the global environment remains one of low growth and low inflation for the foreseeable future, this also means a period of low interest rates.

Ultimately, as we move through the bottom of the cycle, Asia—with some exceptions—should come out of the current malaise in relatively good shape: low interest rates, high savings and inexpensive valuations. Several Asian countries are undertaking reflationary fiscal policies, such as China's substantial package. Monetary policy is also likely to continue to be eased. Fundamentals for growth will probably look stronger in Asia than elsewhere in the world, although the 'build and export' model is unlikely to be a dynamo of growth. Moreover, as a net importer and user of commodities, we believe Asian margins should be underpinned to some extent as input prices moderate. So the story is not all one of doom and gloom.

However, as long as the global backdrop of malfunctioning credit markets persists, Asian growth will continue to slow, and equity risk will remain high. We think credit spreads hold the key to Asian equities running higher.

We continue to think the focus should be on playing rate sensitivity over cyclicity for now, although we remain flexible to turning more pro-cyclical as the destocking phase in Asian economies recedes. We expect rates to fall (both policy and market rates) as a more likely short-term scenario than a sudden rebound in the global economic cycle. We are less concerned now than in the middle of the year about currency crises in Asia, but still think it is better to focus on countries closer to domestic monetary and fiscal reflation (for example China) than where the credit cycle is still early in the slowdown mode (for example, India). Our preferences are for China, Hong Kong and Singapore. We underweight Taiwan, Malaysia and India.

### The growth & earnings outlook

Growth is likely to worsen for the next few months globally and in Asia. Leading indicators continue to deteriorate. The UBS economics team has lowered its Asian growth forecasts substantially. For 2009 it now expects 4.9% GDP growth and 6.3% in 2010.

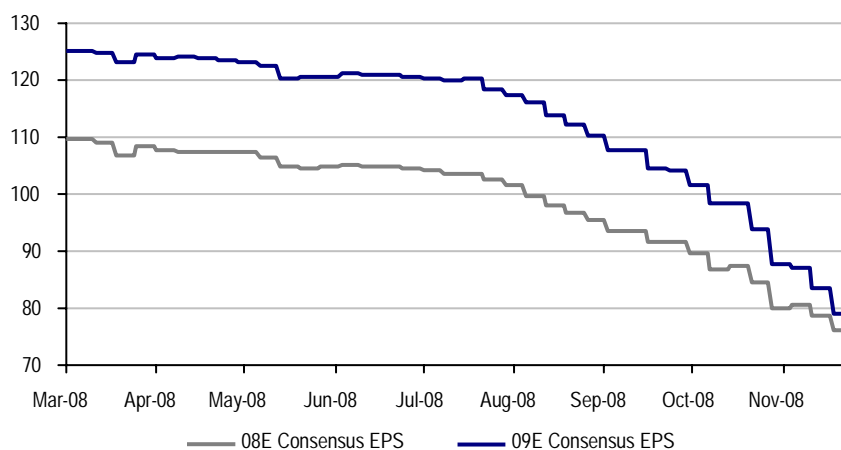
Duncan Wooldridge and the economics team, who have been consistently bearish on the economic outlook, now think the risk to these numbers is balanced as we look into 2009. Moreover, they believe as things stand, the low point of growth could be in the first half of the year. We think this should mark an important inflection point for equities from a fundamental perspective. Monetary easing in Asia along with fiscal reflationary packages should lead to stabilisation of growth, and the inventory cycle—once complete—will likely lead to a rebound in production, even in the face of weaker final demand.

The destocking cycle is especially important. It is happening aggressively at present, posing a substantial risk to revenue and profit. Fourth quarter earnings in Asia are likely to be weak and this may linger into demand in the first quarter. As a result, by the time companies report results, corporate newsflow is likely to be bleak, bottom-up.

Investors have rightly been wary of sell-side earnings estimates in 2008. However, although we expect a poor outcome for earnings generated in the fourth quarter of 2008 and the early part of 2009, we think there are reasons to be more relaxed about consensus growth estimates into next year. Firstly, consensus expectations have corrected substantially, although cynics will correctly point out these corrections were off lofty levels.

We still forecast around 10-15% downside to consensus numbers, principally from revenue growth being especially weak in the last quarter of 2008, and first quarter of 2009.

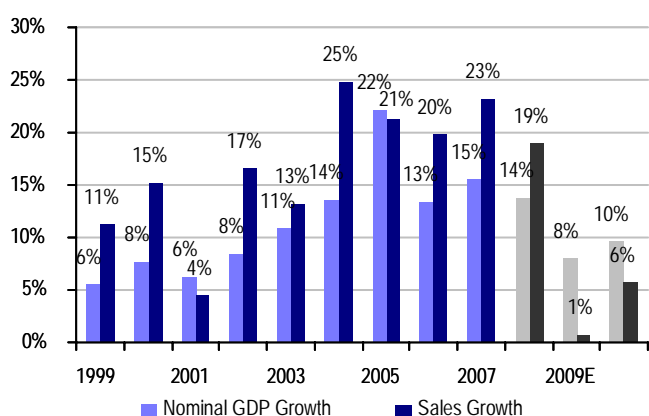
**Chart 1: Consensus EPS forecasts—downgrades (2007 EPS = 100 at year beginning)**



Source: Datastream, IBES

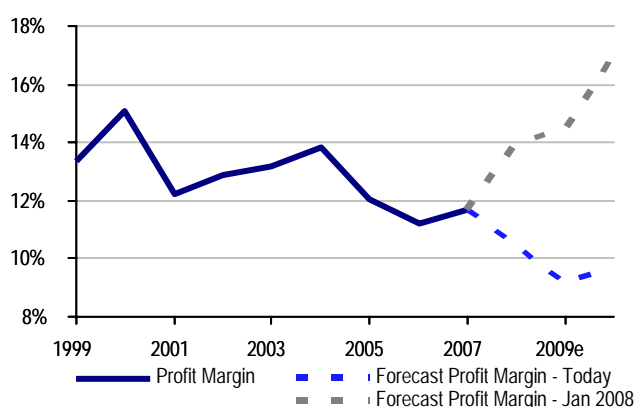
However, now there is more reality in expectations, in our view. Revenue growth forecasts for 2009 also look sensible as do 2010 growth forecasts—both of which are below our economists' nominal GDP forecasts for each year. However, 2008 revenue growth forecasts look a point of stress, and we expect the fourth quarter of 2008, and early months of 2009, to be especially tough for companies as destocking continues. Margin forecasts are predicting a decline of around 300 basis points, similar to the decline in margins during the last recession.

**Chart 2: Asia ex Japan—nominal GDP growth and sales**



Source: Datastream, UBS estimates

**Chart 3: Asia ex Japan—EBIT margins (UBS)**



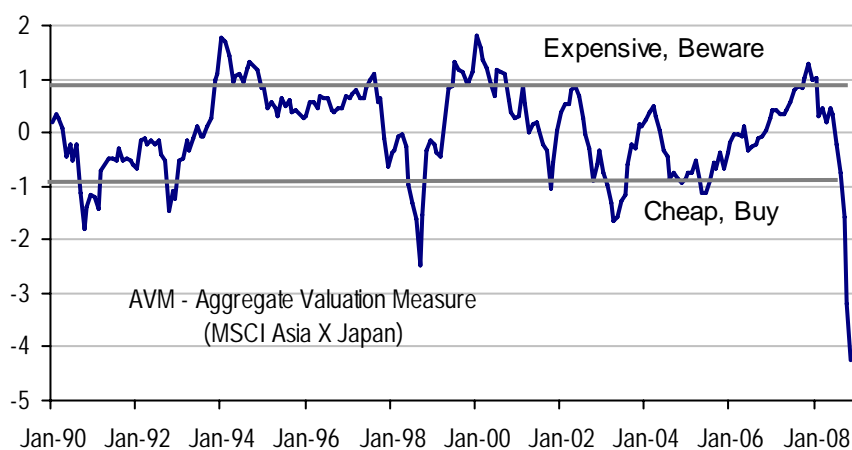
Source: UBS estimates

Specifically on the margin front, we are more sanguine things might start to look more robust. A major contributor being that Asia, as a net importer of commodities, should benefit from lower input prices, in our view.

### Valuation—cheap, but not the catalyst

At the outset of the bear market, Asian equities were expensive. The one thing that has unquestionably occurred since then is valuations have corrected substantially. On our aggregate valuation measure (AVM), Asian equities are now cheaper than at the 1998 lows.

**Chart 4: Asian equities in buy zone—AVM**

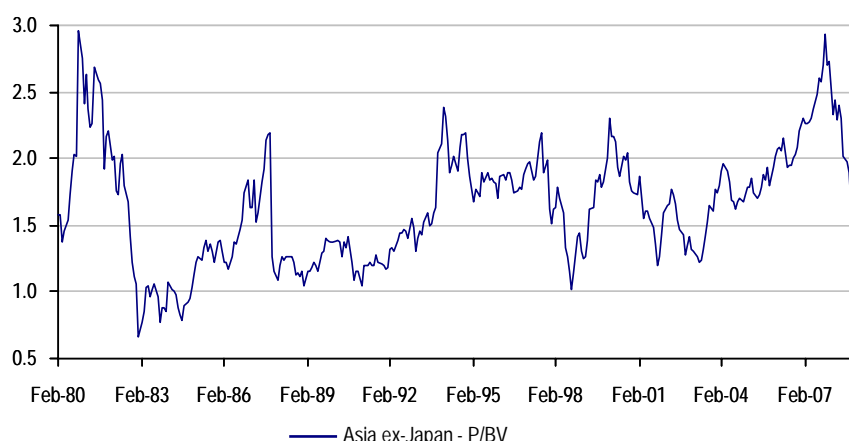


Source: Datastream, UBS estimates

Our AVM is a combination measure that includes five metrics—forward and historic PEs, price to book, dividend yield and an earnings yield/bond yield indicator. There is understandably a great deal of skepticism about using earnings indicators such as PE during recessions. As a cleaner valuation measure, we also look at straight price to book for Asia. Chart 5 shows how Asia looks compared with history; in a word: inexpensive.



Chart 5: Asia ex-Japan—P/BV



Source: Datastream

As we have pointed out, in saying equities are ‘cheap’ in this environment, we are making an observation, rather than indicating a catalyst for the market to turn around. Moreover, relative to other assets such as corporate bonds, equities look attractive, but not as ‘cheap’ as they first appear; therein lies the problem. So long as corporate bond spreads remain elevated there is competing value, with potentially less risk, elsewhere.

### Sentiment/liquidity—the problem

The rise in bond spreads is largely a function of liquidity, or more accurately, the lack of it. While central banks have turned the liquidity taps fully on, the velocity of money has fallen, as financial deleveraging has kicked-in.

Chart 6: Asian high yield CDS

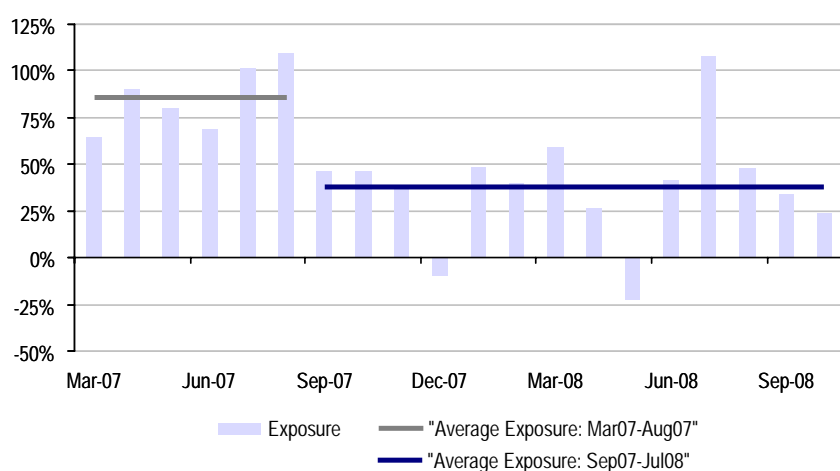


Source: Bloomberg

When this process will end is not clear. However, we believe spreads need to come down as a demonstration that credit markets are working more normally. They also need to fall to realise value in other asset classes, a point made by our global asset allocation colleague, Larry Hatheway.

However, we note that in a micro-liquidity context, net exposure levels of hedge funds in Asia have already fallen substantially, as Chart 7 shows.

**Chart 7: Asian long/short equity hedge fund exposure**



Source: Bloomberg, Datastream, UBS estimates

Also, investor sentiment has become so fragile that half the flow injected into Asian equity markets by international retail investors between 2003 and 2007 have now fled the market. In other words a considerable amount of financial de-leveraging has already taken place within the *equity* market in Asia.

### Where we may go

Asian equities are factoring in a great deal of bad news. Granted, economic growth is likely to slow much further, fourth quarter/first quarter profits are likely to be a source of disappointment and the credit situation continues to be a source of fear. However, a lot of this bad news is in the price, with Asian equities trading on a forward PE of 8.9x. Even factoring a further 20% decline into these numbers, puts the forward PE on 11.2x 'trough' earnings. More compelling, Asian equities now stand on 1.11x book value.

We think at current levels, Asian equities are attractively priced. Downside in our view still exists if credit spreads widen again. Asian equities traded below book value in the early 1980s (in high inflation, global recession and the currency crisis in Hong Kong). A better comparison we think is with the 1998 crisis, when Asian equities touched 1x book value. We view this as a realistic downside risk in the event that credit markets worsen again.

In the last two recoveries in Asia, equities recovered to an average price/book multiple of 1.6, six to nine months from the bottom. This corresponds to a value of 350 on the MSCI Asia ex-Japan. This would be our core expectation of where Asian markets go by year-end 2009, assuming a bottom in markets some time in the next six months (if they have not done so already). However we also think there is considerable upside to this target. As we have highlighted, Asian equities should generate a sustainable ROE higher than in previous downturns due to the better asset/turnover ratios. Furthermore, the 'quality' of the ROE is higher, as it is generally being achieved on lower leverage than in previous cycles. We think this justifies a fair value price to book of at least 1.75x.

## Key themes

Our key message remains that we think economic cyclicality is not the place to be for now. However, we think that as the first quarter progresses it would be correct to reappraise this view if destocking reaches a climax. We believe the more obvious trade is to focus on rate-sensitivity—we see rates coming down (both policy and market rates) as a more likely short-term scenario than a sudden rebound in global growth. This means focusing on high yielding stocks with good cash flow (for example, telecoms) and financials. Many Asian banks are in good shape with underutilised balance sheets. With spreads high and yield curves steep globally, well-capitalised under-gearred banks should be recording net interest margin expansion, albeit NPLs will also likely rise. Our most favoured sectors are financials and telecoms, our least favoured continue to be technology and industrials.

**Table 2: Asia ex-Japan sector weights**

Overweight	Neutral	Underweight
Financials	Consumer Disc	Consumer Staples
Telecom	Materials	Information Technology
	Energy	Industrials
	Health Care	
	Utilities	

Source: UBS estimates

At country level, while we have been concerned about currency risk in a number of external deficit countries throughout the region, such as in India, we are now more optimistic these risks will gradually fade. Our emphasis is on caution towards domestic demand cyclicals, in which the domestic credit cycle continues to play out (for example India and Korea), and is more focused on countries where reflation (monetary and fiscal) is likely to kick-in through the year. Principally, for us, this means China. Beyond this, our overall country focus is guided by a combination of growth adjusted valuation, earnings momentum, and low exposure to cyclicality, high exposure to rate sensitivity. Our overweight countries are Singapore, Hong Kong and China, and underweights, Taiwan, Malaysia and India.

**Table 3: Asia ex Japan country weights**

Overweight	Neutral	Underweight
Singapore	Philippines	India
Hong Kong	Thailand	Malaysia
China	Indonesia	Taiwan
	Korea	

Source: UBS estimates

## 'Flation' in fashion

Deflation, disinflation, reflation and inflation are all likely to be buzz words next year. Cost deflation is likely to be an important theme in Asia. Fiscal reflation is also likely to figure as an important driver of performance as we progress through the year. We expect to hear a lot about deflation and inflation from the commentary community as central banks continue to grapple with the credit crunch.

## Catalysts

The two key catalysts in our view for equity markets are that credit markets and the economy need to stabilise. The best proxy for a credit improvement is the credit spread on longer dated paper, in our view. Although equity markets will likely rally along with a narrowing spreads, we view this indicator as a key source that credit markets are beginning to function again. The growth cycle must also show some signs of hitting bottom. We expect this to happen sometime in the first half. The most likely scenario we focus on is if the risk premium falls first, the growth story will follow. In the first instance we expect Asian equity markets to be propelled by falling risk premiums. Only later do we expect the growth situation to stabilise and help lift equities with it.

In Table 3, we reproduce a more detailed list of potential market catalysts that Jeffrey Palma, UBS's global equity strategist, published 1 December in his year ahead outlook.

**Table 4: Possible catalysts for improved market sentiment**

Catalyst	What to look for?
<b>Inter-bank spreads</b>	Additional narrowing of TED and Libor spreads would signal an unfreezing of the credit markets and a return to a more functioning financial system. This seems a necessary condition to facilitate higher risk appetite.
<b>Corporate bond spreads</b>	A reduction in corporate bond spreads would allow corporates to borrow and refinance at more generous rates and prevent the disruption to the normal course of business from financing worries. Outperformance of lower quality corporate bonds would be a related signal of improvement.
<b>Mortgage rates</b>	Households would be the biggest beneficiary of falling mortgage rates and potentially prevent further worsening in consumer spending by improving the ability to refinance. Further, lower rates would improve housing affordability, helping to boost housing demand which could put a floor on prices and begin to clear inventory.
<b>Bond issuance</b>	As well as lower costs of credit, the availability of credit needs to increase too. An increase in bank lending and the provision of credit to credit worthy borrowers would be a welcome sign.
<b>Volatility</b>	A decline in risk aversion will be critical to instilling confidence and could set the stage for equity multiples to expand and sector rotation to begin.
<b>House prices</b>	Since falling house prices led us into this financial crisis signs of prices stabilising and the end of wealth destruction in housing would benefit both consumers and the asset backed security markets.
<b>Economic activity</b>	Manufacturing indicators tend to be early barometers of the health of the economy and a bottoming of the PMI indices would give some signal that the worst economic news is behind us.

Source: UBS

## Asian Equity Strategy Top 10

With this note, we introduce our Asian Strategy Top 10. This is a most preferred list of stocks that fit into the theme, sector and country tilts we are currently focused on. The list is drawn from stocks on which our colleagues in UBS Asia equity research have 'Buy' ratings.

The most obvious points are at the country level, where our overweight in China (which makes up almost 30% of the MSCI Asia ex-Japan index) results in four

stocks. Likewise, our underweight in Taiwan, results in no representation. Furthermore, although we do not like industrials or technology at a sector level, we have Cathay Pacific, in what would otherwise be a zero weighting towards cyclicality. We like Cathay Pacific (and China Resources Power) for the margin story as input price falls, rather than because demand looks robust.

**Table 5: Asia - Top 10 stock lists**

Company	Market cap (US\$ bn)	UBS rating	Share price (LC)	Price target (LC)	PE 2009E
<b>Most preferred</b>					
Bharti Airtel	24	Buy-ST Buy	651.15	1,000.00	16.2
Cathay Pacific	4	Buy (CBE)	7.90	12.00	(11.7)
China Mobile	169	Buy	72.75	80.00	11.6
CNOOC	31	Buy	6.50	10.90	5.0
China Resources Power	7	Buy	14.60	22.60	36.2
ICBC	170	Buy	3.95	6.90	10.4
Kasikornbank	3	Buy	40.25	77.90	6.5
KT&G	8	Buy	77,000	107,000	14.3
SHK Properties	17	Buy	62.25	84.20	11.1
United Overseas Bank	12	Buy	12.70	16.00	8.9

Source: UBS estimates

## Asia Top 10

In this section we present company commentary for our Top 10 in conjunction with the company analysts.

Our current Top 10 includes the following stocks:

### Asia Top 10

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
<b>Bharti Airtel</b>	Buy-ST Buy	1,000.00	Bharti Airtel is the best positioned mobile operator in terms of brand strength, execution capabilities, spectrum and balance sheet strength.
<b>Cathay Pacific</b>	Buy (CBE)	12.00	Lower oil prices should underpin recovery in 2009. Strong balance sheet, strong competitive position and attractive valuation.
<b>China Mobile</b>	Buy	80.00	China Mobile has the ability to maintain leading position by leveraging on larger sale, better brand name and management quality, and lower integration risk within restructuring.
<b>CNOOC</b>	Buy	10.90	Leveraged play on expected recovery in oil prices, competitive position, potential discoveries, solid balance sheet, in good position to acquire assets.
<b>China Resources Power</b>	Buy	22.60	Best return and margin among peers; upside risk from lower-than-expected coal prices.
<b>ICBC</b>	Buy	6.90	We believe the conservative nature of ICBC's balance sheet structure will provide investors with a relatively safe margin in challenging times.
<b>Kasikornbank</b>	Buy	77.90	Current P/BV of 1x overstates risks.
<b>KT&amp;G</b>	Buy	107,000	Korea's leading cigarette company.
<b>SHK Properties</b>	Buy	84.20	Top developer in Hong Kong with a strong track record.
<b>United Overseas Bank</b>	Buy	16.00	Management has a proven track record through the cycles, well capitalised with Tier 1 of 11.2%. Attractive valuation and franchise strength. Defensive pick among Singapore banks.

Above data as at 1 December 2008. Source: UBS estimates

We summarise briefly the investment case into 2009, current valuation and likely catalysts for each of the stocks in our Top 10 below:

### Bharti Airtel

**Investment case:** Bharti Airtel (Bharti) is the largest mobile operator in India. It has pioneered the mobile revolution in India and benefited from first-mover advantage in tower sharing and backbone expansion. Bharti continues to dominate India's mobile space with its vision, focus on execution, strong brand and wide distribution network, indicated by its strong quarterly results and monthly subscriber additions. We believe Bharti will emerge as a major beneficiary from its joint venture Indus Towers (Indus), as Indus is likely to become the tower provider of choice for Indian GSM operators, given its deep tower portfolio (73,000 towers at the end of FY08).

We believe the critical success factors for Indian mobile operators are: 1) brand strength; 2) execution capabilities; 3) the amount of spectrum available; and 4) balance sheet strength. We believe Bharti is the best positioned Indian mobile operator in each of these areas, and it is therefore our top pick in the Indian mobile space.

**Valuation:** We maintain our Buy rating, and Short-Term Buy rating, with a sum-of-the-parts-based price target of Rs1,000.00, assuming a terminal growth

**Sector:** India Wireless Communications

**Rating:** Buy

**PT:** Rs1,000.00

**Analyst:** Suresh Mahadevan

rate of 2%. Indus and Bharti Infratel (excluding Indus) contribute Rs197.00 to our price target and constitute 19.7% of Bharti's equity value.

**2009 catalysts:** We believe the key catalysts for stock performance are: 1) the announcement of a commercial agreement between Bharti, Vodafone, Idea and Indus, likely in the next few weeks; 2) financial disclosures on Indus, which will provide more visibility; and 3) quarterly results and monthly subscriber additions, showing a continued successful track record.

## Cathay Pacific

**Investment case:** Cathay Pacific's margins have been hit in 2008 by the rapid increase in fuel prices in H1 and Cathay's own rapid capacity growth on North American routes (which limited management's ability to move pricing higher). Demand has taken another step down over the past few months but, assuming oil prices remain at current levels, we think this will be offset by lower jet fuel prices and margins will recover in 2009. While this downturn could be severe from a revenue perspective, we believe Cathay is in a stronger competitive position, following the acquisition of Dragonair in 2006, than it was in the previous downturn (and Cathay has emerged from each of the past three downturns in a stronger competitive position). Valuation multiples (price/book) are close to all-time lows and even in the context of a difficult revenue environment, we think the stock can recover to previous support levels (1x book) implying about 50% upside potential.

**Valuation:** We base our price target of HK\$12.00 on the UBS VCAM model, assuming long-term operating margins reach 10% (the average since the start of this decade).

**2009 catalysts:** Stabilisation of revenue trends, ongoing capacity cuts by weaker airlines, possible deferrals of aircraft by the Chinese airlines (less competition at mainland hubs). Return of risk appetite.

## China Mobile

**Investment case:** China Mobile is still our top pick among Chinese telcos, despite competitive pressure and regulatory risk. We believe China Mobile will be able to maintain its leading position, by leveraging on its a large subscriber base, its strong brand name and management quality, and low integration risk from restructuring. We do not expect asymmetry regulations to have a major impact on China Mobile, and technology risk of TD-SCDMA could be manageable with the parent company's help.

**Valuation:** China Mobile's price target of HK\$80.00 is based on a DCF methodology, with a WACC of 11.7% and long-term growth rate of 2%. We estimate net cash to reach Rmb183bn by the end of 2008, which represents HK\$10.60 per share and 16% of its market cap. In addition, the dividend yield of 5.2% in 2009E is also the highest among Chinese telcos. We believe China Mobile is a defensive play in the current market.

**2009 catalysts:** We expect China Mobile to report strong results in 2008 and 2009, with net profit growth of 32% and 12%, respectively. This is compared with flat earnings in 2008E and an approximate 20% earnings decline in 2009E

**Sector:** Hong Kong Airlines

**Rating:** Buy

**PT:** HK\$12.00

**Analyst:** Damien Horth

**Sector:** China Wireless Communications

**Rating:** Buy

**PT:** HK\$80.00

**Analyst:** Jinjin Wang

for China Telecom and China Unicom. It downside risks could be unexpectedly harsh asymmetric regulations and worse-than-expected TD-SCDMA roll out.

## CNOOC

**Investment case:** UBS believes global oil prices are likely to bottom in the first half of 2009 and that a recovery is possible by H209. If this acts as a catalyst, we think CNOOC is likely to be the first choice among Asian oil and gas stocks given its good value, competitive position and reserves growth potential. We expect CNOOC to grow its production at an 8-10% CAGR over the next five years. While we believe Bohai Bay will continue to present good upside opportunities for reserves growth, we think the deep water exploration projects in the South China Sea will begin to play a leading role. CNOOC recently announced that it believes oil and gas reserves in place in the region could be as high as 22bn boe and that production could peak at 1.0bn boed. Investment through 2020 could total US\$29bn in the region for CNOOC and its partners. Finally, low oil prices have the potential to present good acquisition opportunities for CNOOC this year, in our view.

**Valuation:** We have a Buy rating on CNOOC. We base our price target of HK\$10.90 on a DCF valuation methodology that assumes a long-term Brent crude oil price of US\$85/bbl (2013) and 10.4% WACC (11.8% cost of equity, 4.9% after tax cost of debt, and 1.25 beta).

**2009 catalysts:** We believe that ultimately a bottoming and subsequent rise in global oil prices by mid-2009 could be the key catalyst for CNOOC. Beyond this, we believe newly announced discoveries could also contribute to performance.

## China Resources Power

**Investment case:** We think Chinese IPPs will benefit from low coal costs during 2009, which will drive margin and return recovery. Declining coal costs is a more significant earnings driver than a moderation in power plant utilisation rates.

China Resources Power is our top pick among Chinese IPPs. It has the highest margins and returns, with the best medium-term growth potential and least sensitivity to demand weakness. Although its gearing is the lowest among its Hong Kong-listed China peers (143% 2008E net debt to equity), management is still prudent about capex spending, planning to scale back capacity addition to conserve cash.

Despite falling demand growth in China, the decline in power plant utilisation rates should only be modest, given coincidental low capacity additions, due to slow government approvals and IPPs' financial constraints. This should lead to stable revenue, while margin and return should improve on falling coal costs, in our view.

**Valuation:** Its valuation (excluding coal) is close to its 1x P/BV trough. Our price target of HK\$22.60 is based on three-stage DCF methodology using a WACC of 9.3%, explicit cash flow to 2012 followed by a medium-term growth rate of 7.5% and 11% ROIC for 10 years, and a terminal growth rate of 5.0% at an 9.3% ROIC.

**Sector:** China Oil Companies, Major

**Rating:** Buy

**PT:** HK\$10.90

**Analyst:** Peter Gastreich

**Sector:** China Electric Utilities

**Rating:** Buy

**PT:** HK\$22.60

**Analyst:** Stephen Oldfield



**2009 catalysts:** Settlement of most contracts with coal producers around January 2009 may surprise on the downside relative to our forecast of a 10% YoY rise. We also expect Q109 sector results, released around April 2009, to show margin recovery.

## ICBC

**Investment case:** We believe the conservative nature of ICBC's balance sheet structure will provide investors with more margin in challenging times, as highlighted by: 1) the lowest loan-to-deposit ratio among China banks (56%) as at Q308, making it less vulnerable to PBOC's asymmetric interest rate cut; 2) the lowest 2005-07 loan CAGR of 11% among China banks, suggesting the smallest portion of newly underwritten risks during the economic peak years; and 3) the existence of a Rmb1.03trn restructuring-related bond portfolio yielding 2.23% in H108, indicating upside for its bond portfolio yield, when such positions are reprised in 2009 and 2010.

**Valuation:** We base our price target of HK\$6.90 on 20% long-term ROE, 11.5% COE and a 3.0% terminal growth rate. With the global economy (and China's) fast deteriorating, and the PBOC's proactive and radical interest rate cuts, we see potential downside to our earnings forecasts for 2009-10. Nevertheless, we believe 9.2x 2008E PE and 4.9% 2008E dividend yield is an attractive valuation for this conservative franchise.

**2009 catalysts:** As a leading bank with a 15% share of China's loan market, we believe ICBC will not be immune to the deteriorating macro economy. Our 2009 and 2010 net profit forecasts assume 100bp and 90bp credit cost, compared with 73bp in 9M08. The announced Rmb150bn Tier-2 capital raising could mark a bottom for the stock in 2009, given it will likely secure low-cost funding at the trough of the interest rate cycle.

## Kasikornbank

**Investment case:** We believe the current valuations present an attractive buying opportunity into Kasikornbank's (KBANK) solid long-term growth platform. We expect the above-average return beyond 2009E to be underpinned by: 1) its well established position in the SME and retail segments; 2) the completion of an IT upgrade at year-end 2009, which will likely enhance its fee-based income capability; and 3) the expected decline in credit cost as its NPL coverage ratio rises to over 90%.

**Valuation:** We base our price target of Bt77.90 on a 1.5x 2009E book value multiple, assuming 10.4% COE and a 13.1% sustainable ROE.

**2009 catalysts:** We think the successful IT upgrade under the "K-Transformation" programme could be a key positive catalyst to support fee-based income growth. The project is scheduled to be completed by year-end 2009.

**Country:** China Banks, Ex-S&L

**Rating:** Buy

**PT:** HK\$6.90

**Analyst:** Victor Wang

**Sector:** Thai Banks, Ex-S&L

**Rating:** Buy

**PT:** Bt77.90

**Analyst:** Butsakon Khoosuwan

## KT&G

**Investment case.** We like KT&G given: 1) its high earnings growth visibility in 2009, based on defensive demand for cigarettes and a relatively stable raw material cost trend; 2) solid growth potential from exports and the ginseng business; and 3) a solid cash return policy—we estimate KT&G could use approximately Won600bn for dividends and buybacks every year, over 5% of the current market cap.

**Valuation.** Our 12-month price target of Won107,000 is based on a DCF methodology and assumes an 8.5% WACC and 1% terminal growth.

**2009 catalyst.** We believe a domestic market share gain or decline would be the key catalyst for KT&G.

## SHK Properties

**Investment case:** SHK Properties (SHKP) is the top developer in Hong Kong with a strong track record in sustainable sales, and one of the biggest landbanks. The company's quality management and product has consistently resulted in premium pricing and buyer loyalty. It is now the largest owner of premier offices (IFC and ICC) and the second largest for retail facilities (after Link REIT) in Hong Kong, with new investment property completions (in Hong Kong and China) in FY09-10E at 6.3m sf (or HK\$37bn in value), adding to its already substantial 28.6m sf portfolio. The China expansion ramp up planned for next year should enable SHKP to deploy its strong balance sheet (gearing at 15%) to buy distressed assets at a low in the market.

**Valuation:** We derive our price target of HK\$84.20, on a 25% discount to end-2010E NAV of HK\$112.30. SHKP is trading at a 49% discount to end-2010E NAV and 45% to its trough-2009E NAV of HK\$104.1. The company is trading at multi-decade low point.

**2009 catalysts:** Significant project launches such as The Cullinan (HK\$13bn revenue if all sold) after Chinese New Year, material project purchases or M&A in China should help the company take advantage of good locations in a bad market. Also, material land premium fixing in Hong Kong, will likely expel market doubts over the company's continued development model. Any resolution in the dispute between the Kwok brothers should return investor confidence on the company's premium status.

## United Overseas Bank

**Investment case:** Among the three Singapore banks we prefer United Overseas Bank (UOB) as a defensive pick. It has a much smaller corporate CDO portfolio than DBS, and also does not have a large insurance exposure such as that of OCBC, which can be volatile in turbulent markets. UOB's management has a proven track record of having managed through the cycles and this should bode well in the current environment. UOB has a Tier 1 ratio of 11.2%, well above the minimum requirement of 6%, and we believe this reflects the strength of its balance sheet. While its loan-to-deposit ratio is only 89%, the bank in recent quarters has been a net inter-bank borrower and the recent decline in inter-bank rates should benefit.

**Sector:** Korea Tobacco

**Rating:** Buy

**PT:** Won107,000

**Analyst:** Heather Lee, D.S. Kim

**Sector:** Hong Kong Real Estate

**Rating:** Buy

**PT:** HK\$84.20

**Analyst:** Eric Wong

**Sector:** Singapore Banks, Ex-S&L

**Rating:** Buy

**PT:** S\$16.00

**Analyst:** Jaj Singh

**Valuation:** The stock is trading at 9.8x 2009E PE and 1.13x book. While this is in line with its peers, it is significantly below its trading history. While heightened risk aversion may limit the upside in the near term, we believe the stock remains attractive on a 12-month outlook, both on valuation and on the strength of its franchise. We derive our price target using the Gordon Growth Model, assuming ROE of 12.0%, COE of 9.6%, and growth of 4.8%.

**2009 catalysts:** We think signs of the bottoming of the economy and provisioning could provide potential catalysts for the stock. Another potential catalyst could be better margins via wider spreads.

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■ **Statement of Risk**

Although there are many uncertainties with equity investing, generally economic and policy surprises pose the most consistent and continuous risks. Economic growth can be volatile, leading to earnings uncertainty. Inflation volatility can likewise lead to interest rate uncertainty. The direction and level of policy rates has a substantial impact upon equity valuations.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## UBS Investment Research

# Asian Economic Perspectives

## Asian Economics – Outlook 2009

### ■ Asian economic growth bad in 1H09, less bad in 2H09

We have argued consistently against decoupling for Asia from the beginning of 2008 and believe Asia cannot decouple from a global recession in 2009 either. We expect Asian ex-Japan growth to slow to 4.2% in 2009 versus trend growth of nearly 8% over the past three decades. This is consistent with recession for Asia relative to her own growth experience and would be the slowest growth since the mid 1970s (excluding the 1997/1998 Asian Crisis growth rate of 2.5%). Our growth forecasts are below consensus across the region.

### ■ Inflation and rates to fall across Asia

Inflation has already peaked in Asia and thus the door is open for policymakers to cut rates to put a floor under economic growth, as well as sow the seeds for stronger growth in 2010. Obviously, many Asian economies will deploy differing levels of fiscal stimulus, but we see monetary easing as the central policy response.

### ■ Getting deeper into the mess could help equity markets and FX

Ironically we need to see more downside for growth and profits before markets can improve on a sustainable basis. We have argued all year that one of the problems for Asian markets in 2008 was its proximity to peak growth rates. However, if we string together many months of negative industrial production or exports, coupled with monetary/fiscal easing, then we may see markets move up next year as long as we believe 2H09 will be less bad and that the global economy will improve modestly in 2010. That could be positive for Asian exchange rates as well since capital flow to Asia in 2H09.

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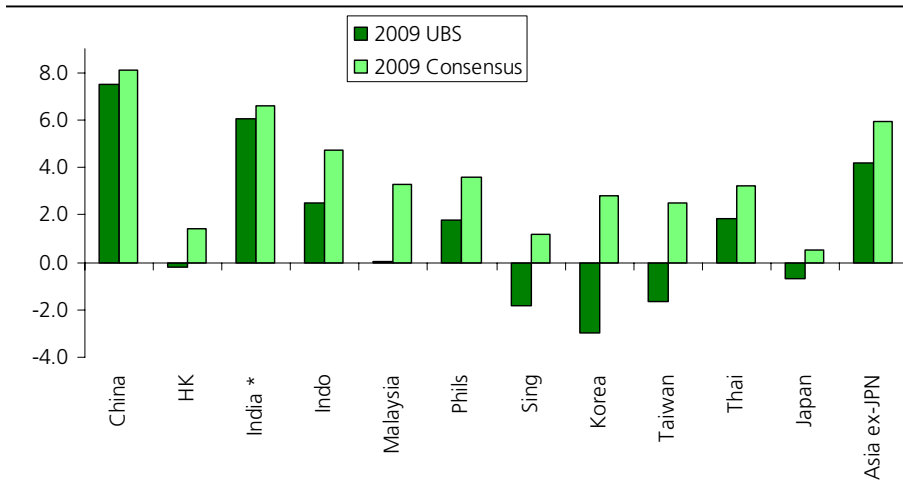
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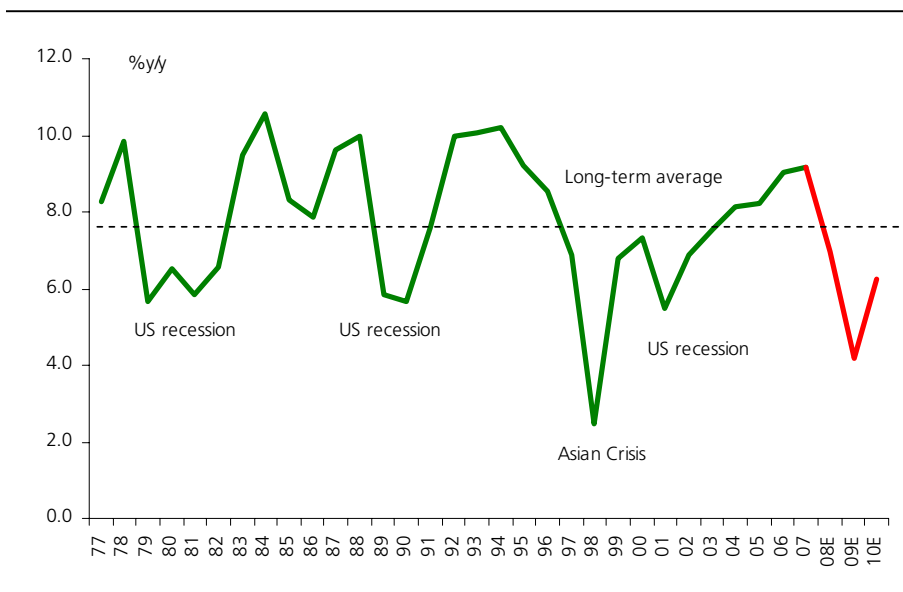
**Chart 1: UBS 2009 Asia GDP Forecasts Vs. Consensus**



Source: CEIC, UBS estimates, Consensus Economics; Note: \* India: Fiscal year beginning April

We started this year by trying to debunk the “decoupling” view for 2008 and that is a good place to start as we look ahead to 2009. (See for example 22 January 2008, *UBS Asian Focus: Asia – The End of Decoupling*.) Next year we expect the G3 economies to contract and the global economy to creep along at just 1.2%/y/y. To put that into perspective remember that the global economy slowed to 2.4% during the 2001 US/global recession. Slower exports to the G3 and to the global economy will lead to weaker domestic demand in Asian economies as the flow of income derived from the export sector weakens to households and businesses. Less income for households should logically mean weaker private consumption; less income for firms should mean a pullback in investment and cost cutting to defend profit margins. Hence, a slowdown in Asian exports equals a slowdown in domestic demand as well, in our view. All this without taking into consideration the negative impact of the deep fall in stock markets this year and impaired flows of global credit. For Asia ex Japan, we think this will translate into the weakest economic growth since the mid 1970s, excluding the 1997/1998 Asian Crisis, despite the region having admittedly solid fundamentals. You can have decoupling or globalization, but you can’t have both (at least when it comes to the business cycle).

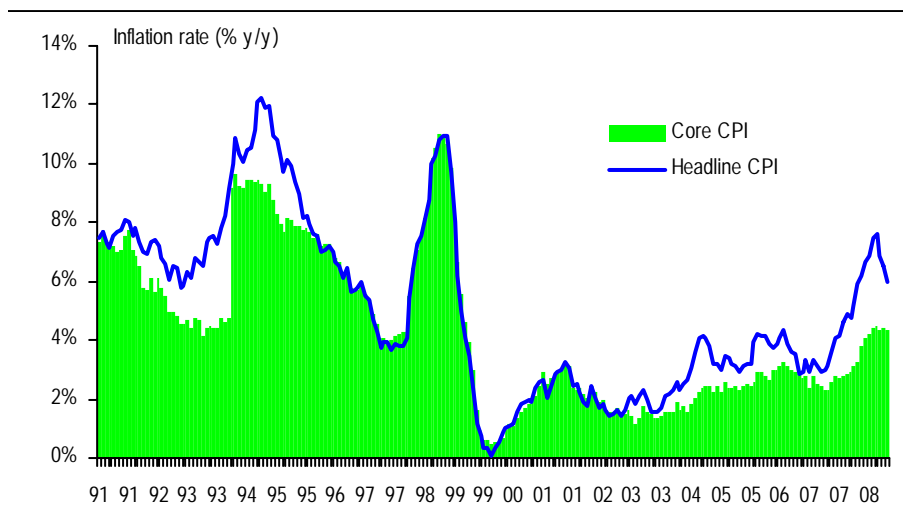
**Chart 2: Asia ex Japan – Headed for 2009 Economic Recession**



Source: CEIC, UBS estimates

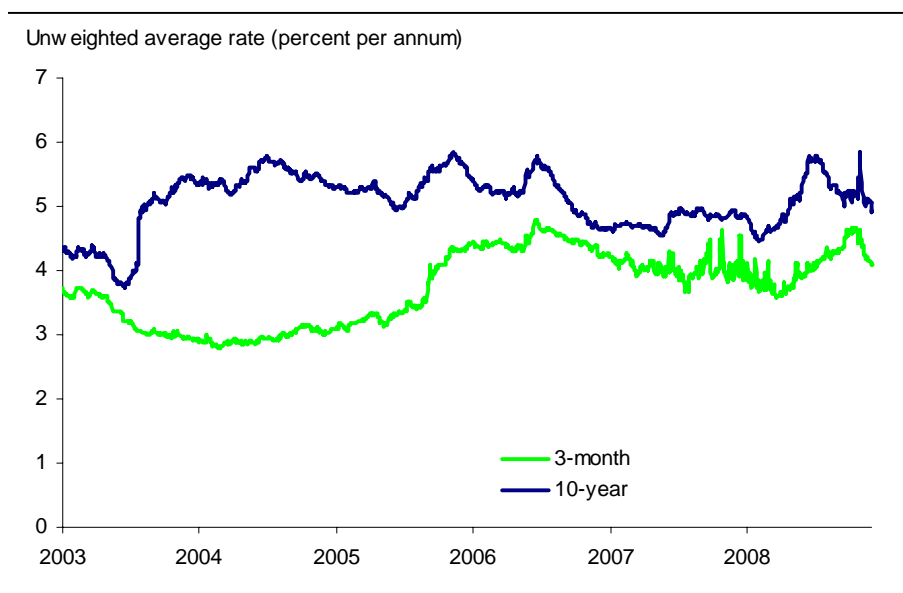
Fortunately, there is room to bring rates down next year to at least put a floor under things in Asia. Inflation in most economies under our coverage is coming down now that oil and commodity prices have collapsed, and with economies in the region clearly slowing we are forecasting inflation to move lower in 2009. That opens the door for monetary easing in the region. In fact many central banks have begun to ease monetary policy as well as announcing fiscal packages, not the least of which is China where rates have been lowered, reserve requirements have been cut and the government has signalled a clear intention to support the economy.

**Chart 3: Asian Inflation Has Peaked**



Source: CEIC, UBS estimates

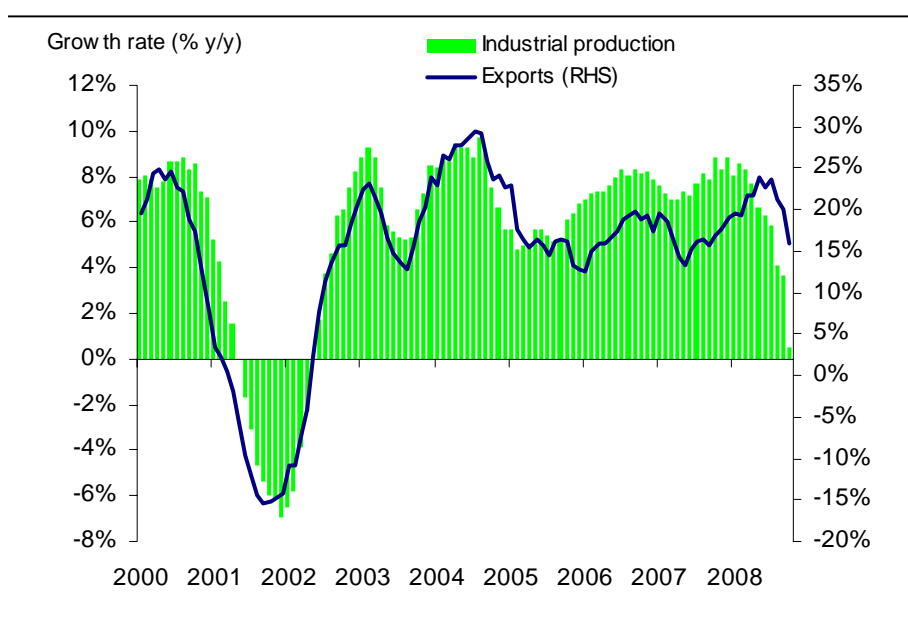
**Chart 4: Asian central banks are beginning to cut rates**



Source: CEIC, UBS estimates

However, a note of caution and optimism is appropriate here. Interest rate cuts and fiscal stimulus are not sufficient conditions for the macro to sustain Asian equity market increases. For that we believe markets must be convinced that the worst is over. That can only be met, in our view, by actually seeing the data get much worse in 1H09. Our dear reader may recall from our earlier reports on the region that we were worried about profit margins and markets early this year when Asia was growing close to peak cyclical growth rates. In 1H08 Asia grew strongly, but because markets anticipated a slowdown markets consistently fell. It is conceivable that the opposite could happen late next year. Ironically, a necessary condition for the macro to be more supportive for markets is that we need to get deeper into recession before investors can honestly sense where the bottom lays. We haven't been able to do that yet. However, chart 5 suggests Asia could be headed there by, say, late 1H09 when we would expect to see much worse economic growth, exports, production and profits. Once we see enough of that and we are in an environment of lower interest rates, markets could actually have a good rally in 2H09 based on the idea that the worst may be behind us from a cyclical view point. Whether that morphs into a multi-year bull market is a separate question.

**Chart 5: Asian Business Cycle – Need to get deeper into the downturn to be bullish**

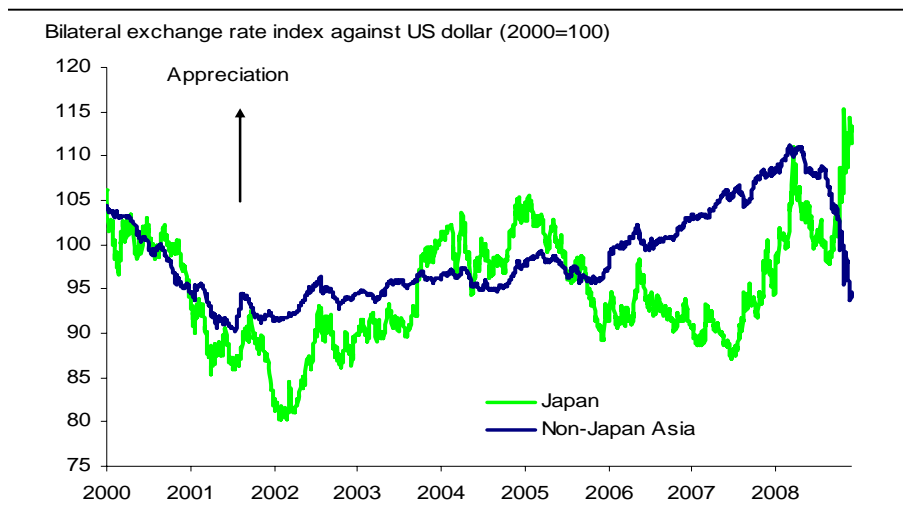


Source: CEIC, UBS estimates

What's good for Asian stock markets is usually good for Asian exchange rates. The above scenario would lead us to believe that the current weakness in Asian exchange rates is unlikely to last beyond 1H09. In other words, we think Asian exchange rates are currently over shooting toward weakness due to global financial contagion pressures. Most Asian economies are running current account surpluses and that is likely to continue next year due to a drop in the cost of imports such oil, even if exports slow sharply. Any whiff that the global economy will improve in 2010 is likely to lead to capital inflows to Asia as much of the region is viewed as a beta play on global growth. And with depressed share prices across the region it is not difficult to imagine global investors shifting equity portfolio funds back to the region and pressuring Asian exchange rates to appreciate.



Chart 6: Asian exchange rate



Source: UBS estimates

However, that is still some ways off and as we suggested earlier we would like to get much deeper into this cyclical slowdown for Asia before getting ahead of ourselves on markets. Certainly we would continue to be very defensive in the early part of 2009. But once we get enough deterioration under our belts we would also caution against extrapolating a very bad 1H09 too far into the future, the same way we cautioned against believing that just because the region was growing strongly in late 2007 and early 2008 that the good times would just keep rolling on -- nothing last forever.

As always, good luck out there!

<b>Real GDP, %YoY</b>	<b>2006</b>	<b>2007</b>	<b>2008E</b>	<b>2009E</b>	<b>2010E</b>
China **	12.8	12.5	9.6	7.5	8.0
Hong Kong	7.0	6.4	2.7	-0.2	1.6
India****	9.6	9.0	6.5	6.0	7.4
Indonesia	5.5	6.3	5.8	2.5	4.7
Japan	2.4	2.2	0.4	-0.7	1.1
Korea	5.1	5.0	3.9	-3.0	3.4
Malaysia	5.8	6.3	5.4	0.0	4.3
Pakistan ***	6.8	5.8	2.5	4.0	N/A
Philippines	5.4	7.2	4.5	1.8	3.4
Singapore	8.2	7.7	2.2	-1.8	4.3
Sri Lanka	7.7	6.8	5.0	4.0	5.0
Taiwan	4.8	5.7	1.5	-1.6	2.9
Thailand	5.2	4.9	4.5	1.8	3.6
<b>CPI, %YoY</b>	<b>2006</b>	<b>2007</b>	<b>2008E</b>	<b>2009E</b>	<b>2010E</b>
China	1.5	4.8	6.3	1.5	2.5
Hong Kong	2.0	2.0	4.5	3.3	2.2
India****	6.8	6.2	8.3	6.5	6.5
Indonesia	13.1	6.4	10.5	7.8	6.2
Japan	0.3	0.0	1.5	0.3	1.1
Korea	2.2	2.5	4.9	4.0	2.0
Malaysia	3.6	2.0	5.7	0.9	0.9
Pakistan ***	7.8	10.0	18.0	9.0	N/A
Philippines	6.3	2.8	9.4	3.0	3.8
Singapore	1.0	2.1	6.0	1.6	1.8
Sri Lanka	10.0	15.8	20.0	10.0	12.0
Taiwan	0.6	1.8	3.7	0.4	0.7
Thailand	4.6	2.2	5.7	0.7	2.4
<b>Current account, % of GDP</b>	<b>2006</b>	<b>2007</b>	<b>2008E</b>	<b>2009E</b>	<b>2010E</b>
China	9.1	10.7	9.3	7.3	6.2
Hong Kong	12.1	13.5	14.9	11.3	13.3
India****	-1.2	-1.6	-2.9	-0.9	-0.5
Indonesia	3.0	2.4	-0.2	0.4	0.7
Japan	3.9	4.8	3.7	3.0	2.3
Korea	0.6	0.6	-1.9	3.1	2.0
Malaysia	16.5	15.7	13.7	6.6	8.5
Pakistan ***	-4.8	-8.6	-5.4	-5.1	N/A
Philippines	4.6	4.4	1.7	4.1	3.5
Singapore	21.8	24.3	15.1	12.9	15.3
Sri Lanka	-5.3	-4.2	-5.0	-5.0	N/A
Taiwan	7.2	8.6	5.3	5.0	5.3
Thailand	1.1	5.3	0.0	1.9	2.5
<b>Budget Balance, % of GDP</b>	<b>2006</b>	<b>2007</b>	<b>2008E</b>	<b>2009E</b>	<b>2010E</b>
China	-0.8	0.7	-0.3	-2.0	-2.8
Hong Kong	3.9	7.0	-0.2	-1.1	-1.3
India****	-3.4	-2.8	-3.0	-3.5	N/A
Indonesia	-0.9	-1.5	-1.0	-1.3	-1.7
Japan	-3.2	-3.1	-3.5	-3.8	-3.6
Korea*	-1.3	0.4	-1.0	-1.8	-2.7
Malaysia	-3.3	-3.2	-4.8	-5.1	-5.0
Pakistan ***	-4.2	-7.0	-5.5	-4.5	N/A
Philippines	-1.1	-0.2	-0.9	-1.5	-2.4
Singapore	0.6	3.0	1.0	0.3	-0.3
Sri Lanka	-8.0	-7.7	N/A	N/A	N/A
Taiwan	-0.6	-0.3	-0.3	-2.3	-3.1
Thailand	-0.6	-1.6	-2.2	-3.3	-2.7

Source: CEIC &amp; UBS estimates

Note: \* Ex. Social Securities funds; \*\* UBS Unofficial GDP forecast base on expenditure basis; \*\*\* Pakistan: Fiscal year beginning July;

\*\*\*\* India: Fiscal year beginning April

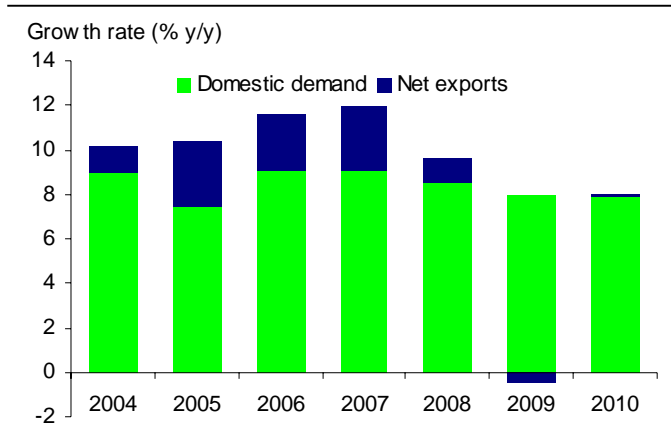
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## China 2009 Outlook

- **We expect GDP growth to slow to 7.5% in 2009.** Much of the drop in GDP growth from the 11.9% in 2007 will come from a decline in contribution from net exports, while overall domestic demand weakens somewhat as expected fall in manufacturing investment is partially offset by a pick up in infrastructure related investment (Chart 7).
- **Domestic demand is slowing sharply, while the export slowdown is yet to hit hard.** After a period of macro tightening measures and coinciding with a external slowdown, domestic housing construction decelerated sharply in recent months, bringing down with it demand for heavy industrial products, including imports (Chart 8). Export growth has been trending downward and we expect it to fall significantly (to 0% in USD terms) in 2009. The recent sharp appreciation of the RMB against a trade-weighted basket of currencies would likely hurt export growth as well. Export weakness is also expected to lead to decline in related manufacturing investment in 2009 as both revenue and sentiment weaken.
- **Fiscal stimulus will support domestic investment and demand for heavy industrial products.** The government has announced a significant fiscal stimulus package that focuses on investment and construction (Chart 9), which is expected to put a floor on demand for construction related products and investment goods. We expect infrastructure investment to accelerate sharply in 2009 to help offset continued weakness in housing investment and decline in corporate Capex spending. In this regard, we see the stabilization of housing investment as key to sustaining overall domestic demand and GDP growth in 2009. We expect the government to roll out additional policy measures to boost housing related investment in the coming months, though we do not expect a recovery until H2 2009.
- **Monetary policy will focus on supporting growth and stave off possible deflation in 2009.** After a year of credit tightening, the central bank cut interest rates aggressively and lifted the credit quota in early November 2008. Although China does not face a liquidity shortage, the PBC took no chances by cutting reserve requirements and reducing sterilizing operations in recent months. These moves are expected to continue into 2009, as the rapid disinflation threatens to turn into deflation in the coming months. We still expect a modest positive CPI growth for 2009 as we think the government will likely use this opportunity to raise prices of controlled products including grain and other agricultural products.
- **No more renminbi appreciation.** The RMB appreciated by more than 15% in effective terms in recent months as it remained stable against the USD while the latter rose strongly against almost all currencies of China's major trading partners. Given slowing export growth and stark external outlook, there has been rising calls for RMB depreciation from exporters. However, given China's persistent large trade surplus (likely >6% of GDP in 2009) and falling demand in G3 economies, RMB depreciation is likely to invite international criticism and protectionist responses. In addition, if this triggers competitive devaluation from neighbouring economies, China would have little to gain in the end. We therefore expect relatively stability of the RMB/USD in the coming year so long as the USD does not strengthen by more than 10% against China's major trading partners, in which case we see modest RMB depreciation against the USD.

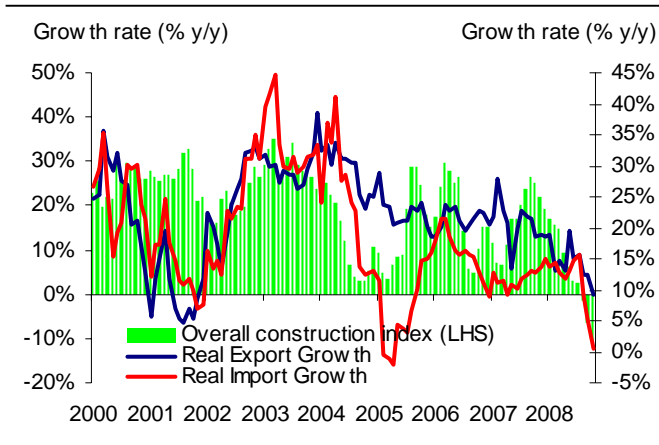
# China 2009 Outlook (Charts)

**Chart 7: GDP growth**



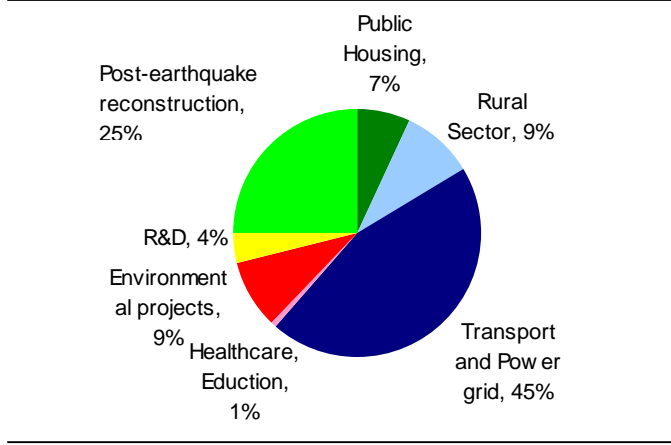
Source: CEIC, UBS

**Chart 8: Domestic demand slowdown is proceeding export slowdown**



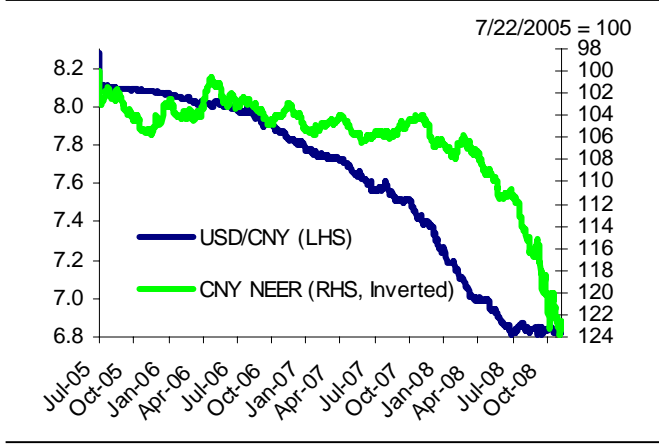
Source: CEIC, UBS

**Chart 9: Fiscal stimulus focus on infrastructure and construction**



Source: CEIC, UBS

**Chart 10: RMB stable against USD, rising in effective terms**



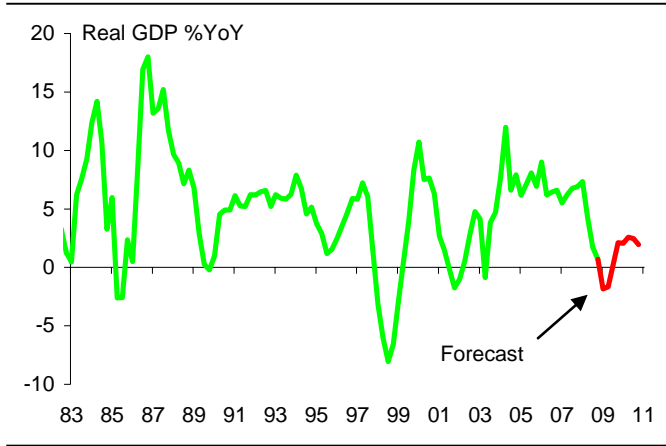
Source: CEIC, UBS

## Hong Kong 2009 Outlook

- **Recession to continue.** The recession in Hong Kong will worsen into 2009. As a small open economy Hong Kong will suffer with the global trend. We expect real GDP to slow from estimated 2.7% in 08 to -0.2% in 09. Exports are over 200% of GDP and generate income for households and businesses who then spend on consumption and investment. Further slowdown in exports will reduce Hong Kong's income growth and keep domestic demand in a recession.
- **Reversal in inflation.** Inflation should average below 2% for most of the year compared to estimated 4.5% in 08. With activity dropping rapidly, we are forecasting the unemployment rate to rise from the trough of 3.2% in 08 to peak at 5.7% in 2H09. This will put significant downward pressure on wages and core inflation. Furthermore, a stronger USD will add to disinflationary pressures on tradable goods. In 2009 headline inflation has a good chance of turning negative in some months, especially in 1H09. The rise in headline inflation in 08 was driven mostly by rise in food prices. We are already seeing international commodity prices plummeting and that should translate into significant reduction in the headline inflation rate.
- **HIBOR heads lower.** We see HIBOR dipping to 0.5% in 2009, which is only slightly higher than the deflationary period in 2002/3. Our US team is forecasting the fed funds rate to fall to 0.25% and that should bring LIBOR lower. In addition, HKMA has taken multiple measures to bring HIBOR lower such as reducing the discount rate and increasing the monetary base in reaction to appreciating HKD. Increased liquidity combined with decreased demand for credit from worsening expectations in economic outlook should push HIBOR lower in 2009.
- **Minor recovery in 2010.** We forecast growth to nudge back up to 2.3% in 2010 as the export sector recovers. Inflation should be around 2.6% from medium term inflationary pressures from the mainland and the return of USD weakness.

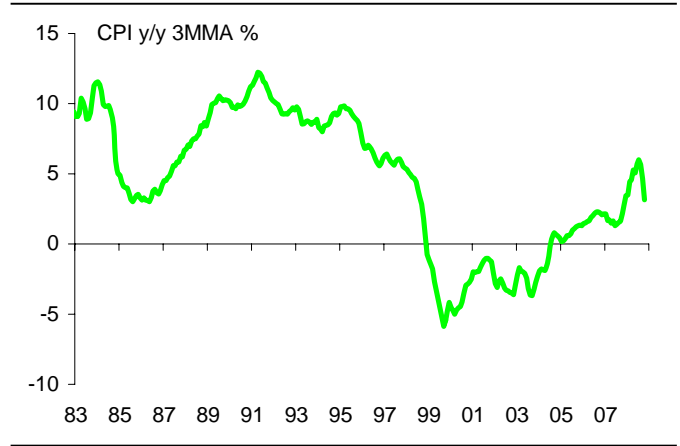
# Hong Kong 2009 Outlook (Charts)

**Chart 11: Growth – Worse is yet to come**



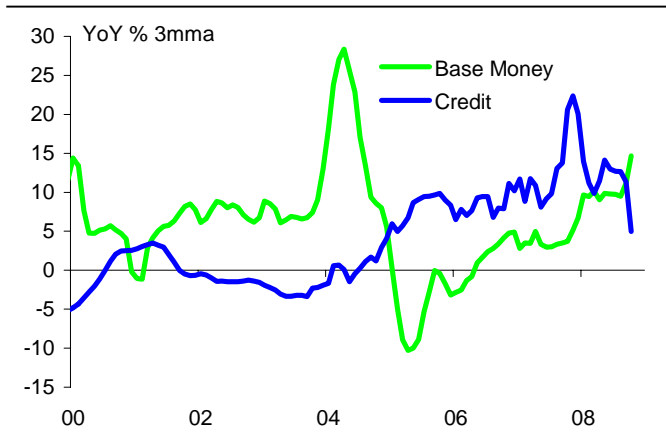
Source: CEIC, UBS

**Chart 12: Disinflation Already Starting**



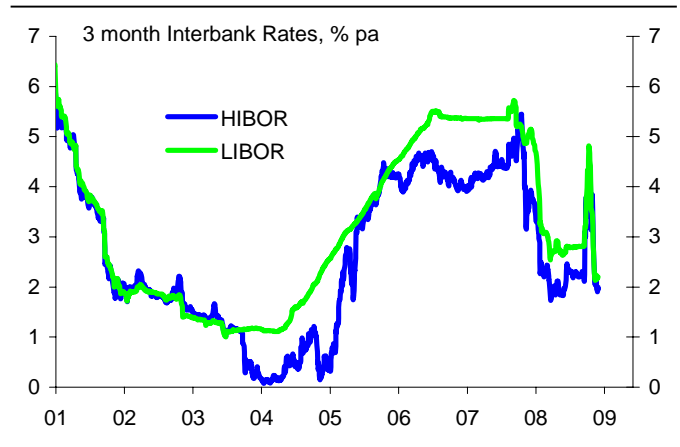
Source: CEIC, UBS

**Chart 13: Liquidity rising but demand falling**



Source: CEIC, UBS

**Chart 14: Means lower HIBOR**



Source: CEIC, UBS

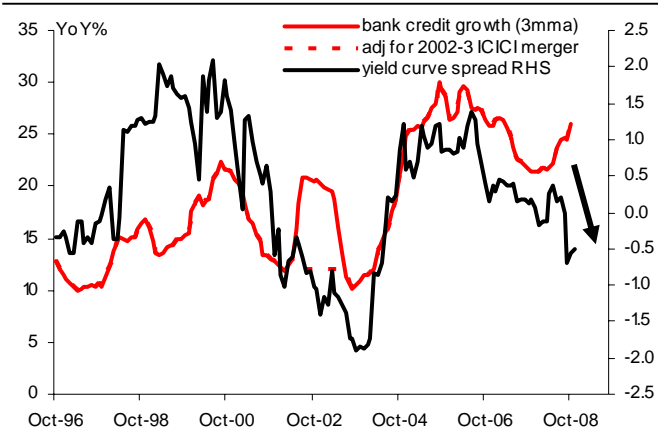
## India 2009 Outlook

- **Growth slowdown.** Real GDP is set to continue to slow to 6.5% in FY09 and 6% in FY10. The main factor driving the downturn is a slowdown in capex and manufacturing. Three reasons for a pause in capex is slower corporate profitability, a slowdown in bank credit and reduced access to overseas borrowing. The government likely has only limited room (~1% of GDP) to boost government capex plans. Private consumption has been supported by several factors: 1) the debt waiver, 2) the rise in wheat prices of the public sector procurement system, 3) civil service pay rises and most notably 4) fixed domestic oil prices which could well be cut in the lead up to the election.
- **Inflation step-down.** In 2008, inflation hit its peak: WPI close to 13% and CPI up at 9-10%. In 2009 we expect the commodity effect to drop out so that WPI drops to low to mid-single digit growth. Slower economic growth should also dampen pricing power. Meanwhile CPI should slow and bottom out around 6% given the weak currency and determination by the authorities to cushion the lending slowdown by injecting more funds for the banks.
- **Credit slows.** The yield curve spread has been negative for a while suggesting the incentive to lend is weak. Reserve money (adjusted for reserve requirements) has slowed to low double digit growth suggesting the supply of funds into the system has slowed. As a result of these two factors we expect system-wide bank credit growth to slow from a peak of 29% to the 15-20% range in 2009. M3 growth is also likely to remain in the 15-20% range cushioned by easy domestic monetary policy through 2009.
- **Current a/c surplus?** The move in oil prices has had a dramatic impact on the current account widening it from \$17.4bn FY08 to an expected \$30bn in FY09. The deficit should narrow to \$10bn in FY10. But even with only 6% export growth and flat imports oil prices would have to average only sub-\$60 bbl through 2009 to produce a current a/c surplus.
- **Rate cuts ahead.** Whereas the story in 2008 was one of high and rising domestic interest rates, 2009 presents a falling interest rates picture. The repo policy rate peaked at 9% and could easily dip below inflation to 5-6% in 2009. 10 year bonds have already rallied from a peak of 9.5% to c.7% in December. As the economy continues to slow and inflation steps down so bond yields should be able to extend the move to c. 6.5%. But yields of sub-6% are likely unsustainable without more serious money & credit slowdown.
- **Modest retracement in INR.** The rupee has weakened due to the effects of high inflation and wider fiscal & external deficits. The inflation and external deficit should improve in 2009 and restore some semblance of stability to the currency. However, on the downside the interest rate structure will not be so attractive, the economy will be weaker and the fiscal accounts are unlikely to improve much. So we expect only a small move from 52 at 2008 y/e to 48 by 2009 y/e.
- **Profitability.** After facing a sharp cost squeeze in 2008, corporate profits should receive a certain cushion of support from lower interest rates and falling commodity prices in 2009. Lower oil prices for some companies can be regarded as a form of tax cut. Upstream companies benefited when commodity prices rose, so one would expect downstream ones to benefit from lower prices.



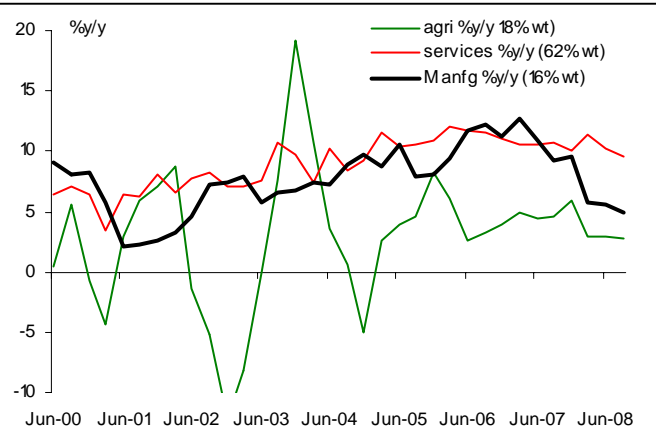
# India 2009 Outlook (Charts)

**Chart 15: Credit slows in 2009**



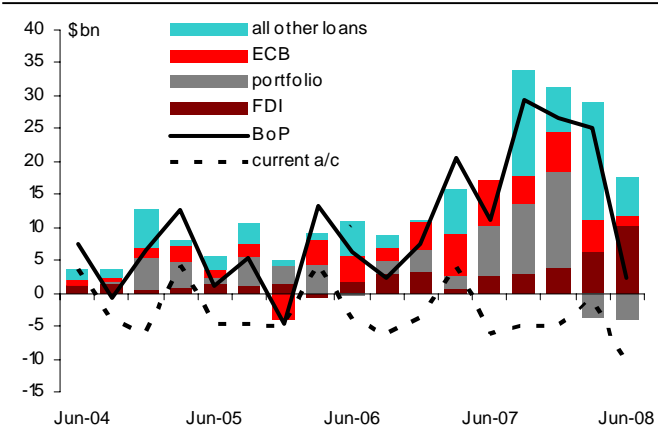
Source: CEIC & UBS

**Chart 16: Manufacturing slows, services follow suit**



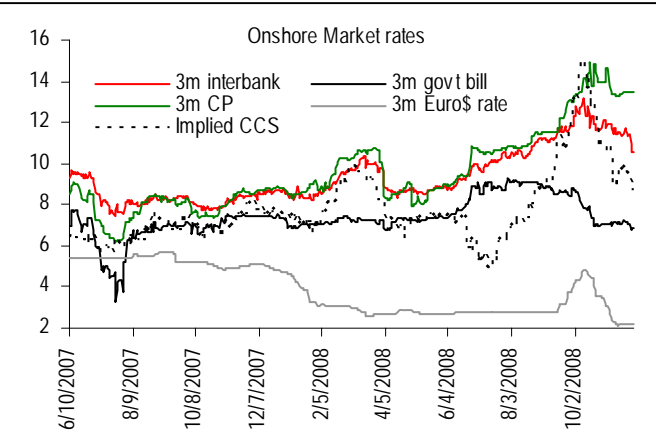
Source: CEIC & UBS

**Chart 17: Balance of payments to improve in 2009**



Source: CEIC & UBS

**Chart 18: Interest rates set to drop further in 2009**



Source: CEIC & UBS

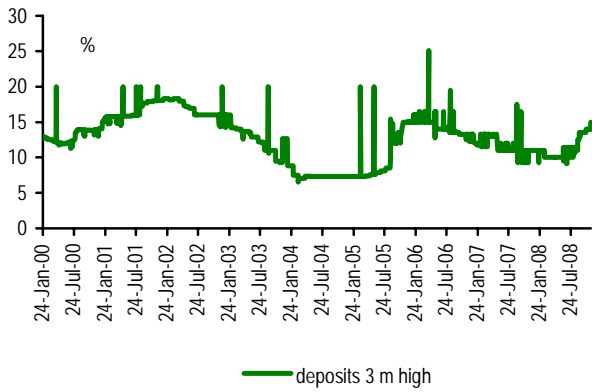
## Indonesia 2009 Outlook

- **Significant growth slowdown.** We expect real GDP to slow to 2.5%y/y in 2009. Ongoing domestic liquidity squeeze, sharp commodities price contraction, weakening investment outlook and prohibitive cost of external financing are expected to curtail credit and import trend on the overall from current strong levels. Offsetting measures via countercyclical fiscal policy or easier monetary policy further hampered by difficulties in fiscal bond financing, still sticky inflation trend and near term currency vulnerabilities from capital outflows. Private consumption should remain sole support for growth in 2009.
- **Inflation momentum fades.** Inflation has peaked in our view. Commodities price decline, fuel price downward revisions and still tight monetary conditions should ease inflationary pressures even as a weakening currency may pose some risk to imported inflation. On the back of an expected trend down in investment and domestic demand, demand push pressure would further be alleviated. Offsetting upward inflationary pressure may come from pre-election spurred spending and a more than expected easing of monetary conditions on the back of that.
- **Credit should slow sharply.** Tighter monetary conditions have already manifested via higher cost of funding as the supply of loanable funds fail to keep up with the exuberant lending trend in previous quarters. Meanwhile, banks have increasingly turn cautious in extending new corporate loans given an environment where financing costs have risen significantly and where the global growth and investment outlook have turned increasingly dim. From the robust over 35% y/y loan growth and high credit growth trend in sectors such as transport and mining that we have seen recently, we expect significant moderation in credit growth going into 2009. Correspondingly, the most significant credit moderation is expected to be seen in the transport and mining sectors.
- **Stubborn trade gap.** Slower external demand, sharp fall in commodities export prices and still resilient import growth of over 50% y/y continue to exert pressures on the current account. Until import growth trend down significantly (and we expect this to occur only in 2 to 3 quarters in line with investment and credit trends), the current account will likely remain in deficit with negative implications for currency support. For 2009 as a whole, we do expect a return to a marginal current account surplus as current imbalances in credit, investment and spending trend correct in line with the global recession associated income moderation and the lagged effect of tight monetary conditions.
- **Monetary and fiscal policy options.** Monetary easing will be a preferred policy alongside more expansionary fiscal spending. However, still high inflation, current account imbalances and a weakened currency does not allow much room for significant easing in our view. We pencil in monetary easing to take place in mid 2009 by 50 bps. Other measures to ease banking liquidity concerns involve ongoing efforts to provide interbank liquidity access, with reserve requirements changes a possibility. On the fiscal side, tax rebates and pre election spending should help to provide a buffer to further downside. Fiscal financing however remains a concern with Indonesia now seeking bilateral loans given the low recourse to bond markets.

For further details, please refer to UBS Economist Chang Chiou Yi; recent reports are; *Indonesia: Sharp Adjustment Ahead* (Southeast Asian Focus, 18 November 2008) and *All About Indonesia* (Emerging Economic Focus, 23 October 2008).

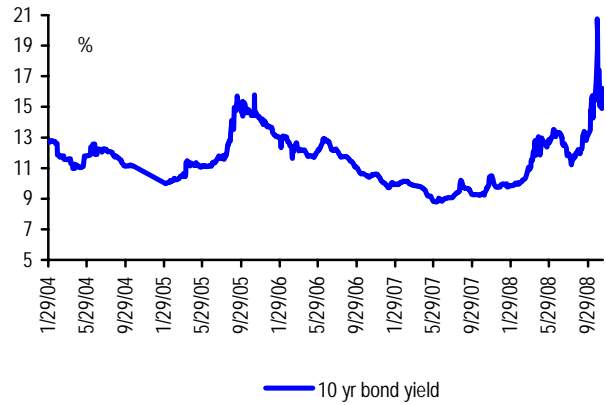
# Indonesia 2009 Outlook (Charts)

**Chart 19: Deposit rates spike as competition for funds rises**



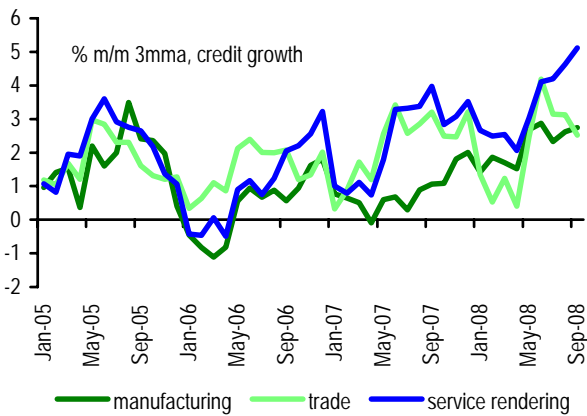
Source: CEIC, UBS

**Chart 20: Government bond financing more expensive**



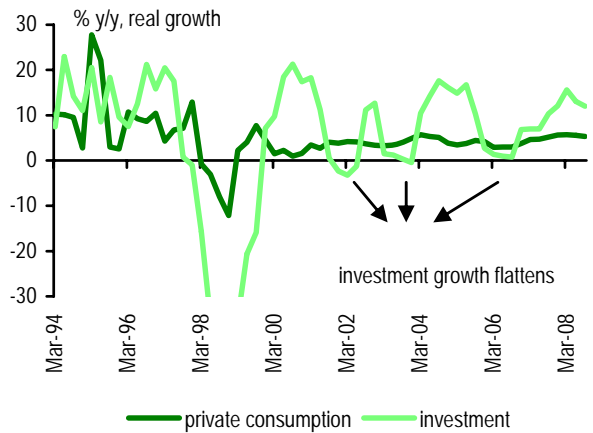
Source: CEIC, UBS

**Chart 21: Strong credit growth momentum expected to correct sharply**



Source: CEIC, UBS

**Chart 22: We expect a retrenchment in investment as seen over previous cyclical downturns**



Source: CEIC, UBS

## Japan 2009 Outlook

### Global recession delays Japan's recovery

- **CY09 real growth to turn negative, for the first time since 1999.** Global recession will likely delay Japan's recovery from current downturn, as exports, the major growth driver for recent past, will drag down overall domestic economic activities. Capex will likely remain weak in CY09 due to deterioration in business sentiment amid worsened global economic outlook despite improving terms of trade. Private consumption will likely soften due to stalled wage growth and weak consumer sentiment. We look for -0.7% real growth for CY09, which will be the first negative since 1999 and the largest negative since 1998 (-2.0%).
- **Exports to be dragged down by global economic recession.** Exports will likely weaken significantly in CY09 (-7.5% after CY08E=+4.1%) amid a deeper global economic recession. UBS estimates that global economy will grow much slower in CY09 than IMF defined global recession threshold of 2.5%, which will be the lowest economic expansion since 1982 (=+0.6%). Exports will likely stay at a negative yoy growth by Q1/CY10 when global economy will likely start showing a clearer sign of recovery.
- **Capex to remain in negative amid weaker exports and business sentiment.** Weaker exports and business sentiment will likely cap improvement in capex (CY09E=-2.1% after CY08E=-1.8%) despite expected better terms of trade in CY09. Capex is expected to hit a bottom in terms of yoy in Q1/CY09 against the backdrop of easing input cost pressures. However, a meaningful recovery won't occur until the middle of CY10 when exports are to resume moderate acceleration.
- **Private consumption to soften amid weakening wage growth.** Private consumption will likely soften in CY09 (+0.6% after CY08E=+1.2%) mainly due to weakening wages and consumer sentiment despite government's 2 trillion cash rebates. A sharp deceleration in prices should have a limited upward impact on consumer spending, as deterioration in wage growth should overwhelm price's positive impact on disposable household income. Moderate improvement in private consumption is expected in CY10 amid better wage conditions.
- **Prices to decelerate sharply amid losing momentum in energy prices.** Core CPI (excluding fresh food) will likely decelerate rather sharply from Q3/CY08 peak (=+2.3% yoy) in CY09, reaching a bottom in the middle of CY09. However, after the bottom, CPI is expected to resume its strength gradually amid re-gaining energy prices and improving output gap.
- **Policy interest rates to be kept for foreseeable future.** Even with gloomier economic outlook, there will be very limited leeway left for the Bank of Japan to maneuver monetary policy to underpin the economy. We believe that further rate cut is less likely, as the Bank of Japan seems to be very cautious on the option, based on recent comments by Governor Shirakawa. We think that return to a sustainable negative yoy % change in core CPI is unlikely for our forecast horizon.

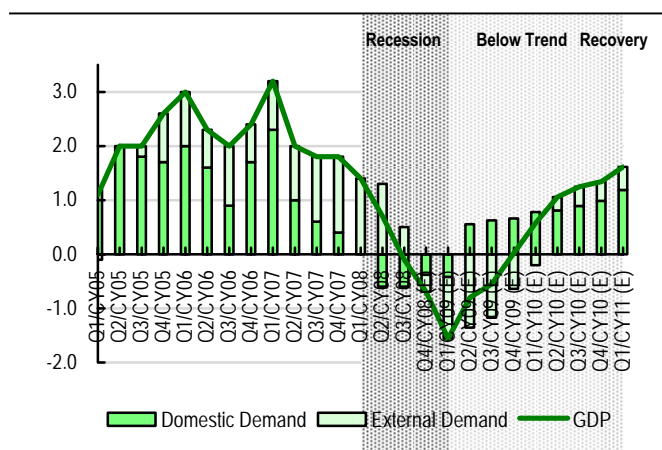
# Japan 2009 Outlook (Charts)

**Table 1: UBS annual GDP forecast**

	FY07A	FY08E	FY09E	FY10E	CY07A	CY08E	CY09E	CY10E
<b>Nominal GDP</b>	0.7	(0.8)	(0.0)	1.7	1.5	(0.6)	(0.4)	1.4
<b>Real GDP</b>	1.7	(0.4)	(0.2)	1.3	2.2	0.4	(0.7)	1.1
Private consumption	1.7	0.3	0.9	1.3	1.7	0.9	0.6	1.2
Residential investment	(13.3)	(0.4)	2.2	0.7	(9.5)	(6.9)	4.7	0.4
Capex	(0.1)	(2.5)	(0.7)	3.3	2.0	(1.8)	(2.1)	2.8
Inventories (contr)	(0.1)	(0.0)	0.1	(0.1)	0.1	(0.2)	0.2	(0.1)
Govt consumption	0.7	0.1	0.7	0.0	0.7	0.2	0.5	0.2
Public investment	(1.8)	(5.3)	(2.1)	(5.0)	(2.5)	(4.7)	(3.1)	(4.3)
Net exports (contr)	1.2	0.0	(0.8)	0.3	1.1	0.7	(1.1)	0.2
Exports	9.5	(1.0)	(5.3)	3.8	8.6	4.1	(7.5)	2.8
Imports	2.0	(1.8)	0.0	2.1	1.7	(0.1)	(1.4)	2.1
Deflator (y/y %)	(1.0)	(0.4)	0.2	0.4	(0.8)	(1.0)	0.3	0.3

Source: METI, MIAC, BoJ, MoF, Bloomberg, UBS estimates

**Chart 23: Real GDP yoy % breakdown: domestic and external demand**



Source: Cabinet Office, UBS estimates

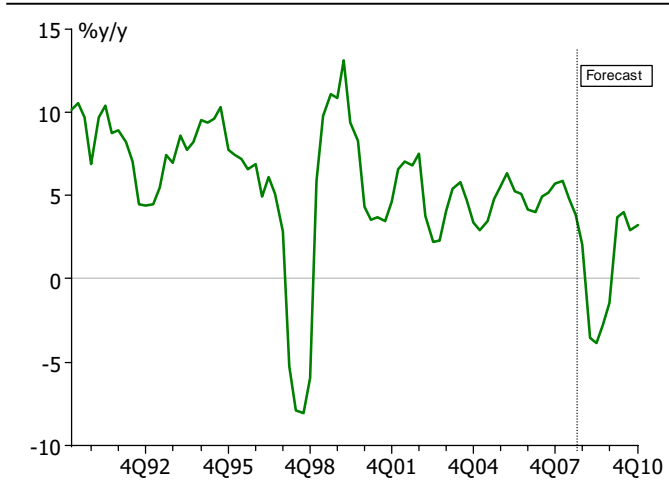
## Korea 2009 Outlook

- We forecast Korean GDP to decline -3% in 2009 assuming export income drops and deleveraging begins in earnest. Recall that private sector debt is 180% of GDP versus 170% in the United States. Total non-financial sector debt was 224% of GDP as of 2Q08. We estimate household debt at 153% of disposable income, again higher than the US. Deleveraging is likely to lead to negative domestic demand next year.
- Policy should be strongly pro-growth. We expect rates to be cut 250bps, bottoming around 1.5%, if domestic demand contracts in line with our forecast. The government is likely run a small fiscal deficit to support the economy, with spending front loaded in 1H09.
- The exchange rate should continue to overshoot toward 1700 in early 2009, but we do not believe this is a true currency crisis and expect the KRW/USD to retrace to 1425 later in the year as the current account swings back to surplus and capital outflows exhaust themselves by 2Q09.
- We expect inflation to remain elevated in 1H09 due to the exchange rate, but disinflation pressures should dominate in 2H09 assuming the exchange rate retraces. The depth of slowdown we forecast suggests rates will still be brought down even if inflation remains above the central bank's target of 3% on the view that medium term pressures clearly point to declining inflation.

For further details and background reports, please refer to UBS Economist Duncan Wooldridge's latest monthly edition of *Korea by the Numbers* (Asian Economic Monitor, October 2008), *Korea – Teeny-weeny Fiscal Stimulus Vs Big Bad Deleveraging* (North Asian Focus, 20 November 2008), *Korea – Feels Like 97/98, But It's Not* (North Asian Focus, 5 September 2008), *Korea – Challenging Times for the Central Bank* (North Asian Focus, 28 March 2008), *Asia: All Strong, But One* (Asian Focus, 14 March 2008), *Korea – All Tapped Out* (North Asian Focus, 29 February 2008), *Korea – The Apology, Lessons from the US* (North Asian Focus, 3 August 2007).

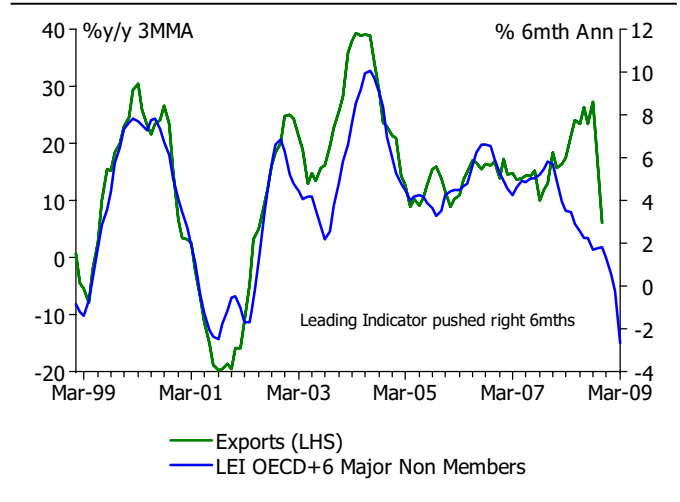
# Korea 2009 Outlook (Charts)

**Chart 24: Real GDP projected to slow to -3.0% in 2009**



Source: CEIC, UBS

**Chart 25: Exports forecasted to slow in 2009**



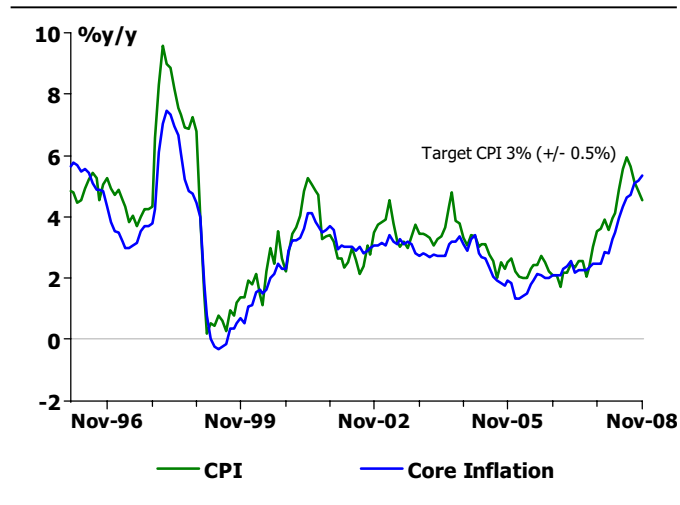
Source: CEIC, UBS

**Chart 26: Korea looks like a possible credit bubble**



Source: CEIC, UBS

**Chart 27: Inflation should drop in 2009**



Source: CEIC, UBS

## Malaysia 2009 Outlook

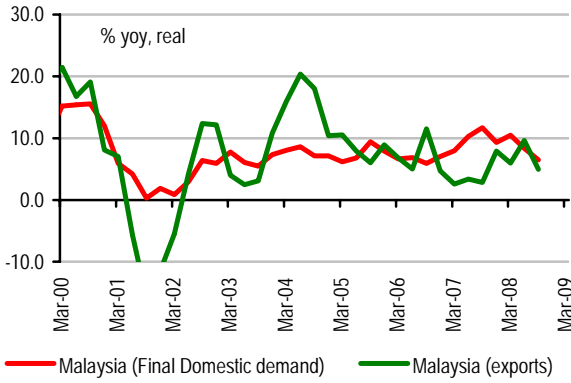
- **Recessionary conditions.** We have for some time highlighted Malaysia's significant exposure to a global growth downturn. Indeed, we feel that the ongoing slowdown looks worse than the 2001 growth slowdown and have calibrated our forecasts accordingly. In the face of the most pernicious slowdown in growth in the global economy since the early 1980s and sharp declines in commodity prices, we now forecast recessionary conditions in Malaysia and no growth in the economy during 2009, with only a tepid recovery in 2010.
- **Domestic growth to suffer too.** Export growth bucked the global trend in early 2008, but is now, to the surprise of no-one, turning down again. We expect negative export growth during 2009. It should also be no surprise for an economy with an export to GDP ratio of 105% that the income shock of negative export growth will meaningfully impact domestic investment and consumption. Lower prices for Malaysia's key commodity exports of crude and palm oil can only enhance this dynamic. However, domestic growth will also slow because of more difficult financial conditions – falling stock markets, more cautious banks and less open capital debt markets have all increased the cost of capital and decreased the availability of funds.
- **Lower inflation.** This time last year the question was when the government would raise fuel prices. The rise in gasoline prices and its subsequent reversal is now behind us. The food price and energy price rises that pushed CPI inflation to 8.5% over the summer are now unwinding, with a little help from the government. We look for inflation to fall below zero at some point during 2009.
- **Lower policy rates.** The BNM has already cut policy rates 25bps at the time of writing. Central bank rhetoric leads us to believe that although the first move was fairly modest, it heralds a series of policy rate cuts in coming months. We now look for further policy rate cuts in the order of 100bps, taking policy rates to 2.25%. At the same time, we look for a wider budget deficit than currently expected to spur debt issuance – a steeper yield curve should ultimately result.
- **Still sizable external balance, unchanged currency policy.** Malaysia's current account surplus almost reached 20% of GDP in Q2 2008. Lower commodity prices imply that this will shrink rapidly in coming quarters, perhaps to below 10% of GDP on average in 2009. Even so the surplus should still be substantial and a source of support for the ringgit. This said, the recent past has seen such sizable capital outflows that despite the inflow of funds driven by the current account surplus, the BNM has still been required to intervene in the currency market to preserve a stable trade weighted ringgit. The level of BNM reserves and the current account surplus lead us to expect the BNM will remain successful in this regard, we look for US\$MYR 3.55 at end 2009, consistent with a reversal of some of the near term asian currency overshooting against the US dollar.
- **Risks.** Our present growth forecast has risks to both the upside and downside depending on the interplay between the external growth environment and Malaysian policy responses. The good news is that the government has already moved to expand the deficit with pump priming measures. The bad news is that while monetary policy should be eased as well as easier policy settings can only soften the blow of a global recession on Malaysia's small open economy. In any case, fiscal policy easing will struggle to surpass the impulses to growth in recent years without running an unnervingly large budget deficit. We project a manageable budget deficit in 2009 of 5.3% of GDP, above the 4.8% planned by the government at the present time.

For further details, please refer to ASEAN Economist Ed Teather; recent reports are; *Malaysia: Moving towards a wider deficit in 2009* (Asian Economic Comment, 5 November 2008) and *Malaysia: Inflation lower, growth fears rising, BNM on the verge of cutting rates* (Asian Economic Comment, 27 October 2008).



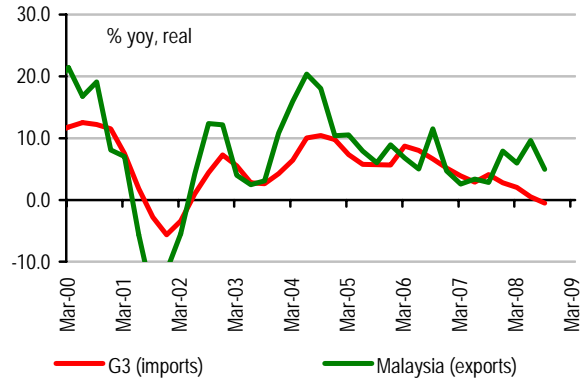
# Malaysia 2009 Outlook (Charts)

**Chart 28: Malaysian domestic and export growth is still elevated**



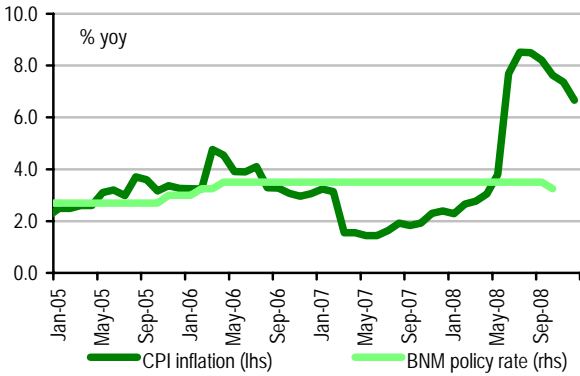
Source: CEIC

**Chart 29: Malaysian exports set to slow**



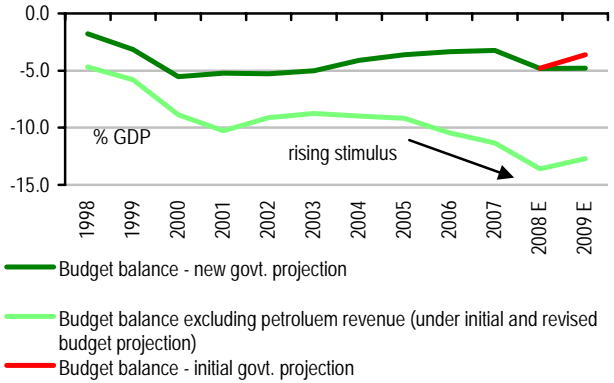
Source: CEIC

**Chart 30: Lower inflation implies increased opportunities for Bank Negara Malaysia to cut rates**



Source: CEIC

**Chart 31: The government has been stimulating the non-oil economy (increasing the non-oil budget deficit) for several years now. This makes it more difficult to provide meaningful 'extra' stimulus in 2009**



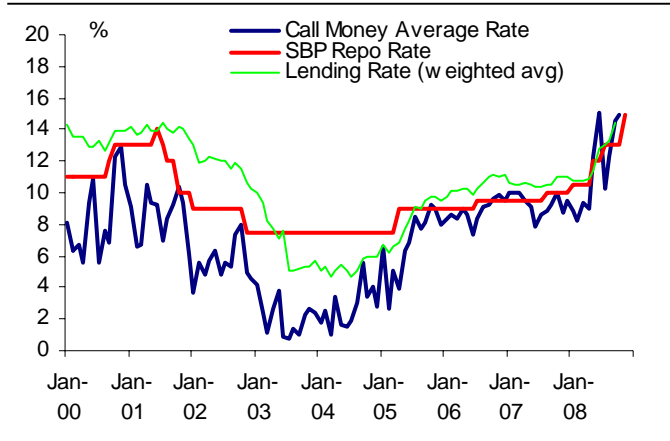
Source: CEIC

## Pakistan 2009 Outlook

- **Growth very slow.** Economy grew at a robust 5.8% in FY08. We expect a slowdown towards 2.5% in 2009 driven by slower consumption and investment. The economy is on an IMF programme with a \$7.6bn Standby Facility. This requires: 1) tighter policy through most of 2009 so interest rates will need to be kept higher for longer, 2) a more flexible exchange rate, 3) a rise in the tax to GDP ratio to 15% over 5 yrs, 4) zero net borrowing from the central bank by the government and 5) a narrower fiscal deficit to 4.2% of GDP in FY09 and to 3.3% of GDP in FY10.
- **Inflation declines.** Inflation and subsidies were 2008's No. 1 policy issue, inflation now at 25%y/y. We expect this to slow to 10% by 2009 year end. Much of this move is related to deregulation following the crippling impact of higher global oil prices on the fiscal budget. Lower global oil prices plus a weaker economy should also help restore single digit inflation.
- **Credit & money slow.** Money and credit should continue to slow to mid-teens growth. Under the IMF programme we expect central bank monetisation of government debt to stop. However, monetary policy is being eased substantially through CRR cuts from a peak of 9% to 5% (which may be cut further) and through generous open market operations. As a result the policy bias is skewed towards domestic demand support.
- **External imbalance improves.** The trade deficits remain an achilles heel. The monthly trade gap is at c. \$2bn but the non-oil gap has narrowed to \$800m. We expect the trade gap to narrow from \$20.6bn in FY08 to \$14.6bn in FY09 and the current account deficit to improve from \$14bn to \$8.6bn. But the key to sustainability, beyond the immediate downswing in imports, is drawing in more FDI and building a broader export base.
- **Rates/FX at turning point.** Under IMF guidance policy rates have been raised to 15%, interbank rates are clustered around it. Also under the IMF package official FX reserves (which fell to as low as \$3.5bn in Nov) have been boosted by \$7.6bn. Additional amounts will likely come from other 'friendly' donor nations. Inflation is poised to decelerate and so we would expect interest rates to come down through 2009, but it is highly unlikely they will move down together. The external gap remains a significant constraint. Ideally one would expect the non-oil trade gap to swing towards balance, but given very weak global demand and government bias to soften the landing there may be only limited further improvement from here. As a consequence we expect further depreciation in the rupee to 85 by 2008 y/e and to 100 by 2009 y/e.

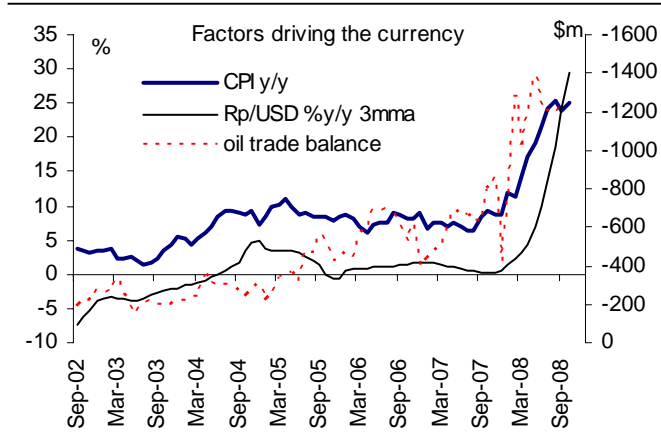
# Pakistan 2009 Outlook (Charts)

**Chart 32: Higher rates for longer**



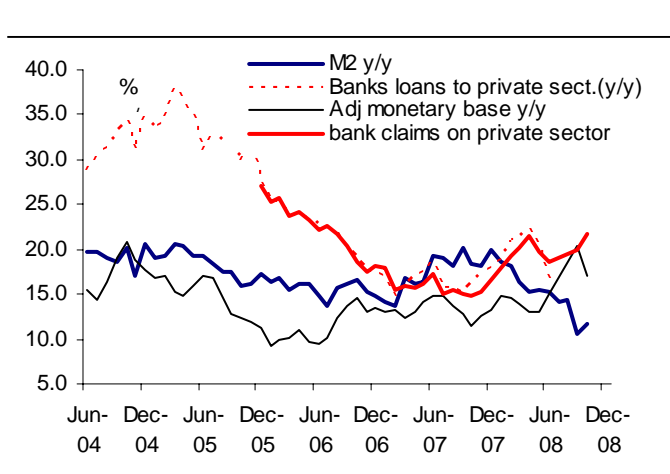
Source: CEIC & UBS

**Chart 33: Softer oil prices + lower inflation to stabilise rupee**



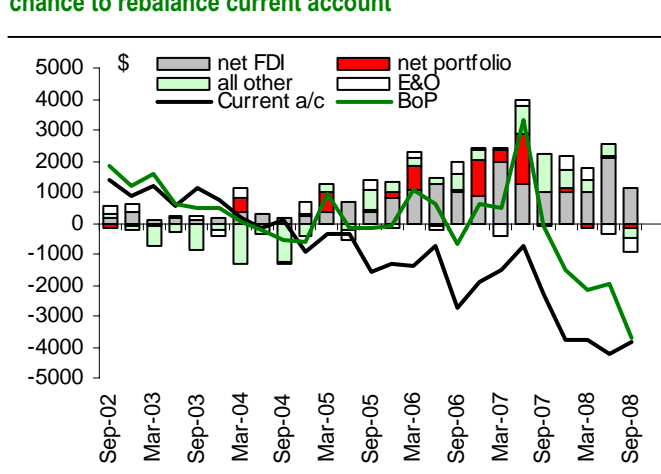
Source: CEIC & UBS

**Chart 34: Expect monetary policy to stay tight**



Source: CEIC & UBS

**Chart 35: External imbalance remains. IMF facility offers chance to rebalance current account**



Source: CEIC & UBS

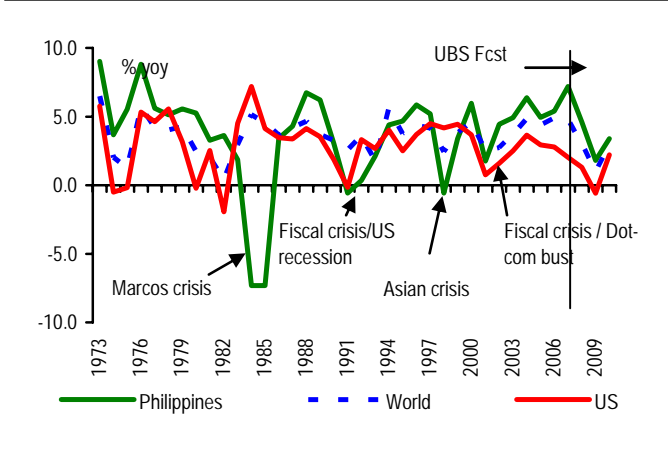
## Philippines 2009 Outlook

- **Weak growth.** Our rationale for weaker Philippine economic growth has not changed. The Philippines is exposed to global trade, financial markets and sentiment shifts. Business confidence is already falling sharply. And financial market conditions must be adversely impacting investment and other economic activity. In the past, tougher financial conditions and reduced profit expectations tended to prompt investment to contract and imports to slow sharply along with exports. Previously these outcomes, in the early 1980s, early and late 1990s and in 2001 have taken Philippine real GDP growth to below 2% and we expect the same this time round with growth of 1.8% in 2009.
- **Less vicious credit cycle.** But while growth may be weak, the Philippines entered this down-cycle after a decade of de-leveraging and declining investment as a share of GDP. This is not to say the credit cycle in the sense of rising NPLs is not going to take place – it will. There is a case to be made, however, that because the evidence of excess investment and credit is lacking, the credit cycle may be less vicious than in those emerging market economies that took more advantage of the easy money environment of the last few years (in Eastern Europe for example).
- **Inflation to fall.** We continue to look for CPI inflation to slow sharply into 2009, assuming that food and energy prices in the CPI decline with oil and rice prices in wholesale markets. We look for 3% inflation on average in 2009, but note that core inflation remains elevated and will hamper the policy response in the context of the external shock to growth.
- **Loose money, wider deficits.** BSP policy makers will have to struggle with still high inflation and sharply slowing growth in coming months, while a large external debt stock makes trend weakness in the peso unpalatable. We believe that the BSP will have the opportunity to ease policy, but not until 2009. While we look for no policy rate cuts in December 2008, if inflation falls and currency weakness is manageable, more policy rate cuts than the 50bps we have pencilled in for 2009 are quite possible. Fiscal policy settings are not programmed to be loosened greatly in 2008 or in 2009. But we see a 1.5% of GDP fiscal deficit in 2009 and 2.0% plus deficit in 2010 as a positive for growth in our base case, but also a source of financing risk.
- **Current account balance to improve.** It is clear that we should expect weak, and most likely negative, export growth (volume and value) in coming months. We also believe that the global slowdown will lead to a decline in remittance payments in 2009. However, we still expect an improvement in the current account balance in 2009 on the basis of lower capital goods imports and, more importantly, a lower commodity import bill. The Philippines, as a net commodity importer, saw national income reduced when commodity prices soared and hence should get some relief from lower commodity prices.
- **Peso weakness to persist on financial flows near term.** Although the Philippines has a current account surplus, implying a flow of income in favour of the peso, the flows through the financial account have been and are likely to remain much less favourable in our view. At least over the next 3-months, we expect the de-leveraging process to continue to put downward pressure on the peso, driving it towards USDPHP 52. Longer term, towards year end 2009, we expect (or hope) that the global de-leveraging flows will have abated somewhat and the value of the peso to recover against the US dollar towards USDPHP 48, consistent with a less vicious credit cycle than elsewhere in the EM world and a current account surplus. We see some evidence of moderation in financial outflows as a potential catalyst for lower BSP policy rates.

For further details, please refer to ASEAN Economist Ed Teather; recent report is; *Philippines: Reality check* (Southeast Asian Focus, 17 November 2008).

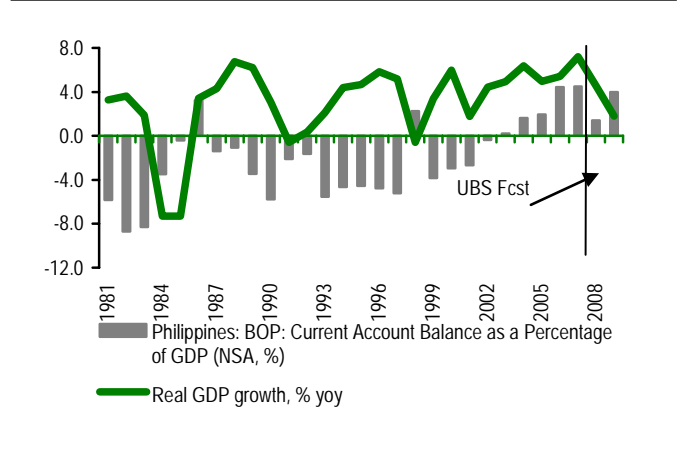
# Philippines 2009 Outlook (Charts)

**Chart 36: Philippines growth to slow further**



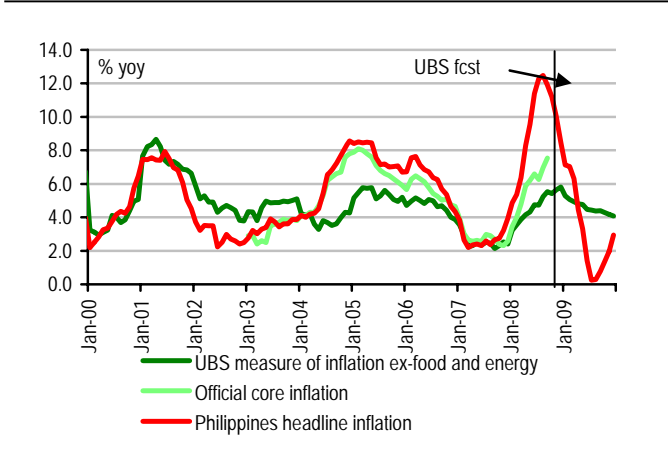
Source: CEIC

**Chart 37: Current account surplus helps insulate the Philippine economy against the global credit crunch, but only partially**



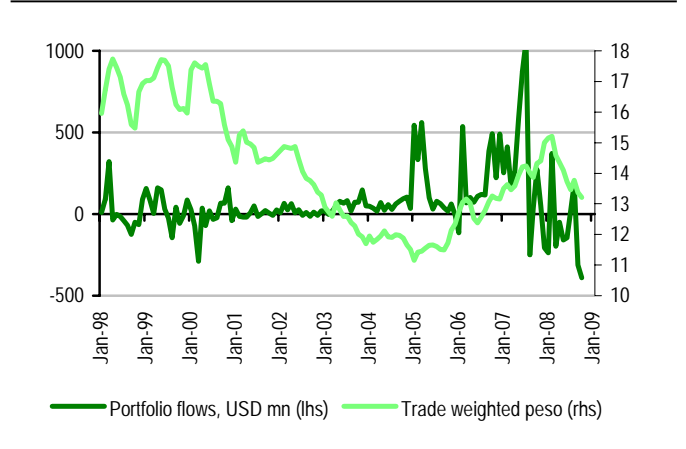
Source: CEIC

**Chart 38: We expect Philippines CPI inflation to fall sharply**



Source: CEIC

**Chart 39: Financial flows weighing on peso**



Source: CEIC

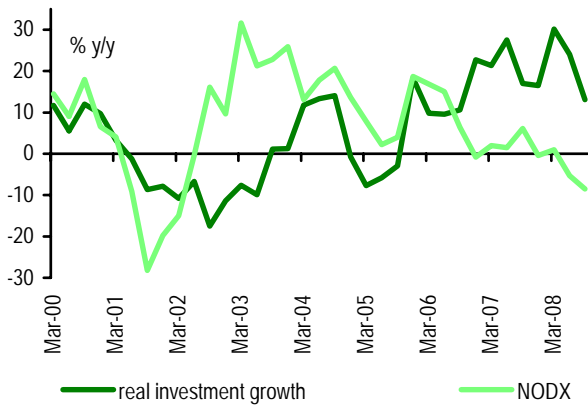
## Singapore 2009 Outlook

- **Singapore in recession.** We expect -1.8% y/y real GDP growth in 2009. 2008 has seen export growth contract on the back of weakening demand across key markets and product segments. For 2009, we continue to highlight the ongoing export fallout theme on the back of the global recession outlook along with expectations of retrenchment in both machinery and construction investment growth. Employment fallout is likewise expected to follow, given the robust labour expansion in previous years that had occurred even as labour productivity turns sharply negative. Offsetting measures include an easier monetary policy, labour policies in the form of wage restraints as well as an expansionary budget. We expect to see generous one off cash transfers, workfare bonuses, corporate tax rebates, micro loans and rental rebates within the budget package to be announced in Jan 2009.
- **Disinflation leaves room for policy easing.** Inflation has peaked in our view and going forward, weakening demand and significant commodities price contraction is expected to lead inflation readings lower into 2009, leaving more room for monetary policy easing. At the upcoming April 2009 monetary meeting, we expect a recentering down of the NEER and forecast the USD/SGD to reach 1.6 by end 2009.
- **Investment and employment at risk.** Cyclical sectors remain most vulnerable to the global downswing and further downtrend in the domestic economy. Employment retrenchment is expected in manufacturing as well as wholesale retail trade, financial and real estate services. Government related services employment remain an offsetting presence. Wage growth is likely to moderate significantly into 2009 on the back of a looser labour market. Specifically, unemployment rate is expected to rise from 2.2% (sa) to 3.4% within the year while net retrenchment could reach 30k or more, in contrast to the robust employment gains seen in recent years.
- **Recovery prospect.** The worst is likely to be over by Q3 09 with moderate pickup in export trend and a stabilisation of the investment and asset markets downtrend. While we expect the lagged effect of the weaker labour market to translate into more modest spending power throughout 2010, we could still expect to see real GDP recovering to 4.3% y/y in 2010, trending up with a pick up in global demand. Buffer to the downside remains the large fiscal space available to the government as well as an expected softening trend in the currency that would help prevent export competitiveness in part.

For further details, please refer to UBS Economist Chang Chiou Yi; recent report is; *Singapore: of recession and stimulus* (Southeast Asian Focus, 24 November 2008).

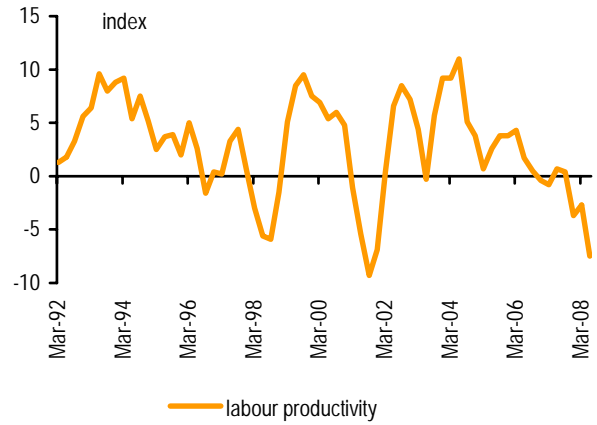
# Singapore 2009 Outlook (Charts)

**Chart 40: Investment will trek export downtrend in 2009**



Source: CEIC, UBS

**Chart 41: Highlighting negative labour productivity all year**



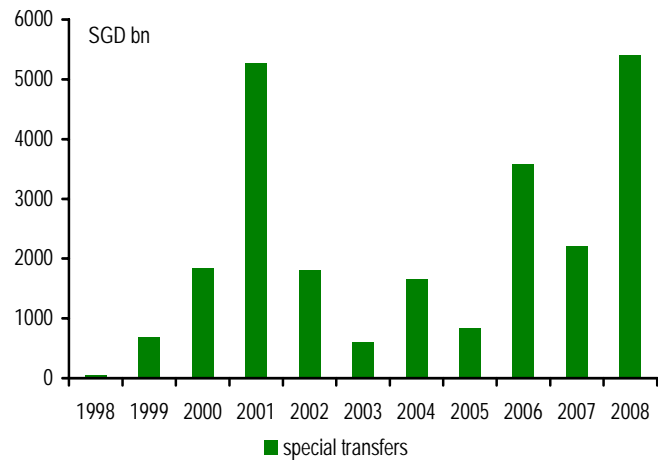
Source: CEIC, UBS

**Chart 42: And the unemployment spike that will likely result**



Source: CEIC, UBS

**Chart 43: Government offsets will provide significant buffer**



Source: CEIC, UBS

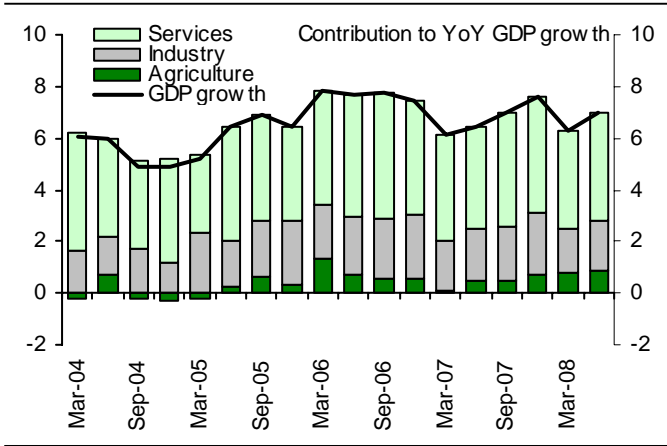
## Sri Lanka 2009 Outlook

- **Slower Growth.** Economic growth should slow from an estimated 5% in 2008 to 4% in 2009. Domestic demand is likely to weaken in line with the tighter monetary conditions and slower credit growth to the private sector.
- **Inflation stabilisation.** The big story is inflation stabilization in 2009. Fiscal deficit monetisation seems to have been halted in 2007, but higher commodity prices pushed up inflation to peak out at 28% in mid-2008. We expect inflation to slow to 10% by 2009 year end.
- **Monetary slowdown.** Monetary austerity prevails. Private sector credit growth has slowed to the high single digits while M3 is stable in the 13-15% range. But crowding out of private credit by government deficit funding is also an issue.
- **Fiscal stabilisation.** The fiscal deficit has been brought under greater control and narrowed to 7% of GDP in 2008. The funding risk has reduced from 1-2 years ago, but remains an obstacle to faster private sector growth. Officially the budget pencils in a fiscal gap of 6.5% of GDP in 2009. Interest repayments are 4.7% of GDP and debt repayment is another 2%.
- **External fragility.** The trade deficit is likely to widen from ~\$3.5bn in 2007 to ~\$6bn in 2008 mostly due to higher import costs. This gap may close slightly to \$5.8bn, but in general will likely stay wider. Even with high remittances the current account gap will likely stay wide in the 7-8% of GDP range from 9-10% estimated in 2008. Low FDI (around 30% of the CAD) poses a sustainability question for the current account gap.
- **Rates/FX.** The stable currency in 2008 has been assisted by one of the most steady monetary policies in the region. In 2009 as high inflation slows right down there is opportunity for a big downshift in local interest rates, but the risk remains that the currency gives more ground due to the wider current account deficit. We anticipate a 5% depreciation in 2009. However fundamentally, the inflation problem is over and the fiscal condition is more stable.



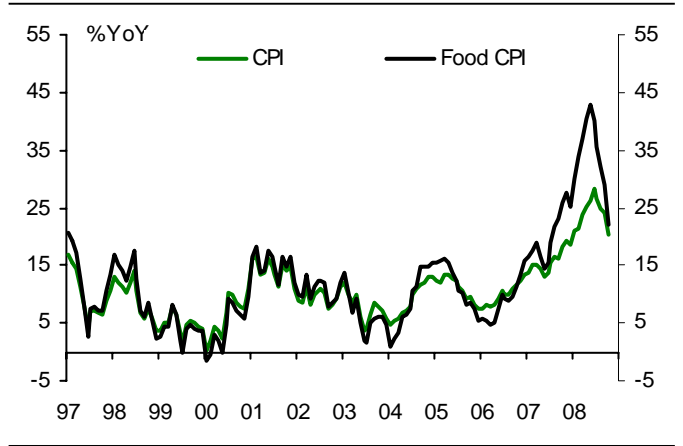
# Sri Lanka 2009 Outlook (Charts)

**Chart 44: Growth set to slow**



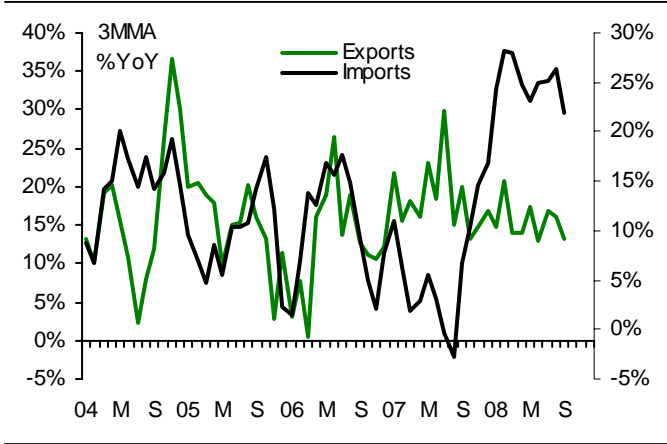
Source: UBS & CEIC

**Chart 45: Inflation stabilisation ahead**



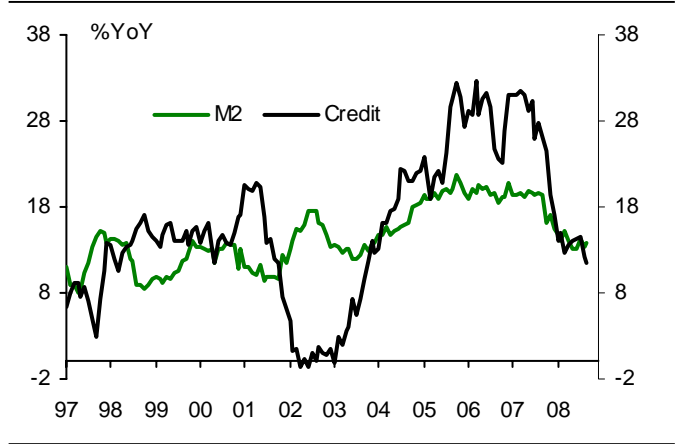
Source: UBS & CEIC

**Chart 46: Soft commodity prices reduce import demand**



Source: UBS & CEIC

**Chart 47: Stable money & credit much more stable**



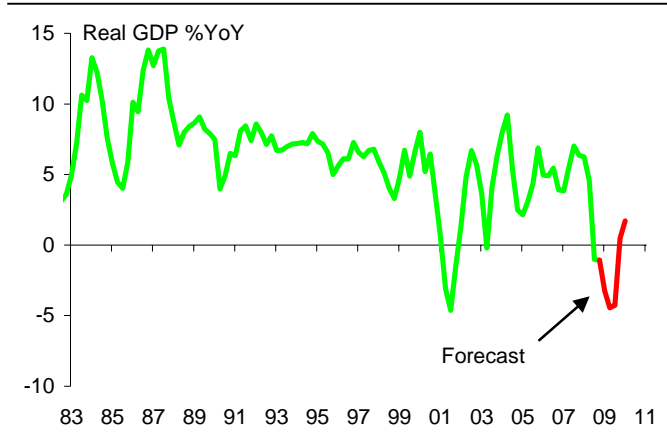
Source: UBS & CEIC

## Taiwan 2009 Outlook

- **Depth of recession similar to 2001.** We expect growth to decelerate to -1.6% versus an estimated 1.5% in 2008. The depth of the slowdown is similar to the bursting of the tech bubble where the economy contracted -2.2% in 2001.
- **Export led.** Taiwan is the most vulnerable to export slowdown in the region after Singapore and Hong Kong. Exports are about 70% of GDP and a sharp slowdown in global demand will impact income growth and domestic demand similar to the small city states. Taiwan has become more export oriented since 2001 (01 exports were about 50% of GDP) and hence the impact on domestic demand will be greater in this down cycle. We see consumption slowing to -0.3% and gross capital formation falling -4.3% in 2009.
- **Inflation will be last year's problem.** With sharp drops in activity and international commodity prices, inflation pressures should ease dramatically. We forecast CPI to average just 0.4% in 2009 compared to 3.7% in 2008. Some months may report negative CPI but we think sustained fall in overall prices are unlikely due to proactive policy responses.
- **Continuation of aggressive interest rate cuts.** We are expecting an additional 125bps of interest rate cuts over the next 12 months to bring the policy discount rate to 1.5%. With inflationary pressures disappearing and growth falling rapidly, the central bank will continue to cut interest rates aggressively to cushion the economy.
- **TWD to weaken further.** We think the TWD will depreciate from expectations of weaker economy and central bank using the currency to help exports and reduce the risk of deflation. We expect the TWD to depreciate above 34 and remain weak for most of the year before appreciating at the end of the year back to 33.5.
- **Infrastructure spending will not be felt until late 2009.** The bulk of the fiscal stimulus for 2009 projected to be approximately 2% of GDP will come in the form of government led infrastructure projects. The budget will be passed in January and we think it will take at least additional six months to plan and approve bids to implement the projects. This means that the bulk of the construction work will not impact the economy until late 2009.
- **2010 looks better.** We expect exports to start recovering in 2H09 albeit at a slow pace. Export slowdown is the root of the slowdown and any recovery in exports will push domestic demand higher. Furthermore, the impact of the government infrastructure spending will become more evident in 2010. We see the economy growing 2.9% in 2010.

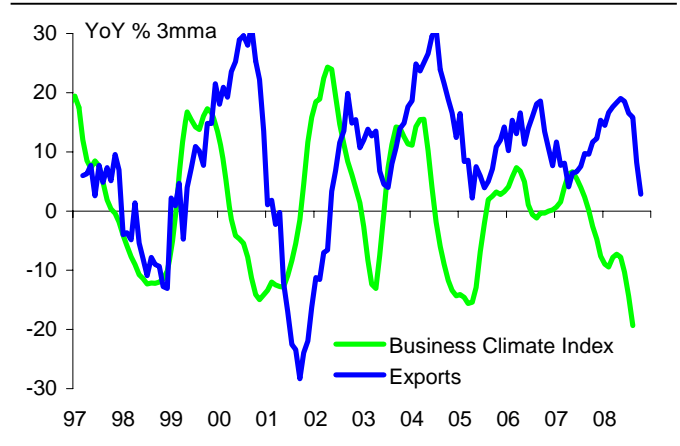
# Taiwan 2009 Outlook (Charts)

**Chart 48: Real GDP to slow in 2008**



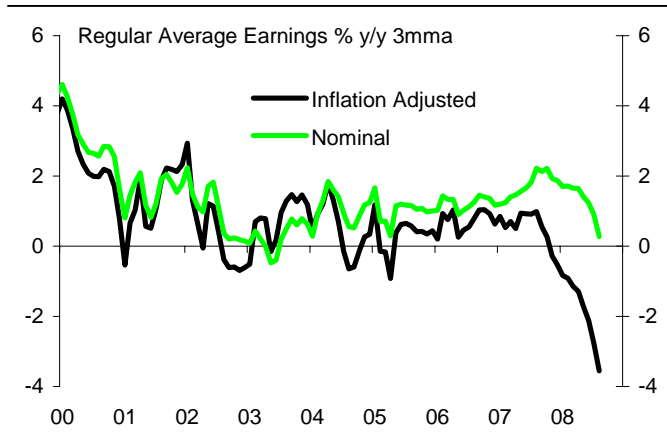
Source: CEIC, UBS

**Chart 49: Leading indicator show no signs of relief**



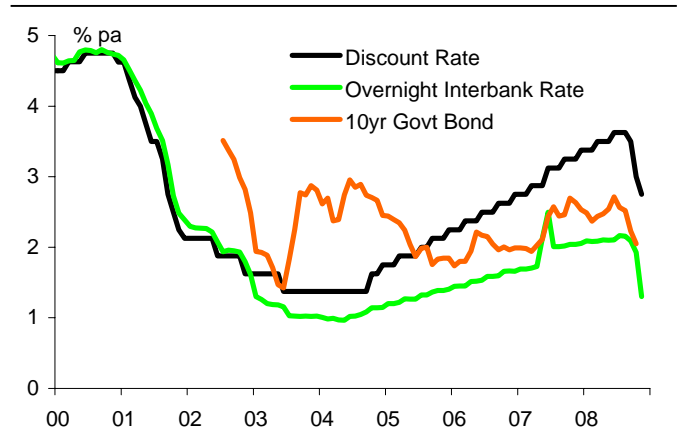
Source: CEIC, TIER, UBS

**Chart 50: Income growth falls with exports**



Source: CEIC, UBS

**Chart 51: Rates will need to go lower**



Source: CEIC, UBS

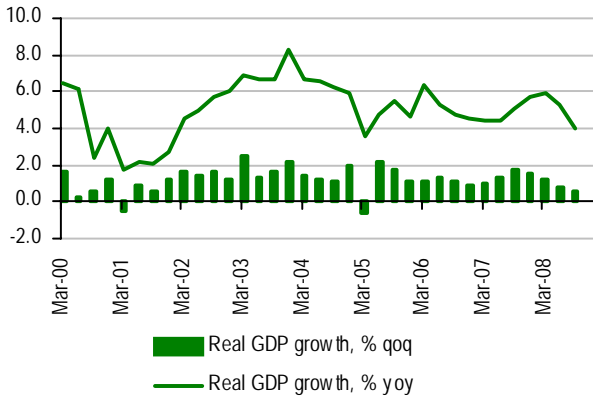
## Thailand 2009 Outlook

- **Global growth and financial crisis is the key for Thailand's economic outlook.** We expect exports to dive into negative growth in 2009, consistent with the slowest growth in the global economy since the early 1980s. In line with this, investment growth should also turn negative. The key driver of weaker investment should be export industries (manufacturing, tourism), with a hiatus in FDI and slower domestic private sector investment spending in the face of tougher financial market conditions. We now look for real GDP growth to average 1.8% in 2009 on the basis of the broad economic outlook. The downside risks to this do include temporary disruption to the economy as a result of anti-government protests, but are mainly associated with export income growth and tighter financial conditions.
- **Politics may matter less than you think.** Thailand's newspapers and the newswires continue to be dominated by political developments, with the latest debacle being the occupation of Bangkok's two main airports by anti government protestors. This has unambiguously negative connotations for growth in the sense that air-freight and tourist traffic is being disrupted. However, the economic pain implied by a sustained closure of the airport probably means the closure will not last. This is not to say the political confrontations will be resolved, rather that they remain a constant and not the swing factor in Thailand's economic performance. This idea is supported by the performance of Thailand's financial markets. Evidence of international equity and currency underperformance in the context of the recent political confrontation is limited. And while there is plenty of evidence of risk aversion (government bonds are outperforming equities) there is little evidence of capital flight.
- **Inflation falling sharply.** November CPI inflation fell to 2.2% from 3.9% in October. The decline in inflation was mainly a function of energy prices, but core inflation also fell. We expect lower energy prices to help slow food price inflation in 2009. Excluding commodities (food and energy), Thai consumer price inflation is sub 1%. As such the latest data and falling commodity prices point to a return to very low inflation in 2009.
- **Policy to be eased.** The sharp decline in inflation and (consensus inflation expectations) to within the BoT's target range along with the slowdown in growth to date means the doors are wide open for monetary and fiscal policy easing. We look for a total of 150bps of repo rate cuts from the Bank of Thailand over the next 12 months – from 3.75% to 2.25%. Given our anticipation that the central bank will try and ease domestic monetary conditions, it makes sense to us that the exchange rate will be allowed to slip against the US dollar in coming months. The size of BoT foreign exchange reserves relative to external debt mean that intervention to hold the exchange rate stable against the US dollar is possible, but if the US dollar is appreciating against most Asian currencies in the near term, as we expect, such intervention would imply an appreciating trade weighted currency. Because we think an appreciating trade weighted currency would be counterproductive given the direction of growth and inflation, we expect a weaker baht against the US dollar will be allowed.
- **Risks - prolonged disruption from protests or a deeper global recession.** We do not see inflation as a risk for Thailand. Nor do we see a collapse in the value of the currency as a significant near term risk. Instead the risks surround the strength of economic growth and the attendant credit cycle. Prolonged anti government protests could mean the temporary disruption to activity, for example at Bangkok's airports, exceeds our expectations. The key risk, however, is that the global slowdown is deeper and more pernicious than we currently anticipate.

For further details, please refer to ASEAN Economist Ed Teather; recent reports are; *Thailand: Will the baht continue to hold up?* (Southeast Asian Focus, 28 November 2008) and *Thailand by the Numbers (November 2008)* (2 December 2008).

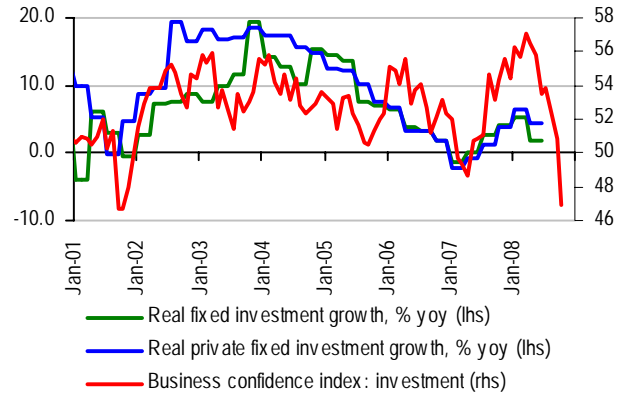
# Thailand 2009 Outlook (Charts)

**Chart 52: Growth slowdown well underway**



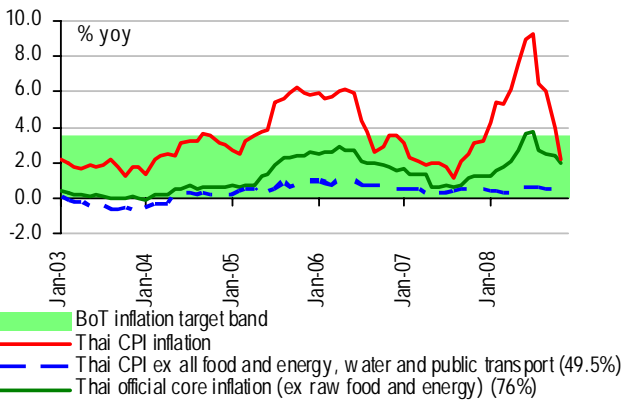
Source: CEIC

**Chart 53: Business confidence suggests collapse in investment growth is yet to come**



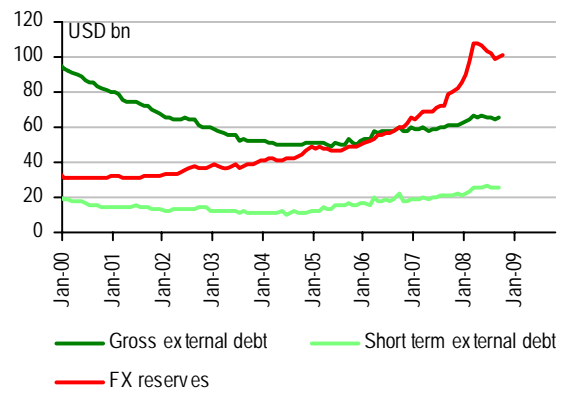
Source: CEIC

**Chart 54: Above target inflation is a thing of the past**



Source: CEIC

**Chart 55: Reserve position means BoT should still be in charge of the baht**



Source: CEIC

## Key Economic Indicators and Forecasts

### Economic Indicators

Country	China	H.K.	India <sup>7</sup>	Indo <sup>5</sup>	Japan	Korea <sup>3</sup>	Malay.	Pakistan	Phil.	Sing.	Sri Lanka	Taiwan	Thai.	Vietnam	Asia <sup>10</sup>
Nominal GDP (2007, USDbn)	3280.4	207.2	1072.4	433.1	4373.3	970.1	186.7	162.2	1439	1614	32.3	384.6	263.7	71.2	7103.5
Per Capita GDP (2007, USD)	2,484	29,796	942	1,926	34,667	20,021	6,871	990	1,622	35,172	1,616	16,819	4,183	836	11,984
Per Capita GDP (2007 USD PPP)	5,480	42,000	2,790	3,570	33,500	24,550	13,220	2,480	3,290	41,750	4,410	34,610	7,810	2,580	17,909
Real GDP Growth:	2008E 9.6%	2.7%	6.5%	5.8%	0.4%	3.9%	5.4%	2.5%	4.5%	2.2%	5.0%	1.5%	4.5%	6.3%	7.0%
	2009E 7.5%	-0.2%	6.0%	2.8%	-0.7%	-3.0%	0.0%	4.0%	1.8%	-1.8%	4.0%	-1.6%	1.8%	6.0%	4.2%
	2010E 8.0%	1.6%	7.4%	4.7%	1.1%	3.4%	4.3%	N/A	3.4%	4.3%	5.0%	2.9%	3.6%	N/A	6.2%
2003-07 (Avg)	11.8%	6.4%	8.8%	5.5%	2.1%	4.4%	6.0%	7.0%	5.8%	7.0%	6.4%	4.9%	5.6%	8.0%	9.1%
2008E	6.3%	4.5%	8.3%	10.5%	1.5%	4.9%	5.7%	18.0%	9.4%	6.0%	20.0%	3.7%	5.7%	20.0%	6.5%
2009E	1.5%	3.3%	6.5%	7.8%	0.3%	4.0%	0.9%	9.0%	3.0%	1.6%	10.0%	0.4%	0.7%	10.0%	2.9%
2010E	2.5%	2.2%	6.5%	6.2%	1.1%	2.0%	0.9%	N/A	3.8%	1.8%	12.0%	0.7%	2.4%	N/A	3.1%
2003-07 (Avg)	2.6%	0.4%	5.0%	8.6%	-0.1%	2.9%	2.2%	7.9%	5.2%	1.1%	10.7%	1.2%	3.2%	7.0%	3.3%
2008E	18.8%	4.4%	13.1%	30.0%	25.7%	20.0%	8.0%	12.0%	4.9%	-6.0%	12.0%	7.8%	15.0%	20.7%	14.4%
2009E	0.0%	-6.9%	5.6%	-2.0%	-8.9%	-6.0%	-12.7%	18.0%	-5.0%	-9.0%	10.0%	-12.7%	-8.2%	N/A	-3.8%
2010E	5.0%	4.5%	20.0%	4.0%	4.2%	8.0%	4.4%	N/A	4.5%	5.0%	15.0%	4.3%	4.1%	N/A	6.0%
2003-07 (Avg)	30.3%	11.5%	24.7%	14.9%	11.4%	18.2%	13.4%	11.7%	7.6%	15.9%	10.5%	12.8%	17.4%	23.8%	16.7%
2008E	25.0%	5.0%	15.9%	80.0%	35.4%	30.0%	6.2%	-9.1%	11.8%	-2.2%	30.0%	14.0%	25.3%	30.0%	20.2%
2009E	1.0%	-6.1%	-0.5%	-3.0%	-5.8%	-15.0%	-6.8%	12.0%	-9.9%	-5.4%	5.0%	-18.5%	-11.6%	N/A	-5.5%
2010E	6.5%	3.3%	18.1%	3.0%	9.7%	9.0%	2.9%	N/A	4.0%	2.8%	15.0%	3.9%	3.8%	N/A	6.7%
2003-07 (Avg)	26.8%	12.1%	31.9%	19.8%	13.7%	18.6%	13.2%	21.2%	7.2%	15.8%	13.2%	14.4%	17.1%	25.4%	17.7%
2008E	252.2	-26.7	-97.4	14.3	75.5	-18.1	34.2	-14.6	-9.3	42.0	-6.0	16.0	-0.4	-20.7	206.8
2009E	240.3	-28.1	-86.1	15.3	44.6	24.7	20.7	-15.1	-5.8	40.3	-5.9	28.4	5.7	N/A	255.6
2010E	234.2	-25.1	-98.2	17.2	64	22.8	23.7	N/A	-5.7	43.3	-6.8	30.5	6.3	N/A	249.1
2003-07 (Avg)	119.8	-14.5	-44.2	32.2	102.7	19.7	25.6	-11.1	-4.8	29.6	-2.6	20.2	2.7	-6.5	186.1
2008E	382.0	32.4	-30.4	-1.0	202.1	-16.3	31.2	-8.6	2.8	28.2	-3.9	20.8	0.0	-23.0	449.7
2009E	339.8	24.3	-10.2	2.0	163.5	19.8	13.6	-9.1	6.3	22.0	-3.5	17.3	5.0	N/A	439.9
2010E	326.2	29.8	-6.9	4.0	126.2	15.9	18.8	N/A	6.1	29.0	N/A	19.9	7.0	N/A	449.9
2003-07 (Avg)	180.1	20.7	-5.1	6.2	170.8	13.3	21.3	-5.1	3.1	26.2	-0.8	25.4	3.3	-2.1	294.5
2008E	9.3%	14.9%	-2.9%	-0.2%	3.7%	-1.9%	13.7%	-5.4%	1.7%	15.1%	-9.5%	5.3%	0.0%	-25.9%	5.6%
2009E	7.3%	11.3%	-0.9%	0.4%	3.0%	3.1%	6.6%	-5.1%	4.1%	12.9%	-7.7%	5.0%	1.9%	N/A	5.3%
2010E	6.2%	13.3%	-0.5%	0.7%	2.3%	2.0%	8.5%	N/A	3.5%	15.3%	N/A	5.3%	2.5%	N/A	4.8%
2003-07 (Avg)	6.6%	11.4%	-0.4%	1.9%	3.9%	1.8%	14.7%	-3.4%	2.6%	20.9%	-3.2%	7.3%	1.4%	-3.6%	6.8%
Fiscal Balance % GDP (2007/2)	0.7%	7.0%	-2.8%	-1.5%	-3.1%	3.8%	-3.2%	-7.0%	-0.2%	3.0%	-7.7%	-0.3%	-1.6%	-3.4%	0.5%

### Sovereign Credit Risk Indicators

Country	China	H.K.	India <sup>7</sup>	Indo <sup>5</sup>	Japan	Korea <sup>3</sup>	Malay.	Pakistan	Phil. <sup>9</sup>	Sing.	Sri Lanka	Taiwan	Thai.	Vietnam	Asia
Total Foreign Debt (07E, USDbn) <sup>6</sup>	350.1	75.8	149.2	1400	N/A	230.1	53.1	38.8	618	25.6	12.2	98.5	59.5	21.8	1243.6
Foreign Public LT debt (07E, USDbn) <sup>4</sup>	84.0	2.8	91.1	68.6	N/A	53.4	21.5	35.1	368	1.4	10.9	0.4	10.9	18.7	371.0
Foreign ST Debt (07E, USDbn)	197.4	30.3	140	36.6	N/A	111.5	13.2	1.5	60	9.7	0.8	83.3	21.9	3.0	523.9
Total Foreign Debt/GDP	10.8%	36.6%	13.1%	32.3%	N/A	23.7%	28.4%	26.6%	42.9%	15.9%	37.7%	25.7%	24.3%	30.9%	N/A
Total Foreign Debt/Exports Goods & Services	24.0%	14.0%	52.5%	102.7%	N/A	49.9%	24.4%	132.3%	78.8%	6.2%	97.6%	32.6%	31.6%	34.5%	N/A
T. Debt Services/Exports Goods & Services	2.1%	2.0%	7.0%	11.9%	N/A	5.4%	4.7%	12.8%	12.7%	1.3%	6.5%	3.0%	7.7%	1.5%	N/A
Foreign Ex. Reserves (USDbn)	195.6	155.3	2440	50.6	977.7	212.3	100.2	6.7	360	162.8	4.5	278.2	103.2	21.0	3248.0
Reserves/Imports (months)	17.8	19.0	10.4	5.7	14.6	5.9	7.9	2.2	7.5	12.3	2.7	15.7	6.5	2.9	N/A
Sovereign Rating/Moody/S&P	A1/A+	Aa2/Aa+	Baa2/BBB-	Ba3/BB-	Aaa/AA	A2/A	A3/A	B3/CC+	B1BB-	Aaa/AAA	N/A/B+	Aa3/AA-	Baa1/BBB+	Ba3/BB	N/A

<sup>1</sup> Singapore: NODX; <sup>2</sup> Philippines, India = Public Sector Balance; Latest data available; <sup>3</sup> Source of foreign debt: IMF; <sup>4</sup> Indonesia Total Public Sector Debt; <sup>5</sup> Source of foreign debt: Bank Indonesia; <sup>6</sup> Source for all other information: EIU; <sup>7</sup> India GDP and current account balance, Fiscal years beginning April; <sup>8</sup> Total Public Debt as at end 1996; <sup>9</sup> Total Public Debt Figures; <sup>10</sup> All aggregate series calculated using 2005 Nominal GDP fixed weight, Asia (ex. Sri Lanka, Pakistan & Vietnam). Prices in forecast and databank tables are as at 28<sup>th</sup> November 2008.

Source: CEIC, UBS estimates







## External Accounts (USD bn)

	1980	1985	1990	1995	2000	2005	2007	2008E	2009E	2010E	2008										2008 Ytd Avg				
											Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		Jul	Aug	Sep	Oct
<b>Sri Lanka</b>																									
Exports	2.3%	1.2%	10.8%	18.6%	19.8%	10.2%	<b>12.3%</b>	<b>12.0%</b>	<b>10.0%</b>	<b>15.0%</b>	18.3%	18.1%	-5.1%	22.7%	13.4%	8.8%	6.8%	13.8%	16.4%	-3.0%	22.9%	14.0%	-9.4%	9.3%	
Imports	26.7%	6.7%	0.1%	18.5%	17.4%	10.7%	<b>10.2%</b>	<b>30.0%</b>	<b>5.0%</b>	<b>15.0%</b>	24.9%	20.5%	15.4%	33.6%	49.1%	30.6%	32.3%	36.9%	24.0%	39.3%	37.9%	28.4%	22.6%	33.5%	
Trade Balance	1.38	-0.96	0.28	-1.50	-1.50	-2.52	<b>-3.57</b>	<b>-6.03</b>	<b>-5.89</b>	<b>-6.78</b>	-0.29	-0.44	-0.42	-0.30	-0.62	-0.32	-0.45	-0.66	-0.51	-0.50	-0.41	-0.50	-0.58	-4.56	
Cur.Account	-4.31	-8.52	-14.68	-0.79	-1.07	-0.65	<b>-1.37</b>	<b>-3.88</b>	<b>-3.48</b>	<b>N/A</b>	-0.29			-0.43			-0.72								
FX Reserves	-	5.26	15.56	-0.79	2.13	3.92	<b>4.51</b>	<b>5.50</b>	<b>6.50</b>	<b>N/A</b>	4.01	4.51	4.61	4.51	4.56	4.73	4.91	4.77	4.88	4.89	5.01	4.75	4.54	4.78	
<b>Taiwan*</b>																									
Exports	23.0%	0.9%	1.5%	20.0%	22.8%	8.8%	<b>10.1%</b>	<b>7.8%</b>	<b>-12.7%</b>	<b>4.3%</b>	11.3%	14.9%	12.7%	19.8%	11.9%	18.6%	23.1%	15.0%	20.9%	21.3%	8.0%	18.0%	-1.7%	-8.1%	12.7%
Imports	33.6%	-8.5%	4.7%	21.3%	26.6%	8.2%	<b>8.2%</b>	<b>14.0%</b>	<b>-18.5%</b>	<b>3.9%</b>	10.7%	9.9%	2.7%	27.7%	15.0%	26.2%	37.7%	17.8%	17.6%	22.5%	12.0%	40.0%	10.5%	-7.1%	19.2%
Trade Balance	0.08	10.62	12.50	8.11	11.22	15.82	<b>27.43</b>	<b>15.97</b>	<b>28.44</b>	<b>30.48</b>	2.16	2.54	3.41	1.15	0.56	0.98	-0.96	0.13	1.37	0.52	-1.39	-1.18	-0.18	2.15	2.00
Cur.Account	-0.91	9.20	10.73	5.47	8.90	17.58	<b>32.98</b>	<b>20.84</b>	<b>17.30</b>	<b>19.89</b>	6.48		11.18				8.66		6.96			2.01			17.63
FX Reserves	2.21	22.56	72.44	90.31	106.74	253.29	<b>270.31</b>	<b>285.00</b>	<b>278.00</b>	<b>281.00</b>	262.94	265.92	270.09	270.31	272.82	277.84	286.86	289.38	290.07	291.41	290.90	282.09	281.13	278.15	284.06
<b>Thailand</b>																									
Exports	23.1%	-4.0%	14.8%	24.9%	19.3%	15.0%	<b>17.2%</b>	<b>15.0%</b>	<b>-8.2%</b>	<b>4.1%</b>	10.5%	26.6%	23.2%	19.0%	33.3%	16.6%	14.5%	27.0%	21.4%	27.5%	43.9%	14.9%	19.4%	5.2%	22.4%
Imports	29.1%	-11.1%	27.3%	30.1%	24.6%	25.7%	<b>8.7%</b>	<b>25.3%</b>	<b>-11.6%</b>	<b>3.8%</b>	7.2%	20.2%	17.4%	8.8%	49.1%	33.3%	32.7%	44.4%	15.7%	30.7%	55.1%	26.9%	39.4%	21.7%	34.9%
Trade Balance	-2.71	-2.12	-9.74	-13.99	7.60	-7.24	<b>12.13</b>	<b>-0.36</b>	<b>5.66</b>	<b>6.35</b>	1.99	1.50	1.77	1.22	-0.66	-0.69	0.16	-1.81	1.29	0.63	-1.03	-0.78	0.13	-0.56	-3.30
Cur.Account	-2.83	-4.80	-20.35	-13.23	9.33	-7.64	<b>14.05</b>	<b>0.00</b>	<b>5.00</b>	<b>7.00</b>	1.74	1.82	2.12	2.24	1.27	0.63	0.79	-1.86	0.51	0.33	-0.91	-0.85	-0.70	-1.13	-1.92
FX Reserves	2.86	3.00	14.31	37.03	32.66	52.07	<b>87.46</b>	<b>97.46</b>	<b>101.46</b>	<b>103.46</b>	80.69	82.43	84.61	87.46	92.77	100.54	109.97	109.76	108.94	105.68	104.75	101.25	102.42	103.18	103.93
<b>Vietnam</b>																									
Exports	23.5%	15.7%	35.8%	34.4%	25.5%	24.0%	<b>22.2%</b>	<b>20.7%</b>	<b>N/A</b>	<b>N/A</b>	10.4%	28.0%	38.3%	34.3%	30.6%	16.8%	24.5%	39.4%	43.7%	53.7%	54.1%	40.4%	42.2%	21.5%	33.8%
Imports	7.3%	54.4%	48.5%	40.0%	33.2%	17.0%	<b>37.0%</b>	<b>30.0%</b>	<b>N/A</b>	<b>N/A</b>	25.1%	39.0%	74.2%	57.5%	66.2%	78.6%	81.3%	84.9%	45.1%	43.0%	42.2%	18.4%	16.9%	0.6%	42.2%
Trade Balance	-0.35	-0.94	-1.77	-2.71	-1.15	-4.6	<b>-12.4</b>	<b>-20.7</b>	<b>N/A</b>	<b>N/A</b>	-1.24	-1.35	-1.62	-1.60	-2.29	-2.78	-3.28	-3.22	-1.91	-0.74	-0.85	-0.26	-0.50	-0.46	-16.89
Cur.Account	-0.26	-1.40	-1.20	-1.88	1.11	-0.6	<b>-7.0</b>	<b>-23.0</b>	<b>N/A</b>	<b>N/A</b>	-1.42			-4.26											
FX Reserves	-	-	-	1.32	3.42	9.05					22.57	23.04	23.49	23.60	24.46	26.33	25.05	23.46	22.16	20.97					23.74

Exports, Imports and Trade Balance, customs cleared basis; Current Account, FX Reserves, balance of payments basis

Trade and Current Account Ytd Sum, not Ytd Average.

## Foreign Exchange and Interest Rate Forecasts

## ASIAN CURRENCY

	CURRENT	1 mth	3 mth	6 mth	1 YEAR	05 Avg	06 Avg	End 2006	End 2007	End 2008E	End 2009E	End 2010E
USD/RMB	6.88	6.80	6.70	6.65	6.50	8.19	7.97	7.80	7.29	6.80	6.80	6.60
USD/HKD	7.75	7.78	7.80	7.80	7.80	7.78	7.77	7.78	7.80	7.80	7.80	7.80
USD/INR	50.29	50.25	52.00	50.00	48.00	44.00	45.19	44.11	39.41	52.00	48.00	45.00
USD/IDR	12151	12600	11000	9800	9800	9711	9167	9020	9419	11000	9800	9500
USD/JPY	93.71	95.00	95.00	95.00	95.00	108.15	116.31	119.07	112.00	95.00	95.00	95.00
USD/KRW	1458.3	1500.0	1700.0	1700.0	1500.0	1023.8	954.4	930.0	935.8	1700.0	1425.0	1350.0
USD/MYR	3.64	3.66	3.65	3.75	3.60	3.79	3.67	3.53	3.31	3.65	3.55	3.55
USD/PKR	78.86	80.00	85.00	90.00	92.00	59.60	60.29	60.88	61.42	85.00	95.00	N/A
USD/PHP	48.88	49.50	50.00	52.00	50.00	55.11	51.34	49.13	41.40	50.00	48.00	48.00
USD/SGD	1.527	1.520	1.510	1.540	1.580	1.664	1.588	1.534	1.436	1.510	1.600	1.450
USD/LKR	110.11	108.00	110.00	110.00	111.00	100.48	103.94	107.65	108.70	110.00	115.50	115.50
USD/TWD	33.49	33.50	34.00	34.00	34.00	32.13	32.51	32.59	32.43	34.00	34.00	33.50
USD/THB*	35.47	36.00	36.00	37.00	37.00	40.25	37.88	36.04	33.75	36.00	36.00	36.00
USD/DONG	16483	N/A	N/A	N/A	N/A	15828	15968	16055	16015	17000	N/A	N/A

\* Onshore exchange rate

## ASIAN MONEY MARKET INTEREST RATE/3 MONTH INTEREST RATE

mid rate	CURRENT	3 mth	6 mth	1 YEAR	End 2006	End 2007	End 2008E	End 2009E	End 2010E
RMB 7D Interbank	2.11	3.40	3.40	3.20	2.88	2.57	3.40	3.00	2.50
HKD 3M HIBOR	1.95	1.50	0.50	0.25	3.90	3.45	1.50	0.50	1.25
INR 91D T Bill	7.14	7.50	6.50	6.00	7.19	7.35	7.50	6.00	7.00
IDR 28D SBI	11.24	9.75	9.75	9.75	9.75	8.00	9.75	9.25	8.75
3M JPY	0.77	0.60	0.50	0.50	0.54	0.83	0.60	0.50	0.50
KRW 91D CD	5.45	5.80	4.25	2.00	4.86	5.82	5.80	1.75	2.20
MYR 3M KLBOR	3.39	3.39	2.89	2.39	3.71	3.61	3.39	2.39	2.39
PKR 3MT Bill	13.10	17.00	17.00	15.00	8.66	9.39	17.00	13.00	N/A
PHP 3M PHBOR	4.75	7.00	6.75	6.50	6.94	6.38	7.00	6.50	6.50
SGD 3M SIBOR	0.82	0.80	0.70	1.20	3.44	2.38	0.80	1.20	1.80
LKR 3M Interbank	17.20	17.00	17.00	15.50	12.76	21.30	17.00	14.00	N/A
TWD 90D CP	1.81	2.00	1.20	1.00	1.75	2.22	2.00	1.00	1.70
THB 3M BIBOR	3.88	3.45	3.05	2.55	5.25	3.85	3.45	2.55	2.55
VND 3M Deposit	11.53	N/A	N/A	N/A	8.55	8.80	N/A	N/A	N/A

## ASIAN BOND YIELD

	CURRENT	3 mth	6 mth	1 YEAR	End 2006	End 2007	End 2008E	End 2009E	End 2010E
RMB 10Y GOV	2.14	3.80	3.60	3.30	2.66	4.15	3.80	3.30	3.50
HKD 10Y GOV	1.66	1.40	1.20	2.00	3.73	3.44	1.40	2.50	3.10
INR 10Y GOV	7.08	7.50	7.00	6.00	7.61	7.79	7.50	6.50	7.50
IDR 10Y GOV	15.58	16.10	15.00	13.00	10.18	10.02	16.10	13.00	12.00
JPY 10Y GOV	1.39	1.30	1.10	1.10	1.67	1.50	1.40	1.10	1.40
KRW 5Y TREASURYS	5.04	4.40	4.00	3.00	5.00	5.78	4.40	3.00	3.50
MYR 10Y GOV	3.67	5.00	4.75	4.00	3.77	4.13	5.00	4.00	4.80
PKR 10Y GOV	16.60	15.00	14.00	12.50	10.42	10.40	15.00	12.00	N/A
PHP 10Y GOV	9.45	9.00	8.75	8.50	6.38	6.58	9.00	8.00	8.00
SGD 10Y GOV	2.29	2.60	2.70	3.20	3.05	2.68	2.60	3.40	3.60
LKR 10Y GOV	17.75	17.00	16.50	16.00	14.75	17.15	17.00	15.00	N/A
TWD 10Y GOV	1.49	1.90	1.20	1.30	2.03	2.58	1.90	1.60	2.40
THB 10Y GOV	3.83	5.50	5.50	5.20	5.40	4.96	5.50	5.20	5.20
VND 10Y GOV	15.00	N/A	N/A	N/A	8.81	9.08	N/A	N/A	N/A

Source for all tables on this page: UBS estimates, Datastream &amp; CEIC

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## Asian Country Strategy

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# UBS Investment Research

## Hong Kong/China - Outlook 2009

3 December 2008

[www.ubs.com/investmentresearch](http://www.ubs.com/investmentresearch)

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### A see-saw market in 2009

#### ■ Summary

We think the prospect of a hard landing for Hong Kong/China earnings with an elevated cost of capital will likely translate to a see-saw performance for the HSI on a 12-month view. We see upside potential on the basis of modest PE expansion as earnings downgrades run their course. UBS analysts forecast HSI earnings to decline 4% in 2009. Based on 11x PE, we set an end-2009 index target of 15,900.

#### ■ What are the likely key themes for 2009?

1) A sharp deceleration in China's nominal GDP growth and over-representation by banks, commodities and real estate in index earnings points to a significant earnings recession. 2) Disinflation versus reflation: obvious reflation plays have outperformed strongly since the stimulus package was announced; however, net beneficiaries of input cost disinflation—food, power and even airlines—may make more rewarding investments. 3) Risk aversion: globally, capital will remain scarce and expensive, resulting in a sustained low PE environment—we favour over-capitalised, high ROIC companies. 4) Hong Kong has a bleaker macro outlook than China but we think deep value is selectively emerging.

#### ■ What may surprise on the upside or downside?

We believe upside and downside surprises will mainly revolve round the efficacy, timing, and magnitude of China's reflation measures.

#### ■ Market valuations & targets, highlighted sectors

Our picks reflect our four themes: safety in an earnings recession, net beneficiaries of disinflation, overcapitalised balance sheets and selective Hong Kong value plays. They are China Mobile, China Yurun Food, China Life Insurance-H, China Resources Power, China Communications Construction, Zhejiang Expressway, Sun Hung Kai Properties, Hang Lung Properties, Esprit, and Cathay Pacific.

Table 1: Hong Kong/China Top 10 Stocks List

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (HK\$)	Price Target (HK\$)	PE 2009E (x)
<b>Most Preferred</b>						
China Mobile (HK)	0941.HK	184.6	Buy	72.75	80.00	10.1
China Yurun Food	1068.HK	1.6	Buy	8.50	13.35	9.9
China Life Insurance-H	2628.HK	74.6	Buy	20.45	26.10	15.9
China Resources Power	0836.HK	7.2	Buy	14.60	22.60	15.2
China Communications Construction	1800.HK	17.0	Buy	8.87	10.70	13.3
Zhejiang Expressway	0576.HK	2.1	Buy	3.74	4.74	8.1
Sun Hung Kai Properties	0016.HK	20.6	Buy	62.25	84.20	11.9
Hang Lung Properties	0101.HK	8.9	Neutral	16.74	18.00	14.9
Esprit	0330.HK	5.9	Buy	36.50	69.00	7.6
Cathay Pacific	0293.HK	4.0	Buy	7.90	12.00	17.9

Data as at 1 December 2008. Source: UBS estimates.

**This report has been prepared by UBS Securities Asia Limited**  
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## Outlook 2009 – Summary

Despite attractive valuations—the HSI is trading at around 9.6x 2009E PE—we think the combination of a hard landing for corporate earnings in 2009 and an elevated cost of capital for Hong Kong-listed equities will translate into a see-saw market for 2009. However, we do see some fundamental value on a 12-month view, as PE multiples should expand modestly once negative earnings momentum bottoms out. We set an end-2009 index target of 15,900, based on applying an 11x target PE to our bottom-up analysts' aggregate EPS for HSI constituents for 2009, with an expected range of 13,00 to 17,350.

UBS analysts forecast -4% EPS growth for the HSI in 2009, with ROE declining from 13.6% in 2008E to 12% in 2009E. In China, our expectation of a sudden, significant deceleration in nominal GDP growth, coupled with a reversal in commodity prices and asset inflation in general, points to further earnings downside. We find some—but only a limited number—of net beneficiaries of raw material price deflation in the listed corporate sector. We think Hong Kong—an open economy heavily reliant on finance, real estate and global trade—is likely to fare even worse, with a slowdown in consumption from southern China. MSCI HK essentially comprises domestic real estate and banks, (for which the negative effects of domestic recession, credit crisis, and global deleveraging are patently evident), and international companies exposed to western consumption and global trade—such as Hutchison Whampoa (Hutchison), Esprit and Li & Fung.

Against a backdrop of negative earnings momentum and corporate profit recession, we believe PE expansion will be very difficult, especially when one examines the industry sector composition of the Hong Kong/China market. Financials and commodities/materials comprise approximately 75% of 2008E aggregate earnings for the MSCI China universe under UBS coverage, but, according to our economics team's estimate, only around 31% of China's GDP.

We believe much of the earnings growth and rising ROE during the past few years in Hong Kong-listed China has been driven by the listing of large state-owned banks with clean balance sheets and the commodity boom. Excluding China banks and commodities, the HSI index (on its current constituents) had an ROE of 11.2% in 2008E, about 220bp lower than the overall index: that is, China banks and commodities added 220bp to the HSI's 2008E ROE.

Hong Kong and China Banks, China commodities, and Hong Kong real estate make up around 60% of the HSI and 73% of 2008 earnings. These sectors have directly or indirectly been beneficiaries of financial leverage (for themselves or their customers), easy credit and asset inflation. Even if the earnings recession is mild, we doubt the market risk appetite would return to levels that support 15-20x PE for these sectors in the next 12 months. This means the overall index would also struggle to re-rate significantly into the mid-teens PE range.

Our index target derivation assumes our bottom-up estimates are broadly correct; our target PE of 11x is based on 13% long-term incremental ROE, 11% cost of equity, and long-term growth of 6.5%. We think the index is likely to trade in a 10-12x PE range unless there is a major compression of risk premiums globally; and our bottom-up earnings forecasts may have a further 5-10% downside. If we assume another 10% haircut to our HSI earnings, and apply 10x PE, the index fair value would stand at 13,000; and if our earnings estimates hold for the next 12 months, and we apply a 12x PE, the index upside would be around 17,350.

## What are the likely key themes?

We identify four themes for Hong Kong/China for 2009.

### (1) Hard landing for Hong Kong/China corporate earnings

China has had five straight years of high-teen growth in nominal GDP—a remarkably consistent 17-19% growth rate in 2004-07, and UBS estimates 2008 will come in at around 16%. The corporate sector's revenue and earnings growth is highly correlated to nominal GDP; for the past ten years, correlation between nominal GDP growth and industrial enterprises' aggregate revenue growth has been around 0.8 in China. However, we think it is not simply the much lower absolute rate of growth that is a concern for corporate profits; the suddenness and the magnitude in **the change in the rate of change** in growth is more important. Nominal GDP growth of 17-19% for a number of years broadly supports revenue growth expectations of 20% plus, and decisions on capex, expansion, cost growth in 2007 and H108 reflected those expectations. Therefore, a sudden change in these expectations, to 8-10% in 2009, can have a large unwinding effect due to, what now turns out to be, recent overinvestment, overstocking, and profligacy in cost base. Corporate earnings for the next 12 months ought to look far worse than the general economy and GDP growth, just as the reverse happened during the boom years. We think our analysts' estimate of a low single-digit earnings decline for Hong Kong/China in 2009 is unlikely to prove sufficiently conservative.

The second point is to distinguish the economy from the equity market. The MSCI China is a skewed representation of the Chinese economy: some 76% of 2008E earnings is derived from financials and commodities, while the broad consumer sector (retail, F&B, autos, hotels) is, surprisingly in our view, under 2% of aggregate earnings. According to our China economics team, the value-added of the financials sector (including real estate) contributed only 9% to China's GDP in 2007 with energy/materials 22% and consumer 21%.

For the S&P 500 in the US, which is a far more developed service economy than China, financials represented only around 24% of 2005-07 operating EPS for the index, energy and materials approximately 18%, while consumer (discretionary and staples) comprised around 17%. The US stock market sector composition much more closely mirrors that of the economy, despite the fact that many large US companies derive a significant portion of earnings from overseas markets.

**Table 2: Sector composition of index earnings and contribution to GDP**

	S&P 500	MSCI China	Share in US GDP	Share in China GDP
Financials	24%	43%	21%	9%
Consumer	17%	2%	13%	21%
Energy & Materials	18%	32%	7%	22%
Telecom & technology	16%	16%	13%	8%
Others	25%	7%	45%	40%

Note: Consumer narrowly refers to F&B manufacturing, durables, autos and retail.

Source: UBS estimates

**Hang Seng Index target: 15,900**  
**Our target is based on 11x PE (driven by 13% ROE, 11% COE and 6.5% growth) and UBS bottom-up EPS for HSI constituents**

How hard the landing will be for China corporate earnings is therefore highly dependent on the outcome for banks and commodity-related earnings, to an extent that is entirely out of proportion to their actual contribution to GDP. A 10% decline in 2009 earnings in the Chinese banking sector, compared with our current forecast of 8% growth, would immediately reduce our aggregate China earnings 9-10%, hardly supportive of the China equity market. However, a decline in the banking sector's very high profit levels in 2008 may be supportive of a near-term recovery in GDP growth. Interest rate cuts reduce banking sector margins but should help to reflate the economy, and a propensity to continue to lend in an uncertain economy supports economic activity but arguably leads to asset quality deterioration and increased credit costs. Indeed for policy makers, it makes sense to redistribute excess banking profits (20% ROE in 2008E) to other sectors of the economy as authorities attempt to reflate the economy.

### The Hong Kong/China earnings picture

For the UBS China coverage universe (which represents approximately 95% of the free float market cap of MSCI China), we are forecasting a 1% earnings decline for 2009, and an 8% decline excluding financials (banks/insurance). Officially IBES consensus for China still calls for around 9% growth, although we doubt share prices are discounting such a scenario. In aggregate, our earnings estimates for 2009 have been reduced by around 19% since the end of H108. For the UBS Hong Kong coverage universe, excluding HSBC (representing approximately 90% of the free float market cap of MSCI HK), we are forecasting a decline of 22% in 2009—the earnings revision for Hong Kong stocks since end-H108 has been 23%.

In our view, key downside risks for China earnings are banks (we estimate 7% EPS growth in 2009), basic materials (-10%), and real estate developers (+33%). For traditional Hong Kong blue chip earnings, we think downside risks are most prominent in banks, given their substantial foreign securities' exposure and a domestic economy clearly in recession, while international large cap companies also face downside risks (Hutchison, Esprit, Li & Fung). Hong Kong real estate earnings momentum is less relevant, in our view, since most of the change is likely to result from the timing of development bookings; landlords' earnings may be quite stable but that scenario could equally be consistent with one of sharp reductions in NAV if spot rentals decline more than we expect in 2009. In other words, we expect physical market price trends to be a far more important value driver than 2009 EPS momentum.

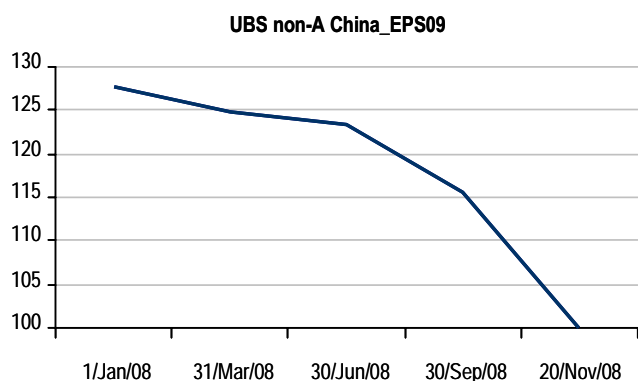
For the Hang Seng Index, overall we believe there could be another 5-10% downside earnings risk to UBS's current bottom up estimates, primarily due to Hong Kong and China banks and secondarily due to Hong Kong real estate, conglomerates, and consumer.

**Table 3: Breakdown of Hang Seng Index by sector**

Hang Seng Index	% of market cap	% of 2008E profit	2009E YoY	
			earnings growth	Comment
China Banks	18%	20%	8%	Downside risk to 09 EPS given margin compression and asset quality deterioration
Hong Kong Banks	18%	17%	-7%	Downside risk to 09 EPS given write-down potential from foreign securities exposure
Banks	35%	37%	1%	
Property	11%	16%	-36%	UBS downgraded significantly already, but value driver is in physical market trends
Oil & Commodities	13%	20%	-19%	Assuming US\$60/bbl average for 2009; US\$10 deviation = >20% earnings change
TMT	16%	13%	11%	Steady growth in China Mobile
Conglomerates	4%	2%	128%	Exposure to trade, western consumption, oil sands pressures Hutch earnings
Consumer	3%	3%	1%	Downgraded aggressively already for Esprit and Li & Fung
Utilities	7%	4%	-16%	New scheme of control agreements for Hong Kong power companies
Transport	1%	1%	74%	Rebound in Cathay Pacific earnings
Insurance & other financial	9%	4%	35%	Ping An write-down in 2008 helps base effect for 2009
Total	100%	100%	-4%	
Total ex-China banks	82%	80%	-7%	
Total ex-China banks/commodities	69%	60%	-3%	

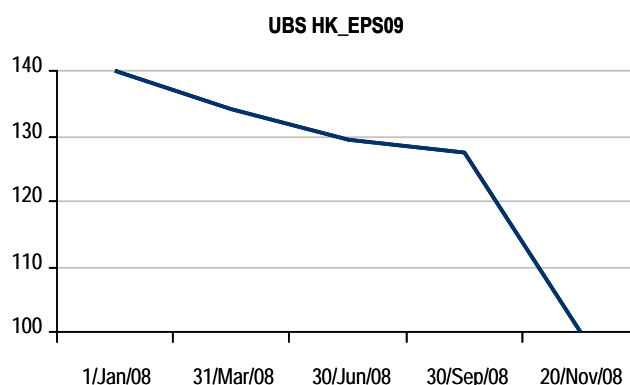
Source: UBS estimates

**Chart 1: UBS China (non-A share) 2009E EPS momentum**



Source: UBS

**Chart 2: UBS Hong Kong 2009E EPS momentum**



Source: UBS

**China Banks**

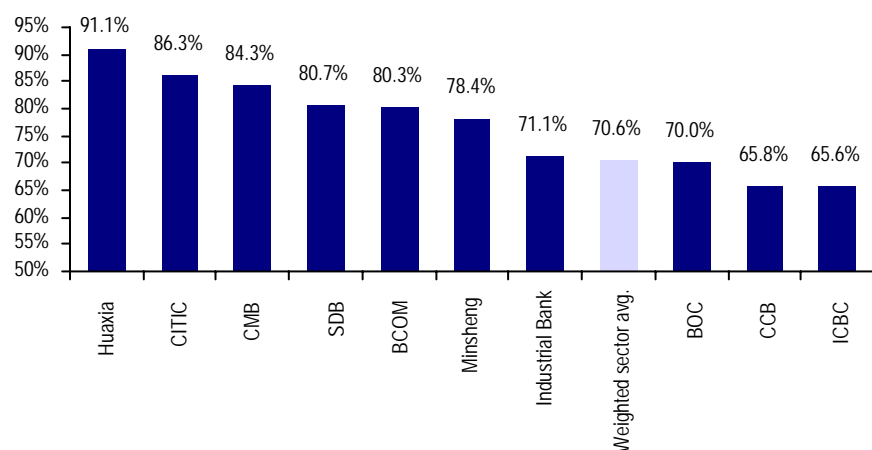
We expect banks' earnings will come under greater pressure in 2009 due to a narrowing net interest margin and rising credit provision costs. Victor Wang, our China banks analyst, now forecasts around 7% profit growth for Chinese H-share banks in 2009, after substantial growth of 71% in 2008E. We envisage downside risks, given the sharp deterioration in the economy, and because around 70% of the entire sector's loans were made after H106 (in China a significant amount of the loan book for short-term working capital etc). Our analysts' sensitivity analysis suggests another 60bp increase in provisioning would reduce sector's profits by 23% in 2009, and every 10bp decrease in NIM would reduce sector's earnings by 5%. We think 10-20% earnings downside is not implausible, and given the importance of the banks to corporate earnings, a 20% downgrade for the sector translates into a 8% reduction in aggregate earnings for the UBS China coverage universe.



**Table 4: Sensitivity of China banks' EPS to change in credit cost provision and NIM**

<b>Credit cost provision</b>	-150bp	-120bp	-90bp	-60bp	-30bp	20bp
<b>Sector earnings</b>	-58%	-46%	-35%	-23%	-12%	8%
<b>Net margin sensitivity</b>	-30bp	-25bp	-20bp	-10bp	-5bp	5bp
<b>Sector earnings</b>	-15.9%	-13.2%	-10.6%	-5.3%	-2.6%	2.6%

Source: UBS estimates

**Chart 3: Portion of H108 loans which were originally underwritten after H106**

Source: Company data, UBS estimates

### Commodities and basic materials

We expect many commodity and basic materials companies to move into losses in 2009: base metal companies will be generally most vulnerable—we forecast Jiangxi Copper to report a loss in 2009, and zinc companies to breakeven or record a loss. With the rapid fall iron ore prices, and previous inventory build up, many China steel makers also look set to report losses for the near term (We forecast the two major H-share steelmakers to show an aggregate 30% decline in EPS for 2009.)

For the China coal sector, our metals and mining team forecasts a price of Rmb744/t for Chinese coal in 2009 (including VAT), around 8% above the current spot. On this basis, the team expects Yanzhou Coal to make Rmb6bn net profit in 2009 and China Coal Rmb8.7bn—minor YoY declines from 2008. We asked what would happen to these companies' earnings if power demand drops to 3% (from our forecast of 5.4%) growth in 2009 and China GDP grows at 5-6%. In that scenario, our team thinks the Chinese coal price would drop below Rmb500/t, at which point Yanzhou Coal would start to record a loss (below Rmb470/t) and China Coal's earnings would be 25-30% below our forecast.

For the oil sector, the UBS oil and gas team assumes US\$60/bbl for the average oil price in 2009—with an oil price of US\$50/bbl for H109. Our analysis suggests a US\$10 difference on the upside or downside would have a 23-27% impact on 2009 earnings for Petrochina and CNOOC, with Sinopec's sensitivity being more moderate due to its larger exposure to the refining business.

## Hong Kong real estate

Our real estate team already forecasts a significant decline in Hong Kong real estate companies' earnings in 2009: in aggregate a 31% decline. For landlords, where rentals move on multi-year cycles, we expect a modest increase of 11% and for developers, we expect a decline of 40%.

From a fundamental perspective, the earnings momentum in Hong Kong real estate for 2009 is not directly value-relevant. Developers' earnings, especially at this point in the cycle, can be very volatile; delays in projects can have meaningful impact on one year's earnings but not on the overall value of a company. The physical limits of a mature economy's landbank means there is not necessarily any perpetuity franchise value in Hong Kong developers' earnings. Therefore, our analysts focus primarily on the NAV of existing properties and current landbank in valuing these companies. Meanwhile the landlords' EPS momentum is also irrelevant, given the multi-year rental lease cycle, such that NAVs will drop much more sharply than earnings in the initial period of a downturn.

### (2) Reflation v disinflation: search for disinflation beneficiaries

Since the Rmb4trn stimulus package was announced, the obvious reflation plays in China have all outperformed 15-40%, some albeit from a low base: the rail-related construction and equipment companies as well as cement and steel. The fact remains that against the heady heights input prices reached in H108, there still should be a significant deflation, or at least disinflation, across a whole range of raw materials. This should offer some margin relief for many companies and sectors. The search for net beneficiaries of input cost deflation or disinflation is topical investment theme, in our view.

However, we expect most industrial companies that are heavy users of raw materials are generally still going to be net losers from the twin forces of falling demand and disinflation/deflation of COGS. This is because the damage to margins from falling ASP, lower volumes, and negative operating leverage more often than not outweigh falling input costs. To be net beneficiaries of disinflation, the industry needs to have very high degree of certainty on revenue and pricing, while still have a major portion of costs in raw materials.

We believe the following sectors/companies are potential net beneficiaries:

#### ■ Food manufacturing

We expect many raw food input prices to generally trend down, or at least stop going up into 2009. Pork processing and breweries might see the biggest input cost deflation. Want Want could be a beneficiary, in our view, given expected continued top-line growth and a diversified mix of raw material inputs, which in 2008 all recorded double digit cost growth, but should moderate to low single digit growth in 2009. However in the short term, we think its milk-based products may face some demand weakness. We expect China Yurun Food to benefit in its downstream pork processing margin from the expected decline in hog prices—we forecast hog prices to drop by around 11-18% in 2009, while its upstream business could benefit from stronger volume growth.

**Table 5: Change in F&B input prices**

Expected change in price in 2009	
Dairy: raw milk	0%
Meat processing: hog	-15%
Brewery: malting barley	-35%
Liquor: grain	10%
Wine grape	15%

Source: UBS estimates

## ■ Power generation

With the benefit of lower coal prices in 2009, some demand growth, and reduced supply increase, we consider IPPs to be beneficiaries of the disinflation theme as well, since we also expect the pricing (tariffs) to move up again by mid-2009 given the very poor financial circumstance of the entire sector. Our IPP analyst favours China Resources Power (as its highest margins/returns act as buffer to demand shortfall) and Huaneng Power International-H (as the company has the broadest geographical exposure among listed IPPs, which should help to offset regional weaknesses in demand).

## ■ Infrastructure construction and equipment companies

We think the construction and equipment providers to the Ministry of Railways (MOR) should retain a very high degree of revenue growth visibility relative to other industrial companies, given the existing eleventh 5-year plan for railway investment and the expected focus on reflation of the economy through infrastructure spending by government. China Southern Locomotive and Rolling Stock (CSR) has 90% of its revenue from railway, and although it would be subject to some price cuts from the MOR in certain products, overall it is in a relatively better position versus other equipment and machinery companies. The two large railway construction companies, China Railway Group (CRG) and China Railway Construction (CRCC), have about half of their revenue derived from China's railway sector, and, as construction companies, their main cost inputs are steel and cement. However, for the large MOR contracts, there is no substantial gain from a reduction of raw material costs, as the MOR acts as the procurer for the main materials for the large contracts. China Communications Construction (CCCC), on the other hand stands to benefit, more since it has a lower proportion of revenue from cost plus contracts with the MOR.

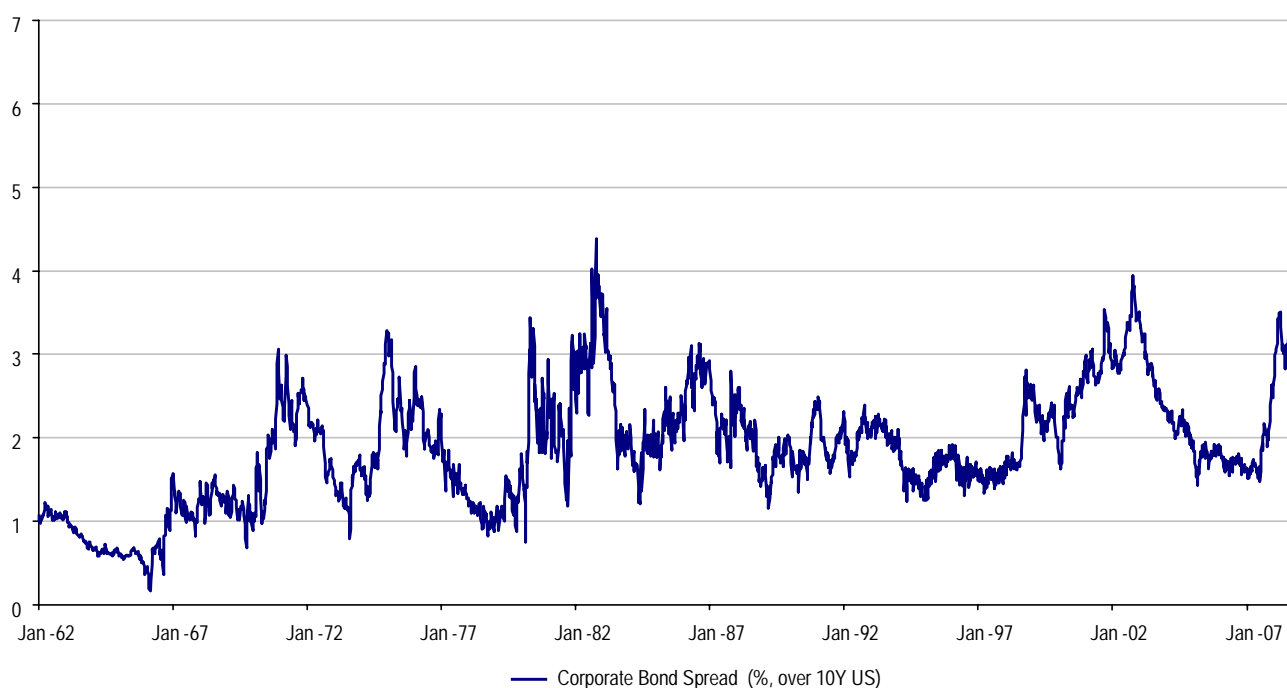
## ■ Airlines

There is little visibility on revenues, but jet fuel became such a big cost item in recent years, and oil prices have declined so sharply that for once, cost benefit may outweigh revenue pressure. We think Cathay Pacific can still swing back to a profit in 2009 on current jet fuel costs, even with a double-digit revenue decline. For the mainland carriers, the domestic jet fuel price is set by the NDRC and CAAC, but we do expect some kind of convergence of domestic and international prices in 2009 (that is, the domestic price should come down). We have a Buy rating on both Cathay Pacific and China Southern-H.

## (3) Risk aversion and global deleveraging

A multi-year unfettered credit expansion and reduction in risk premiums for risky asset classes does not simply finish unwinding in 6-12 months. While western consumer deleveraging and weakening consumption clearly have direct impact on Chinese exports, the other issue is that we expect the cost of capital generally to remain elevated, and heightened risk aversion to persist. The US investment grade corporate bond spread versus treasuries remains very wide—close to 600bp: meaning investors can receive 9.5% yield on investment grade corporate bonds—underpinning the case (should such spreads remain) for equities to trade in a high single-digit PE range.

Chart 4: US investment grade corporate bond yield spread over 10-year US treasuries' yield



Source: Bloomberg

This has two specific implications for Hong Kong-listed equities:

(a) Valuations of Hong Kong-listed China equities are likely to remain low by benchmarks of recent history, since a higher cost of capital does greater damage to the PE of markets and stocks with higher growth and longer duration.

(b) Sectors that structurally require financial leverage and loose credit conditions to do well are likely to continue to trade at low valuations: banks, real estate, and commodities

Our HSI index target derivation is based on a value-driver target PE methodology:  $ROE-g/(ROE*(COE-g))$ . Fundamentally, a fair PE is essentially a function of the 'spread' between return on equity and cost of equity, and the growth rate that can be achieved with that spread. When 'g' is high, as in emerging growth markets or high growth sectors, the magnitude of PE compression is much greater when the spread between ROE and COE narrows: a European tobacco company's PE is hit much less than a Chinese department store when cost of capital rises.

When cost of equity rises so much that it is equal to return on equity, the growth rate becomes value irrelevant. This is pertinent to the current debate on what the HSI's fair valuation should be. Since the aggregate ROE of the index constituents is likely to hover around 11-12% in 2009, in our view, there is not much headroom for cost of equity to rise before there is no spread between return and cost of equity, thereby rendering valuations insensitive to a high or low growth rate. For the sake of argument, if both ROE and COE is 11%, then target PE would simply be  $1/11\%$ , or 9.1x, and P/BV would be 1x.

2009 can be considered a cyclical low year, and what matters is the market's overall future incremental ROE not the 2009 ROE. However, falling ROE in the next 18 months is likely to make investors implicitly or explicitly pessimistic about longer term incremental ROE.

When one considers the above in conjunction with the fact that banks, Hong Kong real estate and commodities comprise 70% of the index's weighted earnings, sustained period of high single digit PE for the index is not impossible to envisage from a fundamental standpoint. The main counter-argument to this would be to make the case that Chinese banks can structurally continue to generate incremental ROE of 15-20%.

#### Search for 'over-capitalisation' not net cash; high ROIC not ROE

We recommend investors to continue to favour companies with strong balance sheets. However we advise searching for 'over-capitalised' companies rather than simply looking for companies with net cash. Having net cash today in a very cash-hungry business that will make big losses in 2009-2010 does not equate to being 'over-capitalised'. In other words, one needs to have a concept of risk-adjusted capital adequacy before buying up all the companies with net cash balance. A net cash position in Chinese shipping companies (COSCO, CSCL, Sinotrans Shipping), or a coal miner that sells on spot price (Yanzhou Coal), is worth relatively little to us, since potential losses in the next two years could destroy the cash pile very quickly. On the other hand, a property company which has a high quality rental portfolio may be considered strongly or even over-capitalised with 10-20% gearing: Sun Hung Kai Properties has 16% gearing, and Hang Lung Properties is in net cash, which, for a property company, is of very substantial scarcity value in our view.

We also believe the focus should be on companies with high ROIC, and not necessarily high ROE, since the latter can simply be result of high financial leverage. Indeed, falling ROE may not necessarily be an indicator of weakness if the company is over-capitalised and is generating too much excess cash.

One of the most over-capitalised sectors in China is technology-media-communications (TMT): China Mobile and the internet companies. These are companies with high net cash positions, yet have such high ROIC that they are able to grow and generate substantial free cash flow at the same time. But other overcapitalised sectors may not be so obvious: the Hong Kong-listed China autos sector is essentially trading at 2.5x its net cash—that is, its net cash represents just over 40% of its aggregate market cap (Dongfeng Motor, Denway Motors, Great Wall Motor and Sinotruk). While the sector's earnings are clearly still under pressure, we do not expect these companies to reverse into large losses nor do they have significant capex needs.

**Table 6: Hong Kong-listed auto sector's current net cash positions**

	Denway	Dongfeng	GWM	Sinotruk	Total
Net Cash (Rmb m)	3,640	2,479	2,142	6,143	14,404
Net cash/equity	30%	11%	34%	53%	27%
Net cash / mkt cap	32%	20%	92%	71%	41%

Source: UBS

Sustained risk aversion and compressed PE/high cost of equity means there should be a premium attached to over-capitalised companies that have high ROIC and self-financing growth, since they by definition have more of what will continue to be a scarce and expensive resource: equity capital.

**(4) Hong Kong has bleaker macro outlook but better ‘deep value’**

Hong Kong’s reliance on the finance, insurance, real estate (FIRE) sectors and global trade hardly augurs well for 2009. A slowdown in southern China may also add pressure on inbound tourism and retail. Savills estimates around 56% of grade-A office space is occupied by banking and professional services; the valued-added of export sector represents approximately 32% of Hong Kong’s GDP. Around two thirds of Hong Kong’s inbound mainland Chinese hotel guests are from Guangdong province, and around 87% of all Macau individual visitor scheme visa permits issued since 2003 have originated from Guangdong province.

For the traditional Hong Kong blue chips, the universe is dominated on the one hand by domestic real estate and banks, and on the other by large international companies, which, to varying extent are all exposed to the western consumer. Many of these businesses did fairly well during or in the immediate aftermath of the last US recession, principally because of China’s rise post WTO entry and the post-SARS Closer Economic Partnership Arrangement (CEPA) and Individual Visitor Scheme (IVS). Hutchison’s container ports, Li & Fung’s outsourcing service to US retailers, and Hong Kong landlords’ retail malls were all, in different ways, beneficiaries of some structural growth drivers in the early 2000s. It is hard to identify such structural drivers from the current much higher base.

Yet despite the doom and gloom on the macro front, we think traditional Hong Kong blue chips offer more ‘deep value’ or ‘trough value’ opportunities than China stocks. Firstly, we believe there is less likelihood of a significant H209 recovery for Hong Kong companies than for China companies; secondly, Hong Kong companies have lived through cyclical busts; thirdly, it is more convincing to look for trough valuations in companies that have been around for a few cycles and a very large proportion of the China market cap has not been listed for long, and in some cases, the companies have not existed in their current form for long.

**Table 7: Hong Kong property price to book valuations**

Property Developers	Current P/BV	SARS low	Asian crisis low
Cheung Kong	0.67	0.53	0.81
Henderson Land	0.45	0.57	0.71
Sun Hung Kai P.	0.59	0.63	0.54
New World Dev	0.31	0.09	0.31
Sino Land	0.45	0.30	0.28
Hang Lung Properties	0.88	0.76	0.39
MTRCL	1.00	0.89	n/a
<b>Average</b>	<b>0.62</b>	<b>0.54</b>	<b>0.51</b>
<b>Property Investors</b>			
Wharf Holdings	0.38	0.64	0.49
Hysan Develop.	0.32	0.28	0.28
Great Eagle	0.18	0.15	0.25
HK Land	0.37	0.56	0.42
Swire Pacific	0.49	0.62	0.54
Shun Tak	0.27	0.49	0.14
<b>Average</b>	<b>0.34</b>	<b>0.46</b>	<b>0.35</b>

Source: UBS

Hong Kong real estate stock valuations are now trading near the trough P/BV of the Asian crisis and SARS periods: 0.7x 2007 P/BV and 0.6x 2008E P/BV, respectively. However, P/BV is probably more expensive than current headline valuations suggest, as the valuation of investment properties is likely to come down significantly, reversing at least part of the substantial revaluation gains booked in the past two years.

## What is our central thesis for 2009?

Our central thesis is that against the backdrop of an earnings recession and elevated cost of capital, the Hong Kong/China market will see-saw through 2009, but has the potential to end the year higher than today given the low level of the equity indices as modest PE expansion will likely accompany the trough of earnings downgrades. However, we think while very significant PE expansion in the HSI is unlikely, as we expect risk aversion remains relatively high; the index's heavy weighting in banks, commodities and Hong Kong real estate will also impede substantial re-rating in the short term, in our view.

## What may surprise on the upside or downside?

China reflation: upside and downside risks are mostly a function of the efficacy, magnitude, and timeliness of the fiscal and monetary stimulus in China. With low household financial leverage in Hong Kong and the likely persistence of loose monetary conditions in the US, Hong Kong asset prices could recover with a general recovery in confidence, especially in its banking sector.

## What are the likely key catalysts?

Government policy initiatives, Chinese demand recovery, unfreezing of Hong Kong credit conditions, a change in risk appetite globally.

## Key stock/sector ideas

Our Top 10 are: China Mobile, China Yurun Food, China Communications Construction, China Resources Power, China Life Insurance-H (China Life-H), Zhejiang Expressway, Sun Hung Kai Properties, Hang Lung Properties, Esprit and Cathay Pacific.

Our key stock picks for Hong Kong/China reflect our four themes discussed earlier, with most stocks ticking more than one box:

- (1) **Safety of earnings or earnings growth amidst a corporate earnings recession:** telcos, consumer staples, toll roads—China Mobile, China Yurun, Zhejiang Expressway, China Communications Construction, China Life-H. We pick China Life-H as our preferred financial stock since we believe insurance offers better growth visibility into 2009 than banks, and the company's bias towards participating products plays better into a risk-averse environment. Toll roads do not offer much growth, but they offer security from very large downgrades. In addition, Zhejiang Expressway is a net cash company, with a 10% dividend yield. Despite the fact that they have some of the weakest balance sheets and were broadly loss-making in 2008, we think IPPs and airlines are two sectors that have visibility of a major turnaround in earnings for 2009: hence our inclusion of China Resources Power and Cathay Pacific in our Top 10.
- (2) **Search for net beneficiaries of cost disinflation**—China Communication Construction, China Yurun Food, China Resources Power, Cathay Pacific. We might have also picked China Railway Group-H and China Southern Locomotive and Rolling Stock-H, however, both have higher valuations than China Communication Construction. Also, China Communication Construction most likely benefits more from cost deflation than China Railway Group or China Railway Construction given its lower exposure to cost-plus contracts with the MOR.
- (3) **Sustained risk aversion/high cost of equity means a search for over-capitalised companies**—China Mobile, Zhejiang Expressway, Esprit, Hang Lung Properties. We are not so tempted by cyclical sectors with large net cash positions such as shipping and autos, although we would start to consider stocks such as Sinotruk and Denway Motors if signs of firm recovery start to emerge in H209. Hang Lung Properties is one of only two Hong Kong/China property companies under UBS coverage with a net cash position—this is of great value in the sector at this stage in the cycle, in our view. Sun Hung Kai Properties, with a high quality asset portfolio and only 16% gearing, is also in a strongly capitalised position relative to its sector.
- (4) **Begin to search for deep value plays in traditional Hong Kong blue-chip universe despite the bleak macro outlook**—Sun Hung Kai Properties and Esprit. Hang Lung Properties is by no means the cheapest in the sector, and its peers have much greater financial leverage—Hang Lung Properties is still on less than 1x P/BV, and trading at only a small premium to its SARS-low. We think Hang Lung Properties seems a better way to play Chinese retail/consumption than other purer plays in China with much higher valuations and risks of de-rating as sales growth figures moderate over the coming quarters.



Hutchison is too laden with debt and too complex and internationally exposed for us to be confident in it being a genuine value play. Swire is another quality name that is cheap, in our view: but having Sun Hung Kai and Cathay Pacific effectively replicates the exposure. Stocks such as Champion Real Estate Investment Trust seem to offer deep value with their yields, but we believe there are in fact other deep value high yield opportunities of better quality in Hong Kong: we can get a 10% dividend yield from Esprit, which has net cash and a genuine consumer franchise. Cheung Kong Infrastructure is another interesting Hong Kong stock that just misses our list. The company has stable base of utility assets (albeit with FX translation risk) and a gross cash position around HK\$8bn. It is in a perfect position to pick up cheap infrastructure assets, but the story is hampered by the fact that we believe the parent, Hutchison, still needs to de-leverage, notwithstanding the recent special dividend from HTIL.

We avoid Hong Kong and China banks, commodities and China real estate developers. The downside risks to our preferred picks are a scenario whereby China reflate significantly, with a rampant resurgence in commodity prices, and a marked reduction in risk aversion to equities globally, which would support very different stock picks.

# Hong Kong/China Top 10

In this section, we present commentary on stocks in our Hong Kong/China Top 10 stock list.

## Hong Kong/China Top 10 Stock List

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
China Mobile	Buy	HK\$80.00	Still solid visibility on low double-digit earnings growth; low valuation and overcapitalised b/s
China Yurun Food	Buy	HK\$13.35	Lower hog price to support volume growth in upstream and improve margin in downstream biz
CCCC	Buy	HK\$10.70	Lower valuation but similar growth to CRG/CRCC & bigger beneficiary of lower material costs
China Resources Power	Buy	HK\$22.60	Strong earnings recovery from lower coal costs; highest margin/lowest gearing among peers
China Life-H	Buy	HK\$26.10	Defensive growth; defensive product mix to outperform peers; conservative management
Zhejiang Expressway	Buy	HK\$4.74	High visibility for earnings; high ROIC, net cash; near double digit dividend yield
SHK Properties	Buy	HK\$84.00	Leading Hong Kong developer/landlord trading at multi-year low valuation, with low gearing
Hang Lung Properties	Neutral	HK\$18.00	The only HK prop co with net cash; growing stream of China rental income; low valuation
Esprit	Buy	HK\$69.00	Deep value: high ROIC with strong b/s; 10% dividend yield; valuation below SARS level
Cathay Pacific	Buy	HK\$12.00	Cost decline to drive earnings recovery despite weak revenue; near record low P/BV

Data as at 1 December 2008. Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Top 10.

### China Mobile (941.HK)

**Investment case:** We still prefer China Mobile as our top pick within Chinese telcos despite the competitive pressure and regulatory risk. We believe China Mobile will be able to maintain its leading position by leveraging on its larger scale, better brand name and management quality, and lower integration risk within restructuring. We expect asymmetry regulations will not have major impact on China Mobile, and the technology risk of TD-SCDMA could be manageable on help from its parent company.

**Valuation:** China Mobile is trading at 11.1x and 10x PE, and 5x and 4x EV/EBITDA for 2008E and 2009E, respectively. Compared with China Telecom and China Unicom, 2009 PE of China Mobile has 25% and 32% discount. We estimate its net cash will reach Rmb183bn by the end of 2008, which represents HK\$10.60 per share and 16% of market cap. In addition, its dividend yield of 5.2% in 2009E is also the highest among Chinese telcos. We believe China Mobile is a defensive play in the current challenging market conditions.

**2009 catalysts:** We expect China Mobile to report strong results for 2008 and 2009 with net profit growth of 32% and 12% respectively. This compares with our expectation for China Telecom and China Unicom to report a 20-23% earnings decline in 2009. Downside risks are unexpected harsh asymmetric regulations and worse-than-expected TD-SCDMA roll out.

**Sector:** China Telecommunications

**Rating:** Buy

**PT:** HK\$80.00

**Analyst:** Jinjin Wang

## China Yurun Food (1068.HK)

**Investment case:** We believe the growth potential for branded meat processing companies is very big as the top three players currently have less than 10% market share. Therefore, we think the growth of top tier meat processing companies will continue to be faster than GDP growth. Although the hog price increased 88.9% YoY in March 2008, Henen Shuanghui Investment & Development and China Yurun Food both achieved good growth in H108. With the hog price falling to Rmb11.8/Kg in October 2008, a decline of 10% YoY, we believe meat processing companies' cost pressure will be largely released in 2009. We expect the average hog price will drop to Rmb12-13/kg in 2009, down 11-18% YoY.

We believe branded meat processing companies will maintain sustainable growth in next three years because of 1) increased industry consolidation given the relatively high production cost; (2) strong pricing power on good brand image; (5) relatively low costs compared with the country average.

We believe pork consumption may be stimulated in 2009 on relatively lower price compared with 2008. On the other hand, the weak macroeconomic conditions may depress demand. Given the uncertainty of consumption growth in China in 2009, we believe Yurun may have to add selling expenses to maintain its good sales growth.

Hog prices and consumer demand are the two biggest risks for the sector in 2009. Meanwhile, M&A could be a positive catalyst to improve companies' growth and margins.

**Valuation:** We derive our price target of HK\$13.35 using DCF methodology, based on 11.6% WACC and 5% terminal growth. We maintain our Buy rating.

**2009 catalysts:** Positive: 1) M&A, 2) low hog price, 3) recovery of demand. Negative: 1) Disease.

## China Communications Construction Corporation (CCCC, 1800.HK)

**Investment case:** The Chinese government has announced it will invest increasingly in transportation infrastructure to boost economic growth and create jobs. Being underinvested in the past, railway has been the focus since the eleventh five-Year Plan. The MOR's recently announced aggressive investment plan of Rmb600bn in 2009 is to double the 2008 target of Rmb300bn. We believe CCCC will benefit from both market share expansion out of a bigger railway construction market pool and a more reasonable and sustainable pricing regime. We prefer China Communications Construction over China Railway Group and China Railway Construction due to its incremental benefit from the increasing investment in railway, superior positioning to benefit from weaker raw material prices and lowest diversification risk.

**Valuation:** Our sum-of-the-parts-based price target of HK\$10.70 implies 9.5x EV/EBITDA and 15.3x PE with 17.4% ROE for 2009E and a 27% 2009-10E earnings CAGR. We have a Buy rating on the stock because of its attractive risk/reward profile (cheaper valuation but similar growth profile to China Railway Group and China Railway Construction).

**Sector:** China Food & Beverage

**Rating:** Buy

**PT:** HK\$13.35

**Analyst:** Lei Chen

**Sector:** China Infrastructure  
Construction

**Rating:** Buy

**PT:** HK\$10.70

**Analyst:** Edmond Huang

**2009 catalysts:** Major catalysts in 2009 include: 1) new transport infrastructure projects approved by the central government; 2) easier access to bank loans for local governments to invest in ports and metros; and 3) weaker raw materials prices (such as steel and cement).

## China Resources Power (0836.HK)

**Investment case:** We think the Chinese IPPs will benefit from low coal costs in 2009, which will drive margin and return recovery. Declining coal costs is a more significant driver of earnings than a moderation in power plant utilisation rates. China Resources Power is our top pick among the Chinese IPP group. It has the highest margins and returns, with the best medium-term growth potential and least sensitivity to any demand weakness. Although its gearing is the lowest among its peers (143% 2008E net debt to equity), management is still prudent about capex spending, planning to scale back capacity addition to conserve cash.

Despite falling demand growth in China, we expect the decline in power plant utilisation rates should only be modest, given coincidental low capacity additions—due to slow government approvals and IPPs' financial constraints. This should lead to stable revenue, while margin and return should improve on falling coal costs, in our view.

**Valuation:** China Resources Power's valuation (excluding coal) is close to its 1x P/BV trough. Our price target of HK\$22.60 is based on three-stage DCF methodology using WACC of 9.3%, explicit cash flow to 2012 followed by a medium-term growth rate of 7.5% and 11% ROIC for 10 years, and a terminal growth rate of 5.0% at a 9.3% ROIC.

**2009 catalysts:** Settlement of most contracts with coal producers around January 2009 may surprise on the downside relative to our forecast of a 10% YoY rise. We also expect Q109 sector results, released around April 2009, to show margin recovery.

## Esprit (0330.HK)

**Investment case:** Esprit faces a challenging operating environment in Germany (around 50% of its sales) where tightened credit and weakened sentiment have impacted Esprit's wholesale order book and same store sales trends. However, we expect Esprit's sound business model with its two-pronged strategy in wholesale and retail would allow for a meaningful turnaround should the global financial system exhibit a sustainable recovery. In a normalised business environment, Esprit's wholesale business provides relatively strong earnings visibility through its order book. There is still room for 10-15% a year top-line growth through market penetration and new market entry under normal conditions. Esprit's retail business is relatively under-penetrated compared with its global peers, such as H&M and Zara (Inditex), and we think it offers attractive potential in volume and margin growth. A strong balance sheet (debt free with more than HK\$6bn in cash) should give flexibility in operations and provide for future expansion.

**Valuation:** Our HK\$69.00 price target is based on a DCF methodology assuming WACC of 10.5% and terminal growth of 2%. The share price has

**Sector:** China IPPs

**Rating:** Buy

**PT:** HK\$22.60

**Analyst:** Stephen Oldfield

**Sector:** Hong Kong Retail, Apparel

**Rating:** Buy

**PT:** HK\$69.00

**Analyst:** Erica Poon Werkun

halved and underperformed the HSI 21% since the FY08 results and it trades at 7.0x CY09E PE and 2.8x FY08E P/BV, below the SARS levels. In addition, we believe Esprit's debt-free balance sheet, 90% ROIC, and 80% payout provide support for the stock. However, in our view, near-term news flow is likely to retain a negative bias, which should continue to put pressure on the share price.

**2009 catalysts:** Positive: 1) a sustainable recovery in the global financial system and improved sentiment in Germany; 2) a meaningful pickup in the wholesale order book; 3) strong same-store sales trends; 4) better-than-expected H109 and FY09 results; 5) a strengthening euro; 6) a higher dividend payout ratio. Negative: 1) a prolonged global financial crisis, 2) negative macro data from Germany and other key markets, 3) worse-than-expected wholesale order book, same-store sales data and margin trends, 4) further euro depreciation, 5) a cut in the dividend payout ratio.

## Sun Hung Kai Properties (0016.HK)

**Investment case:** Sun Hung Kai Properties is the top developer in Hong Kong. Its strong track record in sustainable sales with one of the biggest landbanks, quality management and product has consistently resulted in premium pricing and buyer loyalty. Now it is also the biggest owner of the best offices (IFC, ICC) and retail facilities (second-largest after Link REIT) in Hong Kong, with new investment property completions (both in Hong Kong and China) in FY09-10 at 6.3m sf (or HK\$37bn in value), adding to its already massive 28.6m sf portfolio. China expansion ramp up next year will enable Sun Hung Kai Properties' cashed up balance sheet (gearing at 15%) to be deployed in buying distressed assets at the bottom of the market.

**Valuation:** at a 49% discount to end-10 NAV of HK\$112.3 and 45% to trough-2009E NAV of HK\$104.1, the company is trading at multi-decade low point (see chart below).

**2009 catalysts:** significant project launches such as The Cullinan (HK\$13bn revenue if all sold) after Chinese New Year, material project purchases or M&A transactions in China taking advantage of good locations and bad market, as well as material land premium fixing in Hong Kong which expels market doubts over the company's continued development model. Any resolution in the dispute between the Kwok brothers should return investor confidence on the company's premium status.

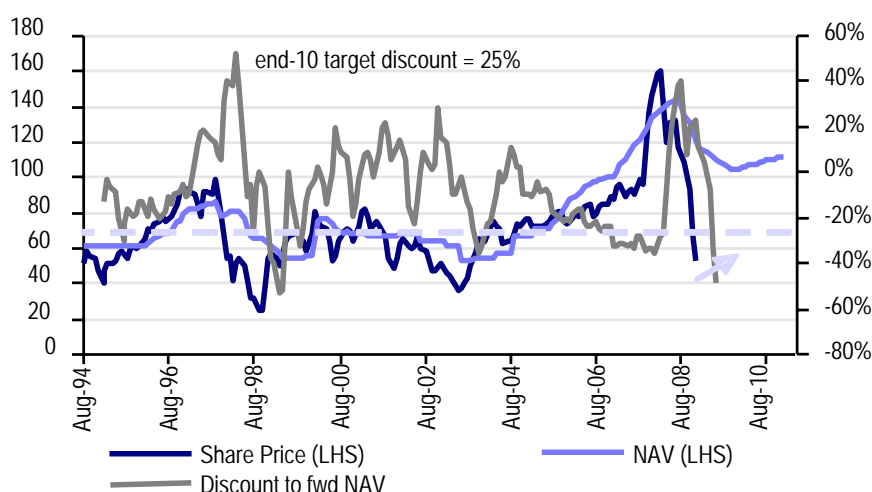
**Sector:** Hong Kong Real Estate

**Rating:** Buy

**PT:** HK\$84.20

**Analyst:** Eric Wong

**Chart 5: SHKP NAV discount—at 1998 trough levels, and below SARS lows**



Source: Datastream, Company data, UBS estimates

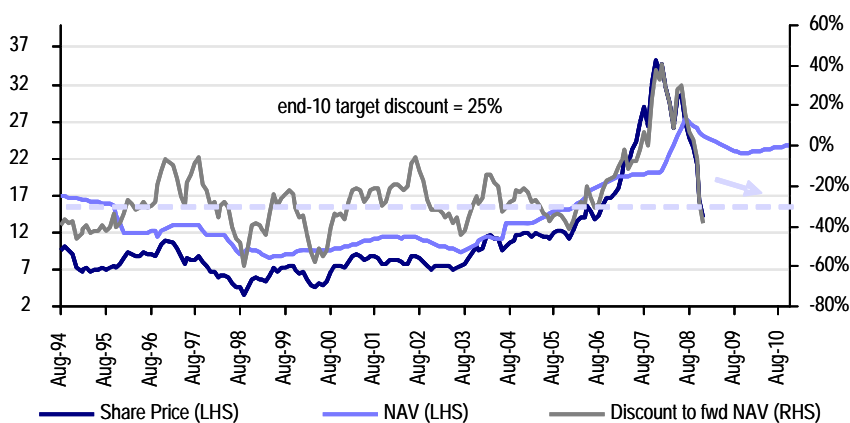
## Hang Lung Properties (101.HK)

**Investment case** As the sole Hong Kong developer that is in a net cash position (HK\$4.3bn as of June 2008), we think Hang Lung Properties is best placed to take advantage of distress among local developers in China and acquire top sites that fit the company’s strategic plan (building future ‘5<sup>th</sup> Avenues’ of China). Focusing on landmark office and retail complexes in the best locations in major cities, Hang Lung Properties is an ideal play on China’s consumption growth in our view. The company has a strong recurrent income stream to back its China growth plans and rental income (50% of total operating profit) to grow 22% in FY08-10, according to our forecast.

**Valuation:** The stock is now trading at a 40% discount to forward NAV, near past trough levels (Chart 6).

**2009 catalysts:** Faster and cheaper purchase of new projects in China as competition for good sites lessens; acquisition of land in Hong Kong replenishing its Hong Kong residential development portfolio; higher-than-forecast rental income from its new China properties.

**Chart 6: HLP NAV discount – below historical average**



Source: Datastream, Company data, UBS estimates

**Sector:** Hong Kong Real Estate

**Rating:** Neutral

**PT:** HK\$18.00

**Analyst:** Eric Wong

## Zhejiang Expressway (0576.HK)

**Investment case:** We expect the company's net profit to recover from the 2008 trough (-30% YoY) and grow 6% and 8% YoY in 2009 and 2010, respectively. 2008 should be the worst year for Zhejiang Expressway given that: 1) traffic diversion to Hangpu Expressway and Hangzhou Bay Bridge started from January 2008 and May/October 2008 respectively; 2) Zheshang Security is loss making on proprietary trading. We believe the negative impact from traffic diversion could be eased in 2009/10 with YoY growth rate of -4% and 8% respectively from -11% in 2008. We forecast no loss from the Zheshang Security's proprietary trading business from 2009.

**Valuation:** We use a sum-of-the-parts valuation to derive our price target of HK\$4.74, with a DCF valuation on its toll business (HK\$4.50, WACC of 12.7%) and a PE valuation on its security business (HK\$0.23, 2008E PE of 15x). The company is in a net cash position with dividend yield of 8.7% and 9.3% in 2008/09. The stock is trading at 8.5x and 8.0x our 2008 and 2009 EPS estimates, respectively (at historical low and below sector average) and 1.0x and 0.9x 2008E/09E P/BV.

**2009 catalysts:** 1) implementation of weight-based toll policy from 2009 could improve ASP and therefore help top line growth; 2) the company might obtain approval from provincial government to extend the concession period of the Shanghai-Hangzhou-Ningbo Expressway by five years.

## China Life-H (2628.HK)

**Investment case:** We believe China Life-H is a defensive play in the insurance sector, which we expect to slow in line with the economy. We think the company is unlikely to maintain its high premium growth momentum after 2008 and will revert to the normalised level of previous years. However, we believe its premium growth will outpace peers given its: 1) high proportion of regular premium business—we expect this to provide more stability to overall premium volume in an economic slowdown. 2) Defensive product mix—customers will likely prefer participating products to other insurance products (such as unit-linked and universal life). China Life is the largest writer of participating products in the sector. 3) Conservative management—customers trust its management to deliver stable returns on their insurance policies, in our view.

**Valuation:** We derive our 12-month price target of HK\$26.10 using the implied new business multiple of 19.1x FY09E, and our price target is equivalent to 2.4x FY09E price to EV.

**2009 catalysts:** Bonus rates declared in Q109 on participating policies, together with regular dividends, might give an investment return substantially higher than fixed deposit rates. This could encourage retail bank depositors switching to insurance products, driving premium growth. The China Insurance Regulatory Commission may consider revising the pricing interest rate of 2.5% fixed for all insurance policies. For new business, this could reduce the risk of writing negative spread business as insurers' expected investment returns fall with the weak A-share market, declining bond yields and interest cuts.

**Sector:** China Infrastructure

**Rating:** Buy

**PT:** HK\$4.74

**Analyst:** Mandy Qu, Henry Wu

**Sector:** China Insurance

**Rating:** Buy

**PT:** HK\$26.10

**Analyst:** Kenneth Lo

## Cathay Pacific

**Investment case:** Cathay Pacific's margins have been hit in 2008 by the sharp increase in fuel prices in H1 and its rapid capacity growth on North American routes, which limited management's ability to move pricing higher. Demand has taken another step-down in the past few months but assuming oil prices remain at current levels, we think that this will be offset by lower jet fuel prices and margins will recover in 2009. While this downturn is likely to be severe from a revenue perspective, we believe Cathay is in a stronger competitive position than the previous downturn following the acquisition of Dragonair in 2006 (and Cathay has emerged from each of the last three downturns in a stronger competitive position). Valuation multiples (price/book) are close to all-time lows and even in the context of a difficult revenue environment, we think the stock can recover to previous support levels (1x P/BV) implying 50% upside.

**Valuation:** Our HK\$12.00 price target is based on the UBS Value Creation Analysis Model (VCAM) model assuming long-term operating margins of 10% (the average since the start of this decade).

**2009 catalysts:** The stabilisation of revenue trends, ongoing capacity cuts by weaker airlines, possible deferrals of aircraft delivery by the Chinese airlines (less competition at Mainland hubs).

**Sector:** Hong Kong/China Airlines

**Rating:** Buy

**PT:** HK\$12.00

**Analyst:** Damien Horth



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■ **Statement of Risk**

Hong Kong and China equities risks include: macroeconomic slowdown/recession; further increase in risk aversion and risk premium; increasing difficulties in securing sufficient finance and capital; political and regulatory changes.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**
**India - Outlook 2009**

India

Equity Strategy

Market Comment

## Staying bullish in the medium term

### ■ Summary

We believe markets are close to historical trough valuations, with the Sensex trading at 9.8x and 2.36x trailing PE and P/BV. However, we think markets are unlikely to rally in the next six months due to the absence of positive triggers, although we remain bullish on a medium-term view. We recommend the following stock-picking strategies: 1) quality companies with reasonable valuation; 2) companies likely to generate free cash flow; 3) stocks trading at attractive levels on a PVGO/PB basis.

### ■ What are the likely key themes for 2009?

We believe the election in India, to be held by May 2009, will be the key theme investors are likely to focus on in H109. Indian markets have generally rallied pre-election and we expect a similar pattern in 2009. Other investment themes are likely to revolve around the performance of perceived high quality versus low quality companies, and whether outperformance of defensives will continue.

### ■ What may surprise on the upside or downside?

We believe the election, crude oil prices, inflation, global credit and economic scenarios could be the key variables to watch out for as they could surprise either way. Markets are likely to be more stable once there is more clarity on these issues.

### ■ Market valuation & targets and highlighted stocks

We factor in 5%/0% EPS growth for FY09/FY10E and assume a trailing 12-month recovery PE of 15x to arrive at our Sensex target of 13,500. Our most preferred stocks are Infosys, Bharti, Hero Honda, ICICI Bank, Punjab National Bank, and Idea, each based on one of the investment strategies we recommend. Our least preferred stocks are HCL Technologies, HDFC Bank, State Bank of India, Reliance Power, and Tata Motors, and reflect our view of deteriorating fundamentals in 2009E.

**Table 1: India Most & Least Preferred List**

Company	RIC	Market Cap (US\$ m)	UBS Rating	Share Price (Rs)	Price Target (Rs)	PE FY10E (x)
<b>Most Preferred</b>						
Infosys	INFY.BO	14,113	Buy	1,233	1,600	16.0
Bharti	BRTI.BO	24,758	Buy-ST Buy	651	1,000	16.7
Hero Honda	HROH.BO	3,021	Buy	755	950	10.4
ICICI Bank	ICBK.BO	7,251	Buy	326	515	14.2
PNB	PNBK.BO	2,207	Buy	415	570	4.4
Idea	IDEA.BO	2,355	Buy-ST Buy	45	100	29.6
<b>Least Preferred</b>						
HCL	HCLT.BO	1,761	Sell	135	160	10.0
HDFC Bank	HDBK.BO	5,131	Sell	899	900	16.7
SBI	SBI.BO	11,134	Sell	1,056	1,150	8.7
Reliance Power	RPOL.BO	5,135	Sell	107	80	54.1
Tata Motors	TELC.BO	1,077	Sell	133	140	95.7

Data as at 1 December 2008. Source: UBS estimates

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**3 December 2008**
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# Outlook 2009 – Summary

## What are the likely key themes?

We outline some of the broad themes that we believe are likely to dominate the Indian economy and market and also have a significant influence on investors’ decisions.

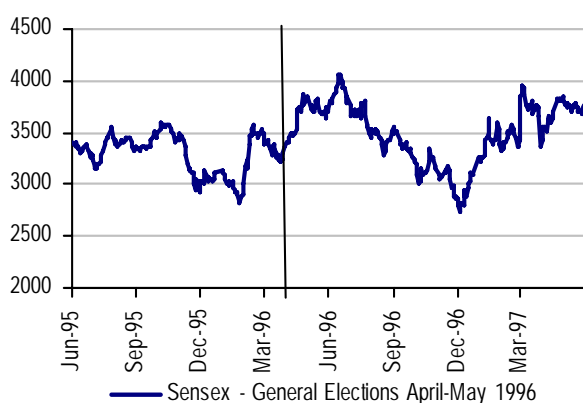
### (1) General election in 2009

Elections to the 15<sup>th</sup> Lok Sabha (Lower House of the Indian Parliament) are due to be held by May 2009. We think there are three possible coalition governments. 1) A Congress-led UPA (United Progressive Alliance) government. The current term (past five years) of its governance has been marked by very high levels of inflation (recent peak of 12%), and the current economic and credit crises. This, coupled with the anti-incumbency factor could swing the tide against this coalition government. 2) The BJP-led NDA (National Democratic Alliance) government. The BJP and NDA could benefit from the anti-incumbency wave. These parties could also take advantage of negative public sentiment due to price rises and economic hardships (news of corporate layoffs). 3) Third Front. Various regional parties such as the BSP (Bahujan Samaj Party) as well the communist parties could form a third front.

We believe the formation of either a UPA/NDA government without the support of the Left parties could be positive for the market. A Third Front government could present some uncertainty, in our view.

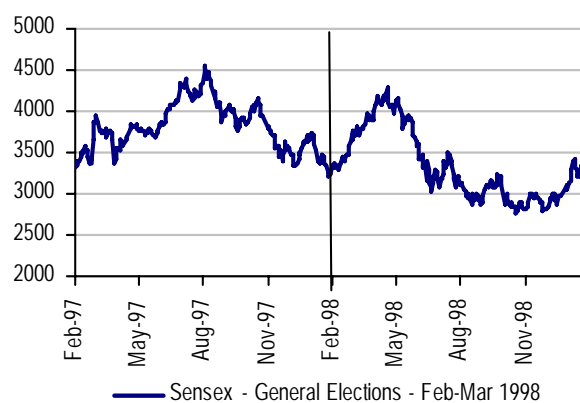
In the past, markets have usually rallied before elections except in 1998 (see charts below).

**Chart 1: Sensex performance vs elections (1996)**



Source: Bloomberg

**Chart 2: Sensex performance vs elections (1998)**

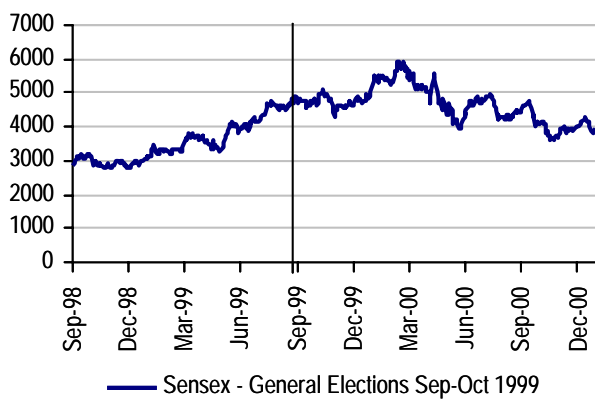


Source: Bloomberg

India March 2010 Sensex target: 13,500

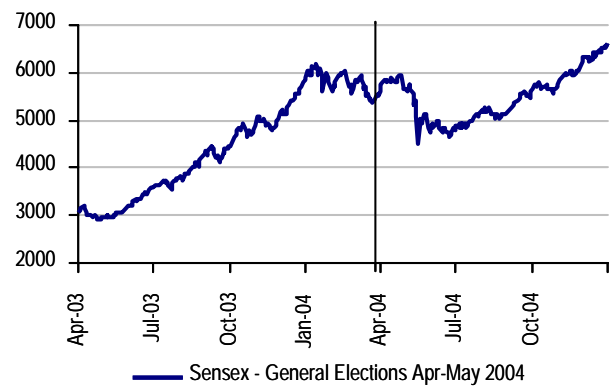
**Our target is based on 5% EPS growth for FY09E and 0% EPS growth for FY10E. Assuming a trailing 12-month recovery PE of 15x, we arrive at our Sensex target of 13,500 implying 53% upside potential.**

**Chart 3: Sensex performance vs elections (1999)**



Source: Bloomberg

**Chart 4: Sensex performance vs elections (2004)**

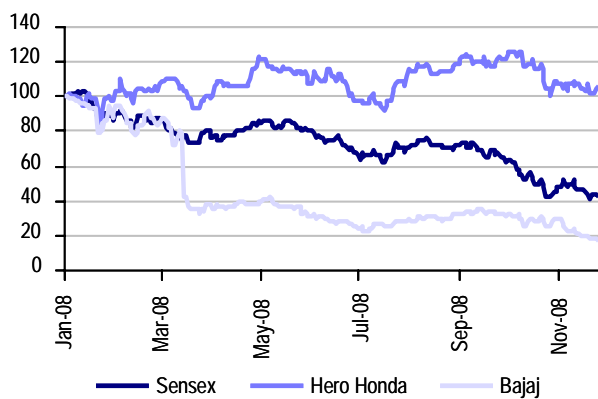


Source: Bloomberg

**(2) Quality companies with reasonable valuation**

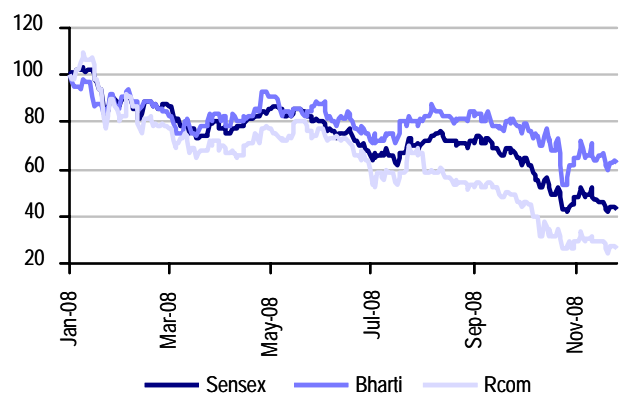
We believe investors are likely to stay with high quality companies that are trading at reasonable valuation. We would recommend Bharti, Infosys, and Hero Honda for outperformance.

**Chart 5: Hero Honda vs Bajaj Auto**



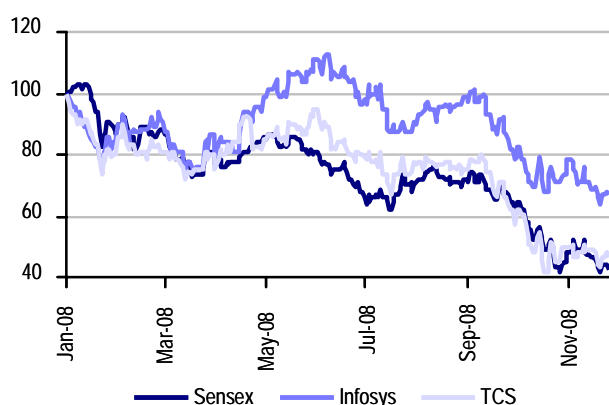
Source: Bloomberg, UBS estimates

**Chart 6: Bharti vs Reliance Communication**



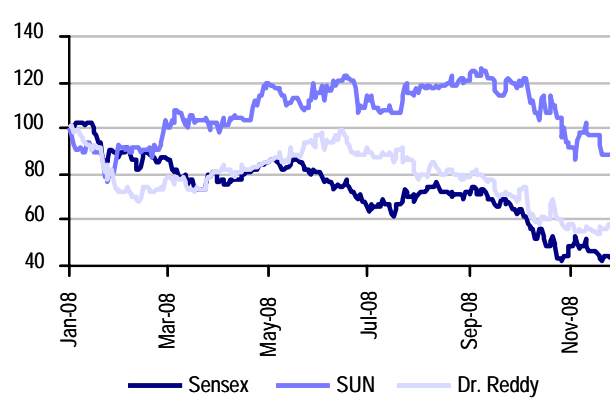
Source: Bloomberg, UBS estimates

**Chart 7: Infosys vs TCS**



Source: Bloomberg, UBS estimates

**Chart 8: Sun Pharma vs Dr Reddy's**



Source: Bloomberg, UBS estimates

**(3) Performance of defensives in a rising market**

We believe defensives such as FMCG will likely underperform in a market rally, although pharma companies may or may not outperform. We track the performance of FMCG and pharma companies in previous bear markets (from peak to trough) and in the year following the bottoming out of the market.

**Table 2: Performance of defensive sectors**

	Sep 94 - Dec96	Dec 96 – Dec 97	Aug 97 – Dec 98	Dec 98 – Dec 99	Feb 00 – Sep 01	Feb 01 – Feb 02	Jan 08 - to date
<b>Sensex</b>	-40.6%	28.5%	-38.8%	69.1%	-56.2%	15.6%	-55.5%
<b>FMCG*</b>	-5.1%	92.5%	15.1%	36.9%	-23.9%	-2.5%	-17.5%
<b>Pharma*</b>	-53.0%	86.3%	21.4%	179.0%	16.9%	-3.5%	-13.0%

Note: FMCG includes Hindustan Unilever, ITC, Nestle, Dabur and United Spirits. Pharma includes Dr Reddy's Labs, Piramal Healthcare, Sun Pharma and Lupin.

Source: Bloomberg, UBS estimates

One conclusion from the above analysis is that these defensive sectors have outperformed the Sensex in bear markets (when compared from the peak of the bull market to the trough), including the current one (since January 2008 onwards), except pharma in September 1994 to December 1996. However, in the one year after the market trough level, the performance has been mixed.

While in the one year following the September 1994 to December 1996 bear market, FMCG outperformed the Sensex; it underperformed in the one-year periods following the next two bear markets (August 1997-December 1998 and February 2000 to September 2001).

Pharma companies, on the other hand, have usually outperformed the market in the one year following the trough except in February 2001-February 2002.

**Earnings growth**

We expect earnings growth for the Sensex to bottom in FY10 at 4%, although we forecast a Sensex EPS CAGR of 9.1% for FY08-11. We believe our Sensex earnings forecasts are among the lowest on the Street.

Ex-Reliance Industries, we expect Sensex EPS growth to decline 3% in FY10. We lower our earnings estimates for FY09-10 from 18-19% estimated in October 2008.

**Table 3: Sensex earnings growth estimates: dis-aggregation by sector**

	% of total	% of total	% of total	% of total	EPS (YoY)	EPS (YoY)	EPS (YoY)	EPS (YoY)	EPS (YoY)
	M cap (FF adj)	PAT - FY09E	PAT - FY10E	PAT - FY11E	FY07 FY08	FY09E	FY10E	FY11E	
<b>Auto</b>	2.7%	7.6%	4.1%	1.6%	37%	7%	23%	-45%	-55%
<b>Banks and FIs</b>	18.3%	17.3%	18.6%	20.5%	17%	43%	1%	12%	27%
<b>Pure cement</b>	0.8%	1.4%	0.9%	0.8%	421%	22%	6%	-33%	-2%
<b>IT services</b>	15.4%	14.6%	14.6%	12.8%	49%	18%	26%	4%	1%
<b>Conglomerates</b>	1.2%	3.0%	2.8%	2.4%	75%	29%	-7%	-5%	-1%
<b>Engineering</b>	10.7%	6.5%	7.6%	6.9%	54%	23%	23%	21%	5%
<b>Consumer staples</b>	11.8%	5.8%	6.3%	6.2%	17%	16%	20%	14%	13%
<b>Metals</b>	3.5%	11.7%	9.1%	9.9%	57%	-9%	-5%	-19%	25%
<b>Oil &amp; Gas</b>	4.9%	6.3%	5.5%	5.7%	15%	12%	1%	-9%	20%
<b>Petrochemicals</b>	13.1%	12.7%	17.2%	19.0%	33%	27%	5%	41%	27%
<b>Pharmaceuticals</b>	0.9%	-0.1%	0.6%	0.9%	157%	63%	-109%	845%	166%
<b>Power</b>	6.5%	4.3%	4.5%	4.7%	30%	15%	23%	8%	21%
<b>Telecom</b>	9.4%	6.9%	6.4%	6.8%	172%	62%	4%	-3%	21%
<b>Property</b>	0.8%	1.9%	1.7%	1.7%	912%	302%	4%	-5%	12%
<b>Sensex</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>41.7%</b>	<b>26.5%</b>	<b>9.0%</b>	<b>4.0%</b>	<b>15.2%</b>

Source: UBS estimates

## Sensex target derivation

We outline our Sensex EPS estimates in the table below.

**Table 4: Bottom-up Sensex EPS estimates and dividend Yield**

	EPS (Rs)	Dividend yield
<b>FY08</b>	856	2.3%
<b>FY09E</b>	933	2.2%
<b>FY10E</b>	966	2.5%
<b>FY11E</b>	1,113	3.1%

Source: UBS estimates

Although we foresee little downside risks to these estimates, we use lower EPS growth estimates for our Sensex target calculation compared with our bottom-up Sensex EPS estimates. Therefore, we assume only 5% EPS growth for Sensex companies in FY09 and 0% growth in FY10 to derive our Sensex target. We assume a trailing Sensex target PE of 15x to derive our March 2010 Sensex target.

**Table 5: Sensex target derivation**

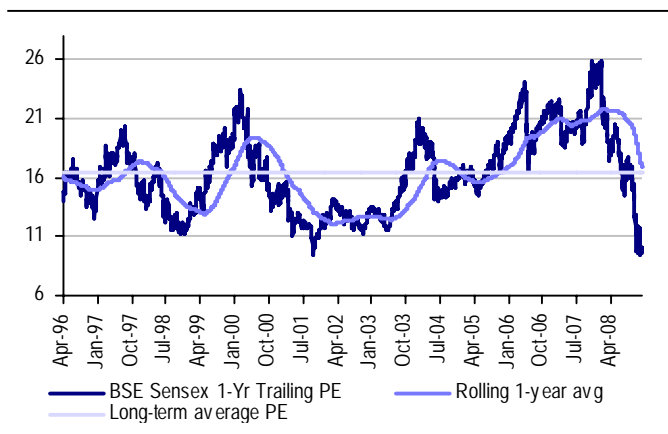
Parameter	Value	UBS Comments
FY08 Sensex EPS (Rs)	856	Actual based on FY08 results
FY09E Sensex EPS (Rs)	899	Assuming 5% growth vs 9% UBS estimated growth
FY10E Sensex EPS (Rs)	899	Assuming 0% growth vs 4% UBS estimated growth
Target trailing PE - March 2010	15x	Average of trough and recovery PE ratios
Sensex target - March 2010	13,482	Target trailing PE FY10E Sensex EPS

Source: UBS estimates

## Valuation

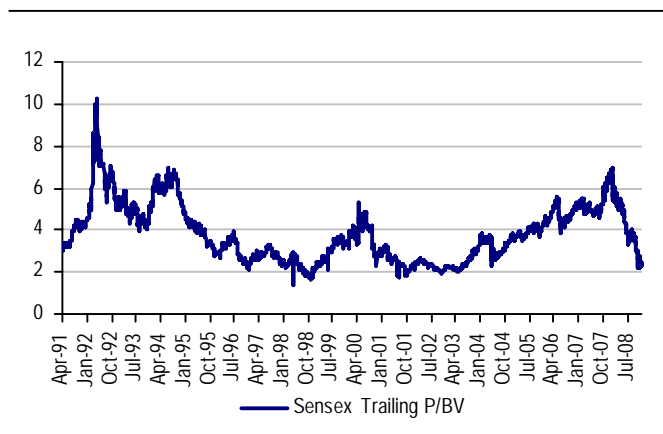
The Sensex currently trades at 9.8x trailing 12-month earnings (long-term average of 16.4x). The trough valuation for the Sensex was 9.5x trailing PE (25 September 2001) and the recovery trailing PE was 20.6x (19 January 2004) in the past bear market. On a trailing P/BV, the Sensex is trading at a 2.36x (long-term average of 3.75x).

**Chart 9: Trailing Sensex PE**



Source: UBS estimates

**Chart 10: Trailing Sensex P/BV**



Source: Bloomberg

## What is our central thesis for 2009?

In conclusion, while Indian stocks may be trading close to floor valuation, we believe the market needs tangible positive catalysts to reverse the negative sentiment and liquidity trends. We think the market is unlikely to perform in the next six months because of the absence of positive catalysts. However, we are positive on a medium-term view and our March-2010 Sensex target is 13,500.

We analyse the Indian market from the following perspectives:

- **Valuation:** The Sensex is trading at 9.8x one-year trailing PE (long-term average of 16.4x) and 2.36x one-year trailing P/BV (long-term average of 3.75x). The market is trading close to the low end of its valuation range.

- **Earnings growth:** Our bottom-up earnings estimates for the Sensex indicates 9% growth in FY09E and 4.0% growth in FY10E. We think scope for further downside revisions to earnings estimates is minimal.
- **Liquidity:** FIIs have been net sellers in Indian equities with YTD net outflow of US\$13.26bn and MTD (to 21 November) net outflow of US\$0.33bn. DIIs have been net buyers YTD of US\$2.83bn, but have been net sellers MTD (to 21 November) of US\$0.37bn.
- **Sentiment:** Sentiment remains negative for equities as an asset class and emerging markets in general. The Indian market has retracted 17% from the recent high of 10,631 on 4 November (up 25% from the close of 8,510 on 27 October 2008).

Based on these, we recommend the following investment strategies for 2009.

#### (1) Quality companies with reasonable valuations

We believe investors should invest in quality companies such as Bharti, Infosys, and Hero Honda for out-performance.

#### (2) Free cash flow generating companies

Investors are also likely to focus on companies that generate free cash flow (after capex, dividends and interest payments).

We list companies that generate free cash flow in Table 6. However, we exclude cyclicals (metals, cement, petrochemicals, oil & gas, construction, real estate etc) and companies with expensive valuations from our final picks.

Based on this strategy, we recommend Reliance Infrastructure, Hero Honda, Sun Pharma and Piramal Healthcare.

#### (3) Companies trading on attractive valuations based on PVGO/PB analysis

We attempt to segregate share prices into Present Value (PV) of 'growth opportunities' (PVGO) and PV of the 'no growth component'. Essentially, for every stock under our coverage we capitalise the FY10E EPS at the cost of equity of that firm to arrive at the PV of the 'no growth component' of the share price. We compute the PVGO as the remainder of the share price.

In Table 7 we list companies under our coverage that are trading at 'valuations where the PVGO is negative. We further screen this list of companies to exclude cyclicals (metals, cement, petrochemicals, oil & gas, construction, real estate etc) to arrive at a short list in this category.

Based on this analysis, within this universe we highlight: Union Bank, BGR Energy Systems, Sintex, United Phosphorus, Bajaj Auto, and Maharashtra Seamless.

### What may surprise on the upside or downside?

We highlight some of the key variables that could surprise the markets on the upside or the downside:

- Crude oil prices—Crude prices sustaining at or below the US\$60/bbl level would be positive for the markets while higher crude prices (US\$100 and



above) would be negative as this could widen the twin deficits and trigger further rupee depreciation.

- Inflation—Lower inflation at or below 5% would surprise on the upside as it would help RBI to further ease the monetary policy in a slowing economy. An inflation level remaining above 10% would surprise negatively in the current economic slowdown.
- Election—If the election results in an absolute majority for a single party, and thus enabling reforms, we believe it would be positive for the market. Even if a coalition government is formed without the support of the left parties, the market could react favourably. However, we think a weak coalition government that needs the support of the left parties or regional parties would be a negative surprise as it would result in slowing economic liberalisation.
- Global credit and economic situation—A quick resolution to the current global financial market crisis is likely to restore investor confidence in emerging market equities. However, a worsening global credit situation and a prolonged recession in developed economies would be negative for emerging equity markets such as India, in our view.

## What are the likely key catalysts?

We believe monetary easing, which the RBI has already been started with the recent cuts in the CRR and repo rates, could increase once inflation declines meaningfully in Q109 on lower commodity prices and base effect. This could help drive both consumption and investment demand in the economy.

Secondly, higher disposal income for middle income earners by way of pay rises (hike in salaries of central/state government employees as recommended by the Sixth Payee Commission) and the income tax relief announced in the Union Budget in February 2008 are likely to support and drive consumption demand.

Thirdly, any fiscal stimulus package announced by the government in the next couple of months could be a positive trigger for the market and the economy.

## Key stock/sector ideas

Our most preferred stocks include Infosys, Bharti, Hero Honda, ICICI Bank, PNB and Idea, picked from each of the investment strategies we recommend. Our least preferred stocks are HCL Tech, HDFC Bank, SBI, Reliance Power and Tata Motors and reflect our view of their deteriorating fundamentals in 2009.

## India Most & Least Preferred

In this section, we present commentary on stocks in our India Most & Least Preferred stock list.

### India Most & Least Preferred

Stock	Rating	Price Target (Rs)	Remarks
<b>Most Preferred</b>			
Infosys	Buy	1,600	High quality IT company, reasonable valuation
Bharti	Buy-ST Buy	950	Best managed Indian mobile company, in our view
Hero Honda	Buy	950	Gaining market share, sustainable gains
ICICI Bank	Buy	515	Good value despite concerns. B/S restructuring; NPLs to decline
PNB	Buy	570	Low NPL ratio (0.4%), healthy margins and growth from rural markets
Idea	Buy-ST Buy	100	Compelling valuations for a pan India mobile player
<b>Least Preferred</b>			
HCL	Sell	160	Acquisition-led growth strategy is not a positive
HDFC Bank	Sell	900	NPLs to increase; ROE growth unlikely for next 2 years
SBI	Sell	1,150	NPLs likely to increase due to aggressive expansion plans
Reliance Power	Sell	80	Gas availability and pricing concerns
Tata Motors	Sell	140	Slowdown in CV segment, debt levels & JLR concerns

Data as at 1 December 2008. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

### Most Preferred Infosys Technologies

**Investment case:** We believe Infosys should command a premium valuation to peers due to its superior margin management ability and pricing discipline.

We believe Infosys is best positioned in the current environment to emerge stronger and make market share gains. Infosys has 1) sufficient margin levers to offset the negative impact of a potential pricing decline in FY10e (the variable cost is around 550bp of revenue, which we estimate can offset even a 5-10% pricing decline in FY10); 2) good execution ability; 3) strong generation of cash flow (days sales outstanding at lowest levels in Q2 FY09), 4) management focus on organic growth (walking away from the Axon bid); 5) pricing discipline (industry leader on pricing); and 6) strong balance sheet (net cash and free cash flow generation).

**Valuation:** Infosys is trading at FY09E PE of 11.6x, 20% below the trough valuation in last slowdown. We base our price target of Rs1,600 on DCF, assuming medium-term growth of 15%, terminal growth of 5% and WACC of 13.7%.

**2009e catalysts:** Infosys guidance in April 2009, which is likely to address the worst-case scenario for FY10, both on revenue growth and EPS growth. We believe margin protection and pricing discipline should differentiate Infosys from peers in 2009.

**Sector:** Software

**Rating:** Buy

**PT:** Rs1,600

**Analyst:** Govind Agarwal

An early recovery in the European and US economies is a likely catalyst. We believe stability in the global economy should result in contract awards and increased deal flow, which have been slow over the past few quarters. Here again, we believe Infosys has been impacted less than peers due to its superior client exposure.

## Bharti Airtel

**Investment case:** Bharti, the largest mobile operator in India, has pioneered the mobile revolution in India and has gained through first-mover advantage in tower sharing and backbone expansion. Bharti continues to dominate India's mobile space with its vision, focus on execution, strong brand and deep distribution, as indicated by its strong quarterly results and monthly subscriber additions. We believe Bharti should emerge as the major beneficiary of its joint venture Indus towers, as Indus is likely to become the tower provider of choice for Indian GSM operators given its deep tower portfolio (73,000 towers at the end of FY08).

**Valuation:** We have a Buy rating on Bharti. Our sum-of-the-parts-based price target of Rs1,000 assumes a terminal growth rate of 2%. Indus and Bharti Infratel (excluding Indus) contribute Rs197 to our price target.

Bharti, Idea and Vodafone Essar (Vodafone) are likely to announce a commercial arrangement whereby Indus will get the rights to offer tenancy slots on all three operators' towers. We believe this announcement is likely to act as a catalyst and we therefore have a Short-term Buy rating on Bharti.

**2009e catalysts:** We believe the key catalysts for stock performance are: 1) the announcement of a commercial agreement among Bharti, Vodafone, Idea and Indus, potentially in the next few weeks; 2) financial disclosures on Indus beginning Q3 FY09, which should provide more visibility; 3) quarterly results and monthly subscriber additions, continuing the successful track record.

## Hero Honda

**Investment case:** Hero Honda, the largest two-wheeler manufacturer in India, has not been affected by the decline in motorcycle sales in FY08, helped by its low dependence on financing and more revenue from sales in rural areas. The company has gained market share in recent months as the share of the economy 100cc segment declined, following the withdrawal of competitors from the market, while the share of the 100cc executive segment has expanded. The company has a strong focus on rural areas where penetration levels are significantly lower than in urban areas. This is likely to result in stable near to medium-term growth for the company.

**Valuation:** We have Buy rating on Hero Honda and a price target of Rs950, based on 8.2x EV/EBITDA using the average EBITDA of FY10-11E. Based on our analysis, we estimate Hero Honda's sensitivity to a 1% change in sales volumes would be 1.1% change at the PAT level, all else being equal.

**2009e catalysts:** We believe the key catalysts for stock performance are: 1) strong sales growth in the current festive season; 2) margin improvement from Q3 FY09, following a decline in commodity prices; 3) higher-than-expected volume growth.

**Sector:** Wireless Communications

**Rating:** Buy, Short term Buy

**PT:** Rs1,000

**Analyst:** Suresh A Mahadevan

**Sector:** Automobile Manufacturers

**Rating:** Buy

**PT:** Rs950.00

**Analyst:** Sonal Gupta

## ICICI Bank

**Investment case:** Over the past four quarters, ICICI Bank has been slowing asset growth and focusing on improving retail liabilities, the benefits of which should accrue over time. This strategy to improve profitability through retail deposit mobilisation has been shaken in the recent past, leading to margin pressure, which along with lower fee income is likely to likely impact near-term earnings. Despite this, we believe current valuation, following a substantial correction, is reasonable.

**Valuation:** The stock is trading at 4.3x PE and 0.4x APBR FY09E as a standalone entity. We have adjusted ICICI Bank's book value for higher NPLs and international exposure. We have a Buy rating and price target of Rs515.00, which is based on our residual income model; with its subsidiaries/associates valued at Rs220 per share.

**2009e catalysts:** 1) CRR and SLR cuts: A cut in the SLR, in particular, can have not only a significant positive short-term, but also a long-term impact on bank earnings. We think ICICI Bank could use this liquidity to reduce its dependence on bulk deposits. 2) Lower lending rates: Lending rates have risen sharply over the past four years. A reduction in lending rates could stimulate demand and reduce concerns relating to NPLs in Indian banks.

## Punjab National Bank (PNB)

**Investment case:** We like the bank's strategy of relatively low loan growth to maintain margins and reduce risk, low net NPL ratio of 0.4% and negligible global exposure. We also believe PNB will be among the few banks to benefit from expanding into rural markets, because of its natural presence and focused strategy of acquiring customers in these markets. We expect PNB to deliver healthy earnings growth in excess of 12% YoY and ROE of around 18% between FY09 and FY11.

**Valuation:** The stock is trading at 6.9x PE and 1.3x APBR FY09E against sustainable ROE of 16.5%. We rate the stock a Buy. We base our price target of Rs570.00 on the residual income model. Our key assumptions are: cost of equity of 14.1%, terminal ROE of 16.5%, and a terminal growth rate of 5%.

**2009e catalysts:** 1) CRR and SLR cuts: A cut in the SLR, in particular, can have not only a significant positive short-term, but also a long-term impact on bank earnings. We think ICICI Bank is likely to use this liquidity to reduce its dependence on bulk deposits. 2) Lower lending rates: Lending rates have risen sharply over the past four years. A reduction in lending rates could stimulate demand and reduce concerns relating to NPLs in Indian banks.

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** Rs515.00

**Analyst:** Tabassum Inamdar, CFA

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** Rs570.00

**Analyst:** Tabassum Inamdar, CFA

## Idea Cellular

**Investment case:** We recommend emerging market growth investors to accumulate Idea at current levels, as: 1) India is still vastly under-penetrated; 2) strong earnings growth in past few quarters and good earnings visibility over the next four to six quarters.

We believe the market has ignored the significant positive steps taken by management to create shareholder value. Over the past two to three quarters, it has pursued several value-accretive initiatives such as: 1) becoming part of the Indus Towers consortium that has resulted in Idea's access to a large footprint of towers, enabling it improve its speed to market and monetise its tower portfolio. 2) The sale of a 20% stake in Aditya Birla Telecom Limited (ABTL) to Providence that values ABTL equity at US\$3.2bn, indicating that Idea may be currently undervalued. 3) The acquisition of Spice should provide Idea access to the Punjab and Karnataka circles with 900 MHz spectrum, while Idea raised US\$1bn from TMI at a 58% premium to the market price.

**Valuation:** We reiterate our Buy rating and short-term Buy rating on Idea Cellular with a sum-of-the-parts based price target of Rs100.00, assuming a terminal growth rate of 2%. Indus contributes Rs34.00 to our price target.

Bharti, Idea and Vodafone Essar (Vodafone) are likely to announce a commercial arrangement whereby Indus will get the rights to offer tenancy slots on all three operators' towers. We believe this announcement is likely to act as a catalyst and we therefore have a Short-term Buy rating on Idea.

**2009e catalysts:** Events which could act as catalysts for the stock are: 1) the announcement of a commercial agreement by Bharti, Vodafone, Idea and Indus, likely in the next few weeks, 2) financial disclosures on Indus, beginning Q3 FY09, which should provide more visibility on Indus; 3) quarterly results and monthly subscriber additions continuing the successful track record.

## Least Preferred HCL Technologies

**Investment case:** We do not like HCL Technologies (HCL) because of its acquisition-led growth strategy. Our analysis suggests acquisitions are likely to drive 4-5% of HCL's revenue growth in FY09. While the Axon acquisition appears EPS-accretive, assuming 6% cost of debt, we believe cost of debt could increase given conditions in the credit markets. We expect Axon to pose integration challenges for HCL and put earnings at risk. The company's strategy of targeting beyond Fortune-500/1000 companies could also work against it in the current macroeconomic environment. Even though a dividend yield of around 8% appears attractive and might provide downward support, we believe it might not be sustainable due to HCL becoming a net debt company after the Axon acquisition.

**Valuation:** Our DCF-based price target of Rs160.00, assumes medium-term growth of 11%, terminal growth of 5%, and 13.7% WACC.0.

**2009e catalysts:** Any further acquisitions made could be negative for the company; 2) prolonged recession in Europe and the US; 3) pricing pressure.

**Sector:** Wireless Communications

**Rating:** Buy, Short-term Buy

**PT:** Rs100.00

**Analyst:** Suresh A Mahadevan

**Sector:** Software

**Rating:** Sell

**PT:** Rs160.00

**Analyst:** Govind Agarwal

## HDFC Bank

**Investment case:** HDFC Bank is among the few banks in India to deliver on both growth and profitability by taking fewer risks. We believe this strategy is reflected in its historically high valuation. We believe HDFC Bank, which has a proven risk management record, is likely to see its NPLs increase from 1.5% to 1.8-2% due to asset quality deterioration in the erstwhile CBOP's operations. We believe both asset quality issues and low near-term ROE will likely reflect on HDFC Bank's valuation.

**Valuation:** The stock is trading at 18.2x PE and 2.5x APBR FY09E. We rate the stock a Sell. We base price target of Rs900 on the residual income model, which is the sum of BVPS for FY09E, plus the present value of income generated over and above the cost of equity. Our key assumptions are: a discount rate of 13.1% (a risk free rate of 8.1%, beta of 1x and risk premium of 5%), sustainable ROE of 20% and a terminal year growth rate of 5%.

**2009e catalysts:** 1) rise in non-performing loans; 2) no growth in ROE.

## State Bank of India

**Investment case:** We are concerned about SBI's strategy to grow its book aggressively and focus on market share in the current environment which could impact its earnings a few quarters from now as asset quality starts to slip. The bank's aggressive target of expanding its branch network by 16% to 11,800 branches and the employee base by 14% or 20,000 to 25,000 employees over the next year will likely put pressure on earnings in FY10, especially if economic activity remains subdued. On the positive front, the flight to safety, we believe, should benefit SBI the most in the sector, given its strong presence and brand franchise.

**Valuation:** The stock is trading at 6.7x PE and 1.2x PBR (standalone) against a sustainable ROE of 15%. We rate the stock a Sell. We base our price target of Rs1,150 on a sum-of-the-parts model. At our price target, the standalone entity would trade at 1.5x APBR FY09E.

**2009e catalysts:** One of the biggest risks for SBI would be a rise in NPL levels due to its aggressive expansion plans.

## Reliance Power

**Investment case:** We believe fuel availability, execution, and financial closure are the key challenges for Reliance Power: 1) the availability and pricing of gas for 10,280MW gas-based capacity remain uncertain; 2) the development plan of the Indonesian coal mine for the 4,000MW Krishnapatnam project is unknown; 3) the 3,960MW Sasan project has yet to achieve financial closure; and 4) only 60% of land for projects has been acquired. After assessing the above risks, we value only 14,620MW of coal-based capacity (52% of the total portfolio of 28,200MW), where fuel risks are potentially lower, and the capacity can be funded from the existing equity base.

**Valuation:** We have a Sell rating and price target of Rs80.00 on the stock. We base our price target on a three-stage DCF methodology, assuming a medium-term growth rate of 7%, a terminal growth rate of 5%, and cost of equity of 13.9%.

**Sector:** Banks, Ex-S&L

**Rating:** Sell

**PT:** Rs900.00

**Analyst:** Tabassum Inamdar

**Sector:** Banks, Ex-S&L

**Rating:** Sell

**PT:** Rs1,150

**Analyst:** Tabassum Inamdar

**Sector:** Electric Utilities

**Rating:** Sell

**PT:** Rs80.00

**Analyst:** Suhas Harinarayanan

**2009e catalysts:** 1) clarity on gas availability; 2) financial closure/EPC awards for projects; and 3) new project wins.

## Tata Motors

**Investment case:** We rate Tata Motors a Sell, as we expect a decline in the company's operating margins due to a slowdown in the Indian economy and lower demand for commercial vehicles. We also expect slow growth in the company's car and LCV portfolio. The recent acquisition of Jaguar Land Rover (JLR) has left the company with high financial gearing. We believe there is downside risk to JLR sales, which account for 75% of JLR's revenue, given recessionary trends in the US and other developed economies. The company remains in a high capex mode, launching new products over the next few years. The high product development and R&D expenses may continue to weigh on the company's margins over the next few years, in our view.

**Valuation:** We base our price target of Rs140.00 on 5.0x EV/EBITDA for the consolidated company.

**2009 catalysts:** 1) Weaker-than-expected sales volume in the domestic market and JLR; 2) increased working capital requirement at JLR; 3) inability to raise the required financing to repay the bridge loan.

**Sector:** Automobile Manufacturers

**Rating:** Sell

**PT:** Rs140.00

**Analyst:** Sonal Gupta

# Appendix

**Table 6: Companies with positive free cash flow**

	Code	Rating	Price	M cap (US\$ m)	PE (x)		EV/EBITDA		FCF		FCF (after interest)		FCF Yield	
			target (Rs)	1-Dec-08	FY10E	FY11E	FY10E	FY11E	FY10E	FY11E	FY10E	FY11E	FY10E	FY11E
<b>Maharashtra Seamless</b>	MHSM.BO	Buy	402	174	3.0	2.8	1.3	0.9	1,948	1,085	1,911	1,049	22%	12%
<b>Satyam</b>	SATY.BO	Buy	360	3,167	6.9	6.9	3.7	2.9	16,350	17,737	19,417	21,990	12%	14%
<b>Reliance Industries</b>	RELI.BO	Buy	2,550	32,293	6.2	5.6	4.3	4.2	186,139	225,745	178,538	230,947	11%	14%
<b>BSES</b>	BSES.BO	Buy	700	2,163	10.9	10.5	10.1	7.8	10,945	10,746	8,772	8,573	8%	8%
<b>Wipro</b>	WIPR.BO	Neutral	310	6,845	8.5	8.7	5.9	5.7	25,636	16,228	27,552	19,180	8%	6%
<b>Sun Pharma</b>	SUN.BO	Buy	1,620	4,446	10.3	12.4	8.4	8.9	15,725	17,262	17,020	18,778	8%	8%
<b>Hero Honda</b>	HROH.BO	Buy	950	3,021	11.5	9.9	6.6	5.4	10,033	11,343	10,028	11,338	7%	8%
<b>Infosys</b>	INFY.BO	Buy	1,600	14,113	11.5	11.1	8.0	7.0	36,335	34,471	43,738	44,129	6%	6%
<b>TCS</b>	TCS.BO	Sell	565	11,056	9.6	9.8	6.7	6.2	29,349	24,169	33,390	30,838	6%	6%
<b>HT Media</b>	HTML.BO	Buy	142	310	9.7	8.2	4.3	3.4	894	1,521	909	1,526	6%	10%
<b>ONGC</b>	ONGC.BO	Buy	1,000	29,192	8.0	6.7	5.0	5.8	60,497	63,434	57,985	61,004	4%	4%
<b>Piramal Healthcare</b>	NICH.BO	Buy	430	924	9.5	8.1	7.2	6.1	1,820	2,928	1,280	2,434	3%	5%
<b>ITC</b>	ITC.BO	Buy	225	12,451	15.3	13.7	9.8	8.4	16,778	21,467	16,678	21,417	3%	3%
<b>ABB Limited (India)</b>	ABB.BO	Sell	350	1,785	15.7	13.5	9.9	8.3	1,740	339	1,671	271	2%	0%
<b>Nestle</b>	NEST.BO	Neutral	1,750	2,762	20.9	17.5	12.7	10.6	2,430	3,463	2,420	3,453	2%	3%
<b>Tata Chemicals</b>	TTCH.BO	Buy	235	676	4.1	3.7	4.2	3.8	2,103	1,457	584	40	2%	0%
<b>Dabur India</b>	DABU.BO	Buy	130	1,469	16.6	14.3	13.0	11.2	1,356	1,319	1,205	1,206	2%	2%
<b>Hindustan Lever</b>	HLL.BO	Buy	300	10,140	18.6	16.2	16.7	14.1	5,937	7,755	7,745	9,063	2%	2%
<b>Asian Paints Ltd.</b>	ASPN.BO	Buy	1,450	1,692	14.3	12.1	9.2	7.8	977	1,872	727	1,680	1%	2%
<b>Bharti Airtel</b>	BRTI.BO	Buy-ST Buy	1,000	24,758	15.4	12.9	7.7	6.5	15,473	37,506	6,846	30,266	1%	2%

Source: UBS estimates



Table 7: PVGO/PB valuation basis

	Rating	Price target (Rs)	Mkt cap (US\$ m) 1-Dec-08	Price (Rs) 1-Dec-08	EPS (Rs) FY10E	No Growth Price FY10E	PVGO FY10E	PVGO - % of Price FY10E	P/BV FY10E
Aban Lloyd	Buy	1,300	475	642	367.7	2,779	-2,137	-333%	1.2
Aurobindo Pharma	Buy	455	119	112	45.0	418	-306	-274%	2.5
Tata Steel	Neutral	230	2,248	154	74.2	556	-403	-262%	3.8
Maharashtra Seamless	Buy	402	174	130	43.5	358	-228	-175%	1.7
Bajaj Hindusthan	Buy	224	114	40	11.9	94	-53	-133%	3.6
Unitech	Neutral	55	779	24	8.6	56	-32	-132%	1.6
Indiabulls Real Estate	Buy	250	439	91	30.5	209	-118	-131%	2.5
Petronet LNG	Buy	81	464	31	7.5	61	-30	-97%	1.1
Tata Chemicals	Buy	235	676	144	35.5	276	-132	-91%	1.5
Sesa	Neutral	85	1,143	73	17.3	138	-66	-91%	1.0
BGR Energy Systems	Buy	419	177	122	27.9	229	-107	-87%	0.9
Union Bank	Buy	200	1,328	144	30.8	248	-104	-72%	1.1
SAIL	Buy	125	5,288	64	13.8	106	-42	-65%	1.2
HCL Technologies	Sell	160	1,761	135	25.7	218	-83	-62%	1.0
PNB	Buy	570	2,207	415	80.7	665	-250	-60%	1.2
DLF	Sell	235	6,097	179	38.1	279	-101	-56%	1.0
Suzlon Energy	Neutral	65	1,136	39	8.3	59	-20	-50%	1.7
Bank of Baroda	Buy	335	1,793	246	45.2	359	-113	-46%	1.3
Bajaj Auto	Buy	670	887	307	49.3	445	-138	-45%	0.5
Satyam	Buy	360	3,167	236	34.2	326	-90	-38%	0.7
Sintex Industries	Buy	328	471	176	30.0	241	-65	-37%	1.3
UPL	Buy	179	740	84	14.1	115	-31	-37%	1.0
IVRCL	Buy	484	344	127	25.4	174	-46	-36%	1.3
Lanco Infratech	Buy	250	501	112	22.4	153	-40	-36%	1.7
GSPL	Buy	80	321	29	4.3	37	-9	-31%	0.9
Nagarjuna Construction	Buy	226	240	58	10.4	73	-15	-26%	1.6
Reliance Industries	Buy	2,550	32,293	1,109	178.2	1,395	-286	-26%	0.0
Glenmark Pharma	Buy	770	1,587	330	40.5	371	-41	-12%	0.4
Hindustan Petroleum	Sell	240	1,579	232	29.0	257	-24	-11%	0.0
Hindalco	Neutral	65	956	51	7.5	56	-5	-9%	2.7
ONGC	Buy	1,000	29,192	681	84.9	735	-53	-8%	0.0
Axis Bank	Buy	540	2,944	413	54.2	427	-14	-3%	0.8

Source: UBS estimates

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### ■ **Statement of Risk**

The risks to investing in India arise from premium valuation, possibility of a cyclical economic slowdown, weakening currency and potential political uncertainty until the election in mid-2009.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**  
**Indonesia - Outlook 2009**

Indonesia

Equity Strategy

Market Comment

## Surviving the bear market

**3 December 2008**
[www.ubs.com/investmentresearch](http://www.ubs.com/investmentresearch)
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### ■ Summary

Macro stability is under pressure. An economic slowdown has begun and earnings remain at risk, in our view. We do not believe there are any positive near-term market catalysts and we think valuations provide the only support for share prices. We prefer stocks with attractive valuations, regardless of sector.

### ■ What are the likely key themes for 2009?

1) Achieving macro stability; 2) earnings resilience; and 3) access to capital. We believe market PE expansion is possible in 2009 due to depressed valuations and the macro adjustments that are taking place. The risk to this scenario is prolonged macro uncertainty, which would influence expectations on fiscal sustainability and domestic capital outflows.

### ■ What may surprise on the upside or downside?

1) Inflation: driven by low commodity prices (positive), and rupiah depreciation (negative). 2) Politics: the popularity of President Susilo Bambang Yudhoyono in the July 2009 election will likely be impacted by the macro uncertainty. Low commodity prices would also reduce energy and raw material costs and mitigate some of the profit slowdown.

### ■ Market valuation & targets, highlighted sectors

The market is at 7.6x 2008E PE, and we expect a 9% decline in market EPS in 2009. Our end-2009 index target is 1,600 (31% higher than the current level) assuming a 12.8% risk-free rate. Our top picks are Telkom Indonesia, Astra International, Bank Rakyat Indonesia, Perusahaan Gas Negara, and Indocement.

**Table 1: Indonesia Most and Least Preferred List**

Company	RIC	Market Cap (US\$m)	UBS Rating	Share Price (Rp)	Price Target (Rp)	PE 2009E (x)
<b>Most Preferred</b>						
Telkom Indonesia	TLKM.JK	9,838	Buy	6,000	7,200	9.8
Astra International	ASII.JK	3,101	Buy	9,500	16,700	5.3
Bank Rakyat Indonesia	BBRI.JK	3,182	Buy	3,175	4,695	5.7
Perusahaan Gas Negara	PGAS.JK	3,493	Buy	1,870	2,500	10.6
Indocement	INTP.JK	1,033	Buy	3,450	5,500	7.8
<b>Least Preferred</b>						
Bakrie Brothers	BNBR.JK	412	Sell	54	47	2.3
Inco Indonesia	INCO.JK	1,544	Sell	1,910	1,800	9.0
Bank Mandiri	BMRI.JK	2,466	Neutral	1,470	1,350	5.9

Data as at 1 December 2008. Source: UBS estimates.

**This report has been prepared by PT UBS Securities Indonesia**  
**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

We think the key themes for the Indonesian equity market in 2009 include: 1) regaining macro stability; 2) earnings resilience; and 3) access to capital and refinancing.

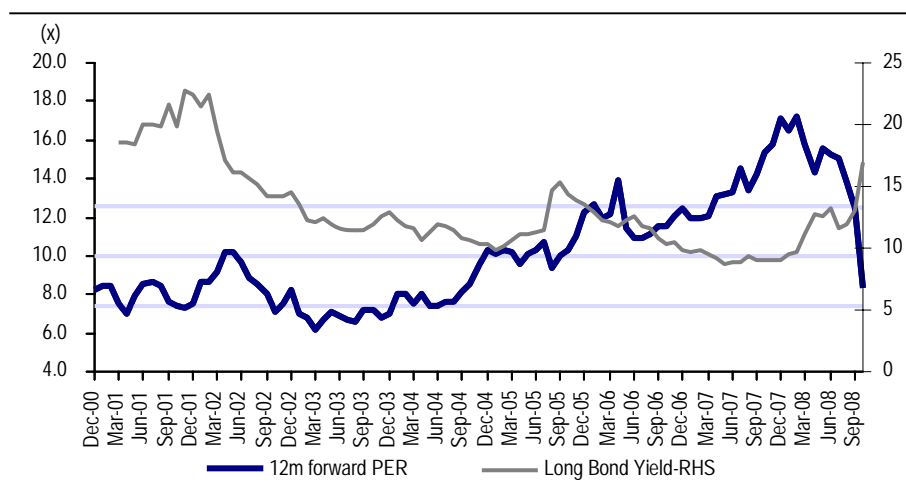
## What is our central thesis for 2009?

**Achieving macro stability.** By the end of 2009, we expect painful macro adjustments to have taken place. This would mean a) a lower equity risk premium and b) a subsequent cut in interest rates, thus improving our 2010 growth expectations. Both would mean PE multiple expansion throughout 2009. This will be the main driver for share price rises, given cheap valuations, in our view.

Indonesia end-2009 index target: 1,600

Our index target is based on a bottom-up summation of the 12-month price targets of covered companies, assuming a 12.8% risk free rate, and derived using discounted cashflow methodology

Chart 1: Indonesia 12-month forward market PE and rupiah long bond yields



Source: UBS estimates

We base our view on the initial conditions of relative strength. 1) There was no credit bubble in Indonesia (credit/GDP was 26% in September 2008, an increase of just 5% in five years, mostly in rupiah), and banks have improved their corporate governance, including crisis handling. 2) The fall in external debt/GDP from 88% in 2002 to 37% in September 2008 indicates economic and earnings growth were not dependent on international wholesale funding.

Given higher interest rates, lower commodity prices, and the fall in the currency, corporate investment is being curtailed in preparation for worsening economic conditions; credit availability for consumer loans is very limited and expensive, and we expect a hard landing for consumption. We expect by end-2009 these painful adjustments will have taken place and consumption growth numbers will have reached lows.

**Chart 2: Rupiah/US dollar exchange rates**



Source: Bloomberg

**Chart 3: Bond yields (%)**

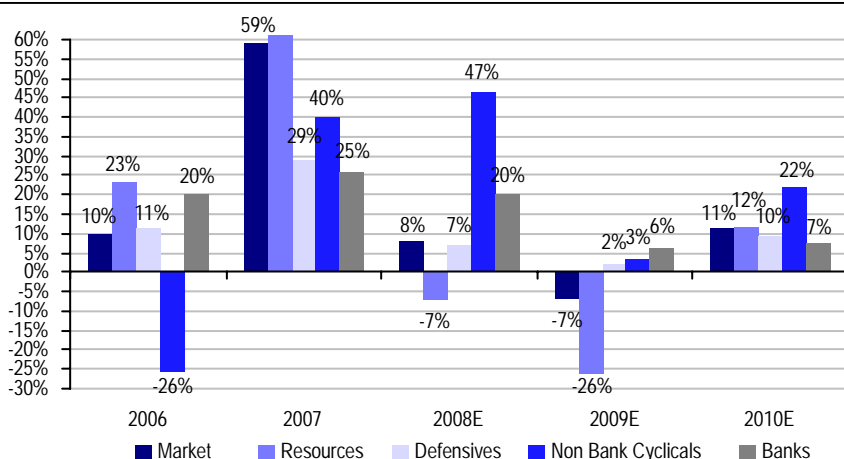


Source: Bloomberg

Risks to our PE multiple expansion thesis include a) the government failing to secure debt financing for its budget, triggering rating downgrades; b) the government failing to act decisively to prevent further deterioration in depositor confidence; and c) the election of a government with less credibility in 2009. In such a scenario, stocks with significant and stable US dollar revenue would likely benefit.

**Earnings resilience.** Earnings expectations remain at risk. The cyclical downturn could still be worse, given the recent fall in the rupiah. UBS expects corporate earnings to decline 7% YoY in 2009 (as at November 2008). We expect help to come in the form of a) higher government spending and b) lower energy and raw material costs.

**Chart 4: Indonesia EPS growth by sector**



Source: Company data, UBS estimates

We expect exporters' earnings to underperform domestic companies, and earnings of domestic companies that have more exposure outside Java to be more at risk than those with a focus in Java.

**Access to capital and refinancing risk.** We expect companies with weak balance sheets or the slightest trace of refinancing risk to underperform those with strong balance sheets and access to capital.

### What may surprise on the upside or downside?

On the downside, a) a bigger-than-expected slowdown, FX-induced inflation, or prolonged tighter domestic liquidity and b) the political consequences of such a crisis, given 2009 is an election year for Indonesia.

On the upside, low commodity prices could mitigate the slowdown in domestic demand, including a) lower energy and material costs for manufacturing companies; b) better fixed-income consumer purchasing power; and c) a lower fuel subsidy bill, allowing some fiscal space for government spending.

Bakrie Brothers' settlement of its debts, particularly through the conclusion of a sale of its 35% stake in Bumi Resources, could be the key catalysts for the Bakrie Group stocks: Bakrie Brothers; Bakrie Telecom; Bakrie Land; Bakrie Sumatra Plantations; and Bumi Resources. Together, they represent up to 35% of the average market turnover of the past 90 days.

### What are the likely key catalysts?

- Tax rate cut: we believe the government will reduce the corporate tax rate to 28% in 2009 and 25% in 2010. We have not yet incorporated this into our earnings forecasts. For 2008, companies with more than 40% free float, where none of the free float shareholders owns more than 5%, might also benefit from a 500bp lower tax rate.
- The result of the parliamentary election in early April 2009 and the presidential election in early July 2009; we believe the performance of Partai Demokrat in the April election will be key.

## Key sector ideas

Table 2: UBS key sector ideas and top picks

Sector	Stance	Comments	Top picks
Coal	Underweight	Coal sector unlikely to regain strong momentum within the next 12 months. Demand for power is falling sharply along with industrial growth. We think coal prices could decline further, even below the marginal cost level of around US\$60/t. This is unsustainable in the long term (as supply is reduced), however it is feasible over a 12-month period. Investors are currently evaluating China's recent stimulus package as well as its near-term growth, to determine how much the economy will slow down. A soft landing for the economy could result in renewed buying interest in the Indonesian coal sector by mid-2009. The sector has been sold down over 60% this year, and currently implies coal prices equal to marginal costs. We think Indonesian coal companies have value in the event China achieves our growth target of 7.5% in 2009.	Indo Tambangraya Megah
Nickel	Underweight	Nickel prices reached a record high in mid-2007 on the construction boom and the strong demand for stainless steel (65% of nickel usage) that followed. Consequently, miners worldwide have been investing in new supply over the past year, which is now flooding the market, while demand is falling. We do not believe nickel will be one of the primary beneficiaries of the China stimulus package, as stainless steel is consider a 'luxury' product, whereas iron and cement are more likely to be affected positively. However, although the nickel sector is unlikely to regain serious momentum within the next 12 months, nickel prices may rise to bring them back to marginal production cost (price US\$4.5/lb vs cost US\$8/lb), in our view. We maintain our underweight stance on the Indonesian nickel sector. We think production cuts are a risk if prices remain low.	Antam
Telcos	Overweight	The Indonesia mobile sector still under-penetrated. Headline penetration of 50-60% is overstated, with unique subscriber penetration likely at 35-40%. Tariffs have fallen approx. 60% in 2008, which is likely to lead to increased usage in 2009. Competition is easing in 2009 as tariffs have already fallen significantly and competitors are likely to focus on tweaking tariffs rather than further significant price cuts. The cost of funding may limit operators' willingness to be aggressive in terms of capex and network expansion, leading to a more stable operating environment. Risk: operators start another round of significant tariff cuts, and macro risks, such as inflation, which may lead to less minutes growth.	Telkom Indonesia
Banks	Underweight	We expect earnings growth and RoE to decline in 2009. We expect loan growth, which is running at 34% YoY as at September 2008, to slow to as low as 10% in 2009 with the inflection point to a recovery in Q409. Given the significant rise in bond yields, tight domestic and FX liquidity, net interest margin (average 6% in Q308) is on the decline. The impact of rupiah depreciation on outstanding US\$ loans (19% of loans), the sharp fall in commodity prices, consumer loans repricing to 500bp higher rates in most cases will trigger stronger than usual NPL formation, in our view.	Bank Rakyat Indonesia
Consumer	Overweight	We expect consumption to soften considerably in 2009. Cash-based consumption (Unilever/Indofood/Ramayana products) is likely to hold up much better than credit consumption (durable goods, auto). Election money (spending) is an upside potential to 2009 consumption. Risks: 1) a significantly weaker rupiah and higher interest rates, and 2) competition.	Unilever Indonesia and Astra International
Cement	Overweight	We forecast cement demand growth to decelerate to 4% in 2009, from a double-digit pace in 2008. This is a cyclical sector, but a 5-year structural growth story remains intact, due to low mortgage penetration (4-5% of GDP). Low refinancing risk for the sector as producers have significantly de-leveraged in the past five years. The sector trades well below replacement cost. Risks: 1) a significantly weaker rupiah and higher interest rates; 2) cost pressure; and 3) regulatory risk.	Indocement
Plantation	Neutral	Plantation sector supply will be tight, with weak demand resulting from government policy on bio-diesel usage obligation, export tax, and import tariffs. We expect supply to be relatively flat until 2012. Surprise on the downside: 1) Maturing estate yield better than expected and 2) perfect substitute soybean supply not as tight as expected. Surprise on the upside: 1) Significantly higher replanting schedule and 2) local bio-diesel demand in Malaysia and Indonesia materialise. Catalysts: 1) CPO price turning point; 2) weather to accommodate good harvest; and 3) trade and/or tariff policy on palm oil for China, India and EU. Share price is already reflecting some bad news in H208.	Astra Agro Lestari
Property	Underweight	We expect a fall in property sales. We forecast overall developers' pre-sales to decline 14-15% YoY. Another factor is the construction progress of pre-sold units. We think there will be a slow-down in the construction rate given slower pre-sales and higher cost of financing, amid a tough environment for commercial space. We believe it is increasingly difficult to increase rental rates. Commercial space supply is growing at a faster rate than demand, especially in the retail sector. 2009 is likely to put strain on property developers' cash flow. Surprise on downside: 1) Tax ID implementation to property sector and 2) FX rate fluctuations. Surprise on upside: 1) Rate cut; 2) tax incentives; and 3) construction raw material prices. Catalysts: 1) Banks resume mortgage lending with lower rates following interest rate cut 2) peaceful democratic election.	Summarecon
Infrastructure	Overweight	SSWJ parallel pipeline was fully completed at end-September 2008, adding 41% capacity. Pipeline completion will also allow PGAS to increase distribution volume by 25% to 700mmscf in 2009. Toll road projects are progressing at a very slow rate; only 5% has begun construction while 41% is still being tendered. We like gas utilities, and are neutral on toll roads. Risks: 1) Slower gas volume ramp-up and 2) slower-than-expected toll road construction.	Perusahaan Gas Negara
Oil and gas	Neutral	We believe crude oil price will be persistently weak in the short-term, and may average US\$50/bbl in H109. Project delays are increasingly becoming a problem particularly for domestic E&Ps, due to lack of financing alternatives. We prefer downstream distribution, which is less leveraged to oil price changes and which we expect to experience 48% fuel sales volume growth in 2009. Risks: 1) lower-than-expected oil price and 2) lower-than-expected volume.	AKR Corporindo

Source: UBS estimates

# Indonesia Most & Least Preferred

In this section, we present commentary on stocks in our Indonesia Most & Least Preferred stock list.

## Indonesia Most & Least Preferred

Company Name	Rating	Price Target	Overview
<b>Most Preferred</b>			
Telkom Indonesia	Buy	7,200	A survivor with the strongest balance sheet in the sector and best access to capital.
Astra International	Buy	16,700	Cyclical, but one of the highest quality companies in terms of management, governance, cost control and balance sheet.
Bank Rakyat Indonesia	Buy	4,695	Rural franchise, well seasoned loan book. Also a defensive business model.
Perusahaan Gas Negara	Buy	2,500	Strong volume growth, no major capex, no balance sheet concern.
Indocement	Buy	5,500	Also a cyclical but very cheap at US\$60 EV/ton, benefits from lower energy prices
<b>Least Preferred</b>			
Bank Mandiri	Neutral	1,350	25% of loan book in US dollars, 11% of loans are previously restructured.
Bakrie Brothers	Sell	47	Uncertainty over the debt settlement solution.
Inco Indonesia	Sell	1,800	Dividend yield play is over given pressure in net income

Data as at 1 December 2008. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

## Most Preferred Telkom Indonesia

**Investment case:** We believe Telkom Indonesia (Telkom) will be the key beneficiary of growing mobile penetration in Indonesia. The country's mobile market is still under-penetrated. We think headline penetration of 50-60% is overstated, with unique subscriber penetration likely in the 35%-40% level. We expect usage to continue to increase in 2009 as tariffs have declined significantly and become more affordable in 2008.

**Sector:** Telecommunications

**Rating:** Buy

**PT:** Rp7,200

**Analyst:** Lydia Chan

**Table 3: Telkomsel SimPATI total cost of call—old versus new**

(Rp)	On-net local		On-net long distance		Off-net local		Off-net long distance	
	old	new	old	new	old	new	old	new
1 minute	1,500	30/465/900/900	4,000	30/465/900/900	1,600	1,500	4,000	1,500
3 minutes	4,500	90/525/960/1,975	12,000	90/525/960/1,975	4,800	3,030	12,000	3,030
5 minutes	7,500	150/585/1020/2,035	20,000	150/585/1020/2,035	8,000	3,090	20,000	3,090
10 minutes	15,000	300/735/1,170/2,185	40,000	300/735/1,170/2,185	16,000	6,180	40,000	6,180

Note: Old tariffs are from April 2007. Source: Company data.



Telkomsel's strong balance sheet helps it remain flexible in capex spending, which will enable the company to stay ahead of its competitors in coverage. In comparison, Telkomsel's competitors are free cash flow negative and will need to depend on debt in order to strengthen its network. Telkomsel is best positioned to benefit from growth due to its dominance, especially in regions outside Java, where it holds as much as 70-80% market share.

**Strong balance sheet is a competitive advantage over competitors that are free cash flow negative**

**Valuation:** We have a Buy rating on the stock and a 12-month price target of Rp7,200. Our sum-of-the-parts-based price target assumes WACC of 14.8% for both Telkomsel and Telkom ex-Telkomsel.

**2009 catalyst:** Competitive intensity easing with no further significant tariff cuts and a recovery in revenue growth for Telkomsel.

**Risk:** On the fixed-line side, we think continued acceleration of fixed-to-mobile substitution and slower broadband take-up could lead to lower revenue growth. Another round of significant tariff cuts could result in disappointing revenue growth for Telkomsel, as in 2008.

**Table 4: Telkom Indonesia—Sum-of-the-parts valuation**

(in Rp bn)	Enterprise Value	Net Debt (Cash)	Equity Value	Telkom's stake	Value per share (Rp)	WACC	Terminal EV/EBITDA
Telkomsel	144,265	879	143,386	65%	4,623	14.8%	5x
Telkom (ex-Telkomsel)	55,465	3,516	51,948	100%	2,577	14.8%	4x
<b>Sum of the parts</b>					<b>7,200</b>		

Source: UBS estimates

## Perusahaan Gas Negara

**Investment case:** We like Perusahaan Gas Negara's (PGAS) combination of EPS growth and a defensive business model, where all the gas supply for a 30% volume CAGR in 2007-10 is already contracted. We believe we are conservative in forecasting 2009 volume of 700mmscfd, 5% lower than that implied by PLN contracts alone. The South Sumatra-West Java (SSWJ) pipeline that will transport this additional gas was already completed at end-September 2008, and so far is operating well.

**Sector:** Gas Utilities

**Rating:** Buy

**PT:** Rp2,500

**Analyst:** Sebastian Tobing, CFA

We think upside risks to our base case scenario are higher-than-expected volume in 2009, and possibly higher prices in 2010. The government is moving towards a free market domestic gas price, compared with a controlled environment in the past year. PGAS currently sells its gas at US\$5.5/mmbtu to local industries—a 50% discount to domestic diesel prices. We now assume no price increase in 2009 and 2010.

**Valuation:** Our DCF-based price target of Rp2,500 assumes WACC of 15.2% and a long-term growth rate of 5.0%. PGAS currently trades at 10.6x our 2009 EPS estimate.

**2009 catalysts:** 1) Quarterly volume and results announcements; 2) more volume contract signing with PLN; and 3) a depreciating rupiah. Our sensitivity analysis suggests PGAS's EPS would rise 10% for every 10% fall in the rupiah. We currently assume a 2009 average of Rp10,500/US\$, 16% lower than the current rate of Rp12,450.

**Risks:** Instead of dispersing future cash flows as dividends, PGAS could embark on new projects that may not be value accretive.

## Bank Rakyat Indonesia

**Investment case:** Bank Rakyat Indonesia is our top pick among Indonesian bank. We think its fundamentals are strong, with its rural deposit franchise; diversified and small portfolio; and adequate capital. Bank Rakyat Indonesia is also the payment bank for the government, with a seasoned portfolio that weathered the last financial crisis. The bank has a track record to deliver above 25% RoE, even during an economic downturn.

**Valuation:** Bank Rakyat Indonesia is trading at 1.7x 2008E P/BV which we think is unwarranted given its franchise, and is far cheaper than Bank Central Asia at 2.8x 2008E P/BV. We derive our price target using the Gordon Growth Method, assuming a 12.8% risk free rate and 25% RoE. Our cut off date is December 2009.

**2009 catalysts:** potential 500bp lower tax rate for companies with more than 40% free float.

## Astra International

**Investment case:** Although Astra International (Astra) has a cyclical business, it remains one of our top picks. This is driven by our belief that 1) Astra is one of the highest quality companies in Indonesia in terms of management, corporate governance, and growth track record; 2) it has a much stronger balance sheet (32% net debt/equity as at September 2008) than it had at the start of the Asian financial crisis (600% net debt/equity in December 1997); and 3) it trades at 1x 2008E P/BV, which we believe is very low for a high quality company without any balance sheet issues.

**Valuation:** Astra is trading at 5.3x our 2009E EPS estimate and 1.0x 2009E P/BV. We forecast its EPS to decline 15% in 2009. We derive our price target using sum-of-the-parts methodology, assuming a 12.8% risk free rate and 5% terminal growth. The cut off date is December 2009.

**2009 catalysts:** 1) Better-than-expected auto and motorcycle sales; 2) market share performance; and 3) a return of investor interest in the Indonesia market given Astra as an Indonesian cyclical proxy.

**Risks:** 1) Macro risks, notably a significantly weaker rupiah and/or much higher interest rates that would adversely impact car and motorcycle sales volume and 2) fierce competition in motorcycles from Yamaha and new entrants (Indian products).

**Sector:** Banks

**Rating:** Buy

**PT:** 4,695

**Analyst:** Joshua Tanja, CFA

**Sector:** Conglomerates

**Rating:** Buy

**PT:** Rp16,700

**Analyst:** Johannes Salim, CFA

## Indocement

**Investment case:** Indocement is another cyclical play; but it has a strong balance sheet (5% net gearing). As a testament to its strong cash flow, the company prepaid a US\$75m (net of refinancing effect) loan in September 2008. The spare capacity advantage (75% domestic utilisation rate) allows Indocement flexibility in the upcycle (no big capex plan).

**Valuation:** 4.3x 2009E EV/EBITDA, 1.3x P/BV, and US\$60 EV/ton. We derive our price target using DCF methodology, assuming a 12.8% risk free rate, and 5% terminal growth rate. Our cut-off date is December 2009.

**2009 catalysts:** 1) monthly cement demand; 2) selling price increases; and 3) market share performance.

**Risks:** 1) macro risks, notably a significantly weaker rupiah and/or much higher interest rates that would adversely impact cement demand; 2) cost pressure; and 3) regulatory risk.

## Least Preferred Bakrie Brothers

**Investment case:** Bakrie Brothers is one of the first Indonesian companies to have declared technical default on some of its loans (US\$12m of US\$1.2bn loan at the parent company). The sale of its stake in Bumi Resources (Bakrie Brothers' most valuable asset) is necessary as the way out, in our view. However, with a steep fall in Bumi Resources' share price significant uncertainty remains.

**Valuation:** Our price target is Rp47. This is derived from a sum of the parts of the market cap of Bakrie Brothers' subsidiaries.

**2009 catalysts:** 1) divestment of Bumi Resources stake, leaving the company as a shell (holding) company and 2) resolution of the debt problem.

**Risks:** 1) Lingering debt problem; 2) commodity price fluctuations (notably coal and CPO prices); and 3) execution of new business opportunities.

## Inco Indonesia

**Investment case:** Inco Indonesia's former attractive dividend story is gone for now due to pressure on net earnings. It is under pressure from parent Vale to cut production as high cost nickel producers are losing money because of low nickel prices.

**Valuation:** The stock trades at 11.3x our 2009 EPS estimate. We derive our price target using DCF methodology, assuming a 12.8% risk free rate and life of mine reserve. Our cut off date is December 2009.

**2009 catalyst:** Nickel price change.

**Risks:** The company remains one of the best run in Indonesia with very strong corporate governance, in our view.

**Sector:** Building Materials

**Rating:** Buy

**PT:** Rp5,500

**Analyst:** Johannes Salim, CFA

**Sector:** Conglomerates

**Rating:** Sell

**PT:** Rp47

**Analyst:** Johannes Salim, CFA

**Sector:** Mining

**Rating:** Sell

**PT:** Rp1,800

**Analyst:** Andreas Bokkenheuser

## Bank Mandiri

**Investment case:** Bank Mandiri is operating in a tougher environment because of tight US dollar liquidity and concern about rising NPLs, given the bank has the highest US dollar loans concentration and the highest restructured loans concentration. Most of the recent initiatives into the consumer/micro and retail deposit franchise have not been tested in tough operating conditions (its unseasoned portfolio, gain in low-cost deposit franchise have not been tested in a high rate/crisis environment).

**Valuation:** Bank Mandiri is trading at 0.9x 2008E P/BV. We derive our price target using the Gordon Growth Method, assuming a 12.8% risk free rate and 18% ROE. Our cut off date is December 2009.

**2009 catalysts:** Indonesia monthly macro numbers, quarterly NPL announcements, election results.

**Sector:** Banks

**Rating:** Neutral

**PT:** Rp1,350

**Analyst:** Joshua Tanja, CFA

Table 5: UBS valuation guide

UBS COVERED COMPANIES	Price Rp	Mkt Cap US\$m	Price Target Rp	Rating	Core profit % y-y		PER		EV/EBITDA		PBV		Core ROE (%)		Gear	Yld	Price Performance (%)			
					Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09			Dec-10	1 mo	3 mos	6 mos
					Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09			Dec-10	1 mo	3 mos	6 mos
Gudang Garam	4,250	899	4,500	Neutral	15.5	-11.3	10.8	4.9	5.5	3.8	4.0	0.5	0.5	11.0	9.4	0.3	9.0	-1.2	-31.5	-46.5
Unilever Indonesia	7,650	6,414	9,400	Buy	29.4	17.2	10.5	23.0	19.6	15.5	13.2	17.9	15.8	77.9	80.4	(0.3)	5.1	2.7	0.7	12.5
Ramayana Lestari Sentosa	470	362	600	Neutral	9.2	8.9	17.6	9.0	8.2	3.7	3.1	1.4	1.3	16.0	16.0	(0.5)	6.6	-6.0	-43.4	-37.3
Indofood S.M.	950	986	1,240	Neutral	37.2	-8.8	5.3	6.7	7.4	3.1	3.2	1.1	1.0	16.4	13.8	0.9	6.0	-12.8	-56.3	-64.8
Kalbe Farma	400	446	740	Buy	-12.4	17.5	12.1	6.8	5.7	2.5	2.2	1.1	1.1	16.9	18.4	(0.3)	4.3	9.6	-45.9	-54.0
Media Nusantara Citra	124	187	370	Buy	0.4	11.5	14.9	3.5	3.2	2.0	1.8	0.4	0.4	11.6	11.8	0.0	9.2	-52.3	-62.4	-79.0
Matahari Putra Prima	630	312	490	Sell (CBE)	15.9	9.3	19.1	13.4	12.3	3.8	4.3	0.8	0.8	6.2	6.5	0.1	2.4	6.8	18.9	21.2
Astra International	9,500	4,190	16,700	Buy	29.9	-14.4	26.4	4.5	5.3	3.6	3.8	1.2	1.0	25.7	19.7	0.4	7.5	1.6	-55.4	-53.0
United Tractors	3,600	1,123	5,900	Buy	64.7	-8.4	29.4	4.3	4.7	2.4	2.2	0.9	0.8	22.0	17.9	0.1	11.4	14.3	-65.4	-71.9
Telkom Indonesia	6,000	13,292	7,200	Buy	-7.8	1.4	4.2	10.0	9.8	3.4	3.3	3.0	2.6	29.6	26.5	0.2	6.5	11.1	-23.1	-26.4
Indosat Tbk	4,850	2,896	5,400	Neutral	-5.0	-14.9	2.6	13.6	15.9	4.2	4.3	1.5	1.4	11.1	9.0	0.7	3.2	-8.5	-21.8	-14.9
Bakrie Telecom	52	163	110	Buy	69.7	22.7	16.5	6.1	4.9	2.9	1.8	0.3	0.3	5.0	5.8	0.2	-	-21.2	-83.0	-80.7
Indocement	3,450	1,396	5,500	Buy	61.1	0.2	26.8	7.9	7.8	4.5	4.3	1.5	1.3	19.4	17.1	0.1	3.8	-1.4	-46.1	-42.5
Holcim Indonesia	425	358	640	Buy (CBE)	107.6	-45.1	31.0	5.4	9.8	4.9	5.2	1.3	1.2	24.2	11.7	1.3	-	-4.5	-62.1	-61.4
Semen Gresik	3,300	2,151	4,000	Buy	28.0	-1.7	23.6	8.6	8.8	4.6	5.0	2.4	2.1	28.1	23.8	(0.4)	4.6	10.0	-19.0	-21.9
Perusahaan Gas Negara	1,870	4,720	2,500	Buy	54.2	42.9	34.8	14.3	10.0	8.2	5.9	7.0	4.1	48.6	40.7	1.3	7.0	33.6	-21.3	-33.0
Bumi Resources	940	2,004	3,000	Buy	38.4	14.3	-12.4	3.5	3.1	1.4	0.9	1.2	0.9	34.6	30.7	(0.1)	11.4	-56.8	-80.4	-87.8
Bukit Asam (PTBA)	6,800	1,722	8,200	Buy	178.2	1.3	-13.1	8.6	8.5	5.3	5.1	3.8	3.1	43.7	36.6	(0.4)	8.0	24.2	-47.3	-51.9
Indo Tambangraya Megah (ITM)	9,200	1,142	17,600	Buy	409.7	-29.3	-20.2	3.7	5.2	1.5	1.9	1.2	1.3	33.8	24.9	(0.3)	8.5	19.5	-64.4	0.0
Inco Indonesia	1,910	2,086	1,800	Sell (CBE)	-45.3	-71.6	41.9	3.2	11.3	1.1	2.7	1.0	1.1	31.3	9.9	(0.5)	0.1	13.0	-43.0	-70.2
Antam	990	1,038	1,050	Sell (CBE)	-48.4	-43.1	-6.8	3.7	6.5	2.5	4.2	0.9	0.9	25.2	13.8	(0.0)	6.2	-4.8	-41.8	-70.0
Medco Energi Internasional	1,810	663	2,300	Neutral	760.8	-47.2	32.3	4.6	8.8	3.5	4.3	0.6	0.7	12.2	8.0	1.2	5.7	-13.8	-61.5	-64.0
Energi Mega Persada	130	206	200	Sell	21.4	-36.3	196.4	13.3	20.9	7.8	10.4	0.5	0.5	4.0	2.5	1.4	-	-62.9	-81.4	-87.5
Berlian Laju Tanker	420	210	NA	Suspended	55.9	-62.5	18.5	1.6	4.3	5.9	7.4	0.4	0.4	24.9	8.5	2.8	6.2	-35.4	-76.3	-80.0
Aneka Kimia Raya	530	182	800	Buy	48.3	-21.5	36.2	5.7	7.3	3.1	3.0	1.1	1.0	19.7	13.7	0.5	4.2	-14.5	-60.7	-55.8
Summarecon Agung	200	141	325	Buy	-11.0	-12.5	-17.9	9.0	10.3	4.8	5.2	0.7	0.6	7.3	6.1	0.3	1.1	-2.4	-40.3	-41.2
Ciputra Development	190	137	400	Buy	-17.3	-39.9	-6.6	8.9	14.9	(1.8)	1.0	0.3	0.3	3.1	1.8	(0.4)	1.1	-20.8	-60.8	-60.0
Kawasan Industri Jababeka Tbk	50	76	30	Sell	78.7	-13.4	21.5	12.5	14.4	8.5	10.9	0.4	0.4	3.2	2.7	0.6	-	-5.7	-58.3	-64.5
Bakrieland Development	68	148	110	Buy	11.0	-34.7	53.4	10.1	15.4	4.5	5.4	0.3	0.3	3.1	2.0	(0.1)	-	-11.7	-80.0	-82.8
Lippo Karawaci	920	1,749	470	Sell	-18.6	-24.9	72.2	55.4	73.7	30.5	38.3	3.5	3.4	6.4	4.6	0.2	0.2	50.8	24.3	29.6

Table 5: UBS valuation guide (cont'd)

UBS COVERED COMPANIES	Price Rp	Rating	Price Target Rp	Mkt Cap US\$m	Core profit % YoY		PER		EV/EBITDA		PBV		Core ROE (%)		Gear	Yld Dec-10	Price Performance (%)			
					Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09	Dec-08	Dec-09			Dec-08	Dec-09	1 mo	3 mos
Bakrie Brothers	54	Sell	47	556	422.2	73.8	45.8	4.1	2.3	7.2	7.9	0.1	0.1	2.7	4.5	0.2	-	-62.8	-83.4	-89.2
Citra Marga Nusaphala Persada	990	Sell	1,000	218	21.1	13.3	11.4	13.1	11.6	6.0	6.1	1.4	1.3	10.5	11.1	0.4	3.9	-15.4	-19.5	-29.3
Jasa Marga	800	Buy	960	598	146.6	-14.9	12.3	7.9	9.3	4.9	5.8	0.8	0.8	10.5	8.3	0.5	2.1	0.0	-30.4	0.0
Gajah Tunggal Tbk	176	Sell	140	61	12.8	11.8	1.1	1.9	1.7	3.6	3.2	0.2	0.2	10.9	11.0	1.2	6.3	-13.7	-54.3	-63.3
Astra Agro Lestari	8,150	Buy	11,000	1,410	-27.8	-66.3	44.5	4.8	14.1	2.8	7.6	2.0	1.9	41.2	13.3	(0.2)	5.1	34.7	-51.1	-66.5
Bakrie Sumatera Plantations	230	Sell (CBE)	165	96	69.1	-79.6	31.7	2.0	9.6	2.4	5.7	0.2	0.2	12.5	2.6	0.3	-	-14.8	-78.5	-87.6
London Sumatra Indonesia	2,700	Buy (CBE)	3,000	405	47.4	-76.5	52.7	3.8	16.2	2.4	7.1	0.9	0.8	24.0	4.8	(0.0)	-	37.8	-48.6	-72.6
Bank Central Asia	2,700	Suspended	NA	7,242	21.6	7.4	11.3	12.1	11.2	-	-	2.8	2.5	23.1	21.9	4.1	4.1	0.0	-18.2	0.0
Bank Internasional Indonesia	470	Neutral	510	2,495	60.8	9.8	20.1	34.9	31.8	-	-	3.8	3.5	10.8	11.0	1.1	1.1	1.1	2.2	1.1
Bank Mandiri	1,470	Neutral	1,350	3,332	19.5	-0.5	5.0	5.8	5.9	-	-	0.9	0.9	16.1	14.8	8.5	8.5	-5.8	-48.4	-48.4
Bank Niaga	415	Sell	400	554	-2.2	-7.7	6.2	6.6	7.2	-	-	0.9	0.8	13.1	11.0	3.1	3.1	-11.7	-52.3	-57.7
Bank Danamon Indonesia	2,550	Buy	2,900	1,390	9.1	4.7	6.1	5.5	5.2	-	-	1.1	1.0	19.2	18.3	10.0	10.0	-1.9	-51.9	-51.9
Bank Rakyat Indonesia	3,175	Buy	4,695	4,300	24.5	13.1	5.1	6.5	5.7	-	-	1.7	1.5	26.1	25.4	8.7	8.7	-8.0	-50.4	-44.3
<b>JCI</b>	<b>1,223</b>			<b>74,055</b>	<b>11.3</b>	<b>-9.0</b>	<b>9.1</b>	<b>7.6</b>	<b>8.3</b>	<b>4.1</b>	<b>4.1</b>	<b>1.5</b>	<b>1.4</b>	<b>20.2</b>	<b>16.8</b>	<b>0.4</b>	<b>5.7</b>	<b>-2.7</b>	<b>-42.2</b>	<b>-49.0</b>

Data as at 1 December 2008. Source: UBS estimates

Table 6: Non-bank debt profile as at September 2008.

Company	Total loan		All short term		Cash Rp bn Sep-08	EBITDA Rp bn 2008E	Cash less S-T Debts Rp bn	Interest Cover	Debt/ Ebitda	Remarks Assume Rp12,000/US\$, 10% US\$ coupon, 15% Rupiah coupon
	S/T and L/T Rp US\$	L/T Rp US\$	Loans Rp US\$	L/T Rp US\$						
BNBR.JK	846	1,520	158	1,205	4,062	1,913	(10,561)	1.0	10.0	Data as of June 2008 on consolidated. At parent level, as of mid-Nov 2008, total debt is US\$1.2bn. Cash at parent level as of June is only US\$30mn.
INDF.JK	6,079	740	2,404	497	5,619	5,319	3,215	3.0	2.8	The US\$360m is for wheat inventory (short-term working capital), US\$180m for acquisition of Lonsum, and the rest other investment loans.
ASII.JK	12,648	791	7,626	384	10,170	14,007	2,544	4.9	1.6	Rp12trn rupiah L/T debts come from financing arms, US\$500m in UT, US\$250m in financing arm, and the rest from subsidiaries
BLTA.JK	2,092	1,497	1,200	380	2,756	2,608	1,556	1.2	7.7	Company had US\$313m of cash and available for sale investments as of 6M08. The company completed one sale and leaseback worth approx US\$50m in September and plans to do three more for additional US\$150m by end-08. It also plans to refinance US\$100m of its ST debt due December 08.
INTP.JK	62	291	31	288	266	2,993	235	8.3	1.2	In October paid US\$100m to parent company, remaining also to parent Heidelberg
UNTR.JK	516	293	378	131	2,744	4,704	2,366	11.0	0.9	UT already paid US\$116m of bridging loan in September after a US\$390m rights issue.
AKRA.JK	-	286	-	124	258	764	258	2.2	4.5	Current maturities are working capital that will be rolled over, we do not expect company to have difficulty
KIJA.JK	137	90	137	90	70	193	(68)	1.5	6.3	In Oct, got syndicated loans amounting \$106m, maturing 2014
TLKM.JK	13,641	491	5,766	78	7,816	37,061	2,050	14.1	0.5	Total RP loan figure includes Rp1.1trn in jpy.
MEDC.JK	1,651	608	1,304	55	6,753	4,373	5,450	4.5	2.0	Medco currently holds US\$370m of cash after selling Apexindo and Tuban PSC
GJTL.JK	-	467	-	49	628	1,031	628	1.8	5.4	US\$42m is due at end of October 2008. According to management, it will make payment, cash position as of 6M08 is US\$92m. Rest of loans is bullet in 2010
PGAS.JK	-	782	-	33	2,291	6,127	2,291	6.5	1.5	PGAS has additional JPY-denominated loan worth Rp2.7trn to be paid on an equal quarterly payments until 2043.
LSIP.JK	8	85	8	29	851	1,545	843	15.0	0.7	Club deal \$150m matures 2011
ISAT.JK	15,837	346	2,286	25	6,647	9,072	4,361	3.3	2.2	(As of September 2008) Rp1,860bn of current maturity paid on 24 Oct 2008. Rp6.6trn in cash. US\$250m will mature in 2010. US\$220m in 2011. Without capex, no need for 2010 refinancing.
ANTM.JK	-	86	-	23	3,691	3,707	3,691	35.9	0.3	
ITMG.JK	-	77	-	18	2,214	4,077	2,214	44.4	0.2	Data as of June.
UNSP.JK	4	167	3	15	486	883	483	4.4	2.3	Bond US\$150m matures 2011
SMRA.JK	1,292	8	293	4	410	384	116	1.9	3.6	Raised Rp300 bn, already paid back Rp 150 bn bond in July 08
SMCB.JK	4	136	3	1	129	1,240	127	7.6	1.3	
GGRM.JK	6,034	-	6,034	-	406	3,421	(5,628)	3.8	1.8	Mostly for clove inventory. Very likely to be rolled over. No problem.
UNVR.JK	-	-	-	-	805	3,701	805	no debt	-	
RALS.JK	-	-	-	-	1,433	556	1,433	no debt	-	
KLBF.JK	381	-	380	-	1,071	1,226	691	21.5	0.3	
MPPA.JK	1,081	-	441	-	2,295	804	1,854	5.0	1.3	
BTEL.JK	645	145	-	-	2,323	897	2,323	3.3	2.7	(As of Sept08) US\$2.5m due in Oct 09, large repayments occur from 2011 onwards. most likely taking on more US\$ debt through vendor financing.
SMGR.JK	316	-	65	-	3,308	3,620	3,243	76.4	0.1	
PTBA.JK	-	-	-	-	2,596	2,612	2,596	no debt	-	
INCO.JK	-	-	-	-	1,806	6,986	1,806	no debt	-	
ENRG.JK	0	488	0	-	1,493	866	1,493	1.5	6.8	Data as of June 2008. ENRG has obtained 5-year loans totalling US\$450m to refinance and further capex
CTRA.JK	170	2	81	-	2,547	369	2,466	13.1	0.5	
ELTY.JK	1,229	-	39	-	1,028	205	989	1.1	6.0	Rp500 bn, 2 bonds, maturity 2011 & 2013
LPKR.JK	512	250	268	-	2,010	550	1,743	1.5	6.4	\$250 m bond matures in Mar 2011
CMNP.JK	1,223	-	131	-	90	419	(41)	2.3	2.9	
JSMR.JK	5,956	-	411	-	3,909	1,782	3,498	2.0	3.3	Cash will be spent on toll road construction.
AALI.JK	-	-	-	-	1,902	4,132	1,902	no debt	-	
MNCN.JK	221	134	221	-	1,615	966	1,394	29.1	1.9	All US\$ debt matured in 2011.
BUMI.JK	-	364	-	-	2,732	11,905	2,732	27.2	0.4	Data as of June 08. Majority of cash is invested with a local asset management. Company planned to add more debt to finance 17% share buyback.
<b>TOTAL</b>	<b>72,585</b>	<b>10,144</b>	<b>29,667</b>	<b>3,430</b>	<b>91,232</b>	<b>147,020</b>	<b>47,101</b>	<b>6</b>	<b>1</b>	

Source : Company data

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### ■ **Statement of Risk**

Our market earnings forecast and our market recommendations are dependent on several factors including : our macro view, the volatility of the Rupiah, government regulations and sector by sector specific risks.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.



UBS Investment Research  
Korea - Outlook 2009

Korea

Equity Strategy

Market Comment

H2 looks better than H1

3 December 2008

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■ Summary

For the first time in six years, Korea is likely to enter the New Year with undervaluation in P/BV terms relative to historical levels. While we expect YoY earnings declines to continue to be substantial, at least for H109, we forecast valuations to move towards normal levels. In past bear markets, when P/BV fell below 1 standard deviation, it took an average of 13-14 months to return to the mean of 1.1x. In the current downturn, P/BV fell below 1 standard deviation in late October 2008.

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■ What are the likely key themes for 2009?

We think buying opportunities might emerge at some time in H109 given 1) the potential stabilisation of the Won, which would be positive for earnings and the Kospi; 2) the earnings outlook is better for H209 than H109, at least due to a lower base in H208; and 3) the economic outlook may be similar to the earnings outlook. The Kospi generally recovers one to two quarters ahead of the economy.

■ What may surprise on the upside or downside?

On the upside, aggressive action from the government could restore confidence sooner than we expect. On the downside, the deleveraging of households and corporations could be substantial and take time, leading to longer and more pronounced weakness in economic growth.

■ Market valuation & targets, highlighted stocks and sectors

At a Kospi index level of 1,030, 2009E P/BV is 0.9x. Our end-2009 Kospi target is 1,250, based on 1.1x 2009E P/BV or the historical mean. We prefer companies with relatively resilient business. Given the weak Won, we also favour auto companies with less volatile product pricing. We think it might be too early to expect a cyclical rally, thus we are selective on cyclical stocks.

Table 1: Korea Top 7 Stocks List

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (Won)	Price Target (Won)	PE 2009E (x)
<b>Most Preferred</b>						
KT&G	033780.KS	7.579	Buy	77,000	107,000	12.8
Shinsegae	004170.KS	4.833	Buy	429,500	500,000	13.9
Hite Brewery	103150.KS	1.232	Buy	172,000	251,000	10.3
LG Telecom	032640.KS	1.892	Buy	10,450	13,000	7.6
Hyundai Motor	005380.KS	5.411	Buy	41,000	90,000	4.6
Hyundai Mobis	012330.KS	3.135	Buy	59,800	115,000	5.1
Dongkuk Steel	001230.KS	0.992	Buy	22,750	30,000	4.3

Data as at 1 December 2008. Source: UBS estimates

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# Outlook 2009 – Summary

## What are the likely key themes?

- **End-2009 Kospi target 1,250.** We set our end-2009 Kospi target at 1,250 based upon 1.1x 2009E P/BV, which has been the historical mean since 1990 (Chart 1). The multiple is based upon 11.5% sustainable ROE (the past 10-year average), 10.8% cost of equity and 3% terminal growth. We think PE is not meaningful at present because of poor earnings visibility and major earnings misses.
- **For the first time in six years, Korea will likely enter the New Year with undervaluation by P/BV relative to historical levels.** At a Kospi level of 1,030, 2009E P/BV is 0.9x, which is a 21% discount to the 1.14x historical mean.
- **Buying opportunities may come some time in H1 2009,** in our view, given 1) the potential stabilisation of the Won; 2) the earnings outlook is better for H209 than H109; and 3) the economic outlook may have a similar trend to earnings outlook.
- **Stabilisation of the Won—positive for exporters, the Kospi and earnings.** 1) The Won has weakened sharply against major currencies in the year-to-date. Korean exporters' competitiveness relative to global peers, especially Japanese, has improved by a significant margin. 2) When the Won stabilises, we expect earnings declines to moderate from around 60% YoY in Q308 to 30-40% since nearly a half of the 60% earnings decline in Q3 was due to FX-related valuation losses (see Tables 2 and 3). 3) A stable Won should also help reduce foreign selling of Korean stocks. The sharp Won depreciation has been one of the reasons behind the foreign selling, in our view.
- **2009 earnings outlook weak for H109, better for H2.** Substantial earnings declines on a YoY basis look inevitable till Q209, given expected weakness in macro demand and a high comparison base. In Q308, earnings declined around 60% YoY, about half of which was attributable to weak fundamentals (see Tables 2 and 3). However, in H209, the comparison base will be lower, at least.
- **The Kospi generally recovers one to two quarters ahead of the economy** (see Chart 2). Our economics team expects a recession in 2009 globally, as well as for the US and Korea. However, we expect GDP to bottom in Q209 followed by a moderately better outlook from Q309. In the past, the Kospi has tended to recover one-to-two quarters ahead of the economy.
- **The government actions likely continue.** We believe a decisive, substantial, and fast policy response is critical to restore confidence in the capital market. Until the capital market stabilises, we expect continued action from the government in Korea as well as other major countries. We think this could include: 1) a further rate cut by the Bank of Korea (BOK); 2) liquidity injections—the BOK's purchase of bank bonds, the setting up of a bond stabilisation fund to buy bonds, potentially government capital injections to banks, 3) increasing the supply of US dollars through BOK currency swap, the government guarantee of US\$ debt issued by banks, currency swaps with the US Federal Reserve, and 4) fiscal stimulus. We think the Kospi will likely respond to the measures sporadically, as it has recently.

**Market target: 1,250 at end-2009**

**Our target is based on 1.1x 2009E P/BV that is a historical mean**

## What is our central thesis for 2009?

**Valuations will likely move towards normal levels**, in our view. This is the main reason we expect about a 20% return in the Kospi. The historical mean P/BV since 1990 is 1.14x. In the past market corrections, once P/BV fell below 1 standard deviation of 0.85x, it took average 13-14 months to revert back to the mean of 1.1x. This time, P/BV fell below 1 standard deviation in late October 2008 (see Chart 1).

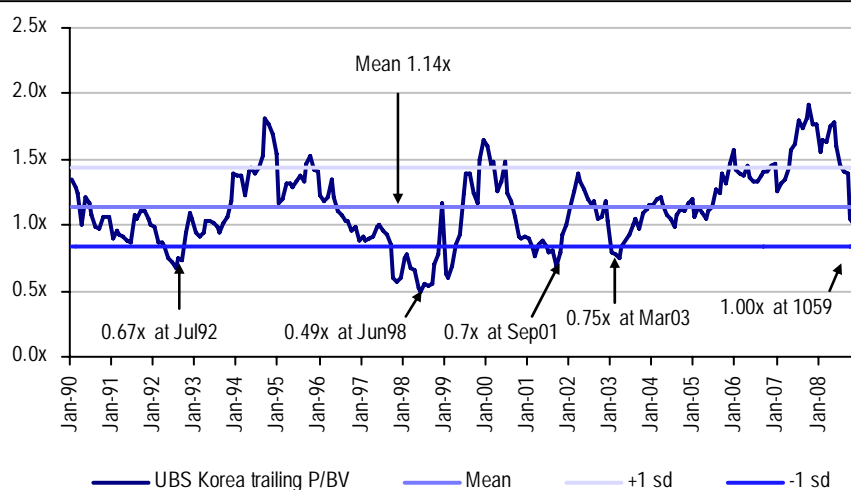
**Buying opportunity may come some time in H109**, in our view, given 1) the potential stabilisation of the Won, 2) the earnings outlook is better for H209 than H1, 3) the economic outlook trend could be similar to that of earnings. All these should lead valuations towards normal levels.

## What may surprise on the upside or downside?

**Upside:** the capital market could regain confidence sooner than expected on aggressive action from the government.

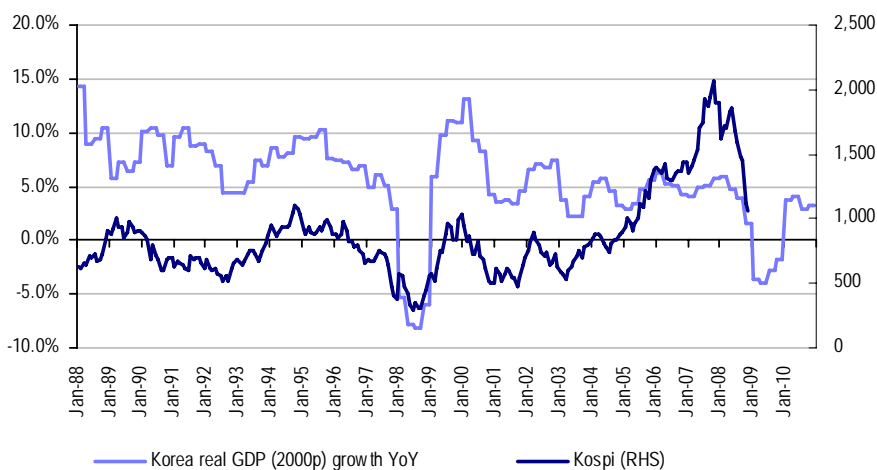
**Downside:** the de-leveraging of households and corporations could be long and substantial, leading to deeper and longer weakness in economic growth. This could lead to further downside to our earnings estimate.

**Chart 1: P/BV trend**



Source: Company data, UBS estimates

**Chart 2: Kospi versus GDP growth**



Source: Bank of Korea, UBS estimates

Table 2: Q3 results for top 30 stocks by market cap under UBS coverage

(Won bn)	Company	Operating Profit				Net Profit				Diff. vs. UBS	Diff. vs. IBES	Diff. vs. IBES		
		Q308	Q208	QOQ	YoY	Q307	QOQ	YoY	UBSE					
017670.KS	SK Telecom	504	533	-5.4%	537	-6.1%	334	298	12.0%	777	-57.1%	311	361	-7.5%
030200.KS	KT Corp.	329	368	-10.4%	338	-2.5%	161	161	0.6%	257	-37.3%	299	202	-46.0%
032390.KS	KTF	170	-14	TN	120	TN	74	-31	TP	63	17.0%	58	61	NM
042660.KS	DSME	107	190	-43.5%	76	41.0%	-85	115	TN	117	TN	135	135	-162.8%
009540.KS	Hyundai Heavy Industries	344	548	-37.2%	423	-18.8%	292	655	-55.5%	435	-32.9%	550	550	-46.9%
010140.KS	Samsung Heavy Ind.	143	193	-26.0%	119	19.7%	174	168	3.5%	142	23.1%	168	168	3.7%
005930.KS	Samsung Electronics	1,023	1,894	-46.0%	2,066	-50.5%	1,219	2,142	-43.1%	2,191	-44.4%	2,289	1,837	-46.8%
066570.KS	LG Electronics	571	856	-33.4%	362	57.8%	25	707	-96.5%	339	-92.7%	490	509	-94.9%
034220.KS	LG Display	190	831	-77.1%	709	TP	291	732	-60.2%	524	-44.5%	239	205	21.8%
000660.KS	Hynix Semiconductor*	-463	-183	NM	263	TN	-1,650	-708	NM	168	TN	-378	-378	NM
033780.KS	KT&G	230	263	-12.4%	233	-1.1%	229	224	2.2%	198	15.3%	208	218	5.2%
023530.KS	Lotte Shopping	149	202	-26.1%	168	-11.4%	123	168	-26.9%	151	-19.0%	171	162	-28.3%
004170.KS	Shinsegae	219	200	9.6%	215	1.6%	141	139	1.3%	144	-2.2%	153	153	-8.0%
005380.KS	Hyundai Motor	104	663	-84.2%	314	-66.7%	265	547	-51.6%	426	-37.8%	287	401	-33.9%
000270.KS	Kia Motors Corporation	54	117	-54.1%	-116	TP	-22	86	TN	-55	NM	75	89	TN
012330.KS	Hyundai Mobis	238	348	-31.5%	204	17.1%	184	316	-41.7%	183	0.7%	210	226	-18.3%
035420.KQ	NHN Corp	111	129	-13.4%	99	12.8%	83	93	-10.7%	70	17.8%	95	92	-10.1%
005490.KS	POSCO	1,984	1,885	5.3%	1,073	84.9%	1,219	1,476	-17.4%	871	39.9%	1,505	1,306	-6.7%
010950.KS	S-Oil	487	704	-30.9%	140	246.7%	130	369	-64.7%	105	23.4%	228	228	-42.9%
096770.KS	SK Energy	733	532	37.7%	418	75.2%	472	259	82.1%	332	42.3%	244	244	93.0%
015760.KS	KEPCO	-27	-277	NM	1,796	TN	-325	-464	NM	1,163	TN	702	706	-146.3%
047040.KS	Daewoo E&C	98	136	-28.3%	161	-39.5%	124	65	92.4%	141	-11.9%	68	108	15.0%
012630.KS	Hyundai Development Co.	54	106	-49.0%	117	-54.2%	43	91	-53.3%	85	-50.0%	53	56	-23.8%
060000.KS	Kookmin Bank	938	1,079	-13.1%	1,007	-6.8%	568	644	-11.8%	775	-26.7%	556	697	-18.4%
053000.KS	Woori Finance Holdings	569	846	-32.7%	767	-25.8%	157	415	-62.1%	323	-51.3%	465	503	-68.7%
055550.KS	Shinhan Financial Group	817	1,242	-34.2%	879	-7.0%	323	791	-59.1%	524	-38.3%	655	682	-52.6%
086790.KS	Hana Financial Group	303	518	-41.5%	494	-38.6%	-73	310	TN	400	TN	164	249	-129.4%
004940.KS	Korea Exchange Bank	453	444	1.9%	354	27.9%	151	246	-38.8%	194	-22.4%	172	229	-34.1%
000810.KS	Samsung F&M	221	234	-5.7%	164	34.8%	149	164	-9.0%	112	32.8%	154	171	-12.9%
016360.KS	Samsung Securities	29	94	-69.0%	117	-75.1%	30	77	-61.2%	95	-68.8%	50	79	-62.5%
<b>By Sector</b>														
<b>Telecommunications</b>		1,003	887	13.1%	995	0.9%	569	427	33.2%	1,097	-48.2%	667	624	-8.8%
<b>Transportation &amp; Shipbuilding</b>		594	930	-36.2%	618	-4.0%	381	939	-59.4%	693	-45.0%	853	853	-55.3%
<b>Technology</b>		1,321	3,397	-61.1%	3,399	-61.2%	-116	2,873	TN	3,223	TN	2,640	2,172	-105.3%
<b>Consumer</b>		598	664	-9.9%	617	-3.0%	492	531	-7.2%	494	-0.3%	533	533	-7.6%
<b>Auto</b>		397	1,128	-64.8%	401	-1.1%	427	949	-55.0%	554	-22.9%	572	715	-40.3%
<b>Media, Internet, Others</b>		111	129	-13.4%	99	12.8%	83	93	-10.7%	70	17.8%	95	92	-10.1%
<b>Basic Materials (ex-SK Energy)</b>		2,471	2,589	-4.6%	1,213	103.7%	1,349	1,844	-26.9%	977	38.1%	1,733	1,533	-12.0%
<b>Utilities</b>		-27	-277	NM	1,796	TN	-325	-464	NM	1,163	TN	702	706	-146.0%
<b>Construction</b>		151	242	-37.3%	279	-45.7%	167	156	7.1%	227	-26.3%	121	164	1.7%
<b>Financials</b>		3,331	4,457	-25.3%	3,781	-11.9%	1,305	2,648	-50.7%	2,424	-46.1%	2,215	2,610	-50.0%
<b>Total</b>		9,950	14,146	-29.7%	13,616	-26.9%	4,332	9,996	-56.7%	11,253	-61.5%	9,418	10,247	-57.7%
<b>Total (ex-KEPCO)</b>		9,977	14,423	-30.8%	11,820	-15.6%	4,657	10,460	-55.5%	10,090	-53.8%	8,716	9,541	-51.2%
<b>Total (ex-financial)</b>		6,619	9,689	-31.7%	9,835	-32.7%	3,027	7,348	-58.8%	8,829	-65.7%	7,375	7,637	-60.4%
<b>Total (ex-KEPCO &amp; financial)</b>		6,646	9,966	-33.3%	8,039	-17.3%	3,352	7,812	-57.1%	7,666	-56.3%	6,673	6,931	-51.6%

Note: \* IBES consensus for UBS estimates. OP for banks is PPOP.

Source: Company data, Bloomberg, UBS estimates

Table 3: UBS annual earnings forecast—UBS Korea Universe

Sector	Sales			EBIT			EBITDA			Net Profit			Net profit growth YoY		
	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E
Telecommunications	38,319	40,412	40,939	4,675	4,130	4,626	10,802	10,283	10,763	3,272	2,196	2,809	-3.9%	-32.9%	27.9%
Transportation & Shipbuildings	59,737	74,644	88,316	4,157	4,646	4,596	6,297	6,989	7,080	3,282	1,415	3,663	58.5%	-56.9%	158.9%
Technology	139,598	160,473	158,757	10,810	11,101	2,401	28,096	29,462	20,205	10,344	5,057	1,377	9.5%	-51.1%	-72.8%
Consumer Staple	10,858	10,005	10,658	1,947	1,956	2,178	2,381	2,335	2,558	1,275	1,401	1,630	-3.7%	9.8%	16.4%
Consumer Discretionary	84,011	91,206	94,715	4,762	6,073	6,321	6,898	8,414	8,723	4,121	4,734	5,133	4.9%	14.9%	8.4%
Media, Internet, Others	3,417	3,894	3,262	1,013	1,522	1,323	1,130	1,631	1,409	995	1,480	1,400	101.1%	48.8%	-5.4%
Basic Materials	81,432	136,300	117,739	8,827	15,558	9,370	12,163	19,430	13,382	7,135	10,393	6,955	26.1%	45.7%	-33.1%
Utilities	31,045	34,161	36,809	2,876	244	-2,262	8,790	6,207	3,944	1,524	-744	-2,115	-32.2%	TN	NM
Construction	28,198	32,945	38,224	2,334	2,506	2,517	2,516	2,689	2,712	2,510	2,199	2,213	63.9%	-12.4%	0.6%
Financials - Banks	NA	NA	NA	NA	NA	NA	NA	NA	NA	11,660	7,958	5,859	14.8%	-31.8%	-26.4%
Financials - Non Life Insurance	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,104	1,217	1,201	92.4%	10.3%	-1.3%
Financials - Brokerages	NM	NM	NM	NM	NM	NM	NM	NM	199	1,297	695	977	19.8%	-46.5%	40.7%
UBS Korea Universe Total	476,615	584,041	589,421	41,400	47,736	31,070	79,074	87,439	70,976	48,520	36,000	31,102	15.7%	-21.7%	-18.2%
UBS Korea Universe Total (ex-KEPCO)	447,477	551,959	554,774	38,579	47,555	33,401	70,283	81,233	67,031	47,053	36,810	33,288	18.6%	-17.5%	-14.2%
UBS Korea Universe Total (ex-financial)	476,615	584,041	589,421	41,400	47,736	31,070	79,074	87,439	70,976	34,458	28,131	23,065	14.5%	-18.4%	-18.0%

Source: Company data, UBS estimates

## What are the likely key catalysts?

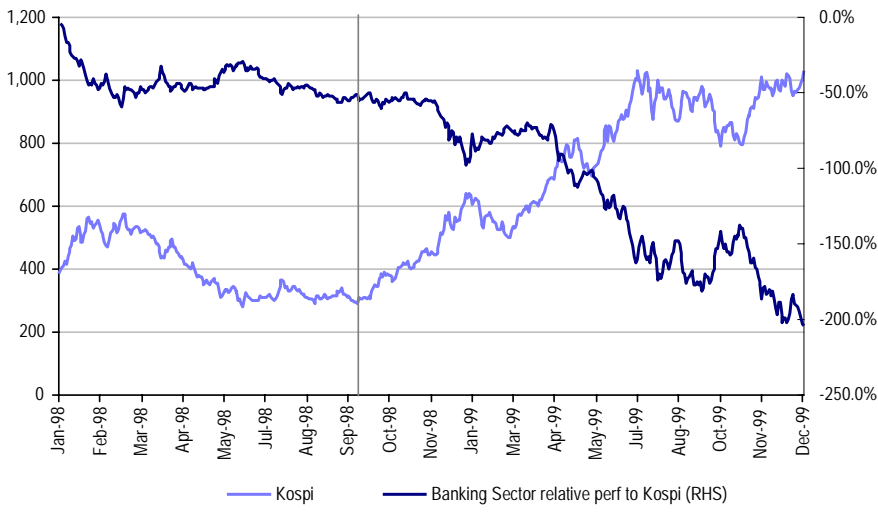
- A stable Won, a better earnings outlook in H209 compared with H109, and the government action to stabilise the capital markets and stimulate the economy are the likely catalysts.

## Key stock/sector ideas

We prefer companies with relatively resilient business at the moment. Given the weak Won, we also favour exporters with less volatile product pricing and cheap valuations. We think it may be too early for a cyclical rally, thus we are very selective on cyclical stocks.

- **Prefer resilient business with reasonable valuations.** We prefer companies with relatively resilient business, strong cash flows versus debt, and reasonable valuations as we think the demand weakness will likely deepen and liquidity concerns may remain for a while. Our top picks in this category are KT&G, Shinsegae, Hite Brewery, LG Telecom and Hyundai Mobis (given its aftermarket parts business).
- **Prefer beneficiaries of weak Won.** The Won has weakened sharply in the year-to-date—by 57% against the US dollar, 36% against the euro and 84% against the Yen. Korean exporters' competitiveness relative to global peers, especially those in Japan, has improved by a substantial margin. Our top picks in this category are Hyundai Motor and Hyundai Mobis.
- **Too early to increase beta. Hyundai Motor and Dongkuk Steel.** We believe it may be too early to expect a cyclical rally, given that it may take a while before macro demand starts to recover. We may increase beta some time in H109 on our expectation of better earnings and macro demand in H209. At the moment, we are very selective in cyclicals. Our top picks in this category are Hyundai Motor and Dongkuk Steel.
- **Banks—bailout will likely start.** The government is encouraging many construction companies to enter a type of pre-bailout programme known as a 'creditors' agreement', because of concern about liquidity and a record high number of unsold apartments. There could be more such bailouts, which would become a burden for banks. We note that during the Asian financial crisis, the banking sector lagged the bottom of the Kospi by 12 months, and also remained a laggard during the Kospi rally that started in Oct 1998 (Chart 3). We believe it may be too early to buy banks.

Chart 3: Kospi versus banking sector during 1998 crisis and onwards



Source: Korea Exchange

## Korea Top 7

In this section we present company commentary for our Top 7 stocks in conjunction with the company analysts.

Our current Top 7 includes the following stocks:

### Korea Top 7

Stock	Rating	Price target	Overview
<b>Most Preferred</b>			
<b>KT&amp;G</b>	Buy	107,000	1) High earnings growth visibility in 2009E, given defensive demand and relatively stable raw material costs; 2) solid growth potential from exports and ginseng business; 3) solid cash return policy
<b>Shinsegae</b>	Buy	500,000	1) Most defensive retailer in Korea given its high exposure to discount stores (around 80% of OP); 2) beneficiary of potential consumption trading down trend in Korea
<b>Hite Brewery</b>	Buy	251,000	1) Resilient and stable beer demand; 2) meaningful margin recovery expected from Q209 on falling malt price; 3) its strong pricing power and oligopoly competition structure
<b>LG Telecom</b>	Buy	13,000	1) Stable competition implies good earnings visibility. LGT does not have plans to boost market share or revenue through aggressive marketing; 2) attractive valuation
<b>Hyundai Motor</b>	Buy	90,000	1) Cheap valuation; 2) the prime beneficiary of a weak Won; and 3) meaningful market share gain amid weak demand
<b>Hyundai Mobis</b>	Buy	115,000	1) Resilient aftermarket parts business (around 70% of OP) ; 2) Strong aftermarket margins expected in 2009, due to a weaker Won and increasing high-margin exports
<b>Dongkuk Steel Mill</b>	Buy	30,000	1) high exposure to plates (around 60% of OP) whose demand is still strong given high shipbuilding backlog; 2) low risk of Ssangyong E&C, given exceptionally high bid price versus the current share price; 3) depressed valuation

Source: UBS. Priced as at market close on 1 December 2008

We summarise briefly the investment case into 2009, current valuation and likely catalysts for each of the stocks in our Top 7 list below:

### LG Telecom (032640.KS)

Competition in the Korean wireless industry has started to ease due to (i) a shift in operators' focus towards profit margins from market share; (ii) a slowdown in the migration of subscribers to 3G; and (iii) the signing of lock-up contracts from Q208. This is evident from a drop in industry gross adds and churn trend. We think this is positive for the wireless sector and LG Telecom. We believe LG Telecom management has shown it can fulfil its commitment of preserving margins. While the interconnection rate decision, due before the end of 2008, is a near-term concern for LG Telecom, we believe this risk is more than priced in at the current share price.

**Valuation:** Our price target of Won13,000 is based on DCF using 8.8% WACC and 0% terminal growth.

**Table 4: Korean wireless sector valuation comps (2009E)**

	SK Telecom	KTF	LG Telecom
EV/EBITDA (x)	4.2	3.7	4.0
PE (x)	10.9	17.7	7.6
eFCF yield	9.7%	9.7%	8.2%
Dividend yield	4.4%	1.8%	4.0%

Source: UBS estimates

**Sector:** Telecom

**Rating:** Buy

**PT:** Won13,000

**Analyst:** Josh Bae



**2009 catalysts:** We believe positive subscriber data points and earnings results would be catalysts for LG Telecom in 2009. Another potential positive catalyst is discussion of industry consolidation in the Korean telecom sector. Potential negative catalysts are discussions regarding tariff cuts, MVNO introduction or additional spectrum fee.

### KT&G (033780.KS)

We like KT&G, because of: 1) its high earnings growth visibility in 2009E, due to the defensive demand for cigarette products and relatively stable raw material cost trend; 2) its solid growth potential from exports and ginseng business; and 3) solid cash return policy—we estimate KT&G should use approximately Won600bn for dividends and buybacks every year, which is over 5% of current market cap.

**Valuation:** Our price target of Won107,000 is based on DCF methodology assuming 8.5% WACC and 1% terminal growth. We think KT&G's valuation is reasonable at 12.8x 2009E PE, in line with the global tobacco company average of 13.9x. The stock is trading at around a 37% premium to the market and we think this is not excessive given its high visibility in earnings growth next year.

**2009 catalysts:** We believe domestic market share gain or decline will be the key catalysts.

### Shinsegae (004170.KS)

We like Shinsegae, given its defensive business during the macro downturn. Shinsegae's sales and operating profit have been growing every year since 1997—even during the recession periods of 1998, 2001 and 2003. Since more than 80% of its OP comes from the discount store business, we think Shinsegae is the most defensive stock among its peers.

**Valuation:** Our price target is based on a sum of the parts, using DCF for core business, 1x book value for Samsung Life, and 10x 2009E PE for associated income. Shinsegae trades at 12.2x 2009E PE (Samsung Life value adjusted), which is a 31% premium to the Korea market. However, the valuation premium does not look excessive, as global major discount stores also trade at an average 30% premium to their respective markets.

**2009 catalysts:** Retail same store sales growth trend could be a key catalyst.

### Hite Brewery (103150.KS)

We like Hite Brewery due to: 1) resilient and stable beer demand; 2) meaningful margin recovery expected from Q209 on a falling malt price; 3) its strong pricing power and oligopolistic competition structure.

**Valuation:** The stock is trading at 10.3x 2009E PE compared with the global brewery average of 12.7x. Our price target of Won251,000 is based on DCF (11.2% COE, 3% terminal growth), and implies 15x 2009E PE.

**2009 catalysts:** The 2009 malt contract price and the potential sale of Oriental Brewery could be key catalysts for Hite Brewery's share price and earnings outlook in 2009.

**Sector:** Consumer

**Rating:** Buy

**PT:** Won107,000

**Analyst:** Heather Lee

**Sector:** Consumer

**Rating:** Buy

**PT:** Won500,000

**Analyst:** Heather Lee

**Sector:** Consumer

**Rating:** Buy

**PT:** Won251,000

**Analyst:** Heather Lee

## Hyundai Motor (005380.KS)

We like Hyundai Motor as 1) it is the prime beneficiary of a weak Won. Hyundai is perhaps the biggest currency beneficiary in the global auto industry; 2) its market share will likely increase meaningfully overseas amid weak demand; and 3) its moderate EPS growth in 2009E.

**Valuation:** We believe its valuation is attractive at 4.6x 2009E PE and 0.41x 2009E P/BV, 0.38x 2010E P/BV. Our price target of Won90,000 is based on 10x 2009E PE.

**2009 catalysts:** Once the Won exchange rate stabilises, Hyundai could book full currency benefit in its income statement without further material valuation loss on FX debt and FX hedging.

## Hyundai Mobis (012330.KS)

We like Hyundai Mobis because: 1) it has a resilient and non-cyclical aftermarket parts business (around 70% of OP)—its aftermarket revenue has grown every year at an 8% CAGR since 2000; 2) we expect aftermarket margins to continue to be strong in 2009 due to a weaker Won and increasing high-margin exports.

**Valuation:** We believe Hyundai Mobis's valuation is attractive at 5.1x 2009E PE and 4.8x 10E PE. Our price target of Won115,000 is based on 10x 2009E PE.

**2009 catalysts:** Resilient earnings announcements amid weak economy should act as catalyst.

## Dongkuk Steel (001230.KS)

We like Dongkuk Steel as 1) around 60% of its operating profit is from plates, demand for which is still strong given the high-level of shipbuilding backlog and 2) the risk of acquiring a 50% stake in Ssangyong E&C seems low due to its exceptionally high bid price (Won31,000/share) compared with the current share price (Won6,600).

**Valuation:** We think Dongkuk Steel's valuation is very attractive at 4.3x 2009E PE and 0.48x 2009E P/BV. Our 12-month price target of Won30,000 is based on 0.63x 2009E P/BV (9% 3-year forward ROE, 12.5% COE, and 3% perpetual growth).

**2009 catalysts:** If Dongkuk Steel decides to withdraw its bid to acquire Ssangyong E&C, we think the market could respond positively.

**Table 5: Valuation—Korea Top 7**

Name	Code	Price	Rating	PE (x)		P/BV (x)		ROE (%)		Yield (%)	Net debt to EBITDA	2008E NP UBS vs IBES	2008E NP (Won bn)	
				08E	09E	08E	09E	08E	09E				08E	IBES
KT&G	033780.KS	77,000	Buy	13.6	12.8	3.1	2.8	23.9	22.8	3.6%	Netcash	-2%	784	801
Shinsegae	004170.KS	429,500	Buy	14.7	13.9	2.1	1.8	15.4	14.1	0.3%	2.9x	-8%	552	600
Hite Brewery	103150.KS	172,000	Buy	13.9	10.3	2.8	2.3	12.3	24.7	1.7%	2.1x	-2%	116	118
LG Telecom	032640.KS	10,450	Buy	9.1	7.6	1.5	1.3	17.0	18.0	3.3%	0.8x	0%	320	318
Hyundai Motor	005380.KS	41,000	Buy	5.0	4.6	0.4	0.4	9.1	9.2	2.7%	Netcash	-12%	1,708	1,943
Hyundai Mobis	012330.KS	59,800	Buy	5.2	5.1	1.0	0.9	21.1	18.0	2.1%	Netcash	2%	988	966
Dongkuk Steel	001230.KS	22,750	Buy	3.2	4.3	0.5	0.5	17.6	11.5	3.3%	2.1x	19%	438	369

Data as at 1 December 2008. Source: UBS estimates, Bloomberg consensus.

**Sector:** Autos

**Rating:** Buy

**PT:** Won90,000

**Analyst:** Young Chang

**Sector:** Autos

**Rating:** Buy

**PT:** Won115,000

**Analyst:** Young Chang

**Sector:** Steel

**Rating:** Buy

**PT:** Won30,000

**Analyst:** Yong-Suk Son

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■ **Statement of Risk**

Forecasting earnings and corporate financial behaviour is difficult because it is affected by a wide range of economic, financial, accounting and regulatory trends, as well as changes in tax policy.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

# UBS Investment Research

## Malaysia - Outlook 2009

Malaysia

Equity Strategy

Market Comment

### Outlook 2009

3 December 2009

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#### ■ Summary

We think Malaysia could prove to be a defensive market in 2009. Politics is now less of a risk, with a leadership transition plan in place. While negative risks to the economy have risen, we think these risks are manageable as long as the global economic environment does not deteriorate further. However, we have been selective in picking stocks, as we believe not all stocks have reached attractive valuations.

#### ■ What are the likely key themes for 2009?

We see fiscal/monetary pump-priming and normalisation of corporate earnings (in 2010) as key themes for 2009. We believe the Malaysian government will pursue expansionary policies in 2009 to avert a recession. This should bode well for banks and construction stocks. We also think that by H209, investors will begin to look forward to 2010 and identify companies poised for a sharp earnings turnaround.

#### ■ What may surprise on the upside or downside?

We think the following could materially affect our earnings forecasts: 1) the global economic outlook; 2) momentum in commodity prices; and 3) banks' asset quality trend. Of these, we believe NPL trends have the highest risk to our earnings.

#### ■ Market valuation & targets, highlighted stocks and sectors

We set our end-2009 KLCI target at 1,000, but stress that an economic hard landing (versus our base case of a soft landing) may lead the KLCI to test its lowest trailing P/BV of 0.9x (KLCI: 587). Our most preferred stocks are Public Bank, Resorts World, Petronas Gas (defensive plays with low earnings and dividend risks) and AMMB (turnaround play). Our least preferred stocks are Sime Darby and Bursa Malaysia.

**Table 1: Malaysia Most & Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Public Bank	PUBME.KL	8.1	Buy	8.35	9.25	12.9
Petronas Gas	PGAS.KL	5.3	Buy	9.75	11.50	18.0
Resorts World	RWBW.KL	3.6	Buy	2.27	3.30	10.9
AMMB Holdings	AMMB.KL	1.5	Buy	2.00	2.86	7.4
<b>Least Preferred</b>						
Sime Darby	SIME.KL	8.4	Sell	5.10	4.54	16.2
Bursa Malaysia	BMYS.KL	0.8	Sell	5.20	5.70	24.5

Data as at 1 December 2008. Source: UBS estimates

KDN: PP8170/01/2009(020496)

**This report has been prepared by UBS Securities Malaysia Sdn Bhd.**  
**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

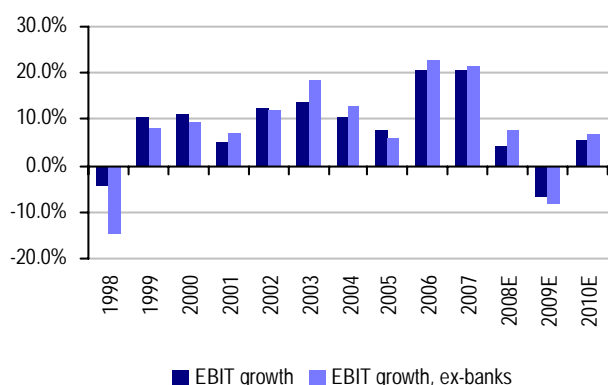
We see two themes playing out in 2009: 1) implications of fiscal and monetary pump-priming; and 2) normalisation of corporate earnings in 2010. In our view, the Malaysian government will pursue expansionary policies in 2009 to avert a recession. This should bode well for banks and construction stocks. We also think an accommodative monetary policy should ease the NPL risk for banks, as consumers and companies get access to affordable credit.

By H209, we believe some investors might begin to look forward to 2010 and identify companies that appear poised for a sharp earnings turnaround. Of the companies we cover, we think Tenaga, Genting, and AMMB Holdings are poised to register more than 25% EPS growth in 2010. Tenaga should benefit from lower coal prices, while Genting should begin to record a contribution from its Sentosa integrated resort project.

**KLCI target: 1,000**

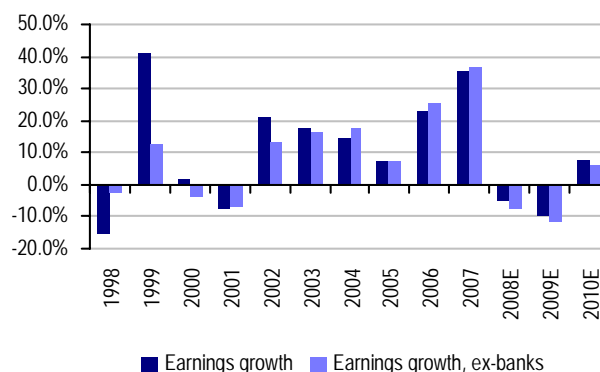
**Our target is based on the average of three methodologies (historical PE, ROE/COE, and earnings yield gap)**

**Chart 1: EBIT growth (YoY)—UBS Malaysian universe**



Source: UBS estimates

**Chart 2: Net profit growth (YoY)—UBS Malaysian universe**



Source: UBS estimates

## What is our central thesis for 2009?

Our end-2009 KLCI target of 1,000 assumes that Malaysia experiences an economic soft landing in 2009/10. We currently project zero GDP growth in 2009, recovering to 4.3% in 2010. Our 2009 GDP growth forecast reflects our pessimistic view on the global economy and assumes: 1) exports contract 13% YoY; 2) gross fixed capital formation declines to -4.9% YoY; 3) private consumption grows at 3.3% YoY, and 4) government consumption rises 9.5% YoY.

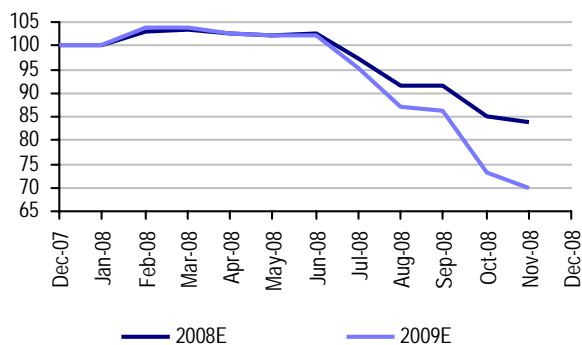
**Table 2: Deriving our KLCI target**

Index target based on:	End-2008E		End-2009E		Comment
	Index	PE	Index	PE	
(1) Historical average PE	916.33	13.4	1,008.45	13.4	Based on -1 standard deviation from historical average PE of 15.6x
(2) ROE/COE	977.12	14.3	877.57	11.7	Based on UBS 2008-09 EPS estimates, cost of equity of 10.5% in 2008E and 10% in 2009E
(3) Earnings yield gap	941.41	13.8	1,112.74	13.8	Assumes one-year bond yield of 4% in 2008 and 3.5% in 2009
<b>Average</b>	<b>944.96</b>	<b>13.8</b>	<b>999.59</b>	<b>13.3</b>	

Source: UBS estimates

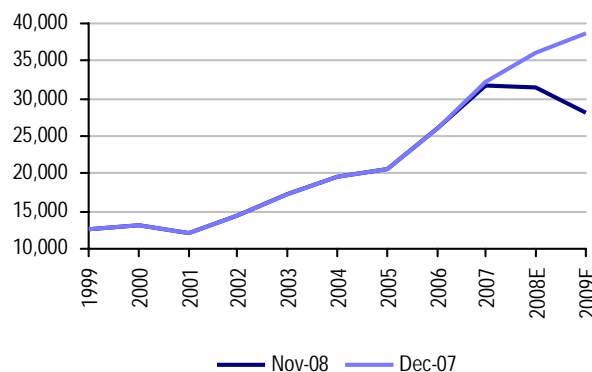
Our 2009 macro outlook also assumes that inflation is no longer a key risk and that the Ringgit stages a recovery in late 2009 as capital outflows ease. Against our macro outlook, we are forecasting an EPS decline of 9% in 2008 and 10% in 2009. Despite our negative earnings outlook, we expect our universe of stocks to maintain a dividend yield of approximately 4% in 2009.

**Chart 3: UBS market EPS trend (Malaysian universe)**



Source: UBS estimates

**Chart 4: Aggregate net profit for our Malaysian universe (RM m)**



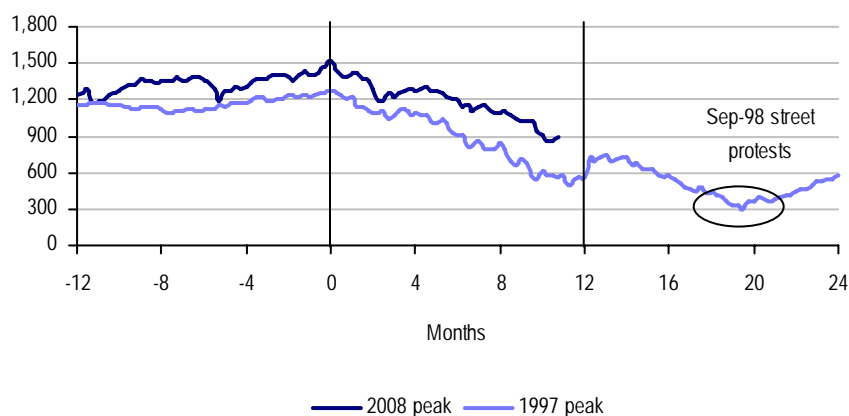
Source: UBS estimates

## What may surprise on the upside or downside?

We think the following could materially affect our earnings forecasts: 1) a positive or negative change to the global economic outlook; 2) momentum in commodity prices; and 3) banks' asset quality trend. Of the three, we believe NPL trends have the highest risk to our earnings.

Meanwhile, our 2009 macro and earnings forecasts are highly sensitive to commodity prices. We believe the direction of oil prices will likely determine the degree of fiscal stimulus, while the direction of palm oil and coal prices could materially affect our earnings forecasts. Finally, assuming an economic hard landing, we think the KLCI could test its lowest trailing P/BV of 0.9x (KLCI: 587).

**Chart 5: KLCI performance—repeat of 1998?**



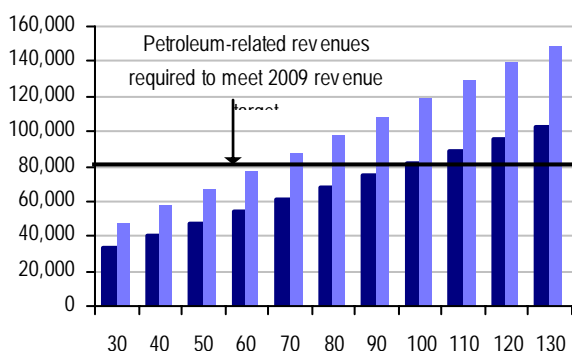
Note: Month 0 represents the peak for KLCI during the period (28 February 1997 and 11 January 2008).

Source: UBS estimates

## What are the likely key catalysts?

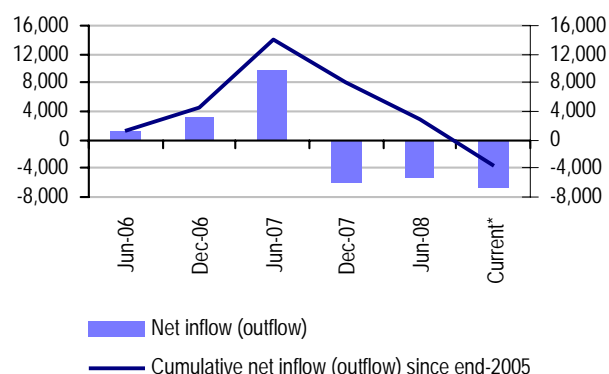
- Orderly leadership transition.** We expect the UMNO Party elections in March 2009 to confirm the current political stability. With a political hierarchy in place, we believe the key politicians will now focus mainly on tackling economic and national development issues.
- Strengthening of the Ringgit.** We expect the Malaysian Ringgit to stage a recovery on a 12-month horizon as capital outflows ease. We believe negative financial flows for most of 2008, as a result of de-leveraging and de-risking portfolios, have led to foreign holdings of Malaysian bonds and equities falling to pre-2005 levels.
- Direction in oil prices.** On the negative side, if crude oil prices fall below US\$60/bbl, we estimate that Petronas would need to pay out 100% of profits in order for the government to keep petroleum-related revenues in 2010 at 2009 levels. Although lower end-user fuel prices should bode well for consumer sentiment, we think the fallout in government revenues could dampen economic growth further in 2010. On the positive side, rising oil prices should lead to windfall revenues for the government for subsidies and domestic pump-priming.

Chart 6: Petroleum-related revenues versus oil prices



Source: UBS estimates

Chart 7: Trend in foreign equity flows



Source: Bursa Malaysia, UBS estimates

## Key stock/sector ideas

Under the current global economic and financial market conditions, we believe well-managed companies trading at what we consider to be reasonable valuations should outperform on a 12-month investment horizon. Our most preferred stocks are: Public Bank, Petronas Gas, Resorts World, and AMMB Holdings.

## Malaysia Most & Least Preferred

In this section, we present commentary on stocks in our Most & Least Preferred stock list.

### Malaysia Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most preferred</b>			
Public Bank	Buy	9.25	Low earnings risk with solid track record; our forecasts assume sharp uptick in NPLs
Petronas Gas	Buy	11.50	Low earnings risk with c70% of EBIT guaranteed by Petronas
Resorts World	Buy	3.30	Minimal earnings risk; hike in gaming tax possible but unlikely, in our view
AMMB Holdings	Buy	2.86	Potential earnings upside from ANZ's pro-active initiatives
<b>Least preferred</b>			
Sime Darby (M)	Sell	4.54	High earnings risk with weak outlook for CPO, heavy equipment, property, autos
Bursa Malaysia	Sell	5.70	Earnings risk from lower turnover velocity given backdrop of global de-leveraging

Data as at 1 December 2008. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

### Most Preferred Public Bank

**Investment case:** We believe Public Bank's proven risk management and dominant retail franchise should enable it to sustain a pre-goodwill ROE of 25% in 2009-10E. This should support its premium valuations, in our view. Given that Public Bank has further strengthened its risk management systems and sales distribution network, we also think it could be in a strong position to expand its market share in the near term.

Between 1997 and 2007, Public Bank increased its share of industry loans from 5% to 16%. The bulk of this increase occurred following the 2001 recession (market share of 5% in 2000 to 16% in 2007). Public Bank has further strengthened its risk management systems and sales distribution network, and we therefore think the bank could be even better positioned today to expand its market share.

**Valuation:** We base our price target on the Gordon Growth Model, which assumes an H109 ROE of 22.7%, cost of equity of 9%, and long-term growth of 4% (implies a c80% dividend payout).

**2009 catalysts:** We see consistent quarterly earnings performance and confirmation on the amount of its dividend payments as the key drivers for a re-rating of the stock. In our view, a consistent quarterly earnings performance and dividend payments (we forecast 2009 net DPS of RM0.49 or a 75% payout of 2009 earnings) should be a clear sign of the bank's solid risk management and business franchise.

**Risks:** Our forecasts and rating for Public Bank are based on our assumptions that: 1) it continues to achieve higher-than-industry loan growth of 12-15% pa for the next two years; and 2) it will benefit from the implementation of Basel II capital requirements, which we expect will enable the group to sustain its dividend policy in 2008-09.

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** RM9.25

**Analyst:** Colbert L. Nocom



## Petronas Gas

**Investment case:** We see limited earnings risk in the near term given that 70% of Petronas Gas' earnings are guaranteed by its parent, Petronas, via a gas processing and transmission agreement expiring in March 2015. Annual free cash flow (FCF, post-capex) of RM1.4bn should support a dividend yield of around 4.5% (assuming 60% payout of FCF) and still provide room for investments and M&A.

**Valuation:** Our DCF-derived price target uses our FY09-11 FCF forecast, and assumes a WACC of 8.4% and 1% terminal growth. We value 20%-owned Gas Malaysia at 15x PE.

**2009 catalysts:** We view clarity on the utilisation of its cash and a turnaround of its utilities business in H2 FY09 as key catalysts for 2009. The company is finalising a shareholders' agreement to participate in a 300MW gas-fired project in Sabah. If the project goes ahead, we think it should provide better clarity on dividend payments in CY09. Meanwhile, we believe an ongoing review of the company's pricing agreement with customers should anchor a turnaround in its utilities business in H2 FY09.

**Risks:** We believe the main risks to our earnings estimates and valuation are: 1) a sudden shutdown of one of its gas separation plants; 2) a material change in its gas processing and transmission agreement with its parent, Petronas (the current agreement expires in 2010); 3) earnings volatility from its 20%-owned associate, Gas Malaysia; 4) a change in the company's capital management strategy; and 5) M&A or a major capacity expansion.

## Resorts World

**Investment case:** In a tight credit environment and with depressed equity markets, Resorts World's (Resorts) US\$1.2bn net cash puts it in a strong position, relative to its peers, to expand through M&A. Although we forecast an earnings contraction, we expect Resorts to weather the downturn better than its peers because of its status as Malaysia's only casino.

**Valuation:** Our DCF-based price target of RM3.30 assumes a WACC of 9.7% and long-term growth of 4%. At our price target, Resorts would trade at 16x 2009E PE.

**2009 catalysts:** We view clarity on the company's M&A plans as a key catalyst for 2009. In a tight credit environment and with depressed equity markets, we believe Resorts' US\$1.2bn net cash puts it in a strong position, relative to its peers, to expand through M&A. Although we forecast an earnings contraction, we expect Resorts to weather the downturn better than its peers because of its status as Malaysia's only casino.

**Risks:** We believe the main risk to our earnings forecasts and valuation for Resorts is if gaming revenue falls. This could happen because of a slowdown in the economy and because of increased competition from casinos in Asia. Given the nature of gaming, fluctuations in the casino hold rate may also affect profitability. Increased costs, in particular wages, might affect margins. Investors will also have to consider reinvestment risks given that Resorts does not fully pay out its free cash flow and has ambitions to expand its operations regionally.

**Sector:** Gas Utilities

**Rating:** Buy

**PT:** RM11.50

**Analyst:** Colbert L. Nocom

**Sector:** Lodging

**Rating:** Buy

**PT:** RM3.30

**Analyst:** Alain Lai

## AMMB Holdings

**Investment case:** At 1x forward P/BV, we think AMMB provides good value on a 12-month investment horizon. With signs that ANZ's strategic initiatives are starting to bear fruit, we believe AMMB is unlikely to face a major deterioration in ROE over the next 12 months.

**Valuation:** We base our price target of RM2.86 on the Gordon Growth Model, which assumes an H1 FY10 ROE of 11.5%, a WACC of 9.8%, and a long-term growth rate of 4%. At our price target, AMMB would trade at 1.2x 2009E P/BV.

**2009 catalysts:** In our view, evidence of further operating improvements arising from ANZ's initiatives and stable asset quality trends are key catalysts for the stock in 2009. We think AMMB's current valuations appear to be discounting an even sharper deterioration in profitability. While AMMB has historically been prone to higher asset quality risk in times of economic stress, we think last year's write-downs and ANZ's entry should allow AMMB to weather this slowdown better.

**Risks:** We believe the key risk to our forecasts and valuation is an adverse deterioration in AMMB's retail portfolio, particularly the hire purchase portfolio, and the resultant provisioning requirement.

## Least Preferred Sime Darby

**Investment case:** We think the stock's EV/CE of 2.5x is unjustified given its ROCE of less than 10% (in 2009-10E) and high earnings risk due to the poor outlook for most of its core divisions (plantations, property, autos, heavy equipment).

**Valuation:** We base our price target on a sum-of-the-parts valuation where the plantation division is valued on a DCF assuming a long-term price of US\$570/tonne and long-term growth of 4%. Non-plantations divisions are valued on 8x FY09E earnings.

**2009 catalysts:** We view weak momentum for crude oil prices (CPO) as the key catalyst for the stock's potential underperformance. While we are positive on the long-term prospects for the oil palm industry and see some value at current share prices, the outlook for next year's CPO price looks challenging. Aside from the continued influence of crude oil prices, tight credit and fund flows, fundamental demand has been adversely affected by slowing economic growth and supply may not be as tight as we had previously thought.

**Risks:** We believe the main risk to our earnings forecasts and valuation for Sime Darby is if the palm oil price falls. The palm oil price can be affected by a wide variety of factors, including weather, trade policies, currency movements, the price of substitute vegetable oils and even crude oil. In the long term, the palm oil price might also be affected by consumer preferences and environmental NGOs. With regard to its non-plantation business; property development and investment, heavy equipment and auto distribution; Sime Darby's earnings might be affected by economic cycles, investor sentiment and interest rates.

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** RM2.86

**Analyst:** Colbert L. Nocom

**Sector:** Industrial Services

**Rating:** Sell

**PT:** RM4.54

**Analyst:** Alain Lai

## Bursa Malaysia

**Investment case:** Bursa Malaysia (Bursa) is the most expensive stock in our global exchange universe in terms of PE and EV/EBITDA. Given our view of a lacklustre trading outlook for the Malaysian market near term and the low likelihood of a meaningful special cash dividend, we think the stock's premium valuation is not justified.

**Valuation:** We derive our price target using DCF analysis based on our implicit 2008-12 FCF estimates (FCF CAGR of 5%), a WACC of 10%, and a terminal growth rate of 4%. At our price target, the stock's 12-month dividend yield would be 3.5%.

**2009 catalysts:** We believe signs of continued weakness in Malaysian trading volumes could be the main catalyst for the stock's potential underperformance.

**Risks:** Bursa Malaysia's revenue depends on clearing fees, which are driven by the level of trading turnover on the securities market. Hence, the company is subject to the volatility of the local stock market, the outlook of which depends primarily on local economic conditions, the attractiveness of companies listed on the Malaysian stock exchange, and other factors such as foreign capital flows.

**Sector:** Investment Services

**Rating:** Sell

**PT:** RM5.70

**Analyst:** Colbert L. Nocom

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### ■ **Statement of Risk**

Stock markets are influenced by several factors, internal and external, that make predictions of market direction inherently difficult. Our stock ratings are based on earnings estimates that are subject to changes because of changes in the operating environments of the respective companies. For our most and least preferred stocks, please refer to individual risk sections in the report.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**  
**Philippines - Outlook 2009**

Philippines

Equity Strategy

Market Comment

**Injecting some cyclicality**

■ **Summary**

Philippine GDP growth and earnings could remain weak in 2009, but with the PSEi having fallen 46% YTD and with some sectors trading below 2009E P/BV, we think much of the bad news is in the price. Normalised credit markets, however, may be a prerequisite for value stocks to be noticed.

■ **What are the likely key themes for 2009?**

Our key themes for 2009 are: 1) among emerging markets, the Philippines could be one of the least vulnerable to near-term financial strain; 2) the result of the May 2010 presidential election could be market-neutral; 3) Philippine consumption spend should benefit from falling commodity prices; and 4) we favour liquid stocks with strong balance sheets and good medium-term growth potential.

■ **What may surprise on the upside or downside?**

Earnings growth could surprise on the downside. The impact of falling commodity prices on consumption spending, the resilience of OFW remittances and the severity of asset price deflation may surprise positively.

■ **Market valuation & targets, highlighted stocks and sectors**

UBS global and regional strategists believe that falling equity risk premiums will be a catalyst for an equities rally in 2009, but that we are not at that point yet. In the case of Philippine stocks, given the difficulty accumulating significant positions, we recommend the gradual injection of cyclicality. Our 12-month bottom-up index PSEi target is 2,400 and our top picks are Ayala Corp., SM Investments, Ayala Land and PNOC-EDC.

**3 December 2008**

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**Table 1: The Philippines' Top 4 Stocks List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	P/BV 2009E (x)
<b>Most Preferred</b>						
Ayala Corp.	AC.PS	1.96	Buy	193.00	285.00	0.70
SM Investments	SM.PS	2.28	Buy	183.00	425.00	0.92
Ayala Land	ALI.PS	1.65	Buy	6.20	9.00	1.61
PNOC-EDC	EDC.PS	0.76	Buy	2.55	4.40	1.02

Note: Ayala Land's P/BV of 1.61x includes landbank that has not been revalued. Data as at 1 December 2008.  
 Source: UBS estimates

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# Outlook 2009 - Summary

## What are the likely key themes?

The following are our key themes for the Philippines in 2009:

- **While long-term debt as a percentage of GDP remains high, the Philippines is one of the least exposed emerging markets to near-term financial strain, in our view.**

The country has relatively high foreign exchange reserve cover for short-term debt (ie, over 400%), a healthy current account balance and a less severe credit cycle versus most emerging peers.

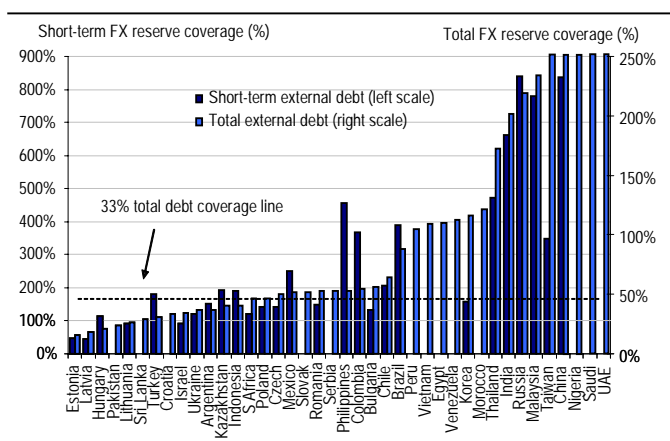
According to UBS economist Ed Teather, unlike previous episodes of weak growth in the 1980s and 1990s, the Philippines has been running a current account surplus in recent years.

Furthermore, the Philippines was also late to the ‘global growth party’ with bank lending to GDP declining in 2008 versus the 2000 to 2003 trough. These factors could help mitigate the credit concerns of lenders and reduce the likelihood of tighter credit that eventually impinges on growth.

**UBS Philippines PSEi target: 2,400**

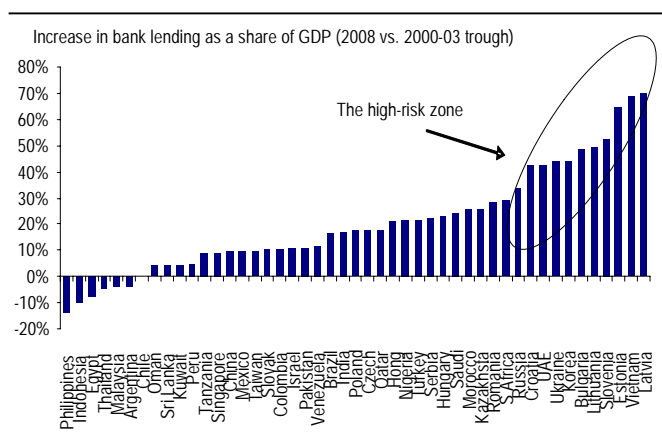
**Our bottom-up price target is based on our price targets for PSEi stock components under our coverage**

**Chart 1: FX reserves and debt coverage**



Source: IMF, World Bank, Fitch, UBS

**Chart 2: Increase in bank lending as a share of GDP (2008 vs. 2000-03 trough)**



Source: IMF, Haver, UBS

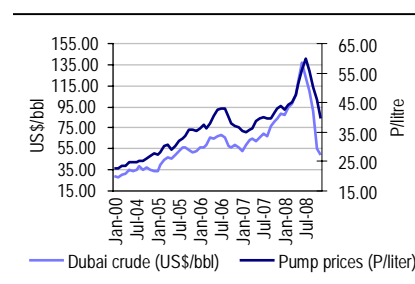
- **Political ‘noise’ ahead of the May 2010 presidential elections could result in increased market volatility, though policy and market-neutral.**

With presidential elections set for May 2010, there is little incentive for the opposition to unseat President Arroyo. Uncertainties have more to do with the possibility of “Charter Change” (changing the Constitution), which is being revived by allies of the President. Some believe that this is being done with a view to extending President Arroyo’s term in office, which is currently limited by the Constitution to one six-year term.

Our base case is for elections to proceed in May 2010. As we do not foresee major economic policy shifts from any of the leading candidates for the presidency, we believe that the election will be market-neutral.

- **The effect of lower commodity prices—particularly oil—on consumption spending and margins could mitigate the effects of the global slowdown.** We estimate that domestic oil companies have yet to fully reflect international crude oil price declines in their prices.
- **We favour liquid stocks with strong balance sheets and growth potential beyond 2009.** Given the prevailing credit uncertainties, we favour large cap, liquid stocks with strong balance sheets. We also like companies with sustainable high-growth potential beyond 2009 and/or those that have the resources to build the foundations for such growth.

Chart 3: Sharp fall in oil prices



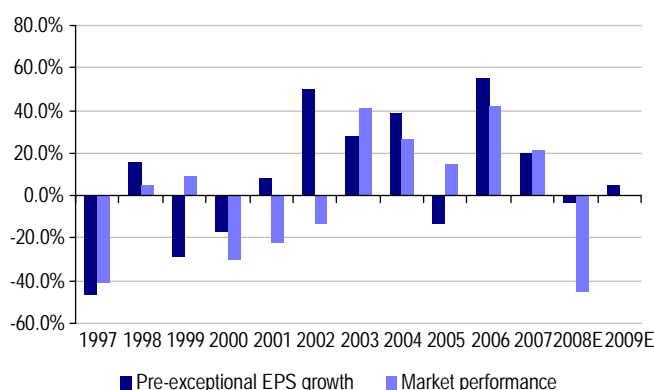
Source: Department of Energy

## What is our central thesis for 2009?

Our central thesis for 2009 is that:

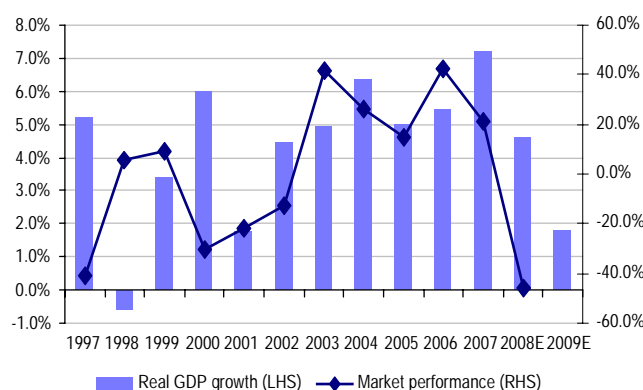
- **GDP growth and market earnings are likely to be weak in 2009 but much of the bad news may be in the price** after the market's YTD 45.6% decline (versus our 2008E earnings decline of -3.1%).

Chart 4: Annual market earnings growth vs. PSEi performance



Source: UBS estimates

Chart 5: GDP growth vs. PSEi performance



Source: CEIC, UBS estimates

- **Stocks are inexpensive but investors could remain apathetic until the credit market thaws.** We believe Philippine stocks are inexpensive with some sectors trading below 2009 P/BV. Risks associated with the clogged global credit markets rather than value, however, are likely to be the overriding consideration, particularly in less liquid, emerging markets like the Philippines.

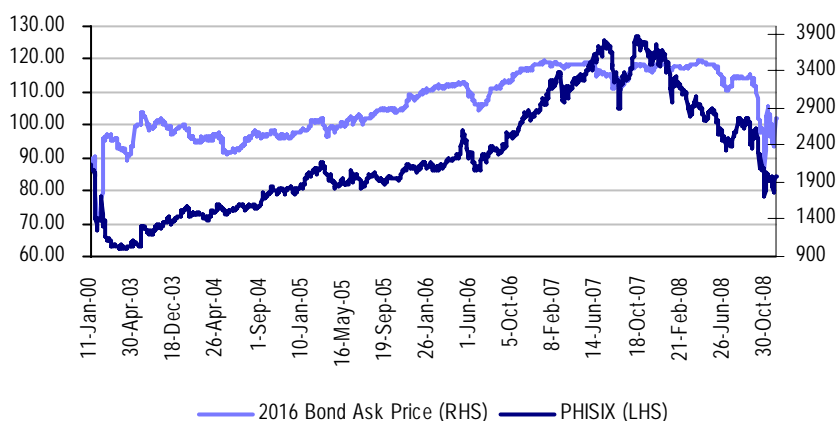
**Table 2: Regional valuation table**

	PE (x)		P/BV (x)		ROE (%)		EPS growth (%)		Dividend yield (%)	
	2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E
China	10.5x	10.3x	1.7x	1.5x	16.1%	14.5%	11.1%	2.1%	3.7%	3.6%
Hong Kong	10.6x	10.9x	0.8x	0.8x	7.9%	7.6%	-17.8%	-3.4%	6.0%	6.1%
India	9.5x	8.8x	1.8x	1.6x	19.2%	17.9%	7.9%	7.9%	2.3%	2.5%
Indonesia	7.3x	7.8x	1.6x	1.4x	21.2%	18.1%	7.6%	-5.8%	5.0%	5.1%
Korea	9.5x	12.4x	1.0x	0.9x	10.4%	7.5%	-13.7%	-23.4%	2.5%	2.6%
Malaysia	11.2x	12.7x	1.4x	1.3x	12.1%	10.1%	-10.4%	-11.7%	4.8%	4.1%
Philippines	10.3x	9.8x	1.4x	1.3x	13.4%	12.6%	-1.7%	5.4%	5.7%	5.1%
Singapore	8.9x	9.6x	1.0x	1.0x	11.7%	10.6%	-12.1%	-7.7%	6.5%	6.3%
Taiwan	10.4x	13.2x	1.2x	1.2x	11.7%	9.2%	-18.4%	-20.9%	8.1%	6.8%
Thailand	6.0x	7.4x	0.9x	0.9x	15.3%	12.3%	1.3%	-17.0%	7.4%	6.9%

Note: Priced as at 1 December 2008. Source: UBS estimates

- Philippine bond spreads could be a leading indicator.** Improving credit conditions are likely to result in falling bond spreads and equity risk premia. This could be the catalyst for the early stages of a recovery in equities. The chart below shows the high correlation between equities and bond prices (ie, both inversely correlated with yields).

**Chart 6: Sovereign bond vs. equity index**



Source: Bloomberg



**Chart 7: Philippine 10-year peso bond yield**



Source: CEIC

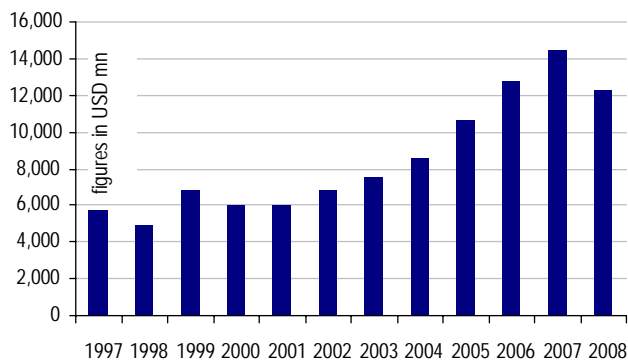
■ **UBS global equity and Asian strategists expect stabilisation of credit markets/falling equity risk premia in 2009 but that any move could be premature at this time.** As accumulating a meaningful position in a less liquid market like the Philippines is challenging, we believe that long-term investors should gradually start injecting cyclical into their portfolios.

**What may surprise on the upside or downside?**

We believe that earnings growth will surprise on the downside. While we project 5.4% 2009 market earnings growth, which would approximate zero growth after stripping out the effects of a lower corporate tax rate from 35% in 2008 to 30% in 2009, we believe the risk of further downgrades remains.

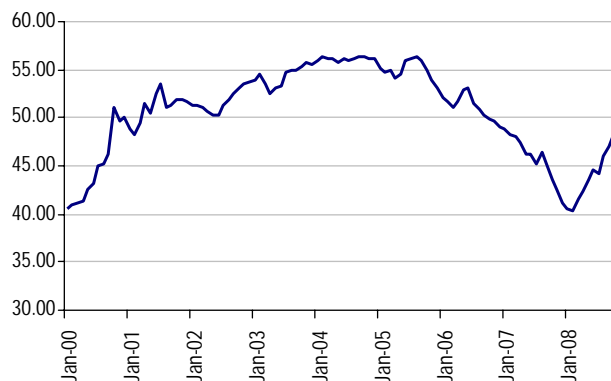
Among the things that may surprise positively are the resilience of consumption spending on falling oil and other commodity prices as well as the resilience of OFW remittances, especially with the peso having devalued sharply against the US dollar recently. These, along with possible government pump-priming/reflationary initiatives, could mitigate the severity of asset price deflation (ie, property prices).

**Chart 8: OFW remittances (US\$ m)**



Source: CEIC

**Chart 9: US\$/P rate**



Source: CEIC

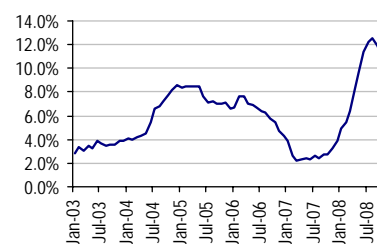
## What are the likely key catalysts?

We think the likely market catalysts include:

- Falling bond spreads.
- Lower inflation.
- Better-than-expected OFW remittances.
- Better-than-expected GDP growth.

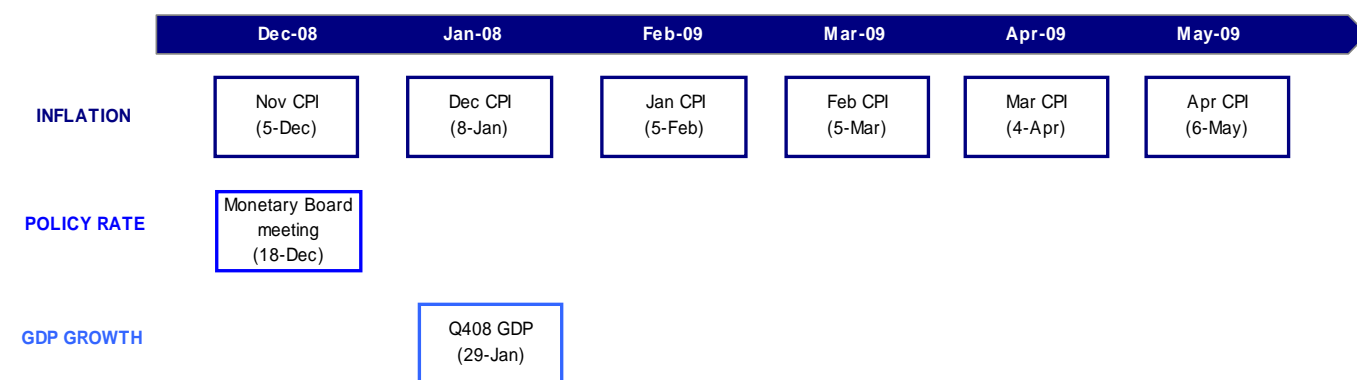
The time table below shows the expected release dates by the government of key macroeconomic variables.

Chart 10: Inflation on the downtrend



Source: CEIC

Chart 11: Economic calendar



Source: NSO, NSCB, BSP

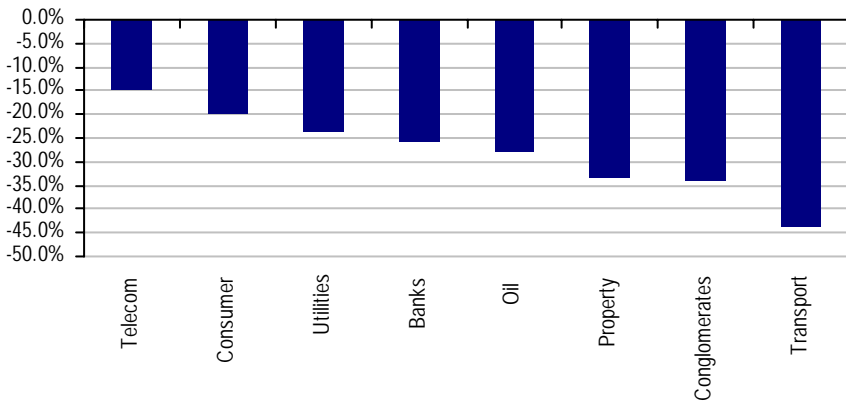
## Key stock/sector ideas

For 2009, we recommend the following investment strategies:

- **Prioritise large cap, liquid stocks** (“first-liners”) that would likely be the first to respond to falling equity risk premia.
- **Focus on companies that have the resources to build long-term growth foundations.** We like conglomerates Ayala Corp and SM Prime, which have the “war-chest” to take advantage of market opportunities; Ayala Land for the high discount to its prime Makati landbank, and PNOC-EDC for its geothermal expansion potential.
- **We prefer the above over large-cap telecom companies PLDT and Globe** based on the PLDT’s more subdued medium-term growth prospects due to high cellular penetration levels and the prevalence of “all-you-can-eat” pricing that may limit upside for Globe from increased usage. Between the two, we prefer PLDT.

The following chart shows that since the Lehman fallout, investors have rotated from cyclical (conglomerates, property and banks) to defensive sectors (telecoms and utilities). Based on our view that global markets could stabilise in 2009, a reversal could take place eventually.

Chart 12: Sector performance since Lehman fallout (14-Sept-08 to 28-Nov-08)



Source: Bloomberg

## The Philippines' Top 4

In this section, we present commentary on stocks in our Philippines' Top 4 Stocks List.

### The Philippines' Top 4 Stocks List

Stock	Rating	Price target (P)	Overview
<b>Most Preferred</b>			
<b>Ayala Corp.</b>	Buy	285	Ayala Corp (AC) is the one of the country's largest holding companies. Its main subsidiaries are leaders in their respective industries in the Philippines: Ayala Land (the biggest property developer), Bank of the Philippine Islands, (the third-largest bank), Globe Telecom (the second-largest mobile operator), and Manila Water (the sole water distributor in the east zone of Metro Manila).
<b>SM Investments</b>	Buy	425	SM Investments Corp (SM) is the holding company of the SM Group of companies, which has interests ranging from retail and banking to mall and property development. Its core publicly-listed units are SM Prime (mall operator, 53%-owned), Banco de Oro (36.6%) and Chinabank (16.3%).
<b>Ayala Land</b>	Buy	9.0	Ayala Land is the Philippines' largest property developer with total assets of P89.9bn as of June 2008. Its landbank of 4,265 hectares makes it one of the country's largest landowners. The company's core business is the development of integrated mixed-use communities, and it has recently expanded its rental portfolio through new retail space and BPO leases.
<b>PNOC-EDC</b>	Buy	4.4	PNOC Energy Development Corp (EDC) is the second-largest geothermal producer in the world (the largest in the Philippines), accounting for over 60% of total steam and 38% of geothermal power production in the Philippines. EDC has an installed capacity of 1,199MW of steam and a generation capacity of 744MW.

Source: Company data, UBS estimates

We summarise our investment case for 2009, current valuation, and likely catalysts for each of the stocks in our Top 4 list below:

### Ayala Land

**Investment case:** Ayala Land's (ALI) share price, which has fallen 68% from its 2007 peak, now implies a P/BV of 1.61x, below Asian financial crisis levels. In our view, risks are lower than those in 1997 based on: 1) tame property price inflation of 11% CAGR in the past four years; 2) OFW remittances that are more than double 1997 levels; and 3) more diversified property development revenue.

While the timing may be early, we think that for longer-term investors, lower uncertainty in global markets at some point in 2009 could lead to a rotation to cyclicals. In any event, ALI's strong balance sheet (net cash position), healthy recurring mall and office income (44% of operating income), valuable landbank and more sustainable revenue base could provide share price support.

**Valuation:** Our 12-month price target of P9.00 is based on a 25% discount to our sum-of-the-parts NAV of P12.00.

**2009 catalysts:** Acquisition of new land bank; stronger-than-expected sales take-up; falling interest rates.

**Sector:** Real Estate

**Rating:** Buy

**PT:** P9.00

**Analyst:** Jody Santiago

## Ayala Corporation

**Investment case:** We like Ayala Corp (AC) based on: 1) its cash hoard of US\$521m as at end-September 2008 in a high-opportunity environment; 2) its strong balance sheet with a September 2008 net debt-to-equity ratio of 0.07:1, a spread out debt maturity profile and minimal FX exposure; and 3) a diversified portfolio of among the highest-quality defensive and cyclical companies in the Philippines, in our view.

**Sector:** Real Estate

**Rating:** Buy

**PT:** P285.00

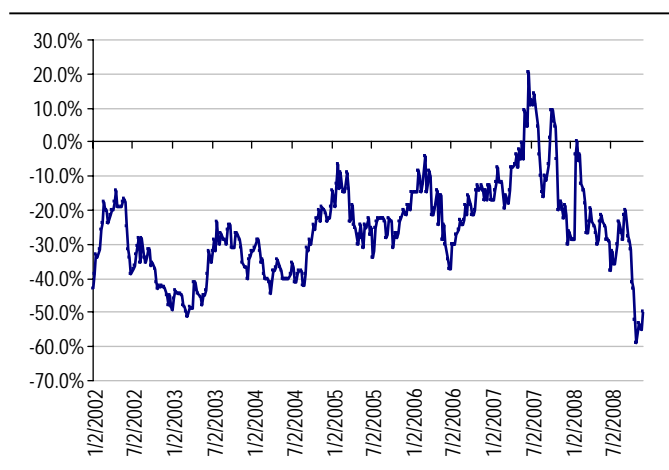
**Analyst:** Jody Santiago

At current levels, the stock trades at a 21.8% discount to NAV (at the listed price of its subsidiaries), its highest in five years. As risk-aversion remains high, we think AC could provide a less aggressive alternative to ALI for investors concerned about near-term volatility.

**Valuation:** Our NAV estimate for AC is based on a sum-of-the-parts valuation using our price target for its listed subsidiary, which accounts for 91% of our NAV.

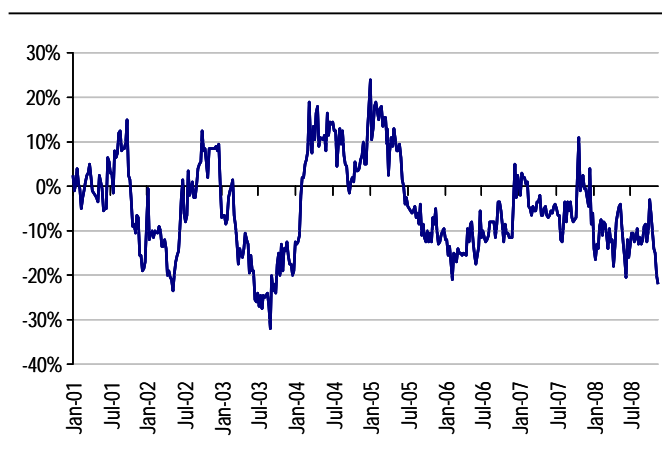
**2009 catalyst:** Acquisitions or expansion using a portion of its US\$520m cash hoard.

**Chart 13: Ayala Land's NAV discount**



Source: UBS estimates

**Chart 14: Ayala Corp.'s NAV discount**



Source: UBS estimates

## SM Investments

**Investment case:** We think SM Investments is undervalued and at a 40% discount to market NAV. Its portfolio is a diverse mix of defensive (malls) and cyclical stocks (banking and property).

**Sector:** Real Estate

**Rating:** Buy

**PT:** P425.00

**Analyst:** Minda Olanon

The company and its proponents appear to be among the most cash-rich groups in the Philippines, which could mitigate financial risk and allow it to 'bottom-fish' in the current environment. We are positive on the conglomerate's initiatives to restructure its holdings (which also involves divesting non-core assets) and improving corporate governance.

**Valuation:** Our 12-month price target of P425.00 is based on a sum-of-the-parts valuation of SM Investments' listed holdings, and unlisted retail and property assets.

**2009 catalyst:** Acquisitions or expansion using a portion of its cash

## PNOC-EDC

**Investment case:** EDC’s existing geothermal operations generate high FCF because of long-term guaranteed off-take contracts in place—we estimate FCF yield of 19% in 2009 (higher than telecom company PLDT’s 9.4%). Even after excluding all its expansion projects, we value EDC at P4.40 (DCF-based), 73% above the current share price.

**Sector:** Electric Utilities

**Rating:** Buy

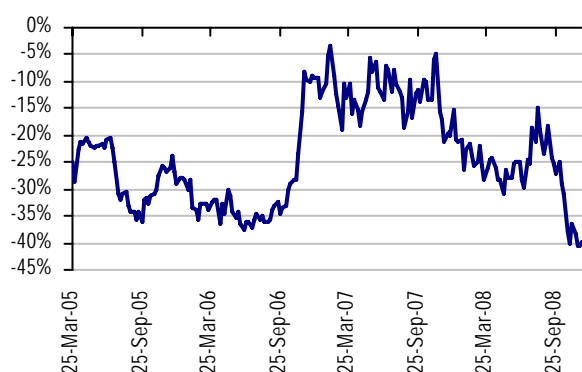
**PT:** P4.40

**Analyst:** Karisa Magpayo

**Valuation:** Our 12-month price target is based on a DCF of its operating power plants using a WACC of 11.2%.

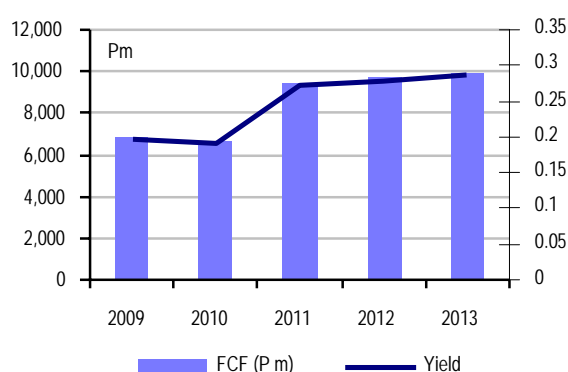
**2009 catalysts:** The sale of a portion of parent First Gen’s stake in EDC or the refinancing of First Gen’s debt that could ease refinancing concerns across the group.

**Chart 15: SM’s discount to NAV**



Source: UBS estimates

**Chart 16: EDC’s FCF yield (excluding expansion capex)**



Source: UBS estimates

**Table 3: Sector valuations**

	Mkt Cap (US\$ m)	Pre-Ex Earnings Growth			Pre- ex PE (x)		P/BV (x)		ROE (%)		Dividend Yield (%)	
		2007	2008 E	2009 E	2008 E	2009 E	2008 E	2009 E	2008 E	2009 E	2008 E	2009 E
<b>Market</b>	30,988	20.0%	-1.7%	5.4%	10.3x	9.8x	1.4x	1.3x	13.4%	12.6%	5.7%	5.1%
<b>Telecom</b>	11,281	6.8%	-0.4%	-0.5%	11.2x	11.2x	3.4x	3.4x	30.0%	30.2%	9.0%	7.9%
<b>Conglomerates</b>	5,462	53.2%	-6.5%	7.4%	9.4x	8.7x	0.8x	0.8x	12.1%	8.6%	3.3%	3.2%
<b>Property</b>	4,610	29.1%	13.6%	5.9%	10.2x	9.6x	1.0x	0.9x	10.0%	9.7%	3.3%	3.2%
<b>Utilities</b>	3,179	20.0%	16.9%	11.1%	8.2x	7.4x	1.2x	1.1x	9.0%	12.6%	4.8%	3.1%
<b>Banks</b>	3,924	17.9%	-26.8%	6.9%	14.4x	13.5x	1.2x	1.1x	8.1%	8.2%	4.0%	4.0%
<b>Consumer</b>	1,076	7.5%	-4.1%	11.6%	8.5x	7.6x	1.0x	0.9x	11.4%	11.8%	5.5%	5.6%
<b>Transport</b>	609	23.8%	43.2%	17.3%	9.5x	8.1x	2.2x	1.9x	23.0%	22.9%	2.8%	3.2%
<b>Oil</b>	846	6.1%	-24.3%	7.9%	8.5	7.9	1.0	0.9	11.9%	11.5%	3.4%	3.4%

Note: Priced as at 1 December 2008. San Miguel Corp and Banco de Oro are not included in the valuations. San Miguel numbers are under review while Banco de Oro’s earnings may be distorted by trading losses. Source: UBS estimates

Table 4: Company valuations

	Rating	Market cap. (US\$ m)	Average daily T/O (US\$ '000)				Current		Price target (P)	P/BV (x)		Pre-exc PE (x)		EPS Growth (%)		Div yield (%)	
			past 1-mo	past 6-mos	past 12-mos	Price (P)	Price (P)	2008E		2009E	2008E	2009E	2008E	2009E	2008E	2009E	
PLDT	Neutral	9,050	8,199	9,461	9,611	2,340.00	2,400.00	2,400.00	4.0	4.1	12.2	12.1	0.9	0.3	8.3	8.5	
Bank of Phil. Islands	Sell	2,795	1,641	2,339	2,463	42.00	37.50	37.50	2.0	1.9	19.9	18.8	-28.8	6.1	5.1	4.3	
San Miguel	Buy	2,729	91	136	388	42.50	60.00	60.00	0.9	0.9	14.5	13.6	98.5	6.8	2.7	2.9	
SM Investments	Buy	2,293	1,213	1,498	1,576	183.00	425.00	425.00	1.0	0.9	9.5	8.4	6.0	13.8	4.0	4.2	
Globe Telecom	Neutral	2,232	1,639	1,756	2,064	825.00	850.00	850.00	2.2	2.1	8.5	8.8	-3.9	-2.7	15.2	9.2	
SM Prime	Neutral	1,968	1,104	1,209	1,438	7.20	8.80	8.80	0.9	0.8	15.1	13.8	6.9	8.8	3.1	3.3	
Ayala Corp.	Buy	1,966	2,761	2,749	3,072	193.00	285.00	285.00	0.8	0.8	12.7	13.2	-13.2	-3.8	2.4	2.3	
Ayala Land	Buy	1,657	1,299	2,329	3,040	6.20	9.00	9.00	1.7	1.6	18.4	23.6	0.2	-22.0	2.2	2.6	
Meralco	Buy	1,317	1,425	1,464	2,271	58.00	63.00	63.00	1.2	1.1	16.1	15.1	-7.2	6.8	1.7	1.7	
Banco de Oro	Neutral	1,094	791	1,179	1,411	23.50	28.00	28.00	0.9	0.9	20.6	11.4	-45.9	81.2	6.8	1.5	
Metrobank	Buy	908	998	1,698	2,026	24.50	33.00	33.00	0.8	0.7	8.8	8.1	-28.8	8.9	4.1	4.1	
Petron	Sell	846	161	365	640	4.40	5.00	5.00	1.0	0.9	8.5	7.9	-24.3	7.9	3.4	3.4	
Jollibee	Sell	805	1,376	759	687	38.50	34.80	34.80	2.8	2.5	16.8	15.1	-3.0	12.2	2.5	2.4	
PNOC EDC	Buy	764	2,258	2,441	2,440	2.55	4.40	4.40	1.2	1.0	6.4	6.5	-3.5	-1.9	10.6	3.9	
Aboitiz Equity Ventures	NA	629	87	291	305	5.50	Under Review	Under Review	0.8	0.7	7.1	6.7	-13.3	4.8	5.0	3.8	
ICTSI	Buy	609	204	458	697	15.50	38.00	38.00	2.2	1.9	9.5	8.1	43.2	17.3	2.8	3.2	
Manila Water	NA	555	1,058	1,047	1,194	13.50	Under Review	Under Review	1.9	1.6	12.2	9.8	13.3	25.1	2.6	2.9	
Aboitiz Power	Buy	543	497	598	365	3.60	7.50	7.50	0.8	0.8	6.7	6.0	17.6	12.5	5.2	5.0	
Alliance Global	Buy	375	365	1,044	1,012	1.78	4.80	4.80	0.4	0.3	5.9	5.2	-7.2	13.9	-	-	
Robinsons Land	Buy	327	88	450	639	5.80	12.50	12.50	0.7	0.7	5.6	4.8	15.9	16.7	9.1	10.3	
Megaworld Corp	Buy	262	1,765	2,435	2,831	0.62	NM	NM	0.3	0.3	3.5	3.0	21.7	18.4	4.7	5.8	
Universal Robina	Buy	222	203	258	387	5.00	NM	NM	0.3	0.3	3.5	3.2	-44.1	9.9	13.9	14.3	
Phil. National Bank	Buy	221	93	180	217	16.25	27.00	27.00	0.4	0.4	7.6	7.3	-5.1	3.9	-	-	
Filinvest Land	Buy	211	288	642	834	0.42	1.10	1.10	0.3	0.3	5.9	5.3	20.5	11.8	4.8	3.4	
First Holdings	Buy	200	697	721	885	16.50	36.00	36.00	0.3	0.3	5.8	5.4	-25.2	7.1	6.1	6.1	
First Gen Corp	Buy	195	657	647	703	11.75	28.50	28.50	0.3	0.3	4.4	3.0	-53.8	33.2	-	-	
Vista Land	Buy	185	686	640	738	1.06	1.90	1.90	0.3	0.2	2.9	2.6	40.2	11.8	7.7	6.8	
Pepsi	Buy	48	95	127	208	0.64	3.20	3.20	0.5	0.4	3.0	2.7	-25.3	16.9	16.8	18.5	

Note: Priced as at 1 December 2008. Source: UBS estimates

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■ **Statement of Risk**

A key risk to our view is a longer-than-expected recovery period for credit markets that could keep equities at the current depressed levels.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.



# UBS Investment Research

## Singapore - Outlook 2009

**3 December 2008**
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## Navigating a recession

### ■ Summary

We believe the market looks deeply oversold and we forecast a rally of 15-20% in Q109. This said, our central thesis remains a grim economic outlook and high risk aversion. We expect the market to be difficult and volatile through 2009.

### ■ What are the likely key themes for 2009?

1) Blue chips could continue to outperform, despite deep value in small caps. 2) The absence of growth and scarcity of capital means that sustainability of dividends and high ROIC will be critical for performance, in our view. 3) Big cap cyclical stocks could strongly outperform in H209. 4) Closer to 2010 and beyond, if growth continues to languish and credit remains tight, M&A could emerge as a major theme.

### ■ What may surprise on the upside or downside?

We believe the market has not priced in the possible success of the two integrated resorts in Singapore, which could boost spending and employment in a recession. On the downside, we think investors should watch the job market. We expect job losses of 30,000 in 2009—the worst on record in a single year, but less severe than the cumulative losses of 42,000 during the Asian financial crisis and 79,500 during the two years that encompassed the TMT downturn/September 11/SARS.

### ■ Market valuation & targets, highlighted stocks

We forecast a fair value of 2,100 for the FTSE Straits Times Index (FSSTI) at end-2009, assuming 12x trailing PE and a 33% decline in trailing earnings. We see a firmer uptrend mostly at the tail end of 2009 when the worst of economic conditions are likely to have passed. Our top picks are shown below.

**Table 1: Singapore Top 9 Stocks List**

Company	RIC	Market Cap (US\$ bn)	UBS rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
United Overseas Bank	UOBH.SI	13.0	Buy	12.700	16.00	9.8
CapitaLand Ltd.	CATL.SI	4.8	Buy	2.590	3.70	5.6
ST Engineering Ltd	STEG.SI	4.5	Neutral	2.290	2.50	15.0
Singapore Exchange	SGXL.SI	3.3	Buy	4.850	9.00	14.2
SembCorp Marine	SCMN.SI	2.0	Buy	1.490	3.00	5.9
MobileOne	MONE.SI	0.7	Buy	1.270	2.40	8.2
Singapore Press	SPRM.SI	3.6	Neutral	3.540	3.75	13.4
Singapore Post	SPOS.SI	0.9	Buy	0.755	0.96	11.3
Parkway Life REIT	PWLR.SI	0.3	Buy	0.795	1.20	10.6

Data as at 1 December 2008. Source: UBS estimates

**MICA (P) 036 / 11 / 2008**
**This report has been prepared by UBS Securities Pte. Ltd. (Reg. No. 198500648C)**
**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

**Near-term rally, but market likely to be difficult and volatile for most of 2009.** We think the market is deeply oversold and we forecast a rally of 15-20% in Q109. We do not believe the market will retest recent lows. This said, our central thesis remains that the economic outlook is grim, and risk aversion will likely remain at elevated levels. We expect a difficult and volatile market through 2009. At end-2009, we forecast a fair value of 2,100 for the FTSE Straits Times Index (FSSTI), assuming 12x trailing PE and a further 33% decline in trailing earnings. We expect a stronger market mostly in the tail end of 2009 when the worst of economic conditions are likely to have passed.

**Our 12-month view.** Thematically, we believe

- Blue chips will continue to outperform small caps. There is no shortage of oversold big-cap stocks at this point, in our view.
- Domestic demand stocks should be relatively resilient. This time, the high net worth market segment has been hurt disproportionately, while mass market balance sheets have remained relatively stable. Retail participation in the stock market has been limited, while mass market housing prices have not increased much in recent boom years.
- The absence of growth, coupled with the global collapse in short-term interest rates, should lead to a rise in dividend yield investors, with a focus on stable and sustainable dividends. Until the debt market stabilises, we think structured finance vehicles, including Singapore REITs, could still underperform the inherently cash generative businesses.
- The scarcity of capital means that higher ROIC companies would rerate, and geared companies could continue to struggle with performance.
- Over the course of 2009, and most likely closer to 2010 and beyond, if growth languishes as most expect and credit remains rationed, M&A could emerge as a major theme. For now, distressed sellers remain limited, while prospective buyers are also likely to stay sidelined until there are greater signs of stability in the traded securities of both stocks and bonds.

In Table 2, we rank stocks by free cash flow (FCF) margins and ROIC (where FCF margin is >5%, and ROIC >15%). We believe the cash squeeze will strengthen the competitive edge of companies with strong cash generative businesses. Among stocks that have fallen sharply, we think SembCorp Marine (SMM) and Singapore Exchange (SGX) look most interesting. We continue to like Singapore Post (SingPost) and Singapore Press Holdings (SPH) for their monopolistic, stable cash flows.

Meanwhile, we think until the debt markets stabilise, stocks with a low interest coverage ratio (ICR) would continue to be viewed with caution. In Table 3, we identify stocks in our coverage with a low ICR (where ICR is <3x), ranked by estimated net debt/equity.

**FSSTI target: 2,100**  
**Based on 12x trailing PE and a 33% decline in trailing earnings, which matched that of 1998**

## Key themes on a 12-month view

**We believe stocks with high FCF margins and ROIC are best positioned**

**On the flipside, refinancing risks could continue to crimp performance**

In Table 4, we rank stocks by 2009 estimated dividend yields. Yields are in abundance in the Singapore market. For asset securitisation vehicles, the dividend yield averages 15.4% in CY09E for Singapore REITs, and 22.8% for business trusts. Outside of Singapore REITs and business trusts, stocks with a 2009E dividend yield of >8%, market cap of >\$1bn, a sustainable payout, and low bankruptcy risks include: Singapore Airlines (SIA), DBS Bank (DBS), SMM, Venture Corp, Neptune Orient Lines (NOL), COSCO, Yangzijiang Shipbuilding, MobileOne, and StarHub.

**High yields are in abundance. Look out for sustainable payout and low bankruptcy risks**

Meanwhile, non-properties blue chips with a market cap of over S\$5bn and which are trading close to or below 1x P/BV now include SIA, DBS, Keppel Corp, United Overseas Bank (UOB), OCBC, and Wilmar International.

**Big-cap blue chips with low P/BV**

**Table 2: UBS universe screened by FCF margin and ROIC**

	FCF Margin > 5%	ROIC > 15%	Net D/E < 30%	ICR > 15	Beta	12m perf
	Ave 2008-09E	Ave 2008-09E	2009E	2009E		
Singapore Exchange	54%	454%	-72%	net int income	1.2	-66%
Yangzijiang Shipbuilding	38%	205%	-104%	net int income	1.8	-79%
Raffles Education Corp.	35%	27%			1.4	-71%
Singapore Press	31%	48%	27%	26.7	0.9	-22%
Straits Asia Resources	28%	50%		15.8	1.8	-77%
Singapore Post	27%	38%		21.4	1.1	-31%
MobileOne	19%	42%		18.9	1.0	-37%
StarHub	17%	48%			0.7	-32%
Golden Agri-Resources	16%	16%	6%		1.9	-77%
SMRT Corporation	13%	22%	8%	86.0	0.8	2%
Singapore Telecom	14%		26%		1.1	-36%
Thai Beverage	11%	23%	20%	24.7	0.8	-16%
Tat Hong Holdings	9%	29%	16%	21.7	1.9	-84%
Singapore Airlines	9%	16%	-27%	net int income	1.1	-41%
Keppel Corporation	9%	25%	7%	net int income	1.7	-71%
SembCorp Marine	8%	39%	-26%	net int income	1.6	-66%
Venture Corporation	7%	16%	-14%	24.2	1.3	-68%
ST Engineering	7%	48%	-1%		1.0	-39%
Wilmar International	6%		26%		1.5	-38%

\*Negative denotes net cash. Source: UBS estimates

**Table 3: UBS universe screened by ICR <3x, ranked by net debt/equity**

	FCF margin	ROIC	Net D/E	ICR < 3	Beta	12m perf
	ave 2008-09E	Ave 2008-09E	2009E	2009E		
Olam International	-5%	12%	512%	1.6	1.6	-70%
Chartered Semiconductor Manufacturing	-20%	-4%	105%	-ve EBIT	1.7	-81%
CapitaCommercial Trust	53%	3%	92%	2.2	1.4	-69%
CitySpring Infrastructure Trust	14%	3%	77%	1.5	1.2	-45%
Indofood Agri Resources	-2%	14%	77%	2.9	1.8	-79%
CapitaMall Trust	62%	5%	49%	2.8	1.1	-48%
Suntec REIT	72%	3%	36%	2.8	1.6	-59%
Biosensors International Group	-40%	-68%	30%	-ve EBIT	1.9	-64%
Neptune Orient Lines	10%	4%	11%	-ve EBIT	1.6	-76%

Source: UBS estimates

Table 4: UBS universe ranked by 2009E net dividend yield

RIC	Company	Mkt cap (S\$ m)	Price (local curr)	Net div yield		PE (x)		P/BV (x)		EPS CAGR 2008- 10E	Cash % of share price	Beta	12M perf
				2008E	2009E	2008E	2009E	2008E	2009E				
<b>Market cap &gt;S\$5bn</b>													
SIAL.SI	Singapore Airlines	12,504	10.540	9.5%	9.5%	8.9	7.9	0.8	0.8	11%	31%	1.1	-41%
DBSM.SI	DBS Bank	14,074	9.080	8.8%	8.6%	7.5	7.5	0.7	0.7	17%	NA	1.3	-55%
SPRM.SI	Singapore Press	5,544	3.540	7.5%	7.2%	13.1	13.4	2.7	2.7	-1%	-10%	0.9	-22%
STEG.SI	ST Engineering Ltd	6,836	2.290	7.2%	6.7%	13.9	15.0	3.1	3.1	-2%	2%	1.0	-39%
KPLM.SI	Keppel Corporation	6,210	3.930	5.9%	6.6%	6.0	5.3	1.2	1.1	9%	-13%	1.7	-71%
SGXL.SI	Singapore Exchange	5,088	4.850	7.1%	6.3%	13.2	14.2	6.3	5.5	4%	15%	1.2	-66%
TBEV.SI	Thai Beverage	5,273	0.210	5.9%	5.8%	13.1	12.1	2.3	2.1	6%	-14%	0.8	-16%
OCBCE.SI	OCBC	15,686	5.010	5.7%	5.6%	8.5	10.3	1.1	1.2	0%	NA	1.3	-41%
TELE.SI	Singapore Telecom	39,804	2.500	5.6%	5.0%	11.6	11.1	1.8	1.7	7%	-16%	1.1	-36%
CATL.SI	CapitalLand Ltd.	7,312	2.590	4.6%	4.6%	5.5	5.6	0.6	0.6	-22%	-71%	1.3	-63%
UOBH.SI	United Overseas Bank	19,952	12.700	4.7%	4.6%	9.5	9.8	1.1	1.1	6%	NA	1.2	-36%
WLIL.SI	Wilmar International Limited	17,216	2.700	1.2%	1.7%	8.7	11.7	1.2	1.1	-10%	-37%	1.5	-38%
<b>Market cap between S\$1-5bn</b>													
SCMN.SI	SembCorp Marine	3,082	1.490	11.4%	13.6%	7.0	5.9	1.6	1.5	13%	15%	1.6	-66%
VENM.SI	Venture Corporation	1,113	4.060	12.3%	12.3%	-18.0	6.9	0.6	0.6	NA	10%	1.3	-68%
NEPS.SI	Neptune Orient Lines	1,419	0.995	11.4%	12.3%	7.4	-8.5	0.3	0.4	NA	-5%	1.6	-76%
AEMN.SI	Ascendas REIT	1,868	1.410	11.0%	11.7%	9.9	9.3	0.8	0.7	6%	-98%	1.2	-39%
COSC.SI	COSCO Corporation (Singapore) Ltd	1,594	0.720	10.7%	11.0%	3.7	4.8	1.3	1.2	-11%	17%	1.9	-90%
YAZG.SI	Yangzijiang Shipbuilding (Holdings) Ltd.	1,370	0.415	6.4%	10.8%	4.7	2.8	1.0	0.8	36%	74%	1.8	-79%
MBNE.SI	MobileOne	1,136	1.270	10.4%	9.8%	7.7	8.2	4.9	4.4	2%	-19%	1.0	-37%
CMLT.SI	CapitaMall Trust	2,795	1.680	8.9%	9.3%	12.9	12.8	0.6	0.6	2%	-85%	1.1	-48%
STAR.SI	StarHub	3,503	2.050	8.8%	9.3%	10.7	10.3	28.0	25.3	2%	-22%	0.7	-32%
SCIL.SI	SembCorp Industries Ltd	3,558	2.010	7.3%	7.9%	6.8	6.2	1.1	1.0	8%	1%	1.5	-64%
RLSE.SI	Raffles Education Corp.	1,068	0.460	6.7%	7.3%	10.5	9.5	2.8	2.5	15%	-18%	1.4	-71%
SPOSE.SI	Singapore Post	1,444	0.755	8.0%	7.1%	10.4	11.3	6.0	5.4	-7%	-12%	1.1	-31%
CMDG.SI	ComfortDelGro	2,697	1.340	3.9%	5.4%	15.5	14.7	1.8	1.6	8%	-1%	1.0	-30%
OLAM.SI	Olam International Limited	1,542	0.900	4.4%	5.3%	10.2	9.6	2.3	2.0	9%	-216%	1.6	-70%
SMRTC.SI	SMRT Corporation Ltd	2,480	1.640	5.0%	5.3%	16.8	16.3	3.2	3.1	1%	-2%	0.8	2%
PARM.SI	Parkway Holdings Ltd.	1,426	1.260	2.8%	4.1%	17.3	14.6	1.0	1.0	23%	-51%	1.2	-62%
CTDM.SI	City Developments Limited	4,892	5.380	2.7%	2.7%	6.5	8.0	0.8	0.7	-6%	-77%	1.4	-63%
GAGR.SI	Golden Agri-Resources	2,145	0.215	20.6%	1.6%	3.8	15.2	0.3	0.3	-39%	-28%	1.9	-77%
<b>Market cap below S\$1bn</b>													
MIIF.SI	Macquarie Intl Infrastructure Fund	372	0.290	32.2%	34.2%	3.5	3.3	0.2	0.2	NA	-40%	1.2	-71%
LMRT.SI	Lippo Mapletree Indonesia Retail Trust	281	0.265	26.0%	24.5%	4.2	4.2	0.3	0.3	-1%	-8%	1.5	-64%
STRL.SI	Straits Asia Resources Limited	746	0.735	17.2%	21.3%	2.9	2.4	1.3	1.1	10%	-38%	1.8	-77%
CDLT.SI	CDL Hospitality Trusts	510	0.620	19.2%	17.6%	6.4	6.5	0.4	0.4	-3%	-55%	1.4	-71%
CRCT.SI	CapitaRetail China Trust	235	0.495	15.5%	17.2%	7.0	6.3	0.4	0.3	6%	-121%	1.6	-77%
MAPL.SI	Mapletree Logistics Trust	390	0.325	20.4%	16.9%	4.9	6.0	0.4	0.4	-9%	-259%	1.4	-69%
SUNT.SI	Suntec REIT	946	0.635	15.9%	16.1%	8.0	7.8	0.2	0.2	1%	-160%	1.6	-59%
CACT.SI	CapitaCommercial Trust	968	0.700	16.3%	16.0%	7.0	7.6	0.2	0.3	-37%	-268%	1.4	-69%
CITY.SI	CitySpring Infrastructure Trust	243	0.495	14.4%	15.9%	68.7	37.3	1.0	1.3	NA	-103%	1.2	-45%
MMPR.SI	Macquarie Prime REIT	467	0.490	14.7%	15.0%	8.6	8.5	0.3	0.3	-3%	-135%	1.4	-53%
FCRT.SI	Frasers Centrepoint Trust	378	0.615	12.3%	12.6%	9.0	8.6	0.5	0.5	6%	-85%	1.3	-53%
TAT.SI	Tat Hong Holdings	258	0.510	13.9%	11.4%	2.9	3.5	0.6	0.6	-17%	-32%	1.9	-84%
AGRN.SI	Allgreen Properties Ltd	636	0.400	10.3%	10.3%	7.1	-5.4	0.3	0.3	75%	-247%	1.5	-75%
PWLR.SI	Parkway Life REIT	478	0.795	8.6%	9.7%	12.2	10.6	0.6	0.6	9%	-40%	1.2	-30%
HLSF.SI	Hong Leong Finance Ltd	861	2.000	9.0%	7.7%	6.9	8.0	0.6	0.6	-5%	NA	1.2	-47%
KLAN.SI	Keppel Land	971	1.350	5.9%	5.9%	4.3	3.4	0.4	0.4	29%	-167%	1.6	-82%
BANY.SI	Banyan Tree Holdings	287	0.385	5.0%	3.2%	10.0	15.4	0.5	0.5	-2%	-104%	1.7	-78%
TION.SI	Tiong Woon Corporation	62	0.185	2.6%	2.8%	2.1	2.1	0.4	0.4	-4%	-155%	1.8	-80%
HYFL.SI	Hyflux	791	1.550	1.6%	1.7%	12.4	10.5	2.7	2.2	9%	-17%	1.5	-55%
IFAR.SI	Indofood Agri Resources	666	0.460	0.0%	0.0%	3.2	10.3	0.5	0.5	-42%	-87%	1.8	-79%
CSMF.SI	Chartered Semiconductor Manufacturing	483	0.190	0.0%	0.0%	-8.7	-1.4	0.2	0.2	NA	-496%	1.7	-81%
BIOS.SI	Biosensors International Group	269	0.255	0.0%	0.0%	-14.8	14.4	2.0	1.8	NA	-10%	1.9	-64%
SOET.SI	Sino-Environment Technology Group	215	0.620	0.0%	0.0%	5.3	4.5	1.0	0.8	14%	-8%	1.9	-71%

Source: UBS estimates

## What is our central thesis for 2009?

**High systemic risks and uncertain global conditions.** UBS's economists now expect a severe global recession, with economies slowing sharply in all regions. UBS economists forecast global GDP growth of 1.2% YoY in 2009, with below-trend activities through 2010. We expect the Fed fund rate to drop another 75bp to trough at 0.25% by January 2009.

**A sharp slowdown in Singapore.** With an economy that sits on global tradeflows, Singapore will likely slide into a sharp cyclical downturn in 2009. We now expect Singapore GDP to decline 1.8% YoY in 2009, with a substantial trough of negative 4.5% YoY in Q209E. Our estimates also assume job losses of 30,000 in 2009, the worst on record in any single calendar year. Putting this in context though, these job losses are taking place after record employment gains of 235,000 in 2007 and another 200,000 in the first three quarters of 2008. In comparison, cumulative job losses were 42,000 over four quarters between Q298 and Q199; and 79,500 over eight quarters between Q301 and Q203.

We expect credit losses for the Singapore banks to rise to 1.7% of loans in this cycle, versus 1.6% in 2001 and 0.6% in 2003, but substantially below the peak of 5.2% during the Asian crisis, as gearing and interest rate risks are now much lower. Meanwhile, we expect residential vacancy rates to hit an all-time high of 13% from 6% now, and peak-to-trough declines in home prices of 10%/19%/32% in the mass/mid/prime markets as the job market weakens.

**Barrage of monetary and fiscal fixes to continue.** With little prospect of a quick turnaround, we expect the barrage of monetary and fiscal policy fixes to continue. Already, the Monetary Authority of Singapore (MAS) has softened its policy stance on the trade-weighted currency band to "zero appreciation" from one of "modest and gradual appreciation". Since its peak in July 2008, the Singapore dollar has weakened 13% against the US dollar, and we believe a further 5% is likely (to 1.60) over the next 12 months. Meanwhile, the Finance Ministry has hinted that fiscal measures to be announced in the Budget on 22 January 2009 will be the most expansionary ever, with the aim of providing a significant and sustained boost to help cushion the downturn. Our sense is the focus of fiscal policies will be two-fold—to provide immediate cash flow relief and to anchor the medium-term competitiveness of doing business in Singapore, so as to persuade companies to stay put even as they cut operations elsewhere.

**S\$ interest rates could still go lower.** The key benchmark 3M SIBOR has fallen from 2.8% at end-2007 to 0.83% now. Still, domestic interest rates could go lower, given our expectation of a further 75bp cut in the Fed fund rate by early 2009. Relative to banks in developed markets, Singapore financial institutions are flush with capital (average Tier 1 ratio: 11.8%; average total CAR: 14.5%) and liquidity (average LDR: 80%). Singapore banks have tightened credit and widened spreads, but are far from withholding lending to the average consumer or the big corporates. We continue to believe this is a key distinction that will prevent the economic fallout from matching the severity seen during the Asian crisis. In 1997-98, the SIBOR rose from 2.4% to a high of 13%, severely compounding the stress in the economy. The number of bankruptcy petitions rose 70% in 1998, in large part due to the interest rate spikes.

**A severe global recession**

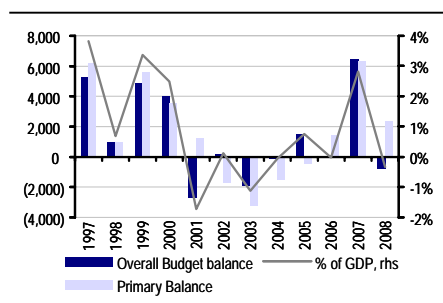
**Recession and job losses in Singapore**

**Impact on credit losses, vacancy rates, and home prices**

**Monetary and fiscal policy fixes to continue**

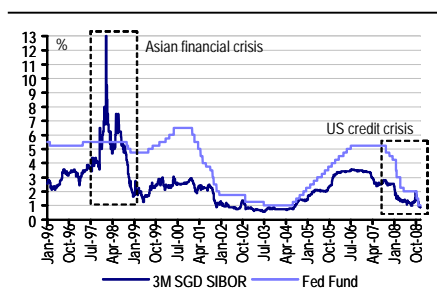
**S\$ interest rates could still go lower, given our expectation of a further 75bp cut in the Fed fund rate**

**Chart 1: Fiscal stimulus—could exceed past recessions**



Source: Ministry of Finance, CEIC

**Chart 2: Domestic interest rates & Fed funds—now versus the Asian crisis**



Source: Datastream

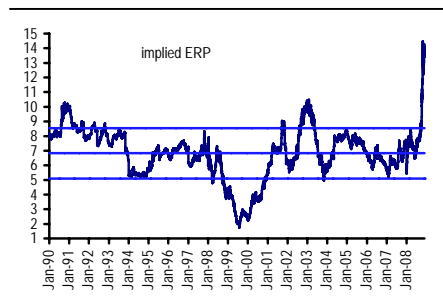
**Market priced for a re-run of the Asian crisis.** Volatility and weakness in the regional currencies (especially the Rupiah and the Won) is evoking memories of the Asian crisis. We believe the market is priced for a repeat of the Asian crisis, but the economic reality does not justify a hard landing in our view.

- **Sentiment and momentum indicators.** Sentiment indicators are hitting extreme levels. We believe the market is due for a sharp rally in early 2009. The implied equity risk premium is now nearly 4 SD above mean. Meanwhile, the 13-week rate of change has hit -40%, suggesting a deeply oversold market. As well, we note that insiders buying in the market has widened beyond smaller stocks to include management of large blue chips.

**Market seems priced for a re-run of the Asian crisis**

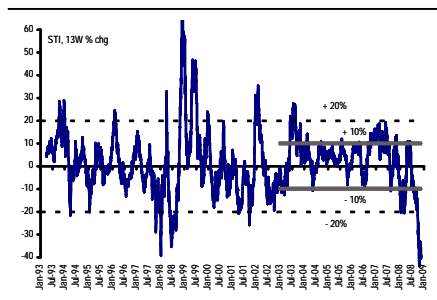
**Sentiment and momentum indicators suggest market is deeply oversold, and due for a bounce**

**Chart 3: Equity risk premium**



Source: Datastream, UBS estimates

**Chart 4: STI—13-week rate of change**



Source: Datastream

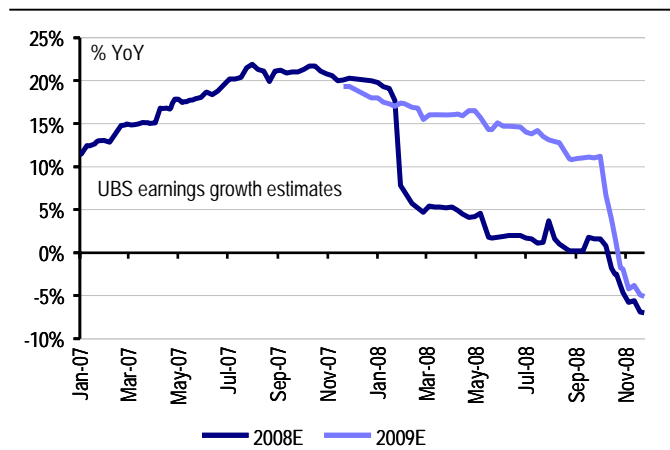
- **Earnings downgrades—80% through?** On earnings, we now estimate EPS growth of -10.8% YoY for 2008 and -6.0% YoY for 2009. From its peak, we have now cut our EPS forecasts 24% for 2008 and 40% for 2009. We do not envisage the cut from the peak for 2009E EPS to exceed 50%, which means we could be 80% through the downgrades. Sectors with the biggest cuts are technology and transport, while those with the least cuts are industrials and media.

**We could be 80% through 2009 EPS forecast downgrades**

- During the Asian crisis, the peak to trough cut in EPS was 65% for 1998, and 46% for 1999. What is interesting is that the market bottomed before the EPS revision cycle troughed. As Chart 6 shows, during the Asian crisis, the market bottomed in October 1998, when consensus was about 70-80% through the EPS downgrades.

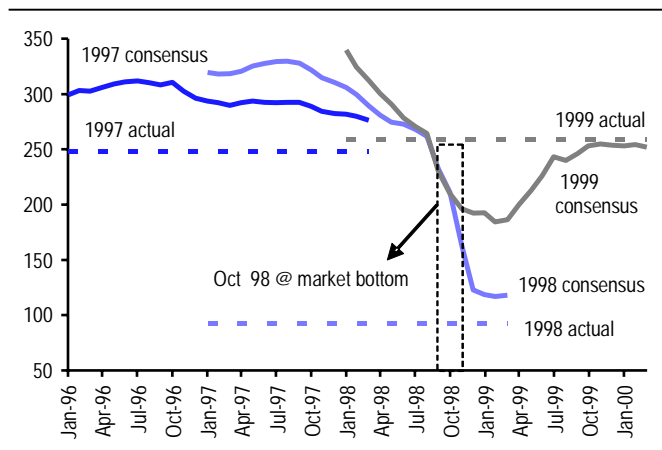
**During the 1998 crisis, the market bottomed when consensus was 70-80% through EPS downgrades**

**Chart 5: UBS universe earnings—2008E & 2009E down 24% and 40%, respectively**



Source: UBS estimates

**Chart 6: IBES earnings revisions—how bad it got in 1997-99**



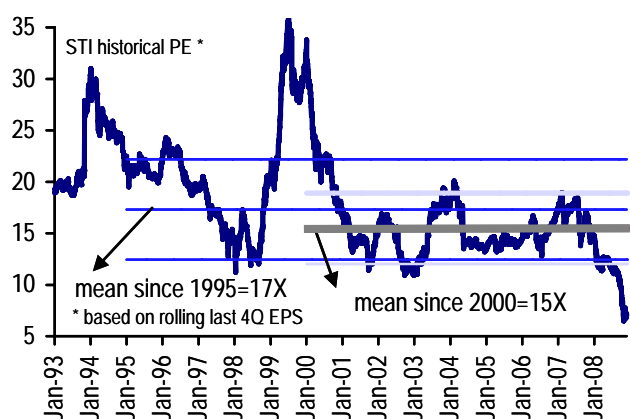
Source: Datastream

- **Valuations versus past crises.** On trailing PE, the FSSTI is now at 7.1x. This is 36.6% below the worst of the Asian crisis (at 11.2x) and 34.9% below the worst of SARS (at 10.9x) (Chart 7). The trailing P/BV, however, is at 1.4x, which is approximately 24% above the low of the Asian crisis, and similar to the low of SARS (Chart 8).
- In comparing P/BV, it is important to note that corporate profitability (ROE) has been rising through the crises, which we believe is structural. ROE has risen from 5.7% in 1998 to 6.6% in 2001, and then 10.1% in 2003 and 12% in 2008 (Chart 9). The sale of low-yielding non-core assets (mainly properties) and market consolidation (most notably in banks and shipyards) have boosted asset turn, while stronger capital management (where the dividend payout has more than doubled) has strengthened financial leverage. For ROE to reach the 1998 level, 2009 earnings estimates would have to fall a further 47%.
- As shown in the DuPont analysis, we now forecast ROE (ex banks) of 10.8% in 2009. Relative to 2007, these estimates presume a 22% drop in margins and a 12% fall in asset turn. Meanwhile, we project gearing to fall further to 16.2%, the lowest level since 1999.

**Now trading at 7.1x trailing PE**

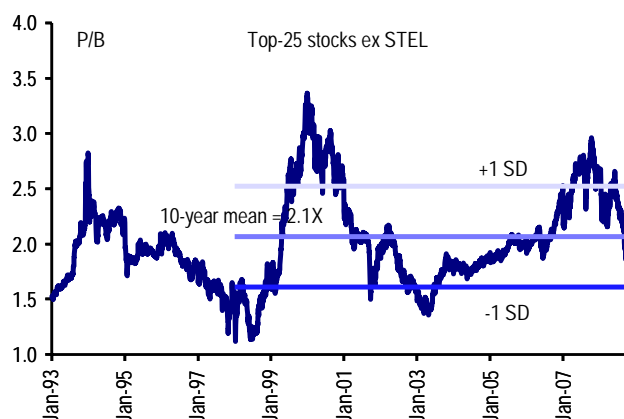
**ROE improvement is structural**

**Chart 7: Trailing PE**



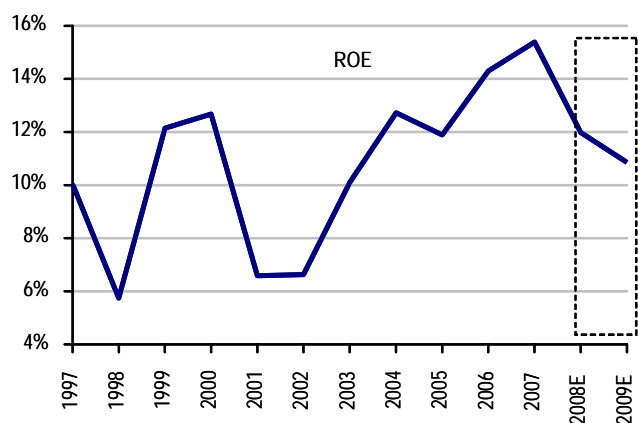
Source: Datastream, UBS estimates

**Chart 8: P/BV**



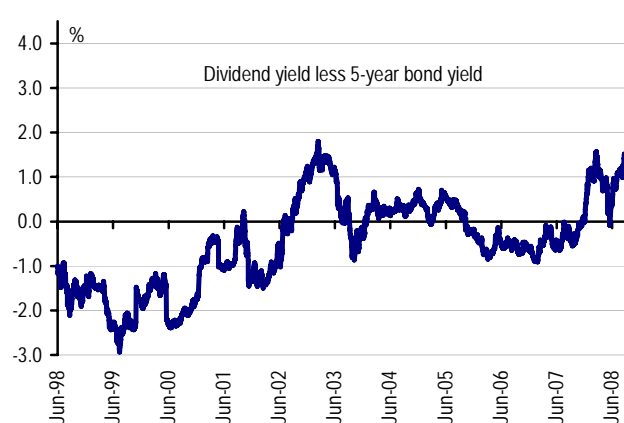
Source: Datastream, UBS estimates

**Chart 9: ROE**



Source: UBS estimates

**Chart 10: Dividend yield less bond yield**



Source: Datastream, UBS estimates

**Table 5: UBS Singapore (ex banks)—ROE DuPont decomposition**

Year	95	96	97	98	99	00	01	02	03	04	05	06	07	08E	09E
<b>ROE (%)</b>	11.2	12.2	10.6	6.3	12.4	12.6	5.3	6.0	11.0	13.3	13.3	14.0	16.1	12.1	10.8
<b>ROA (%)</b>	10.8	11.6	9.5	5.5	11.4	11.2	3.9	4.0	7.8	10.2	10.6	11.3	13.3	10.1	9.2
<b>Margin (%)</b>	20.3	20.5	16.5	8.0	15.1	13.6	6.3	6.9	11.2	13.2	11.9	12.6	13.9	10.8	10.9
<b>Asset turn (%)</b>	53.0	56.8	57.9	69.3	75.1	82.9	61.7	58.5	69.7	76.9	89.2	89.8	95.3	93.3	83.8
<b>Leverage (%)</b>	104.2	105.1	110.7	114.0	109.0	112.0	137.5	149.5	140.7	131.1	125.5	124.1	121.5	119.9	118.3
<b>Gearing (Net D/E) (%)</b>	4.2	5.9	14.7	13.2	5.2	18.3	52.9	46.4	35.6	27.1	24.2	24.0	19.4	20.4	16.2
<b>P/B</b>	2.4	2.5	2.1	1.8	3.5	2.6	1.7	1.1	1.5	1.6	1.8	2.2	2.7	1.1	1.1
<b>EV/CE</b>	2.6	2.5	2.0	1.8	3.2	2.3	1.6	1.2	1.4	1.6	1.7	2.1	2.4	1.1	1.1

Source: UBS estimates



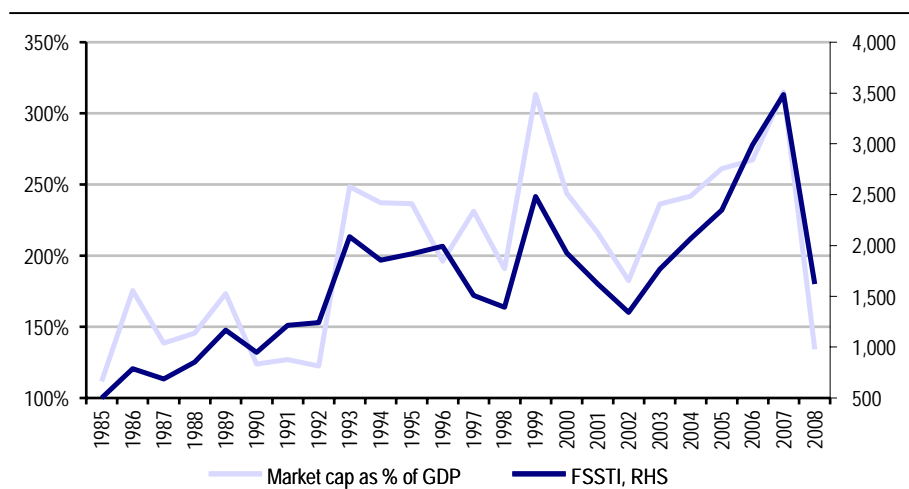
■ **Index target.** During recessionary periods, the FSSTI traded to around 12x trailing PE, versus 7.1x currently. But assuming that one year from now, the four-quarter rolling trailing earnings fall 33% from here (which matches the decline in 1998), we estimate the fair value of the FSSTI would be 24% higher from here at 2,100.

**Index target of 2,100**

■ As a reasonableness test, we calculate market cap as a percentage of GDP. As Chart 11 shows, total market cap has now fallen from 315% of GDP at end-2007 to 135% of GDP now, its lowest level since 1992. Assuming nominal GDP contracts 4% YoY in 2009 and the FSSTI at 2,100, total market cap would be at 180% of GDP, still lower than 190% at end-1998.

**Market cap as percentage of GDP is at its lowest level since 1992—135% versus 315% at end-2007**

**Chart 11: Market cap as % of GDP**



Source: CEIC

## What may surprise on the upside or downside?

**What is not priced in is that the two integrated resorts could be a success.**

Equities investors are now questioning the viability of the two integrated resorts (IRs). Critically, outcome of the projects will likely shape global investors' assessment of Singapore's execution abilities, business prospects, and the sustainability of asset prices beyond the current downturn. We believe the IRs will prove a boon for the economy, providing a boost to spending and employment in the recession.

**The IRs could prove a boon**

**Failure of the MBS neither likely nor an option.** We think the massive wealth destruction will curtail the profitability of the IRs, and concerns over the solvency of Las Vegas Sands (LVS) could continue for some time. But, the feasibility of the Marina Bay Sands (MBS) is not at risk, in our view: 1) we believe the worst of the construction cost pressure is over. MBS is likely on track for phased opening in late 2009, and the Resorts World at Sentosa (RWS) in Q110; 2) funding is now fully secured; 3) the projects should generate sufficient cash flow for loan repayment, to start in two years' time in 2011; and 4) there are levers available to both operators should conditions deteriorate further. These include the government permitting phased opening/building of attractions until conditions stabilise, direct equity stakes by say the Singapore Tote Board, and monetisation of retail assets.

**Concerns over solvency of Las Vegas Sands could continue, but we believe MBS is not at risk**

In the event that LVS files for Chapter 11, the likely scenario is one where: equity in MBS gets wiped out first (US\$1.1bn or S\$1.6bn), the project cost falls to S\$5.44bn (equivalent to the loan amount, ROI of 14%) for the new investor, and the Tote Board could take over the project and subsequently farm out stakes to private parties when conditions stabilise. We believe there would be no shortage of buyers for a monopolistic casino in a jurisdiction with structurally low regulatory risks and interest rates.

**How much cash flow is needed in 2011?** Sustainable EBITDA is hard to forecast, given there is no precedent of such a land-based casino. We estimate the IRs could each generate S\$750m EBITDA in 2011, versus loan repayment needs of S\$700m for MBS and S\$530m for RWS. (Note: LVS's estimates for MBS are much higher at US\$1.25bn of EBITDA in 2012). Essentially, our estimates assume each project will generate an EBITDA in 2011, equivalent to what the Genting casino generated in 2008. We are assuming the combined revenue of MBS and RWS in 2011 will be equal to what one Venetian Macau generated in 2008.

**Likely a highly cash generative asset.** We estimate that the IRs will be among the most profitable casinos ever built in terms of absolute cash flows: 1) The "local mass" market should be strong, underpinned by a propensity to gamble. Singapore has the highest per capita spend on lottery anywhere in the world. We estimate the Singapore Tote Board generates about S\$10bn in betting revenue pa, while the illegal market is at least another S\$5bn. 2) The "foreign mass" spending should be substantial. There is no precedent for such a land-based casino, 20 minutes away by car from one of the busiest international airports in the world. Singapore has won top-three spots in global rankings of convention cities for 10 straight years, and as the top convention city in Asia for eight years, with 10.3m tourists in 2007 versus a local population of 4.8m. 3) These are monopolistic assets. Two casinos with stated objectives of different positioning (one as a MICE destination, the other as a tourist attraction) will both seek to maximise monopoly pricing, in our view. This is a critical difference versus a highly competitive market where supernormal profits are not sustainable because of new entrants. 4) Low gaming taxes in Singapore of approximately 12% for mass and 21% for VIP (inclusive of 7% GST) versus Macau at 39% and Malaysia at 25%. For casinos, the three key costs are gaming taxes, junket commissions and labour.

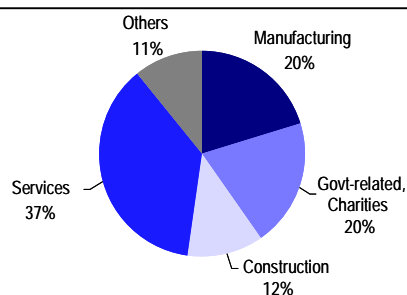
**Watch the job market.** We believe the biggest downside risk is in the pace of job cuts. Retrenchment has intensified, but employers are showing no signs of panic. So long as companies do not give up on the medium-term prospects of doing business in Singapore, the cyclical downturn should not evolve into massive relocations of operations out of Singapore, the way it did over 2001-03. A sharp rise in unemployment could set in motion negative population growth and severe second order damage to the physical property market beyond what we are currently expecting. As Charts 12-13 show, employment is diversified across key sectors, and also within services.

**Cash flow should cover loan repayments, which start in 2011**

**Local propensity to gamble, depth of foreign arrivals, monopolistic positioning and low gaming taxes to underpin profitability**

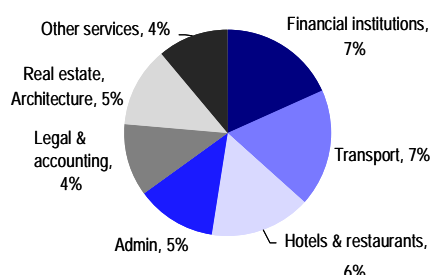
**Downside risk is in the job market**

**Chart 12: Employment by key sectors**



Source: CEIC

**Chart 13: Services jobs as % of total**



Source: CEIC

## What are the likely key catalysts?

We believe the “buyers’ strike” in the equity market is unlikely to continue into early 2009, and investors would have to reassess their portfolio allocations for the new year. Specific to Singapore, we believe key events include: 1) the FY09 Budget on 22 January 2009; 2) the MAS monetary policy review in April 2009; and 3) the targeted opening of the MBS in late 2009 and RWS in early 2010. Hiring for these projects should commence by Q309.

## Key sector ideas

**Table 6: Sector & stock picks**

Sector	Stance	Comments	Top picks
<b>Financials</b>	Overweight	Banks are now trading at c1x P/BV. Singapore banks did not make losses even during the Asian crisis, and we believe the track record is likely to be sustained in this cycle. We expect credit losses (provisions as % of loans) to average 1.7%, higher than SARS (0.6%) and the TMT burst/September 11 (1.6%), but below the Asian crisis (5.2%). Loan demand is falling, but supply of credit is falling even faster. As global banks rebuild balance sheets, the next two to three years should see Singapore banks gaining market share against foreign peers and regaining some ability to re-price credit.	UOB – more defensive than DBS. This said, a valuation gap wider than 50% would look excessive, in our view. SGX – derivatives revenue should hold up due to volatile markets, and migration of OTC products onto regulated exchanges. Monopoly with high FCF margins and ROIC
<b>Media</b>	Overweight	Print media has been in a structural decline for several years given limited growth and concerns of online competition. Increasingly though, evidence suggests that online media has made only small inroads into the ad market in Singapore. Because of the effective monopoly, the FCF margin and ROIC of SPH remains high at 31% and 48%, respectively. Given that SPH did not recognise revaluation gains on the Paragon, a fall in asset value now should not impact the book or P/L.	SPH
<b>Properties</b>	Neutral	The most critical call for Singapore is likely the timing for a move back into properties. Mid-cap developers are now trading at valuations similar to the Asian crisis, a time marked by high interest rates and balance sheet stress. This said, physical market prices and rents are only just starting to fall in earnest. Refinancing needs of the Singapore REITs could keep the market on edge. Transaction volume could stay low till stability is seen in macro data points, likely in Q309.	CapitaLand – key challenge is timing, given that re-rating is dependent on them buying distressed assets PLife REIT – low gearing, defensive earnings
<b>Telecoms</b>	Neutral	Given the declines in share prices, the telcos are now trading at 5-13% FCF yield. We think scope for special dividends is limited until credit markets stabilise. SingTel faces near-term uncertainties on emerging market exposures and currencies.	MobileOne is likely most defensive, and least exposed to rising competitive pressures
<b>Diversified Industrials</b>	Neutral	Oil exploration remains a structural theme. Near term though, order cancellation risk is present and order book momentum is likely to fall off sharply. This said, the top Singapore yards have demonstrated their superior execution abilities relative to peers, reporting robust margins through Q1-Q308 despite substantial cost pressures. Importantly, capex has remained low, and high FCF margins and balance sheet strength should support sustainability of dividends. With Keppel Corp and SMM trading at an end-2009E dividend yield of 7-14%, we are Neutral rather than Underweight the sector at these share price levels.	SMM: We would view any weakness in the share price as an attractive buying opportunity, given the outlook on a two-year view remains robust. STE
<b>Transport</b>	Underweight	The land transport sector is highly cash generative, but valuations relative to other high yield stocks are looking stretched (average dividend yield of 5.5% versus 10% for the top 10 high yield stocks, ex Singapore REITs/business trusts). The pace of ridership increases should start to moderate. SIA and NOL now present value, in our view, trading at 0.8x and 0.4x P/BV respectively. This said, we would be more comfortable picking growth cyclicals in three to six months time.	SIA, NOL
<b>Technology</b>	Underweight	We remain cautious on the upstream fabs, where losses are expected to continue to rise for Chartered Semi. We believe Venture's high-mix/low-volume business model should help deliver more defensible profit margins relative to EMS peers with high consumer exposure.	Venture

Source: UBS

## Singapore Top 9

In this section, we present commentary on our Singapore top picks.

### Singapore Top 9 Stocks

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
United Overseas Bank	Buy	16.00	Management has a proven track record through the cycles, well capitalised with Tier 1 of 11.2%. Attractive valuation and franchise strength. Defensive pick among Singapore banks.
CapitaLand Ltd.	Buy	3.70	Cash balance of over S\$4bn – focus on buying distressed assets from Q209 onwards, therefore could be one of the first real estate companies to have NAV and EPS upgrades.
ST Engineering Ltd	Neutral	2.50	
Singapore Exchange	Buy	9.00	Derivatives revenue should record structural growth. Some recovery in securities turnover likely if risk aversion falls from current extreme levels, which we believe may come in early 2009.
SembCorp Marine	Buy	3.00	Near term, industry risks look high. But we believe price weakness would represent an attractive opportunity based on its superior execution abilities, low capex, and high dividend yield of 14%.
MobileOne	Buy	2.40	Attractive mix of high dividend yield (FCF yield of 15%) and reasonable earnings growth (8-9% EPS CAGR). Development of NBN provides opportunity.
Singapore Press	Neutral	3.75	Monopolistic and strong cash flows. Potential to benefit from lower newsprint costs in H209.
Singapore Post	Buy	0.96	Stable earnings and strong free cash flow. Credit crunch substantially reduces risk of new entrants. High dividend yield likely to be maintained as it retains monopolistic market position.
Parkway Life REIT	Buy	1.20	Strong organic growth and low near-term fund raising risk. Master lease ensures stable rental growth with embedded inflation hedge.

Data as at 1 December 2008. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Top 9 Stocks list below:

### United Overseas Bank

**Investment case:** Among the three Singapore banks we prefer United Overseas Bank (UOB) as a defensive pick. It has a much smaller corporate CDO portfolio than DBS, and also does not have a large insurance exposure such as that of OCBC, which can be volatile in turbulent markets. UOB's management has a proven track record of having managed through the cycles and this should bode well in the current environment. UOB has a Tier 1 ratio of 11.2%, well above the minimum requirement of 6%, and we believe this reflects the strength of its balance sheet. While its loan-to-deposit ratio is only 89%, the bank in recent quarters has been a net inter-bank borrower and the recent decline in inter-bank rates should benefit.

**Valuation:** The stock is trading at 9.8x 2009E PE and 1.13x book. While this is in line with its peers, it is significantly below its trading history. While heightened risk aversion may limit the upside in the near term, we believe the stock remains attractive on a 12-month outlook, both on valuation and on the strength of its franchise. We derive our price target using the Gordon Growth Model, assuming ROE of 12.0%, COE of 9.6%, and growth of 4.8%.

**2009 catalysts:** We think signs of the bottoming of the economy and provisioning could provide potential catalysts for the stock. Another potential catalyst could be better margins via wider spreads.

**Sector:** Financials

**Rating:** Buy

**PT:** S\$16.00

**Analyst:** Jaj Singh

## CapitaLand

**Investment case:** CapitaLand (CL) has been cautious on asset markets for over 12 months. As a result, there have been proactive asset sales (that is, Singapore office, China mixed use), and it has maintained a cash balance of over S\$4bn. CL is therefore likely to be one of the few companies able to look beyond refinancing risk, and focus on buying distressed assets from Q209 onwards (it is waiting for the cycle to trough). This could result in CL being one of the first real estate stocks to record NAV and EPS upgrades, post the current downgrade cycle. The likelihood is the company will remain relatively inactive for the next three to six months; however, on a 12-month outlook, the market is likely to narrow the discount to NAV to some degree, with further material downside unlikely, in our view.

**Valuation:** Our end-2009 RNAV estimate is S\$6.40. Our 12-month DCF-based price target of S\$3.70 is roughly in line with stated book value, and at a 40% discount to our RNAV estimate.

**2009 catalysts:** The reinvestment of surplus cash is likely to be the main positive catalyst. Developers in general are likely to start to re-rate once transaction volume returns to the residential market, and markets can see an improvement in GDP growth on the horizon.

## ST Engineering

**Investment case:** In the near term, we think ST Engineering's (STE) Aerospace and Land Systems divisions could experience margin pressure and report weak earnings in Q1-Q209 because of the weaker global economy. Nevertheless, we think the stock looks interesting because: 1) we believe consensus earnings estimates have been cut to more realistic levels, and we think consensus earnings downgrades should slow soon; and 2) we believe a 100% payout ratio for 2008, as guided by management, is achievable given the strength of its cash flow. We think the generous dividend payout ratio can be maintained in 2009. The stock is trading at a net yield of 7.2% for 2008E and 6.7% for 2009E.

**Valuation:** Our price target is based on STE's discounted free cash flow to equity. We use a cost of equity of 8.2% based on a 3.2% risk-free rate and assume terminal growth of 3%. We believe DCF is appropriate, given STE's strong cash generation and consistent track record of returning cash not needed to shareholders. Since 2002, STE has returned 100% of its net profit in dividends. We think this will likely be repeated in 2008, unless the cash is needed for a large acquisition.

**2009 catalysts:** 1) Credit quality of airline customers; 2) infrastructure spending; and 3) dividend payout ratio.

**Sector:** Properties

**Rating:** Buy

**PT:** S\$3.70

**Analyst:** Alastair Gillespie, CFA

**Sector:** Diversified Industrials

**Rating:** Neutral

**PT:** S\$2.50

**Analyst:** Cheryl Lee, CFA

## Singapore Exchange

**Investment case:** We expect trading volume to remain volatile in the near term, but it could rebound in FY10 as investors return to the relatively high economic growth region of Asia. Singapore, as a key financial services centre of Asia, should benefit. While securities volume has declined in recent months, derivatives volume has been increasing due to the popularity of futures in the current environment. Derivatives made up 20% of total revenue in FY08, and there is likely structural upside to this business as more OTC products are migrated onto regulated exchanges. We believe Singapore Exchange's (SGX) strong balance sheet with a net cash position and monopolistic status make it an attractive stock to own.

**Valuation:** The stock trades at a 15.3x FY09E PE, in line with its historical average. Our DCF-based price target of S\$9.00 assumes a WACC of 8.7% and terminal growth of 3%. We estimate the current share price is assuming average turnover of S\$800m per day for the next five years. This represents a 62% fall from FY08 turnover and a 37% drop from the FY09 average so far. While we expect turnover to remain weak going into the holiday season, we think there is potential for a rebound in January 2009 as investors reassess their investment allocations.

**2009 catalysts:** We think the main catalyst could be a rebound in securities turnover and we think this could come in early 2009 with some normalisation of risk aversion from current extreme levels.

## SembCorp Marine

**Investment case:** UBS expects oil prices to remain soft through 2009. UBS's view is for Brent crude oil prices to trend around US\$60/bbl—and we expect a normalised Brent crude price of US\$85/bbl. In the near term, tight credit supply means newsflow could be poor; however, we believe the quality of order books is generally good and that downside to 2009 earnings projections should be contained. The company has paid out at least 70% of earnings in dividends since 1998 and we think this can be maintained. In the medium term, we believe supply-side constraints are tight. Low oil prices in the near term would likely result in marginal activity decelerating. Over the next few years this should be a less pressing issue since demand for oil should be weak in a recessionary global economy. However, we think capex cannot be delayed indefinitely—or even beyond a few years—because of the magnitude of field decline rates.

**Valuation:** Our S\$3.00 price target is based on our estimate of SembCorp Marine's (SMM) discounted free cash flow to equity. We discount SMM's equity cash flows at its COE of 8% (Singapore rf 3.1%, beta=1) and assume 3% terminal growth.

**2009 catalysts:** 1) Newsflow on order books; and 2) execution margins: could be helped by cost pressure.

**Sector:** Financials

**Rating:** Buy

**PT:** S\$9.00

**Analyst:** Jaj Singh

**Sector:** Diversified Industrials

**Rating:** Buy

**PT:** S\$3.00

**Analyst:** Cheryl Lee, CFA

## MobileOne

**Investment case:** We believe MobileOne (M1) has an attractive mix of high dividend yield and reasonable earnings growth. The dividend yield is now 10% and the payout is likely to be sustainable given its solid balance sheet and free cash flow. Meanwhile, the yield gap against the 10-year government bond is now at an all-time high of 780bp. We forecast a 2009-12 net profit CAGR of 9%, driven by 1) lower leased circuit costs; 2) a new revenue stream from broadband leveraging NBN (Next Generation National Broadband Network); and 3) lower capex and depreciation.

**Valuation:** M1 trades at 8x PE, 4x EV/EBITDA and 13% FCF yield for 2009E, which we view as attractive. Our 2009 net profit forecast is 10% below consensus, due to our more conservative stance on the competitive outlook. Our concern is that SingTel may seek to increase its subscriber base by bundling before new players enter through NBN. However, we believe M1's valuations are excessively pricing in this risk. Our DCF-based price target assumes a WACC of 8.6% and 0% terminal growth.

**2009 catalysts:** We expect further details regarding NBN to emerge through the course of 2009. We view NBN as a good opportunity for M1 to enter the broadband market. We believe M1 is the most credible potential new entrant through NBN as it currently has almost no presence in the broadband market while it is a sizeable player in wireless. In 2009, we expect investors to start putting more focus on M1's potential to cut leased circuit costs and capex as the fibre optic cable rollout is complete.

## Singapore Press

**Investment case:** Despite its relatively defensive qualities, Singapore Press Holdings' (SPH) share price has fallen 22% YTD. We expect advertising revenue to be down 11% YoY in FY09 and net earnings to contract 5%. The forecast contraction in net profit is not as large as the top line because of ongoing contributions from the property development of the Sky@Eleven condominium. While the decline in advertising revenue will depend on the severity of the recession, we believe further downside to the bottom line could be offset by a fall in newsprint prices. Newsprint prices make up 20% of total costs and have risen significantly in recent quarters. Newsprint cost rose 27% in FY09, but we think there is potential for it to be lower as global commodity prices have fallen in recent weeks. We believe SPH's monopolistic status and strong cash flows are attractive qualities in this environment.

**Valuation:** The stock trades at 13.4x FY09E earnings and has a 7.2% dividend yield. Our price target is based on a sum-of-the-parts valuation, with S\$1.27 for its non-core business and DCF for its core business.

**2009 catalysts:** A fall in newsprint price and bottoming of the economy are two potential catalysts for the stock.

**Sector:** Telecoms

**Rating:** Buy

**PT:** S\$2.40

**Analyst:** Josh Bae

**Sector:** Media

**Rating:** Neutral

**PT:** S\$3.75

**Analyst:** Jaj Singh

## Singapore Post

**Investment case:** Singapore Post (SingPost) is the dominant postal services operator in Singapore. We think it is attractive due to its defensive earnings and strong free cash flow generation. Revenue growth was flat during the Asian crisis and down only 2% during SARS. On our estimates, SingPost will generate FCF of more than S\$120m a year for the next five years, more than enough to cover the S\$96m required to pay the minimum 5¢ per share dividend that management had committed to. While the domestic postal sector was liberalised in May 2008, the final terms of liberalisation lead us to believe that SingPost will not be significantly affected. The company is well run, led by strong management, and we believe likely to retain its near-monopolistic market position. SingPost has low capex and refinancing requirements until 2013.

**Valuation:** Our 12-month price target of S\$0.96 is derived using DCF, assuming 9.2% COE and 3% terminal growth. The stock trades at a PE of 10.4x FY09E and a 7.9% net dividend yield. Our price target implies a FY09E yield of 6.2%.

**2009 catalysts:** SingPost is exploring options to unlock the value of its headquarters, the Singapore Post Centre building. While conditions remain difficult for an outright sale, we think any positive announcement could be a share price catalyst.

## Parkway Life REIT

**Investment case:** We believe Parkway Life REIT (PLife) is among the most defensive Singapore REITs based on strong organic growth and low near-term fund-raising risk. 90% of the trust's income is derived from three hospitals in Singapore, where Parkway Holdings has 15-year leases, contracted to pay minimum rental growth of CPI+1% to the REIT. For 2009, we expect PLife's DPU to grow 8.9%: 7.5% due to 6.5% CPI growth in Singapore in 2008, and another 1.4% from the acquisitions done in 2008. PLife has a conservative balance sheet currently with 19.7% gearing (debt of S\$199m over assets of S\$1bn). In Q308, PLife entered into three-year long-term loan facilities for S\$200m to refinance its short-term facilities. This ensures there is no refinancing risk until 2011.

**Valuation:** PLife has a 2009E DPU yield of 9.7%, and more than a 50% discount to stated NAV. We derive our S\$1.20 price target using a three-stage DCF analysis.

**2009 catalysts:** PLife may continue to buy accretive healthcare assets in Japan and China in 2009, but has stated that it would keep gearing below 40-45%.

**Sector:** Transport

**Rating:** Buy

**PT:** S\$0.96

**Analyst:** Vey-Sern Ling, CFA

**Sector:** Properties

**Rating:** Buy

**PT:** S\$1.20

**Analyst:** Regina Lim



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■ **Statement of Risk**

For 2009 we are projecting global GDP growth of 1.2% and Singapore GDP growth of -1.8%. Further downgrades of macro estimates would impact our EPS estimates.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## UBS Investment Research

## Taiwan - Outlook 2009

Taiwan

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Market Comment

## Looking for the inflection point

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## ■ Summary

The initial excitement over the expansion in cross-strait relations has dissipated, and we believe change will take time. We think Taiwan is heading in the right direction structurally, and that the longer-term economic benefits will become more visible by H209. However, we expect it will still take time for headwinds from the global slowdown to abate.

## ■ What are the likely key themes for 2009?

There are three likely themes, in our view: 1) further expansion of cross-strait relations, including investments and the setting up of financial institutions; 2) structural change, including lower inheritance tax and new infrastructure spending; and 3) the timing of the inflection point for tech demand to reach stability.

## ■ What may surprise on the upside or downside?

The key risk for the market is if the global economic slowdown lasts longer or is more pronounced than we expect, in our view. This could lead to a more protracted downturn in exports and domestic consumption. On the upside, we think a rise in infrastructure spending and improvement in cross-strait relations could help to partially mitigate the risk.

## ■ Market valuation &amp; targets, highlighted sectors

Our 12-month index target is 6,000, equivalent to 1.6x 2009E P/BV and 16x PE. By sector, we are Overweight telecom, insurance and semiconductors, Neutral banks and hardware, and Underweight materials and transport. We believe Q109 would be a low-risk opportunity for longer-term positioning in Taiwan when better clarity on the magnitude of the slowdown is likely post year-end holiday sales.

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Table 1: Taiwan Most and Least Preferred List

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (NT\$)	Price Target (NT\$)	PE 2009E (x)
<b>Most Preferred Stocks</b>						
Acer Inc.	2353.TW	3.41	Buy	43.00	58.00	8.7
HTC Corporation	2498.TW	7.50	Buy	331.00	530.00	8.3
TSMC	2330.TW	32.02	Buy	40.80	50.00	16.7
MediaTek	2454.TW	7.23	Buy	224.50	330.00	10.0
Cathay FHC	2882.TW	10.34	Buy	35.40	46.40	16.0
Taiwan Cement	1101.TW	2.43	Buy	24.60	25.00	14.2
Taiwan Mobile	3045.TW	5.44	Buy	47.70	60.00	11.9
<b>Least Preferred Stocks</b>						
Quanta	2382.TW	3.96	Sell	36.15	32.00	10.1
Foxconn Tech	2354.TW	1.75	Sell	68.70	58.00	11.5
Yulon Motor	2201.TW	0.66	Sell	13.95	13.00	14.3
Formosa Petrochem	6505.TW	19.40	Sell	69.90	70.00	16.1
Yang Ming Marine	2609.TW	0.79	Sell	12.10	7.20	(3.8)

Data as at 1 December 2008. Source: UBS estimates.

This report has been prepared by UBS Securities Pte. Ltd., Taipei Branch  
 SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES

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# Outlook 2009 – Summary

## What are the likely key themes?

### Cross-strait relations

While the initial excitement on the expansion in cross-strait relations has dissipated, we believe the cross-strait theme will come back into focus in 2009. Cross strait relations expanded in the latest round of negotiations with: 1) an increase in the number of weekend charter flights; 2) direct shipping; 3) postal cooperation; and 4) cross-strait food safety. We believe the next step will be the signing of an MOU on cross-strait supervision at the next meeting, scheduled for Q109. This would allow Taiwan financial institutions to set up branches in China and vice versa. We also look forward to the potential for Chinese companies and individuals to invest in both commercial and residential property in Taiwan. We expect the longer term benefits to Taiwan's economy from the improvement in cross-strait relations to become more visible in H209.

### Structural change led by government initiatives

We believe another theme for 2009 is structural change in Taiwan led by government initiatives. The first is the proposed cut in inheritance tax from 50% to 10%. We think this is an important directive. We believe a cut in the tax rate provides the incentive for high net worth individuals to keep their assets onshore, as opposed to depositing them in accounts in Hong Kong or Singapore. This would make Taiwan more competitive compared with other regional destinations, which should lead to an improvement in fund flow, in our view.

An equally important directive by the government is the plan to increase infrastructure spending through i-Taiwan 12 projects. This will have the most immediate impact on the domestic economy. Once construction of the projects begins to accelerate in H209, we believe this should provide an added boost to the domestic economy in Taiwan, which in turn should be positive for domestic consumption.

### Timing of the inflection point

For the tech sector in Taiwan, we believe the key theme will be the timing of the inflection point. With the global economy heading into recession, there is a currently a rush to reduce inventory and cut orders within the Taiwan tech foodchain due to slowing end demand. However, we think the order pattern is likely to stabilise once the global downturn and inventory reach low points. This in itself could lead to a rebound in the Taiwan tech sector. We believe the critical link will be the upstream semiconductor segment. Since this is the first area to experience a sharp decline in orders, it is also likely to be the first area to stabilise.

## What is our central thesis for 2009?

Year-to-date, we have revised down our earnings estimates for the Taiwan market within our coverage universe by 32%/51% for 2008/2009. This brings our 2008E/2009E YoY earnings decline to 27%/21%. We believe expectations and reality are now more closely aligned and reflective of a global recession scenario. For reference, earnings in Taiwan declined 41% YoY in 2001.

**End-2009 index target: 6,000**

**Our target is based on 1.6x P/BV with implied 16x PE based on 2009E**

**Rise in infrastructure spending and lower inheritance tax are important directives**

**While conditions remain weak for the tech sector, at some point, conditions will stabilise**

**Expectations and reality are now more closely aligned and reflective of a global recession scenario**

**Table 2: Taiwan earnings estimate revisions, earnings growth forecasts and valuations**

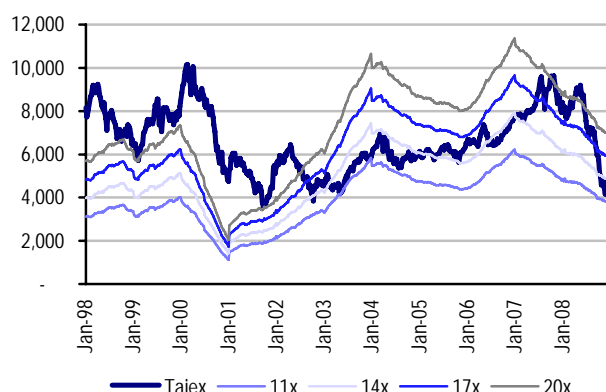
Sector	Earnings revision YTD		Underlying EPS growth (%)		PE (x)		P/BV (x)	
	2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E
Tech	-28.6%	-59.1%	-23.9%	-32.2%	8.6	12.6	1.2	1.2
Financials	-64.9%	-37.3%	-54.5%	94.9%	22.2	11.4	0.8	0.8
Telecom service	-5.4%	-3.4%	3.2%	3.7%	12.3	11.9	2.2	2.3
Transportation	-187.0%	-190.6%	n.m.	n.m.	n.m.	n.m.	0.7	0.8
Steel	-3.3%	-42.3%	0.3%	-38.9%	5.1	8.3	0.9	1.0
Chemicals	-20.6%	-33.2%	-25.5%	-33.6%	9.2	13.8	1.4	1.5
Others	-27.0%	-30.4%	-27.4%	5.6%	14.0	13.2	1.2	1.1
<b>Market</b>	<b>-31.6% -50.</b>	<b>7% -</b>	<b>26.6% -21.</b>	<b>4%</b>	<b>10.4</b>	<b>13.2</b>	<b>1.2</b>	<b>1.2</b>

Data as at 1 December 2008. Source: UBS estimates

Given the declines in our earnings forecasts, we revise our 12-month Taiwan index target to 6,000 (from 7,500). Our new index target is based on 1.6x 2009E P/BV with implied 16x PE. Our assumption is that the TaieX rebounds from the current low point once the economic environment shows signs of stability in H209.

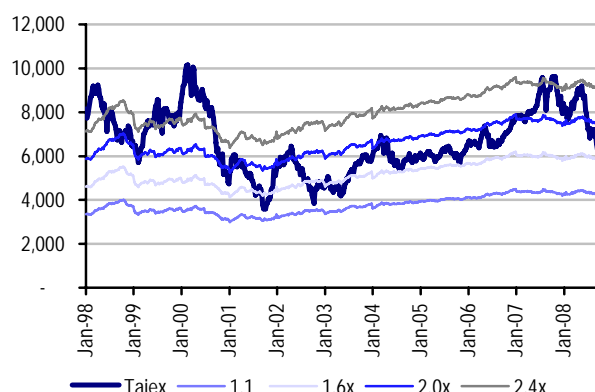
**Signs of stability in H209 could provide a catalyst for a rebound**

**Chart 1: PE band**



Source: UBS estimates

**Chart 2: P/BV band**



Source: UBS estimates

### What may surprise on the upside or downside?

We think the key risk for the market is if the global economic slowdown lasts longer or is worse than we forecast. This could lead to a more protracted period of downturn in exports and domestic consumption. The tech sector in Taiwan is particularly sensitive to changes in global conditions. Under such a scenario, the market may remain rangebound for longer period of time, or even show downside in the short term. Increased fiscal spending by various governments around the world may help to mitigate the risk.

**Key risk is if global slowdown lasts longer or shows steeper decline than forecast**

On the upside, should improvement in cross strait relations move ahead faster than expected and show more direct benefits, this could help to boost Taiwan's domestic economy. This could come in the form of increased tourism, investment in commercial and residential properties, or better efficiency in Taiwan companies through increased linkage with the greater China economy. Additionally, a rise in infrastructure spending could also help to partially mitigate the risk of economic slowdown.

**Improvement in cross-strait relations and rise in infrastructure spending could help to partially mitigate the risk**

## What are the likely key catalysts?

We believe the implementation of the cross-strait initiatives and the realisation of the associated economic benefits will serve as a catalyst. These would include the signing of the MOU on financial supervision (Q109), permitting Chinese companies or individuals to invest in commercial or residential properties in Taiwan (H209), and a more meaningful increase in number of Chinese tourists. Such developments would serve as catalysts for domestic consumption, tourism, property and asset plays. However, the precondition for this is some stability in the global macro environment by H209. Headwinds from a slowing global economy continue to be the more dominant factor in current environment.

**Signing of MOU and permitting Chinese investment in Taiwan could be catalysts**

**Table 3: Cross-strait initiatives**

H208	Time	Status	Approval Process
Permit China's QDILs to invest in the Taiwan equity market	Dec-08	Ongoing	FSC to submit administrative decree for Executive Yuan's approval
Permit Chinese companies and individuals to invest in commercial real estate	H208-2009	Ongoing	Mol to submit administrative decree for Executive Yuan's approval
Permit Chinese companies to invest in local manufacturing sector, infrastructure projects and service sector	H208-2009	Ongoing	MoEA to submit administrative decree for Executive Yuan's approval
2009	Time	Status	Approval Process
Sign MOU with China government	H109	Ongoing	MAC to negotiate with China authority; FSC to issue related procedures for Executive Yuan's approval
Permit local brokers, futures and asset managements to invest in China	Dec-09	Ongoing	FSC to submit administrative decree for Executive Yuan's approval
Permit Chinese companies and individuals to invest in residential real estate	Dec-09	Ongoing	Mol to revise administrative decree for Executive Yuan's approval
Permit Taiwan banks to establish branch, to do business and lend in China	Dec-09	Ongoing	MoEA, FSC and related government agency to submit administrative decree for Executive Yuan's approval
Permit Taiwan banks to invest in China banks directly	Dec-09	Ongoing	MoEA, FSC and related government agency to submit administrative decree for Executive Yuan's approval
Permit China capital (including China banks) to invest in local banks	Dec-09	Ongoing	MoEA, FSC and related government agency to submit administrative decree for Executive Yuan's approval
Open commercial flights	Dec-09	Ongoing	MAC to negotiate with China authority; MoTC to revise related procedures. Require Legislative Yuan's approval if direct flights

Source: Executive Yuan, Mainland Affairs Council, Investment Commission of MoEA, Financial Supervisory Commission

Another potential catalyst is a rise in infrastructure spending. Once new projects get underway, we expect this to provide a boost to construction activities, which would also benefit the domestic economy. This should lead to rise in demand in sectors such as cement and steel in Taiwan.

**Rise in infrastructure spending could also provide a boost**

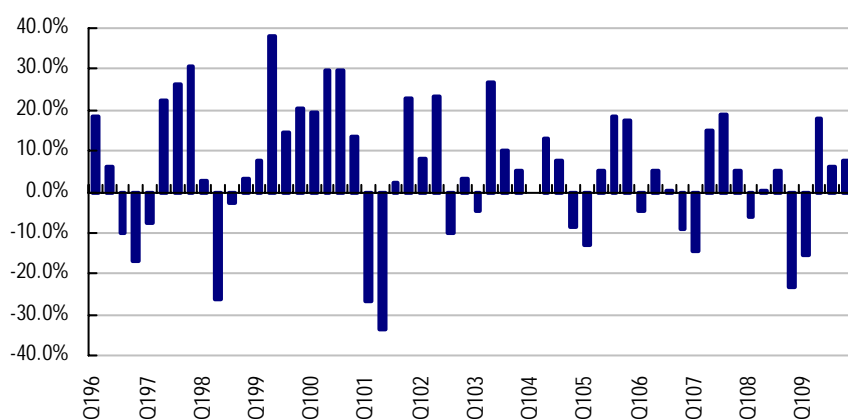
**Table 4: Infrastructure spending**

No.	Title	2009 annual budget	Total project size
		US\$ m	US\$ m
1	Island-wide MRT, train, and highway systems	2,080	46,252
2	Kaohsiung port and marine park	223	1,838
3	Taichung international airport and shipping hub	6	1,592
4	Expanding Taoyuan Int'l Airport	45	2,134
5	Schools and R&D	771	7,166
6	Science parks and bio-tech parks	315	3,662
7	Urban renewal projects	99	1,815
8	Development of rural areas	73	4,777
9	Coastal area's business and tourism development	99	637
10	Afforestation projects	86	955
11	Flood prevention projects	1,207	5,924
12	Drainage construction projects	414	7,643
<b>Total</b>		<b>5,417</b>	<b>84,395</b>

Source: Executive Yuan, Economic Daily News, UBS estimates

Within the Taiwan tech space, a key catalyst from a bottom-up approach would be stability in foundry orders. Based on past cycles, adjustment typically lasts two-to-three quarters. This would place the timing for stability around Q209/Q309. Since foundry is at the upstream of the tech foodchain, a pick up in orders would provide an early signal for completion of inventory adjustment. Once the upstream semiconductor foodchain begins to restock inventory, we expect a rise in hardware shipments to follow.

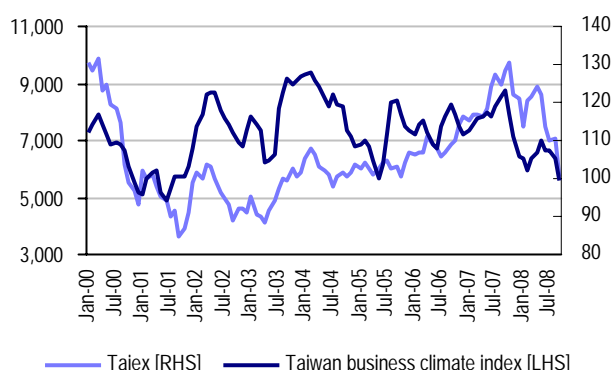
**If conditions stabilise for upstream semiconductor in Q209/Q309, this should also boost sentiment**

**Chart 3: TSMC quarterly revenue change (QoQ %)**

Source: Company data, UBS estimates

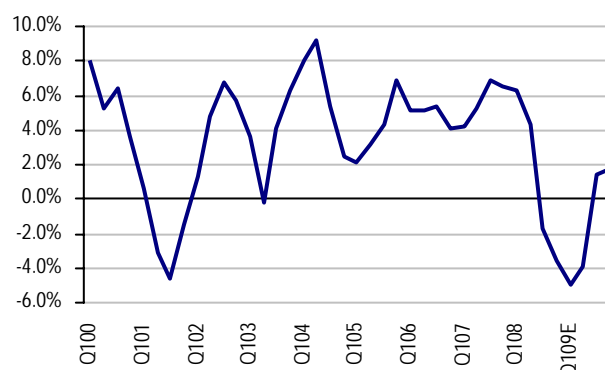
From a top-down economic perspective, we expect the bottoming of the cycle to be a catalyst for the overall market. We will be closely watching changes in the Taiwan business climate index as well as industrial production. We think the important focal point here will be the pace of the decline rather its magnitude. If the rate of slowdown begins to moderate, we expect the market to look ahead to eventual stabilisation. UBS's Taiwan economist, Sean Yokota, believes the worst of the economic slowdown in Taiwan will be in Q109, followed by a gradual return to growth.

Chart 4: Taiex versus Taiwan business climate index



Source: TIER, TEJ

Chart 5: Taiwan GDP YoY growth



Source: CEIC, UBS estimates

## Key sector ideas

Table 5: UBS sector view

Industry group	Neutral weight	Tilt	UBS weight	Comments
<b>Semiconductors</b>	23.7%	2.0%	Overweight	While orders are continuing to trend lower, we believe this is already mostly in the price. The next check-point would be the decline in inventory and the potential timing for return in orders. We shift to Overweight here, but think the best timing for positioning will be in Q109 once we get clarity on orders trends for H109. Our top picks are TSMC and MediaTek
<b>Insurance</b>	3.6%	1.0%	Overweight	We see the decline in systematic risk for global financial system as a positive. We prefer Cathay Financial in the current environment, given its strong franchise and its position as high value provider.
<b>Telecommunication Services</b>	7.9%	1.0%	Overweight	This sector has strong pricing power and is more immune to the global macro economic slowdown, but has limited growth momentum. Our top pick is Taiwan Mobile, given its strong cash flow and stable industry position.
<b>Materials</b>	16.0%	-3.0%	Underweight	We are cautious on the petrochemical sector. We expect the ethylene operating rate to peak in 2008 and trend down from 2009 with large capacities slated for start-up in the Middle East and China. We are also cautious on the steel sector given the correction in steel prices. However, the cement sector could benefit from decline in coal price.
<b>Transportation</b>	1.5%	-1.0%	Underweight	The shipping sector is vulnerable to a global slowdown. Lower oil prices are providing relief for airlines, but slower growth is adding to revenue concerns.
<b>Technology Hardware &amp; Equipment</b>	26.8%	0.0%	Neutral	With seasonal slowdown on the horizon and low expectations on year-end holiday sales, we see limited catalyst in the short-term. However, market-share gainers are still likely to outperform. Our top picks are: Acer Inc. and HTC.
<b>Diversified Financials</b>	3.5%	0.0%	Neutral	We view brokerages as a market proxy.
<b>Banks</b>	8.7%	0.0%	Neutral	The operating environment for banks remains challenging, given signal-digit loan growth, flat-to-downward margins, and a slowdown in the wealth management business. Potential signing of MOU with China in Q109 could though provide a short-term catalyst.
<b>Property</b>	0.1%	0.0%	Neutral	We expect property prices to show a moderate correction, especially in areas such as Taipei county, Taoyuan, Taichung, and Kaohsiung, given the slowdown in domestic consumption.
<b>Others</b>	8.2%	0.0%	Neutral	
<b>Total</b>	<b>100.0%</b>	<b>0%</b>		

Source: MSCI, UBS estimates

## Taiwan Most & Least Preferred

In this section, we present commentary on stocks in our Taiwan Most & Least Preferred stock list.

### Taiwan Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most preferred stocks</b>			
<b>Acer Inc.</b>	Buy	58.0	We expect Acer's 2009 shipment growth to outpace peers due to its efficient business model and leading position in the netbook market
<b>HTC Corporation</b>	Buy	530.0	We believe HTC will continue to be in the leading position in the rapidly growing smartphone market segment
<b>TSMC</b>	Buy	50.0	We think TSMC's risk / reward profile has turned positive and we believe it will be the only profitable wafer foundry in the long term
<b>MediaTek</b>	Buy	330.0	We expect MediaTek to be the only profitable 2G handset baseband provider in the future and we see limited downside risk for the stock at current level
<b>Cathay FHC</b>	Buy	46.4	We think the stock has discounted much of the negatives in terms of short-term fundamentals. Cathay is our preferred pick among Taiwan insurers
<b>Taiwan Cement</b>	Buy	25.0	We believe Taiwan Cement will be a major beneficiary of the government's stimulus package on infrastructure spending and the falling coal price
<b>Taiwan Mobile</b>	Buy	60.0	Taiwan Mobile is our preferred stock amongst Taiwan telecom companies, given undemanding valuations, both relative to local peers and the regional operators
<b>Least preferred stocks</b>			
<b>Quanta</b>	Sell	32.0	As the largest notebook ODM, we believe it could be difficult for Quanta to deliver higher-than-industry shipment growth in 2009
<b>Foxconn Tech</b>	Sell	58.0	We believe Foxconn Tech could be negatively affected by Hon Hai's ambition to tap into notebook manufacturing
<b>Yulon Motor</b>	Sell	13.0	Yulon will be negatively impacted by weak auto demand in Taiwan and China in 2009, in our view. Delay of a land development project implies limited upside surprises on 2009E earnings.
<b>Formosa Petrochem</b>	Sell	70.0	Sharp falls in refining margins, declining petrochemical margins can impact Formosa Petrochemical's bottom line performance in 2009. Trading at 3x PBV, we think valuation appears to be demanding
<b>Yang Ming Marine</b>	Sell	7.2	We expect Yang Ming Marine (YMM) to suffer greater losses than its peers in 2009-10. YMM faces challenges due to high exposure to Asia-Europe trade, increasing gearing, and substantial fleet growth

Data as at 1 December 2008. Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

### Most preferred Acer Inc. (2353.TW)

**Investment case:** We expect Acer's 2009 shipment growth to outpace its peers due to its efficient business model and leading position in the netbook market. We believe only companies with low operating expense ratios can survive in an environment of rapidly falling ASP. Our analysis suggests netbooks could be the key growth driver for overall notebook PC shipment growth. We also think wireless operators' bundling netbooks with their services should be a favourable trend for Acer.

**Sector:** Hardware

**Rating:** Buy

**PT:** NT\$58.00

**Analyst:** Edward Yen



**Valuation:** We have a Buy rating on Acer and price target of NT\$58.00. Our price target is based on a sum of the parts with NT\$0.7 long-term investment value and NT\$57.3 DCF derived from core business. Our DCF-based price target for core business assumes midterm/ terminal EBIT of 2%/1%, mid-term/terminal growth of 5.2%/3%, and 8.4% WACC.

**2009 catalysts:** The introduction of the next generation Aspire One under Packard Bell or Gateway brands could gain more attention from consumers. Moreover, we believe the new channel should be important driver for netbook demand, as wireless operators are trying to boost data revenue. Acer currently sells only 5-10% of total netbook shipments through wireless operators. Our survey suggests wireless operators in Europe and Japan have launched netbook bundled plans, and more could follow in 2009.

## HTC Corporation (2498.TW)

**Investment case:** HTC is the first mover in adopting Qualcomm's powerful new Snapdragon IC platform and this could ensure its leading position in the rapidly growing smartphone market segment. We forecast the global smartphone segment to maintain solid growth of 20% in 2009 and total units to increase from 13.7% of global shipments in 2008 to 18.1% in 2009, due to falling prices and the ongoing addition of user friendly applications. HTC is ahead of rivals in introducing phones based on Google's new Android platform and thus has been able to expand its market coverage to a different segment.

**Valuation:** We have a Buy rating on HTC and price target of NT\$530.00. We think HTC is attractive given it offers 10% cash dividend yield, its net cash/equity ratio is 89%, and the cash position accounts for close to 27% of its market cap. Our price target is based on DCF with assumptions of 12.5% EBIT margin, 8%/3% mid/terminal growth, and WACC of 8.9%.

**2009 catalysts:** We expect HTC to gradually improve its margins with shipments of new Android phones to non-T-Mobile clients in late Q109. Our industry checks suggest leading wireless carriers such as Vodafone, AT&T and NTT DoCoMo have partnered with HTC to design customised Android phones.

## TSMC (2330.TW)

**Investment case:** We think TSMC's risk/reward profile has turned positive with all the negative news already in the price. We are positive on TSMC as we believe it will continue to lead its peers in advanced process development. TSMC has dominated the advanced foundry process since 65nm and we believe its leading position will be further enhanced in the 45nm field. We think TSMC will be the only profitable wafer foundry in the long run.

**Valuation:** We have a Buy rating on TSMC and a price target of NT\$50.00. Our price target is based on average of 2.6x P/BV and TSMC's DCF-based fair value (6% mid-term growth, 24% EBIT margin, and 8.1% WACC).

**2009 catalysts:** We believe the next catalyst for TSMC will be the foundry service for MPU (microprocessor) chips on 45nm. We think AMD will rely more on TSMC after the spin-off of its manufacturing facilities.

**Sector:** Hardware

**Rating:** Buy

**PT:** NT\$530.00

**Analyst:** Arthur Hsieh

**Sector:** Semiconductors

**Rating:** Buy

**PT:** NT\$50.00

**Analyst:** Jonah Cheng

## MediaTek (2454.TW)

**Investment case:** We expect MediaTek to have stronger position in the global handset supply-chain after two major competitors, TI and Freescale, announced plans to exist handset baseband IC business. We expect MediaTek to continue to be a profitable 2G handset baseband provider in the future. We see limited downside potential for the stock at the current level and think the current price presents an attractive buying opportunity.

**Valuation:** We have a Buy rating on MediaTek and a price target of NT\$330.00. Our price target is based on 15x PE.

**2009 catalysts:** Looking into 2009, we think the major growth drivers for MediaTek include: 1) ramp up its 3G (WCDMA) chip successfully; 2) design-in from tier 1 brands like Motorola and Samsung; and 3) stronger demand for blue-ray disk (BD) disk products.

## Cathay Financial Holding (2805.TW)

**Investment case:** We think Cathay Financial Holding provides the highest value of the Taiwan insurers given its strong ROE profile. We believe the stock has discounted far ahead of its short-term fundamental outlook and we see value at the current level. We think the removal of three major risks—1) US agency exposure; 2) immediate balance sheet risk; 3) FX risk—makes Cathay Financial Holding looks attractive. We recommend investor accumulate Cathay Financial Holding shares and it is our preferred pick among Taiwan insurers.

**Valuation:** We have a Buy rating and a price target of NT\$46.40 on Cathay Financial Holding. Our price target is derived from sum-of-the-parts methodology where we value Cathay at 1.0x P/adj. NAV.

**2009 catalysts:** We think lower-than-expected losses could be a key catalyst for Cathay Financial Holding.

## Taiwan Cement (1101.TW)

**Investment case:** We believe the current valuation already factors in weak earnings in 2008 and we see value at the current level. We expect earnings recovery in 2009 given falling coal prices and higher cement ASP for Taiwan domestic and export shipments. We also expect higher investment income from Ho-Ping Power Plant next year due to lower coal costs and higher power tariffs. We see good long-term value in this stock and expect sequential margin improvements going into 2009.

**Valuation:** We have a Buy rating on Taiwan Cement and price target of NT\$25.00. Our price target is derived from sum-of-the-parts methodology, where we value core business using US\$60 EV/ton and mark listed long-term investments to market.

**2009 catalysts:** We think the following could be key catalysts for Taiwan Cement: 1) further margin expansion hence better core earnings in Q408; 2) upside risks on consensus earnings due to share disposal gains in November; and 3) a government stimulus package for infrastructure projects to be passed by the Legislative Yuan in March 2009.

**Sector:** Semiconductors

**Rating:** Buy

**PT:** NT\$330.00

**Analyst:** Jonah Cheng

**Sector:** Financial services

**Rating:** Buy

**PT:** NT\$46.40

**Analyst:** Pandora Lee

**Sector:** Building material

**Rating:** Buy

**PT:** NT\$25.00

**Analyst:** John Chung

## Taiwan Mobile (3045.TW)

**Investment case:** We believe pricing competition in Taiwan's mobile market remains in check, which benefits the three dominant operators. With good earnings visibility, stable cash flow, and a high dividend yield, we believe the Taiwan telcos are attractive in the current volatile market. Taiwan Mobile is our preferred stock amongst the Taiwan telcos, given undemanding valuations, both relative to local peers and the regional operators. Growing cable and fixed-line contributions should continue to add to its revenue base.

**Valuation:** We have a Buy rating on the stock and price target of NT\$60.00. We derive our price target using DCF-methodology.

**2009 catalysts:** 1) Taiwan Mobile owns 20% of its shares in treasury, which could be used to engage in cable MSO M&A activities to enhance earnings, 2) falling asset prices should benefit the company in negotiations and 3) solid execution and cost control should also boost investor confidence in Taiwan Mobile.

## Least preferred Quanta (2382.TW)

**Investment case:** As the largest notebook (NB) ODM, we believe it could be difficult for Quanta to deliver higher-than-industry shipment growth in 2009. We think some of the higher end NB models that Quanta is exposed to could be vulnerable as cash strapped consumers seek lower-priced alternatives. We feel the premium given to Quanta is unjustified when NB ODMs are faced with similar market conditions and Quanta could face the most downside if Hon Hai makes a push into NB ODM.

**Valuation:** We have a Sell rating on Quanta and price target of NT\$32.00. Our DCF based price target assumes 3%/3% mid-term/terminal growth, 1.7%/1.4% mid-term/terminal EBIT margin and 8.4% WACC.

**2009 catalysts:** Our checks suggest Quanta and Hon Hai have the most direct customer overlap. If Hon Hai were to become more aggressive in the NB space, Quanta could be the first to be impacted. We believe this could add uncertainty to Quanta's growth outlook in 2009 and could cause Quanta's shipment momentum to lag other ODMs. Quanta's margins could be at risk if the company wants to pursue above-industry volume growth.

## Foxconn Technology (2354.TW)

**Investment case:** We believe Hon Hai's ambition to push further into notebook manufacturing could affect Foxconn Technology's relationship with major NB ODMs, as these customers would be more reluctant to purchase from a subsidiary of a competitor, in our view. Separately, we believe potential share gains in the games console business would not be sufficient to offset the decline in the company's other businesses, given the lower margin and smaller earnings contribution.

**Valuation:** We have a Sell rating on Foxconn Technology and price target of NT\$58.00. Our DCF-based price target assumes a 5% mid-term EBIT margin, 3% mid-term growth and 9.5% WACC.

**Sector:** Telecom

**Rating:** Buy

**PT:** NT\$60.00

**Analyst:** Shirley Tse

**Sector:** Hardware

**Rating:** Sell

**PT:** NT\$32.00

**Analyst:** Edward Yen

**Sector:** Hardware

**Rating:** Sell

**PT:** NT\$58.00

**Analyst:** Edward Yen

**2009 catalysts:** As game console shipments start to drop in late 2008, we believe weak sales momentum could serve as a negative catalyst. Additionally, our Nintendo hardware shipment forecast is for flat global shipments in 2009 and a decline in 2010. This should also cap Foxconn Technology's top-line growth in 2009, in our view.

## Yulon Motor (2201.TW)

**Investment case:** We expect auto demand to remain weak going into 2009. Auto demand YTD is weaker than we expected and we think it has not bottomed yet. Yulon plans to launch its own brand car, *Luxgen*, in Q209 in Taiwan. We believe the company may face challenges given the tough macro environment. We remain cautious on the potential impact of its own brand business on earnings over the next two years. The delay of its land development project also implies limited upside surprises on Yulon's 2009E earnings and potentially high leverage for the development of its own brand business.

**Valuation:** We have a Sell rating on Yulon Motor and price target of NT\$13.00. Our price target is based on a 40% discount to our sum-of-the-parts derived NAV estimates.

**2009 catalysts:** We believe the key negative catalysts for Yulon Motor in 2009 are 1) weaker-than-expected auto demand in Taiwan, despite the government's relief package and 2) further delay on its own brand car launch in view of the weakening auto demand in both Taiwan and China.

## Formosa Petrochemical (6505.TW)

**Investment case:** Driven by slowing global demand, we believe risk is on the downside for refiner's margins. The falling gasoline and naphtha margins are affecting complex refiners, such as Formosa Petrochemical, more than others. Q308 EBIT was weaker than we expected due to slower sales and declining margins. We now think its Q408 outlook will be worse, given 1) the continued slump in oil and naphtha price should causing further unwinding of high cost inventory; and 2) we believe refining margins will likely fall in Q408.

**Valuation:** We have a Sell rating on Formosa Petrochemical and a price target of NT\$70.00. We value Formosa Petrochemical using DCF. We assume 6.6% WACC based on a 3.3% risk-free rate of return, a 5% equity risk premium, 3.2% after-tax cost of debt, company beta of 0.84 and a terminal growth rate of 3%.

**2009 catalysts:** We think 1) sharp falls in refining margins; 2) declining petrochemical (ethylene and propylene) margins; and 3) a demanding valuation at 3x P/BV are negative catalysts for 2009.

**Sector:** Auto

**Rating:** Sell

**PT:** NT\$13.00

**Analyst:** John Chung

**Sector:** Petrochemical

**Rating:** Sell

**PT:** NT\$70.00

**Analyst:** Kim-Chong Tan

## Yang Ming Marine (2609.TW)

**Investment case:** We expect Yang Ming Marine to suffer greater losses than its peers in 2009-10. The company faces challenges due to its high exposure to Asia-Europe trade, increasing gearing, and substantial fleet growth. We expect load factors will continue to fall in 2009, driving unit costs higher. We forecast 100% net debt/equity in 2010, higher than 2001-02. New vessel orders suggest approximately 15% pa fleet growth 2008-10E, again higher than 2001-02. We believe significant transpacific exposure is also a drag on earnings and we estimate intra-Asia trade contributes very little profit. Following discussions with management, we expect very limited positive impact from direct shipping links with the mainland.

**Valuation:** We have a Sell rating on Yang Ming Marine and price target of NT\$7.20. Our price target is based on an EV/DFMV of 66% and 7.4% WACC. We assume no dividend payment in 2009-10 and do not rule out an equity issuance if operating conditions worsen.

**2009 catalysts:** We think a key downside risk for Yang Ming Marine is if the company cuts rates in an attempt to boost volumes and load factors. We see little earnings support from this part of the business.

**Sector:** Shipping

**Rating:** Sell

**PT:** NT\$7.20

**Analyst:** Alex Chang

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■ **Statement of Risk**

Slowing macroeconomic conditions could lead to demand slowdown and negatively impact the business outlook for Taiwan companies.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**  
**Thailand - Outlook 2009**

Thailand

Equity Strategy

Market Comment

## A tough year for Thailand

**3 December 2008**
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### ■ Summary

The Thai market heads into 2009 weighted down by a global economic downturn and domestic politics. In the near term, it appears that headwinds are against Thailand and that sentiment will take time to turn in a risk-averse environment. Absent a resolution of the current political problems, Thailand is likely to lag the region in a recovery scenario.

### ■ What are the likely key themes for 2009?

Two key macro themes dominate the prospects for the Thai market: the impact of the forecast global recession on the domestic economy and Thai politics. Our earnings growth forecasts have already been cut to match UBS economists' bearish economic growth forecasts of 1.8% in 2009 and 3.5% in 2010. However, the seizure of the Bangkok Airport will have a negative impact on tourism and trade that was not built into these assumptions.

### ■ What may surprise on the upside or downside?

Thai politics is likely to provide the greatest opportunity for surprises, both positive and negative. The resolution of, or deterioration in, the current conflict will be the primary domestic catalyst for the SET Index, in our view.

### ■ Market valuation & targets, highlighted stocks and sectors

Our SET Index target of 535 is based on a target P/BV of 1.18x. We highlight our top 10 Thai stocks for 2009 below, noting that our most preferred picks are Thai banks, which look to have a margin of safety versus regional peers and compelling valuations.

**Table 1: Thailand Top 10 Stocks List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Siam Commercial Bank	SCB.BK	4,233	Buy	44.5	80.2	7.3
Kasikornbank	KBAN.BK	2,696	Buy	40.3	77.9	6.2
Bangkok Bank	BBL.BK	3,365	Buy	63.0	118.2	6.2
EGCO	EGCO.BK	773	Buy	52.5	127.0	2.9
Glow Energy	GLOW.BK	794	Buy	19.4	49.0	7.1
Central Pattana	CPN.BK	558	Buy	9.2	29.3	8.3
Thai Union	TUF.BK	437	Buy	17.7	25.5	6.3
Bangkok Expressway	BECL.BK	271	Buy	12.6	25.4	5.9
CP All	CPALL.BK	1,303	Buy	10.5	13.9	12.8
PTT E&P (F)	PTTE.BK	8,340	Buy	91.0	153.0	10.5

Data as at 1 December 2008. Source: UBS estimates

**This report has been prepared by UBS Securities (Thailand) Ltd.**  
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# Outlook 2009 – Summary

## What are the likely key themes?

We think two core themes will be the most important determinants of market valuations in 2009: the impact of the global downturn and developments in local politics. Broadly, we think Thailand’s attractiveness as a defensive market on a macro level will be offset by political risk. Another important theme for the market might be the impact of a falling oil price on the economy as a whole and on Bangkok consumers. With soft commodity prices falling in tandem with the entire commodities market, we expect an unwinding of the rural income growth story and a transfer of wealth back to urban consumers.

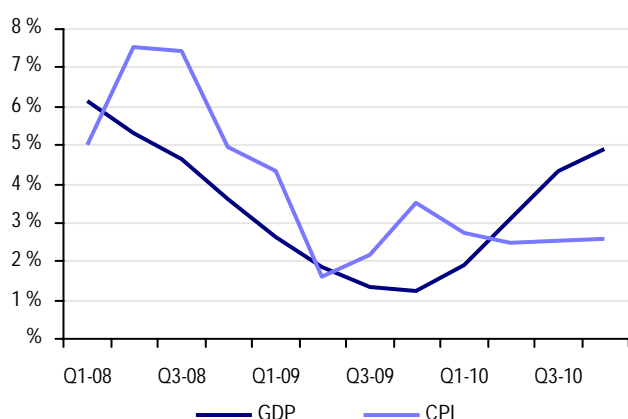
**Thailand SET target: 535**

**Our target is based on adjusting post-2001 P/BV average for our coverage universe of 1.44x for our 2009E ROE assumption of 12.3% and assuming a 15% contraction in PE. This is equivalent to a P/BV target of 1.18x**

### Forecasts already incorporate severe global recession

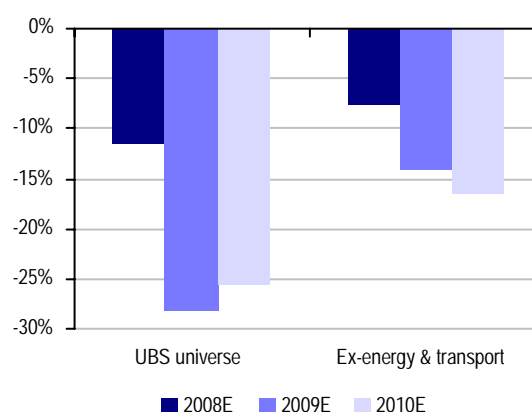
We have already incorporated bearish economic forecasts into our earnings projections for our Thailand coverage universe. We are roughly 8% below consensus for each of 2009 and 2010. The current political crisis appears likely to result in a direct negative impact on the economy that was not built into our forecasts. If the current situation does not improve, we think GDP growth near 0% is a possibility.

**Chart 1: Thai GDP growth to hit bottom in H109E**



Source: BOT, UBS estimates

**Chart 2: We have brought our forecasts down to match this**



Source: UBS estimates

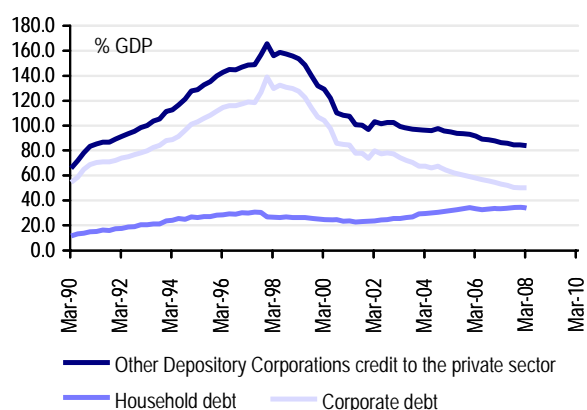
### Thailand has some insulation from global situation

At a macro economic level, Thailand looks fairly solid relative to peers in Asia. Through 2006 and 2007, the country did not appear to have the growth expectations or asset price inflation seen elsewhere, so should have less far to fall.

In each of the three channels for contagion from international economic problems—trade, finance and confidence—Thailand has some degree of insulation. We expect exports to decline 8% in 2009, but imports to drop more quickly at 11% as energy prices fall and imported content drops. At a financial level, Thailand has few of the risk factors seen in other countries. We do not expect any local credit crisis and think the country is somewhat buffered from the global problem. At a national and corporate level, the story has been one of deleveraging and FX is adequate to cover foreign exposure. While consumer and investor confidence are likely to be negatively affected, we do not expect them to fall much from their low base. Falling inflation should help in both cases.

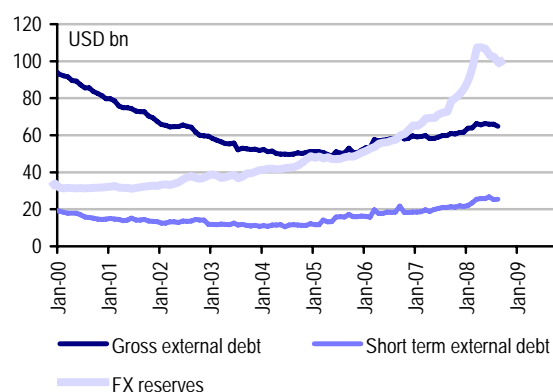


**Chart 3: Thailand has been deleveraging since 1998**



Source: CEIC, UBS

**Chart 4: External debt levels look safe**



Source: CEIC, UBS

### Thai politics may be the biggest domestic factor

This year has seen a steady escalation of political tension in Thailand. There is no clear solution on the horizon and we expect problems to linger. Underlying the current strife are major issues in Thai society against a backdrop of political change that will produce winners and losers. We believe the risks remain high for the foreseeable future.

Our base case has called for a gradual improvement in political conditions as we believe the majority of Thais favour a compromise solution. We have expected that Thailand will continue to be led by elected governments that pursue broadly pro-market policies. Over the longer term, we still expect this to be the most likely outcome. However, there is much less visibility in the short term and the range of outcomes is greater. We cannot rule out any of the scenarios we have previously described: an extension of the current government under a new party; rule by a new coalition headed by the Democrat party; the formation of a unity government; or the return of a non-elected government through a coup or judicial action.

### What is our central thesis for 2009?

Thailand faces a significant headwind moving into the beginning of next year. The combined impact of the economic slowdown and public political quarrelling will likely limit SET performance on both an absolute and relative basis, in our view. However, Thailand does have some unique features that will influence valuations. On the plus side, these include low leverage and exposure to risky asset markets, an economy that is not coming off boom times, companies that have been operating on lean margins, a high level of exposure to energy, independent consumers, and prospects for the rapid implementation of fiscal policy. Thai listed companies also have little exposure to exports. However, Thailand's ongoing political strife and the high level of export dependency of the economy as a whole are mitigating factors. Over the course of the year, we expect progress to be made towards a political solution and an improving global economy. These should support higher valuations in the Thai market.

## Thai banks are our most preferred picks

Top quality Thai banks have been able to create value in an environment of steady deleveraging and flat asset prices. We believe they are well run, not overly exposed to risky assets and look to continue to deliver high ROE. Thai bank valuations look compelling versus their own history, regional peers and the rest of the SET, even after our sharp earnings forecast downgrades.

## What may surprise on the upside or downside?

The biggest variable for Thailand remains politics. We expect a gradual improvement but no solution. From a local perspective, we think risks are weighted to the upside and we still see prospects for a compromise as being greater than for increased conflict. However, at an investor level, the situation may be somewhat different. Improvement is a gradual process that is difficult to see and measure. However, deterioration can be rapid and visible.

## What are the likely key catalysts?

Year to date, the SET has fallen roughly in line with the MSCI Asia ex-Japan Index in US\$ terms. The most powerful drivers for the Thai market have been related to global macro issues and we expect that to continue. As noted above, easing global economic factors and improving politics are gradual and do not provide specific catalysts. It is possible that an event occurs that provides some level of confidence in improving politics such as a public compromise, overwhelming election results or solid performance by a Thai government. We believe rising oil prices would serve as a boost to PTT Public and PTT Exploration & Production (PTTEP). A resilient consumer sector would support valuations in related stocks and Thai banks, although the catalyst would most likely be earnings.

## Key stock/sector ideas

We are cautious about the Thai market in the short term as we expect the impact of the global economic downturn and local political turmoil to provide headwinds. Regardless, we do think our preferred stocks provide a risk-reward balance that is attractive. The best way to position for a recovery in the first half of 2009 is the Thai banks sector, in our view. We like Siam Commercial Bank, Kasikornbank, and Bangkok Bank, in that order. We do think oil prices will begin to recover in H2 after averaging US\$50 per barrel in the first two quarters. PTTEP has the highest level of correlation to oil prices and limited exposure to domestic Thai politics. For investors with a more defensive outlook, we recommend Electricity Generating Co., Glow Energy, Bangkok Expressway, Thai Union Frozen, CP All, and Thai Beverage. We continue to like property names Land & Houses and Preuksa Real Estate, but think investors can wait until strong signs of domestic economic recovery are closer. We think it is too early to play the cyclical recovery in refiners, petrochemicals, and dry bulk shipping.

# Thailand Top 10

In this section, we present commentary on stocks in our Thailand Top 10 list.

## Thailand Top 10

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
Siam Commercial Bank	Buy	80.2	Safe positioning, high ROE
Kasikornbank	Buy	77.9	Current P/BV of 1x overstates risks
Bangkok Bank	Buy	118.2	Macro play, trading well below a P/BV of 1.0x
EGCO	Buy	127.0	Solid earnings from PPAs, double-digit dividends
Glow Energy	Buy	49.0	Good growth pipeline and solid management
Central Pattana	Buy	29.3	Resilient retail sales, capacity growth
Thai Union	Buy	25.5	Falling commodity prices, weak Baht, good management
Bangkok Expressway	Buy	25.4	Solid earnings, good dividend
CP All	Buy	13.9	Resilient retail sales, China divestment
PTT E&P (F)	Buy	153.0	Pure oil play without Thai political risk

Data as at 1 December 2008. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Top 10 list below:

### Siam Commercial Bank

**Investment case:** We think Siam Commercial Bank (SCB) is well positioned to outperform competitors in this tough operating environment. We believe it has the capability to sustain its superior ROE (15-16%), supported by: 1) its early implementation of a strict loan underwriting policy in early 2008; 2) ongoing efforts to expand loan yields by limiting incremental working capital loans, while increasing high-yield retail loans; 3) limited downside risk from its foreign investment portfolio; and 4) the low risk of higher provisioning due to an NPL coverage ratio of 83%.

**Valuation:** We base our price target of Bt80.20 on a dividend discount model. We derive a P/BV target multiple of 2.0x 2009E book value, assuming 10.7% COE and a 15.4% sustainable ROE.

**2009 catalysts:** We believe SCB's early implementation of a strict underwriting policy will help cap NPL formations. This should consequently help limit provisioning risk and support a re-rating of its share price in 2009.

### Kasikornbank

**Investment case:** We believe the current valuations present an attractive buying opportunity into Kasikornbank's (KBANK) solid long-term growth platform. We expect the above-average return beyond 2009E to be underpinned by: 1) its well established position in the SME and retail segments; 2) the completion of an IT upgrade at year-end 2009, which will likely enhance its fee-based income capability; and 3) the expected decline in credit cost as its NPL coverage ratio rises to over 90%.

**Valuation:** We base our price target of Bt77.90 on a 1.5x 2009E book value multiple, assuming 10.4% COE and a 13.1% sustainable ROE.

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** Bt80.20

**Analyst:** Butsakon Khoosuwan

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** Bt77.90

**Analyst:** Butsakon Khoosuwan

**2009 catalysts:** We think the successful IT upgrade under the “K-Transformation” programme could be a key positive catalyst to support fee-based income growth. The project is scheduled to be completed by year-end 2009.

## Bangkok Bank

**Investment case:** Bangkok Bank’s (BBL) share price has fallen sharply, driven by rising concerns over the potential deterioration of its large exposure to overseas loans and foreign investments (15% of Q208 total assets) amid a growing risk of a global recession. We believe losses on these exposures could prove much less than market expectations. In view of this, we believe BBL’s depressed valuation (2008E P/BV of 0.7x) is unwarranted and that the stock is attractive at current levels. We think BBL’s shareholder equity and strong corporate banking platform would help sustain ROE at 10.5-11.5%, supporting a re-rating of its valuation in the medium term.

**Valuation:** We base our price target of Bt118.20 on a dividend discount model. We derive a P/BV target multiple of 1.2x 2009E book value, assuming a 10.0% COE and 11.2% sustainable ROE.

**2009 catalysts:** While we expect modest earnings growth in 2009, we think there is room for valuation upside, which is likely to be supported by lower-than-expected NPL formations from its overseas loan book.

## Electricity Generating Co

**Investment case:** We believe EGCO can provide a sustainable double-digit dividend yield. The company has fewer growth projects outside Thailand than Ratchaburi and so should be viewed as more defensive than its peers, in our view.

**Valuation:** Our DCF-based price target of Bt127 assumes a WACC of 8% and a finite asset life.

**2009 catalysts:** We believe the tentative start of operations at the Nam Theun 2 project, a 1,000MW hydroelectric power project in Laos that is 25% owned by EGCO, should be viewed as a positive potential catalyst for the stock.

## Glow Energy

**Investment case:** Glow is our top pick in the Thai utilities sector given management’s strong track record in securing and executing value-accretive projects such as the 2007 IPP win, the 380MW cogeneration project, and the 115MW industrial contract for Siam Cement.

**Valuation:** We base our price target of Bt49 on a DCF valuation, assuming a WACC of 8% and finite life for PPAs (Power Purchase Agreements) and industrial contracts. We believe Glow’s valuation is attractive on an EV/CE and ROACE/WACC basis. The stock is also trading at a 31% discount to regional IPPs on 2009E PE.

**2009 catalysts:** We believe potential catalysts could come from newsflow on securing new projects such as the industrial contract (estimated capacity of 400MW) for Siam Cement’s proposed industrial contract in Vietnam.

**Sector:** Banks, Ex-S&L

**Rating:** Buy

**PT:** Bt118.20

**Analyst:** Butsakon Khoosuwan

**Sector:** Electric utilities

**Rating:** Buy

**PT:** Bt127

**Analyst:** Athaporn Arayasantiparb

**Sector:** Electric utilities

**Rating:** Buy

**PT:** Bt49

**Analyst:** Athaporn Arayasantiparb

## Central Pattana

**Investment case:** We believe Central Pattana (CPN) will benefit from resilient retail spending in Thailand, given its dominant position in the department store segment. We think a 37% and 19% increase in lettable retail and office space, respectively, from the opening of three retail malls in 2009 would support its earnings and share price further.

**Valuation:** We value CPN at Bt29.30 using a sum-of-the-parts methodology, consisting of 1) Bt60.7bn (Bt27.87/share) from its retail property development business, and 2) Bt3.1bn (Bt1.43/share) from its 33% stake in CPNRF.

**2009 catalysts:** We think CPN could benefit from two potential catalysts in 2009: 1) the conclusion of the land lease agreement with the State Railway of Thailand, which has been an overhang on the share price; and 2) a lower rent discount at the key Central World department store.

## Thai Union Frozen

**Investment case:** We believe a 180bp EBITDA margin expansion led by falling raw material prices and operating costs would lead to strong earnings for Thai Union Frozen (TUF). Defensive demand for its products (canned tuna and frozen seafood) and an export tariff reduction should also bode well for volumes, in light of the expected global economic recession in 2009. Moreover, a weak currency (Bt/US\$) could provide upside risk to earnings, both in terms of revenue and margin.

**Valuation:** We value TUF at Bt25.50 using a DCF methodology, assuming an 8.2% WACC and 3% terminal growth.

**2009 catalysts:** We think TUF could benefit from two potential catalysts in 2009, namely: 1) stable or further weakening of the currency; and 2) a possible positive WTO ruling against the US zero coupon bond on Thai shrimp export.

## Bangkok Expressway

**Investment case:** We think there are two positive factors that should boost traffic volume in 2009. These are: 1) a fall in oil prices; and 2) the start of toll collection for the Southern Outer Ring Road. We expect Bangkok Expressway's (BECL) revenue to rise 7.6% in 2009, compared with -1.9% in 2008E.

**Valuation:** We value BECL at Bt25.40 using sum-of-the-parts methodology that values: 1) the core operation based on DCF (8.7% WACC and 0% terminal growth) at Bt20.5/share; 2) the listed investments (BMCL and TTW) at market prices (Bt4.3/share); and 3) the non-listed investment (SEAN) at book value (Bt0.6/share).

**2009 catalysts:** We believe a recovery in traffic volume and toll revenue collection will be key earnings drivers, supporting a potential re-rating of its share price in 2009.

**Sector:** Retail property developer

**Rating:** Buy

**PT:** Bt29.30

**Analyst:** Piyanan Panichkul

**Sector:** Food products

**Rating:** Buy

**PT:** Bt25.50

**Analyst:** Piyanan Panichkul

**Sector:** Transportation

**Rating:** Buy

**PT:** Bt25.40

**Analyst:** Butsakon Khoosuwan

## CP All

**Investment case:** CP All has consistently outperformed our expectations in terms of same store sales (SSS) and earnings growth. Its success can be attributed to the low-cost and efficient small-store format, customer-centric product management, and ability to squeeze more margins from suppliers. Recently, the company also divested its money-losing China hypermarket business. CP All should benefit from lower oil prices, which increases consumers' disposable incomes and also reduces transport costs between its warehouses and stores.

**Valuation:** We value CP All at Bt13.90 using a DCF valuation, assuming a WACC of 10% and terminal growth of 4%. The stock is trading at a 28% discount to Asian CVS peers on 2009E PE.

**2009 catalysts:** A potential positive catalyst is bidding for the Vietnam licence for 7-11, which might take place in late 2009. We believe CP All has greater expertise in emerging market logistics than competitors from more developed markets such as President Chain Store (Taiwan) and Dairy Farm (Hong Kong/Singapore).

## PTT Exploration & Production

**Investment case.** UBS believes global oil prices are likely to bottom during the first half of 2009, and we believe a recovery is possible by H209. If so, we think PTT Exploration & Production's (PTTEP) share price will benefit. Given that nearly 75% of the company's production and half of its earnings are determined by natural gas, the earnings are generally less sensitive to oil prices when compared to CNOOC. However, PTTEP's share price has proven historically to be among the most highly correlated to oil prices in Asia. We estimate the company can deliver a five-year production CAGR near 8-10%, although most of this will be in natural gas, in our view. We believe the projects with the highest potential for PTTEP in the near term are in Myanmar and Vietnam, and in the long term in Cambodia and Iran. Finally, low oil prices have the potential to present good acquisition opportunities for PTTEP this year, in our view.

**Valuation.** We have a Buy rating on PTTEP. We use a DCF valuation methodology to arrive at our Bt153 price target. We assume a long-term Brent crude oil price of US\$85/bbl and a long-term Thailand natural gas price of US\$5.4/mmbtu. Finally, we assume a WACC of 10.3%.

**2009 catalysts.** We believe that ultimately a bottoming and subsequent rise in global oil prices by mid-2009 could be the key catalyst for PTTEP. Beyond this, we believe newly announced discoveries could also contribute to performance.

**Sector:** Broadline retailers

**Rating:** Buy

**PT:** Bt13.90

**Analyst:** Athaporn Arayasantiparb

**Sector:** Asia Oil and Gas

**Rating:** Buy

**PT:** Bt153.00

**Analyst:** Peter Gastreich

### ■ **Statement of Risk**

Stock markets are influenced by several factors, internal and external, that make predictions of market direction inherently difficult. Our stock ratings are based on earnings estimates that are subject to changes because of changes in the operating environments of the respective companies.

### ■ **Analyst Certification**

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## Asian Sector Strategy

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# UBS Investment Research

## Asia Agribusiness - Outlook 2009

Asia

Agriculture

Sector Strategy

### Tough times ahead

#### ■ Summary

We expect the CPO price to be weak in 2009 on our view that global edible oil demand and supply will be in balance. We forecast an average CPO price of US\$450/t for 2009, down from an estimated US\$890/t for 2008. However, share prices are down significantly in 2008, and we think some stocks are attractively valued, even though short-term catalysts might be lacking.

#### ■ What are the likely key themes for 2009?

1) A weak South American soybean harvest. 2) M&A, if the issue of credit is resolved. 3) Falling Malaysian palm oil output. 4) Biodiesel demand picking up. 5) Crude oil continues to be a strong influence on the palm oil price.

#### ■ What may surprise on the upside or downside?

Crude oil remains the biggest external influence on the palm oil price. On supply, we will monitor the South American soybean crop in March-May 2009. We will also be looking for Malaysian palm oil inventories to decline, as the low production cycle progresses.

#### ■ Highlighted stocks

Wilmar remains our top pick because of its downstream-biased business model. Among the upstream players, we like Astra Agro for its balance sheet strength. IOI Corp is our only big-cap Buy in Malaysia. Our least preferred stocks are Sime Darby and KL Kepong.

4 December 2008

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**Table 1: Asia Agribusiness Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Wilmar	WLIL.SI	10.70	Buy	2.56	3.26	11.1
Astra Agro	AALI.JK	1.01	Buy	7,900	11,000	13.7
<b>Least Preferred</b>						
Sime Darby	SIME.KL	9.20	Sell	5.15	4.54	18.6
KL Kepong	KLKK.KL	2.40	Sell	8.20	7.75	12.9

Data as at 2 December 2008. Source: UBS estimates

This report has been prepared by UBS Securities Malaysia Sdn Bhd.

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# Outlook 2009 – Summary

## What are the likely key themes?

With the CPO price likely to remain soft, we expect many plantation companies to have significantly lower free cash flow in 2009. Because of this, we expect M&A to emerge as a key theme in 2009. In our Q-Series® report, *Which companies are best positioned for a downturn?* (17 October 2008), we identified Astra Agro, KL Kepong and Golden Agri has having the balance sheet to embark on M&A.

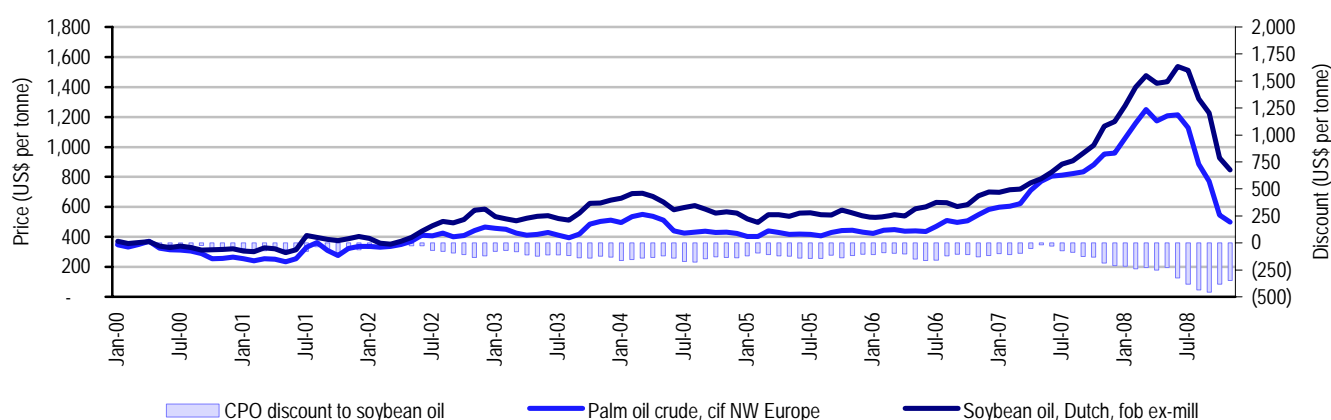
How well companies manage the downturn could be a market focus in 2009. Companies that have low production costs—IOI and Hap Seng Plantations—stand a better chance of delivering profitability, while those with a higher cost structure—Sime Darby and Bakrie—could rapidly slip into loss, in our view. We think companies will likely slow new plantings and explore ways of becoming more efficient and also to cut costs.

We think the government response to a low CPO price is likely to be closely monitored as the oil palm sector in Indonesia and Malaysia is a significant employer and forex earner. Both governments have announced mandatory biodiesel blending targets. In addition, Malaysia has also announced cash incentives for replanting.

**CPO price in 2009E: US\$450/tonne  
(Malaysia FOB average)**

**Themes: 1) M&A, 2) cost cuts,  
3) government response**

**Chart 1: CPO and soybean oil price**



Source: *Oil World*

## What is our central thesis for 2009?

We expect the CPO price to continue its downward trend in 2009, as inventories remain stubbornly high and demand weak. Crude oil, which we assume remains depressed in 2009, is likely to continue to be a major influence on the palm oil price. We assume an average CPO price of US\$450/tonne in 2009, approximately half the average of the estimated US\$890/tonne in 2008.

We believe the low CPO price environment will favour companies with a downstream manufacturing bias such as Wilmar. Downstream manufacturing companies could remain profitable in a low price environment because of their focus on processing margins and volume.

**We expect the CPO price to remain soft  
in 2009**

**Low CPO price environment favours  
downstream manufacturing-biased  
companies**

Tight credit and high interest rates in Indonesia are major obstacles for M&A at this juncture, in our view. If the situation were to change substantially, we could expect news on M&A, especially on companies trading on low EV/hectare. In the absence of other themes and given our view on the CPO price, we do not see any strong positive catalysts for plantation stocks in 2009.

**M&A news could provide some excitement**

Despite the weak CPO price outlook, we think some stocks— in particular Golden Agri, Indofood Agri, IOI, Wilmar—are attractive because their share prices have declined significantly.

**Some stocks appear attractive on a long-term view**

## What may surprise on the upside or downside?

UBS forecasts crude oil price to average US\$60/barrel in 2009 and could even touch US\$50/barrel in H109. This would influence the palm oil price to trend lower. However, any upside to the crude oil price should lead to a rapid reversal of the palm oil price.

**Influence of crude oil price**

One of the factors leading to the sharp decline in the CPO price since July 2008 has been the credit crunch, which has adversely affected trade and therefore demand. An easing of the credit crunch could lead to demand picking up again. While we expect the credit situation to improve, we think inherent demand has also been negatively impacted by the economic slowdown. Nonetheless, we think a stronger-than-expected recovery in demand could lead to an unexpected recovery in the CPO price

**Easing of the credit crunch**

## What are the likely key catalysts?

South America will harvest its soybean crop in March-May 2009. At this juncture, *Oil World* and the USDA predict combined Argentine and Brazilian soybean production to grow 0-1%, because of the lack of credit and lower application of fertilizer from previously.

**Argentine and Brazilian soybean harvest in March-May 2009**

The Malaysian palm oil output cycle turned in August 2008, but the turning point coincided with a slowdown in export demand, resulting in inventories remaining high. While we expect export demand to return, we do not think it will be robust given the economic weakness. As a result, palm oil inventories may deplete slowly and only well into 2009. The timing of this event and the magnitude of the change could provide a catalyst for the CPO price, in our view.

**Malaysian palm oil inventory**

## Key stock ideas

Our top picks are Wilmar and Astra Agro. We like Wilmar because it derives most of its earnings from downstream manufacturing. We believe Astra Agro is well managed and, because of its strong balance sheet, we think it is in a strong position for M&A.

**Top picks: Wilmar and Astra Agro**

We highlight Sime Darby and KL Kepong as top sells. The two stocks are trading well below their historical PE trading bands. However, because of the significant lower CPO price than a year ago, we do not find these stocks attractive at current valuation. Their relative outperformance in 2008 has also contributed to their current unattractive valuation.

**Top sells: Sime Darby and KL Kepong**

We think Golden Agri and Indofood Agri are attractively valued on a DCF basis, assuming long-term normalised CPO price of US\$570/tonne, and their current EV/mature hectare of US\$6,000-7,000. We estimate they are trading on an implied after-tax plantation EBIT yield of 14-16% versus WACC of 14%, assuming our long-term price assumption.

**Golden Agri and Indofood Agri:  
liquidity and attractive value**

IOI's standing as a well managed, consistent sector leader had been tarnished in 2008, because of its untimely entry into property development in Singapore and the high profile resignation of a key staff member. Its share price, which at one stage outperformed the sector, is now trading in line with the sector. We reckon the appointment of a group financial controller should re-establish IOI's standing if the appointment inspires market confidence. We see this as a key event for IOI because one of the factors that made IOI stand out among its peers in the past was the way it used the capital markets to fund M&A growth and to lower WACC.

**IOI had a challenging 2008**

# Asia Agribusiness Most & Least Preferred

In this section, we present commentary on stocks in our Asia Agribusiness Most & Least Preferred stock list.

## Asia Agribusiness Most and Least Preferred

Stock	Rating	PT	Overview
<b>Most preferred</b>			
<b>Wilmar</b>	Buy	S\$3.26	Low CPO price environment favours companies that have greater exposure to downstream manufacturing
<b>Astra Agro</b>	Buy	Rp11,000	Well managed upstream plantation company with a strong balance sheet. Well positioned for M&A
<b>Least preferred</b>			
<b>Sime Darby</b>	Sell	RM4.54	Non-plantation divisions could be a drag; has among the highest production costs in the sector
<b>KL Kepong</b>	Sell	RM7.75	Lacks catalysts; unattractive, in our view, having outperformed in 2008

Data as at 2 December 2008, Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each stock in our Most & Least Preferred list.

## Most Preferred Wilmar

**Investment case:** We believe Wilmar has the best business model to weather the low CPO and oilseed price environment. We estimate 85% of its EBIT will be derived from the merchandising and processing divisions in 2009. Given its strong earnings resilience compared with that of a pure upstream plantation player, we expect Wilmar to have substantial free cash flow available to fund M&A opportunities in 2009.

**Valuation:** Wilmar is trading on PE of 11.1x 2009E earnings versus its historical two-year average of 14.2x earnings and a plus and minus one standard deviation of 11.3x and 17.2x, respectively. We base our price target of S\$3.26 on a sum-of-the-parts valuation, where we value the merchandising and processing business on DCF, assuming WACC of 8.9% and long-term growth of 5%.

**2009 catalysts:** Excluding short-term debt for working capital and pledged cash, Wilmar had net gearing of 12% as at September 2008. If Wilmar gears up to a maximum of 40%, excluding short-term debt for working capital, we estimate the company would have the ability to raise an additional US\$2.5bn of funds for M&A. Wilmar has so far delivered stable a profit margin, despite raw material and product price volatility. Another catalyst would be better-than-expected results.

**Sector:** Singapore Agriculture

**Rating:** Buy

**PT:** S\$3.26

**Analyst:** Alain Lai

## Astra Agro

**Investment case:** Management's aim is to boost productivity. It recently appointed three new sub-directors; each to handle one of three specific matters: "land intensification"; land purchase; and planting. We believe this should result in a much better focus to pursue growth. Astra Agro has a healthy balance sheet and is an efficient CPO producer, in our view. The company has no outstanding debt. It had its Rp1.9trn net cash as at end-September 2008, and we expect the production cost to drop 11% in 2009 to US\$311/t. Astra Agro has had a steadily increasing dividend payout: 24% in 2001, 40% in 2002, 49% in 2003-04 and 65% from 2005 to 2007.

**Valuation:** Our DCF-derived price target is Rp11,000, which assumes a 12.8% risk-free rate, 15.6% WACC and a 5% growth rate.

**2009 catalysts:** We think there are three potential catalysts for the stock in 2009: a final dividend announcement from the record-high 2008 earnings in H109; potential acquisitions of estates at fair prices; and a CPO price recovery earlier than we expect. Astra Agro is pure upstream producer that should benefit from CPO price appreciation, in our view.

## Least Preferred Sime Darby

**Investment case:** Among the plantation companies with larger market cap (IOI, KL Kepong and Wilmar), we forecast Sime Darby's EPS to decline the most in FY09. This is because we see downside to its non-plantation divisions, in line with the Malaysian economy. It also has one of the highest production costs in the sector.

**Valuation:** Sime Darby is trading on 16.3x FY09E earnings compared with a five-year historical average PE of 18.5x and a plus and minus one standard deviation of 14.1x and 22.9x, respectively. We base our price target on a sum-of-the-parts valuation, where we value the non-plantation business at 8x FY09E earnings and the plantations on DCF, assuming a long-term CPO price of US\$570/tonne, WACC of 10.4% and long-term growth of 4%.

**2009 catalysts:** We think Sime Darby's non-plantation divisions—auto distribution and property development—could suffer weakness in 2009, as the Malaysian economy slows. UBS forecasts Malaysia GDP growth of 0% in 2009, suggesting a sharp deterioration in confidence and growth. Anecdotal evidence suggests an already softening property market and cautious consumer spending. We expect poor performance by the auto distribution and property development divisions in the quarterly results to be a key catalyst for a share price fall.

**Sector:** Indonesia Agriculture

**Rating:** Buy

**PT:** Rp11,000

**Analyst:** Felicia Tandiyono

**Sector:** Malaysia Industrial Services

**Rating:** Sell

**PT:** RM4.54

**Analyst:** Alain Lai

## KL Kepong

**Investment case:** Among the Malaysian plantation companies, we think KL Kepong has among the highest production growth potential because it had the foresight of expanding into Indonesia in the 1990s, much before its competitors. Its downstream manufacturing operations are finally coming together, after struggling in FY01-06. However, we think KL Kepong's current valuation is unattractive compared with that of Golden Agri, Indofood Agri and Astra Agro. We reckon the emergence of cheaper plantation stocks in Singapore in the past couple of years has led to a de-rating of the more expensive Malaysian stocks such as KL Kepong.

**Valuation:** KL Kepong is trading on 12.2x FY09E earnings compared with its five-year historical average of 16.2x and a plus and minus one standard deviation of 12.2x and 20.1x, respectively. We base our price target on a DCF methodology, assuming a long-term average CPO price of US\$570/tonne, WACC of 10.4% and long-term growth of 4%.

**2009 catalysts:** We think KL Kepong will continue to underperform in 2009, as there are other plantation stocks—Golden Agri, Astra Agro and Indofood Agri—that are trading at more attractive valuation and have similar growth potential. KL Kepong's share price has also held up better than that of Golden Agri, Indofood Agri and Astra Agro in 2008. The only stock-specific catalyst we expect for KL Kepong in 2009 is the completion of the two new oleochemical plants, which should add 160,000 tonnes of capacity to the current 855,000 tonnes.

**Sector:** Malaysia Agriculture

**Rating:** Sell

**PT:** RM7.75

**Analyst:** Alain Lai



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### ■ Statement of Risk

The main risk to our earnings forecast and price targets for plantation stocks are if the palm oil price falls. Our key assumption is that palm oil price remains soft in 2009 and averages US\$450/tonne. It could fall further for a number of reasons; crude oil price falling further, supply of edible oils being significantly stronger than expected, particularly from South America, and demand being significantly weaker than expected. Demand could remain depressed for a prolonged period if credit continues to be tight, thereby adversely affecting trade.

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## Coping with recession conditions

### ■ Summary

We believe the key risk for Asian economies/banks is if the G7 recession spreads to cause lower GDP growth than we expect in China (7.5%) and India (6.0%) as excess capacity in export goods, higher unemployment and reduced domestic consumption would raise NPLs and provisions across Asia. We prefer banks with high Tier 1 ratios (+9%), high PPOP margins (+2.0%), and strong deposit franchises.

### ■ What are the likely key themes for 2009?

1) Recap risk for any bank below a core Tier 1 ratio of 7.5% and dividend cuts. (2) Government guarantees for SME loans in Korea, Taiwan, Hong Kong and Singapore. 3) Government banks taking over vulnerable non-banks (especially in Korea and Taiwan). 4) Tougher regulation of foreign banks in Asia leading to balance sheet downsizing.

### ■ What may surprise on the upside or downside?

Upside surprise, in our view, would be aggressive action by the US government to fund asset management companies for illiquid mortgages and absorb any losses beyond year-end 2008 valuations. Downside risk would be if China's efforts to boost domestic spending (consumption, infrastructure) fail, inter-regional trade stagnates and export prices fall more than expected, hurting corporate profitability.

### ■ Highlighted stocks

Our most preferred stocks are banks with high PPOP margins, a strong deposit franchise and less government intervention risk (United Overseas Bank, ICBC-H, China Merchants Bank-H, Bank Rakyat Indonesia, ICICI Bank, Kasikornbank, Bank of China (HK)) or M&A plays at very low P/BVs (Korea Exchange Bank, Hana Financial Group). Our least preferred are Malayan Banking (expensive acquisitions), State Bank of India (NPL risk) and Taishin Financial (capital shortage).

**4 December 2008**
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**Table 1: Asia Banks Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
United Overseas Bank	UOBH.SI	13.7	Buy	12.00	16.00	9.3
ICBC-H	1398.HK	163.8	Buy	3.80	6.90	9.2
China Merchants Bank-H	3968.HK	23.6	Buy	12.64	40.50	6.1
ICICI Bank	ICBK.BO	7.8	Buy	323.75	515.00	7.8
Bank Rakyat Indonesia	BBRI.JK	3.5	Buy	3,100	4,695	5.4
Bank of China (Hong Kong)	2388.HK	12.2	Buy	8.25	17.40	6.9
Kasikornbank	KBAN.BK	2.8	Buy	39.00	77.90	6.0
Korea Exchange Bank	004940.KS	3.2	Buy	7,060	11,600	6.9
Hana Financial Group	086790.KS	2.5	Buy	16,900	30,600	6.8
<b>Least Preferred</b>						
Malayan Banking	MBBM.KL	6.9	Neutral	5.15	5.30	9.8
State Bank of India	SBI.BO	11.5	Sell	1,040.25	1,150.00	8.8
Taishin Financial Holding	2887.TW	0.9	Sell	5.58	3.80	18.2

Data as at 2 December 2008. Source: UBS estimates

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# Outlook 2009 – Summary

## What are the likely key themes?

(1) Recap risk for any bank below a core Tier 1 ratio of 7.5% and dividend cuts. (2) Government guarantees for SME loans in Korea, Taiwan, Hong Kong and Singapore. (3) Government banks taking over vulnerable non-banks (especially in Korea and Taiwan). (4) Tougher regulation of foreign banks in Asia leading to balance sheet downsizing and repricing of corporate/mortgage loans, up 50-100bp, (this will benefit the banks with strong deposit franchises once the provisions cycle peaks in 2009) .

## What is our central thesis for 2009?

Our economists forecast a recession in Korea (-3% GDP growth in 2009E), Singapore (-1.8%), Taiwan (-1.6%) and Hong Kong (-0.2%). We expect this to be driven by weaker exports due to weak consumption in the G7 economies, negative wealth effects and contraction in business investment by commodity dependent economies (Middle East, Russia and Australia). We do not believe the effect of a G7 recession in Asia will be as bad as the 1997-98 Asian crisis, but more similar to the 2001-03 period in Asia, when the tech sector slumped and consumer confidence was low. The negative wealth effect from falling equity markets will also restrict loan demand and cause more deleveraging in the property sector. FX funding constraints will negatively impact growth in Korea, Australia and India.

We estimate Asian stock markets fell by US\$11trn from the peak in Q407. This represents 75% of Asian GDP, but a very significant 7.7x GDP for Hong Kong, 1.6x for Singapore, 1.2x for India and 1.1x for Taiwan. We thus expect 2009 to be a period of reduced demand for goods requiring debt (property, autos) and this will expose these sectors to inventory problems. We think banks most exposed to real estate developers/private construction activity are most at risk of higher NPLs, while mortgage loans above 80% LTV are at risk in the luxury end of the property market. Our economists forecast only a mild slowdown in GDP growth for China (from 9.6% in 2008E falling to 7.5% in 2009E) and India (6.5% in 2008 dropping to 6.0% in 2009E); assuming government spending, lower commodity prices (such as oil and coal) and domestic service demand offset weaker export markets.

**Table 2: Real GDP growth YoY**

(%)	2008E	2009E	2010E
Indonesia	5.8	2.5	4.7
Singapore	2.2	-1.8	4.3
Hong Kong	3.9	-0.2	2.8
China	9.6	7.5	8.0
Korea	3.9	-3.0	3.4
Thailand	4.9	1.8	3.6
India	6.5	6.0	7.4
Philippines	4.6	1.8	3.4
Malaysia	5.4	0.0	4.3
Taiwan	1.5	-1.6	2.9
Japan	0.4	-0.7	1.1
Australia	2.6	1.5	2.6

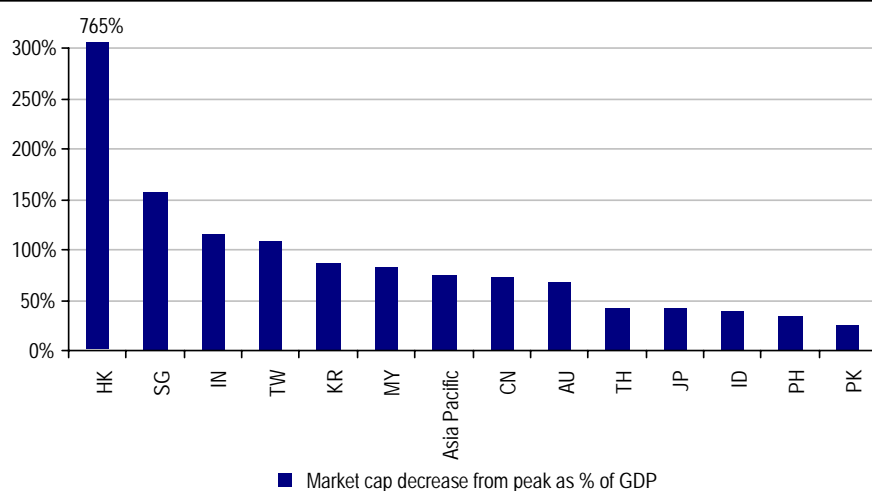
Source: UBS estimates

**Table 3: Loan growth YoY**

(%)	2008E	2009E	2010E
Indonesia	21.7	13.8	17.2
Singapore	11.3	(0.7)	1.6
Hong Kong	16.8	8.7	9.3
China	12.9	13.5	13.5
Korea	18.7	7.7	7.1
Thailand	11.4	3.9	3.6
India	22.8	19.1	19.9
Philippines	16.1	5.1	7.6
Malaysia	12.1	6.2	6.6
Taiwan	5.7	1.3	6.7
Japan	1.2	2.0	2.9
Australia	17.3	10.4	8.0

Source: UBS estimates

Chart 1: Asian stock market falls as % of GDP from peak



Source: Bloomberg, UBS estimates

We also expect domestic interest rates to be cut aggressively in 2009; however, highly leveraged SMEs, construction companies and small businesses will not benefit from lower rates. We are therefore most concerned about banks with PPOP margins below 1.5% in Japan, Taiwan, Korea and Australia, as lower rates are unlikely to help PPOP margins and higher NPLs/investment write-downs will expose banks with a core Tier 1 ratio below 7.5% to recap risk.

We believe it could be difficult for Bank of East Asia (BEA), Dah Sing Banking Group (Dah Sing) and Wing Hang Bank (Wing Hang) to turnaround their operations themselves in 2009, so may consider either raising equity or sell to Chinese banks if they believe they have no other option. We think this also applies to banks like Hana Financial Group (Hana FG), Siam City Bank, Bank Danamon Indonesia (Danamon), Hong Leong Bank, SinoPac Financial Holding (SinoPac), E.SUN Financial Holding (E-sun), RHB Capital, Shin Kong Financial Holding (Shin Kong) and TISCO Bank (TISCO). We believe these banks face the biggest challenge justifying raising equity from existing shareholders and may be better off considering a domestic merger or selling to a foreign bank.

We expect fiscal spending to help support domestic demand (in China, Singapore and Australia); however, we think private sector credit risk will deteriorate, especially for leveraged SMEs in Korea, Taiwan and China. We expect banks in Asia with pre-provision margins below 1.5% to be the most vulnerable (Japan, Taiwan, Korea and Australia). We see upside risk to our 2009 provisions forecasts for most banks. Thus, despite higher loan spreads on SME loans and mortgages as funding costs drop, we believe banks in Korea, Taiwan, Australia and Japan might face recap risk and need to cut dividends.

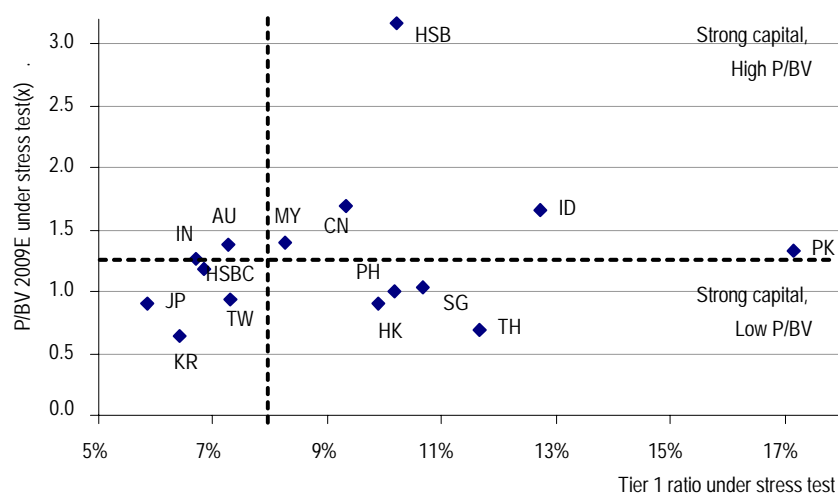
Table 4: Asia banks deposit leverage

Deposit/GDP	2004	2007	Sep-08	Market cap/Deposit	2004	2007	Sep-08
Japan	99%	96%	101%	Japan	83%	103%	59%
China	151%	158%	158%	China	15%	86%	27%
Hong Kong	299%	364%	340%	Hong Kong	174%	352%	174%
Australia	59%	89%	78%	Australia	123%	146%	75%
India	60%	68%	71%	India	100%	248%	92%
Korea	69%	66%	66%	Korea	88%	174%	81%
Taiwan	154%	155%	153%	Taiwan	93%	118%	66%
Singapore	112%	132%	124%	Singapore	173%	234%	109%
Malaysia	132%	137%	130%	Malaysia	112%	127%	70%
Indonesia	36%	32%	26%	Indonesia	79%	146%	71%
Thailand	88%	77%	71%	Thailand	79%	105%	48%
Philippines	50%	49%	43%	Philippines	65%	146%	69%
Pakistan	35%	36%	30%	Pakistan	51%	121%	73%

Source: CEIC, UBS estimates

We expect the worst stage of the earnings cycle for Asian banks to be in H109, as revenue is hurt by stagnant loan growth, falls in capital market fees and investment losses continue (equities, structure products, and bond defaults). Also, we think year-end audits of borrowers will force banks to downgrade loans to NPL status. Assuming we front-load 2010 provisions into our forecasts for 2009 and assume a write-down of 1% on other assets, we expect the adjusted Tier 1 ratios of banks in Korea, Japan, India, Australia and Taiwan fall below 8%. Banks in Thailand, Singapore, the Philippines and Hong Kong (mid-cap) have adjusted Tier 1 ratios above 10% and trade at relatively low adjusted P/BV multiples. Hang Seng Bank, Indonesian banks and Chinese banks have relatively strong tier 1 ratios, but trade at relatively high P/BV multiples.

Chart 2: Stressed Tier 1 ratio and adjusted P/BV 2009E by countries



Note: For Taiwan, we use common equity/ adjusted asset (70-80% of asset) as approx Tier 1 ratio for financial group  
Source: UBS estimates

We see some recap risk for banks in Japan, Korea, India, Taiwan and Australia with the banks most vulnerable being **Taishin Financial Holding (Taishin), Shinhan Financial Group, Mizuho Financial Group, Shin Kong, Shenzhen Development Bank, Industrial Bank of Korea, Hana FG, Sumitomo Mitsui Financial Group and Woori Finance Holdings**, as their adjusted Tier 1 ratio could drop below 6%. The amount of Tier 1 capital needed to maintain existing Tier 1 ratio for these banks ranges from 10-20% of existing capital. However, if the ratio needs to be increased to an 8% minimum, the dilution risk is higher for these banks (30-40% of current Tier 1 capital and since some of these banks trade <0.75x P/BV implies significant dilution risk). We see downside risk to dividend payouts for banks in these markets.

Banks in India, China, Hang Seng Bank (HSB), Thailand and Indonesia have PPOP margins above 2% so can absorb 4% new NPL formation (assuming 50% loss rate) and still remain profitable. PPOP margins in Pakistan are high, but this reflects the countries high risk premium on government bonds and strong core deposits for the large banks. Our forecasts for provisions in 2009-10 are below 2001 peak levels so the downside risk to earnings is high in 2009 for most banks in Asia, especially as the global recession now hurts the corporate, SME, construction and real estate sectors. This is the reason we believe our stress test front-loading of our provisions from 2010 into 2009 is prudent.

**Table 5: Stressed Tier 1 ratio by Asian countries**

(USD mn)	Tier 1 ratio 2009E	Net Profit 2009E	ROA 2009E	PPOP/Avg.Asset 09&10E	PPOP/Avg.RWA 09&10E	Tier 1 cap decrease from 2010E provisioning frontloaded	Tier1 cap decrease from other earnings asset loss	Sum	Capital raising	% of Tier1 cap.	% of Mkt Cap.	Stressed Tier1 ratio
JP	6.8%	5,122	0.16%	0.61%	1.21%	6,303	9,139	15,442	14,901	13%	21%	5.9%
KR	7.3%	4,340	0.44%	1.45%	2.11%	5,026	1,109	6,135	5,932	12%	18%	6.4%
IN	7.5%	4,970	1.03%	2.25%	2.54%	2,700	836	3,537	2,468	7%	6%	6.7%
HSBC	8.9%	12,651	0.48%	1.49%	3.13%	17,309	9,594	26,903	26,903	23%	22%	6.8%
TW	8.2%	2,407	0.45%	0.92%	1.26%	1,696	1,801	3,497	2,915	9%	10%	7.3%
AU	8.1%	11,875	0.74%	1.39%	2.80%	4,300	3,032	7,332	6,465	9%	6%	7.3%
MY	9.0%	2,666	0.91%	1.71%	2.44%	932	622	1,554	1,402	7%	5%	8.3%
CN	10.4%	63,876	1.30%	2.19%	3.95%	16,415	15,079	31,493	3,402	1%	1%	9.3%
HK	10.9%	1,905	0.93%	1.61%	2.93%	560	643	1,203	296	2%	2%	9.9%
PH	11.1%	379	0.76%	1.56%	2.38%	157	153	310	-	0%	0%	10.2%
HSB	11.3%	1,863	1.82%	2.04%	4.79%	117	375	492	-	0%	0%	10.2%
SG	11.3%	3,593	0.82%	1.35%	2.14%	314	1,566	1,880	-	0%	0%	10.7%
TH	12.4%	2,156	1.12%	2.20%	3.23%	870	210	1,080	-	0%	0%	11.7%
ID	14.6%	1,971	1.99%	3.80%	6.72%	847	239	1,085	95	1%	1%	12.7%
PK	18.0%	368	2.44%	4.01%	6.30%	44	42	86	-	0%	0%	17.1%

Source: UBS estimates

Table 6: Adjusted P/BV 2009E under stress test by Asian countries

(USD m)	Max provisioning per loan (since 2001)	Provisioning per loan 2009E	Provisioning per loan 2010E	Max vs 2009-10E provisioning	Market cap	Equity 2009E	P/BV 2009E	Stressed equity	P/BV under stress test	% change in equity
Japan	1.1%	0.6%	0.6%	0.5%	71,127	93,866	0.76	78,424	0.91	-16%
Korea	2.8%	1.1%	0.9%	1.8%	32,605	57,459	0.57	51,323	0.64	-11%
India	2.0%	1.1%	1.1%	1.0%	44,358	38,718	1.15	35,182	1.26	-9%
HSBC	2.1%	2.1%	2.0%	0.0%	123,671	132,154	0.94	105,251	1.18	-20%
Taiwan	2.2%	0.8%	0.8%	1.4%	28,527	33,741	0.85	30,244	0.94	-10%
Australia	0.5%	0.5%	0.5%	-	103,366	82,634	1.25	75,302	1.37	-9%
Malaysia	2.0%	0.9%	0.7%	1.2%	27,978	21,546	1.30	19,992	1.40	-7%
China	1.0%	1.0%	0.8%	0.1%	499,350	327,964	1.52	296,471	1.68	-10%
Hong Kong	1.9%	0.8%	0.6%	1.2%	14,526	17,221	0.84	16,018	0.91	-7%
Philippines	1.9%	0.9%	0.8%	1.1%	3,586	3,870	0.93	3,560	1.01	-8%
HSB	0.4%	0.3%	0.3%	0.0%	24,584	8,269	2.97	7,777	3.16	-6%
Singapore	1.0%	0.7%	0.2%	0.5%	32,111	33,160	0.97	31,281	1.03	-6%
Thailand	1.3%	0.9%	0.9%	0.4%	12,759	19,441	0.66	18,360	0.69	-6%
Indonesia	2.3%	1.7%	1.9%	0.5%	15,470	10,411	1.49	9,326	1.66	-10%
Pakistan	1.5%	1.0%	1.0%	0.5%	2,723	2,137	1.27	2,051	1.33	-4%

Source: UBS estimates

## What may surprise on the upside or downside?

The US finally fixing its banking system. Upside surprise would be aggressive action by the US government to fund asset management companies (AMC) for illiquid mortgages and absorb any losses beyond a stated floor level (for example, 90% of year-end 2008 valuations). The US government stepped in to protect Citigroup (Citi) from losses on US\$306bn in residential and commercial mortgages on 24 November. Citi will absorb the first US\$29bn of any losses (over and above any existing reserves held against the guaranteed assets). Any losses in excess of that amount will be shared by Citi (10%) and the government (90%). The government's share will be further allocated as follows: The treasury (through the Troubled Assets Relief Program, TARP) will bear the first US\$5bn of government losses, the Federal Deposit Insurance Corporation (FDIC, via the Deposit Insurance Fund) will bear the next US\$10bn of government losses, and the Fed bears any losses beyond that (via a non-recourse loan to Citi, subject to the 10% loss sharing). The guarantee is effective for 10 years on residential assets or five years on commercial assets. In return for these guarantees, Citi will issue an additional US\$7bn of preferred stock to the treasury (\$4bn) and to FDIC (\$3bn), separate from the US\$20bn additional TARP injection. Citi will also issue a warrant to the treasury for 10% of its total investment in these two transactions (\$2.7bn). The strike on this warrant will be at US\$10.61 (20-day trailing average ended on 21 November 2008).

This was a constructive way to put a floor on illiquid mortgage loans and incentivise Citi to restructure these loans in a prudent and flexible manner (principal forgiveness and interest rate abatement). We believe other major US banks would benefit from some type of back-stop by the US government to put a floor on real estate loans. If this is done in a comprehensive fashion, it could be positive for the US economy and indirectly positive for Asia, which needs the US to consume.

**China economy disappoints.** We see downside risk if China's efforts to boost domestic spending (consumption, infrastructure) fail, inter-regional trade stagnates and export prices drop more than expected hurting corporate profitability. Our economists forecast GDP growth of 7.5% for China in 2009, down from 9.6% in 2008E. We still forecast loan growth of 13.5% in 2009 which shows China needs to create more credit to support less GDP growth. The risk for Chinese state-owned banks is capital intensive parts of the economy (such as steel, cement, auto and commercial real estate) suffer from excess capacity/inventories and increased demand for working capital leads to higher loan growth, but weaker asset quality. Further efforts to cushion the economy could result in China reducing lending rates more than deposit rates thus hurting PPOP margins. This suggests our forecast ROA of 1.3% for Chinese banks (down from 1.5% in 2008) may prove too high.

## What are the likely key catalysts?

- A comprehensive solution to the US banking system's problems is needed by the banks/government to restructure consumer loans to make the repayment terms affordable. President Elect Obama takes office on 20 January so we believe efforts to revive the US economy will be critical, including (1) consumer debt restructuring; (2) tax incentives to hire new workers; (3) infrastructure spending for states with high unemployment; (4) auto industry restructuring; and (5) a sharp drop in housing inventories.
- We think G7 economies are likely to cut interest rates to very low nominal levels (zero to 3%) and real interest rates need to be kept at zero/negative levels. This could reverse the currency weakness in Asia and help consumer confidence in H209.
- Bankruptcy/restructuring of the corporate sector will lead to global consolidation in industries such as autos, airlines, steel, shipbuilding, semi-conductors and electronics, in our view.
- Chinese banks take steps to acquire banks in Hong Kong (BEA, Dah Sing or Wing Hang). We believe some large cross border M&A is possible for pan-Asia retail banks, such as Standard Chartered, Citi, DBS, ANZ, RBS and Barclays.
- We expect second Tier players like BEA, Dah Sing, Wing Hang, Hana FG, Siam City Bank, Danamon, Hong Leong Bank, Sinopac, E-sun, RHB Capital, Shin Kong and TISCO to face consolidation pressure.
- We expect wholesale funded global banks to withdraw/deleverage from Asia making the syndicated loan market tight, loan pricing higher and local banks seeing better loan spreads.



## Key stock ideas

**Most preferred:** **United Overseas Bank (UOB)**, due to its defensive capital/NPL profile with margin upside potential; **Industrial & Commercial Bank of China-H (ICBC-H)**, because it is a defensive play, and has the most under-leveraged balance sheet as well as strong CAR and a powerful distribution network; **China Merchants Bank-H (CMB-H)**, due to its low PE, and high ROA/ROE; **ICICI Bank**, on its strong capital to manage the NPL cycle; **Bank Rakyat Indonesia (BRI)** for its high PPOP margin and low PE; **Bank of China (Hong Kong) (BOCHK)** due to its manageable NPL/investment risk, low P/PPOP, high Tier 1 and high dividend; **Kasikornbank** on its high PPOP margin, low P/BV, and more defensive NPL cycle, and **Korea Exchange Bank (KEB)/Hana FG** because their very low P/BVs make them takeover candidates).

**Least preferred:** **Malayan Banking (Maybank)**, due to its expensive acquisitions; **State Bank of India (SBI)** on its NPL risk; and **Taishin** for its weak capital, low PPOP margin and NPL issues.

**Table 7: Asia Banks Most and Least Preferred valuations**

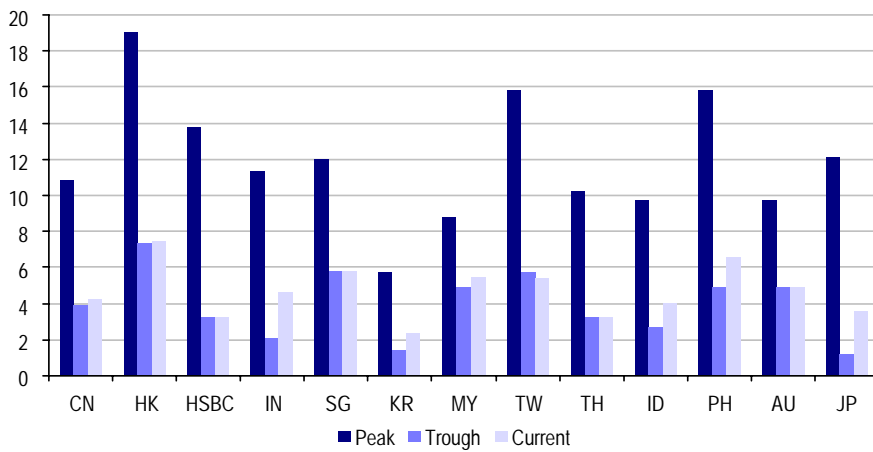
	Share price	Mkt cap (US\$ bn)	% upside pot. to PT	PE		P/BV		P/PPOP	ROE (%)		ROA (%)		Dividend yield (%)		
				08E	09E	08E	09E		08E	09E	08E	09E	08E	09E	
<b>Most preferred</b>															
<b>UOB</b>	12.00	S\$	12.3	33%	9.1	9.3	1.06	1.08	5.6	11.5	11.5	1.05	0.95	5.0	4.9
<b>ICBC-H</b>	3.80	HK\$	163.8	82%	9.0	8.2	1.80	1.59	5.5	21.9	20.9	1.35	1.27	5.0	5.5
<b>CMB-H</b>	12.64	HK\$	24.0	220%	6.1	5.4	1.87	1.49	4.4	34.6	30.6	1.84	1.73	3.6	4.1
<b>ICICI Bank</b>	323.8	Rs	7.2	59%	9.3	7.8	0.69	0.63	4.0	8.1	9.1	0.97	1.13	2.7	3.2
<b>BRI</b>	3,100	Rp	3.1	51%	6.1	5.4	1.66	1.42	3.0	28.4	27.3	2.73	2.69	6.3	7.9
<b>BOCHK</b>	8.25	HK\$	11.3	111%	9.2	6.9	0.92	0.87	5.6	10.1	13.0	1.01	1.29	7.1	9.4
<b>Kasikorn</b>	39.00	Bt	2.6	100%	5.7	6.0	0.83	0.75	2.8	15.3	13.1	1.51	1.30	5.1	5.1
<b>KEB</b>	7,060	Won	3.1	64%	6.3	6.9	0.72	0.66	2.1	11.2	10.0	0.70	0.62	7.1	7.1
<b>Hana FG</b>	16,900	Won	2.4	81%	8.3	6.8	0.40	0.38	1.7	4.6	5.5	0.30	0.32	2.4	0.6
<b>Least preferred</b>															
<b>MayBank</b>	5.15	RM	6.9	3%	8.6	9.8	1.25	1.20	4.3	15.2	13.1	1.18	0.94	7.0	6.4
<b>SBI</b>	1,040.25	Rs	10.9	11%	8.6	8.8	1.08	0.96	3.4	14.6	12.9	0.95	0.78	2.1	2.2
<b>Taishin</b>	5.58	NT\$	1.0	-32%	(29.3)	18.2	0.51	0.50	1.4	-0.2	3.1	(0.01)	0.11	-	1.7

Note: Data as of 2 December 2008

Source: UBS estimates

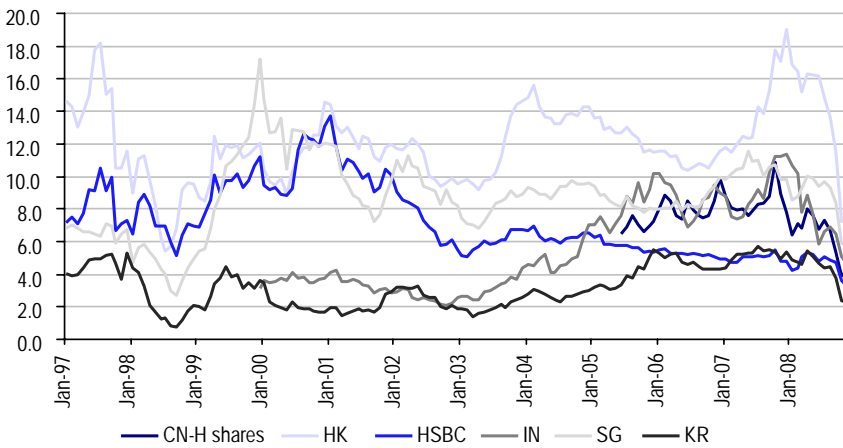
Asia banks now trade at eight year lows in P/BV terms (1.2x) and P/PPOP terms (2-6x) with 50% of our coverage universe below 1.0x P/BV reflecting (1) recap risk, (2) depressed ROEs in 2009, and (3) concern over SME/property collateral risk. Unlike the Asian crisis, most Asian countries have strong FX reserves, flexible exchange rates and can justify lower rates as inflation drops. Korea trades at the lowest P/BV, of only 0.5x, followed by Taiwan at 0.7x, Japan and Thailand at 0.8x and Singapore and Philippines at 1.0x. The banks with the highest P/BV multiples include Pakistan (1.5x), Australia (1.4x) and Indonesia (1.4x). Korean banks trade at only 2-2.5x P/PPOP and even China has dropped to just 4-4.5x.

**Chart 3: Asia bank P/POP peak, trough since 2001**



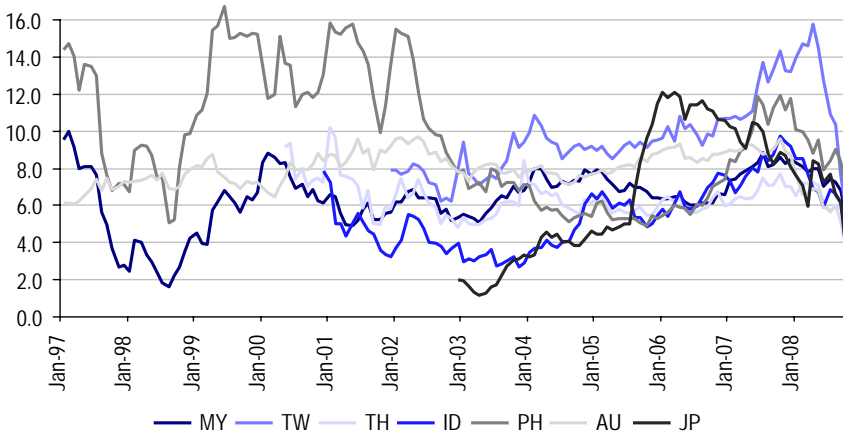
Source: UBS estimates

**Chart 4: Asia banks P/POP historical trend**



Source: UBS estimates

**Chart 5: Asia banks P/POP historical trend (Cont'd)**



Source: UBS estimates

Table 8: Regional valuation

Market average	PE (x)			P/BV (x)			P/PPOP (x)			Dividend Yield (%)		
	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E
Australia	7.8	8.7	8.8	1.5	1.4	1.3	5.3	5.0	4.4	8.9	9.4	9.4
China	12.4	7.0	6.1	2.1	1.5	1.2	7.2	4.9	4.1	3.6	5.2	5.9
Hong Kong	6.3	8.4	8.7	1.3	1.3	1.2	5.8	30.4	5.9	9.3	6.9	8.5
Indonesia	8.7	7.3	6.8	1.8	1.6	1.4	5.1	4.4	3.8	5.5	6.6	7.7
India	11.0	11.3	10.2	1.6	1.4	1.2	6.1	6.0	5.2	2.7	2.2	2.5
Pakistan	6.7	7.1	7.7	1.9	1.7	1.5	4.3	4.5	4.7	5.2	4.8	4.3
Korea	3.5	5.0	7.4	0.6	0.6	0.5	2.0	2.2	2.1	7.5	5.7	4.4
Malaysia	7.9	9.4	9.4	1.3	1.3	1.2	5.2	4.9	4.9	4.4	4.1	4.4
Philippines	8.5	13.5	10.9	0.8	1.0	0.9	4.4	6.1	5.9	3.9	4.1	2.6
Singapore	7.5	8.3	9.0	0.9	1.0	1.0	5.5	5.4	5.5	6.0	6.5	6.3
Thailand	6.6	5.5	5.8	0.8	0.8	0.7	3.3	3.0	3.0	7.4	6.0	6.2
Taiwan	10.2	4.3	12.1	0.7	0.7	0.7	4.5	0.2	4.7	6.0	2.4	3.6
Japan	7.5	15.2	12.6	0.8	0.8	0.7	3.7	3.3	3.7	2.7	4.1	4.4

Note: Data as of December 2 2008, Average of major banks

Source: UBS estimates

Table 9: Regional valuation (cont'd)

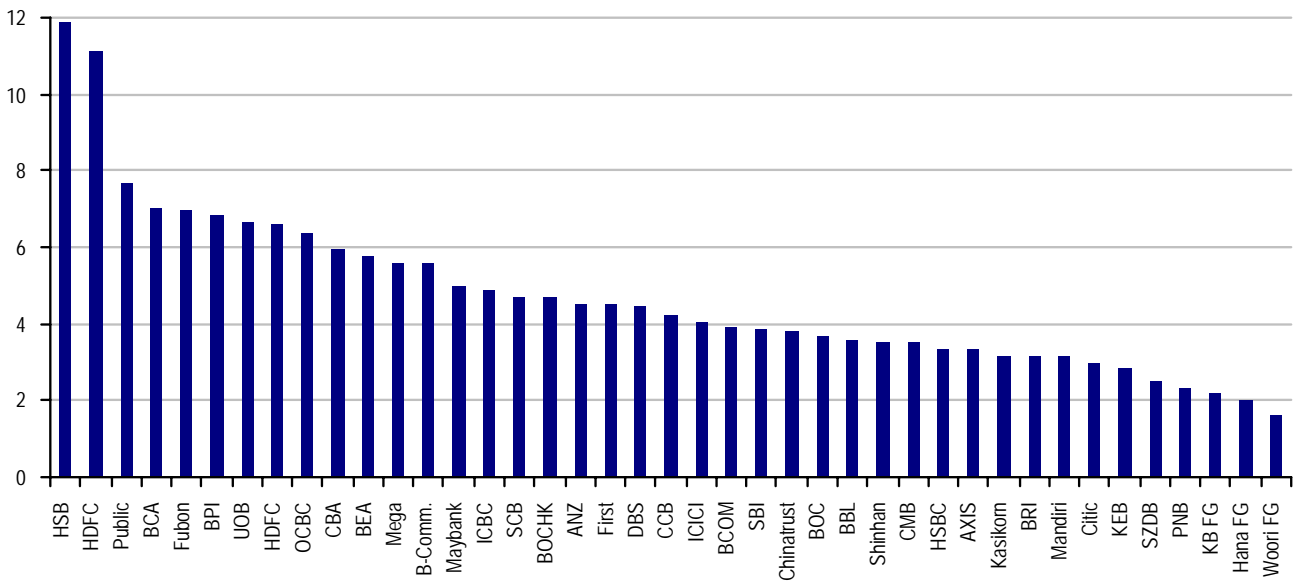
Market average	ROE (%)			ROA (%)			RoRWA (%)			Dividend payout (%)		
	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E	2007	2008E	2009E
Australia	18.5	15.7	14.5	1.1	0.8	0.8	1.7	1.5	1.5	69.5	81.2	81.8
China	18.3	24.1	22.1	1.1	1.5	1.3	2.0	2.7	2.5	45.7	40.0	40.0
Hong Kong	20.3	12.3	14.7	1.6	0.9	1.1	3.0	2.0	2.4	55.4	58.3	53.8
Indonesia	21.6	22.6	21.5	2.2	2.3	2.2	4.5	4.3	4.1	42.5	42.8	47.3
India	18.9	13.7	13.4	1.8	1.5	1.4	2.0	1.6	1.6	27.5	24.3	24.7
Pakistan	29.4	23.2	19.4	3.5	3.0	2.6	5.5	4.7	4.1	35.0	34.0	34.0
Korea	17.2	12.2	8.3	1.1	0.7	0.5	1.7	1.1	0.7	25.9	25.1	27.4
Malaysia	11.4	14.0	12.2	0.8	1.0	0.9	1.4	1.7	1.4	36.0	39.0	42.5
Philippines	10.2	6.6	7.9	1.1	0.7	0.8	1.8	1.1	1.2	38.9	68.8	32.7
Singapore	12.9	11.3	10.6	1.4	1.1	0.9	2.0	1.6	1.4	44.0	53.0	55.7
Thailand	12.6	13.5	11.8	1.2	1.3	1.1	1.8	1.9	1.7	45.8	31.0	34.2
Taiwan	7.1	2.0	6.0	0.5	0.2	0.4	0.7	0.3	0.6	53.3	31.0	39.9
Japan	6.6	3.5	4.2	0.3	0.1	0.2	0.6	0.3	0.3	20.4	61.1	55.8

Note: Data as of November 28 2008, Average of major banks

Source: UBS estimates

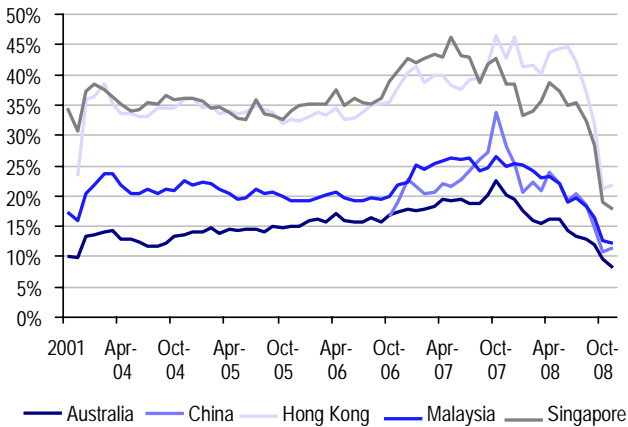
There are only nine Asia bank stocks trading above 6x P/PPOP, namely, **Hang Seng Bank, Housing Development Finance Corporation (HDFC), Public Bank, Bank Central Asia (BCA), Fubon Financial Holding (Fubon), Bank of the Philippine Islands (BPI), UOB, HDFC Bank and OCBC**. This list only includes banks with a market cap above US\$2.5bn. For the bank stocks trading below 4x P/PPOP we suggest looking at **ICICI, China Merchants Bank-H, Kasikornbank, BRI, KEB and Hana FG**.

Chart 6: P/POP 2009E



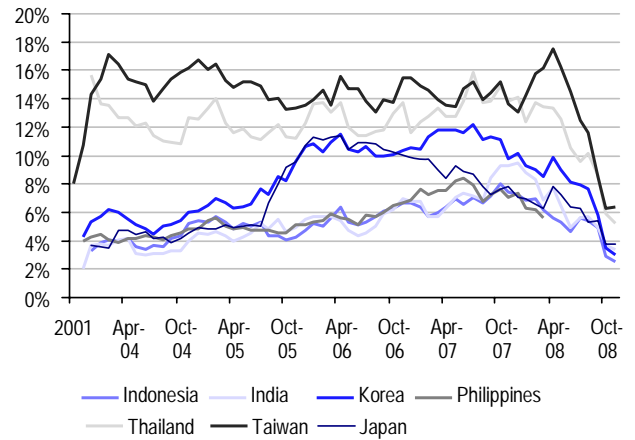
Source: UBS estimates

Chart 7: Bank market cap to GDP



Source: UBS

Chart 8: Bank market cap to GDP



Source: UBS

# Asia Banks Most & Least Preferred

In this section, we present commentary on stocks in our Most & Least Preferred stock list.

## Asia Banks Most & Least Preferred

Stock	Rating	PT (LC)	Overview
<b>Most preferred</b>			
United Overseas Bank	Buy	16	Most resilient bank in Singapore with Tier 1 of 11.2%, low LDR of 89% and trades on 9x PE (ROA of 1%)
ICBC-H	Buy	6.9	Conservative B/S with LDR of 56%, lowest loan CARG from 2005-07 of 11%, Tier 1 10.7% and 2009E PE of 8x and yield of 4.9%
China Merchants Bank-H	Buy	40.5	Strong retail deposit/card franchise (+36-40m customers) and high PPOP margin (2.6%) makes PE of 6.3x attractive
ICICI Bank	Buy	515	At 7.8x standalone FY10E PE and 0.69x P/BV and Tier 1 ratio of 11.6% ICICI can cope with rising NPLs.
Bank Rakyat Indonesia	Buy	4,695	Strong rural deposit franchise/micro lending generate PPOP margin of 2.7% so 2009E PE of 5.4x is attractive on ROE of +25%
Bank of China (Hong Kong)	Buy	17.4	Strong Tier 1 of 11.8% will allow the bank to absorb losses from subprime/Lehman in 2008 and show ROE of 13% in 2009E
Kasikornbank	Buy	77.9	Strong deposit franchise and high margin SME loans generate PPOP margin of 2.6% the highest in Thailand; 2009E PE only 6x
Korea Exchange Bank	Buy	11,600	At 0.7x 2009E P/BV we see upside from M&A once Lonestar is allowed to sell its 51% stake; only 2.1x P/PPOP
Hana Financial Group	Buy	30,600	Stock hurt by Taesan LCD losses and concern over rising NPLs given low PPOP margin of 1.1%, but looks oversold at 0.4x 2009E P/BV
<b>Least preferred</b>			
Malayan Banking	Neutral	5.3	Expensive overseas acquisitions (Bank Internasional Indonesia, MCB Bank) creates earnings, capital and dividend risk
State Bank of India	Sell	1,150	Expanding loans without the controls needed in weaker economic conditions
Taishin Financial Holding	Sell	3.8	Weak capital (Tier 1 of 5%), low PPOP margin (0.9%) and M&A/recap risk.

Data as at 2 December 2008. Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list:

## Most Preferred United Overseas Bank

**Investment case:** Among the three Singapore banks, we prefer United Overseas Bank (UOB) as a defensive pick. It has a much smaller corporate CDO portfolio than DBS, and also does not have a large insurance exposure such as that of OCBC, which can be volatile in turbulent markets. UOB's management has a proven track record of having managed through the cycles and this should bode well in the current environment. UOB has a Tier 1 ratio of 11.2%, well above the minimum requirement of 6%, and we believe this reflects the strength of its balance sheet. While its loan-to-deposit ratio is only 89%, the bank in recent quarters has been a net inter-bank borrower and the recent decline in inter-bank rates should benefit.

**Sector:** Singapore Banks, Ex-S&L

**Rating:** Buy

**PT:** S\$16.00

**Analyst:** Jaj Singh

**Valuation:** The stock is trading at 9.3x 2009E PE and 1.1x P/BV. While this is in line with its peers, it is significantly below its trading history. While heightened risk aversion may limit the upside in the near term, we believe the stock remains attractive on a 12-month outlook, both on valuation and on the strength of its franchise. We derive our price target using the Gordon Growth Model, assuming ROE of 12.0%, COE of 9.6%, and growth of 4.8%.

**2009 catalysts:** We think signs of the bottoming of the economy and provisioning could provide potential catalyst for the stocks. Another catalyst could be better margins via wider spreads.

## ICBC-H

**Investment case:** We believe the conservative nature of ICBC's balance sheet structure will provide investors with more margin in challenging times, highlighted by: 1) the lowest loan-to-deposit ratio among China banks (56%) as at Q308, making it less vulnerable to PBOC's asymmetric interest rate cut; 2) the lowest 2005-07 loan CAGR of 11% among China banks, suggesting the smallest portion of newly underwritten risks during the economic peak years; and 3) the existence of Rmb1.03trn restructuring-related bond portfolio yielding 2.23% in H108, indicating upside for its bond portfolio yield, when such positions are reprised in 2009 and 2010.

**Valuation:** We base our price target of HK\$6.90 on 20% long-term ROE, 11.5% COE and a 3.0% terminal growth rate. With the global economy (and China's) fast deteriorating, and the PBOC's proactive and radical interest rate cuts, we see potential downside to our earnings forecasts for 2009-10. Nevertheless, we believe 9x 2008E PE and 5% 2008E dividend yield is an attractive valuation for this conservative franchise.

**2009 catalysts:** As a leading bank with a 15% share of China's loan market, we believe ICBC will not be immune to the deteriorating macro economy. Our 2009 and 2010 net profit forecasts assume 100bp and 90bp credit cost, compared with 73bp in 9M08. The announced Rmb150bn Tier-2 capital raising could mark a bottom for the stock in 2009, given it will likely secure low-cost funding at the trough of the interest rate cycle.

## China Merchants Bank-H

**Investment case:** We believe China Merchants Bank should deliver stronger-than-peers results in 2009-10E, considering 1) it has a 20-year operation track record through many economic cycles without government NPL carve-out; 2) it has the best client base, highlighted by a high portion of demand deposits and leading wealth management franchise, and we believe such clients' asset quality should be more resilient in economic downturn; and 3) China Merchants Bank only had a 2.4% national loan market share by 2007, meaning it can be more agile and flexible than the large state-owned banks.

**Valuation:** We have a Buy rating and HK\$40.50 price target for China Merchants Bank-H, based on 11.25% COE, 22% long term ROE and 3.3% terminal growth. Even though our number does not include goodwill write-off and there could be earnings downside due to deteriorating economy, we believe 6.1x 2008E PE is a very attractive price to accumulate this premium bank.

**Sector:** China Banks, Ex-S&L

**Rating:** Buy

**PT:** HK\$6.90

**Analyst:** Victor Wang

**Sector:** China Banks, Ex-S&L

**Rating:** Buy

**PT:** HK\$40.50

**Analyst:** Victor Wang

**2009 catalysts:** We think the only uncertainty comes from a goodwill write-off. China Merchants Bank acquired Wing Lung Bank (WLB) for HK\$36.3bn during 2008 at 3.1x Q108 P/BV. China Merchants Bank is assessing the goodwill arising from this acquisition, and we believe a write-off will be booked in its 2008 annual report (due late March 2009). Although such goodwill write-off is only an accounting treatment and should have little impact for equity holders, we think the market could react negatively.

## ICICI Bank

**Investment case:** Over the past four quarters ICICI Bank has been slowing asset growth and focusing on improving retail liabilities, the benefits of which should accrue over time. This strategy to improve profitability through retail deposit mobilisation has been shaken in the recent past, leading to margin pressure, which along with lower fee income will likely impact near-term earnings. Despite this, we believe current valuation, following a substantial correction, is reasonable.

**Valuation:** The stock is trading at 7.8x standalone FY10E PE and 0.69x P/BV as a standalone entity. We have adjusted ICICI Bank's book value for higher NPLs and international exposure and rate the stock as a Buy with a price target of Rs515 based on our residual income model; with its subsidiaries/associates valued at Rs220 per share.

**2009 catalysts:** (1) CRR and SLR cuts: A cut in the SLR, in particular, can have not only significant positive short-term, but also a long-term impact on bank earnings. We think ICICI Bank will likely use this liquidity to reduce its dependence on bulk deposits. (2) Lower lending rates: Lending rates have risen sharply over the past four years. A reduction in lending rates could stimulate demand and reduce concerns relating to NPLs in Indian banks.

## Bank Rakyat Indonesia

**Investment case:** Bank Rakyat Indonesia is our top pick in the Indonesian banking sector. We believe its fundamentals are strong with its rural deposit franchise, diversified and small portfolio, and adequate capital. Bank Rakyat is also the payment bank for the government with a seasoned portfolio that weathered the Asian financial crisis. The bank has a track record to deliver above 25% ROE even during an economic downturn.

**Valuation:** Bank Rakyat Indonesia is trading at 1.7x P/BV 2008E which we think is unwarranted given its franchise, and is far lower than BCA at 2.7x P/BV.

**2009 catalysts:** potential 500bp lower tax rate for companies with more than 40% free float.

**Sector:** India Banks, Ex-S&L

**Rating:** Buy

**PT:** Rs515.00

**Analyst:** Tabassum Inamdar, CFA

**Sector:** Indonesia Banks, Ex-S&L

**Rating:** Buy

**PT:** Rp4,695

**Analyst:** Joshua Tanja, CFA

## Bank of China (Hong Kong)

**Investment case:** We believe BOCHK is further strengthening its leading position in current global financial crisis due to a sound capital base, strong earnings and support from its parent Bank of China Group. When the economy becomes increasing challenging, we believe both depositors and banking customers will seek quality and pick leading franchises such as BOCHK.

**Valuation:** We base our price target of HK\$17.40 on 1.85x 2009E P/BV, assuming 16.5% sustainable ROE, 10.5% COE and 3.0% long-term growth. We maintain our Buy rating on BOCHK's leading market position, relatively sound earnings power, and attractive valuation of 7.1x 2009E PE and 9.2% 2009E dividend yield.

**2009 catalysts:** (1) Possible write-down of BEA stake in 2008 annual report (due March 2009). BOCHK purchased 4.94% of BEA (0023.HK) in November 2007 for HK\$3.95billion (HK\$51 per share). BEA's share price is currently HK\$15.7 and it has issued a profit warning issued for its 2008 full year results. And (2) A separate FX asset write-down. BOCHK had around HK\$248bn non-government securities by H108, mostly in financial institutions bonds. We forecast another HK\$8.7bn write-off is needed, indicating a 4.9% final loss ratio for the HK\$248bn investment portfolio.

## Kasikornbank

**Investment case:** We believe the current valuations present an attractive buying opportunity into Kasikornbank's solid long-term growth platform. We expect the above-average return beyond 2009E to be underpinned by: 1) its well established position in the SME and retail segments; 2) the completion of an IT upgrade at year-end 2009, which will likely enhance its fee-based income capability; and 3) the expected decline in credit cost as its NPL coverage ratio rises to over 90%.

**Valuation:** We base our price target of Bt77.90 on a 1.5x 2009E P/BV, assuming 10.4% COE and a 13.1% sustainable ROE.

**2009 catalysts:** We think the successful IT upgrade under the "K-Transformation" programme could be a key positive catalyst to support fee-based income growth. The project is scheduled to be completed by year-end 2009.

## Korea Exchange Bank

**Investment case:** We think KEB is effectively an M&A target in limbo as Lonestar would like to sell its 51% stake. A court ruled in late November that there was no wrongdoing in the original sale to Lonestar; however, prosecutors are appealing the case. We expect KEB to suffer in the same way as other Korean banks in the economic downturn in 2009 as we forecast an ROE of only 10%. We believe KEB will be more resilient in this downturn as (1) it has not revealed any outsized risk for KIKO or construction loans, (2) it has a 50% market share of FX deposits in Korea so faces less FX funding issues, (3) it has not expanded into cyclical/low ROE non-banking activities and has kept operating costs within a reasonable range of 40-45%. We think KEB is still an

**Sector:** China Banks, Ex-S&L

**Rating:** Buy

**PT:** HK\$17.40

**Analyst:** Victor Wang

**Sector:** Thailand Banks, Ex-S&L

**Rating:** Buy

**PT:** Bt77.90

**Analyst:** Butsakon Khoosuwan

**Sector:** Korea Banks, Ex-S&L

**Rating:** Buy

**PT:** Won11,600

**Analyst:** John Wadle, Soyoung Kim



M&A target and we see M&A valuation reaching Won12,000-13,000 at 1.2-1.3x P/BV.

**Valuation:** KEB trades at 0.7x 2009E P/BV with an ROE of 10% and 2009E PE of 7x. We assume it will try to maintain a dividend payout of 40-50% implying a yield of 7%. Our price target of Won11,600 is based on 1.1x P/BV assuming a through-the-cycle ROE of 11-12%.

**2009 catalysts:** (1) final court ruling allowing Lonestar to sell its 51% stake, (2) BoK rate cuts which would lower lending rates and reduce risk of hard landing in the construction/RE sector, (3) rebound in quarterly earnings in 2Q09 to an ROE of 11-12%.

## Hana Financial Group

**Investment case:** We think the possibility of further losses on Taesan LCD (+Won200bn) will remain a concern and that Q408/Q109 results are likely to show losses. The key issue is if Hana FG opts for a discounted rights issue as we estimate the group may need Won1trn in equity (25-30% of market cap) if NPLs continue to get front-loaded in the next six months. We believe the stock is oversold as (1) it has no debt at the holding company level so has flexibility to inject capital into Hana Bank if necessary, (2) Hana FG could opt for a merger if NPLs/funding turns out worst than expected with losses exceeded Won500bn in H109, (3) we expect the Bank of Korea to cut rates to 2% in 2009 (from 4% currently) and this should reduce CD rates and bank bond costs (currently 7-8%). Therefore, since Hana FG has the lowest PPOP margin of 1.1% could benefit from lower funding costs in Q209.

**Valuation:** Hana FG trades at 0.4x 2009E P/BV; however, we estimate a hard landing would only wipe out 20% of book value. Therefore, if Hana FG needs to raise equity we expect it will conduct a rights issue and ask existing shareholders to subscribe. Its ex-rights P/BV will rise to 0.6x if we assume NPL write-offs and dilution. Our fair value of 0.7x P/BV is only possible if Hana FG avoids a rights issue, stops loan growth and reduces its high cost funding over the next six to nine months. To really create value we believe Hana needs to be bought by either KB FG or merge with some Samsung Group financial companies.

**2009 catalysts:** (1) possible M&A if the stock continues to trades below 0.5x P/BV, (2) BoK rate cuts should push CD rates below 4.5% and bank bond yields below 6.5%, (3) rights issue/equity capital raise could mark bottom for the stock.

## Least Preferred Malayan Banking

**Investment case:** We believe that even though Maybank is trading at the low-end of its trailing P/BV range, a meaningful re-rating could prove difficult, given the lack of clarity on 1) how its new strategic 'Leap 30' programme translates to improvements in its operating performance 2) the integration and risk of further impairment or forex losses on its recent acquisitions.

**Valuation:** We base our price target of RM5.30 per share on our H1-FY10E ROE estimate of 13.3%, COE of 9.7% and long term growth rate of 3%.

**Sector:** Korea Banks, Ex-S&L

**Rating:** Buy

**PT:** Won30,600

**Analyst:** John Wadle, Soyoung Kim

**Sector:** Malaysia Banks, Ex-S&L

**Rating:** Neutral

**PT:** RM5.30

**Analyst:** Colbert Nocom

**2009 catalysts:** (1) Stronger/weaker NPL formation at BII (2) Writebacks/further impairments on its acquisition.

## State Bank of India

**Investment Case:** We are concerned about SBI's strategy to grow its book aggressively and focus on market share in the current environment which could impact its earnings a few quarters from now as asset quality starts to slip. The bank's aggressive target of expanding its branch network by 16% to 11,800 branches and the employee base by 14% or 20,000 to 25,000 employees over the next year will likely put pressure on earnings in FY10, especially if economic activity remains subdued. On the positive front, the flight to safety, we believe, should benefit SBI the most in the sector, given its strong presence and brand franchise.

**Valuation:** The stock is trading at 8.8x FY10E PE and 1.1x P/BV (standalone) against a sustainable ROE of 15%. We rate the stock a Sell with a price target of Rs1,150. We base our price target on a sum-of-the-parts model. At our price target, the standalone entity would trade at 1.5x adjusted P/BV FY09E.

**2009 catalysts:** One of the biggest risks for SBI would be a rise in NPL levels due to its aggressive expansion plans.

## Taishin Financial Holding

**Investment case:** We have Sell rating on the stock for the following reasons: (1) we are unsure if Taishin will successfully raise capital given the further delay of its rights issue; (2) the announced capital raising plan would create significant EPS dilution; (3) the very high current debt level leads to refinancing risk and heavy interest burden; (4) the pending Chang Hwa Bank merger would continue to be a fundamental, technical and sentimental drag, and (5) poor core earnings outlook with no PPOP recovery in sight.

**Valuation:** We base our price target of NT\$3.80 on 0.3x P/BV derived from a ROE driven, simple growth model in which we assume 2010E ROE of 4.6% and a cost of equity of 8.4%.

**2009 catalysts:** (1) The potential signing of an MOU between Taiwan and China scheduled for Q109, (2) 2008 full year earnings figures and 2009 guidance released in February 2009, (3) The potential announcement of a capital injection (application submitted in November 2008; the deadline to complete is six months later).

**Sector:** India Banks, Ex-S&L

**Rating:** Sell

**PT:** Rs1,150

**Analyst:** Tabassum Inamdar, CFA,

**Sector:** Taiwan Banks, Ex-S&L

**Rating:** Sell

**PT:** NT\$3.80

**Analyst:** Pandora Lee

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### ■ Statement of Risk

The main risk for Asia banks is inflation in countries with current account deficits and low FX reserves, which poses more challenges for banks in Pakistan, India and Korea as higher interest rates would hurt margins for banks with high LDRs and hurt credit quality. Also, asymmetric change in deposit rates and lending rates could hurt current high loan margins (4%) for Chinese banks. Also, banks with equity/asset ratios below 5% and ROAs below 1% are vulnerable to economic and regulatory risk, especially if still growing loans by more than 15% per annum as they will encounter capital shortages.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

# UBS Investment Research

## Asia Consumer - Outlook 2009

Asia

Consumer, Non-Cyclical

Sector Strategy

### Be defensive

#### ■ Summary

We expect the slowdown in consumption demand to continue in Asia in 2009 based on the global recession, the negative wealth effect and slowing income growth. We are positive on the F&B and consumer staple sectors due to falling raw material costs and stable demand. However, we think earnings visibility on the consumer discretionary sector is low because of uncertain consumer demand and increasing competition.

#### ■ What are the likely key themes for 2009?

The key common themes for the region are: 1) the consumption slowdown; 2) falling raw material costs; and 3) tight credit markets. In addition, key themes for the major Asian consumer markets are: food safety (China/Hong Kong); the ability to sustain volume growth (India); local currency depreciation (Indonesia and Korea); and the resilient outlook for retail sales (Thailand).

#### ■ What may surprise on the upside or downside?

We think a recovery in global financial markets, raw material cost trends, government stimulus packages, M&A and corporate governance could surprise either on the upside or downside.

#### ■ Highlighted stocks

Our Asian Consumer Top 11 Stocks List highlights our preferred picks in each country. It comprises China Yurun Food, Parkson Retail, Esprit, Hindustan Unilever, ITC, Unilever Indonesia, Hite Brewery, KT&G, Shinsegae, Resorts World, and CP All.

**4 December 2008**
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**Table 1: Asia Consumer Top 11 Stocks List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
China Yurun Food	1068.HK	1.588	Buy	8.48	13.35	9.9 x
Parkson Retail	3368.HK	2.564	Buy	7.13	13.77	16.1 x
Esprit	0330.HK	5.923	Buy	36.95	69.00	7.7 x
Hindustan Unilever	HLL.BO	10.154	Buy	233.2	300.0	5.5 x
ITC	ITC.BO	12.734	Buy	169.6	225.0	17.7 x
Unilever Indonesia	UNVR.JK	4.777	Buy	7,700	9,400	19.7 x
Hite Brewery	103150.KS	1.120	Buy	175,000	251,000	10.5 x
KT&G	033780.KS	7.304	Buy	76,000	107,000	12.7 x
Shinsegae	004170.KS	5.248	Buy	407,500	500,000	13.2 x
Resorts World	RWBW.KL	3.529	Buy	2.30	3.30	10.8 x
CP All	CPALL.BK	1.347	Buy	10.80	13.90	13.2 x

Data as at 2 December 2008. Source: UBS estimates

**This report has been prepared by UBS Securities Pte. Ltd., Seoul Branch**  
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## Outlook 2009 - Summary

### What are the likely key themes?

**China/Hong Kong.** We believe the key themes in 2009 will be: 1) the slowdown in consumption particularly by upper/middle income groups that are affected more by the negative wealth effect; 2) low earnings visibility against a backdrop of global recession and turmoil in financial markets; 3) lower raw material costs for F&B companies; 4) margin pressure from an increase in promotional activities to attract foot traffic, diseconomies of scale, and higher cost of debt; 5) the impact of tight credit markets on operations, expansion and refinancing risk; 6) heightened awareness of food safety issues; and 7) an acceleration of industry consolidation based on the tougher operating environment.

**India.** In our view, the key theme will be the ability to sustain volume growth after price increases in 2008. This will depend on the sustainability of demand as well as expansion of EBITDA margins as raw material costs decline. As each company in the consumer sector is driven by a different dynamic, we analyse them individually and use different themes. Some companies are likely to experience pressure on volume growth while others may not record an increase in EBITDA margin, as fixed costs are not guaranteed to fall. Therefore the key to stock performance in 2009 will be the ability to sustain volume growth, in our view.

**Indonesia.** We believe the three key themes that will emerge in 2009 are: 1) cash-based consumption (FMCG, consumer staples, etc) will hold up better than credit consumption (durable goods, autos, etc); 2) election 'money/spending' (cash handed out during election rallies) will offer upside potential to consumption; and 3) rupiah depreciation will offset windfall profits for consumer companies from falling oil and commodity prices.

**Korea.** We believe Korea consumption demand will be weak in 2009 due to slowing income growth, the negative wealth effect and highly leveraged households. The UBS economics team forecasts a 3.0% decline in GDP and a 2.2% decline in consumption in 2009. We believe the key themes will be: 1) weak earnings visibility for discretionary consumer companies; 2) potential margin expansion at F&B companies from falling raw material costs; 3) the impact of currency movements; and 4) rising funding costs and refinancing risk.

**Malaysia (Gaming).** As Resorts World Sentosa IR (Integrated Resort) nears completion and a soft opening in early 2010, we expect 1) less concern about construction cost escalation and project delays; and 2) rising concern that the opening of the Sentosa IR could adversely affect business at Genting Highlands. Another key theme in 2009, which is an ongoing issue, is how will Resorts spend the US\$1bn cash on its balance sheet? **Plantations.** We think the CPO price will remain weak in 2009. A combination of a low CPO price and tight credit could spark consolidation in the industry. We believe plantation companies with strong balance sheets or with substantial downstream operations will lead in M&A.

**Thailand.** We believe resilient Thai retail spending will be a key theme for the consumer sector in 2009. In past financial crises, retail spending has held up well compared with big-ticket items such as houses and cars. In 2001, retail sales grew 10.7% despite a slowdown in GDP growth to 2.2%. In 2009, we believe Thai retail spending will be driven by two key drivers: a) trade-downs from high-end to typical mass-market products amid a poor outlook for incomes; and b) a lower cost of living caused by inflation and a sharp drop in the oil price.

## What is our central thesis for 2009?

**China/Hong Kong.** Urban expenditure is slowing as consumer spending becomes more reserved. Picking up the slack, though, are the powerful drivers of rural consumption, urbanisation and the trade-up cycle. We expect underlying consumption growth to remain strong. UBS China economist, Tao Wang, expects real consumption growth to stay strong at 9.6% in 2008 and 9.1% in 2009. On the other hand, we are more cautious about profitability. Earnings trend visibility is low but we believe that risk is to the downside due to diseconomies of scale, bigger markdowns, and higher selling expenses and cost of debt.

**India.** We expect the consumer sector to grow 10-12% YoY in value terms in 2009, benefiting from 5-6% volume growth YoY and an increase in disposable income in rural areas. Consumers in rural areas have expanded as income levels have improved over the past two to three years. We are cautious, however, about the impact of weak macroeconomic sentiment on the top 2-4% of the urban population.

**Indonesia.** We believe that consumption will soften considerably while cash-based consumption (ie, Unilever/Indofood/Ramayana products) is likely to hold up much better than credit consumption (durable goods, autos) that may record negative growth. We project a UBS consumption score card of two points for 2009, down significantly from 15 points in 2008. The main reasons are that: 1) some consumption (demand) was front-loaded in 2008 given higher inflationary expectations; and 2) there was a much higher lending rate for consumers (up 500-600bp over the past three to four months) due to tight domestic liquidity in the banking system.

**Korea.** We prefer consumer staple companies over discretionary based on higher visibility earnings growth from stable and defensive demand and falling raw material costs. We think the best time to revisit consumer discretionary stocks such as department stores would be Q209, when we expect retail sales to bottom. Despite meaningful underperformance, we think it is too early to buy consumer discretionary stocks based on low earnings visibility and likely slowing retail sales growth.

**Malaysia (Gaming).** We are positive on the Sentosa IR, as we think there is pent-up casino demand in Singapore. Furthermore, Sentosa IR will operate in a duopoly and therefore competition is unlikely to be excessive. We also think the size of the casino market in Southeast Asia is large enough for both the Singapore casinos and Genting Highlands, and therefore we do not expect a significant drop in business for Resorts World. **Plantations.** In our view, global demand for edible oils in 2009 will fall short of supply, despite downturns in South American soybean and Malaysian palm oil production. Our negative outlook for the CPO price implies a lack of a short-term catalyst for the sector. However, we feel share prices have fallen sufficiently for some plantation stocks.

**Thailand.** We believe Thai retail spending will be resilient in 2009 despite the weak macro outlook, driven by a trade-down trend from high-end to mass-market products and a lower cost of living caused by inflation and a sharp drop in the oil price. We like retail companies based on the resilient outlook for retail sales.

### What may surprise on the upside or downside?

**China/Hong Kong.** From a macro perspective, a faster (or slower) recovery in global financial markets could surprise on the up (or down) side. At the company level, we believe M&A will lead to top-line or earnings growth surprising on the upside. Higher raw materials costs would surprise on the downside. Food quality issues and corporate governance could also surprise on the downside. In addition, major policy changes by the Chinese government will surprise either on the upside (incentives) or downside (tightening measures).

**India.** We believe EBITDA margins will surprise on the upside, as soft commodity prices remain below 2008 levels. We look for fixed costs to come down, as companies will be affected by higher costs in 2008 (ie, logistics, transportation, employee costs with bonuses, etc).

**Indonesia.** We believe election money/spending presents upside potential to our consumption story. Indonesia will hold three elections in 2009 (a parliamentary election and two presidential election rounds). Although election money (cash handed out at election rallies) is hard to quantify, historical data (the past two election years of 1999 and 2004) showed that the consumption indicators we tracked were much better than the predictions at the beginning of the year. Better-than-expected consumption would lead to improved pricing power, which would be another positive surprise for our earnings forecasts.

A negative surprise would be a weaker rupiah, as 60-70% of consumer companies' COGS are linked to the US dollar. The weaker rupiah would adversely affect credit consumption (durable goods), as consumers tend to postpone big-ticket purchases. This could be mitigated by a fall in raw material costs arising from lower oil and commodity prices. Our sensitivity analysis of 10% rupiah depreciation and a 10% fall in raw-material costs indicates a neutral effect on earnings (the effect of one cancels out the other).

**Korea.** Potential government measures to boost the domestic economy (tax cuts, expansionary budgets, etc) could surprise on the upside/downside for overall consumption demand. At the company level, changes in raw material costs, currency movements and funding costs could surprise on the upside or the downside.

**Malaysia (Gaming).** How Resorts World utilises the US\$1bn on its balance sheet could surprise the market positively or negatively depending on what is acquired (if anything) and how much the company pays. We think Resorts will make a good acquisition because of the current tight credit markets (which puts geared casino groups at a disadvantage) and as asset prices have fallen significantly. **Plantations.** The price of palm oil is still heavily influenced by the crude oil price. UBS forecasts crude to remain at US\$60/barrel in 2009, in line with our outlook for a soft palm oil price. A recovery in crude could result in an unexpected rise in the palm oil price, and a worse-than-expected decline in the South American soybean crop would also lift the price.

**Thailand.** We believe the key upside surprise will come from government tax measures to help relieve income pressure on consumers and corporate cash flow. According to media reports, the government is considering measures to increase personal income tax exemptions and lower corporate income tax. In our view, key downside surprises for consumer companies could come from higher promotion costs to boost revenue and consumer spending patterns in the tough economic conditions.

## What are the likely key catalysts?

**China/Hong Kong.** We highlight food safety and the raw material pricing trend as key catalysts for the F&B sector. Retail sentiment and same-store-sales trends are key catalysts for retailers. We believe M&A and market expansion are key catalysts for most consumer sectors. Refinancing risks would serve as key catalysts as well in the current environment.

**India.** We believe the key catalyst for ITC will be government policy on the cigarette sector to be announced in the budget. If the increase in excise duty is less than 10%, we expect ITC to record higher volume growth and a strong operating performance. For other consumer stocks, low inflation and higher volume growth would be the key triggers.

**Indonesia.** Catalysts include better-than-expected consumption indicators (especially for durable goods/autos), ASP increases, rupiah movements and a change in market share.

**Korea.** Positive catalysts for the F&B sector are Won appreciation, a stabilising raw material cost trend and consumer product price hikes. For retailers, department store same-store-sales growth trends and the Consumer Sentiment Index are key catalysts.



**Malaysia (Gaming).** The announcement of an M&A by Resorts World would be a key catalyst in 2009, in our opinion, as would the lead up to the opening of Resorts World Sentosa IR in early 2010. An easing of the credit markets may diminish Resorts' advantage of being in a net cash position. **Plantations.** The South American soybean harvest in March to May 2009 is a key catalyst for the sector. At this juncture, we expect no increase in the crop because of a lack of credit and reduced application of fertiliser. We also view the downturn in Malaysian palm oil production as a key catalyst, if it translates to lower inventories.

**Thailand.** A sharp reduction in the domestic diesel price could be a positive catalyst for the Thai consumer sector both in terms of corporate costs and consumer spending. For company specific catalysts, we believe the removal of overhangs from 2008 regarding Central Pattana's land lease and CP All's China divestment will be key share price catalysts.

## Key stock ideas

**China/Hong Kong.** In the F&B sector, we like China Yurun due to resilient rural consumption, urbanisation and the trade-up cycle. We have a Sell rating on Inner Mongolia Yili, as we think its sales recovery after the melamine scandal will be slower than Mengniu's. In the retail sector, we like Parkson Retail, Lianhua Supermarket, Gree Electrical Appliance, Belle International and Xtep International.

**India.** Our top picks are Asian Paints, Hindustan Unilever and ITC.

**Indonesia.** Unilever Indonesia and Astra International are our top two picks, as we believe sticking with blue chips is reasonable in light of current market conditions.

**Korea.** We like KT&G and Hite Brewery based on stable demand, leading market positions and falling raw material costs (Hite). We also like Shinsegae as we believe a trade-down trend should benefit its discount store business. We are cautious on the department store sector such as Lotte Shopping due to the weak outlook for same-store-sales growth over the next three quarters.

**Malaysia.** In the gaming sector, we have Buy ratings on both Genting and Resorts World. At this juncture we prefer Resorts, as we believe it will make a good acquisition and we value the resilience of Resorts' strong operating cash flow in light of the current economic turmoil. For the plantations sector, IOI Corp is our top Buy and Sime Darby our top Sell.

**Thailand.** We highlight Central Pattana (department store developer) and CP All (convenience store operator) as our top consumer picks in Thailand. Besides stable and healthy revenue from retail sales, we think both companies have good long-term growth prospects in the under-penetrated up-country areas of Thailand.

## Asia Consumer Top 20

In this section, we present commentary on stocks in our Asia Consumer Top 20.

### Asia Consumer Top 20 list

Company	Rating	Price target	Overview
<b>Belle International</b>	Buy	HK\$5.21	China's largest women's footwear retailer.
<b>China Yurun Food</b>	Buy	HK\$13.35	The third largest meat processor in China.
<b>Esprit</b>	Buy	HK\$69.00	Engaged in wholesale and retail fashion and lifestyle products under the Esprit brand.
<b>Gree Electrical App.</b>	Buy	Rmb27.71	Gree is China's largest air-conditioner manufacturer.
<b>Lianhua Supermarket</b>	Buy	HK\$13.07	Retail chain operating three types of outlet: hypermarkets; supermarkets; and convenience stores.
<b>Parkson Retail</b>	Buy	Rmb13.77	One of the first foreign department store chains to establish a presence in China.
<b>Xtep International</b>	Buy	HK\$2.72	Well known sportswear brand in China.
<b>Asian Paints Ltd.</b>	Buy	Rs1450	Asian Paints is the leading paint manufacturer in India.
<b>Hindustan Unilever</b>	Buy	Rs300.0	Hindustan Lever is the leading household goods and food products company in India.
<b>ITC</b>	Buy	Rs225.0	ITC is the leading cigarette manufacturer in India.
<b>Astra International</b>	Buy	Rp16,700	Astra International is Indonesia's largest automotive conglomerate.
<b>Unilever Indonesia</b>	Buy	Rp9,400	Unilever Indonesia is the leading household goods and food products company in Indonesia.
<b>Hite Brewery</b>	Buy	Won251,000	Leading beer manufacturer in Korea with c60% domestic beer market share.
<b>KT&amp;G</b>	Buy	Won107,000	Korea's leading cigarette company.
<b>Shinsegae</b>	Buy	Won500,000	Korea's No. 1 discount store (E-mart) operator.
<b>Genting</b>	Buy	RM6.50	Malaysian holding company—casino resort, oil palm plantations, property development, etc.
<b>IOI Corporation</b>	Buy	RM3.70	One of Malaysia's largest plantation companies.
<b>Resorts World</b>	Buy	RM3.30	Malaysian company with investments in the casino and hotel businesses.
<b>Central Pattana</b>	Buy	Bt29.30	The largest retail property developer in Thailand.
<b>CP All Plc</b>	Buy	Bt13.90	CP All operates Thailand's largest convenience store chain.

Source: UBS estimates

We summarise our investment case into 2009, the current valuation, and likely catalyst(s) for each of the stocks in our Asia Consumer Top 20 as follows:

# China/Hong Kong

## Most Preferred Esprit

**Investment case:** Esprit faces a challenging operating environment in Germany (c50% of its sales) where a tight credit market and weaker sentiment have impacted Esprit's wholesale order book and same-store-sales growth trends. However, we expect Esprit's sound two-pronged strategy in wholesale and retail will allow for a meaningful turnaround should the global financial system achieve a sustainable recovery. In a normal business environment, Esprit's wholesale business provides relatively strong earnings visibility via its order book, and we think there is room for 10-15% pa top-line growth from new market penetration. Esprit's retail business is relatively under-penetrated compared to its global peers such as H&M and Zara (Inditex), and offers attractive volume and margin growth potential. A strong balance sheet (debt free with over HK\$6bn in cash) should provide operational flexibility and ammunitions for future expansion.

**Valuation:** Our HK\$69.00 12-month price target is derived using a DCF methodology and assumes a WACC of 10.5% and terminal growth of 2%. The share price has halved and underperformed the HSI 15% since the FY08 results and it trades at 7.7x 2009E PE and 2.7x 2009E P/BV, below the SARS levels. In addition, we believe Esprit's debt-free balance sheet, c90% ROIC, and c80% payout provide support for the stock price. However, in our opinion, near-term newsflow is likely to retain a negative bias, which should continue to pressure the share price.

**2009 catalysts:** Positive: 1) a sustainable recovery in global financial markets and improved sentiment in Germany; 2) a meaningful increase in the wholesale order book; 3) strong same-store-sales trends; 4) better-than-expected H1 FY09 and FY09 results; 5) a strengthening euro; and 6) a higher dividend payout ratio. Negative: 1) a prolonged global financial crisis; 2) negative macro data from Germany and other key markets; 3) a worse-than-expected wholesale order book, same-store-sales trend, margin trends; 4) further euro depreciation; and 5) a cut in dividend payout ratio.

## China Yurun Food

**Investment case:** We believe China Yurun will maintain growth in the next three years because of: 1) an increase in industry consolidation given relatively high production costs; 2) a product mix that leans to high-margin products; 3) an aggressive expansion plan; 4) a good brand image that secures pricing powder; and 5) relatively low cost hog prices compared with the country average.

We expect the company to achieve 25.1%, 27.8% and 23.6% growth in pre-X net profit in 2008, 2009 and 2010, respectively. We do not think the economic slowdown will impact pork consumption significantly in 2009 and 2010. Indeed, pork consumption may increase based on lower prices compared with 2008. We expect the average hog price to drop to Rmb12-13/kg in 2009, down 11-18% YoY.

**Sector:** Retailers, Apparel

**Rating:** Buy

**PT:** HK\$69.00

**Analyst:** Erica Poon Werkun

**Sector:** Food & beverage

**Rating:** Buy

**PT:** HK\$13.35

**Analysts:** Lei Chen, Erica Poon Werkun

**Valuation:** We derive our 12-month price target of HK\$13.35 using a DCF valuation methodology based on an 11.6% WACC and 5% terminal growth. We maintain our Buy rating.

**2009 catalyst:** M&A.

## Parkson Retail

**Investment case:** The headline Consumer Price Index (CPI) dropped for the sixth consecutive month to only 4.0% in October. We believe declining food prices will shift consumer spending to department stores from supermarkets. Moreover, if the stock and property markets stabilise in 2009, investors will likely revalue department stores based on a longer-term perspective.

We expect same-store-sales growth to trough in Q109, as the CCI (Consumer Confidence Index) drops further. However, we believe the stock price will rebound after the bad news is absorbed. We view any short-term pullbacks as attractive buying opportunities.

**Valuation:** We have a Buy rating on Parkson and a 12-month price target of HK\$13.77. Our price target is derived using a DCF methodology based on a 10.8% WACC, 12% ROIC and 5% terminal growth.

**2009 catalyst:** Lower personal income tax.

## Lianhua Supermarket

**Investment case:** The headline CPI dropped for the sixth consecutive month to only 4.0% in October. We believe same-store-sales growth at supermarkets will fall in 2009 because of declining food prices. However, despite intensive competition among domestic and foreign players, we retain our view that in a volatile macro economic environment, supermarket operators will be able to maintain stable cash flow and achieve relatively high profitability.

We expect Lianhua's same-store-sales growth to decline to 6% in H208 as food prices decline, and to rise to 8% in 2009.

**Valuation:** We have a Buy rating on Lianhua and a 12-month price target of HK\$13.07. Our price target is derived using a DCF methodology based on a 10.8% WACC, 10% ROIC and 5% terminal growth.

**2009 catalyst:** Lower personal income tax.

## Gree Electrical Appliance

**Investment case:** As an important proxy for the property market, we believe sector stock prices will react positively on a recover of transaction volume in the domestic property market. Both consumer electronic retailers and makers are now under pressure from slowing demand from new buyers due to low transaction volume. We believe transaction volume will not recover until market prices reach a level that is supported by strong affordability. This implies that both Gome and Suning will face serious challenges in 2009.

Gree is our top pick in this sector. As one of the potential beneficiaries of the government's stimulus package, Gree's strong position in the domestic market should ensure strong volume growth in 2009-10.

**Sector:** Department store

**Rating:** Buy

**PT:** HK\$13.77

**Analysts:** Randy Zhou, Erica Poon  
Werkun

**Sector:** Supermarket

**Rating:** Buy

**PT:** HK\$13.07

**Analysts:** Randy Zhou, Erica Poon  
Werkun

**Sector:** Consumer durable

**Rating:** Buy

**PT:** Rmb27.71

**Analyst:** Randy Zhou

**Valuation:** We have a Buy rating on Gree and our DCF-based 12-month price target is Rmb27.71, assuming a WACC of 9.8%, terminal ROIC of 10.0% and terminal growth of 5.0%.

**2009 catalyst:** A rebound in property market transaction volume in 2009.

## Belle International

**Investment case:** To reflect the recent global economic slowdown, we had lowered our 2008/09/10 sales and earnings estimates for Belle. Instead of modest margin improvement, we believe most footwear companies will face poor consumer sentiment, and will have to offer more sales discounts on their footwear products to avoid a significant drop in sales volume. This should lead to a decline in gross margin, in our view.

At the operating level, we expect rising operating costs (concessionaire and promotional fees, rental and staff) to pressure operating margins. Although uncertain retail rents should result in more earnings volatility for Daphne, which focuses on standalone stores, we expect intense competition and increased promotional schemes imposed by department store operators to have a greater impact on margin for footwear outlets located in department stores, including Belle's outlets.

According to the China General Chamber of Commerce, Belle was the leader in the women's footwear market in terms of sales value with six of its brands in the top 10 list in 2007. We expect Belle's economies of scale, multi-brand strategy and strong bargaining power to result in a significant outperformance to the footwear industry, and for it to become a consolidator in department stores. We believe fundamentals remain strong and Belle remains our preferred choice in the women's footwear sector.

**Valuation:** We maintain our Buy rating and our 12-month price target of HK\$5.21 (16x 2009E PE), which is based on a sum-of-the-parts DCF methodology.

**2009 catalysts:** 1) A special dividend; 2) share buyback/placements; 3) M&A; 4) store rollout plan; and 5) monthly or quarterly sales updates (from every six months).

## Xtep International

**Investment case:** Xtep reported strong YoY sales growth of 30-40% at the Q1 and Q209 trade fairs, which took place in the early summer and autumn of 2008, as most distributors were still optimistic about sportswear sales trends in 2009.

Xtep is our preferred pick because: 1) cash per share is about HK\$1.00, while it trades at only HK\$1.48 (as at the close on 2 December 2008); and 2) it trades at a relatively attractive multiple of 4.8x 2009E PE.

**Valuation:** We derive our 12-month price target for Xtep using a DCF methodology, implying 13x and 9x 2009E PE, respectively. We believe the stock is oversold at the current share price, which is significantly below our price target. Therefore, we maintain our Buy rating.

**Sector:** Footwear retail

**Rating:** Buy

**PT:** HK\$5.21

**Analysts:** David Lau, Erica Poon Werkun

**Sector:** Sportswear

**Rating:** Buy

**PT:** HK\$2.72

**Analysts:** David Lau, Erica Poon Werkun

**2009 catalysts:** 1) Sales results from the quarterly trade fairs; 2) additions or departures of distributors; 3) special dividends and store rollout plan; 4) M&A; and 5) share placement/repurchases.

## Least preferred Inner Mongolia Yili

**Investment case:** We believe Inner Mongolia Yili will report a loss in 2008 due to the melamine scandal. Based on its high exposure to milk powder sales, we believe Yili's sales will recover only after Mengniu's. The company has been losing market share continuously in the past two years due to weak management, in our view. Although it achieved strong growth in milk powder sales in H108, the company's total sales growth was still lower than the industry average.

We believe Yili was not as proactive as Mengniu after the melamine scandal occurred, and therefore any recovery in sales will be slower than Mengniu's.

**Valuation:** We derive our 12-month price target of Rmb6.00 using a DCF methodology based on a 10.3% WACC and 5% terminal growth. We have a Sell rating on Yili.

**2009 catalyst:** Quarterly sales updates.

**Sector:** Food & beverage

**Rating:** Sell

**PT:** Rmb6.00

**Analysts:** Lei Chen, Erica Poon Werkun

# India

## Most Preferred Asian Paints

**Investment case:** We expect 2009 to be a good year for Asian Paints, as we believe the company will grow revenue in the domestic business based on its pricing power, especially in the decorative paints segment. We expect raw material costs as a percentage of sales to fall as the price of crude oil and derivatives should remain below 2008 levels. Furthermore, efficiencies derived from higher volume growth will likely flow through to the operating margin.

**Valuation:** Our 12-month price target of Rs1,450 is derived using a DCF methodology based on a WACC of 11.6%, medium-term growth of 14% and long-term growth of 5%.

**2009 potential catalysts:** Rupee appreciation against the US dollar would aid the decline in landed crude oil prices, thereby reducing raw material costs. The sustainability of volume growth and improved quarterly results are likely to act as key catalysts. The international business makes losses in Southeast Asia and the Caribbean. If the company manages to post positive EBIT contributions from these two geographies, the market could be positively surprised.

## Hindustan Unilever

**Investment case:** Hindustan Unilever's key volume growth driver in 2008 has been the personal products business, which grew 14-15% YoY while soaps and detergents grew 4-5% in volume terms. Soaps recorded a 15% average price increase in 2008, although we do not estimate price increases in 2009.

Based on sustained overall volume growth at 6-7% and average price increases of 5-6% (primarily achieved through product mix upgrades and selective price increases), we expect like-to-like revenue growth of 13% YoY in FY10. Hindustan Unilever will change its year-end from December to March; hence the March 2010 year-end will not be comparable with the base period.

**Valuation:** Our 12-month price target of Rs300 is derived using a DCF methodology of existing and future cash flows and based on an 11.5% WACC and a terminal growth rate of 5%.

**2009 catalysts:** We look for 5-6% volume growth in the domestic business in 2009, which would suggest that the ongoing credit/liquidity crisis has not affected consumer staples due to low penetration and the cash transaction nature of the business in India.

We will monitor a reduction in volume growth (the result of knee-jerk negative sentiment) or higher-than-expected savings from raw materials, which could yield a margin expansion surprise.

**Sector:** Chemicals

**Rating:** Buy

**PT:** Rs1,450

**Analyst:** Nupur Agarwal

**Sector:** Household products

**Rating:** Buy

**PT:** Rs300

**Analyst:** Sunita Sachdev

## ITC

**Investment case:** ITC's cigarette volume growth has been positive on a QoQ basis, reflecting strong uptrading to premium brands despite the negative macro environment. We believe that as tobacco is a defensive segment, it will play outperform, especially in FY10E, when volume correction (FY09) is over.

With almost all the recommendations of the FCTC (Framework Convention on Tobacco Control) having been implemented (in India) and indirect tax collection by the central government falling, we believe the government will not increase duty significantly (which would affect the industry significantly). Having removed non-filter cigarettes from the market, we believe the cigarette business is now far more price inelastic than before and the prospects for volume growth have improved.

Growth at its hotel, paperboard and agri-businesses—all more cyclical—should decline/decelerate in FY10, prompting expectations of margin expansion for the company. Commodity input price reductions should aid a faster turnaround of the loss-making consumer staples businesses.

**Valuation:** Our 12-month price target of Rs225 is derived using a DCF methodology assuming a WACC of 11.8%, 12% medium-term growth rate and 5% terminal growth rate.

**2009 catalyst:** The biggest catalyst for the stock is a benign budget for the cigarette industry. We believe this would prompt volume growth (and therefore real growth) for the company.

**Sector:** Tobacco

**Rating:** Buy

**PT:** Rs225

**Analyst:** Sunita Sachdev



## Indonesia

### Most Preferred Unilever Indonesia

**Investment case:** We believe Unilever Indonesia has one of the most defensive business models (basic consumer goods being recession proof, and strong brand equity) and one of the highest quality management's in the country. We estimate the company will generate 85% ROE in 2008. Our stress test (severe rupiah devaluation environment) suggests only 9% earnings downside for 2009.

**Valuation:** Our 12-month price target of Rp9,400 is derived using a DCF methodology and assuming a 12.8% risk-free rate and 5% long-term growth.

**2009 catalysts:** 1) Flight to quality/defensive investing theme; 2) resilient sales; and 3) margin performance.

### Astra International

**Investment case:** We believe Astra International is one of the highest quality companies in Indonesia. The balance sheet has improved meaningfully to 32% net debt-to-equity from 600% as at December 1997. In our opinion, a slowdown in auto sales in 2009 should not be prolonged. A valuation of below 1x 2008E P/BV, to some extent, is pricing in a solvency issue, which is non-existent in our opinion.

**Valuation:** Our 12-month price target of Rp16,700 is based on a sum-of-the-parts methodology, with DCF utilised mostly in valuing each part of the business. Our DCF assumptions include a 12.8% risk-free rate and 5% long-term growth.

**2009 catalysts:** 1) Better-than-expected auto and motorcycle sales; 2) market share performance, and 3) investor interest in the Indonesian market returns based on Astra as an Indonesian cyclical proxy.

**Sector:** Cosmetics

**Rating:** Buy

**PT:** Rp9,400

**Analyst:** Johannes Salim

**Sector:** Automobile Manufacturer

**Rating:** Buy

**PT:** Rp16,700

**Analyst:** Johannes Salim

## Korea

### Most Preferred KT&G

**Investment case:** We like KT&G given: 1) its high earnings growth visibility in 2009, based on defensive demand for cigarettes and a relatively stable raw material cost trend; 2) solid growth potential from exports and the ginseng business; and 3) a solid cash return policy—we estimate KT&G could use approximately Won600bn for dividends and buybacks every year, over 5% of the current market cap.

**Valuation:** Valuation appears reasonable at 12.7x 2009E PE, in line with the global tobacco company average of 13.4x. The stock trades at a c30% premium to the market; not excessive given its high visibility earnings growth next year. Our 12-month price target of Won107,000 is based on a DCF methodology and assumes an 8.5% WACC and 1% terminal growth.

**2009 catalyst:** Domestic market share gain(decline) will be the key positive(negative) catalyst.

### Hite Brewery

**Investment case:** We are positive about Hite Brewery based on: 1) resilient and stable beer demand; 2) meaningful margin recovery expected from Q209 from a lower malt price; and 3) strong pricing power and the oligopolistic structure of the market.

**Valuation:** The stock trades at 10.5x 2009E PE versus the global brewery average of 12.7x. Our 12-month price target of Won251,000 is derived using a DCF methodology (11.2% CoE and 3% terminal growth) and implies 15x 2009E PE.

**2009 catalysts:** The 2009 malt contract price and the potential sale of Oriental Brewery are the key catalysts for the share price and earnings next year.

### Shinsegae

**Investment case:** We like Shinsegae based on the defensive nature of its business during a macro downturn. Shinsegae's sales and operating profit have grown every year since 1997—even during the recessions of 1998, 2001 and 2003. As more than 80% of operating profit is derived from the discount store business, we think Shinsegae is the most defensive company among its peers and that potential trading down should benefit the company's discount store business.

**Valuation:** Shinsegae trades at 11.5x 2009E PE (value adjusted for Samsung Life), which is a 28% premium to the Korean market. However, we think the valuation premium does not look excessive, as global discount stores also trade at an average 30% premium to their respective markets. Our 12-month price target of Won500,000 is based on a sum-of-the-parts methodology, using DCF for the core business, 1x book value for Samsung Life and 10x 2009E PE for equity method income.

**2009 catalyst:** Retail same-store-sales growth trend is the key catalyst.

**Sector:** Tobacco

**Rating:** Buy

**PT:** Won107,000

**Analyst:** Heather Lee, D.S. Kim

**Sector:** Brewery

**Rating:** Buy

**PT:** Won251,000

**Analyst:** Heather Lee, D.S. Kim

**Sector:** Retailer

**Rating:** Buy

**PT:** Won500,000

**Analyst:** Heather Lee, D.S. Kim

## Malaysia

### Most Preferred Resorts World

**Investment case:** With US\$1bn in cash on the balance sheet, we believe Resorts World is well positioned to weather the credit crunch and therefore to grow market share faster than its global competitors on a two- to three-year view.

**Valuation:** We derive our 12-month price target of RM3.30 for Resorts using a DCF methodology and assuming a WACC of 9.7% and long-term growth of 4%. We value Resorts' remaining 19% interest in Star Cruises at market capitalisation.

**2009 catalyst:** We believe Resorts will utilise its US\$1bn cash, its balance sheet and operating cash flow from Genting Highlands to grow via M&A during the downturn.

### Genting

**Investment case:** We are positive on Sentosa IR due to open in early 2010. We also think that with its strong balance sheet Genting is well positioned to benefit from the economic downturn.

**Valuation:** Our sum-of-the-parts-derived 12-month price target of RM6.50 values the leisure operation using DCF and assumes a WACC of 9.7% and long-term growth of 4%. We value the other divisions at market capitalisation, fair EV/MW, or DCF.

**2009 catalysts:** As the opening of the Sentosa IR in early 2010 is close, we expect completion risk and cost escalation risk to diminish. M&A could also be a positive catalyst for Genting.

### IOI Corp

**Investment case:** IOI has struggled in the past year after losing key finance personnel and having invested in Singapore property at the peak of the cycle. However, we believe IOI still has the best reinvestment track record and the best managed plantations in terms of yield and cost in Malaysia. The sharp share price decline offers an attractive entry level, in our view.

**Valuation:** Our 12-month price target of RM3.70 values plantations using a DCF methodology and assumes a long-term CPO price of US\$570/tonne, a WACC of 8.4% and long-term growth of 4%. We value the property division at RNAV and manufacturing at 1.5x fair EV/CE.

**2009 catalysts:** We view the appointment of a credible CFO and a recovery in CPO/crude oil prices as key catalysts for the stock price.

**Sector:** Gaming

**Rating:** Buy

**PT:** RM3.30

**Analyst:** Alain Lai

**Sector:** Gaming

**Rating:** Buy

**PT:** RM6.50

**Analyst:** Alain Lai

**Sector:** Plantations

**Rating:** Buy

**PT:** RM3.70

**Analyst:** Alain Lai

## Least preferred Sime Darby

**Investment case:** We think Sime Darby's non-plantation divisions—motor distribution, heavy equipment and property development—will be hit hard by the economic slowdown.

**Valuation:** Our 12-month price target of RM4.54 is based on a sum-of-the-parts valuation where we value the plantations division using DCF and assuming a CPO price of US\$570/tonne, a WACC of 10.4% and long-term growth of 4%. We value the other divisions at 8x FY09E earnings.

**2009 catalyst:** We expect the motor, heavy equipment and property development divisions to underperform in line with the economic downturn.

**Sector:** Plantations

**Rating:** Sell

**PT:** RM4.54

**Analyst:** Alain Lai

# Thailand

## Most Preferred Central Pattana

**Investment case:** We believe Central Pattana (CPN) will benefit from resilient retail spending in Thailand, based on its dominant position in the department store segment. We think a 37% and 19% increase in lettable retail and office space, respectively, from the opening of three retail malls in 2009 should support earnings and the share price.

**Valuation:** We value CPN at Bt29.30/share using a sum-of-the-parts methodology consisting of: 1) Bt60.7bn (Bt27.87/share) from the retail property development business; and 2) Bt3.1bn (Bt1.43/share) from its 33% stake in CPN Retail Growth Property Fund.

**2009 catalysts:** We think CPN could benefit from two potential catalysts in 2009: 1) removal an overhang on the conclusion of a land-lease agreement with the State Railway of Thailand; and 2) a lower rent discount at the key Central World department store.

## CP All

**Investment case:** We are bullish on CP All based on its strong 2008E same-store-sales growth of 6.2% and higher operating margin of 4.3% (compared with 3.2% in 2007). In October, CP All divested its loss-making Chinese hypermarket, which was the main overhang on the share price.

**Valuation:** We derive our 12-month price target of Bt13.90 using a DCF valuation and assuming a WACC of 10% and terminal growth of 4%. CP All is one of UBS's 20 top picks in the Asian small-cap universe.

**2009 catalysts:** We think CP All should benefit from two potential catalysts in 2009: 1) the unwinding of a US\$58m loan guarantee with Shanghai Lotus; and 2) securing the licence bid for the new 7-11 franchise in Vietnam.

**Sector:** Retail property developer

**Rating:** Buy

**PT:** Bt29.30

**Analyst:** Piyanan Panichkul

**Sector:** Broadline retailers

**Rating:** Buy

**PT:** Bt13.90

**Analyst:** Piyanan Panichkul

Table 2: Valuation Matrix—Asia Consumer

Company name	Rating	Price (Local)		Mkt cap. (US\$ m)		PE (x)		PIBV (x)		EV/EBITDA (x)		RoE (%)		Div. yld (%)	EPS CAGR 2007-10E	Net debt to equity 2008E			
		2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E	2008E	2009E						
<b>China /Hong Kong</b>																			
Anta Sports Products	Buy	3.2	879	9.0	7.6	6.7	1.5	1.4	1.5	2.3	3.1	1.7	18.7	20.7	21.5	6.8%	24%	Net cash	
Beijing Hualian Hypermarket	Sell	6.0	423	22.7	21.2	18.0	1.7	1.5	1.6	6.5	6.9	5.8	7.6	7.7	8.6	1.4%	-7%	Net cash	
Beijing Wangfujing	Buy	18.9	1,080	20.3	16.6	13.5	2.2	1.8	2.0	3.5	4.6	2.4	11.4	12.8	14.4	1.5%	27%	Net cash	
Beijing Yanjing Brewery	Buy	12.1	1,927	27.7	22.2	17.4	2.1	1.9	2.0	8.2	10.2	6.8	7.8	9.3	11.1	1.5%	23%	Net cash	
Belle International Holdings	Buy	3.7	4,029	13.5	11.3	9.4	2.1	1.8	1.8	8.8	8.8	7.0	16.2	17.1	18.0	2.2%	18%	Net cash	
Cafe de Coral	Sell	12.6	892	20.5	16.4	15.8	3.6	2.7	2.8	11.2	11.2	8.3	7.7	18.9	17.3	3.2%	5%	Net cash	
China Mengniu Dairy Co. Ltd.	Sell	8.3	1,672	22.7	22.6	15.7	2.3	2.1	1.9	8.6	7.2	7.0	6.1	8.0	8.8	0.3%	-11%	Net cash	
China Resources Enterprise	Buy	10.7	3,285	13.5	13.1	11.1	1.1	0.9	1.0	9.1	9.1	6.9	23.2	23.7	24.7	2.3%	3%	Net cash	
China Yurun Food	Buy	8.5	1,588	12.7	9.9	8.0	2.6	2.2	2.2	9.1	9.1	5.3	22.2	23.7	24.7	2.3%	25%	Net cash	
Daphne International	Buy	1.6	328	5.1	4.8	3.9	1.4	1.2	1.2	3.0	3.0	2.7	2.0	31.7	26.4	4.0%	19%	Net cash	
Esprit	Buy	37.0	5,923	19.7	7.7	6.6	7.9	2.7	2.7	14.2	14.2	4.8	4.1	46.0	36.6	4.1%	10%	Net cash	
Giordano	Buy	1.6	312	8.4	7.7	6.1	1.3	1.2	1.3	4.3	4.3	3.8	2.4	15.0	19.9	12.0%	10%	Net cash	
Gome Electrical Appliances	Buy	1.1	1,844	6.0	5.6	5.2	1.5	1.3	1.3	4.0	4.0	3.7	3.3	23.2	25.0	5.0%	15%	Net cash	
Henan Shuanghui Investment & Development	Neutral	30.2	2,662	27.1	22.8	19.1	8.0	7.1	7.7	16.3	14.6	12.1	30.3	34.5	38.7	3.1%	17%	Net cash	
Inner Mongolia Yili Industrial	Sell	8.7	1,012	-22.8	22.2	17.3	1.6	1.5	1.5	142.3	7.9	5.7	-7.2	7.2	8.7	0.0%	-3%	Net cash	
Kweichow Moutai	Buy	104.9	14,397	21.8	17.7	15.1	8.3	6.2	6.2	11.4	14.4	11.5	9.4	45.1	36.2	1.4%	32%	Net cash	
Li & Fung	Neutral	13.6	5,985	15.1	13.2	10.8	3.4	3.2	3.2	11.4	11.4	8.7	25.9	25.3	28.7	5.3%	17%	Net cash	
Lianhua Supermarket Holdings	Buy	8.9	714	13.8	12.4	9.3	2.0	1.9	1.9	0.7	0.7	0.8	0.0	15.4	15.8	2.2%	25%	Net cash	
Lifestyle International	Buy	5.4	1,188	8.8	8.2	6.9	1.7	1.5	1.5	8.4	7.9	6.3	20.5	18.9	19.8	3.1%	9%	Net cash	
Luzhou Laojiao	Buy	20.4	4,130	19.3	15.5	12.1	7.2	6.2	6.2	14.5	11.4	8.8	44.2	43.0	46.7	3.6%	45%	Net cash	
Parkson Retail	Buy	7.1	2,564	19.6	16.1	12.1	5.1	4.2	4.2	15.7	12.3	9.5	28.8	28.4	30.6	1.5%	29%	Net cash	
Ports Design	Buy (GBE)	8.1	574	9.1	7.7	6.3	3.6	3.0	3.0	6.9	6.9	4.5	43.7	42.6	42.9	6.9%	17%	Net cash	
Sa Sa International	Neutral	1.5	268	14.3	7.7	7.8	3.5	1.9	1.7	8.1	3.6	3.7	26.6	24.7	23.4	7.4%	9%	Net cash	
Suning Electricals	Neutral	17.7	7,674	24.3	22.3	21.7	5.6	4.7	4.7	14.2	11.9	11.3	30.4	23.0	20.3	0.0%	17%	Net cash	
Texwinca	Neutral	3.4	589	8.9	5.1	5.3	2.2	1.1	1.0	6.0	3.2	2.9	26.2	22.5	20.0	6.9%	11%	Net cash	
Tsingtao Brewery	Neutral	15.8	2,660	25.8	20.1	15.7	3.1	2.9	2.9	10.7	8.3	6.5	12.6	14.9	17.5	2.3%	29%	Net cash	
Want Want China Holdings	Buy	3.0	5,095	17.6	14.6	12.2	4.9	4.0	4.0	12.7	9.7	8.1	32.9	30.3	30.0	1.7%	26%	Net cash	
Wuliangye Yibin	Buy	15.3	8,459	29.0	24.7	20.3	5.2	4.5	4.5	17.0	14.6	12.3	19.4	19.5	20.3	0.7%	25%	Net cash	
Xtep International Holdings	Buy	1.5	420	6.0	4.8	3.7	1.1	1.0	1.0	3.6	3.6	1.5	1.1	33.8	21.9	24.4	7.5%	52%	Net cash
Yue Yuen Industrial	Buy	13.9	2,979	7.5	7.3	6.5	1.1	1.0	1.0	5.3	4.9	4.4	15.3	14.4	15.1	6.8%	8%	Net cash	
<b>India</b>																			
Dabur India Ltd.	Buy	81.8	1,411	26.7	19.4	16.0	15.1	9.0	9.0	22.2	15.1	12.5	64.9	52.9	49.1	1.5%	16%	Net cash	
Hindustan Unilever	Buy	233	10,154	5.5	5.5	18.7	24.0	24.0	24.0	4.0	4.0	16.7	440.1	440.1	102.7	15.4%	15%	Net cash	
ITC	Buy	169.6	12,734	21.5	17.7	15.7	5.6	4.5	4.5	14.4	11.6	10.1	27.8	27.5	26.4	2.0%	15%	Net cash	
Nestle India Ltd.	Neutral	1,420	2,738	24.5	20.3	17.0	26.1	19.2	19.2	15.6	12.6	10.6	118.3	109.0	100.3	2.4%	31%	Net cash	
Pantaloon Retail (India) Ltd.	Buy (GBE)	201	587	24.2	16.0	10.6	2.4	2.1	2.1	10.3	10.4	8.9	10.6	14.2	18.5	0.4%	32%	Net cash	
United Spirits Ltd	Buy	814	1,412	19.8	16.0	12.8	6.0	4.5	4.5	9.6	9.9	8.4	28.1	32.4	30.5	0.5%	28%	592%	

Note: Data as at 2 December 2008. Source: UBS estimates

Table 2: Valuation Matrix—Asia Consumer (Cont'd)

Company name	Rating	Price (Local)		Mkt cap. (US\$m)		PE (x)		PIBV (x)		EV/EBITDA (x)		RoE (%)		Div. yld (%)	EPS CAGR 2007-10E	Net debt to equity 2008E		
		2008E	2010E	2008E	2010E	2008E	2010E	2008E	2010E	2008E	2010E	2008E	2010E					
<b>Indonesia</b>																		
Bakrie Sumatera Plantations	Sell (CBE)	210.0	6.7	0.2	0.2	8.8	6.7	0.2	0.2	2.2	5.1	4.3	14.1	2.6	3.2	11.1%	-29%	25%
Gudang Garam	Neutral	4,225.0	5.5	5.0	0.5	5.5	5.0	0.5	0.5	4.0	4.3	3.9	11.4	9.6	10.1	8.9%	4%	36%
Indofood S.M.	Neutral	890	6.2	5.9	1.0	6.2	5.9	1.0	1.0	4.2	4.6	4.6	17.5	14.4	13.9	4.8%	10%	237%
London Sumatra Indonesia	Buy (CBE)	2,600.0	288	3.7	18.7	12.2	10.2	0.9	0.9	2.4	7.4	5.1	28.0	5.2	7.7	8.2%	-24%	Net cash
Matahari Putra Prima	Sell (CBE)	620	228	13.2	12.1	10.2	10.2	0.8	0.8	4.4	4.8	4.5	6.4	6.6	7.5	1.9%	15%	24%
Ramayana Lestari Sentosa	Neutral	470	267	9.1	8.3	7.1	1.5	1.3	1.2	3.9	3.3	2.4	16.5	16.7	18.0	6.1%	12%	Net cash
Unilever Indonesia	Buy	7,700	4,777	23.1	19.7	17.9	17.9	18.0	15.9	15.6	13.3	12.0	85.3	85.5	85.2	3.3%	19%	Net cash
<b>Korea</b>																		
Amorepacific Corp	Neutral	565,000	2,257	19.1	16.8	14.9	3.0	2.6	2.3	9.8	9.5	8.9	16.9	16.8	16.5	0.9%	9%	Net cash
CJ CheilJedang	Neutral	148,500	1,144	19.0	16.4	13.6	2.2	2.0	1.8	6.9	7.1	6.2	12.6	12.9	14.0	2.7%	16%	140%
CJ Corp	Buy	27,200	511	16.9	11.0	8.9	0.4	0.4	0.4	-11.1	-8.7	-8.2	2.7	4.0	4.6	3.7%	19%	23%
CJ Home Shopping	Neutral (CBE)	29,650	223	5.8	6.0	5.8	0.6	0.6	0.6	5.3	6.0	6.1	11.0	9.8	9.7	5.1%	21%	37%
GS Home Shopping	Buy	47,000	211	5.7	5.7	5.2	0.8	0.7	0.7	1.9	-1.4	-1.7	14.9	13.3	13.1	6.4%	7%	Net cash
Hite Brewery	Buy	175,000	1,120	14.1	10.5	9.0	2.9	2.4	1.9	8.4	7.1	6.2	12.3	24.7	23.5	1.7%	10%	151%
Hyundai Department Store	Neutral (CBE)	51,900	795	5.7	6.2	6.0	0.8	0.7	0.6	2.3	2.1	1.8	14.4	11.9	11.0	1.7%	2%	17%
KT&G	Buy	76,000	7,304	13.4	12.7	11.7	3.1	2.7	2.5	8.7	7.8	6.9	23.9	22.8	22.4	3.7%	12%	Net cash
LG Household and Health Care	Buy	152,000	1,621	20.9	16.6	13.8	4.9	3.9	3.2	12.5	10.4	8.7	26.3	26.3	25.5	1.2%	31%	66%
Lotte Shopping	Neutral	166,000	3,238	6.7	8.2	7.8	0.5	0.5	0.5	2.1	2.6	2.2	8.4	6.4	6.4	1.2%	-4%	3%
Nongshim	Buy	230,000	955	19.5	11.7	9.9	1.3	1.2	3.8	6.8	4.9	3.9	6.8	10.6	18.2	2.0%	11%	Net cash
Shinsegae	Buy	407,500	5,248	13.9	13.2	11.5	2.0	1.7	1.5	8.8	8.3	7.6	15.4	14.1	14.2	0.3%	10%	83%
<b>Malaysia</b>																		
Berjaya Sports Toto	Neutral	4.8	1,689	18.2	14.7	13.9	19.4	13.4	10.5	12.5	10.2	9.6	93.1	105.3	84.8	4.1%	6%	76%
Genting	Buy	3.9	3,989	11.3	12.7	9.7	1.1	1.0	0.9	5.7	7.3	5.9	10.0	8.2	10.0	1.8%	-2%	Net cash
IOI Corporation	Buy	3.1	5,165	21.4	14.2	18.7	4.8	2.2	2.0	14.5	9.8	11.6	24.1	15.4	11.2	2.0%	-5%	41%
KL Kepong	Sell	8.2	2,405	15.9	12.2	15.7	3.0	1.5	1.4	10.6	7.5	8.8	19.8	12.5	9.2	3.5%	-7%	11%
Resorts World	Buy	2.3	3,529	10.1	10.8	11.0	1.4	1.3	1.2	4.5	4.3	4.1	14.9	12.8	11.7	4.0%	0%	Net cash
Sime Darby (M)	Sell	5.2	8,504	17.5	16.3	21.6	2.9	0.6	0.5	10.4	8.0	9.9	22.4	8.6	6.2	3.7%	-14%	Net cash
<b>Philippines</b>																		
Jollibee Foods Corp	Sell	37.0	763	16.2	14.5	12.4	2.7	2.4	2.1	6.7	5.7	4.8	17.6	17.6	18.2	2.6%	8%	Net cash
Pepsi-Cola Products Philippines	Buy	0.6	48	3.0	2.7	2.0	0.5	0.4	0.4	0.8	1.2	0.9	18.3	17.1	20.4	16.8%	2%	Net cash
San Miguel - B	Buy	42.5	2,692	14.5	13.6	12.5	0.9	0.9	0.8	5.4	5.2	4.6	6.5	6.4	6.7	2.7%	32%	Net cash
Universal Robina Corp.	Buy	5.0	217	3.5	3.1	2.9	0.3	0.3	0.3	1.0	1.4	1.2	8.3	9.4	9.8	14.1%	8%	Net cash
<b>Thailand</b>																		
CP All Plc	Buy	10.8	1,347	16.0	13.2	12.6	5.1	4.2	3.7	5.2	4.9	4.0	29.7	35.1	31.5	3.2%	37%	Net cash
Thai Beverage	Buy	0.2	3,530	13.4	12.3	11.9	2.3	2.2	2.1	6.9	6.4	6.1	17.1	18.3	17.9	5.8%	1%	31%
Thai Union Frozen Products	Buy	17.6	437	6.5	6.2	5.9	1.3	1.0	0.9	6.7	6.1	5.4	20.6	17.9	16.4	9.6%	17%	169%

Note: Data as at 2 December 2008. Source: UBS estimates

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Source: UBS



### ■ Statement of Risk

Key risks for the Asian consumer sector are: 1) consumer demand slowdown; 2) raw material costs trend; 3) currency volatility; 4) competition; 5) government policies; and 6) rising funding costs and tight credit markets.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

# UBS Investment Research

## Asia Materials - Outlook 2009

Asia

Mining &amp; Metals

Sector Strategy

### Waiting for demand

#### ■ Summary

We expect the material sector's equity performance and earnings outlook to remain under pressure. Prices of both coal and metals have declined on sharp falls in demand. We expect the base metal sector to suffer losses in 2009, while coal companies with secured sales or discount pricing should have defensive earnings.

#### ■ What are the likely key themes for 2009?

The two key themes are financing ability and the level of base demand. While we expect copper, nickel and zinc companies under our coverage to record large earnings declines or losses for 2009, we think they should have enough cash and funding to survive the year. On coal, we monitor both coking and thermal spot prices in China to gauge the demand support level.

#### ■ What may surprise on the upside or downside?

On the upside, if demand recovers quickly, with modest supply growth, metal and coal prices could rise rapidly. On the downside, prices could fall to new lows if demand remains weak for the next two quarters.

#### ■ Highlighted stocks

We like companies with low production costs and volume growth that sell coal at a discount to market prices (such as China Shenhua Energy) or that have low valuations (such as Straits Asia Resources). Our least preferred companies are those where production costs are near or below current metal prices (Jiangxi Copper and Yunnan Chihong Zinc & Germanium). The Yanzhou Coal A-share price is more than twice that of its H shares.

**4 December 2008**
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**Table 1: Asia Materials Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
China Shenhua Energy-H	1088.HK	36.6	Buy	13.42	20.81	7.7
Straits Asia Resources	STRL.SI	0.5	Buy	0.71	2.10	2.3
<b>Least Preferred</b>						
Jiangxi Copper-H	0358.HK	17.8	Sell	4.45	1.40	N/A
Yanzhou Coal-A	600188.SS	6.2	Sell	8.72	7.39	7.4
Yunnan Chihong Zinc	600497.SS	1.1	Sell	9.55	3.90	N/A

Data as at 2 December 2008. Source: UBS estimates

**This report has been prepared by UBS Securities Asia Limited and UBS Securities Co. Limited**  
**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

### Disappearing demand

We expect the demand for metals to be lower in 2009 than 2008 and that of coal to lag behind supply growth due to lower, or no economic growth. The challenge is to determine when de-stocking of various commodity inventories ends and when buyers return to the market.

### Surviving the downturn

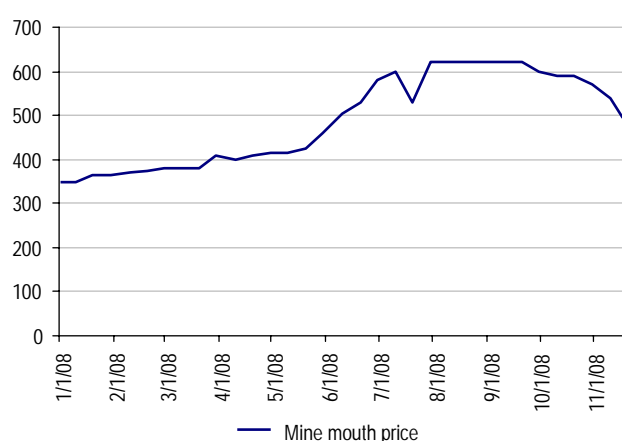
We expect nickel companies to record 40-65% YoY declines in 2009 earnings. For copper and zinc companies, we forecast losses in 2009. These companies should have enough cash from the past three years' profit growth to survive at least 2009. We still expect profits for the coal sector in 2009 and that companies in this sector should also be able to continue operating in 2009.

### Level of base demand

The real challenge now is to determine the level of base demand in China, the key economy driving commodity demand and the economy with the highest forecast growth rate. At the end of November, thermal coal spot prices were down 27.8% from the beginning of the month and 35.2% lower than the peak in July. The concern is that this could fall below contract prices of Rmb450/t and towards the marginal cost of Rmb350/t. For coking coal, the Shanxi coking coal price has declined 42.3% from the peak in July to Rmb830/t, compared with the marginal cost of Rmb700/t. It is difficult to calculate earnings until prices stabilise and we can estimate a base level of demand.

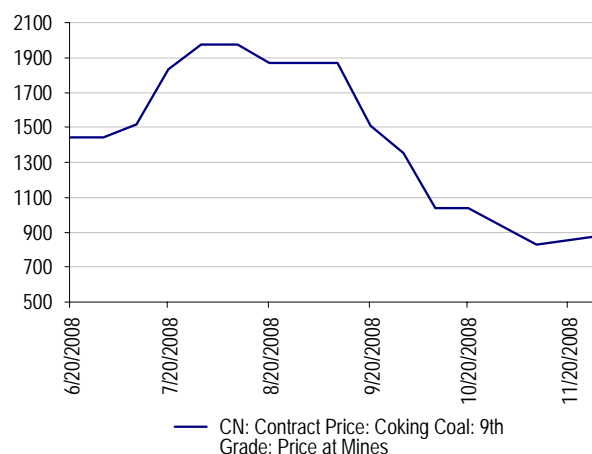
**Prices need to stabilise before we can gauge base demand**

**Chart 1: Datong premium blend mine mouth price (Rmb/t)**



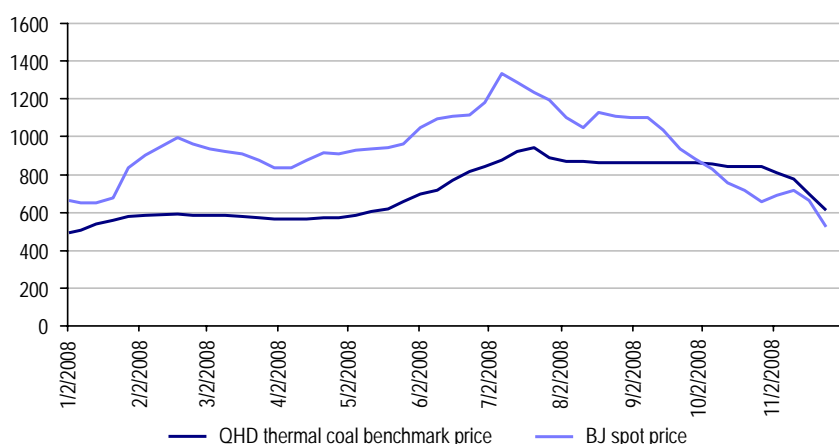
Source: sxcoal

**Chart 2: China mine mouth coking coal price (Rmb/t)**



Source: Globalcoal, sxcoal

Chart 3: Qinghuangdao and Newcastle spot price (Rmb/t)



Source: Globalcoal, sxcoal

## What is our central thesis for 2009?

We expect both the earnings and the equity performance of the materials sector to remain under pressure in 2009 and we forecast losses for copper and zinc companies as current metals prices are already near or below production costs. The only companies in the sector with defensive earnings are coal companies with low production costs and volume growth, which sell at prices that are at a discount to spot prices, or those that have secured forward pricing with reduced risk of re-negotiation.

The fate of the materials sector lies outside the industry, with the macro environment and the return of demand growth. Supply growth across commodities has been modest, but even with possible cutbacks in production, until demand returns, commodity prices are likely to remain at current low levels, in our view.

## What may surprise on the upside or downside?

On the upside, inflationary pressure could return if central banks continue monetary expansion. Commodity supply growth has been modest, and with likely supply cutbacks, this could mean commodity prices could rise very quickly when demand returns.

On the downside, consumption could remain low if global de-leveraging continues for longer than anticipated. Also, if China is not able to provide a source of stable growth, sustained slow demand growth could mean further downside to commodity prices.

**Part of coal sector to provide defensive earnings**

**On the upside, monetary expansion could lead to inflationary pressure**

**On the downside, if demand remains weak, prices could further decline**

## What are the likely key catalysts?

The three main key catalysts for the sector are Chinese government policy, supply cutbacks and Chinese coal contract negotiations.

**Chinese government policy:** The Chinese government is committed to economic growth and has loosened monetary policy and announced an Rmb4trn stimulus package. If China is able to maintain economic growth above 5% for H109, this could support demand for commodities.

**Looser monetary policy and fiscal stimulus**

**Supply cutbacks:** In the next two to three years, we expect supply challenges could start to re-emerge if demand returns. This is because supply is already constrained and faces further cutbacks in the short term from the current low commodity price levels. International mining companies have already scaled back expansion plans and we expect China mining companies to follow suit.

**Chinese contract coal price negotiations:** The current thermal Qinhuangdao benchmark is Rmb690/t (including 13% VAT). This compares with China Shenhua's 2008 contract price of Rmb456/t (including VAT). If the spot price stabilises above Rmb600/t and China Shenhua is able to achieve a contract price increase of more than 10% YoY, this could provide relief to investors, as it provides an indication of base thermal coal demand. The contract price negotiations start December 2008 and come into effect from January to December 2009.

**Spot price stabilises and higher contract prices could bring relief**

## Key stock ideas

Our most preferred picks fall into two categories:

**Selling below market prices:** For 2008, China Shenhua sold about 66% of its coal at the China contract price of Rmb456/t, compared with the spot price range of Rmb550-1,000/t. We estimate it will sell about 62% of volume in 2009 at a 15% YoY higher domestic contract price, unless the Chinese spot price falls below the contract price. In such a scenario, the economy is unlikely to support commodity demand in general. Thus, if China Shenhua can secure a contract price increase, and sales volume increases 10% YoY, we think 11% YoY earnings growth is achievable.

**China Shenhua sells below market prices, earnings growth achievable**

**Companies with presales and at low valuations:** Straits Asia Resources (Straits Asia) has forward sold 75% of its 2009 coal production, most at a benchmark price of US\$140/t (ASP US\$114/t). In calculating its 2009E EPS, we assume only a 3% YoY increase in sales volume. We believe Straits Asia's current share price performance implies an investor assumption that contracts will be renegotiated. However, Straits Asia's Japanese, Korean and European client base has no track record of forcing renegotiations, although historically, various Chinese and Taiwanese utilities have renegotiated contracts. Straits Asia is now trading at a 2009E PE of 2.3x and a dividend yield of 21.3%.

**Straits Asia Resources is trading at 2.3x 2009E PE**

Our least preferred stocks fall into the following categories:

**Companies with forecast losses:** We expect a modest loss for Jiangxi Copper but a large (cash) loss for Yunnan Chihong Zinc in 2009. With Jiangxi Copper's production cost at US\$1.25/lb and price at US\$1.30/lb in 2009E, we expect the company to post a loss of Rmb0.05 per share. For Yunnan Chihong, we estimate lead concentrate self sufficiency below 20% in 2009; the ill-timed expansion of zinc smelting capacity from 160ktpa to 200ktpa and lead smelting capacity from 100ktpa to 160ktpa further exposes the company to low zinc/lead prices while the expansion pushes net gearing to about 60% in 2009. We forecast a loss of Rmb0.12 per share for 2009E.

**Losses forecast for Jiangxi Copper and Yunnan Chihong Zinc**

**Companies with high valuations despite earnings decline:** With 60% of sales volume on spot contracts, we forecast Yanzhou Coal-A earnings to decline 18% YoY in 2009E. If spot prices continue to fall, the earnings risk is clearly to the downside. We note that the company's A-share price is currently more than twice the H-share price and we expect this premium to narrow.

**The Yanzhou Coal A-share price is 217% that of Yanzhou Coal H shares**

# Asia Materials Most & Least Preferred

In this section, we present commentary on stocks in our Asia Materials Most & Least Preferred stock list.

## Asia Materials Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
China Shenhua-H	Buy	HK\$20.81	Defensive earnings from 62% sales at discount contract price, 10% volume growth
Straits Asia Resources	Buy	S\$2.10	75% of 2009E volumes forward sold at US\$114/t, 2.3x 2009E PE and 21.3% dividend yield.
<b>Least Preferred</b>			
Jiangxi Copper-H	Sell	HK\$1.40	High production cost means losses in 2009E
Yanzhou Coal-A	Sell	Rmb7.39	18% earnings decline in 2009E but downside risk if spot prices keep falling. 117% premium to the H-share price.
Yunnan Chihong Zinc	Sell	Rmb3.90	Low concentrate supply, ill-timed smelting expansion and 60% gearing. Losses in 09E.

Data as at 2 December 2008. Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list:

## Most Preferred China Shenhua Energy-H

**Investment case:** Our top pick among the Chinese coal company stocks is China Shenhua Energy-H (Shenhua-H). We think Shenhua will deliver achievable output growth with annual 12-15mt organic growth in 2008-10E. Although the Chinese spot coal price has declined 38% from a peak of Rmb1,100/t, we believe Shenhua still could raise its heavily discounted long-term contract coal price, which is Rmb456/t this year. We think Shenhua is better positioned than its peers due to its large scale and its own transport system.

Despite falling demand growth in China, we expect a modest decline in power plant utilisation rates, given low capacity additions. This should lead to stable revenue, in our view. We forecast the power segment to deliver earning growth in 2009.

With 62% of sales at the discounted China contract price and 11% of profit from the power segment, we expect Shenhua's earnings to grow in 2009 against a backdrop of slower coal demand and falling spot prices.

**Valuation:** Our PE-based price target for Shenhua-H is HK\$20.81. Due to lower growth assumptions in our PE model, our target PE is 11.8x, using a long-term growth rate of 5.8%. Our price target is equivalent to 0.84x our DCF value of HK\$24.82/share, assuming a WACC of 12.1% and implying a long-term coal price of US\$44.3/t compared with the current China spot price of US\$85/t.

**Sector:** China Coal

**Rating:** Buy

**PT:** HK\$20.81

**Analyst:** Ghee Peh

**2009 catalysts:** 1) Settlement of most contracts with IPPs around January 2009 near our forecast 15% YoY rise. 2) Higher YoY monthly production and sales numbers in 2009. We expect power segment utilisation rates to decline less than the national average. 3) We think a completed asset acquisition should restore investor confidence in the parent company's support.

## Straits Asia Resources

**Investment case:** In connection with Straits Asia's recent US\$300m refinancing, the company forward sold 75% of its 2009 coal production to ensure earnings visibility. As such, management was able to price most of its coal at a benchmark of US\$140/t (ASP US\$114/t), which is now 63% above the current Newcastle spot price.

We believe Straits Asia's current share price performance implies an investor assumption that contracts will be renegotiated. However, although historically that has been true for various Chinese and Taiwanese utilities, Straits Asia's Japanese, Korean and European client base have no track record of forcing renegotiations.

As Straits Asia's shares have been sold down along with coal prices and the rest of the sector, we think the current share price of S\$0.71 and 2009 PE of 2.3x represents an attractive buying opportunity. The current share price furthermore implies a dividend yield above 21.3%.

**Valuation:** Our price target of S\$2.10 is based on a 2009E PE multiple of 7.5x, assuming 10.1% cost of capital, a 10.5% risk-free rate, and 5% equity risk premium. Straits Asia's 2009 PE of 2.3x is at a 50% discount to the Indonesia sector average.

**2009 catalysts:** We believe the three primary catalysts for Straits Asia's share price are 1) coal price strength; 2) further reserve upgrades; and 3) a limited number of contract renegotiations.

## Least Preferred Jiangxi Copper-H

**Investment case:** Our global team forecasts the 2009E copper price at US\$1.30/lb and 2010E at US\$1.55/lb. Jiangxi Copper's copper mine production cost is about US\$1.25/lb and we expect it to report a loss for 2009. On its smelting business, we think Jiangxi Copper is also vulnerable to low tolling and smelting charges. However, the recent convertible bond issue and operating cashflow since 2006 should mean a cash balance of Rmb8bn, which we expect will help the company survive the next two years. We also expect the company to delay overseas mine projects.

**Valuation:** We have a Sell rating on Jiangxi Copper-H with a price target of HK\$1.40. We base our price target on a 72% discount to our DCF valuation of HK\$4.97 per share, which uses a WACC of 13.1% and a long-term copper price of US\$1.50/lb. We believe the 1998 trough is the most relevant, as the company only made Rmb10m profit that year and traded in a range of 0.2-0.7x P/BV. A discount of 72% to our DCF is equal to 0.2x P/BV.

**Sector:** Indonesia Coal

**Rating:** Buy

**PT:** S\$2.10

**Analyst:** Andreas Bokkenheuser

**Sector:** China Non-ferrous Metals

**Rating:** Sell

**PT:** HK\$1.40

**Analyst:** Ghee Peh / Wendy Wang



**2009 catalysts:** 1) copper prices stabilizing and starting to move up on improved demand; 2) an announcement of significant delays in capex; and 3) an announcement of a special dividend.

## Yanzhou Coal-A

**Investment case:** Yanzhou Coal is selling over 60% of its volume on a spot basis and in a weakening market, its earnings are especially vulnerable, hence we forecast an 18% YoY decline in 2009 net profit. With spot prices trending lower, there could be more downside to forecasts. The A share price is almost twice the H-share price. We believe production volumes, the spot coal price and high production costs are the key challenges for Yanzhou Coal 1) with main six Shandong mines already mature, we only expect an 8% YoY production increase from new mines; 2) we expect the company's ASP from the Shandong mines to decrease 5% in 2009; 3) as the Shandong mines are fairly mature, we do not expect the cost uptrend to be reversed—Yanzhou Coal had to pay Rmb35/t in local and central government charges and we expect this level of charges to be maintained; and 4) volume growth would be at risk in the event of any delay in the mining license for the 8mtpa Yushuwan Mine.

**Valuation:** We have a Sell rating on Yanzhou Coal-A with a price target of Rmb7.39. We base our price target on a 2009E PE of 6.3x, assuming a long-term growth rate of 2.9%, and cost of equity of 11.3%. Our price target is equivalent to 0.92x our DCF value of Rmb7.99/share, assuming WACC of 10.8%, and it implies a long-term coal price of US\$67/t compared with the current China spot price of US\$89/t.

**2009 catalysts:** 1) the spot coal price stops declining and stabilises; 2) obtaining the mining license for Yushuwan earlier than expected could lead to upward revisions in volume growth and earnings; and 3) announcement of a special dividend at the Q209 results release due to the lack of capex.

## Yunnan Chihong Zinc & Germanium

**Investment case:** We believe low self sufficiency, over-expansion of smelting capacity, and a worsened financial position are the key challenges for Yunnan Chihong: 1) lack of lead concentrate to lower self sufficiency from 31% in 2008 to below 20% in 2009E; 2) the expansion of zinc smelting capacity from 160ktpa to 200ktpa and lead smelting capacity from 100ktpa to 160ktpa to further expose the company to low zinc/lead prices; 3) the completion of the expansion projects to consume capital and increase net gearing to around 60% in 2009E. Given our forecast lower-than-cost zinc/lead prices, we expect a large (cash) loss for Yunnan Chihong in 2009.

**Valuation:** We have a Sell rating on Yunnan Chihong and a price target of Rmb3.90. We base our price target on a three-stage DCF methodology, assuming a terminal growth rate of 3%, and cost of equity of 8.5%.

**2009 catalysts:** 1) production curbs could limit losses; 2) an increase in the portion of zinc alloy products could also help to stem losses; and 3) a cutback of capex to help with debt servicing.

**Sector:** China Coal

**Rating:** Sell

**PT:** Rmb7.39

**Analyst:** Patrick Dai/Ghee Peh

**Sector:** China Zinc & Lead

**Rating:** Sell

**PT:** Rmb3.90

**Analyst:** Patrick Dai/Ghee Peh

Table 2: Regional Valuation

Company	Country	Ticker	Year end	Rating	Price (local currency)			Total return %	3 month avg T/O		12-month price		Market cap(m)	
					Current	Target	Upside (%)		US\$ m	%	High	Low	Local currency	US\$
<b>Coal Companies</b>														
China Coal Energy	China	1898.HK	31-Dec	Buy	4.43	6.93	56.4%	57.8%	39.8	26.15	2.91	56523	8210	
China Shenhua Energy	China	1088.HK	31-Dec	Buy	13.42	20.81	55.1%	56.8%	104.7	49.35	8.41	252261	36639	
Yanzhou Coal Mining	China	1171.HK	31-Dec	Buy	4.02	5.78	43.8%	46.1%	29.5	17.54	3.02	18784	2728	
Hicliit Industry Int'l	China	1393.HK	31-Dec	Buy	1.47	2.01	36.7%	37.5%	8.7	15.2	0.8	2726	396	
China Shenhua Energy - A	China	601088.SS	31-Dec	Buy	17.33	23.46	35.4%	36.1%	52.1	71	16.83	347074	50410	
China Coal Energy - A	China	601898.SS	31-Dec	Neutral	6.58	7.94	20.7%	21.4%	36.7	24.42	6.17	60586	8800	
Yanzhou Coal Mining - A	China	600188.SS	31-Dec	Sell	8.72	7.39	-15.3%	-13.8%	13.9	26.04	7.91	42688	6200	
Bukit Asam (PTBA)	Indonesia	PTBA.JK	31-Dec	Buy	6250	8200	31.2%	33.5%	8.8	17000	4150	15668083	1274	
Bumi Resources	Indonesia	BUMI.JK	31-Dec	Buy	850	3000	252.9%	256.1%	61.1	8550	710	18239760	1483	
Indo Tambangraya Megah	Indonesia	ITMG.JK	31-Dec	Buy	8550	17600	105.8%	109.5%	2.1	35700	5950	845	845	
Straits Asia Resources	Indonesia	STRL.SI	31-Dec	Buy	0.705	2.1	197.9%	199.6%	0.0	4.3	0.605	746	488	
<b>Metal producing companies</b>														
Antam	Indonesia	ANTM.JK	31-Dec	Sell	960	1050	9.4%	11.7%	10.7	4650	850	9443075	768	
Jiangxi Copper	China	0358.HK	31-Dec	Sell	4.45	1.4	-68.5%	-66.0%	24.5	21.75	2.85	12213	1774	
China Molybdenum	China	3993.HK	31-Dec	Buy	2.65	4.4	66.0%	68.0%	5.7	17.68	1.53	12559	1824	
Inco Indonesia	Indonesia	INCO.JK	31-Dec	Sell	1870	1800	-3.7%	19.0%	5.7	10050	1180	1543	1543	
Hindalco Industries	India	HALC.BO	31-Mar	Neutral	51.7	65	25.7%	27.5%		219.95	40.4	47733	956	
National Aluminium Co. Ltd.	India	NALLU.BO	31-Mar	Neutral	167.85	185	10.2%	12.0%		552.2	139.15	109629	2196	
Sterlite Industries	India	STRL.BO	31-Mar	Neutral	227.95	335	47.0%	47.3%		1104.8	200.5	169117	3388	
Western Mining	China	601168.SS	31-Dec	Neutral	6.41	6.5	1.4%	1.9%	29.2	45.38	5.41	15275	2219	
Yunnan Chihong	China	600497.SS	31-Dec	Sell	9.55	3.9	-59.2%	-53.3%	7.2	42.9	6.8	7270	1056	
Shenzhen Zhongjin Lingnan	China	000060.SZ	31-Dec	Sell	8.15	5.7	-30.1%	-28.0%	9.0	49.73	6.12	5777	839	

Source: Company data, UBS estimates

Table 3: Regional Valuation

Company	Country	Ticker	PE				Dividend yield				EV/EBITDA					
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E		
<b>Coal Companies</b>																
China Coal Energy	China	1898.HK	8.3x	4.9x	6.0x	5.5x	1.3%	6.6%	5.4%	5.8%	14.0x	1.7x	1.6x	1.8x		
China Shenhua Energy	China	1088.HK	11.8x	8.8x	7.7x	6.8x	1.7%	3.7%	4.3%	4.8%	14.7x	5.4x	4.8x	4.1x		
Yanzhou Coal Mining	China	1171.HK	6.0x	2.6x	2.9x	2.6x	2.4%	14.0%	12.7%	14.2%	8.6x	1.3x	1.3x	1.0x		
Hiclii Industry Int'l	China	1393.HK	2.2x	2.6x	4.8x	3.1x	0.8%	11.6%	6.2%	9.5%	22.8x	1.3x	2.2x	1.1x		
China Shenhua Energy - A	China	601088.SS	16.3x	12.6x	11.3x	9.9x	0.7%	2.8%	3.1%	3.5%	36.4x	7.4x	6.6x	5.7x		
China Coal Energy - A	China	601898.SS	15.5x	10.0x	10.2x	9.5x	n/a	1.2%	1.5%	1.6%	0.0x	3.8x	3.8x	3.7x		
Yanzhou Coal Mining - A	China	600188.SS	15.4x	6.1x	7.4x	6.5x	1.4%	6.5%	5.4%	6.1%	12.9x	3.3x	3.9x	3.5x		
Bukit Asam (PTBA)	Indonesia	PTBA.JK	21.4x	7.7x	7.6x	8.7x	2.3%	2.8%	7.9%	8.0%	3.6x	2.4x	4.0x	4.3x		
Bumi Resources	Indonesia	BUMI.JK	4.4x	3.2x	2.8x	3.2x	3.2%	4.1%	9.8%	11.4%	13.5x	5.3x	5.1x	5.5x		
Indo Tambangraya Megah	Indonesia	ITMG.JK	17.5x	4.2x	3.8x	4.8x	3.6%	1.9%	9.8%	8.5%	11.1x	1.4x	1.1x	0.9x		
Straits Asia Resources	Indonesia	STRLSI	17.9x	2.8x	2.3x	2.3x	1.8%	17.2%	21.3%	21.3%	3.8x	1.1x	1.1x	0.7x		
<b>Weighted Average</b>			<b>13.8x</b>	<b>9.8x</b>	<b>9.1x</b>	<b>8.1x</b>	<b>1.2%</b>	<b>3.8%</b>	<b>4.1%</b>	<b>4.6%</b>	<b>14.4x</b>	<b>1.5x</b>	<b>1.3x</b>	<b>1.2x</b>		
<b>Metal producing companies</b>																
Antam	Indonesia	ANTM.JK	1.8x	3.6x	6.3x	6.8x	2.4%	27.8%	10.8%	6.2%	3.6x	2.4x	4.0x	4.3x		
Jiangxi Copper	China	0358.HK	3.1x	3.1x	n/a	39.9x	2.5%	7.1%	0.0%	0.5%	8.1x	2.7x	19.9x	10.2x		
China Molybdenum	China	3993.HK	5.2x	4.2x	6.1x	5.1x	1.9%	7.6%	5.2%	6.3%	18.7x	1.7x	2.3x	1.6x		
Inco Indonesia	Indonesia	INCO.JK	1.7x	3.9x	8.8x	6.2x	22.8%	19.7%	0.7%	0.1%	3.8x	1.1x	1.1x	0.7x		
Hindalco Industries	India	HALC.BO	2.0x	2.7x	5.0x	6.9x	1.4%	1.8%	3.5%	2.4%	3.3x	3.6x	3.6x	3.9x		
National Aluminium Co. Ltd.	India	NALU.BO	4.5x	6.6x	10.1x	16.8x	3.3%	1.8%	3.8%	2.4%	3.0x	7.6x	4.4x	8.2x		
Sterlite Industries	India	STRL.BO	2.8x	3.6x	4.8x	7.5x	1.5%	0.3%	2.5%	2.1%	2.9x	3.5x	1.3x	1.6x		
Western Mining	China	601168.SS	8.0x	13.2x	n/a	44.2x	0.5%	2.3%	0.0%	0.7%	43.5x	6.2x	17.6x	10.5x		
Yunnan Chihong	China	600497.SS	2.8x	22.0x	n/a	115.6x	5.8%	2.3%	0.0%	0.4%	15.0x	10.9x	30.1x	17.6x		
Shenzhen Zhongjin Lingnan	China	000060.SZ	4.9x	10.2x	n/a	32.8x	2.1%	4.0%	0.0%	1.3%	16.7x	5.6x	46.9x	11.9x		
<b>Weighted average</b>			<b>3.9x</b>	<b>6.8x</b>	<b>6.8x</b>	<b>24.8x</b>	<b>4.1%</b>	<b>5.8%</b>	<b>3.7%</b>	<b>2.1%</b>	<b>12.3x</b>	<b>4.4x</b>	<b>10.4x</b>	<b>6.3x</b>		

Note: Based on closing prices as of 2 December 2008

Source: UBS estimates, company data

Table 4: Regional valuation

Company	Country	Ticker	EV/Operating cash flows				P/BV				ROE			
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E
<b>Coal Companies</b>														
China Coal Energy	China	1898.HK	18.3x	2.2x	2.4x	2.6x	4.4x	0.8x	0.8x	0.7x	21.7%	20.6%	12.3%	12.3%
China Shenhua Energy	China	1088.HK	17.7x	6.3x	5.6x	4.7x	4.2x	1.4x	1.1x	0.9x	20.1%	16.9%	14.7%	13.6%
Yanzhou Coal Mining	China	1171.HK	10.3x	1.5x	1.4x	1.1x	2.5x	0.8x	0.7x	0.6x	16.1%	30.5%	24.4%	23.5%
Hicli Industry Int'l	China	1393.HK	27.6x	1.3x	2.3x	1.1x	4.2x	0.5x	0.5x	0.4x	40.1%	18.9%	9.5%	13.6%
China Shenhua Energy - A	China	601088.SS	43.9x	8.5x	7.8x	6.4x	9.4x	1.9x	1.5x	1.3x	20.4%	18.1%	14.9%	13.8%
China Coal Energy - A	China	601898.SS	n/a	4.1x	4.4x	4.3x	n/a	1.5x	1.4x	1.3x	16.1%	18.7%	14.1%	13.8%
Yanzhou Coal Mining - A	China	600188.SS	15.4x	3.6x	4.4x	3.9x	3.9x	2.0x	1.9x	1.8x	15.0%	34.5%	26.9%	29.0%
Bukit Asam (PTBA)	Indonesia	PTBA.JK	14.0x	5.9x	5.5x	5.9x	5.1x	3.7x	3.0x	2.5x	26.2%	53.1%	40.0%	28.9%
Bumi Resources	Indonesia	BUMI.JK	9.9x	1.8x	1.2x	1.0x	4.8x	1.2x	0.9x	0.8x	53.8%	40.5%	34.6%	24.7%
Indo Tambangraya Megah	Indonesia	ITMG.JK	12.8x	1.4x	1.3x	1.2x	4.9x	1.2x	1.0x	0.9x	20.5%	40.5%	26.9%	18.8%
Straits Asia Resources	Indonesia	STRL.SI	25.5x	2.2x	2.1x	2.1x	3.8x	1.3x	1.1x	1.0x	16.2%	54.0%	49.9%	45.0%
<b>Weighted Average</b>			<b>29.5x</b>	<b>6.4x</b>	<b>6.0x</b>	<b>5.0x</b>	<b>6.6x</b>	<b>1.6x</b>	<b>1.3x</b>	<b>1.1x</b>	<b>21.8%</b>	<b>20.1%</b>	<b>16.2%</b>	<b>15.1%</b>
<b>Metal producing companies</b>														
Antam	Indonesia	ANTM.JK	3.6x	2.4x	4.2x	4.5x	3.0x	0.9x	0.9x	0.8x	75.9%	27.0%	14.0%	12.4%
Jiangxi Copper	China	0358.HK	9.5x	3.0x	23.7x	10.3x	2.3x	0.6x	0.6x	0.6x	25.4%	18.3%	-0.7%	1.3%
China Molybdenum	China	3993.HK	18.7x	1.7x	2.3x	1.6x	6.8x	1.1x	1.0x	0.9x	36.6%	24.7%	15.4%	16.8%
Inco Indonesia	Indonesia	INCO.JK	4.0x	1.2x	1.7x	1.0x	4.4x	1.0x	0.9x	0.8x	74.6%	32.4%	10.4%	13.1%
Hindalco Industries	India	HALC.BO	3.3x	3.6x	3.6x	3.9x	1.4x	1.2x	0.4x	0.4x	24.1%	15.8%	8.9%	5.6%
National Aluminium Co. Ltd.	India	NALU.BO	3.3x	9.8x	6.8x	254.4x	1.9x	2.4x	1.2x	1.1x	35.2%	19.8%	11.6%	6.7%
Sterlite Industries	India	STRL.BO	2.9x	3.5x	1.3x	1.6x	2.6x	1.4x	0.7x	0.6x	56.6%	19.1%	10.8%	8.4%
Western Mining	China	601168.SS	43.5x	6.2x	17.6x	10.5x	11.2x	1.4x	1.4x	1.4x	26.9%	11.0%	0.0%	3.1%
Yunnan Chihong	China	600497.SS	15.0x	10.9x	30.1x	17.6x	8.7x	2.8x	3.1x	3.0x	48.7%	11.9%	-3.8%	2.7%
Shenzhen Zhongjin Lingnan	China	000060.SZ	16.7x	5.6x	46.9x	11.9x	7.3x	2.1x	2.4x	2.2x	35.8%	22.0%	-2.1%	7.1%
<b>Weighted average</b>			<b>12.4x</b>	<b>4.8x</b>	<b>11.2x</b>	<b>39.0x</b>	<b>4.8x</b>	<b>1.5x</b>	<b>1.1x</b>	<b>1.1x</b>	<b>43.4%</b>	<b>19.8%</b>	<b>7.2%</b>	<b>7.7%</b>

Note: Based on closing prices as of 2 December 2008. Data shown for December year-end, or the nearest year-end to December. Market cap is expressed in millions of US\$

Source: Bloomberg, UBS estimates

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■ **Statement of Risk**

Forecasting mining company earnings is difficult because it is affected by a wide range of economic, financial, accounting and regulatory trends.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## Oil price recovery by H209E

### ■ Summary

Global oil prices have fallen 60-70% from a peak near US\$145/bbl in mid-2008. Furthermore, we believe prices can stay near current levels through H109 before recovering in H209. Given that we maintain a positive long-term view on the prospects for global oil prices, we believe H109 will present a good opportunity to accumulate Asia's upstream and integrated oil and gas stocks.

### ■ What are the likely themes for 2009?

We see four likely themes for 2009: 1) evidence of a reversal of fortune for oil markets may come by the middle of 2009, as global demand reaches a trough and OPEC production cuts take hold; 2) lower oil prices may lead to more M&A activity; 3) refined product price reform may link China's prices to regional; and 4) downstream refining and chemicals companies could experience a severe trough.

### ■ What may surprise on the upside or downside?

UBS has a particularly bearish view on Asia's downstream refining and chemical stocks, with our 2009 EPS forecasts well below consensus estimates. Hence, significant downgrades to consensus earnings forecasts are possible, in our view.

### ■ Highlighted stocks

As we believe the risk to oil prices is to the upside on a 12-month horizon, we are moving our preference from integrated stocks to upstream stocks with strong balance sheets. These include CNOOC and PTT Exploration & Production (PTTEP). Despite its downstream focus, we also favour Reliance Industries for its earnings momentum, future diversification upstream and strong balance sheet. Our least preferred stocks are Formosa Petrochemical, S-Oil and Energi Mega Persada.

**4 December 2008**
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**Table 1: Asia Oil and Chemical Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
CNOOC	0883.HK	36.6	Buy	5.95	10.90	7.4x
PTTEP	PTTE.BK	8.3	Buy	91.50	153.00	10.6x
Reliance Industries	RELI.BO	32.3	Buy	1,074.65	2,000	7.4x
<b>Least Preferred</b>						
S-Oil	010950.KS	4.3	Neutral	64,000	66,000	14.1x
Formosa Petrochem	6505.TW	19.3	Sell	69.90	70.00	16.1x
Energi Mega Persada	ENRG.JK	0.2	Sell	117	200	18.8x

Data as at 2 December 2008. Source: UBS estimates

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# Outlook 2009 – Summary

## What are the likely key themes?

**Oil demand likely to reach a trough in H109:** We believe global oil demand growth will reach a trough some time in H109 and that this, combined with the impact of OPEC production cuts, will likely lead to a bottoming of global oil prices. We forecast an average of just US\$50/bbl (Brent) in H109 but expect a recovery in H209.

**Table 2: Global demand growth**

Demand (% change Y-o-Y)	2006	2007	Q1-08	Q2-08	Q3-08	Q4-08E	2008E	Q1-09E	Q2-09E	Q3-09E	Q4-09E	2009E	2010E
OECD America	-0.6%	0.5%	-3.3%	-3.4%	-6.0%	-6.2%	-4.7%	-3.9%	-3.9%	-1.3%	-0.6%	-2.4%	0.5%
OECD Europe	0.1%	-2.4%	-0.2%	-0.5%	-1.9%	-2.1%	-1.2%	-3.0%	-2.9%	-2.4%	-2.3%	-2.7%	-0.8%
OECD Asia Pac	-1.4%	-1.6%	-0.5%	-0.7%	-2.8%	-4.3%	-2.1%	-2.5%	-2.4%	-1.6%	-1.3%	-2.0%	-0.7%
OECD	-0.5%	-0.8%	-1.8%	-2.0%	-4.2%	-4.6%	-3.2%	-3.4%	-3.3%	-1.7%	-1.3%	-2.4%	-0.1%
FSU	5.3%	-4.0%	4.8%	4.9%	9.6%	1.0%	5.0%	2.0%	0.0%	-4.0%	-4.0%	-1.6%	-1.0%
China	6.0%	4.9%	5.8%	3.8%	7.2%	4.0%	5.2%	3.0%	3.4%	4.9%	4.9%	4.0%	5.6%
Other Asia	1.0%	2.9%	4.3%	2.2%	2.0%	1.5%	2.5%	1.4%	1.4%	1.6%	1.9%	1.6%	2.8%
South America	3.9%	6.4%	4.1%	4.7%	2.6%	1.3%	3.1%	-0.1%	0.2%	0.2%	0.2%	0.1%	1.5%
Mideast	5.6%	6.0%	5.2%	7.8%	6.7%	3.6%	5.8%	4.4%	4.4%	4.5%	4.4%	4.4%	3.2%
Africa	-0.4%	4.4%	3.4%	4.2%	3.7%	3.7%	3.8%	2.6%	2.5%	2.5%	2.5%	2.5%	4.0%
Non-OECD	3.6%	3.7%	4.7%	4.4%	5.0%	2.5%	4.1%	2.2%	2.1%	2.0%	2.0%	2.1%	2.9%
<b>TOTAL DEMAND</b>	<b>1.2%</b>	<b>1.1%</b>	<b>0.9%</b>	<b>0.7%</b>	<b>-0.2%</b>	<b>-1.6%</b>	<b>0.0%</b>	<b>-0.9%</b>	<b>-0.9%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>-0.4%</b>	<b>1.3%</b>

Source: EIA, UBS estimates

**Table 3: Oil price forecasts**

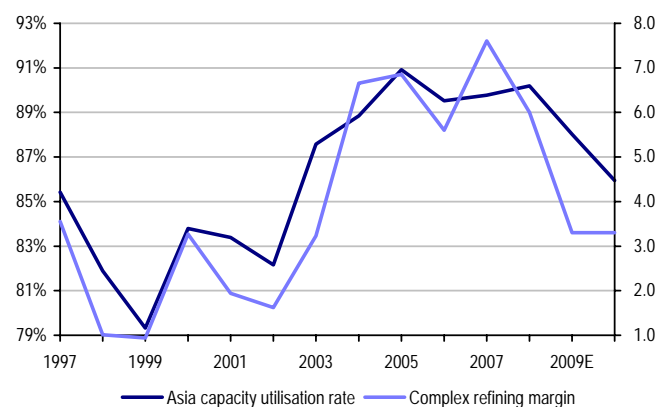
	2007	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E	2011E	2012E	2013E
<b>Brent</b>	<b>72.66</b>	96.31	122.79	117.15	60.00	<b>99.06</b>	53.00	50.00	71.00	66.00	<b>60.00</b>	<b>75.00</b>	<b>85.00</b>	<b>95.00</b>	<b>85.00</b>
<b>WTI</b>	<b>72.23</b>	97.82	123.80	118.22	60.00	<b>99.96</b>	55.00	50.00	70.00	65.00	<b>60.00</b>	<b>75.00</b>	<b>86.00</b>	<b>96.00</b>	<b>86.00</b>

Source: Datastream, UBS estimates

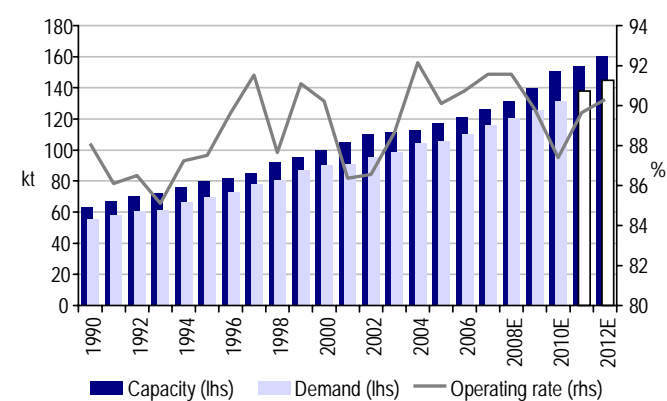
**Lower oil prices could lead to acquisitions:** Lower oil prices, coupled with the good cash positions of many upstream producers, could signal that 2009 will be a year of increased M&A activity in the sector. We believe lower oil prices could lead to reduced capital expenditure plans. This would be more reflective of falling costs and not likely due to project cancellations.

**China oil sector reforms:** If not already by the end of 2008, we believe the Chinese government is likely to introduce a mechanism to link refined product prices to regional prices. Given the large fall in global oil prices as well as the recent trend of raising consumption taxes in China, we now believe the country is unlikely to lower windfall profit taxes on upstream producers.

**Downstream trough approaching:** We expect downstream refining and petrochemicals producers to encounter trough conditions in 2009 and 2010. We believe complex refiners with tougher crude blends and higher middle distillate exposure should fare better than others. We expect the trough to be more severe in petrochemicals given the wave of new capacity additions.

**Chart 1: Asia refiner operating rate versus Reuters GRM (US\$/bbl)**

Source: BP, Reuters, UBS estimates

**Chart 2: Global supply and demand for ethylene (ktpa)**

Source: UBS estimates

## What is our central thesis for 2009?

**We prefer upstream and integrated stocks to downstream refining and petrochemical stocks.** Given that UBS is bullish on global oil prices in the long term, we believe the expected weakness in oil prices and hence equities during H109 should provide for a good opportunity to buy upstream and integrated oil and gas stocks with large trading liquidity.

**We would also screen upstream and integrated companies for health of balance sheets.** This can add a buffer of protection in the event that the global oil demand and oil prices were to worsen. We believe stronger balance sheets and good cash positions could leave selected companies in a better position to acquire attractively priced upstream assets. Finally, we believe trading liquidity should be a key consideration.

**While value has emerged in many pure downstream refining stocks, and balance sheets are not over-leveraged, we would generally avoid the sector.** We are concerned that the downturn in refining and chemicals could last well into 2010 and hence believe catalysts remain uncertain. However, there could be opportunities to buy more complex refiners, and refiners in general could benefit from inventory gains if oil prices begin to move up during H209 and 2010. Further downstream, we see few opportunities to buy petrochemical stocks.

## What may surprise on the upside or downside?

While we favour CNOOC's exposure to global oil prices, we note that Duri crude, the key benchmark for CNOOC, has recently dropped to a very low US\$30/bbl. The price of Duri has historically been volatile and we believe the large discount to other crude benchmarks is not likely to last. However, if it does last, this could lead to downside risk to our estimates.

Also, we believe China is likely to move forward with refined product price reform that could link prices to regional spot prices. While we believe the improved visibility will be a positive for China's integrated stocks PetroChina and Sinopec, we cannot discount the risk that if oil prices were to move up again aggressively, the government would not allow a pure pass through to end-product prices.



## What are the likely key catalysts?

We believe the key sector catalyst in 2009 should be when the markets see evidence that the trough in global oil demand has been reached and evidence that OPEC production cuts are taking hold. We believe the US will have experienced its worst YoY demand decline during Q408 and that European demand is likely to see its worst YoY demand decline during H109.

Given a nearly 14% YoY growth in refined product demand in China in H108, it is likely that demand growth for products during H109 will be sluggish before recovering in H209. Chinese demand grew above trend in 2008, mostly due to: 1) subsidies; 2) inventory building ahead of the Olympics; and 3) enhanced demand for diesel for small power generation in disaster areas (Sichuan earthquake and ice storms in southern China).

Downstream, we expect a wave of capacity to arrive in 2009. This should act as a catalyst for further margin deterioration. The capacity includes about 1.3mbpd of refining capacity in Asia, and 7.5mtpa and 3.5mtpa of ethylene and PX capacity, respectively, in Asia and the Middle East combined.

## Key stock ideas

**Our most preferred list:** We have screened regional upstream and integrated stocks for larger trading liquidity, leverage to oil prices, earnings momentum, and balance sheet strength. On this screen, our three most preferred stocks in the region are CNOOC, PTTEP, and Reliance Industries.

**Table 4: Earnings and balance sheet indicators for Asia (ex-Japan) large cap upstream and integrated stocks**

	% EPS growth		Net debt-equity ratio	
	2009E	2010E	2009E	2010E
ONGC	1%	(9%)	(44%)	(53%)
<b>CNOOC</b>	<b>(36%)</b>	<b>27%</b>	<b>(4%)</b>	<b>(1%)</b>
<b>Reliance Ind.</b>	<b>(3%)</b>	<b>41%</b>	<b>3.4%</b>	<b>(4.6%)</b>
<b>PTTEP</b>	<b>(32%)</b>	<b>33%</b>	<b>5%</b>	<b>(4%)</b>
PetroChina	(34%)	30%	17%	19%
PTT Public	(24%)	29%	44%	43%
Sinopec	16%	17%	61%	55%
SK Energy	NA	10%	79%	71%

Source: UBS estimates

Previously, we had a preference for integrated stocks (PetroChina, Sinopec and PTT Public) as we believed earnings at these companies would be less negatively geared to falling oil prices.

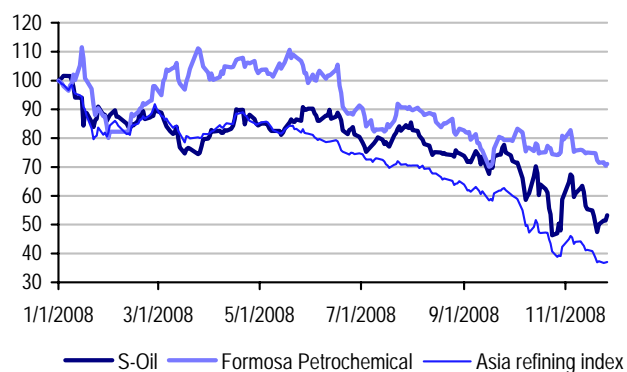
However, now that oil prices have fallen and given that we believe the risk to oil prices on a 12-month horizon is to the upside, we prefer the more oil leveraged plays. CNOOC and PTTEP have poor earnings momentum in 2009 but we believe this is priced in. We also believe the stocks are likely to stage the strongest earnings recoveries during H209 and H110.

As a predominantly downstream producer, Reliance Industries is an exception to our pure upstream picks. However, the company is integrating upstream in the next one to two years. Furthermore, Reliance has among the best earnings growth and strongest balance sheets in the region, in our view. This is based on volume growth of highly complex refining capacity, as well as upstream gas expansion.

We also note that CNOOC, PTTEP and Reliance have among the lowest financial leverage in Asia. UBS estimates that CNOOC will have a net cash-to-equity position of 4% in 2009, while we forecast net debt-to-equity of just 5% and 3% for PTTEP and Reliance, respectively. This, in our view, could provide support if the global economic situation worsens and sends product prices down. This also leaves the companies in a good position to consider upstream acquisitions, in our view.

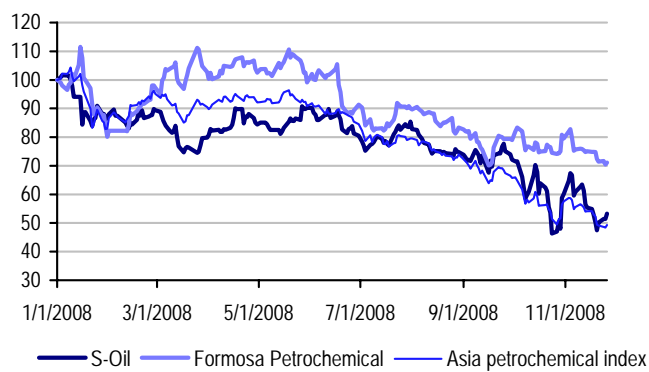
**Our least preferred list:** For our least preferred list, we include two downstream stocks that have outperformed in 2008 and seem to have relatively high valuations (Formosa Petrochemical and S-Oil). While we are generally more bullish on upstream stocks, we believe market expectations for Energi Mega Persada’s earnings performance are too high.

**Chart 3: US\$ share price performance versus simple average index of Asia (ex-Japan) refining share performance (1 Jan, 2008 = 100)**



Source: Bloomberg, UBS

**Chart 4: US\$ share price performance versus simple average index of Asia (ex-Japan) petrochemical share performance (1 Jan, 2008 = 100)**



Source: Bloomberg, UBS

# Asia Oil and Chemical Sector Most & Least Preferred

In this section, we present commentary on stocks in our Asia Oil and Chemical Most & Least Preferred stock list.

## Asia Oil and Chemical Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
CNOOC	Buy	HK\$10.90	Leveraged play on expected recovery in oil prices, competitive position, potential discoveries, solid balance sheet, in good position to acquire assets.
PTTEP	Buy	Bt153.00	Leveraged play on expected recovery in oil prices, gas exposure provides some downside protection if oil prices disappoint, potential discoveries, solid balance sheet.
Reliance Industries	Buy	Rs2,000	Among best EPS growth in the sector through 2011E, downstream focused but high complexity and good volume growth, integrated upstream in 1-2 years, solid balance sheet.
<b>Least Preferred</b>			
Formosa Petrochemical	Sell	NT\$70.00	Stock has outperformed, valuation looks high, large exposure to gasoline and ethylene.
S-Oil	Neutral	Won66,000	Stock has outperformed, valuation looks high, exposed to naphtha and BTX.
Energi Mega Persada	Sell	Rp200	Consensus expectation looks very high, large interest expense, weak balance sheet.

Data as at 2 December 2009. Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

### Most Preferred CNOOC

**Investment case:** UBS believes global oil prices are likely to bottom in the first half of 2009 and that a recovery is possible by H209. If this acts as a catalyst, we think CNOOC is likely to be the first choice among Asian oil and gas stocks given its good value, competitive position and reserves growth potential. We expect CNOOC to grow its production at an 8-10% CAGR over the next five years. While we believe Bohai Bay will continue to present good upside opportunities for reserves growth, we think the deep water exploration projects in the South China Sea will begin to play a leading role. CNOOC recently announced that it believes oil and gas reserves in place in the region could be as high as 22bn boe and that production could peak at 1.0bn boed. Investment through 2020 could total US\$29bn in the region for CNOOC and its partners. Finally, low oil prices have the potential to present good acquisition opportunities for CNOOC this year, in our view.

**Valuation:** We have a Buy rating on CNOOC. We base our price target of HK\$10.90 on a DCF valuation methodology that assumes a long-term Brent crude oil price of US\$85/bbl (2013) and 10.4% WACC (11.8% cost of equity, 4.9% after tax cost of debt, and 1.25 beta).

**2009 catalysts:** We believe that ultimately a bottoming and subsequent rise in global oil prices by mid-2009 could be the key catalyst for CNOOC. Beyond this, we believe newly announced discoveries could also contribute to performance.

**Sector:** China Oil Companies, Major

**Rating:** Buy

**PT:** HK\$10.90

**Analyst:** Peter Gastreich, Jimmy Wong

## PTT Exploration & Production

**Investment case.** UBS believes global oil prices are likely to bottom in the first half of 2009 and that a recovery is possible by H209. If so, we think PTT Exploration & Production's (PTTEP) share price will benefit. Given that nearly 75% of the company's production and half of its earnings are determined by natural gas, earnings are generally less sensitive to oil prices when compared to CNOOC. However, PTTEP's share price has proven historically to be among the most highly correlated to oil prices in Asia. We believe the company can deliver a five-year production CAGR of 8-10%, although most of this will be in natural gas, in our view. We believe the projects with the highest potential for PTTEP in the near term are in Myanmar and Vietnam, and in the long term in Cambodia and Iran. Finally, low oil prices have the potential to present good acquisition opportunities for PTTEP this year, in our view.

**Valuation.** We have a Buy rating on PTTEP. We use a DCF valuation methodology to arrive at our Bt153.00 price target. We assume a long-term Brent crude oil price of US\$85/bbl and a long-term Thailand natural gas price of US\$5.4/mmbtu. Finally, we assume a WACC of 10.3%.

**2009 catalysts.** We believe that ultimately a bottoming and subsequent rise in global oil prices by mid-2009 could be the key catalyst for PTTEP. Beyond this, we believe newly announced discoveries could also contribute to performance.

## Reliance Industries

**Investment case.** We believe Reliance Industries (RIL), with start-up of the new refinery and gas production from KGD6, is one of the few companies in India which will record significant earnings growth in FY10 despite the global turmoil. We expect the company's earnings quality to improve as the annuity cash flow from E&P business increases from nil in FY08 to approximately 35% of EBITDA in FY10E. Although we expect weak fundamentals in the core business of refining and petrochemicals, earnings from new businesses should provide the necessary support. Post development of KGD6, E&P should continue to create value over the medium term as RIL moves to concentrate on exploring newer fields adjacent to KGD6 and developing the already discovered fields of NEC 25 and coal bed methane. The story from D6 may not have fully played out yet as further appraisal on the field is carried out over the next couple of years. Reliance also has a strong balance sheet with a FY10E net debt to equity of 3.4%. We expect cash generation of approximately US\$7-8bn from FY10 onwards, which should strengthen its financial position further.

**Valuation:** Our sum-of-the-parts-based price target for RIL is Rs2,000. We value the core business at Rs695, at an EV/EBITDA multiple of 5x for refining and 4.5x for petrochemicals. We value E&P (D1/D3 fields, the rest of D6, NEC25, CBM and prospective resources) at Rs1,010. We value the retail business at book value at Rs58, and RIL's stake in Reliance Petroleum at Rs215. At our price target, RIL would trade at a PE of 13.7x and EV/EBITDA of 9x FY10E.

**2009 catalysts:** We believe the following could act as catalysts for the stock: 1) production start of gas from D1/D3; 2) the resolution of gas sales arbitration and signing of gas sales contracts; 3) commissioning of RPL Refinery; and 4) additional discoveries in exploration blocks.

**Sector:** Thailand Oil Companies, Secondary

**Rating:** Buy

**PT:** Bt153.00

**Analyst:** Peter Gastreich

**Sector:** India Chemicals, Commodity

**Rating:** Buy

**PT:** Rs2,000

**Analyst:** Harshad Katkar

## Least Preferred S-Oil

**Investment case:** While we acknowledge that S-Oil's higher complexity makes it a good defensive stock, we believe much of this may have already been priced in, as indicated by large outperformance relative to the Asia refining sector and relative to the KOSPI. S-Oil's earnings (before FX loss) were ahead of UBS expectations in 2008 due to its larger exposure to premium ultra low sulphur diesel products, and its use of cheaper Saudi Arabian crude oil blends. However, given the large wave of new refining capacity coming to Asia in 2009, we believe earnings are likely to disappoint. Our pre-ex EPS forecast of Won4,546 for 2009 is down 33% YoY and nearly 31% below the Reuters consensus estimate of Won6,602.

**Valuation:** We have a Neutral rating on S-Oil and a price target of Won66,000. We use a DCF methodology that assumes a WACC of 8.9% and a long-term growth rate of 3%.

**2009 catalysts:** We think 1) demanding valuation; 2) falling refining margins; and 3) declining petrochemical (benzene and paraxylene) margins could be key catalysts for 2009.

## Formosa Petrochemical

**Investment case:** Falling gasoline and naphtha margins are affecting the complex refiners, such as Formosa Petrochemical (FPCC), more than its peers. FPCC's Q308 EBIT was weaker than we expected due to slower sales and declining margins. We now think the Q408 outlook will be worse given: 1) the continued slump in oil and naphtha prices should cause further unwinding of high-cost inventory; and 2) we believe refining margins are likely to fall into Q408. Momentum in 2009 could deteriorate further.

**Valuation:** We have a Sell rating on FPCC and a DCF-based price target of NT\$70. We assume a 7.1% WACC based on a 3.8% after-tax cost of debt, a 3.3% risk-free rate, a 5% risk-free premium, 0.90 beta, and a 3% terminal growth rate.

**2009 catalysts:** We think: 1) demanding valuation at 3x P/BV; 2) falling refining margins; and 3) declining petrochemical (ethylene and propylene) margins could be key catalysts for 2009.

**Sector:** Korea Oil Companies, Secondary

**Rating:** Neutral

**PT:** Won66,000

**Analyst:** Peter Gastreich

**Sector:** Taiwan Chemicals, Commodity

**Rating:** Sell

**PT:** NT\$70.00

**Analyst:** Kim-Chong Tan

## Energi Mega Persada

**Investment case:** We expect Energi Mega Persada's (EMP) EPS to decline 36% YoY in 2009 due to: 1) lower expected oil prices; and 2) higher interest expenses. We expect EMP to pay a 15% interest expense on its newly obtained US\$450m debt. The company's current attempt to sell its 50% stake in Kangean PSC adds to uncertainty about its strategic direction, in our view, despite the possibility of being value accretive if it can sell the stake for more than US\$390m (based on US\$3.2/boe implied by our price target and 2P reserves of 122m boe).

**Valuation:** We have a Sell rating on EMP. Our life of mine DCF-based price target of Rp200 assumes a WACC of 14.8%. We assume 2009 and long-term oil prices of US\$60 and US\$85/barrel, respectively.

**2009 catalysts:** We believe potential catalysts include: 1) a solution to the parent company's (Bakrie Brothers) debt problem; and 2) the sale of its 50% stake in Kangean PSC for less than US\$3.2/boe.

**Sector:** Indonesia Oil Companies,  
Secondary

**Rating:** Sell

**PT:** Rp200

**Analyst:** Sebastian Tobing

Table 5: Asia Oil and Chem universe - Valuation

	Reuters code	Rating	Price Cur	Mkt cap US\$bn	PE (x)		P/BV (x)		EV/EBITDA		ROE (%)		Yield (%)		Net debt/equity (%)	
					09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E
<b>Exploration &amp; Production</b>																
CNOOC Ltd	0883.HK	Buy	HK\$	36.6	7.4	5.8	1.2	1.1	4.3	3.4	17.6	19.9	4.7	6.0	(3.7)	(0.5)
Medco Energi	MEDC.JK	Neutral	Rp	0.5	6.6	5.0	0.5	0.5	3.9	3.0	8.0	10.3	0.6	9.4	107.6	99.2
Oil & Natural Gas	ONGC.BO	Buy	Rs	29.2	7.8	6.5	1.2	1.0	4.9	5.7	18.2	19.0	5.1	6.1	(52.7)	(57.9)
PetroChina	0857.HK	Buy	HK\$	154.9	9.2	7.0	1.2	1.1	4.5	3.8	12.7	15.4	4.9	6.4	16.5	18.6
PTT E&P (F)	PTTE.BK	Buy	Bt	8.3	10.6	7.9	2.0	1.7	3.5	3.1	19.4	23.0	4.9	5.5	4.8	(4.2)
PTT	PTT.BK	Buy	Bt	11.3	6.0	4.6	0.9	0.8	4.4	3.7	15.3	17.8	7.7	7.7	44.3	42.6
Reliance Industries	RELI.BO	Buy	Rs	32.3	7.4	5.8	1.2	1.2	5.2	4.6	20.5	26.0	1.4	1.8	15.3	23.5
Cairn India	CAIL.BO	Buy	Rs	5.3	3.0	2.2	0.6	0.5	2.3	1.1	22.4	24.5	0.0	0.0	(12.7)	(31.2)
Energi	ENRG.JK	Sell	Rp	0.2	18.8	6.4	470	438	10.2	6.8	2.5	7.1	0.0	0.0	192.4	195.6
<b>Simple Average</b>					14.3	9.0	37.5	34.8	6.4	4.3	12.7	15.8	3.0	4.1	30.4	30.4
<b>Refining &amp; Marketing</b>																
Bangchak Petroleum	BCP.BK	Buy	Bt	0.2	6.0	4.7	0.3	0.3	6.3	5.1	5.1	6.2	6.5	11.3	37.3	27.9
GS Holdings	078930.KS	Buy	Won	1.4	6.9	7.3	0.6	0.6	8.0	8.5	9.8	8.8	4.8	4.8	19.0	18.9
GSPL	GSPT.BO	Buy	Rs	0.3	6.3	6.2	1.1	1.0	4.1	3.6	18.8	16.9	4.8	4.8	111.2	68.0
Petron	PCOR.PS	Sell	P	0.8	7.9	7.6	0.9	0.8	6.4	6.0	12.2	11.4	3.4	3.4	84.9	65.0
Petronas Gas	PGAS.KL	Buy	RM	5.3	18.0	17.7	2.4	2.3	8.9	8.6	13.3	13.2	4.4	4.6	(22.4)	(28.1)
PTT Aromatics	PTTAR.BK	Buy	Bt	0.6	5.2	4.8	0.3	0.3	7.4	6.8	6.4	6.7	8.0	8.7	96.6	92.0
Sinopec	0386.HK	Buy	HK\$	56.1	6.3	5.4	1.0	0.9	3.6	3.3	16.3	17.0	5.5	6.3	64.9	58.3
SK Energy	096770.KS	Buy	Won	4.3	7.4	6.7	0.8	0.7	5.3	4.9	10.8	10.9	3.2	3.2	78.8	70.6
S-Oil	010950.KS	Neutral	Won	5.1	14.1	14.1	2.3	1.8	9.1	8.8	16.7	14.2	5.9	4.7	(7.1)	(14.1)
Thai Oil	TOP.BK	Buy	Bt	1.0	7.3	6.8	0.5	0.4	4.7	4.1	7.3	7.9	19.1	10.9	33.9	29.6
Hindustan Petroleum	HPCL.BO	Sell	Rs	1.6	8.2	NA	0.5	NA	12.4	NA	7.7	NA	1.3	NA	146.8	NA
Bharat Petroleum	BPCL.BO	Sell	Rs	2.6	9.6	NA	0.8	NA	18.6	NA	12.1	NA	2.1	NA	104.4	NA
Indian Oil Corp	IOC.BO	Sell	Rs	9.5	10.6	NA	0.7	NA	12.5	NA	9.7	NA	2.5	NA	(119.4)	(96.4)
Reliance Petroleum	RPET.BO	Susp	Rs	6.5	4.8	3.8	1.5	1.1	4.1	2.8	36.7	33.1	1.0	1.3	37.5	(6.2)
GAIL	GAIL.BO	Sell	Rs	5.1	9.1	7.8	1.0	0.9	4.1	2.8	16.8	17.3	3.9	4.5	0.3	0.5
Esso	ESSO.BK	Buy	Bt	0.4	5.4	4.6	0.4	0.4	7.1	6.4	8.1	9.5	17.4	13.7	106.5	94.5
<b>Simple Average</b>					8.9	8.0	0.9	0.9	6.3	5.4	10.5	12.6	5.9	6.4	49.1	31.9
<b>Petrochemicals</b>																
China BlueChem	3983.HK	Buy	HK\$	1.7	7.5	8.2	1.0	1.0	4.3	4.2	14.5	12.3	4.0	3.7	(21.2)	(29.2)
Formosa C&Fibre	1326.TW	Neutral	NT\$	7.9	12.0	13.7	1.1	1.0	3.2	2.7	8.7	7.6	6.6	6.6	(1.3)	(1.0)
Formosa Petrochem	6505.TW	Sell	NT\$	19.3	16.1	31.9	2.6	NA	13.7	15.5	16.3	8.6	5.5	5.5	44.9	50.0
Formosa Plastics	1301.TW	Neutral	NT\$	8.4	10.3	13.4	1.1	1.1	0.0	(0.2)	11.0	8.5	7.8	7.8	(1.4)	0.9
Honam Petrochem	011170.KS	Susp	Won	1.0	4.7	7.0	0.4	0.4	0.9	0.9	8.6	5.4	1.5	1.0	11.3	10.3
Nan Ya Plastics	1303.TW	Neutral	NT\$	8.9	11.4	14.5	1.1	1.1	2.6	2.9	9.6	7.7	7.9	7.9	22.0	23.8
PTT Chem	PTTC.BK	Buy	Bt	1.2	5.3	2.9	0.4	0.4	4.5	2.8	7.7	13.6	14.2	14.2	34.6	28.1
Petronet LNG	PLNG.BO	Buy	Rs	0.5	4.0	3.9	0.9	0.7	3.1	3.0	23.8	19.9	7.4	7.7	70.0	67.9
LG Chemical	051910.KS	Susp	Won	3.5	7.4	9.3	0.9	0.8	3.0	3.0	12.3	9.1	6.2	3.4	2.6	(2.3)
QSLP	000792.SZ	Buy	Rmb	9.8	17.4	15.5	11.6	9.5	9.7	8.6	81.4	67.5	4.6	5.2	2,210.8	496
Sinofert	0297.HK	Buy	HK\$	3.0	9.4	8.6	2.1	1.7	6.1	5.5	23.8	21.3	1.6	1.7	17.3	14.2
<b>Simple Average</b>					9.7	11.7	2.1	1.8	4.7	4.5	19.9	16.9	6.0	5.9	217.2	60.1

Prices as at 2 December 2008. Source: Datastream, UBS estimates

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### ■ **Statement of Risk**

We believe oil prices are the number one risk in the sector. Our valuation of oil companies is based on UBS global crude oil price forecasts. UBS forecasts Brent crude oil prices of US\$86/bbl in 2008 and US\$79/bbl in 2009. We have a normalised long-term Brent oil price assumption of US\$73/bbl. Any deviation from the above forecasts could change our investment conclusions.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.



# UBS Investment Research

## Asia Real Estate - Outlook 2009

Asia

Real Estate

Sector Comment

### After a painful 2008, volatility to reduce

#### ■ Summary

With Asia real estate down 65% in the past 13 months, in line with the Asian crisis a decade ago, we believe price stability and positive returns are likely in 2009.

#### ■ What are the likely key themes for 2009?

1) Real estate equities to bottom in H109; 2) GDP to trough in mid-2009 at the earliest; 3) physical real estate to remain in a cyclical downturn until H209; 4) consensus EPS to be cut further; 5) large-cap blue chip companies to increase their dominance; and 6) refinancing.

#### ■ What may surprise on the upside or downside?

Upside: 1) fiscal stimulus and rate cuts; 2) renewed optimism in physical real estate markets; and 3) resurgent liquidity into real estate equities. Downside: 1) the macro environment; 2) refinancing issues; and 3) physical asset price declines.

#### ■ Highlighted stocks

While fundamentals are weak, stocks have discounted an undue amount of pessimism, and are now some 60% below our downgraded NAV estimates. Our key picks are summarised below.

4 December 2008

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**Table 1: Asia Real Estate Most and Least Preferred**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
China Overseas Land Investment	0688.HK	10.1	Buy	10.58	15.20	13.1
SOHO China	0410.HK	1.7	Buy	2.53	7.60	3.3
Champion REIT	2778.HK	0.76	Buy	1.34	3.70	7.84
SHK Properties	0016.HK	19.5	Buy	58.8	84.20	11.2
The Link REIT	0823.HK	3.8	Buy	13.76	18.40	17.3
KLCC	KCCP.KL	0.7	Buy	2.70	3.50	11.5
CapitaLand	CATL.SI	4.6	Buy	2.49	3.70	5.4
CapitaMall Trust	CMLT.SI	1.7	Buy	1.58	2.69	12.0
Land & Houses	LH.BK	0.8	Buy	2.74	5.50	10.0
<b>Least Preferred</b>						
Cheung Kong	0001.HK	20.8	Neutral	69.70	76.20	10.5
Unitech	UNTE.BO	0.8	Neutral	25.75	55.0	3.2
CapitaCommercial Trust	CACT.SI	0.6	Sell	0.7	0.67	7.2

Data as at 2 December 2008. Source: UBS estimates

This report has been prepared by UBS Securities Pte. Ltd. (Reg. No. 198500648C)

**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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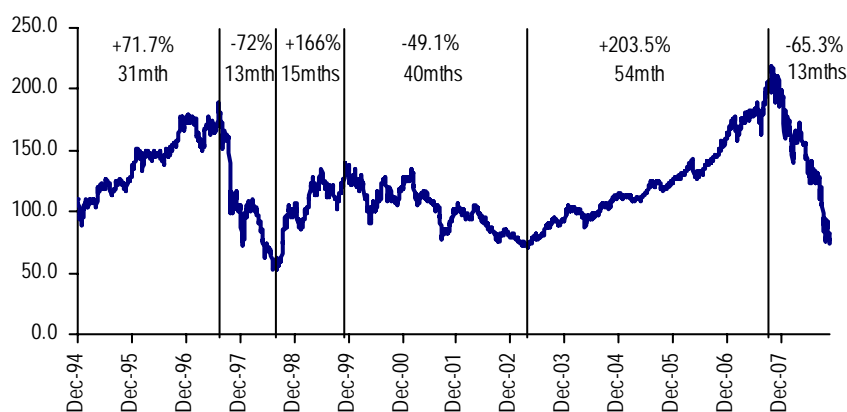
# Outlook 2009 - Summary

## What are the likely key themes?

**Listed real estate likely to bottom in 2009:** Listed real estate in the region has experienced a crash of the same severity and duration as in the Asia crisis a decade ago. The MSCI APxJ Real Estate index is now down 65% from its high, already 13 months into this bear market. Given current pricing and valuation levels, we believe it is likely real estate equity markets will trough in H109. However, the timing of a rebound remains an area of great market uncertainty.

**Chart 1: MSCI APxJ Real Estate index**

**Already 13 months into the bear market**

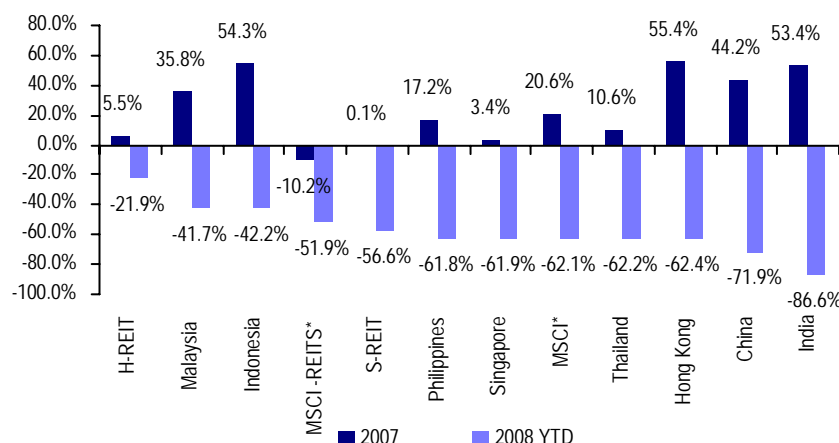


Source: MSCI, UBS estimates

The REITs have outperformed the developers YTD, with defensive positions likely to continue to outperform in the near term. However, on a 12-month view further value exists in the more cyclical developers (60% discounts versus 25-35% discounts for the H-REITs and S-REITs), in our view.

**Chart 2: Price performance 2007 and 2008 YTD**

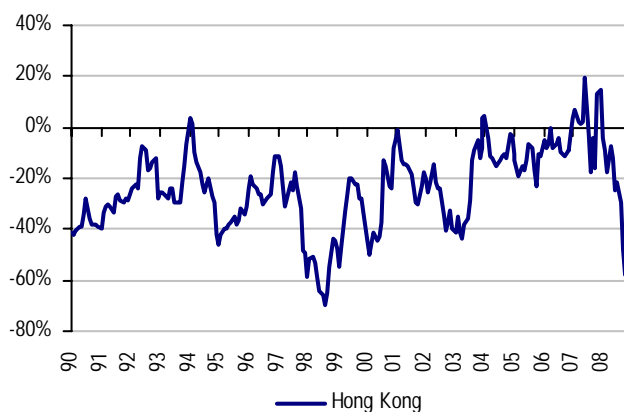
**REITs have outperformed developers; stay defensive for now**



Source: MSCI, UBS estimates. Note: \* = MSCI APxJ RE index. India and Indonesia data is partially reliant on a Datastream composite, due to the lack of complete MSCI data.

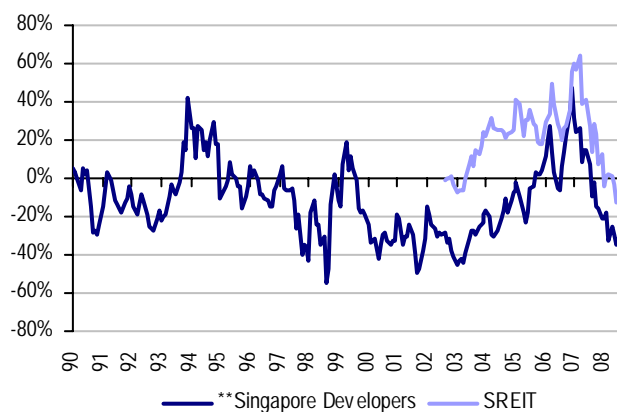
In our view, the collapse in share prices presents a value opportunity. However, the issue is how long markets will take to reflect fundamental value. As shown in the following charts, both Hong Kong and Singapore (markets with a long history) are now back to around a 60% discount to NAV, a trough level historically.

Chart 3: Hong Kong P/RNAV



Source: UBS estimates

Chart 4: Singapore P/RNAV



Source: UBS estimates

**The macro environment to have a very tough year:** As shown in the following table, our economics team expects most economies to trough around mid-2009, with the more open economies of Singapore and Hong Kong the hardest hit. However, we acknowledge incremental revisions continue to be negative, therefore this inflection point could be pushed out further.

**Singapore the weakest with -4.5% Q209 GDP**

Table 2: GDP forecasts, with trough quarter shaded

% YOY	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410
Hong Kong	7.3	4.2	2.7	1.7	-1.9	-1.6	0.2	2.1	2.1	2.6	3.0	3.4
China	10.6	10.1	9.0	8.7	7.1	6.8	7.8	8.0	8.1	7.6	8.2	8.2
India	8.8	7.9	6.9	5.6	5.6	4.8	5.9	6.3	7.0	7.5	7.5	7.3
Indonesia	6.3	6.4	5.2	5.3	2.7	1.4	2.0	4.1	4.6	4.4	4.5	5.4
Malaysia	7.1	6.3	4.6	3.9	1.1	-0.6	-0.5	-0.1	2.4	4.6	5.5	4.5
Singapore	6.9	2.1	-0.4	0.5	-2.6	-4.5	-2.4	2.1	3.6	5.1	4.9	3.7
Thailand	6.1	5.3	4.7	3.6	2.6	1.9	1.3	1.3	1.9	3.1	4.4	4.9
Philippines	4.7	4.6	4.8	4.5	4.0	1.9	1.0	0.6	1.8	2.8	4.0	4.7
US	2.5	2.1	0.8	0.0	-0.6	-1.3	-0.9	0.5	1.5	2.2	2.5	2.7
UK	2.3	1.5	0.3	-0.9	-1.7	-2.2	-1.9	-1.5	-0.8	-0.1	0.5	1.3
Asia (ex-Japan, ex-Aus & NZ)	8.3	7.8	7.2	6.7	5.9	5.6	6.1	6.6	6.9	7.2	7.3	7.3
World	4.1	3.3	2.9	2.5	1.8	0.9	0.9	1.1	2.2	2.8	3.0	3.3

Source: UBS economics team

In response to the slump in global economic growth and growing deflation fears central banks globally have moved to aggressively cut interest rates (Fed -100bp to 1%, BOE -200bp to 3%, Australia -200bp to 5.25%, ECB -100bp to 3.25%, BOJ -20bp to 0.3%, and China -190bp to 5.6%), at the same time as providing growing fiscal stimulus. There is also a growing focus on the quantitative easing tool employed in Japan after 1999, premised on very low interest rates and excess liquidity provided to the banks by central banks. Ultimately this type of policy should stop deflation, and return inflationary expectations to the markets, a positive for real estate.

**Rate cuts globally will help real estate**

**The duration and depth of the re-pricing of real estate:** We believe a stabilisation in asset prices is needed to provide both lenders and borrowers with confidence and balance sheet stability to start transacting again. The residential market provides a good barometer of property market conditions, and as the following table highlights almost all markets are now 0-20% down from their highs, with our analysts calling for further declines of 10-20% from today, before reaching trough valuations in H209. Our China team believes the trough in Chinese prices could potentially pull forward into Q209, from H209, if more forceful policy measures are introduced.

**Residential likely to fall for another 12 months**

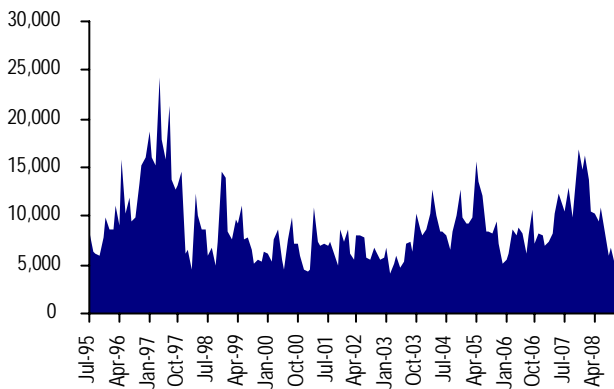
**Table 3: Regional residential price forecasts**

Cap values	Date of expected trough?	2007 % chg	Dec 2007 - Now % chg.	Peak - Now % chg.	Peak - Trough % chg.
Jakarta - Mid-up high rise	H209	5.2%	1.4%	0.0%	-3.1%
Singapore - Mass	H209	30.0%	0.0%	0.0%	-10.0%
Shanghai	H209	16.2%	-0.1%	-0.4%	-10.4%
Singapore - Mid	H209	50.1%	-7.1%	-7.1%	-19.0%
Bangkok (condo only)	H209	15.3%	-6.9%	-12.2%	-21.0%
Manila	H209	22.2%	0.0%	-8.3%	-25.0%
Bangkok House price Index	H209	-1.4%	4.7%	-1.1%	-29.1%
Singapore - Prime	H209	70.0%	-15.0%	-15.0%	-32.0%
Mumbai - North	H209	53.3%	-4.3%	-8.3%	-37.5%
Hong Kong (CCL/Property Price Index)	H209	25.1%	-10.5%	-19.0%	-37.8%
Mumbai - Central	H209	20.0%	-6.7%	-20.0%	-42.9%
Beijing	H209	39.5%	0.4%	-13.1%	-21.8%
Mumbai - South	H209	42.9%	0.0%	-21.9%	-53.1%

Source: UBS estimates

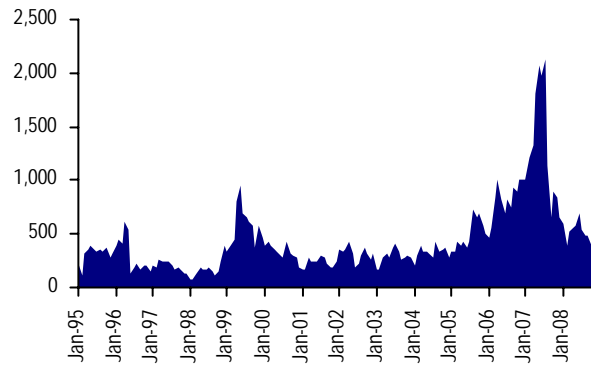
We need to see transactional volume return as a precursor to renewed price performance, but as shown in the following charts, this continues to trend down.

**Chart 5: Hong Kong residential volume (monthly)**



Source: Centaline

**Chart 6: Singapore residential volume (monthly)**

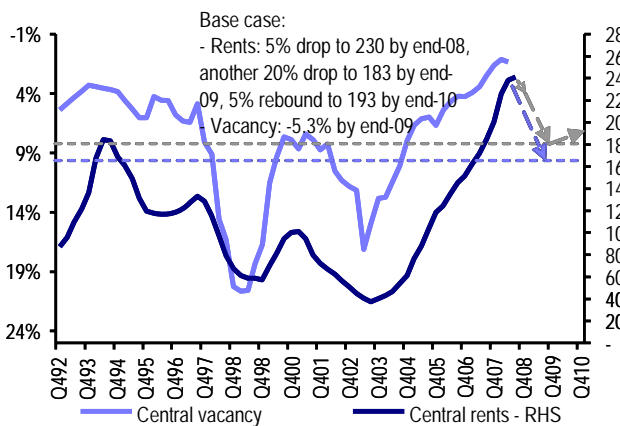


Source: URA

The rapid contraction in office demand continues to impact Hong Kong and Singapore landlords. In Hong Kong we expect rents in Central to drop 25% between September 2008 and end-2009, with prices dropping 30% during the same period. For 2010E, we expect both Central office rents and prices to rebound 5%. However, Singapore has a supply problem, with just less than 10m sq ft of new space due for completion between 2009E and 2013E. As a result we expect more severe falls in Singapore, with rents down over 50% between 2008 and 2012, and capital values to fall 55%.

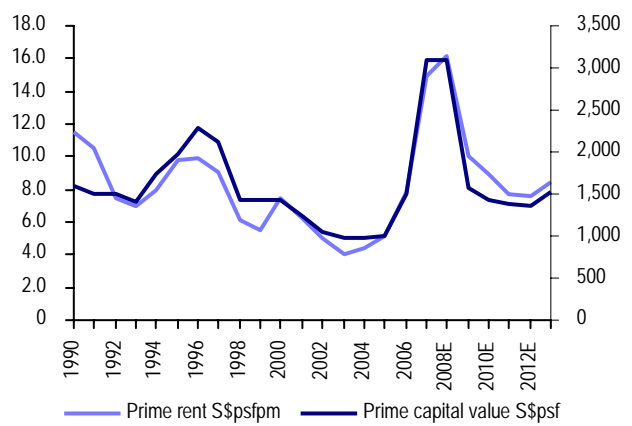
**Office demand shock; Singapore also has a supply problem**

**Chart 7: Hong Kong office rents**



Source: UBS estimates, JLL

**Chart 8: Singapore office rents**



Source: CBRE, UBS estimates

We believe retail will be the most resilient real estate asset class, but this is still likely to record weakness. Our UBS China economist expects China's real consumption growth to remain strong at 9.5% in 2008 and 9.2% in 2009. Hong Kong (more exposed to the financial crisis) on the other hand, faces stronger headwinds with our UBS economist forecasting real consumption growth to slow to 0.9%/2.5% in 2009/10E (4.9%/5.3% in nominal terms). In Singapore we expect rents to fall 10% in the Orchard Road area in 2009, while overall retail rents could fall 7%. However, for well-managed suburban malls, which dominate their trade area, we expect rents to be stable in 2009.

**Retail likely to remain the most resilient**

**Earnings revisions and balance sheet write downs:** We have progressively lowered earnings forecasts in 2008, with the pace accelerating in Q308. As shown in the following charts, the magnitude of our EPS revisions are still about half those of recent cyclical downturns, implying further downside is possible, especially for markets such as China.

**Table 4: UBS EPS growth estimates**

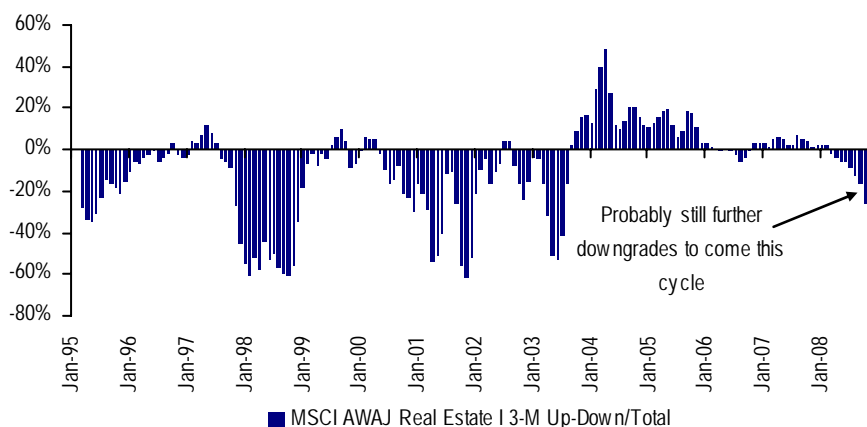
	Earnings growth 2008-09E (% pa)	Earnings growth 2009-10E (% pa)
Hong Kong - ex lodging property companies	14.0	18.0
Hong Kong - ex lodging REIT	6.7	-0.1
Hong Kong - lodging property companies	-15.2	12.5
Japan property companies	-11.1	3.7
JREIT	-8.4	2.1
Singapore property companies	-15.1	-29.7
SREIT	1.7	-3.0
China property companies	47.1	30.9
India property companies	-10.0	16.5
Indonesia property companies	-26.3	54.4
Malaysia property companies	-25.9	8.2
Philippines property companies	-2.7	7.9
Thailand property companies	-11.7	10.6

Source: UBS estimates

For China in particular, we expect street estimates to fall significantly in the January/February 2009 results season, as 2009 price and volume assumptions are lowered.

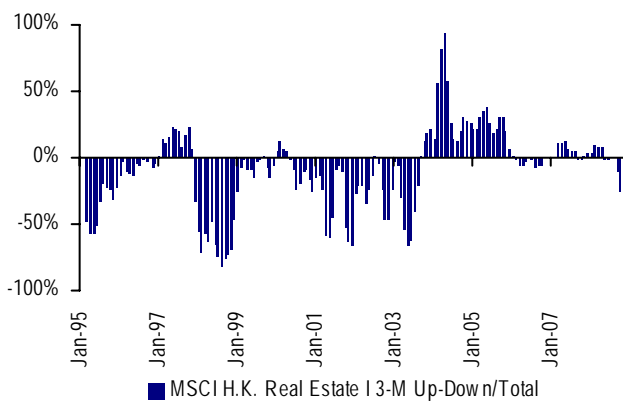
**Expect China downgrades in Q109**

**Chart 9: Asia (ex-Japan) Real Estate EPS revisions**



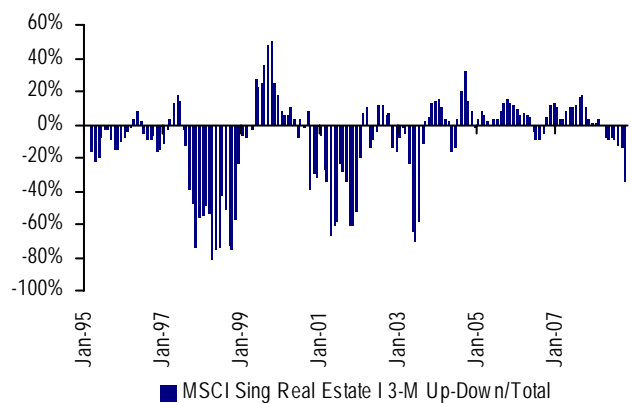
Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 10: Hong Kong Real Estate EPS revisions**



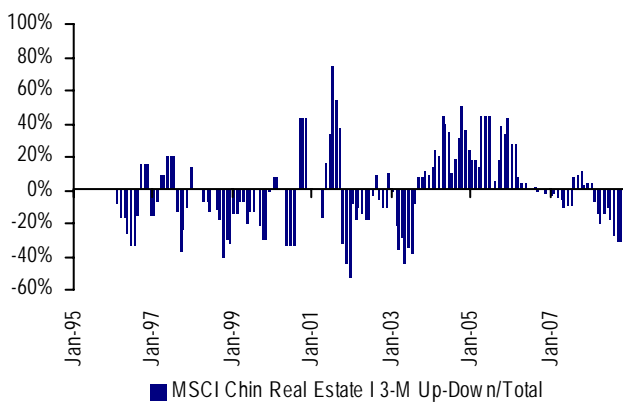
Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 11: Singapore Real Estate EPS revisions**



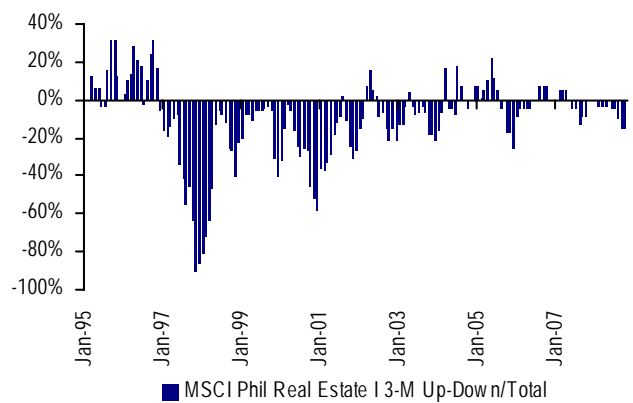
Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 12: China Real Estate EPS revisions**



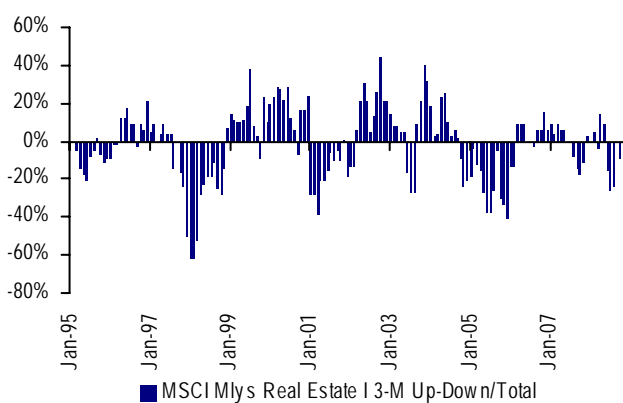
Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 13: Philippines Real Estate EPS revisions**



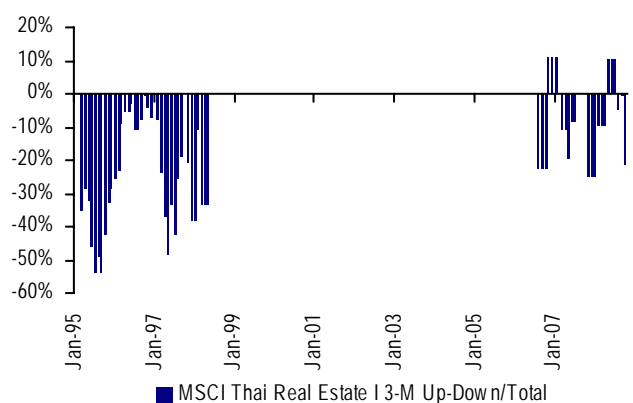
Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 14: Malaysia Real Estate EPS revisions**



Source: Thomson Financial DataStream, MSCI, I/B/E/S

**Chart 15: Thailand Real Estate EPS revisions**



Source: Thomson Financial DataStream, MSCI, I/B/E/S

Some developers are also likely to write down residential projects where the margins have eroded, as with Vanke. We believe this is a sensible strategy, given in most relevant cases the market is implicitly pricing in margin erosion, therefore write-downs can provide a clean slate that shares might react positively to.

**The strong get relatively stronger:** In this environment, strong companies are likely to increase their dominance, and smaller, less well-capitalised operators become marginalised or lose their independence.

We have identified a number of large-cap developers that we believe are watching the Chinese property market and waiting for a timely point to buy distressed assets. The majority of major Hong Kong developers and landlords, given their strong balance sheets (gearing about 20%), are likely to acquire distressed assets in China in 2009, in our view.

Timing could be in Q2-Q309, when we expect the China property market to bottom out and corporate distress to be at a maximum.

- **SHK Properties/Henderson Land/CK/Sino**—all have indicated a desire to buy into China projects when local developers exit the market. The preferred mode of acquisition will be at project level rather than M&A, which could bring in unwanted contingent liabilities.
- **Great Eagle**—in a net cash position and lacks a new growth engine outside of hotels. The company could easily buy land in China or mixed development projects comprising residential, retail, office and hotels—this is a strong supplement to its hotel expansion strategy.
- **Link REIT**—we expect further asset acquisitions after prices fall. Timing is likely to be after Q309, when the majority of ongoing/planned asset enhancement initiatives in its core portfolio are completed. They could potentially spend HK\$5.8bn on acquisitions (while keeping their gearing ratio below 35%). Likely targets will be middle to low-end retail.
- **Soho China**—Soho is the only developer in China with net cash that can be deployed in purchasing distressed assets. The company's net cash holding as at June 2008 was HK\$6bn.
- **CapitaLand**—its cash position is now in excess of S\$4bn (they have net debt, but have retained asset sale proceeds in cash), with a plan to reinvest in distressed assets from Q209. China, Singapore, Vietnam and Australia are likely to be the main target markets.
- **City Developments**—likely buyers of US and Europe hotels in H209.
- **Land & Houses** is looking to buy some of Lehman Brother's property fund's office building assets in Thailand. However, timing is still very uncertain as the bidding and price have not been concluded.

Against this a number of companies are more likely to be sellers of assets in 2009:

**Residential project write-downs likely**

**Several big players eyeing distressed China assets**



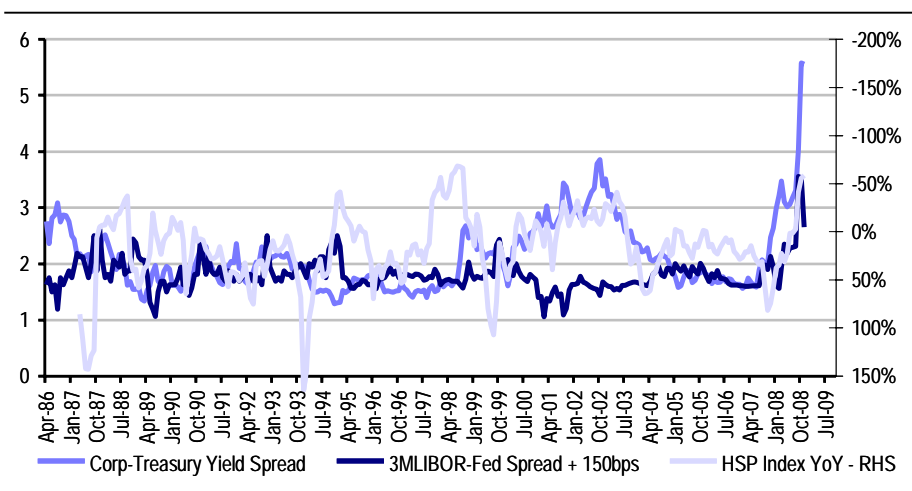
- Some of the China developers are burdened with high gearing and stretched cash flows, and therefore are likely to divest assets, in our view. Greentown (146% net gearing), R&F (144%), SZI (70%), Hopson (67%) and Agile (60%) are some of those with above average gearing. Two projects we do expect to be divested are (SOL, Rmb1.5bn, Chongqing Tiandi) and (Agile, Rmb1.2bn, Huizhou Bailuhu Project).
- In Singapore the two main potential sellers of assets are City Developments, who are willing to sell S\$2.5bn of their Singapore office and Keppel Land, who are potentially sellers of their \$100m Equity Plaza office asset.
- The Indian developers are likely to be net sellers. Given Unitech does not have many completed assets, we expect the company to look to sell partly completed assets—mainly office and hotels. We expect transactions to start from November 2008 stretching until March 2009. The likely value of sales could be US\$400m. We think DLF could sell part stakes in large, city centre projects (Delhi, Mumbai).
- A lot of small developers in China, Thailand, Malaysia and Vietnam are likely to halt project expansion given financing difficulties, and become net sellers. This could be the main source of assets for the larger Hong Kong and Singapore groups.

**The effect of global deleveraging, and access to credit by both corporates and consumers:** The fall in asset prices in the past 12-18 months has created a balance sheet solvency issue for many banks, corporates and consumers. However, Asia consumers were already running at a conservative household savings rate (ie 30% in Singapore), therefore we are unlikely to see a step change in household spending that is possible in some western markets. This deleveraging trend has resulted in substantially lower investor appetite, but mainly for new residential property investments, with investor demand unlikely to return until H209 at the earliest.

Balance sheet strength, and access to both reasonably priced debt and equity is likely to be a key differentiator in 2009. With limited refinancing occurring in Q408, the market is likely to start to see tangible evidence of success and failures in Q109. The primary source of debt is now bank debt, with CMBS expiries likely to be in focus.

For real estate equities to start to re-rate there needs to be a normalisation of credit conditions, in our view. This is likely to be slow in coming, as solvency risk needs to be addressed and balance sheets recapitalised. However, this is beginning to happen in the money markets, mainly because of substantial liquidity injections, government guarantees and stakes being taken in banks.

**Chart 16: Bond yield spreads not normalising yet despite some moderation in the money market yields**



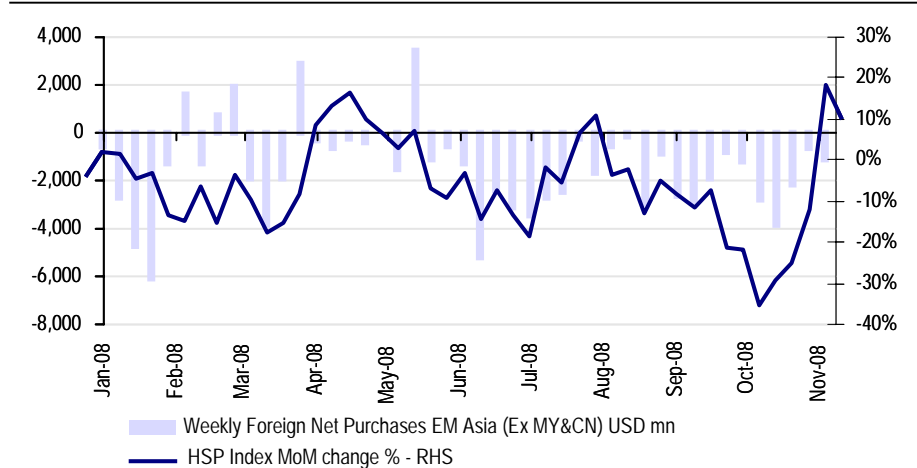
Source: Datastream

There continues to be debate as to where sustainable gearing levels will sit. The Asia REIT market is a good example, with participants comfortable with the likes of Link REIT at 23% gearing, but uncertain on SREITs such as AREIT and CapitaMall Trust (CMT) in mid 40%. This could lead to equity raisings in 2009, if the market demands sub-40% gearing. However, the banks remain willing to lend at 50% LTV.

Our China team also highlighted the tightness of cash flow as a key area of focus for China developers. Unless marked credit loosening (probably driven by government policy) happens, or there is a sharp rebound in market prices and activities, we expect slow sales to potentially continue for the next six months, which would strain most developers' cash flow, resulting in more newsflow on developers (listed or unlisted) resorting to distress fund raising exercises (eg, selling profitable projects at low prices to foreign developers or funds) or bankruptcies.

**Global allocations:** We believe Asia has been negatively impacted by a flight of capital back to more mature markets such as the US, together with the capital exodus from equity markets in general. As the following chart shows, the continued equity fund outflow from Asia has been a consistent theme through 2008, with no sign as yet of this flow turning positive.

Chart 17: Another US\$ 1bn outflow in the week ending 7 November



Source: Country stock exchange, Datastream

## What is our central thesis for 2009?

We find it hard to be overly bearish from current pricing levels, given the downturn is now of similar severity to the Asian crisis. Equally, it would be premature to be overly bullish. We therefore believe the key focus should be gauging when a recovery is likely to occur, with ongoing fears in the market that while we may be close to trough valuations (most developers are now at a 45-70% discount to our downgraded NAV estimates) we could remain at, or around, these levels for a protracted period.

Our current expectation is the macro economic backdrop and operating conditions will be weak for at least the first half of 2009. We expect the stock market to begin to price in a recovery roughly six months before the real economy recovers. Based on our macro forecasts, the real economy is likely to turn somewhere around H209 and early 2010. We recognise that in a deleveraging environment there is a risk that conditions remain subdued for longer.

We therefore have some early confidence Asia real estate equity markets have potential to deliver at least a respectable H209 performance, with the three to six-month performance susceptible to liquidity flows, continued consensus downgrades, poor fundamental newsflow, and continued pessimism and risk aversion.

We expect well capitalised, large-cap developers to increase their dominance, given their sound balance sheets, and with the banks likely to skew lending capacity to these larger 'preferred' banking customers.

## What may surprise on the upside or downside?

### Upside:

- **Fiscal stimulus:** This may prove to be of greater magnitude, and have greater effectiveness in a shorter time than currently envisaged. The flurry of Chinese policy pronouncements in the past month demonstrates the Chinese government's resolve to 'defend the 8% handle', and we see further policy support to benefit directly (for example fees and tax cuts, and lending relaxations) or indirectly (lower policy rates) the property market. However, as our China team cautioned, although the market is willing to give the government the benefit of the doubt, any slips in the execution of economic support plans could result the positive impact arriving to achieve our Q309 rebound forecast.
- **Residential transactional volumes** return to more healthy levels.
- More aggressive than expected **rate cuts**.
- **Deflationary expectations** revert to inflationary expectations, given low interest rates, fiscal stimulus, and quantitative easing. This should be a positive for asset markets.
- **Proactive asset sales** at respectable prices and balance sheet deleveraging, potentially removing the equity raising overhang that exists in some stocks.
- A number of companies are planning to **aggressively reinvest**, once they have confidence the cycle has troughed, as discussed earlier. This could be the trigger for the first round of NAV upgrades in the next cycle.
- **M&A:** There are too many small cap REITs in Singapore that are lacking market attention. This is likely to continue to diminish their access to efficiently price debt and equity, and may lead to consolidation. There are now 17 of the 21 SREITs with a freefloat market cap below US\$250m.
- M&A in Hong Kong is unlikely as most property companies are majority-owned by families. In contrast, with valuations at historic lows stake increases and privatisation may be a more likely outcome for most companies in the sector. For REITs, Champion REIT is a possible privatisation candidate. With good assets (Citibank Plaza and Langham place) significantly undervalued, Great Eagle (owns 49% of Champion) need only spend HK\$4.7bn (at a 40% premium to yesterday's unit price) to purchase the outstanding freefloat. Funding should not be an issue as Great Eagle has cash on hand of HK\$4.2bn (its gearing ratio is only 6%).
- Most China developers are now trading at less than 0.3x P/BV, which makes for attractive privatisation opportunities if majority owners have the cash. A push back on taking action is that this may limit the ability of the company to raise financing should the market recover swiftly in the next year.
- **Property tax cuts:** These occurred in Singapore in 1998 and 2001, when 25-55% property tax rebates were given. Our Thai team also believes this is possible, with an extension of the government property tax programme estimated to enhance developers' margins 4%.

#### Downside:

##### ■ **Refinancing problems.**

- **Clearing price discovery.** We continue to see limited transactional evidence in most asset classes, leading to a continued disconnect between implied prices from the listed market and the book values of physical holdings. As a result, there remains uncertainty as to the 'true' market value of assets in this environment. Refinancing issues are likely to trigger sales in H109.
- Companies become forced to **raise equity**, given increasingly stretched balance sheets if asset values continue to decline. Chinese developers and SREITs (ie CCT, other office REITs) are most likely to raise equity.
- Fiscal stimulus fails to stem the rapid decline in GDP, leading to yet more **negative GDP revisions**.
- Deleveraging fund flows and **continued redemptions**.
- Excessive **currency volatility** and weakness, such as in the Rupiah and Rupee recently. This may continue to temper the market's enthusiasm for emerging market exposures, over larger cap more mature market exposures.

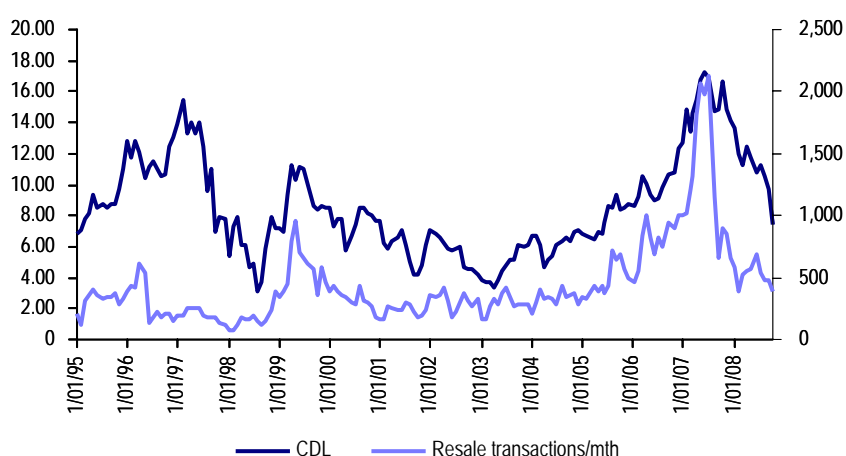
#### What are the likely key catalysts?

**Fiscal and policy stimulus:** China (already announced), Singapore (January 2009 budget), Malaysia (Q109), India (next couple of months, more focused on guarantees for projects than outright spending), Hong Kong (HK\$100bn of infrastructure spend recently announced, and potential policy support from China, such as enlarging the individual travel scheme, supporting Hong Kong SME's in China, and accelerating infrastructure projects such as the Hong Kong-Zhuhai-Macau bridge). Timing: Q408-2010.

**Light at the end of the tunnel:** The major catalyst is likely to be optimism. This is impossible to forecast, but is likely to stem from stronger-than-expected job creation (or retention), evidence of successful fiscal stimulus, aggressive rate cuts, and expectations that the world can return to trend growth. Timing: Uncertain.

**Residential volumes:** Transactional volume has historically held quite a close correlation with developer stock price performance. The following chart draws out one such example, with City Developments plotted against Singapore resale transactions. There is no evidence yet of any volume improvement. Timing: late 2009/2010.

Chart 18: City Developments vs Singapore residential volumes



Source: Reuters, URA

**Earnings/NAV momentum:** For a sustainable recovery, we need to see an environment in which the market expects the next EPS/NAV revision to be positive. The likelihood is we remain in a downgrade cycle for the next three to six months in the majority of markets. Timing: H209.

**Credit markets & Refinancing success (or lack of):** As discussed in an earlier section, normalisation of credit conditions and further rate cuts are likely to be key positive triggers. Timing: Q109 onwards.

## Key stock ideas

In this environment we continue to recommend investors remain defensive, and stick to large-cap companies, ideally with high stable free cash flow with high interest cover. Given continued risk aversion we expect liquidity to return to the larger markets first (Hong Kong, China, and Singapore), with emerging markets such as Indonesia, India, the Philippines and Thailand likely to lag behind the recovery.

As such we continue to focus on lower beta names for H109, and look to add higher beta names progressively as hope emerges and the end of the global downturn comes into sight.

In our global real estate strategy, relative to the global real estate universe, we overweight H-REITs, S-REITs and Hong Kong investors, and market weight exposure China, Hong Kong and Singapore developers.

# Asia Real Estate Most & Least Preferred

In this section, we present commentary on stocks in our Asia Real Estate Most & Least Preferred stock list.

## Asia Real Estate Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
COLI	Buy	15.20	Leading national player.
SOHO China	Buy	7.60	A unique boutique commercial property developer with a focus on the CBD area in Beijing.
Champion REIT	Buy	3.70	One of the most undervalued units in the Hong Kong Property sector.
SHK Properties	Buy	84.20	Top developer in Hong Kong with strong track record.
Link REIT	Buy	18.40	23% gearing; defensive retail assets; large cap quality.
KLCC	Buy	3.50	2.8m sq ft of commercial retail and office space in the 40 hectare KLCC development in the heart of Kuala Lumpur.
CapitaLand	Buy	3.70	S\$4bn of cash to spend on distressed assets.
CMT	Buy (CBE)	2.69	Most defensive fundamentally of the large cap S-REITs; 43% gearing is above comfort levels.
Land & Houses	Buy	5.50	Land and House would benefit from the current consolidation in the Thai housing development market.
<b>Least Preferred</b>			
Cheung Kong	Neutral	76.20	Most expensive stock in the Hong Kong property sector
Unitech	Neutral (CBE)	55.00	A collapse in demand for land/other properties where construction is yet to begin, and in residential pre-sales means asset sales are the only option.
CCT	Sell (CBE)	0.63	Gearing could rise to 67% if office markets fall as expected; likely to raise equity

Source: UBS estimates. Data as at 28 November 2008.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

## Most Preferred China Overseas Land Investment (COLI)

**Investment case:** A national player with a geographically diverse portfolio, COLI demonstrated its strength when markets in tier one cities were weak. It is a trusted brand in China for quality and good locations. With the longest track record among H-share developers, its completed project and management experience indicates the execution power of the company. COLI has reiterated its FY08/FY09 GFA sales target of 2.7m/4.0m sq m and its FY08 revenue target of HK\$27bn, which has been 84% achieved. It has demonstrated strong selling ability even in bad times such as 2008. From January to October 2008, it accumulated GFA pre-sold reached 2.2m sq m (25% YoY) with presale proceeds Rmb22.8bn (34% YoY), average January to October 2008 ASP up 7% YoY to Rmb10,308/sq m (January to October 2007: Rmb9,606/sqm). We believe the company has a high chance of achieving its target for the year. A further decline in sentiment in the Chinese property sector could result in diminished sales and profits.

**Valuation:** Our FY09E NAV is HK\$9.30 and 12.6x FY09E PE. Our three-stage growth model implied price target is HK\$15.20, which is comprised of development property at 20.7x/17.9x target PE and investment property at NAV.

**Sector:** China Real Estate

**Rating:** Buy

**PT:** HK\$15.20

**Analyst:** Kitty Cheung

**2009 catalysts:** As the largest H-share developer, COLI is well positioned in the consolidating cycle. Project launches and sales in diversified cities will still be the main catalyst.

## SOHO

**Investment case:** A unique boutique commercial property developer with a focus on the CBD area in Beijing. Its strong brand recognition, design and marketing expertise, has helped SOHO sell projects quickly and at premium pricing. With a very good pre-sales performance in 2008, it will most likely carry forward unbooked sales for the next one to two years, providing a secure sales lock in for growth next year.

**Valuation:** Our FY09E NAV is HK\$6.40 and 8.1x FY09E PE. Our price target of HK\$7.60 is based on a three-stage growth model.

**2009 catalysts:** Net cash position should give SOHO more opportunities as a consolidator to acquire more cheap and quality landbank in 2009.

## Champion REIT

**Investment case:** We believe Champion REIT is one of the most undervalued units in the Hong Kong Property sector, trading at a 76% discount to our DDM-derived NAV. Champion REIT has the some of the best assets among Hong Kong REITs and it is mitigating its over-reliance on financial tenants through the relatively strong performance from Langham Place retail. Langham Place reported a 20-30% YoY growth in retail sales in recent months despite the global slowdown. Champion REIT has no near-term refinancing risk and the risk of Champion REIT breaching the REIT and debt covenant is minimal, in our view.

**Valuation:** Champion REIT could provide a 15-17% 2009-11E dividend yield and is trading at a 76% discount to our DDM-derived NAV, which is the highest in the sector. The discount is even larger than Hong Kong landlords (64%) and developers (47%), which we believe is not justified given the more stable income/cash flow and higher dividend payout. Our price target of HK\$3.70 is based on a 2009E target yield of 7.0%.

**2009 catalysts:** We expect sentiment to remain weak until we see some form of stability in the finance industry. Further rate cuts and normalisation of bond yield are potential positive catalysts.

## Link REIT

**Investment case:** Link REIT is a relatively safe and defensive Hong Kong REIT. Link has been progressively increasing its reversionary rent magnitude in each of the past four/five results seasons from 10% (over three years) to 15%, to 20%, to 25%, and at the latest results to 30%, showing the asset enhancement drive is still gathering rent rise improvement. Management recently indicated it expects this momentum to be maintained for the rest of the year, despite the economic turmoil elsewhere. We view Link REIT is the safest Hong Kong REIT because it has no refinancing risk and is the least likely to breach the REIT and debt covenant, in our view. Its gearing ratio is only 23% (lowest among peers) and its FY09E interest coverage is 4.7x (highest among peers).

**Sector:** China Real Estate

**Rating:** Buy

**PT:** HK\$7.60

**Analyst:** Kitty Cheung

**Sector:** Hong Kong-Real Estate

**Rating:** Buy

**PT:** HK\$3.70

**Analyst:** CJ Lee

**Sector:** Hong Kong-Real Estate

**Rating:** Buy

**PT:** HK\$18.40

**Analyst:** Eric Wong



**Valuation:** Link REIT could provide 2009/10E dividend yield of 6% and is trading at a 15% discount to our DDM-derived NAV. Our price target of HK\$18.40 is based on a 2009E target yield of 4.3%.

**2009 catalysts:** Further rate cuts and normalisation of bond yields could be positive for Link REIT.

## SHK Properties

**Investment case:** Sun Hung Kai Properties (SHKP) is the top developer in Hong Kong. Its strong track record in sustainable sales, with one of the biggest landbanks, quality management and product has consistently resulted in premium pricing and buyer loyalty. It is now the largest owner of premier offices (IFC and ICC) and the second largest for retail facilities (after Link REIT) in Hong Kong, with new investment property completions (in Hong Kong and China) in FY09-10E at 6.3m sf (or HK\$37bn in value), adding to its already substantial 28.6m sf portfolio. The China expansion ramp up planned for next year should enable SHKP's to deploy its strong balance sheet (gearing at 15%) to buy distressed assets at a low in the market.

**Valuation:** We derive our price target of HK\$84.20, on a 25% discount to end-2010E NAV of HK\$112.30. SHKP is trading at a 51% discount to end-2010E NAV and 45% to its trough-2009E NAV of HK\$104.1. The company is trading at multi-decade low point.

**2009 catalysts:** Significant project launches such as The Cullinan (HK\$13bn revenue if all sold) after Chinese New Year, material project purchases or M&A in China should help the company take advantage of good locations in a bad market. Also, material land premium fixing in Hong Kong, will likely expel market doubts over the company's continued development model. Any resolution in the dispute between the Kwok brothers should return investor confidence on the company's premium status.

## KLCC Property

**Investment case:** KLCC Property is 32%-owned by Petronas and 19%-owned by KLCC holdings. Its ultimate shareholder is the Ministry of Finance. It owns an effective (after deducting minority interest) 2.8m sq ft of commercial retail and office space in the 40 hectare KLCC development in the heart of Kuala Lumpur. 58% of the company's EBITDA comes from office space, 23% from retail, 11% from hotel, and the balance from property/carpark management. KLCC Property also owns two pieces of land within the KLCC development that it plans to develop in the future.

**Valuation:** Our price target of RM3.50 reflects a 25% discount to our FY09E RNAV (derived using an asset cap rate of 6.4%). At our price target, we estimate KLCC Property's rental assets would be valued a cap rate of 8.5%. Our price target has yet to incorporate the potential income from the company's Lot C and D projects.

**2009 catalysts:** With nearly full occupancy for its retail and office rental space, we expect KLCC Property to post flat ROCE in 2009-11. Our forecasts assume minimal earnings growth from the company's hotel operations.

**Sector:** Hong Kong Real Estate

**Rating:** Buy

**PT:** HK\$84.20

**Analyst:** Eric Wong

**Sector:** Malaysia Real Estate

**Rating:** Buy

**PT:** RM3.50

**Analyst:** Colbert Nocom

## CapitaLand

**Investment case:** CapitaLand (CL) has been cautious on asset markets for over 12 months. As a result, there have been proactive asset sales (that is, Singapore office, China mixed use), and it has maintained a cash balance of over S\$4bn. CL is therefore likely to be one of the few companies able to look beyond refinancing risk, and focus on buying distressed assets from Q209 onwards (it is waiting for the cycle to trough). This could result in CL being one of the first real estate stocks to record NAV and EPS upgrades, after the current downgrade cycle. The likelihood is the company will remain relatively inactive for the next three to six months; however, on a 12-month outlook, the market is likely to narrow the discount to NAV to some degree, with further material downside unlikely, in our view.

**Valuation:** Our end-2009 RNAV estimate is S\$6.40. Our 12-month DCF-based price target of S\$3.70 is roughly in line with stated book value, and at a 40% discount to our RNAV estimate.

**2009 catalysts:** The reinvestment of surplus cash is likely to be the main positive catalyst. Developers in general are likely to start to re-rate once transaction volume returns to the residential market, and markets can see an improvement in GDP growth on the horizon.

## CapitaMall Trust (CMT)

**Investment case:** We believe large-cap, retail landlords are thematically in the most defensive positions among the real estate universe. As the largest SREIT, CMT is well positioned to continue to benefit from defensive buying. The risk is the gearing level at 43.3%, which while not excessive or unsustainable, is above many investors comfort level.

**Valuation:** Our price target of S\$2.69 is DCF-derived, using explicit DPU for 2008-12, 5-10 year growth rate of 2.0%, terminal growth of 2.5%, beta of 1.0, a risk-free rate of 3.4%, and market risk premium of 5%. CMT is trading at a 35% discount to stated book value.

**2009 catalysts:** The key factors fundamentally are: 1) whether asset values stay sufficiently resilient to maintain gearing below 50% (current 43.3%), in order to reduce the risk of a dilutive equity raising; and 2) how resilient rents are given the Singapore recession. The assets appear fairly rented, relative to sales productivity, therefore this hinges on sales performance. A property tax rebate may be offered by the Singapore government, giving some flexibility to provide abatements to retailers.

## Land & Houses

**Investment case:** We believe Land & Houses (LH) will benefit from the current consolidation in the Thai housing development market. In our view, LH's high operating leverage led by its large scale, strong brand name and solid financial position, could lead to a strong earnings recovery when demand recovers in 2010. We highlight the favourable supply conditions in the low-rise market (LH's key focus) as new housing construction permits declined 9% in 2007 and 10% in H108.

**Sector:** Singapore Real Estate

**Rating:** Buy

**PT:** S\$3.70

**Analyst:** Alastair Gillespie, CFA

**Sector:** Singapore Real Estate

**Rating:** Buy

**PT:** S\$2.69

**Analyst:** Alastair Gillespie

**Sector:** Thai Real Estate

**Rating:** Buy

**PT:** B\$5.50

**Analyst:** Piyanan Panichkul

**Valuation:** We value LH using a sum-of-the-parts methodology. Our Bt5.50 price target assumes Bt3.90 for the core housing development business (DCF-based, with 9% WACC, and 4% terminal growth), Bt0.70 for rental assets, and Bt0.90 investment value.

**2009 catalysts:** We think LH could benefit from positive catalysts including: 1) a sharp decline in construction costs, which could enhance its margin in H209; and 2) a sharp rate cut, which could lead to mortgage rate reduction; and 3) possible purchases of distressed office buildings.

## Least Preferred Cheung Kong

**Investment case:** Cheung Kong is one of the most expensive stocks in the Hong Kong Property sector, trading at just a 29% discount to end-2010E NAV, versus the sector average of 46%, reflecting good sales progress in H108. It is one of the broadly-owned developers, after the capitulation in other big peers (especially SHK Properties, Henderson Land and New World Development). Moreover, Cheung Kong's income would be less defensive if the downturn persists as its recurrent income is lower than peers (investment property only 15% of GAV versus SHK Properties: 52%, Henderson 52% and Sino Land 47%).

**Valuation:** Cheung Kong is trading at 29% discount to end-2010E NAV of HK\$101.70 and 15% to trough-2009E NAV of HK\$83.90. We derive our price target of HK\$76.20 from a 25% discount to end-2010E NAV of HK\$101.70.

**2009 catalysts:** Negative catalysts will be the delay in completion of The Capitol, which may affect FY08E earnings. Positive catalysts might be the turnaround of Hutchison's 3G units and interest rate cuts, could be positive for property stocks.

## Unitech

**Investment case:** Unitech, 62%-owned by the Chandra family, is one of India's largest and most diversified real estate companies. It is a leading developer of residential apartments, commercial/IT parks, and retail malls. It has a small presence in power transmission, prefabricated construction, paving blocks, and ready mix concrete businesses.

**Valuation:** Our price target of Rs55.00 implies a 60% discount to NAV. We recently lowered our estimate for cash value (applying market value for all land bank and not just the key assets) from Rs140 to Rs97/share to capture lower land prices, and exclude large townships. We also lowered our NAV estimate from Rs270 to Rs160 to reflect longer completion times and higher debt.

**2009 catalysts:** We believe Unitech will have to sell partially completed assets to match cash outflow in H2 FY09E even after receiving Rs3bn from the sale of its stake in Unitech Wireless. A collapse in demand for land/other properties where construction is yet to begin, and in residential pre-sales means asset sales are the only option.

**Sector:** Hong Kong Real Estate

**Rating:** Neutral

**PT:** HK76.20

**Analyst:** Eric Wong

**Sector:** India Real Estate

**Rating:** Neutral

**PT:** Rs55.00

**Analyst:** Suhas Harinarayanan

## CapitaCommercial Trust (CCT)

**Investment case:** CCT has S\$2.5bn of debt, and assets valued at S\$6.74bn. We believe office rents and capital values might fall 50% in 2009 from S\$3,100p sf to S\$1560p sf. This could mean the gearing for CCT's portfolio could rise from 38% to 67%.

**Valuation:** We derive our price target of S\$0.63, using explicit DPU for 2008-2012, a five to ten-year growth rate of 1.5%, terminal growth of 2.5%, a beta of 1.15, a risk-free rate of 3.4%, and market risk premium of 5%. Our cash flow forecasts assume a dilutive equity raising.

**2009 catalysts:** We expect CCT to successfully refinance its S\$580m CMBS due in March 2009, within the next two months. We continue to expect CCT to raise S\$1bn of equity by 2010.

**Sector:** Singapore Real Estate

**Rating:** Sell (CBE)

**PT:** S\$0.63

**Analyst:** Regina Lim

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### ■ **Statement of Risk**

Risks for the sector include interest rates, construction costs, market rentals, refinancing risk, and cross border regulatory risks.

### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**
**Asia Steel - Outlook 2009**

Asia

Steel

Sector Strategy

**Long-term value; few near-term catalysts [REVISED]**
**■ Summary**

We have revised our Most and Least Preferred List since first publishing it on 4 December 2008, as UBS has ceased coverage of Ann Joo Resources and Kinsteel. We expect steel stocks to be weak near term as we forecast steel prices and demand to fall. However, we remain positive long term as we believe demand will recover in Asia from mid-2009, driven by China and its stimulus packages. Although we expect profits to decline in Q408-Q109, a fall in raw material prices in the Japan FY09 (JFY09) will support profits from H209, in our view.

**■ What are the likely key themes for 2009?**

1) A recovery in steel demand, especially from China given its stimulus packages; 2) consolidation, as weak market conditions provide opportunities to restructure the fragmented industry; and 3) the ability of mills to restrain supply.

**■ What may surprise on the upside or downside?**

Upside surprises could include: 1) an earlier-than-expected recovery in China demand, helped by government stimulus measures; and 2) a sharp drop in steel production as mills actively contain supply, thereby leading to inventory drawdown. Negative surprises could include: 1) a prolonged global economic recession; and 2) further deterioration of the credit market. Key indicators to watch will be the China spot steel price, input price (including scrap) and production figures.

**■ Highlighted stocks**

Although we believe the sector shows value given the potential near-term positive catalysts, we remain cautious until signs emerge of a recovery in Chinese demand, which we expect in mid-2009, and potential consensus EPS cuts occur. We favour defensive, unleveraged stocks such as POSCO, China Steel, and Steel Authority of India (SAIL).

**5 December 2008**
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**Table 1: Asia Steel Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
POSCO	005490.KS	18.9	Buy	318,000	450,000	7.8
China Steel	2002.TW	7.3	Buy	22.00	36.00	9.3
Steel Authority of India	SAIL.BO	5.3	Buy	63.70	125.00	3.7
Wuhan Steel	600005.SS	6.8	Neutral	6.01	4.30	9.0
<b>Least Preferred</b>						
Hyundai Steel	004020.KS	1.8	Neutral	30,400	40,000	9.4
Maanshan Steel - A	600808.SS	3.5	Sell	3.57	2.26	11.3

Data as at 2 December 2009. Source: UBS estimates

**This report has been prepared by UBS Securities Pte. Ltd., Seoul Branch and UBS Securities Co. Limited**  
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## Outlook 2009 - Summary

### What are the likely key themes?

We believe the key themes for 2009 include: 1) a recovery of steel demand, especially that of China, given its stimulus packages; 2) consolidation, as weak market conditions provide good opportunities to restructure the fragmented industry; and 3) the ability for mills to contain supply.

We believe the strength of recovery in Chinese steel demand on the government's policy decisions to be key, given the importance of China to Asian (67% of demand) and global steel industry (33% of demand). China already announced a Rmb4trn bail-out plan in November 2008, centered around public housing and infrastructure construction. Wang Tao, UBS China Economist, expects more measures to be announced as China politically requires economic growth. She expects additional credit and land policy measures to encourage more private sector investments in the mass residential property market. We believe such measures will help stabilise and increase demand from H209, providing support for the steel sector.

We believe consolidation, especially in China, to be another key theme in 2009. Steel is a fragmented industry, with the top five mills globally producing only 18% of world's steel production. In China, the top ten mills comprise 38% of production, as at October 2008. We believe the weak steel market, with many Chinese mills selling below cash cost, provides a unique opportunity to restructure the fragmented industry.

We expect 2009 to be a test for the supply discipline of large mills, which, historically, has not been timed optimally. We believe the current fall in production is a reflection of lack of demand rather than proactive supply cuts to support steel prices. However, we continue to monitor production as lower supply is required to match demand and lower inventory.

### What is our central thesis for 2009?

We believe there are few positive catalysts in the near term, as witnessed by falling steel spot prices and demand. We believe steel prices could remain below production costs given low transaction levels and a lack of confidence.

We estimate the cash cost for major regional mills to be around US\$540-680/t with large Chinese mills at US\$590/t and small mills at around US\$450/t for JFY2008. But we believe the cash cost will fall further in JFY2009 as we expect raw material prices to fall. Below is a sensitivity table showing our estimates of the change in production cost per tonne of steel depending on changes in raw material prices.

**Table 2: Change in HRC production cost per tonne depending on input costs**

		Iron ore price									
		US\$/t	2009E					2008			
			60	70	80	90	100	110	120	130	140
Coking coal price	2009E	140	-201	-186	-171	-156	-141	-126	-111	-96	-81
		160	-189	-174	-159	-144	-129	-114	-99	-84	-69
		180	-177	-162	-147	-132	-117	-102	-87	-72	-57
		200	-165	-150	-135	-120	-105	-90	-75	-60	-45
		220	-153	-138	-123	-108	-93	-78	-63	-48	-33
	2008	240	-141	-126	-111	-96	-81	-66	-51	-36	-21
		260	-129	-114	-99	-84	-69	-54	-39	-24	-9
		280	-117	-102	-87	-72	-57	-42	-27	-12	3
		300	-105	-90	-75	-60	-45	-30	-15	0	15
		320	-93	-78	-63	-48	-33	-18	-3	12	27

Source: UBS estimates

However, we believe this is not a sustainable level and expect government stimulus packages—including expansionary fiscal and global monetary policies—to help revive the steel demand, although with a lag. We anticipate steel prices in Asia to bottom in H209, helped by recovery in Chinese demand.

**Table 3: UBS HRC price forecasts**

(US\$/t)	2007	Q108	Q208	Q308	Q408E	2008E	YoY	Q109E	Q209E	Q309E	Q409E	2009E	YoY	2010E	YoY
China	485	618	709	727	525	645	33%	486	450	467	485	472	-27%	514	9%
Korea	560	557	657	716	716	662	18%	716	663	597	597	643	-3%	581	-10%
Taiwan	530	613	766	874	737	748	41%	706	598	582	613	625	-16%	613	-2%
US	540	702	1,146	1,117	827	948	76%	661	661	606	606	634	-33%	620	-2%
Europe	646	770	1,032	1,068	744	904	40%	616	515	515	544	547	-39%	588	7%

Source: UBS estimates

## What may surprise on the upside or downside?

Upside surprises could be: 1) an earlier-than-expected recovery in Chinese demand helped by government stimulus measures; 2) a sharp drop in steel production as mills actively contain supply, thereby leading to inventory drawdown. Possible negative surprises include a longer-than-expected economic recession and further deterioration of the credit market. We believe a delayed recovery in Chinese demand could pressure steel prices and stocks down further.

## What are the likely key catalysts?

The key catalysts to focus on, in our view, are: 1) additional economic stimulus packages in China; 2) a recovery in mainland China spot steel prices; 3) a rise in international scrap prices; and 4) an improvement in OECD leading indicators. Furthermore, we believe consensus earnings estimates to be too optimistic for 2009E as we expect earnings to fall meaningfully in Q408-Q109. We view potential earnings estimate revisions in H109 to provide a good buying opportunity.



## Key stock ideas

Although steel equities remain at attractive levels, we remain cautious ahead of a recovery of Chinese demand, which we expect from mid-2009 and potential consensus EPS downgrades. We favour defensive, unlevered stocks such as POSCO, China Steel (CSC), and Steel Authority of India (SAIL). However, we believe it too early to enter China as we expect further deterioration in sector fundamentals before there are improvements.

# Asia Steel Most & Least Preferred

In this section, we present commentary on stocks in our Asia Steel Most & Least Preferred stock list.

## Asia Steel Most & Least Preferred

Stock	Rating	Price target	Overview
<b>Most Preferred</b>			
<b>POSCO</b>	Buy	Won450,000	Steel pricing to remain resilient during the downturn based on its strategy to maintain stable pricing; Strong balance sheet
<b>China Steel</b>	Buy	NT\$36.0	Dividend yield near a historical high; One of the least leveraged companies in the universe
<b>Steel Authority of India</b>	Buy	Rs125	Likely to benefit from resurgence of infrastructure spending in India
<b>Wuhan Steel</b>	Neutral	Rmb4.30	Premium product mix with silicon steel will help it cushion margin pressure from declining steel price
<b>Least Preferred</b>			
<b>Hyundai Steel</b>	Neutral	Won40,000	One of the most leveraged firms in the region and operational risk at Dangjin
<b>Maanshan Steel - A</b>	Sell	Rmb2.26	Low gross profit margin of 10.9% in 9M08 suggests faster deteriorating margins ahead

Source: UBS estimates

We summarise our investment case into 2009, current valuation, and likely catalyst for each of the stocks in our Most & Least Preferred list:

### Most Preferred POSCO (005490.KS)

**Investment case:** POSCO is one of the world's most competitive and scalable mills with leading technology. It is one of our top picks in the Asia Steel universe due to (1) limited downside risk for steel pricing as prices are one of the lowest in the region. We expect POSCO's steel pricing to be resilient during the downturn based on its strategy to maintain stable prices irrespective of the cycle (increase less during upturn and cut less in downturn); (2) POSCO has historically reported healthy margins even during a downturn as evidenced in 2001, when spot steel prices fell below cash cost but POSCO posted an EBITDA margin of 24%; and 3) its strong balance sheet with net debt/equity position of -1% in 2009E.

**Valuation:** POSCO stock has dropped 45% YTD, weighed down by weak steel prices and concerns over bidding for Daewoo Shipbuilding & Marine Engineering (DSME). The stock currently trades at an attractive valuation, in our view, at 7.8x 2009E PE and 0.9x 09E P/BV. Our price target of Won450,000 is based on 1.1x 2009E P/BV (11.9% 3-year forward ROE, 11.1% COE and 3% perpetual growth).

**2009 catalysts:** We believe key positive catalysts for POSCO are 1) successful overseas expansion projects in India and Vietnam; and 2) an earlier-than-expected recovery of steel prices.

**Sector:** Korea Steel

**Rating:** Buy

**PT:** Won450,000

**Analyst:** Yongsuk Son

## China Steel (2002.TW)

**Investment case:** China Steel is a cost competitive, premium steelmaker enabling the company to post consistently high profits relative to peers regardless of the cycle. It is one of our top picks in the region because 1) its dividend yield near a historical high at 14.9%, which indicates stock has been oversold; 2) it is one of the least leveraged companies in the universe with 2009E net debt/equity at 6.4; and 3) a reduction in contract pricing, a lagging indicator to domestic spot price, which we believe is already priced in.

**Valuation:** China Steel's share price has dropped 49% YTD, weighed down by weak steel prices. The stock currently trades at an attractive valuation, in our view, at 9.3x 2009E PE and 1.1x 2009E P/BV. Our price target of NT\$36.00 is based on 1.8x 2009E P/BV (13.0% 3 year forward ROE, 8.6% COE and 3% perpetual growth).

**2009 catalysts:** We expect the key catalyst to be an earlier-than-expected recovery in steel prices.

## Steel Authority of India (SAIL.BO)

**Investment case:** SAIL is our top-pick in the Indian steel universe, because has the highest raw material integration and the lowest gearing. It will benefit from the resurgence of infrastructure spending in India due to its inward (domestic) nature on contracts. SAIL has the ability to expand capacity without significantly adding debt.

**Valuation:** Our price target of Rs125 is based on DCF using WACC of 13.2%, a medium-term growth rate of 12% and a long-term growth rate of 5%.

**2009 catalysts:** We believe the company should launch expansion projects as soon as possible. It has an elaborate method of awarding contracts, which is a time consuming process; once these are done, we think the market will build in the higher value-addition for future output.

## Wuhan Steel (600005.SS)

**Investment case:** Wuhan's gross margin of 19.6% in 9M08 indicates the company's premier product mix with silicon steel will likely help it cushion the margin pressure from declining steel price. We estimate its EBITDA/t at US\$162 in 2009, which would put it among the top quartile of Chinese mills. Besides, the company has neither the serious inventory problem that Baosteel has, nor the ill-timed new capacity addition that Angang has to deal with.

**Valuation:** We derive our price target from 50% domestic peer PE (5.6x 2009E) weighting and 50% regional peer EV/EBITDA (4.0x 2009E).

**2009 catalysts:** The catalyst for 2009 could come from the substantial investment in power generation and transmission infrastructure that leads to higher demand for its silicon steel.

**Sector:** Taiwan Steel

**Rating:** Buy

**PT:** NT\$36.00

**Analyst:** Yongsuk Son

**Sector:** India Steel

**Rating:** Buy

**PT:** Rs125

**Analyst:** Sunita Sachdev

**Sector:** China Steel

**Rating:** Neutral

**PT:** Rmb4.30

**Analyst:** Hubert Tang

## Least Preferred Hyundai Steel (004020.KS)

**Investment case:** Hyundai Steel is one of our least preferred stocks in the Korean steel universe because of 1) its high net/debt equity, rising from 70% as of September 2008 to 96% by 2009E, one of the highest in the region; 2) operational risk at Dangjin. We do not expect Hyundai Steel to post profits from Dangjin in the short-term as it has not operated a blast furnace before; and 3) it is most exposed to construction and automobile industry, which are experiencing a slowdown.

**Valuation:** Hyundai Steel stock has dropped 62% YTD, weighed down by weak steel prices. The stock currently trades at an attractive valuation, in our view, at 9.4x 2009E PE and 0.5x 2009E P/BV. Our price target of Won40,000 is based on 0.7x 2009E P/BV (9.3% 3 year forward ROE, 12.6% COE and 3% perpetual growth).

**2009 catalyst:** We believe successful initial operation of Dangjin blast furnace could drive earnings.

## Maanshan Steel (600808.SS)

**Investment case:** Maanshan is one of our least preferred in the China steel sector, as its low 10.9% gross margin in 9M08 suggests a faster deteriorating margins ahead, as the overall steel price is set to drop sharply in 2009. We estimate its EBITDA/ton of US\$75 is only 46% of that of Wuhan Steel. In addition, we do not expect the government's investment in railway will translate to substantial earning upside for Maanshan, as the Ministry of Railways will always set the price ceiling for products it purchases.

**Valuation:** We derive our price target from a 50% domestic peer PE (8.2x 2009E) weighting and a 50% regional peer EV/EBITDA regression output (3.5x 2009E).

**2009 catalysts:** A positive catalyst could come from substantial investment in infrastructure that increased demand for long products, which consist of a high proportion in its product mix.

**Sector:** Korea Steel

**Rating:** Neutral

**PT:** Won40,000

**Analyst:** Yongsuk Son

**Sector:** China Steel

**Rating:** Sell

**PT:** Rmb2.26

**Analyst:** Hubert Tang

Table 4: Asia steel stock price performance

Code	Company name	4-Dec-08	Rating	Mkt Cap (US\$m)				Abs performance (%)				Rel performance (%)				Px low since 1-Jan-99	Off from High since Jan-99	Up from Low since Jan-99
				1mo	3mo	6mo	12mo	YTD	1mo	3mo	6mo	12mo	YTD	1-Jan-99	1-Jan-99			
<b>Asia ex Japan, China</b>																		
005490.KS	POSCO	326,000	Buy	19,234	1.2	-24.6	-44.3	-44.8	-44.3	9.9	5.2	1.4	6.1	6.9	765,000	52,100	-57.4%	525.7%
2002.TW	China Steel	21.00	Buy	6,918	-10.1	-40.0	-59.8	-50.2	-51.7	-0.8	-11.1	-17.5	1.5	-3.5	53.90	9.88	-61.0%	112.6%
004020.KS	Hyundai Steel	30,000	Neutral	1,732	4.8	-41.1	-64.1	-64.2	-62.0	3.3	-17.8	-34.6	-31.2	-28.4	95,300	2,015	-68.5%	1,388.8%
001230.KS	Dongkuk Steel Mill	22,500	Buy	1,094	6.6	-32.6	-54.1	-56.3	-52.7	15.7	-6.0	-16.4	-16.0	-10.8	63,900	1,375	-64.8%	153.64%
010520.KS	Hyundai Hysco	5,930		359	-14.8	-42.4	-52.2	-43.8	-41.0	-7.5	-19.7	-12.9	8.1	11.2	33,977	2,005	-82.5%	195.8%
SAIL.BO	SAIL	71	Buy	5,880	-11.8	-51.7	-54.1	-75.4	-75.2	-6.9	-24.2	-22.5	-47.5	-45.4	288	4	-75.4%	1,665.0%
TISC.BO	Tata Steel Ltd.	188	Neutral	2,764	0.7	-66.6	-77.2	-78.3	-79.9	6.2	-47.6	-61.6	-53.7	-55.9	991	45	-81.1%	318.8%
JSTL.BO	JSW Steel	219	Suspended	827	-27.1	-69.1	-79.8	-80.6	-83.4	-23.1	-51.5	-65.9	-58.5	-63.4	1,342	38	-83.6%	478.4%
STRL.BO	Sterlite Industries	257	Neutral (CBE)	3,672	8.1	-56.3	-69.9	-75.9	-75.2	14.0	-31.4	-49.3	-48.4	-45.4	1,105	3	-76.7%	816.09%
	<b>Weighted average</b>		<b>SUM</b>	<b>42,479</b>	<b>-5.8</b>	<b>-47.2</b>	<b>-61.7</b>	<b>-63.3</b>	<b>-62.7</b>	<b>1.2</b>	<b>-22.7</b>	<b>-31.0</b>	<b>-26.6</b>	<b>-26.1</b>				
<b>China</b>																		
600019.SS	Baosteel	5.42	Sell	13,791	18.1	-15.7	-54.1	-67.3	-68.9	1.3	-7.2	-23.7	-17.5	-18.3	21.29	3.67	-74.5%	47.7%
0347.HK	Angang Steel	6.46	Neutral (CBE)	6,180	42.3	-24.5	-65.7	-74.2	-69.7	45.2	11.3	-38.1	-43.9	-37.7	36.60	0.35	-82.3%	1,745.7%
0323.HK	Maanshan Iron & Steel	2.23	Neutral	1,944	48.7	-25.9	-58.5	-61.4	-56.9	51.8	9.3	-25.0	-16.0	-11.2	8.89	0.24	-74.9%	848.9%
600005.SS	Wuhan Steel	6.67	Neutral	7,596	46.9	-3.9	-53.6	-60.0	-66.1	26.1	5.8	-22.8	0.7	-11.0	22.86	1.83	-70.8%	263.8%
	<b>Weighted average</b>		<b>SUM</b>	<b>29,513</b>	<b>39.0</b>	<b>-17.5</b>	<b>-58.0</b>	<b>-65.7</b>	<b>-65.4</b>	<b>31.1</b>	<b>4.8</b>	<b>-27.4</b>	<b>-19.2</b>	<b>-19.6</b>				
<b>Japan</b>																		
5401.T	Nippon Steel	270	Neutral	19,795	-18.4	-41.4	-60.5	-57.8	-61.0	-6.0	-13.1	-28.5	-18.4	-27.0	958	124	-71.8%	117.7%
5411.T	JFE Holdings	2,205	Neutral	14,592	-16.6	-47.2	-65.1	-60.3	-61.0	-3.9	-21.7	-36.8	-23.1	-27.1	8,770	1,257	-74.9%	75.4%
5405.T	Sumitomo Metal Industries	218	Buy	11,284	-15.8	-49.8	-59.4	-52.2	-58.0	-3.0	-25.4	-26.5	-7.5	-21.4	767	38	-71.6%	473.7%
5406.T	Kobe Steel	150	Neutral	5,033	-6.8	-36.2	-58.7	-56.5	-58.8	7.4	-5.3	-25.2	-15.9	-22.9	517	43	-71.0%	248.8%
5471.T	Daido Steel	258	Neutral	1,207	-23.7	-53.5	-61.7	-68.8	-69.2	-12.0	-31.0	-30.7	-39.6	-42.5	1,277	116	-79.8%	122.4%
5423.T	Tokyo Steel	864	Neutral	1,443	5.2	-22.0	-37.7	-37.4	-30.7	21.3	15.8	12.8	21.1	29.7	2,580	246	-66.5%	251.2%
5407.T	Nisshin Steel	143	Neutral	1,532	5.9	-40.4	-64.3	-64.6	-63.6	22.1	-11.6	-35.4	-31.5	-31.9	587	39	-75.6%	266.7%
5463.T	Manichi Steel Tube	2,365	Neutral	2,394	4.4	-20.5	-33.9	-27.0	-14.9	20.4	18.0	19.6	41.3	59.1	3,940	1,080	-40.0%	119.0%
5451.T	Yodogawa Steel	395	Neutral	784	-12.6	-24.5	-30.7	-33.1	-30.8	0.7	12.1	25.5	29.6	29.4	828	218	-52.3%	81.2%
	<b>Weighted average</b>		<b>SUM</b>	<b>58,065</b>	<b>-8.7</b>	<b>-37.3</b>	<b>-52.5</b>	<b>-50.9</b>	<b>-49.8</b>	<b>5.2</b>	<b>-6.9</b>	<b>-13.9</b>	<b>-4.9</b>	<b>-6.1</b>				
<b>Australasia</b>																		
BSL.AX	BlueScope Steel	3.57	Buy-Short Term Sell	1,740	-21.5	-56.3	-70.3	-62.9	-63.0	-7.1	-37.6	-51.2	-29.6	-31.5	12.41	2.51	-71.2%	42.2%
OST.AX	OneSteel Limited	2.38	Neutral	1,341	-34.1	-60.9	-68.5	-62.4	-61.3	-21.9	-44.1	-48.3	-28.8	-28.4	7.80	0.82	-69.5%	190.2%
	<b>Weighted average</b>		<b>SUM</b>	<b>3,082</b>	<b>-55.6</b>	<b>-117.2</b>	<b>-138.7</b>	<b>-125.3</b>	<b>-124.3</b>	<b>-29.0</b>	<b>-81.8</b>	<b>-99.4</b>	<b>-58.4</b>	<b>-59.9</b>				

Source: Company data

Table 5: Asia steel valuation comparison

Ticker	Company name	Local curr	Price (local) 4/12/08	Rating	Mkt Cap (US\$m)	Abs perf (%)			Rel perf (%)			PE (x)			EVEBITDA (x)			P/Book (x)			ROE (%)			ROIC (%)			Dividend yield			EBITDA Mgn (%)		Net Debt/Eq
						1mo	3mo	1mo	3mo	1mo	3mo	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	
Asia ex Japan, China																																
005490.KS	POSCO	KRW	326,000	Buy	19,234	1.2	-24.6	9.9	5.2	5.4	8.0	5.8	3.4	4.8	2.3	1.00	0.93	0.83	17.4	10.4	13.1	17.6	9.5	12.4	3.1	3.1	3.1	19.7	-1.1			
2002.TW	China Steel	TWD	21,00	Buy	6,918	-10.1	-40.0	-0.8	-11.1	5.2	8.9	6.9	3.5	5.8	2.6	1.00	1.05	1.00	20.0	11.5	14.9	16.2	7.7	10.4	15.6	15.6	16.9	6.4				
004020.KS	Hyundai Steel	KRW	30,000	Neutral	1,732	-4.8	-41.1	3.3	-17.8	3.2	9.2	6.4	3.2	6.1	5.6	0.53	0.51	0.47	17.8	5.6	7.7	15.7	3.7	4.0	1.7	1.7	1.7	9.1	95.6			
001230.KS	Dongjuk Steel Mill	KRW	22,500	Buy	1,094	6.6	-32.6	15.7	-6.0	3.2	4.3	3.2	1.7	2.1	2.0	0.52	0.47	0.42	17.6	11.5	14.0	20.0	10.6	10.2	3.3	3.3	3.3	13.6	51.7			
SAIL.BO	SAIL	INR	71	Buy	5,880	-11.8	-51.7	-6.9	-24.2	4.6	5.6	5.0	6.0	1.9	3.2	1.04	0.94	0.84	37.3	25.0	17.5	80.2	50.8	18.8	5.3	5.3	5.3	24.6	-36.1			
TISC.BO	Tata Steel Ltd.	INR	188	Neutral	2,764	0.7	-66.6	6.2	-47.6	2.0	2.5	2.2	4.0	2.9	2.8	0.36	0.32	0.29	23.0	19.3	14.2	17.1	18.9	14.8	8.8	8.8	8.8	12.2	111.5			
STRL.BO	Steeltech Industries	INR	257	Neutral (CBE)	3,672	8.1	-56.3	14.0	-31.4	5.5	8.5	5.6	3.5	1.5	2.0	0.73	0.69	0.63	19.1	10.8	8.4	51.0	33.2	16.4	2.3	2.3	2.3	23.6	-5.0			
<b>Average</b>																																
						<b>-4.6</b>	<b>-47.7</b>	<b>2.3</b>	<b>-23.0</b>	<b>4.0</b>	<b>6.3</b>	<b>4.8</b>	<b>4.0</b>	<b>3.7</b>	<b>3.3</b>	<b>0.7</b>	<b>0.6</b>	<b>22.2</b>	<b>14.1</b>	<b>13.0</b>	<b>29.0</b>	<b>18.1</b>	<b>11.9</b>	<b>5.8</b>	<b>5.8</b>	<b>5.8</b>	<b>17.5</b>	<b>56.3</b>				
China																																
600019.SS	Baosteel	CNY	5.42	Sell	13,791	18.1	-15.7	1.3	-7.2	8.5	11.4	6.4	4.1	4.3	3.0	1.00	0.95	0.87	12.2	8.5	14.1	10.2	7.9	13.2	4.7	4.7	4.7	15.8	35.7			
0347.HK	Angang Steel	HKD	6.46	Neutral (CBE)	6,180	42.3	-24.5	45.2	11.3	4.9	7.3	4.4	3.8	4.5	3.1	0.71	0.69	0.62	15.1	9.6	14.8	12.0	8.4	12.8	9.1	9.1	9.1	18.7	34.6			
0323.HK	Maanshan Iron & Steel	HKD	2.23	Neutral	1,944	48.7	-25.9	51.8	9.3	4.9	6.3	4.3	3.8	4.0	3.1	0.54	0.52	0.48	12.2	8.4	11.5	8.9	7.3	9.7	7.3	7.3	7.3	13.4	66.7			
600005.SS	Wuhan Steel	CNY	6.67	Neutral	7,596	46.9	-3.9	26.1	5.8	7.0	10.0	6.1	4.7	5.4	3.8	1.34	1.04	0.80	21.7	11.8	14.4	13.6	8.1	14.6	5.7	5.7	5.7	19.8	35.6			
<b>Average</b>																																
						<b>39.0</b>	<b>-17.5</b>	<b>31.1</b>	<b>4.8</b>	<b>6.3</b>	<b>8.8</b>	<b>5.3</b>	<b>4.1</b>	<b>4.6</b>	<b>3.2</b>	<b>0.9</b>	<b>0.8</b>	<b>15.3</b>	<b>9.6</b>	<b>13.7</b>	<b>11.2</b>	<b>8.0</b>	<b>12.6</b>	<b>6.7</b>	<b>6.7</b>	<b>6.7</b>	<b>16.9</b>	<b>43.1</b>				
Japan																																
5401.T	Nippon Steel	JPY	270	Neutral	19,795	-18.4	-41.4	-6.0	-13.1	5.2	8.2	5.9	6.7	2.5	3.4	0.82	0.80	0.75	17.4	16.2	9.9	12.1	15.3	5.4	4.1	4.1	4.1	15.2	34.1			
5411.T	JFE Holdings	JPY	2,205	Neutral	14,592	-16.6	-47.2	-3.9	-21.7	4.3	6.0	4.6	6.6	3.0	3.7	0.77	0.71	0.64	19.7	18.7	12.2	10.8	13.5	6.0	5.4	5.4	5.4	17.4	75.5			
5405.T	Sumitomo Metal	JPY	218	Buy	11,284	-15.8	-49.8	-3.0	-25.4	5.5	7.3	5.9	8.5	4.0	4.7	0.97	0.89	0.80	21.4	19.0	12.8	9.5	11.3	5.9	4.6	4.6	4.6	19.5	76.3			
5406.T	Kobe Steel	JPY	150	Neutral	5,033	-6.8	-36.2	7.4	-5.3	5.6	7.7	5.4	5.9	3.4	3.9	0.68	0.65	0.59	15.4	13.1	8.6	10.3	15.4	10.9	4.7	4.7	4.7	14.1	103.4			
5471.T	Daido Steel	JPY	258	Neutral	1,207	-23.7	-53.5	-12.0	-31.0	5.0	9.9	7.6	7.5	3.5	4.1	0.54	0.52	0.50	7.6	11.5	5.4	12.8	13.3	9.0	3.1	3.1	3.1	10.7	64.8			
5423.T	Tokyo Steel	JPY	864	Neutral	1,443	5.2	-22.0	21.3	15.8	3.8	16.5	11.6	4.5	0.2	1.6	0.49	0.49	0.47	4.7	14.2	3.2	-7.6	35.1	2.7	2.3	2.3	2.3	23.5	-43.3			
5407.T	Nisshin Steel	JPY	143	Neutral	1,532	5.9	-40.4	22.1	-11.6	7.4	11.6	7.4	5.5	3.3	3.6	0.36	0.35	0.35	9.0	5.0	3.2	8.7	7.2	5.4	7.0	7.0	7.0	11.1	55.2			
5463.T	Maruichi Steel Tube	JPY	2,365	Neutral	2,394	4.4	-20.5	20.4	18.0	14.5	15.9	13.7	8.4	3.2	3.5	0.97	0.93	0.91	5.9	7.2	6.0	3.4	8.7	6.9	2.5	2.5	2.5	17.4	-11.9			
5451.T	Yodogawa Steel	JPY	395	Neutral	784	-12.6	-24.5	0.7	12.1	11.4	13.9	12.4	4.5	2.4	2.5	0.45	0.44	0.43	5.3	4.4	3.4	4.4	6.8	3.3	3.3	3.3	3.3	9.0	-13.6			
<b>Average</b>																																
						<b>-8.7</b>	<b>-37.3</b>	<b>5.2</b>	<b>-6.9</b>	<b>7.0</b>	<b>10.8</b>	<b>8.3</b>	<b>6.5</b>	<b>2.8</b>	<b>3.4</b>	<b>0.7</b>	<b>0.6</b>	<b>11.8</b>	<b>12.1</b>	<b>7.2</b>	<b>7.2</b>	<b>14.0</b>	<b>6.2</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>4.1</b>	<b>15.3</b>	<b>37.9</b>			
Australasia																																
BSL.AX	BlueScope Steel	AUD	3.57	Buy-Short Term Sell	1,740	-21.5	-56.3	-7.1	-37.6	2.9	4.9	4.3	6.0	2.9	3.3	0.63	0.60	0.55	21.3	17.9	12.5	17.1	16.6	11.3	17.1	17.1	17.1	13.8	34.4			
OST.AX	OneSteel Limited	AUD	2.38	Neutral	1,341	-34.1	-60.9	-21.9	-44.1	3.9	5.2	4.2	9.3	3.3	4.0	0.58	0.55	0.52	12.7	15.3	10.9	7.1	14.3	9.3	13.9	13.9	13.9	14.5	47.4			
<b>Average</b>																																
						<b>-27.8</b>	<b>-58.6</b>	<b>-14.5</b>	<b>-40.9</b>	<b>3.4</b>	<b>5.0</b>	<b>4.3</b>	<b>7.7</b>	<b>3.1</b>	<b>3.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>17.0</b>	<b>16.6</b>	<b>11.7</b>	<b>12.1</b>	<b>15.4</b>	<b>10.3</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>14.2</b>	<b>40.9</b>			

Source: Company data, UBS estimates

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■ **Statement of Risk**

Collapse in steel demand from China, arising from significant slowdown in China's fixed investments, could be detrimental for Asia's steel supply and demand balance. China currently consumes a quarter of global steel supply.

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## UBS Investment Research

## Asia Tech - Outlook 2009

Asia

Technology

Sector Strategy

## Boring is beautiful

## ■ Summary

We believe investors should take a cautious, defensive position within Asia technology in 2009 and have a preference for well-capitalised, large-cap companies with a strong market position, low capex requirements, and low operational gearing. From a valuation perspective, we look to companies with strong free cash flow generation and an attractive cash dividend yield. We think boring is beautiful and see few reasons to take a more aggressive stance, given the considerable economic uncertainties.

## ■ What are the likely key themes for 2009?

We expect investors to increasingly focus on cash flow and balance sheet risks in 2009, given the likelihood of operating losses in some segments and the limited options for companies to raise new funds. We see product 'downsizing' emerging as a key theme in IT hardware, and expect margin pressure to rise across the board. We see scope for consolidation in the memory (Dram) and LCD-panel segments.

## ■ What may surprise on the upside or downside?

We recommend investors maintain an Underweight position in Asia tech and expect further downside to consensus estimates and sector share prices ahead of the Q4 earnings season in January. We expect tech stocks to potentially bottom out in the second quarter before rallying into H209, assuming incremental trends in demand, ASPs and margins improve. However, this thesis is subject to significant uncertainty due to the unprecedented risks facing the global economy.

## ■ Highlighted stocks

Although we have a cautious view on the sector, we expect some stocks to outperform and underperform the peer group on a relative basis on a 12-month view. Our most and least preferred stocks are summarised in the table below.

Table 1: Asia Tech Most and Least Preferred List

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Acer Inc	2353.TW	3.4	Buy	42.60	58.00	8.8
HTC Corp	2498.TW	7.0	Buy	310.00	530.00	7.9
TSMC	2330.TW	29.6	Buy	37.95	50.00	15.3
Samsung Electronics	005930.KS	45.7	Neutral	454,000	470,000	22.2
<b>Least Preferred</b>						
Hynix Semiconductor	000660.KS	2.3	Sell	7,200	6,200	-
Quanta	2382.TW	3.9	Sell	36.10	32.00	9.6
Foxconn Tech	2354.TW	1.6	Sell	63.90	58.00	10.8
Chi Mei Optoelectronics	3009.TW	1.5	Neutral	9.23	13.40	-

Data as at 2 December 2008. Source: UBS estimates

4 December 2008

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## Outlook 2009 – Summary

### What are the likely key themes?

We expect 2009 to be an immensely challenging year for Asian technology companies in light of the unprecedented uncertainties facing the global economy. Recent revisions to guidance from TSMC, ASE, Nokia and Intel serve to show how quickly the demand environment is deteriorating. We see few reasons why the current negative trend should reverse in the short term and believe the worst has yet to come from an operational perspective.

We recommend investors maintain an underweight position in Asia tech as we enter the new year, given the ongoing downside risks and lack of visibility. We expect the Q4 earnings season in January as a negative catalyst for the sector and expect Q1 guidance to be extremely weak for most tech companies. We see further downside risks to share prices and consensus estimates across the sector.

We are concerned about the Christmas season sell-through within the consumer electronics sector in Europe and the US. Consumers in both regions suffer from high levels of indebtedness and shrinking personal wealth due to falling house prices and declining stock markets. The availability of cheap credit, which fuelled the earlier consumer boom, has largely dried up. To add to the challenges, unemployment is rising in the US and across the major economies of Europe.

The psychological impact of current global events should not be underestimated, as consumer spending is closely linked to confidence levels. Day after day consumers are faced with barrage of negative headlines on the latest failings in the global economy. This is leading to a bunker-mentality among consumers, in our view, raising the risk of a major disappointment in retail sales over the Christmas and New Year holiday period.

Assuming this comes to pass, we believe there is a high risk of a major inventory correction in early 2009. We expect the demand environment to remain weak through the first half of 2009, as consumers likely reduce their spending on electronics goods further and corporates reduce IT spending to cut costs and preserve margins.

We therefore expect the Asia tech sector to face a challenging start to 2009 and expect most companies to suffer further sequential declines in sales and margin during the first quarter. We see risks that second-tier foundry and OSAT (assembly and test) companies fall into loss at the operating level. We forecast a widening of operating losses in the memory and LCD-panel sectors in Q1 and see rising balance sheet risks at many tier-two companies.

We provisionally expect the operating outlook at most technology companies to bottom-out at some point during the second quarter, dependent on inventory levels having been worked down and there being some semblance of a seasonal up-tick during the third quarter. Having said that, we do not expect a strong rebound in sales at most technology companies during the second half, due to fundamental challenges in the global economy. The road to recovery for Asia tech is going to be a long and difficult one, in our view.

Assuming our thesis is correct, we expect Asia tech stock prices to potentially bottom-out in the second quarter before rallying into the second half. However, we stress this forecast is subject to significant uncertainty due to the unprecedented scale of the challenges facing the global economy. Our thesis could therefore turn out to be too optimistic and we see a greater risk that the recovery gets pushed out, rather than pulled in.

### Can Asia tech outperform global peers operationally?

We think Asian technology companies face additional risks relative to their peers in Europe and the US due to their greater reliance on the consumer. Asian technology companies (particularly in Taiwan and India) also tend towards a greater reliance on outsourcing. This brings a risk that customers might reduce external outsourcing in an effort to keep their internal facilities, where these exist, fully utilised.

Asian technology companies have several strengths relative to their international peers. Many Asian technology companies generate superior margins compared with their overseas competitors, reflecting the strong execution capabilities and typically lower operating costs in the region. In addition, many Asian technology companies are better capitalised than their overseas peers, which will provide a buffer as the global economy enters recession.

In addition, Asia is home to China and India, the world's two largest emerging market economies. Although neither economy is immune to the effects of the global economic slowdown, forecast GDP growth for both China (UBS estimate: 7.5%) and India (UBS estimate: 6.0%) for 2009 is still superior to forecasts for the mature economies of Western Europe and the US. The proximity of Asian technology companies to China and India, together with potential cultural and language advantages, could provide some companies with additional growth opportunities, in our view.

**Table 2: GDP growth forecasts**

(%)	2007	2008E	2009E	2010E
Global	4.8%	3.1%	1.2%	2.9%
G7	2.2%	1.0%	-0.8%	1.5%
US	2.0%	1.3%	-0.6%	2.2%
Eurozone	2.6%	1.0%	-0.9%	0.6%
Asia	9.3%	7.0%	4.1%	6.5%
China	12.5%	9.6%	7.5%	8.0%
India	9.0%	6.5%	6.0%	7.4%
Taiwan	5.7%	1.5%	-1.6%	2.9%
Korea	5.0%	3.9%	-3.0%	3.4%

Source: UBS estimates

We see forex as a key theme for 2009, following the depreciation of many Asian currencies in the past year. Given the majority of Asian technology products are exported to Europe and the US, we expect currency gains to boost the competitiveness and bottom line of Asian technology companies through 2009. This is particularly true in Korea, following the approximately 50% depreciation in the Won against the US\$ since the beginning of 2008. UBS economists expect the Won to strengthen the second-half of 2009, though their year-end forecast of Won1,425 to the US\$ is still 52% weaker than at the end of 2007.

**Table 3: Year-end forex rate forecasts**

	Year end			
	2007	2008E	2009E	2010E
USD/RMB	7.30	6.75	6.80	6.60
USD/TWD	32.43	34.00	34.00	33.50
USD/KRW	935.80	1500.00	1425.00	1350.00
USD/INR	39.41	51.00	48.00	45.00
EUR/RMB	10.68	8.44	8.16	8.25
EUR/TWD	47.41	42.50	40.80	41.88
EUR/KRW	1368.19	1875.00	1710.00	1620.00
EUR/INR	57.62	63.75	57.60	56.25

Source: UBS estimates

We expect investors to increasingly focus on cash flow and balance sheet risks in 2009, given the likelihood of operating losses in some segments and the limited options for companies to raise new funds. We think companies in the memory and LCD-panel segments will face the greatest cash-flow pressure in 2009, as unit pricing has already fallen below cash costs for most industry players. Both sectors are ripe for consolidation, in our view, and we see risks that undercapitalised, tier-two players might not survive the downturn.

We see scope for state aid to be provided to both industries (particularly in Taiwan) through government loans and other support mechanisms. In 2002 the Taiwan government identified semiconductors, along with flat panel displays as one of its target "One Trillion NT\$ industries" in 2002. We think the Taiwan government is further motivated to protect its already fragile banking sector, which is owed a combined NT\$420bn (US\$12.6bn) from the four domestic Dram companies.

We do not see government intervention as a positive for the memory industry given the pressing need for consolidation in the face of an extended industry slump. Financial support from government sources risks prolonging the downturn as it interferes with the evolutionary process and the principle of fair competition, in our view. Any company receiving state aid is potentially at risk from having punitive import tariffs placed on its products, as in the case of Hynix in 2003 when the EU ruled it had been unfairly subsidised. Allowing nature to take its course will be the fastest and most efficient way to ensure that the industry returns to a more solid footing, in our view.

From a demand perspective, we see risks in sectors most dependent on discretionary spending. Within consumer electronics, we see downside risk to demand for relative 'big-ticket' purchases such as large screen LCD-TVs (>42 inch) and high-end notebooks and smartphones. We expect replacement demand to slow as consumers in Europe and the US tighten belts and reduce all unnecessary expenditure. Product lines most at risk from slowing replacement demand include mobile handsets, digital still cameras, MP3 players and DVD players, in our view.

**Table 4: UBS global handset forecasts**

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Global handset shipments</b>	295	303	311	339	1,247	259	261	287	327	1,135	1,199
<b>Growth YoY</b>	17%	16%	9%	1%	10%	-12%	-14%	-8%	-3%	-9%	6%
<b>Average handset ASP (US\$)</b>	131	130	122	115	124	120	119	114	116	117	n/a
<b>Growth YoY</b>	0%	-2%	-2%	-11%	-4%	-8%	-8%	-7%	0%	-6%	n/a
<b>Global handset revenues (US\$ bn)</b>	39	39	38	39	155	31	31	33	38	133	n/a
<b>Growth YoY</b>	16%	14%	7%	-10%	6%	-20%	-21%	-14%	-3%	-14%	n/a

Source: UBS estimates

We see “downsizing” as a theme within the consumer electronics segment in 2009, as consumers opt for cheaper, lower specification devices. The rise of the netbook (aka ultra-low cost notebook) is an example of downsizing within the PC notebook sector. Within LCD-TVs, we see scope for consumers to opt for smaller screen sizes (43 inches and below), or cheaper second-tier brands.

Downsizing is not necessarily a positive trend, in our view, as it could result in a degree of demand cannibalisation within mainstream products. In addition, margins on reduced-specification products tend to be lower. The Taiwanese notebook players (Acer, Compal and Quanta) are the most geared into the netbook trend, in our view. We forecast 25m netbook shipments in 2009, double our estimate for 12.5m netbook unit shipments in 2008.

We expect margin pressure to rise across the Asia tech sector in 2009, as electronics retailers likely reduce end-market pricing to stimulate demand and competition rises as companies scramble to maintain their share in a declining market. We believe brand-ownership should help some IT hardware companies escape the worst of the pricing pressure, as they are in a stronger position to pass on cuts to their suppliers. This leaves the semiconductor and component suppliers—which typically generate superior margins than their IT hardware customers—most exposed, in our view. We expect suppliers offering non-differentiated, commodity services or products to come under heavy margin pressure in 2009. Margins in the component, LED and solar sector will be subject to further downside risk, in our view.

**Table 5: Key forecast financial metrics across the UBS Asia tech universe**

	Sales growth			EPS growth			EBIT margin			ROE		
	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E
<b>Asia tech</b>	8%	-11%	9%	-9%	-39%	54%	6%	3%	5%	12.6%	7.3%	11.1%
<b>Semiconductor</b>	1%	-19%	12%	-42%	-62%	108%	8%	3%	8%	9.0%	4.0%	9.7%
<b>TFT</b>	4%	-13%	12%	-166%	-59%	85%	7%	0%	4%	11.1%	-1.7%	5.5%
<b>Hardware</b>	11%	-8%	7%	0%	-27%	23%	5%	3%	4%	17.7%	12.8%	13.4%
<b>Components</b>	8%	-10%	10%	4%	-11%	18%	8%	9%	9%	16.4%	14.4%	14.1%
<b>LED</b>	17%	-4%	16%	9%	-22%	11%	12%	11%	11%	8.4%	7.1%	7.7%
<b>Solar</b>	87%	34%	15%	61%	51%	47%	15%	18%	22%	22.9%	27.1%	28.3%

Source: UBS estimates

We see downside risks to companies dependent on the corporate sector, as we expect IT budgets to decline YoY in 2009. In our experience corporate IT budgets, along with travel, entertainment and advertising expenses are usually the first to be cut in an economic downturn. Large IT projects, such upgrading a corporate PC network from Microsoft XP to Vista are at risk of deferral, in our view, as companies focus their scarce resources on core IT projects only.

Our US colleagues interviewed 70 US corporate CIOs in October. Of those interviewed, 57% confirmed they intended to deploy Vista in 2010 or later. This compared with 25% of respondents when the same question was asked in the first quarter of 2008, that is, 32% of respondents had subsequently delayed their purchasing decision. Asia technology companies most exposed to the enterprise IT sector include Indian IT services companies (many of which have a high reliance on the financial sector) and related PC companies in Taiwan.

The corporate sector accounts for about 60% of global PC demand and is a major consumer of PC desktops. We expect global desktop unit volumes to decline 10.9% YoY in 2009 to 135m units. We expect relatively stronger growth in global notebooks in 2009 and forecast 6.2% unit growth to 156m units. Although positive on a relative basis, this is still a marked slowdown on our forecast for 36.5% YoY unit growth to 146.9m units in 2008.

**Table 6: UBS global PC unit forecasts**

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Desktop</b>	37,025	37,097	37,785	39,855	151,762	32,658	32,851	33,800	35,940	135,249	137,491
<b>Desktop % YoY</b>	0.3%	1.5%	-2.3%	-5.6%	-1.7%	-11.8%	-11.4%	-10.5%	-9.8%	-10.9%	1.7%
<b>Notebook</b>	32,122	31,582	40,133	43,126	146,962	33,714	33,342	42,714	46,273	156,043	183,430
<b>Notebook % YoY</b>	38.8%	37.4%	39.8%	31.4%	36.5%	5.0%	5.6%	6.4%	7.3%	6.2%	17.6%
<b>Server</b>	2,060	2,109	2,108	2,230	8,507	2,044	2,090	2,127	2,260	8,522	8,855
<b>Server % YoY</b>	8.8%	11.2%	5.3%	2.4%	6.8%	-0.8%	-0.9%	0.9%	1.3%	0.2%	3.9%
<b>Total</b>	71,206	70,788	80,026	85,212	307,232	68,417	68,283	78,642	84,472	299,814	329,776
<b>Total % YoY</b>	15.0%	15.2%	15.4%	10.3%	13.8%	-3.9%	-3.5%	-1.7%	-0.9%	-2.4%	10.0%

Source: UBS estimates

## What is our central thesis for 2009?

We believe investors should take a cautious, defensive positioning within Asia technology in 2009, and have a preference for well capitalised, large-cap companies that have low capex requirements and low operational gearing. Business models that carry high levels of operational gearing such as memory, LCD-panels, foundry and OSAT (IC assembly and test) carry greater risks, in our view. Foundry, IT service and OSAT business carry additional risk, in our view, as they are reliant on outsourcing orders from third-party customers. This brings risks if customers pull orders in response to the weakening demand environment, as highlighted by recent revisions to guidance from TSMC and ASE in Taiwan.

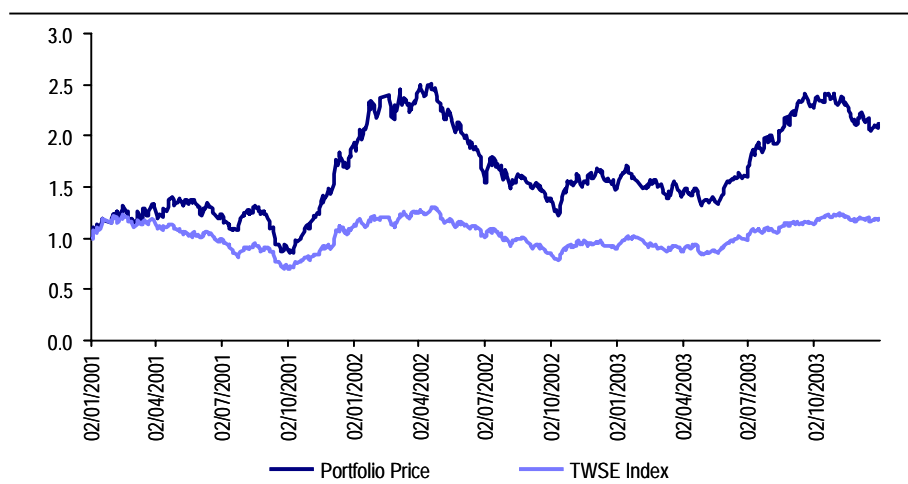
**Table 7: Net cash/debt as a % of market cap in the UBS Asia tech universe ranking**

Top 10 2008E			Bottom 10 2008E			Top 10 2009E			Bottom 10 2009E		
1	Lenovo	82%	1	Chartered Semi	-503%	1	Lenovo	78%	1	Chartered Semi	-508%
2	Innolux	53%	2	CMO	-276%	2	UMC	66%	2	Hynix Semi	-273%
3	Asustek	46%	3	Hynix Semi	-252%	3	Asustek	63%	3	CMO	-214%
4	Foxconn Intl Hldgs	39%	4	Suntech Power	-97%	4	Innolux	53%	4	AUO	-80%
5	Acer	37%	5	AUO	-78%	5	Acer	40%	5	Suntech Power	-79%
6	UMC	35%	6	Wistron	-49%	6	Foxconn Intl Hldgs	39%	6	Wistron	-49%
7	Satyam Comp Svs	33%	7	LDK Solar	-41%	7	Satyam Comp Svs	38%	7	LG Elec	-39%
8	Delta Elec	31%	8	LG Elec	-39%	8	Delta Elec	33%	8	ASE	-33%
9	MediaTek	24%	9	ASE	-33%	9	MediaTek	31%	9	SEMCO	-27%
10	HTC	24%	10	SEMCO	-31%	10	HTC	29%	10	LDK Solar	-19%

Source: UBS estimates

We look for companies with well diversified product portfolios and a diverse customer base. Ideally, companies should also have low exposure to the consumer—though this is hard to find in Asia tech—and should preferably also have low exposure to developed markets. From a valuation perspective, we look to companies with strong free cash flow generation and an attractive cash dividend yield.

Although the above criteria reads like a textbook list of defensive properties, we think boring is beautiful and see few reasons to take a more aggressive stance given the considerable economic uncertainties. We believe investors should therefore stay clear of higher risk sub-sectors for now, including memory, solar and LCD panels.

**Chart 1: Large-cap Taiwan tech outperformed the TWSE index in 2001-03**

Source: Bloomberg

We prefer large cap technology stocks to mid-cap and small-cap. We expect large-cap stocks to outperform given the markets' heightened level of risk aversion, as investors tend to shun less-liquid small cap companies in a market downturn. The previous chart illustrates that a portfolio of large-cap tech stocks outperformed the main index through the post tech-bubble downturn. Note the portfolio is equal-weighted for Hon Hai, TSMC, Mediatek, AUO and HTC.

The following valuation tables highlight key valuation and growth metrics by market. Taiwan is currently the cheapest by valuation (based on earnings multiples), yet we forecast Taiwan tech to outperform its regional peers operationally, in terms of growth, margins and ROE. By contrast, Singapore appears the least attractive market on earnings multiples, although comparisons are distorted by the limited number of tech companies operating in the country. Three of our four preferred picks are in are in Taiwan.

Korea tech is more richly valued on PE and EV/EBITDA multiples, yet we forecast Korean tech companies to deliver the second worst earnings performance in the region. We believe the predominance of capital-intensive, operationally-gearred business models in Korea tech (memory and LCD panels) amplifies the forecast earnings decline in 2009.

Given the current low earnings visibility in tech, we prefer to use P/BV multiples. On this basis, Korea's valuation is in line with the sector on a 2009E P/BV and is slightly more expensive on a 2010E P/BV multiple. Singapore tech companies are also the cheapest in the sector on this basis.

**Table 8: Asia tech valuation by market (multiples calculated in US\$)**

	EV/Sales		EV/EBITDA		PE		P/BV		Sales growth		EPS growth		EBIT margin		ROE	
	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E
<b>Asia Tech (excl India)</b>	0.4	0.4	4.4	3.5	15.8	9.9	1.1	1.1	-11%	9%	-39%	54%	3%	5%	7%	11%
<b>Taiwan</b>	0.4	0.3	4.3	3.2	12.1	8.7	1.1	1.1	-5%	11%	-9%	16%	4%	6%	9%	13%
<b>Korea</b>	0.5	0.5	4.7	3.7	41.3	14.0	1.1	1.1	-26%	6%	-50%	64%	2%	5%	3%	8%
<b>Singapore</b>	0.7	0.6	4.2	3.4	-	16.2	0.4	0.3	-14%	8%	-271%	73%	-1%	2%	-4%	2%
<b>China/HK</b>	0.3	0.3	3.9	3.1	9.6	7.8	1.2	1.1	11%	6%	47%	52%	4%	5%	12%	15%
<b>India</b>	1.2	1.8	4.9	5.7	7.7	8.0	2.4	2.0	14%	2%	12%	-4%	21%	20%	30%	24%

Note: Above data as at 2 December 2008. Source: UBS estimates

Our Indian tech coverage is comprised solely of IT services companies which tend to trade on higher multiples than the IT hardware, component and semiconductor stocks in Taiwan, Korea, Singapore and Hong Kong/China. We exclude the Indian IT services stocks from our Asia tech averages to make for a meaningful comparison across the other countries and sectors.



**Table 9: Asia tech valuation by sub-sector (multiples calculated in US\$)**

	EV/Sales		EV/EBITDA		PE		P/BV		Sales growth		EPS growth		EBIT margin		ROE	
	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E
<b>Asia tech (excl IT services)</b>	0.4	0.4	4.4	3.5	15.8	9.9	1.1	1.1	-11%	9%	-39%	54%	3%	5%	7%	11%
<b>Semiconductor</b>	1.0	0.9	5.2	4.0	33.5	13.5	1.3	1.3	-19%	12%	-62%	108%	3%	8%	4%	10%
<b>TFT</b>	0.4	0.4	3.3	2.1	-	9.0	0.5	0.5	-13%	12%	-59%	85%	0%	4%	-2%	5%
<b>Hardware</b>	0.2	0.2	3.8	3.1	8.3	7.7	1.1	1.0	-8%	7%	-27%	23%	3%	4%	13%	13%
<b>Components</b>	0.8	0.7	5.6	4.5	5.6	6.0	0.8	0.8	-10%	10%	-11%	18%	9%	9%	14%	14%
<b>LED</b>	1.1	0.9	5.5	4.7	13.3	11.8	0.9	0.9	-4%	16%	-22%	11%	11%	11%	7%	8%
<b>Solar</b>	0.8	0.7	3.8	2.5	3.4	2.4	0.9	0.7	34%	15%	51%	47%	18%	22%	27%	28%
<b>IT services</b>	1.2	1.4	4.9	5.7	7.7	8.0	2.4	2.0	14%	2%	12%	-4%	21%	20%	30%	24%

Note: Above data as at 2 December 2008. Source: UBS estimates

The following table compares key valuation multiples in the Asia tech sector against trough and long-term averages. Asia tech stocks are trading below trough multiples in all sectors.

**Table 10: Valuation multiples compared with trough and average**

	EV/Sales				EV/EBITDA				PE				P/BV			
	2009E	2010E	Trough	Average	2009E	2010E	Trough	Average	2009E	2010E	Trough	Average	2009E	2010E	Trough	Average
<b>Semi</b>	1.0	0.9	2.2	3.6	5.2	4.0	6.1	12.3	33.5	13.5	9.3	36.5	1.3	1.3	2.1	3.2
<b>TFT</b>	0.4	0.4	1.2	1.6	3.3	2.1	6.5	9.1	-	9.0	13.6	25.9	0.5	0.5	1.6	2.0
<b>Hardware</b>	0.2	0.2	0.4	1.0	3.8	3.1	6.9	14.4	8.3	7.7	9.5	25.8	1.1	1.0	1.9	3.3
<b>Components</b>	0.8	0.7	1.6	2.2	5.6	4.5	6.7	10.0	5.6	6.0	13.5	23.0	0.8	0.8	1.1	2.3
<b>Solar</b>	0.8	0.7	6.9	8.8	3.8	2.5	31.2	37.4	3.4	2.4	38.4	47.6	0.9	0.7	6.8	7.3
<b>IT services</b>	1.2	1.4	3.5	5.8	4.9	5.7	14.0	20.8	7.7	8.0	18.2	33.4	2.4	2.0	5.7	9.4

Note: Above data as at 02 December 2008. Source: UBS estimates

The following table compares forecast EBIT margins and ROE versus the historical trough and average. Forecast margins for 2009 are above the historical trough in the semiconductor, TFT-LCD, component and IT hardware sectors. Given the current deteriorating outlook across every tech sector and the likelihood of rising ASP pressure in 2009, we see further downside risks to margin estimates across most segments.

Table 11: Forecast margins and ROE compared to trough and average

	EBIT margin (%)				ROE (%)			
	2009E	2010E	Trough	Average	2009E	2010E	Trough	Average
<b>Semiconductor</b>	3%	8%	-12%	12%	4%	10%	-8%	16%
<b>TFT</b>	0%	4%	-20%	4%	-2%	5%	-10%	7%
<b>Hardware</b>	3%	4%	2%	9%	13%	13%	5%	33%
<b>Components</b>	9%	9%	3%	14%	14%	14%	-5%	13%
<b>Solar</b>	18%	22%	17%	24%	27%	28%	25%	50%
<b>IT services</b>	21%	20%	19%	23%	30%	24%	27%	38%

Note: Above data as at 2 December 2008. Source: UBS estimates

### Sectors we would avoid for now

We currently see no reason to be invested in the memory sector (Dram and Nand Flash) on account of its weakening fundamentals. Balance sheet risks are rising at most memory companies as unit pricing has fallen below cash costs for most industry players. We expect both segments to remain in oversupply through 2009 in the face of weakening demand and (as yet) insufficient supply cuts. Further supply cuts could help to stabilise unit pricing, although we are doubtful pricing will rebound substantially in 2009, given the macro uncertainties. We believe the industry recovery has been pushed out to 2010.

Similarly, we believe it is too early to buy into the LCD-panel sector given the weakening fundamentals and rising balance sheet pressures affecting some companies in the sector. As a relative big-ticket purchase, we see downside risks to demand for LCD-TVs in 2009, as consumers continue to deleverage and demand from emerging markets could be worse than expected. We see downside risks to panel demand from the IT sector due to slowing growth in the desktop and notebook segments. On the upside, panel-makers will likely continue to cut supply and we see scope for industry consolidation. On balance, we see risks that the LCD-panel industry is in major oversupply in 2009. Although panel stock valuation appears low on a relative basis to other sectors and versus historical measures, given the downside risks to consensus estimates and limited positive catalysts, we see little reason currently to be invested in the sector.

We are cautious on the solar sector and expect short-term interest to wane due to the declining oil price, which has made the economic arguments in favour of solar less compelling, in our view. A sharp rise in investment in thin-film panel production in 2007 has led to the current overcapacity. A recent survey suggested that solar plants were running at an average utilisation rate of 56% (source: the Information Network). We think investment in solar is at risk from falling corporate capex spending and household de-leveraging, as the cost of installing a solar-panel array involves considerable up-front investment.

## What may surprise on the upside or downside?

Our company forecasts factor in the macro view of the UBS economics team, which has consistently been below consensus. Therefore any improvement in the outlook for the global economy or consumers is an upside risk to our forecasts. However, given the scale of challenges facing consumers in most developed countries, we believe the risks are more to the downside.

We see M&A as an upside risk and see risks that well-capitalised, tier-one vendors might look to capitalise on weakness at tier-two players. This could present opportunities for value-seeking investors willing to invest in the cheaper stocks that have solid fundamentals, in our view. Falling oil and commodity prices, together with declining transport costs are upside risks and would help mitigate rising pricing pressure. Currency risks present both upside and downside risks to our thesis.

Capacity utilisation rates (CUR) are a major determinant of margins and unit pricing in the semiconductor foundry, memory, LCD panel and OSAT (assembly and test) sectors. CUR are a function of supply and demand. We expect leading foundry and OSAT companies to maintain their current capex discipline through the downturn. As a result, we see end-demand as the most critical factor impacting CUR in these sectors. The major product categories produced by foundries include GPU (graphic processor units), handset IC (baseband, CMOS sensor, and Bluetooth), and consumer electronics IC for game consoles, digital-TV, and set-top boxes. OSAT companies have a similar product line-up, with some additional exposure to memory.

We also expect leading LCD-panel companies to maintain their current capex discipline through the downturn and see scope for panel-makers to further cut capacity into 2009, depending on the demand outlook. We therefore see end-demand, from the IT and LCD-TV sector, as the most critical determinant of CUR in the LCD-panel sector. We believe the risks to panel demand, particularly in large-screen LCD-TV, remain on the downside.

We see limited signs of capex discipline in the memory sector (Dram and Nand Flash) and expect both segments to remain in over-supply through to the middle of 2010. CUR in the memory industry remain high currently, as sector companies keep their facilities running at full capacity in order to maintain market share. We see scope for weaker tier-two memory companies to reduce CUR into Q1 in an effort to conserve cash, as we estimate unit pricing in Dram and Nand Flash is currently below their cash costs.

We see potential upside risks from new applications such as smartphones, DTV phones, and Blu-ray players. Apple's iPhone has successfully stimulated demand for mobile broadband, resulting in greater demand for 3G/HSDPA chips. Digital-TV phone is a potential killer application in China and could help to drive replacement demand. Falling pricing on Blu-Ray players, which might drop to around US\$100 (in promotion or bundle deals) in 2009, could result in some upside surprise for the chip demand. Mediatek is the leading Asian vendor in the Blu-Ray sector, in our view.

Within Nand Flash, we expect SSD (solid state drive) demand to remain modest over the next 18 months, as pricing remains too high to make it affordable to mainstream consumers. For example, at current pricing, a 256GB (MLC) Nand SSD drive would cost close to US\$300, compared with around US\$60 for a traditional 256GB hard disc drive. Lower-than-expected Nand Flash pricing could help to stimulate stronger demand in SSD, in our view.

## What are the likely key catalysts?

Tech stocks are more driven by newsflow, momentum and sentiment than other sectors, in our view. We expect newsflow and sentiment in global tech to continue deteriorating through to the end of 2008 and into Q109. We expect this to result in further downside to consensus estimates across the sector and lower tech valuations.

### Potential positive catalysts

- **Capex discipline:** We expect stocks in the foundry, OSAT, LCD and memory sectors to react positively towards any news of capacity reductions.
- **Potential consolidation:** We expect stocks to react positively to any news on industry consolidation, as it could lead to a more stable pricing environment, helping companies maintain profitability.
- **New product cycle:** We expect stocks to react positively to news on new product cycles. For 2009, these could include Blu-ray, China's CMMB TV standard, and Intel's introduction of new Nehalem CPU platform.

### Potential negative catalysts

- **Balance sheet risks:** We expect share prices to react negatively to rising balance sheet risks and potential going-concern issues. We do not see government aid/support as a positive in the Dram or LCD-panel sector, as we think it would likely result in prolonging the industry downturn.
- **Deteriorating end demand:** The outlook for the Asian semiconductor is highly dependent on global demand outlook. We expect Asian tech stocks to react negatively to any worsening signals in end demand.
- **Price competition/margin pressure:** We expect margin pressures to rise across every sector in 2009, as vendors compete aggressively on pricing to win orders to fill capacity. We expect additional margin pressure to result from falling end-market pricing, as retailers cut prices in an effort to stimulate demand.

## Asia Tech Most & Least Preferred

Although we have a cautious view on the sector, we expect some stocks to outperform and underperform the peer group on a relative basis, on a 12-month view. The following table highlights our Asia Tech Most & Least Preferred stock list.

**Table 12: Asia Tech Most & Least Preferred Stocks**

Stock	Rating	PT	Overview
<b>Most preferred</b>			
Acer Inc	Buy	NT\$58	We expect Acer's 2009 shipment growth to outpace peers due to efficient business model and leading position in the netbook market
HTC Corp	Buy	NT\$530	We believe HTC will maintain its leading position in the rapidly growing smartphone market segment
TSMC	Buy	NT\$50	We think TSMC's risk/reward profile has turned positive and we believe it will be the only profitable wafer foundry in the long term
Samsung Electronics	Neutral	Won470,000	We expect Samsung to emerge a winner in the Dram and Nand Flash segments, though see short-term downside risks in its LCD and handset divisions.
<b>Least preferred</b>			
Hynix Semiconductor	Sell	Won6,200	Hynix is the most indebted company in the global Dram sector. We foresee a risk that it will have to raise up to Won2trn new financing in 2009
Quanta	Sell	NT\$32	As the largest notebook ODM, we believe it could be difficult for Quanta to deliver higher-than-industry shipment growth in 2009
Foxconn Tech	Sell	NT\$58	We believe Foxconn Tech can be negatively affected by Hon Hai's ambition to tap into notebook manufacturing
Chi Mei Optoelectronic	Neutral	NT\$13.4	CMO is the most leveraged of the panel makers and we estimate it will need external financing of at least NT\$30bn to make it through the downturn

Note: Above data as at 2 December 2008. Source: UBS estimates

**Table 13: Asia Tech Most & Least Preferred valuation**

	EV/Sales (x)		EV/EBITDA (x)		PE (x)		P/BV (x)		Sales growth		EPS growth		EBIT margin		ROE	
	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E
<b>Most Preferred</b>																
Acer Inc.	0.1	0.1	3.6	3.1	8.8	7.6	1.3	1.2	4%	8%	15%	21%	3%	3%	15%	16%
HTC Corporation	1.0	0.8	5.4	4.4	7.9	7.0	3.1	2.6	11%	17%	-3%	13%	18%	17%	39%	37%
TSMC	3.1	2.5	5.6	4.5	15.3	10.5	2.1	1.9	-22%	19%	-41%	46%	26%	32%	14%	19%
Samsung Electronics	0.6	0.6	4.8	4.0	22.2	12.4	1.2	1.2	-18%	10%	-66%	83%	2%	5%	5%	10%
<b>Least Preferred</b>																
Hynix	1.9	1.9	-341.2	8.6	-1.1	-2.4	1.0	1.5	-36%	9%	-48%	-52%	-43%	-14%	-86%	-64%
Quanta	0.1	0.1	6.0	3.6	9.6	9.2	1.1	1.0	-11%	7%	-20%	5%	2%	2%	11%	10%
Foxconn Tech	0.3	0.3	4.6	4.2	10.8	10.5	1.0	0.9	-6%	1%	-23%	3%	5%	5%	9%	9%
Chi Mei Opto	0.6	0.4	3.6	1.7	-2.2	8.4	0.2	0.2	0%	16%	-261%	-126%	-5%	3%	-11%	3%

Note: Above data as at 2 December 2008. Source: UBS estimates

## Most Preferred Acer Inc

**Investment case:** We expect Acer's 2009 shipment growth to outpace peers' due to its efficient business model and leading position in the netbook market. We believe only companies with a low operating expense ratio will be able to survive in an environment of rapidly falling ASP. Our analysis suggests netbooks could be the key growth driver of overall notebook PC shipment growth. We also view wireless operators' bundling netbooks with their services as a favourable trend for Acer. Slowing PC growth in Western Europe is a key risk to our call.

**Valuation:** We base our price target of NT\$58.00 on a sum-of-the-parts methodology with NT\$0.70 long-term investment value and NT\$57.30 DCF derived from the core business. Our DCF-based price target for the core business assumes medium-term/terminal EBIT of 2%/1%, medium-term/terminal growth of 5.2%/3%, and 8.4% WACC.

**2009 catalysts:** Introduction of the next generation "AspireOne" under Packard Bell or Gateway brands could gain more attention of consumers. Moreover, we believe the new channel should be an important driver of netbook demand, as wireless operators are trying to boost data revenue. Acer currently sells only 5-10% of total netbook shipments through wireless operators. Our survey suggests wireless operators in Europe and Japan have launched netbook bundled plans, and more could follow in 2009.

## HTC Corporation

**Investment case:** HTC is the first mover in adopting Qualcomm's powerful new Snapdragon IC platform and this could ensure its leading position in the rapidly growing smartphone market segment. We forecast the global smartphone segment to maintain solid growth of 20% in 2009 and total units to increase from 13.7% of global shipments in 2008 to 18.1% in 2009, due to falling prices and the ongoing addition of user-friendly applications. HTC is ahead of rivals in introducing phones based on Google's new Android platform and has been able to expand its market coverage to a different segment. Increasing competition in smartphones and reducing operator subsidies are key risks.

**Valuation:** We think HTC is attractive on its cash dividend yield and strong net cash position. We base our price target of NT\$530.00 on DCF, assuming a 12.5% EBIT margin, 8%/3% medium/terminal growth, and WACC of 8.9%.

**2009 catalysts:** HTC should gradually improve its gross and operating margins with shipments of new Android phones to non-T-Mobile clients in late Q109. Our industry checks suggest leading wireless carriers such as Vodafone, AT&T and NTT DoCoMo have partnered with HTC to design customised Android phones.

**Sector:** Taiwan Computers

**Rating:** Buy

**PT:** NT\$58.00

**Analyst:** Edward Yen

**Sector:** Taiwan Computers

**Rating:** Buy

**PT:** NT\$530.00

**Analyst:** Arthur Hsieh

## TSMC

**Investment case:** We think TSMC's risk/reward profile has turned positive with the negative news already in the share price. We are positive on TSMC as we believe it will continue to lead its peers in advanced process development. The company has dominated the advanced foundry process since 65nm and we believe its leading position will be further enhanced in the 45nm field. We think TSMC will be the only profitable wafer foundry in the long run. We see short-term risks if customer pull/postpone orders, as highlighted by the recent revision to Q4 guidance.

**Valuation:** We base our price target on an average of 2.6x PBR and TSMC's DCF-based fair value (6% medium-term growth, 24% EBIT margin, and 8.1% WACC).

**2009 catalysts:** We believe the next catalyst for TSMC will be the foundry service for MPU (microprocessor) chips on 45nm. We think AMD will rely more on TSMC after the spin-off of its manufacturing facilities.

## Samsung Electronics

**Investment case:** While we remain cautious on Samsung's operational outlook over the next couple of quarters, we expect the stock to outperform its peers on a relative basis on account of 1) its strong balance sheet; 2) across-the-board market share gains; 3) the likelihood that Samsung will emerge the winner once the Dram and Nand Flash sectors eventually turnaround. In the short term, we see downside risks due to the deteriorating outlook in LCD panels and expect slowing unit growth and rising ASP pressure in handsets. We expect this to trigger further downside to consensus estimates and the share price in the short term. Further weakness in the Won is an upside risk.

**Valuation:** We base our price target of Won470,000 on a DCF model, which assumes a WACC of 11.5%, mid-term sales of 8% and margin of 8%.

**2009 catalysts:** Our 2009 EPS estimates are about 50% below consensus and we forecast Samsung Electronics will fall into operating loss in Q1. We see downside risks to consensus estimates and expect further downgrades to consensus to act as a negative catalyst. We see risks that Samsung's results are below expectations and expect Q1 guidance to be very weak. We therefore expect the Q4 results, due in late January, to be a further negative catalyst for the stock.

## Least Preferred Hynix Semiconductor

**Investment case:** With the downturn in Dram set to enter a third consecutive year, we expect Hynix's operating outlook to worsen in 2009. We expect this to add further pressure on its cash reserves and foresee a risk that it will have to raise new financing in 2009. We do not expect any new financing to be on favourable terms to the company and see a risk of potential dilution for existing shareholders if any new money is raised via a CB or equity placement.

**Valuation:** We base our price target on a P/BV multiple of 0.5x, versus 0.4x for the pure-play peer group (excluding Samsung Electronics and Toshiba).

**Sector:** Taiwan Semiconductors

**Rating:** Buy

**PT:** NT\$50.00

**Analyst:** Jonah Cheng

**Sector:** Korea Semiconductors

**Rating:** Neutral

**PT:** Won470,000

**Analyst:** Robert Lea

**Sector:** Korea Semiconductors

**Rating:** Sell

**PT:** Won6,200

**Analyst:** Robert Lea

**2009 catalysts:** We expect Hynix's stock to react to incremental news on industries ASPs and newsflow in the PC sector (which accounts for about 85% of Dram demand) and quarterly operating results in the sector (Hynix reports Q4 results in late January 2009). We expect memory stocks to react positively to any news of industry consolidation or capex reductions, given the current oversupply in Dram and Nand Flash.

## Foxconn Technology

**Investment case:** We believe Hon Hai's ambition to push further into notebook manufacturing could affect Foxconn Technology's (FTC) relationship with major NB ODMs, as these customers would be more reluctant to purchase from a subsidiary of a competitor, in our view. Separately, we believe potential share gains in the games console business will not offset the decline in FTC's other businesses, given the lower margin and smaller earnings contribution.

**Valuation:** FTC is trading at 2009E PE of 10.8x, a valuation which we think is stretched compared with other technology stocks, including parent company, Hon Hai. Our DCF-based price target of NT\$58.00 assumes a 5% medium-term EBIT margin, 3% medium-term growth and 9.5% WACC.

**2009 catalysts:** The game console assembly business contributes only 18% earnings despite over 65% sales exposure and seasonality peaks in H208. As game console shipments start to fall in late 2008, sales momentum should weaken—we consider this to be a near-term catalyst. In addition, we forecast flat global Nintendo hardware shipments in 2009 and a YoY decline in 2010. This should also cap FTC's top-line growth in 2009 to some extent.

## Quanta

**Investment case:** As the largest notebook (NB) ODM, we believe it might be difficult for Quanta to deliver higher-than-industry shipment growth in 2009. We believe some of the high-end NB models Quanta is exposed to could be vulnerable as cash-strapped consumers look for lower-priced alternatives. We think Quanta's premium is unjustified as all NB ODMs face similar market conditions. We also think it will likely face the most competitive pressure from Hon Hai's entry into the notebook ODM business.

**Valuation:** We believe Quanta's current valuation is stretched versus industry peers Compal and Wistron that face similar industry conditions and end-market demand. Our DCF-based price target of NT\$32.00 assumes 3%/3% medium-term/terminal growth, 1.7%/1.4% medium-term/terminal EBIT margin and 8.4% WACC.

**2009 catalysts:** Our checks suggest that Quanta and Hon Hai have the most direct customer overlap. If Hon Hai were to become more aggressive in NB, Quanta would be the first to be impacted. This could add uncertainty to Quanta's growth outlook in 2009 and could cause its shipment momentum to lag other ODMs. Quanta's margins could be at risk if it pursues above-industry volume growth.

**Sector:** Taiwan Electronic Components & Equipment

**Rating:** Sell

**PT:** NT\$58.00

**Analyst:** Edward Yen

**Sector:** Taiwan Computers

**Rating:** Sell

**PT:** NT\$32.00

**Analyst:** Edward Yen



## Chi Mei Optoelectronic

**Investment case:** Chi Mei Optoelectronic's (CMO) balance sheet is the most leveraged panel maker. We estimate CMO will need external financing of at least NT\$30bn to make it through this downturn, even after assuming it reduces 2009 capex by 50% to NT\$50bn. The company still has NT\$60bn of outstanding syndicated loans available for 2009. We are concerned that CMO's market position could be significantly damaged such that it might not be able to recover fully to participate in a possible industry recovery in H209/2010.

**Valuation:** CMO trades at a lower P/BV multiple than its peers such as LG Display. However, we think concerns over its financials and market position overshadow the low multiple. We base our price target on 0.49x P/BV 2009E using the UBS franchise spread model (near-term ROE of -4%, mid-term ROE of 7% and cost of equity of 11.3%).

**2009 catalysts:** We see limited positive catalysts for CMO in 2009. Industry-wide production and capex should stabilise the market, but we think much of the reduction would come at the expense of CMO.

**Sector:** Taiwan Electronic Components & Equipment

**Rating:** Neutral

**PT:** NT\$13.40

**Analyst:** Robin Cheng

# Asian IT hardware

## What are the likely key themes?

### Rising pricing pressure to the supply chain

We think falling industry revenue and increasing pricing pressure for the supply chain could be the main theme for the IT hardware sector in 2009. With increased recessionary concerns, we believe the replacement cycle in developed markets could lengthen, while the growth momentum in emerging markets could also slow due to conservative consumer spending and large stock market declines in these regions. As a result of increased macro economic concerns, we now expect global PC revenue to decline by 9.3% and global handset revenue to decline by 14.5% in 2009.

**Sub-sector: Asian IT hardware**

**Analysts: Arthur Hsieh, Edward Yen**

### Prefer notebook PC to the handset food chain

On a relative basis, we prefer the PC food chain to the handset food chain as PC demand could be more resilient than handset demand. With a more serious decline in handset shipments than PC shipments in 2009E, we think handset OEMs may have to fill their internal manufacturing plants before they increase outsourcing. Moreover, we expect the Korean handset OEMs to gain share at the expense of rivals and this could have a negative impact on non-Korean handset component companies because Korean handset OEMs tend to use more domestic suppliers.

### Prefer brand name to OEM/EMS component makers

Among different sub sector in the supply chain, we prefer brand name OEMs to ODM/EMS companies to component suppliers, as brand name OEMs could retain the pricing power and pass on the pricing pressure to the supply chain. ODM and EMS companies usually charge a fixed amount of value-add or handling fee and thus their profit dollar could decline along with falling industry value. Nonetheless, their margin rate could be stable. Separately, we are concerned on the component sub sector given these companies are at the bottom of the food chain and could bear the most pricing pressure.

### Prevailing down-trading consumption trend

As discount stores such as Wal-Mart could still have positive same-store-sales growth because of the down-trading consumption trend, we believe only companies with the leanest cost structures can survive in this challenging environment.

Among different electronics products, we believe netbooks will be attractive to cash-strapped consumers as an affordable product for entertainment value as well as information and computing productivity. We think netbooks also open up new markets that regular NB PC would have difficulty penetrating. We believe netbooks could help widen the age demography of PC users and also help further address the education market. Separately, netbooks could also attract existing NB users to purchase a secondary NB that they would otherwise not have bought if form factors and prices were not attractive enough.

In the handset space, we believe falling prices and the addition of attractive applications could continue to keep the smartphone segment growing at an above-industry rate. We forecast the smartphone segment to still deliver 20% unit growth compared with the handset industry average of a 9% unit decline in 2009.

## What may surprise on the upside or downside?

Given the high correlation between global GDP and electronics product demand assumption, we believe macroeconomic conditions remain the major swing factor to our overall forecasts. Any deviation in the actual GDP to our GDP estimates could lead to a significant change in our industry forecast model.

On a product basis, we think the biggest risk to our PC forecast is whether the demand for netbook will materialise or not. We forecast 6.2% growth in the notebook sector in 2009. This assumes a 1.64% YoY shipment decline within traditional notebooks and 25m netbook shipments in 2009 (up from an estimate of 12.5m shipments in 2008). Given a large percentage of netbook purchases are being made by existing notebook owners, we see risks in the face of the economic slowdown.

In terms of potential positive surprise, we think falling oil and the other commodity prices, declining transport costs, as well as weakening Asian currencies could help component vendors to mitigate pricing pressure. Even though we still believe component vendor margins will continue to decline, the pace of decline might not be rapid, given the aforementioned mitigating factors.

## What are the likely key catalysts?

We think the key catalyst to follow is whether the decline in earnings in Q209 will decelerate. If this happens, investors could gain confidence as it would be a sign that the bottom of the cycle is near. Our base-case scenario is that IT hardware companies face tremendous pressure in Q109 given a potentially serious excess inventory digestion process. This could be more serious for the handset food chain than the PC food chain as our checks suggest the PC food chain has been more cautious in managing inventories.

The other potential catalysts could be new product introductions. Despite all the macro concerns, market demand for Acer's AspireOne netbook and HTC's G1 Android phone has been stronger than expected so far this year. We believe if the coming new models of these platforms are innovative enough, these new products could still garner enough demand and help the companies to better position themselves in an unfavourable environment.

# Asia semiconductors

## What are the likely key themes?

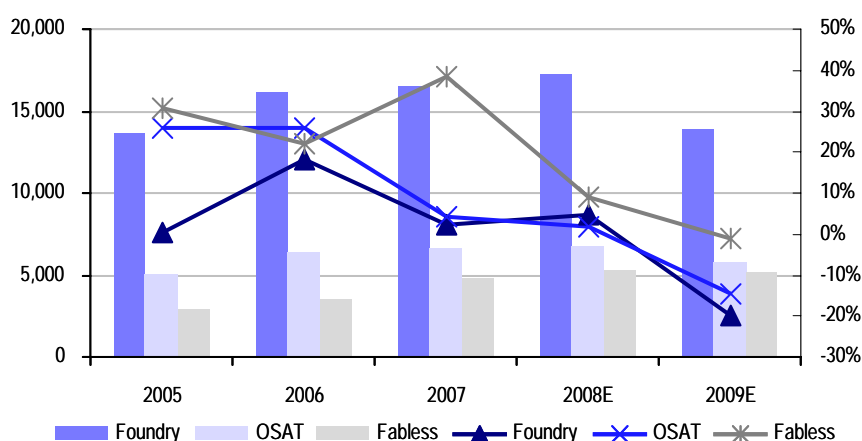
Semiconductor companies tend to suffer more during an economic downturn due to high operating gearing (for example, equipment capex and R&D expenses). We forecast 2009 sales to decline 15% YoY for Asian (ex-memory) semiconductor companies and expect earnings to decrease about 40% YoY, as margins decline due to rising ASP pressure and lower capacity utilisation rates.

**Sub-sector: Asian semiconductors**

**Analysts: Jonah Cheng, Samson Hung**

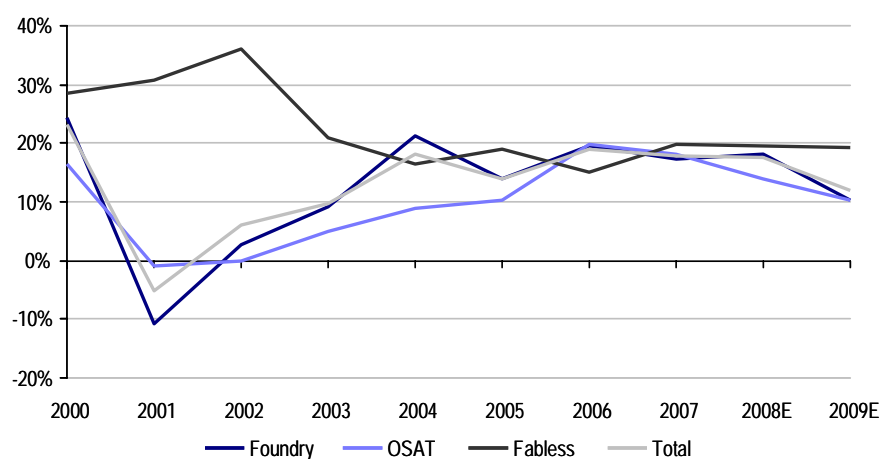
- **Foundries:** we expect foundries to have the steepest revenue and earnings decline (20%/57%), especially among second-tier players. We expect many companies to incur a loss in Q1, with TSMC remaining the only profitable company. We expect foundry players to suffer more on the margin decline given its higher operating leverage. As a result, we expect the aggregate operating margin in foundry to decline to 10% in 2009, from 18% in 2008. NB: This forecast made prior to TSMC's revision to guidance on 1 December.
- **OSAT:** we think overall OSAT 2009 sales/earnings, under UBS coverage, will decline 14%/35% YoY in a weak macro environment. We think capex discipline in the past two years among major OSAT players such as ASE and SPIL should help mitigate overcapacity risk into 2009. However, we think the IDM outsourcing rate will slow and limit their upside potential.
- **IC design:** we think IC design companies, on aggregate, may be more resilient during an economic downturn as we still expect some market share gain by leading players such as MediaTek and Richtek to partly mitigate the overall demand slowdown. As a result, we expect sales from Asian IC design companies under our coverage to decline 5% YoY. As a result, we also expect the operating margin to remain at 19% in 2009.

**Chart 2: Asia semi (excl memory) sales trend (US\$ m)**



Source: Company data, UBS estimates

Chart 3: Asia semi (excl memory) operating margin trend



Source: Company data, UBS estimates

### Survival of the fittest

We believe companies with sound financials will weather the current economic downturn. Generally, we see limited refinancing risk among Asian semiconductor companies as most of them are still have net cash and are generate strong operating cash flow. In addition, we expect companies to be more disciplined on capex in 2009, which would help to sustain positive cash flow in 2009.

However, some second-tier companies might find it more difficult to compete with leaders in new technology development, given their limited resources for on R&D. The lag in technology advancement might widen the competitive gap with leaders when market growth returns. As a result, assuming no external factors such as government support, some small players might exit the market. We believe this would be a positive long-term industry development.

Table 14: Refinancing risk—as of Q308 (NT\$ m)

Name	Cash on hand	FCF FY08	FCF FY09E	Total interest bearing debt	Total debt as % of net debt
TSMC	112,446	135,174	109,446	14,305	-15%
UMC	25,194	27,149	13,379	7,496	-42%
Chartered**	743	24	122	1,813	169%
SMIC**	393	-177	115	1,245	146%
Vanguard	3,359	-653	1,021	0	0%
ASE*	23,305	27,301	20,263	64,425	157%
SPIL	13,075	11,812	11,657	2,982	-30%
NYPGB	1,665	7,784	6,811	0	0%
PPT	1,068	924	1,061	5,926	122%

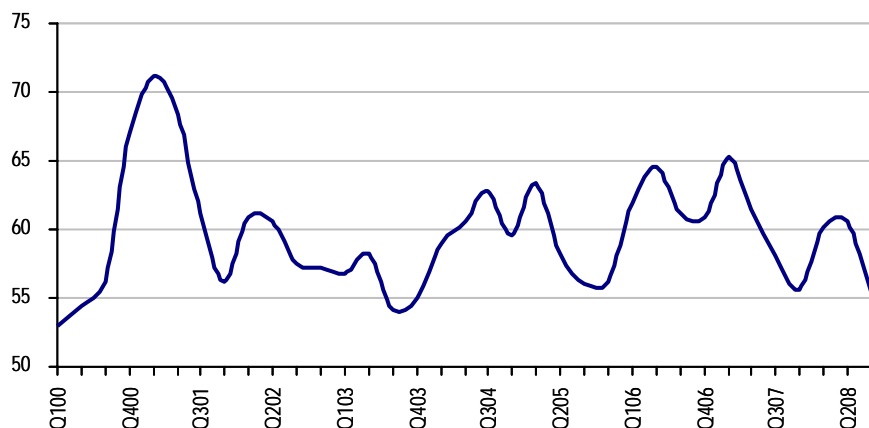
Note: \*ASE figure based on H108; \*\* Chartered and SMIC on US\$ m.

Source: Company data

### Good news—better inventory control/capex discipline

Among the negative trends, we see some positive signs for the industry—better inventory control and good capex discipline in the food chain. Our supply-chain inventory checks indicate Q308 inventory has dropped to low-end range in the past few years and Q4 might reach a record low level. Currently, every company appears cautious and we think the inventory level might have over-corrected. We expect rush orders after Christmas if downstream companies find sell-through is slightly better than their expectation.

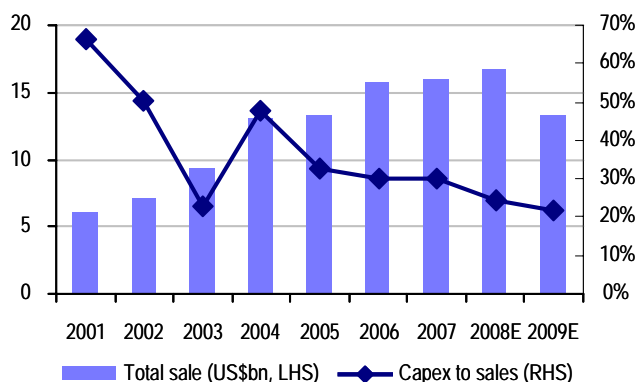
**Chart 4: Total semiconductor (excl memory) inventory turnover days**



Source: Company data, UBS estimates

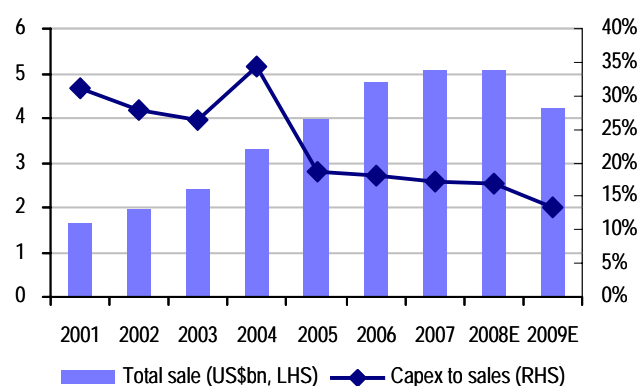
Wafer foundries started to implement capex discipline in 2008 and we think this will reduce the risk from oversupply. Foundries currently have poor profitability due to overinvestment in the past few years (especially in China), but we expect the situation to improve since the China competitors might not be able maintain investment (SMIC will cut capex by 70%+ in 2009). OSAT companies have also indicated a 20%+ capex cut into 2009. We think this will be good for the whole semiconductor supply-chain.

**Chart 5: Foundry capex/sales trend**



Source: Company data, UBS estimates

**Chart 6: OSAT capex/sales trend**



Source: Company data, UBS estimates

## What is our central thesis for 2009?

### Focus on defensive stocks and technology leaders

We advise investors to focus on defensive stocks and technology leaders that are likely to better weather the current economic turmoil and emerge stronger. We believe TSMC, SPIL, and Mediatek are better choices during the downturn.

### Foundry might be the outperformer

In H109, we expect foundry to be the first to outperform semiconductor because of its longest lead-time (two to three months) and low inventory in the supply-chain. Also, we expect significant amounts of new chips to migrate to 65nm process while new capacity for 12" wafers will be limited. This should help leading players to improve their profitability in H209.

### Market focus on M&A opportunities

Consolidation always comes into focus during a downturn. As some wafer foundries are trading at low valuation (below 0.5x PBR), we think the market will monitor any potential consolidation.

## What may surprise on the upside or downside?

### End demand is the most critical issue

CUR is the most important factor that could impact foundry and OSAT profitability. There is capex discipline in the supply-chain, so the end demand outlook is the most critical factor to impact CUR. The major categories of chips fabricated at foundries include GPU (Graphic processor units), handset IC (baseband, CMOS sensor, and Bluetooth), and Consumer electronics ICs (game console, DTV, and STB). A better or worse demand outlook for these products will result in upside (or downside) surprise to our estimates.

### Process migration is key for foundry

We expect higher demand for 65nm process into H209, which might result in tight supply of advanced process. For PC-related IC, the 0.18/0.13um process is sufficient for peripheral chips such as USB 2.0, but we will use 65nm for USB 3.0 or other interconnect technology. For communication chips, 0.13um is good for WLAN (802.11g), Bluetooth, and GPS. But we expect more demand for 65nm because of higher data rates or higher integration. For consumer IC, high definition media processor (H.264) will also need more advanced process than the traditional MPEG2 decoder. It is important for wafer foundries to prepare 65nm process technology and capacity in 2009, in our view.

### New applications might drive growth

Smartphone, DTV phone, and BD (Blu-ray disk) player might be the most important new products in 2009, in our view. Apple's iPhone successfully stimulated demand for mobile broadband, which resulted in greater demand for 3G/HSDPA chips. DTV phone is a potential killer application in China to drive the replacement demand. Also, we expect street price for BD players might drop to around US\$100 (in promotion or bundle deals) in 2009, and it might result in some upside surprise for the chip demand.

## What are the likely key catalysts?

### Potential positive catalysts

- **Capex discipline:** We expect Asian semiconductor foundry and OSAT companies to maintain a capex discipline in 2009 to avoid aggravating the oversupply situation.
- **Potential consolidation:** We expect share prices of Asian semiconductor companies, especially for foundry and OSAT players, to react positively to news on industry consolidation. Consolidation could lead to a more stable pricing environment, helping companies maintain profitability.
- **New product cycle:** Potential new product cycles including the Blu-ray disk, China's CMMB TV standard, and Intel's introduction of new Nehalem CPU platform could drive additional growth in 2009. A faster-than-expected adoption of these new products could help to support share prices in semiconductor sub-sectors including IC design (fabless) and IC substrate in 2009, in our view.

### Potential negative catalysts

- **Deteriorating end demand:** The outlook for the Asian semiconductor is highly dependent on the global demand outlook. Given our cautious view on the macro outlook into 2009, we expect Asian semiconductor stocks to react negatively to any worsening signal in end demand.
- **Price competition/margin pressure:** Foundry and OSAT vendors could compete aggressively on pricing in 2009 to win orders to fill their capacity. Rising price competition would likely lead to more margin pressure. As a result, we expect shares of Asian semiconductor players to react negatively to the likely intensifying pricing competition in 2009.



## IT services

### What are the likely key themes?

We expect the following themes in 2009:

- **Vendor consolidation:** Our analysis suggests the top five India-based IT companies have gained significant market share over FY04-08, an increase from 33% in FY04 to 40% in FY08, with increased momentum in FY07-08. In the current environment, we think pressure from clients and IT vendors on vendors to consolidate will increase, as consolidation drives cost savings.
- **M&A activity/captive buyouts:** Indian IT companies have often stated acquisition as a strategy to expand into new service lines/geographies. We believe Indian IT companies will likely use the cash on their balance sheets to expand into newer markets. There has been activity on this front such as HCL Technology's acquisition of Axon and Tata Consultancy Services' (TCS) acquisition of Citigroup Global services (CGSL). Captive buyouts could become increasingly commonplace in 2009, as: 1) IT companies receive assured revenue streams and domain capabilities; and 2) clients of IT companies are able to raise cash. There have been two such transactions: 1) TCS's acquisition of CGSL; and 2) WNS acquisition of Aviva Global Services.

**Sub-sector: Asian IT services**

**Analyst: Govind Agarwal**

### What is our central thesis for 2009?

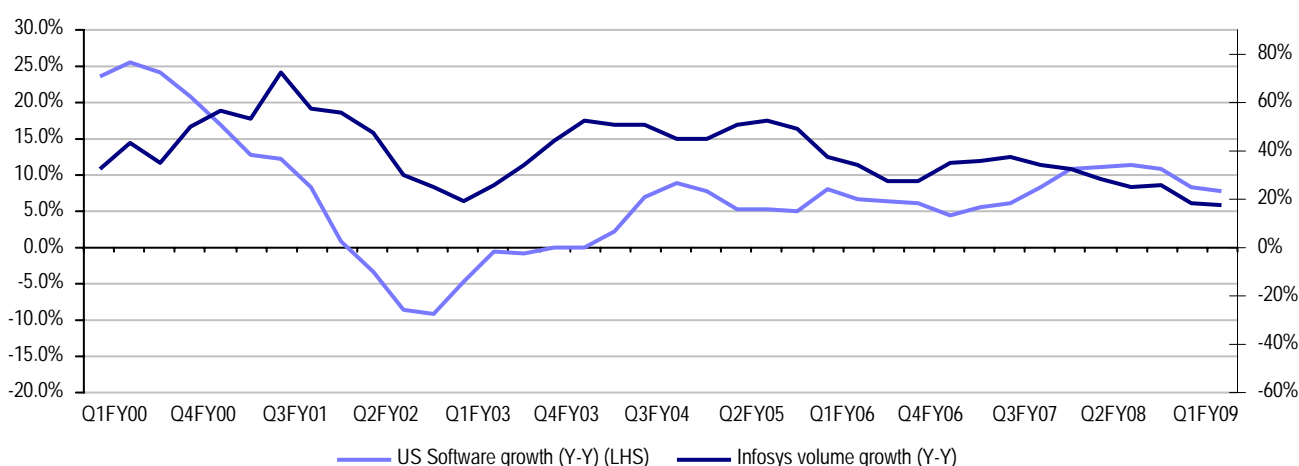
We are cautious on the Indian IT sector as it enters as the period of heightened uncertainty on IT budgets for 2009. We believe clarity on IT budgets and the actual quantum of budget cuts and the impact on Indian IT industry will emerge only towards the end Q109/early Q209. While budget cuts are widely expected in 2009, there is no consensus on the extent of the cuts or on the pricing.

Revenue growth in the Indian IT service sector is closely co-related with the US GDP and global GDP outlook. We believe Indian IT companies tend to benefit in an economic slowdown, as offshoring results in significant savings for the clients. However, in the current environment, when UBS forecasts a recession in US and the global economy, we believe revenue growth rates will decline further in FY10 from FY09 levels.

Indian IT companies derive close to 50-60% of their revenue from the US and 20-30% from Europe and UBS expects these economies to be in recession in 2009. As a consequence, we forecast 9-13% revenue growth in FY10 and FY11, an EBITDA margin decline, and a low single-digit EPS CAGR over FY09-11.

On PE, the stocks are trading 20-30% below trough valuations in the last slowdown in 2001-02. We believe the valuation and balance sheet strength of companies should provide downside support to share prices.

Chart 7: Volume growth versus US software growth



Source: Company data, Federal Reserve Board

Infosys remains our top pick in the sector on a relative basis. We believe it is best positioned in the current environment to emerge stronger and gain market share. We believe Infosys has: 1) sufficient margin leverage to offset a negative impact from a potential pricing decline in FY10 (variable cost is about 550bp of revenue, which should offset even a 5-10% decline in price in FY10); 2) good execution ability; 3) strong cash-flow generation (DSO at lowest levels in Q2 FY09); 4) management focus on organic growth (walking away from the Axon bid); 5) pricing discipline (has led industry metrics on pricing); and 6) strong balance sheet (net cash and free cash flow generation).

We expect Infosys's guidance in April 2009 to address the worst-case scenario on revenue and EPS growth for FY10. We think margin protection and pricing discipline will differentiate Infosys from the peers in 2009. We think a swift recovery in the European and the US economies could be a stock catalyst. We believe stability in the global economy will result in contract awards and increased deal flow; these have slowed over the past few quarters. Here again, we believe Infosys has been less affected than peers because of its superior client exposure.

### What may surprise on the upside or downside?

We believe further deterioration in the macroeconomic environment or bankruptcy of some of the large clients will pose significant downside risk to our estimates. This is particularly true of any companies with exposure to clients in the financial services sector, in our view.

On the positive side, we see scope for offshore IT service companies to gain market share through the downturn. This will help to offset that fact that most corporate IT budgets will likely reduce YoY in 2009.

The revenue, operating margins and net profit of IT companies will benefit from the depreciation of the rupee against the US dollar, whereas US dollar appreciation against the pound and the euro will have a negative impact on the US dollar revenues.

## What are the likely key catalysts in 2009?

We believe the IT services sector could bottom out by February/March 2009 and view Infosys guidance for FY10 in April 2009, as a potential catalyst for the sector. Consensus expectations are for substantial pricing and margin declines in 2009. We believe companies with variable cost structures and tight internal controls will likely do well in 2009.

We believe revenue uncertainty on FY10 revenue will increase as the sector enters the 2009 budget cycle. We expect negative data points/newsflow on IT budgets in Q109 to dampen sentiment on the sector.

Further deterioration in the global macroeconomic environment or the bankruptcy/bailout of some large clients could also have an adverse impact on the company revenue.

## TFT-LCD sector

### What are the likely key themes?

#### Potential industry consolidation

The LCD-panel industry has undergone consolidation in the past cycles but still has more than 10 players in the market. We expect the current downturn in H208-H109 to trigger further consolidation.

Among the first-tier brands, we see exposure to captive customers in the LCD-TV segment as being a key differentiating factor and see Samsung, LG Display and Sharp as being the best positioned competitors. We think AUO and Chi Mei are more at risk, as they are merchant players that do not have the same captive relationships as their larger competitors. We estimate CMO will need external financing of at least NT\$30bn in 2009E even assuming it were to reduce capex by 50% in 2009 to NT\$50bn. CMO's market position could be significantly weakened through this downturn, in our view.

We expect the gap between first-tier companies and the rest to widen through 2009 as balance sheet pressures rise. For example, most lower-tier companies do not have the balance sheet to build G7+ lines for TVs. In addition, G4-6 lines have become uneconomical as monitor panel prices have reached cash costs, forcing most to exit or produce small panels.

#### Greater focus on cost reduction

We expect cost reduction to come increasingly into focus in 2009, as the Taiwanese panel makers began incurring losses from Q308. We expect the Korean makers to incur losses by Q109. We therefore expect further margin pressure among LCD component and material vendors. Commoditised components such as driver IC, polarizer, CCFL, and BLU are most at risk of margin pressure, in our view. We expect price declines to be less severe in glass.

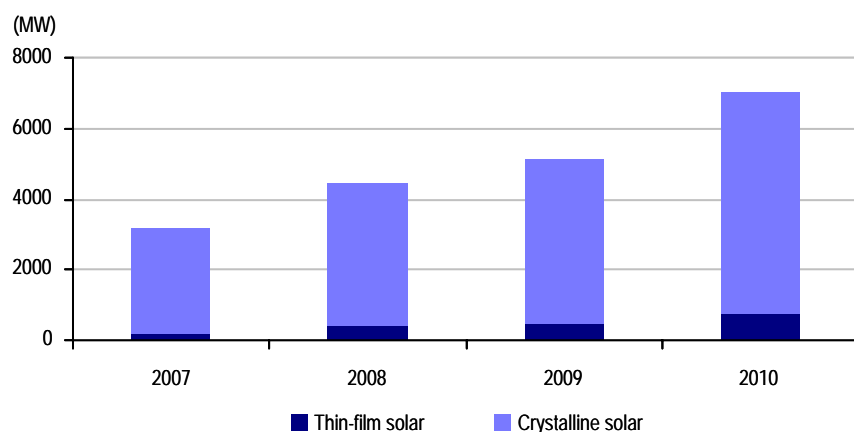
Traditional methods of cost reduction cannot keep up with the rate of TV price decline, in our view. The need for further cost reduction will therefore accelerate the commercialisation of new technologies such as AM-OLED. AM-OLED eliminates the need for back-light unit, liquid crystal and colour filters and could theoretically lower panel costs by as much as 40-50%. Currently, lower yields make it difficult for panel makers to realise these cost savings due to limitations such as life-times, backplane, and uniformity. However, leading panel makers will likely allocate more resources for development given deteriorating profitability of existing TFT-LCD production lines, in our view.

#### New growth drivers in thin-film solar

We forecast a solar demand CAGR of 41% from 07-12. Of this, thin-film solar cells would account for less than 10% of industry supply in 2008E, but could be on a faster growth curve, in our view. Thin-film solar cells comprise a thin layer of silicon coated on a glass-substrate. Mainstream crystalline solar cells use polysilicon wafers. The key advantages of thin-film are low costs (less use of silicon), scalability and transparency. The main drawback is lower power conversion efficiency as single layer thin-film solar cells convert only 7-8% of sunlight into power. Tandem and multiple junction cells increase the efficiency but are not yet widely available.

**Sub-sector:** Asian TFT-LCD panels

**Analysts:** Sean Kim, Robin Cheng

**Chart 8: Solar PV demand forecast**

Source: UBS estimates

Thin-film solar cells share a similar production process to TFT-LCD, attracting interest from the panel makers. Compared with TFT-LCD, the process is simpler and requires less capex as the lithography step is not needed for thin-film. For example, Sharp will spend capex of Yen72bn for new 480MW/year thin-film plant. This compares with capex of over Yen300bn required for a G8 or G10 TFT-LCD line.

Turnkey equipment solutions keep the entry barriers for panel-makers low. Moreover, many module makers have internal cell production, which means that LCD makers with captive customers (LG Display with LG Electronics for modules) will be at an advantage, it would be similar for LCD TVs. Sharp is the early leader with 160 MW/year of capacity in Q408 (ramp-up to 480 MW/year in 2009E). With an uncertain outlook for LCD sector, we expect other first-tier LCD-panel makers to enter the market in 2009/10.

### What is our central thesis for 2009?

With potential oversupply in the LCD-panel sector, we expect 2009 to be a challenging year for all panel makers. In past cycles, when the industry overbuilt capacity and fell into oversupply, lower pricing helped to stimulate demand and stabilise the industry. Supply cuts were the last resort and often unnecessary. However, with the global economic slowdown altering price elasticity dynamics, we are doubtful that enough demand will be stimulated this time around. We therefore believe panel makers will need to cut supply aggressively and pre-emptively.

We prefer Korean panel makers to competitors in Taiwan and Japan, due to the competitive and pricing advantage that the weak Won is providing these companies. For example 42" LCD-TV panel prices have declined 26% in US dollar terms from May 2008 to November 2008. Translated into local currencies, the price decline was 20% in Taiwan dollars, but only 2% in Won. This is one principal reason why Korean panel makers remained in profit in Q3, whereas the Taiwanese did not.

Table 15: TFT-LCD panel supply-demand forecasts

(K m2)	Q108	Q208	Q308E	Q408E	Q109E	Q209E	Q309E	Q409E	2008E	2009E	2010E
<b>Supply</b>	16,954	18,100	17,864	19,994	18,451	19,183	20,446	21,479	72,912	79,559	95,571
<b>Demand</b>	16,143	16,750	16,547	18,472	15,854	17,425	19,362	20,608	67,912	73,249	88,648
<b>Overcapacity Ratio</b>	5.0%	8.1%	8.0%	8.2%	16.4%	10.1%	5.6%	4.2%	7.4%	8.6%	7.8%
<b>Chg - QoQ/YoY</b>											
<b>Supply</b>	5%	7%	-1%	12%	-8%	4%	7%	5%	30%	9%	20%
<b>Demand</b>	-2%	4%	-1%	12%	-14%	10%	11%	6%	19%	8%	21%

Source: Displaysearch, UBS estimates

We forecast panel demand growth to slow in 2009, although the risks to our forecasts are on the downside. For monitor panels, we assume no growth in 2009, although there could be downside risks as our PC analysts expect desktop PC unit to decline by 11% in 2009. For notebook panels, we expect 12% unit growth, reducing to 6% growth in area due to growth in netbooks, which have a smaller screen size. There is a risk that growth in netbooks will cannibalise demand for mainstream notebooks, in our view. For LCD TVs, the question is on price elasticity of demand. We believe a slowdown only shifts the price elasticity curve to the left with the slope intact. However, a severe economic slowdown could change consumer behaviour structurally such that the slope becomes steeper than our expectation.

We expect the outsourcing of TV assembly to increase in 2009, as we estimate the retail price of mainstream 32" and 42" LCD TVs to decline by more than 20% to reach US\$399 and US\$599, respectively. Given the limited new growth opportunities in the PC sector, we expect PC EMS/ODMs to explore new opportunities in outsourced LCD-TV assembly. We expect LG Electronics and Sony to be more aggressive among the premium brands in outsourcing and see a growing opportunity for companies such as TPV, Innolux, Wistron and LG Display/Amtran.

## What may surprise on the upside or downside?

### Downside: growth from emerging markets

For 2009, we believe demand growth in the LCD TV market will largely come from emerging markets such as China. This is based on our assumption that most emerging markets will have some GDP growth (we expect all G7 countries to be in recession). However, even if some countries do not fall into recession, a sudden slowdown in the growth rate could be enough to slow demand growth more than we expect.

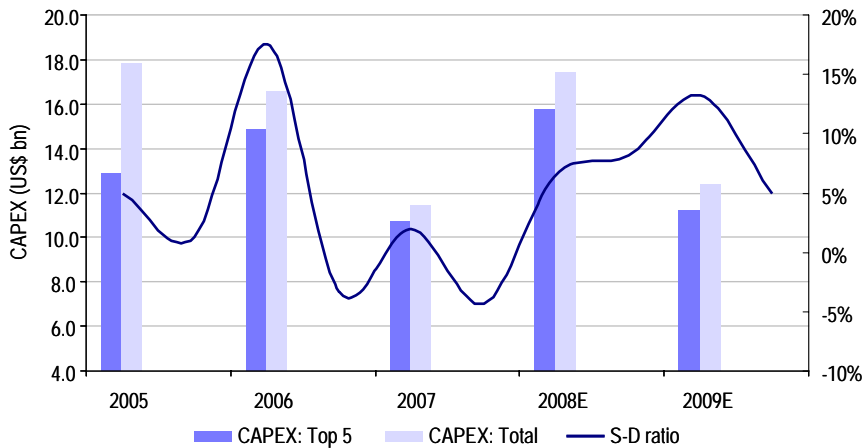
### Upside: resilience from US demand

Despite the recession, if price elasticity remains intact, TV demand could surprise on the upside in the US. In reviewing the Q308 demand data from Displaysearch, we were surprised to see 7.98m units for North America; which is up 20% YoY. We believe demand growth will slow in Q408 and will come nowhere close to the 35% QoQ increase achieved in Q407. However, this suggests there is still some resilience in demand although unit numbers could be misleading if consumers are trading down to smaller screens.

## What are the likely key catalysts?

Panel makers have not announced 2009 capex yet, but we would expect the top four panel makers to reduce capex by 20-50% on a year-on-year basis. Among the second/third-tiers, some makers such as CPT and Hannstar would not be investing at all. Nonetheless, given the macro concerns weighing on demand, capex reductions may not be enough of a catalyst by themselves. Most of the 2009 capex is for capacity in 2010. Thus, by cutting industry capex in 2009, the industry buys itself two years to work through the problems of a supply-demand imbalance. If oversupply can be brought under control in 2009, the industry would have a favourable backdrop for the following 12~18 months.

**Chart 9: Capex trends versus supply-demand ratio**



Source: UBS estimates

# Memory semiconductor

## What are the likely key themes?

With the Dram industry set to enter a third consecutive year of downturn, we think the debate has changed from a focus on the potential for an industry-wide recovery to a question of which companies can survive a prolonged downturn. Company balance sheets—with the exception of Samsung Electronics—are under immense pressure in the Dram sector and are set to weaken further as the ASP has now fallen below cash costs. We expect pressure for industry consolidation to rise into 2009 and see risks that under-capitalised, tier-two players might not survive.

**Sub-sector: Memory semiconductors**

**Analysts:** Robert Lea, Eunice Jang

**Table 16: Dram manufacturers—net debt**

	2002	2003	2004	2005	2006	2007	Q108	Q208	Q308
<b>SEC (US\$ m)</b>	-4,838	-5,757	-7,209	-6,869	-6,889	-8,318	-7,343	-6,047	-6,759
<b>Hynix (US\$ m)</b>	3,383	2,730	901	578	1292	3,328	4,397	5,433	6,202
<b>Micron (US\$ m)</b>	-222	-102	32	-270	-2,070	186	553	837	1,364
<b>Qimonda (US\$ m)</b>	-	-	-	-	-1,426	-1,041	872	341	-1
<b>Inotera (US\$ m, NR)</b>	-	-	-	764	382	1,721	2,057	2,326	2,192
<b>Nanya Tech (US\$ m, NR)</b>	814	716	870	760	449	1,441	2,095	2,131	2,383
<b>Powerchip (US\$ m, NR)</b>	283	258	-344	274	342	1,946	2,588	2,513	2,673
<b>ProMOS (US\$ m, NR)</b>	619	395	4	928	483	1,874	2,264	2,358	2,080

Note: NR = Not Rated.

Source: Company data, FactSet, TEJ, UBS estimates

We see scope for potential state intervention in the sector in 2009, particularly in Taiwan, where the government previously identified semiconductors, along with flat panel displays as one of its target “One Trillion NT\$ industries” in 2002. The Taiwan government is also motivated to protect its already fragile banking sector, which is owed a combined NT\$420bn (about US\$12.6bn) in debt from the four domestic Dram companies. Reports from Germany suggest that the Saxony government is doing all it can to secure the survival of Qimonda.

We provisionally expect the operating performance of most memory companies to bottom-out sometime in the second quarter of 2009. This forecast assumes that industry ASPs stabilise in Q2, helped by a combination of 1) reducing inventory levels and 2) the positive impact of likely additional supply cuts. However, while the sector might technically bottom out in Q2, we expect the road to recovery to be a long and arduous one for all companies in the sector, in light of the likely global recession in 2009.

## What is our central thesis for 2009?

We expect the global Dram and Nand Flash segments to remain in oversupply through 2009 in the face of weakening demand and (as yet) insufficient supply cuts. With ASPs below cash costs for most Dram and Nand players, we expect more substantial supply cuts across the industry into 2009. While these might help to stabilise unit pricing (and could even drive some recovery), we are doubtful pricing will rebound substantially in 2009, given the weakening demand outlook and macro uncertainties. We therefore believe the memory industry recovery has been pushed out to 2010.



We expect industry demand growth for Dram (in terms of total bits) to slow to 30% YoY growth in 2009, from 69% YoY growth in 2008 and 82% YoY growth in 2007. On the supply side, we forecast industry capacity growth of 67% in 2008 and 37% in 2009. We therefore expect the industry to remain locked in oversupply through 2008 and 2009. We forecast Dram oversupply of 2.0% in 2008 and 7.5% in 2009.

**Table 17: UBS global Dram industry supply-demand (512Mb equivalents)**

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Sales (US\$ m)</b>	6,265	8,482	7,982	6,058	28,787	5,349	5,776	6,929	6,873	24,927	29,352
<b>QoQ (%)</b>	-1.0%	35.4%	-5.9%	-24.1%		-11.7%	8.0%	20.0%	-0.8%		
<b>YoY (%)</b>	-35.2%	11.7%	0.9%	-4.3%	-8.6%	-14.6%	-31.9%	-13.2%	13.4%	-13.4%	17.8%
<b>Bit growth (m)</b>	3,500	4,264	4,667	5,077	17,508	4,890	5,186	6,006	6,646	22,728	32,357
<b>QoQ (%)</b>	12.8%	21.8%	9.4%	8.8%		-3.7%	6.1%	15.8%	10.6%		
<b>YoY (%)</b>	76.6%	74.7%	66.4%	63.6%	69.5%	39.7%	21.6%	28.7%	30.9%	29.8%	42.4%
<b>Blended ASP (US\$)</b>	1.79	1.99	1.71	1.19	1.64	1.09	1.11	1.15	1.03	1.10	0.91
<b>QoQ (%)</b>	-12.3%	11.1%	-14.0%	-30.2%		-8.3%	1.8%	3.6%	-10.3%		
<b>YoY (%)</b>	-63.3%	-36.0%	-39.3%	-41.5%	-46.1%	-38.9%	-44.0%	-32.6%	-13.3%	-33.3%	-17.3%
<b>Bit supply (m)</b>	3,562	4,159	4,804	5,339	17,864	5,601	5,828	6,289	6,707	24,426	32,054
<b>Growth QoQ</b>	9.2%	16.7%	15.5%	11.1%		4.9%	4.1%	7.9%	6.6%		
<b>Growth YoY</b>	71.9%	63.5%	68.6%	63.7%	66.6%	57.2%	40.1%	30.9%	25.6%	36.7%	31.2%
<b>Bit demand (m)</b>	3,500	4,264	4,667	5,077	17,508	4,890	5,186	6,006	6,646	22,728	32,357
<b>Growth QoQ</b>	12.8%	21.8%	9.4%	8.8%		-3.7%	6.1%	15.8%	10.6%		
<b>Growth YoY</b>	76.6%	74.7%	66.4%	63.6%	69.5%	39.7%	21.6%	28.7%	30.9%	29.8%	42.4%
<b>Over (+) / Under (-) supply</b>	<b>1.8%</b>	<b>-2.5%</b>	<b>3.0%</b>	<b>5.2%</b>	<b>2.0%</b>	<b>14.6%</b>	<b>12.4%</b>	<b>4.7%</b>	<b>0.9%</b>	<b>7.5%</b>	<b>-0.9%</b>

Source: UBS estimates

Within the Nand Flash sector, we forecast industry demand growth of 112% in 2008 and 74% in 2009. We forecast industry supply growth of 128% in 2008 and 77% in 2009. As a result, we forecast oversupply of 7.6% in 2008 and 9.6% in 2009.

We expect SSD (solid state drive) demand to remain modest over the next 18-months, as pricing remains too high to make it affordable to mainstream consumers. For example, at current pricing, a 64GB (SLC) Nand SSD drive would cost close to US\$500, compared with around US\$50 for an 80GB hard disc drive.

Table 18: UBS global Nand Flash supply-demand model summary (4Gb equivalents)

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
Sales (US\$ m)	3,556	4,064	3,480	3,371	<b>14,470</b>	2,863	3,202	3,816	4,006	<b>13,886</b>	<b>20,626</b>
QoQ (%)	-20.2%	14.3%	-14.4%	-3.1%		-15.1%	11.8%	19.2%	5.0%		
YoY (%)	43.5%	29.0%	-23.0%	-24.3%	-0.9%	-19.5%	-21.2%	9.7%	18.8%	-4.0%	48.5%
Bit growth (m)	1,265	1,626	1,815	2,197	<b>6,903</b>	2,196	2,585	3,242	4,004	<b>12,027</b>	<b>25,692</b>
QoQ (%)	-4.8%	28.5%	11.6%	21.1%		-0.1%	17.7%	25.4%	23.5%		
YoY (%)	171.7%	172.5%	111.1%	65.2%	<b>112.3%</b>	73.5%	58.9%	78.7%	82.2%	<b>74.2%</b>	<b>113.6%</b>
Blended ASP (US\$)	2.81	2.50	1.92	1.53	<b>2.10</b>	1.30	1.24	1.18	1.00	<b>1.15</b>	<b>0.80</b>
QoQ (%)	-16.1%	-11.1%	-23.3%	-20.0%		-15.0%	-5.0%	-5.0%	-15.0%		
YoY (%)	-47.2%	-52.7%	-63.5%	-54.2%	<b>-53.3%</b>	-53.6%	-50.4%	-38.6%	-34.8%	<b>-44.9%</b>	<b>-30.5%</b>
Bit supply (m)	1,456	1,648	1,949	2,373	<b>7,426</b>	2,650	2,964	3,448	4,119	<b>13,181</b>	<b>23,993</b>
Growth QoQ	19.9%	13.2%	18.3%	21.8%		11.7%	11.9%	16.3%	19.5%		
Growth YoY	169.4%	158.3%	125.3%	95.4%	<b>127.9%</b>	82.0%	79.9%	76.9%	73.6%	<b>77.5%</b>	<b>82.0%</b>
Bit demand (m)	1,265	1,626	1,815	2,197	<b>6,903</b>	2,196	2,585	3,242	4,004	<b>12,027</b>	<b>25,692</b>
Growth QoQ	-4.8%	28.5%	11.6%	21.1%		-0.1%	17.7%	25.4%	23.5%		
Growth YoY	171.7%	172.5%	111.1%	65.2%	<b>112.3%</b>	73.5%	58.9%	78.7%	82.2%	<b>74.2%</b>	<b>113.6%</b>
Over (+) / Under (-) supply	<b>15.1%</b>	<b>1.3%</b>	<b>7.4%</b>	<b>8.0%</b>	<b>7.6%</b>	<b>20.7%</b>	<b>14.7%</b>	<b>6.3%</b>	<b>2.9%</b>	<b>9.6%</b>	<b>-6.6%</b>

Source: UBS estimates

## What may surprise on the upside or downside?

Memory semiconductors are commodity products and industry pricing is determined by the relative balance of supply and demand in the sector. Investors therefore need to consider the likely risks to the supply and demand outlook in both Dram and Nand Flash in order to take a view on the likely future direction of pricing and earnings in the industry.

The risks to demand are more on the downside in our view, due to the high probability of a global recession in 2009. Demand for Dram is largely driven by the PC sector, which we estimate accounts for some 85% of total Dram industry demand. We think the risks to PC demand are on the downside, as corporations (about 60% global PC demand) likely freeze or rein back IT spending in 2009 and consumers reduce their spending on electronics. We expect incremental growth in the Dram content per PC to slow in 2009 given already adequate levels of Dram loading per system, in our view.

We see downside risks to demand for Nand Flash due to slowing consumer demand for portable electronics. The Nand Flash market is reliant on several mature consumer electronics segments including DSC and MP3 players, which we estimate will account for 38% of Nand industry demand in 2008. As mature product segments, we believe demand for DSCs and MP3 is more vulnerable in a consumer downturn as these markets are more reliant on replacement demand because penetration rates are high. Replacement cycles tend to be more vulnerable in a downturn, as many consumers opt to keep their current camera or MP3 player, rather than purchase a new one.

We see greater upside risk to supply estimates (particularly in Dram) due to the current oversupply and balance sheet pressure in the sector. Several Dram vendors have announced supply reductions in the last quarter, as ASPs have fallen below cash costs. Supply cuts, where these have been announced, have so far been small in magnitude and have not had a meaningful impact on the oversupply in the face of weakening demand. As a result, industry pricing in Dram has continued to fall. With ASPs below cash costs for most Dram and Nand players, we expect to see more substantial supply cuts across the industry into the new year.

## What are the likely key catalysts?

Trading in memory stocks is highly volatile and the sector attracts a greater proportion of short-term speculators, than long-term investors, in our view. Memory stocks tend to have a high beta and can be subject to large intra-day swings, driven by short-term newsflow and sentiment. We identify the following potential catalysts for the sector:

### Potential negative catalysts

- **PC sector news flow:** With the risks to PC shipments on the downside, in our view, we expect Dram stocks to react negatively to any further disappointment in the PC sector. We therefore expect Dram stocks to react to newsflow the PC OEM companies (Dell, HP, Acer and Lenovo); other PC-related companies such as Intel, AMD and Seagate and PC forecast updates from market forecasters such as Gartner Dataquest, IDC and iSuppli.
- **ASP pricing data:** We expect sector stocks to react to changes to pricing in the Dram and Nand Flash segments. Contract pricing is announced twice a month, with spot pricing announced on a daily basis. Investors can monitor pricing trends in both Dram and Nand Flash on the [www.dramexchange.com](http://www.dramexchange.com) website.
- **Quarterly operating results:** We expect operating results to deteriorate further in Q4, for all memory companies, including Samsung Electronics. Given the high margin of error in accurately forecasting profits at memory companies, quarterly results have been coming in below market expectations for most memory companies over the past few quarters. Memory companies are due to report Q4 earnings in January 2009. We expect Q1 guidance for most memory stocks to be weak.
- **Refinancing news:** Given the current cash constraints impacting almost every memory company, we would view any news of refinancing (or government intervention) as negative for memory stocks given the risk of dilution for existing shareholders.

### Potential positive catalysts

- **Capex reductions:** We expect memory stocks to react positively to news of capacity or capex reductions, given the significant oversupply in both memory segments.
- **Industry consolidation:** We expect memory stocks to react positively to any news of industry consolidation, given the current significant oversupply in both the Dram and Nand Flash segments.

# Valuation

**Table 19: Asia tech valuation by sector—semiconductor**

	EV/Sales (x)		EV/EBITDA (x)		PE (x)		P/BV (x)		Sales growth		EPS growth		EBIT margin		ROE	
	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E
<b>Semiconductor</b>	1.0	0.9	5.2	4.0	33.5	13.5	1.3	1.3	-19%	12%	-62%	108%	3%	8%	4%	10%
<b>Samsung Electronics</b>	0.5	0.5	4.5	3.8	22.6	12.6	1.2	1.2	-20%	10%	-67%	83%	2%	5%	5%	10%
<b>TSMC</b>	2.9	2.3	5.2	4.1	15.4	10.5	2.1	1.9	-22%	19%	-41%	46%	26%	32%	14%	19%
<b>Hynix</b>	1.9	1.9	-	8.5	-	-	1.0	1.5	-37%	9%	-49%	-52%	-43%	-14%	-86%	-64%
<b>UMC</b>	0.7	-0.2	1.7	-0.4	-	13.4	0.5	0.5	-18%	25%	-900%	-429%	-6%	6%	-1%	4%
<b>MediaTek</b>	1.6	1.3	5.2	4.7	9.5	8.3	2.5	2.0	-1%	15%	1%	14%	25%	25%	26%	25%
<b>ASE</b>	1.0	0.9	3.8	3.5	24.0	10.8	0.9	0.8	-19%	10%	-70%	123%	6%	10%	4%	8%
<b>Nanya PCB</b>	1.0	0.6	4.2	2.6	7.3	6.0	1.1	1.4	-12%	10%	-24%	21%	14%	16%	15%	23%
<b>Novatek Micro.</b>	0.3	0.3	1.6	2.1	5.2	5.8	1.0	0.9	-17%	-4%	-32%	-11%	13%	12%	19%	16%
<b>Siliconware</b>	1.0	1.1	3.2	3.5	9.6	9.0	1.3	1.2	-15%	3%	-20%	6%	14%	14%	13%	14%
<b>SMIC</b>	1.0	0.8	2.9	2.5	-	-	0.2	0.2	-18%	18%	9%	-31%	-34%	-18%	-18%	-15%
<b>Chartered Semi</b>	1.4	1.2	4.8	3.8	-	-	0.2	0.2	-16%	16%	465%	-61%	-14%	-4%	-13%	-4%
<b>ASM Pacific Tech.</b>	1.6	1.4	7.4	6.2	12.1	10.3	2.8	2.6	-9%	5%	-30%	18%	16%	18%	23%	25%
<b>Powertech Technology</b>	1.1	0.9	2.6	2.3	4.8	4.1	1.6	1.4	4%	15%	-7%	17%	21%	21%	34%	34%
<b>Vanguard</b>	0.5	0.4	2.1	1.7	-	43.2	0.6	0.6	-25%	12%	-120%	-203%	-3%	1%	-1%	1%
<b>Richtek</b>	1.6	1.3	6.8	5.6	9.8	8.4	3.3	2.8	10%	16%	6%	17%	21%	21%	34%	33%
<b>Realtek</b>	0.0	0.0	0.2	0.0	11.7	14.0	0.8	0.8	-15%	2%	-1%	-17%	8%	6%	7%	6%
<b>Phison</b>	0.2	0.1	6.3	4.6	13.9	9.7	1.1	1.0	0%	17%	-24%	44%	2%	2%	8%	10%
<b>Sodiff Adv Materials</b>	2.1	1.3	4.7	3.4	8.4	5.7	1.8	1.3	7%	47%	-15%	48%	25%	24%	21%	24%
<b>Phoenix Precision</b>	0.6	0.5	2.9	2.0	-	100.2	0.4	0.4	-17%	14%	-129%	-134%	1%	3%	-1%	0%

Note: Above data as at 2 December 2008. Source: UBS estimates

Table 20: Asia tech valuation by sector—TFT, hardware

	EV/Sales (x)		EV/EBITDA (x)		PE (x)		P/BV (x)		Sales growth		EPS growth		EBIT margin		ROE	
	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E
<b>TFT</b>	0.4	0.4	3.3	2.1	-	9.0	0.5	0.5	-13%	12%	-59%	85%	0%	4%	-2%	5%
<b>LG Display</b>	0.6	0.6	3.4	2.5	91.7	12.8	0.7	0.7	-38%	6%	-96%	618%	1%	6%	1%	5%
<b>Samsung SDI</b>	0.1	0.0	0.6	-	17.6	12.7	0.6	0.5	-40%	-7%	6%	39%	2%	3%	3%	4%
<b>AU Optronics</b>	0.7	0.6	4.5	2.8	-	9.4	0.6	0.6	-9%	12%	-132%	-244%	-2%	4%	-4%	6%
<b>Chi Mei Opto</b>	0.6	0.4	3.6	1.7	-	8.4	0.2	0.2	-1%	16%	-260%	-126%	-5%	3%	-11%	3%
<b>Innolux Display</b>	0.1	0.1	0.8	0.7	6.9	5.8	0.5	0.5	14%	26%	-2%	20%	4%	4%	8%	9%
<b>TPV Technology</b>	0.1	0.1	3.0	2.7	2.4	2.0	0.2	0.2	3%	8%	-22%	16%	2%	2%	9%	10%
<b>Hardware</b>	0.2	0.2	3.8	3.1	8.3	7.7	1.1	1.0	-8%	7%	-27%	23%	3%	4%	13%	13%
<b>Hon Hai Precision</b>	0.2	0.2	3.9	3.4	8.8	8.4	1.1	1.0	-7%	11%	-11%	5%	4%	3%	12%	12%
<b>Compal Comm.</b>	-0.1	-0.1	-	-	25.5	17.5	0.9	0.9	-23%	5%	-73%	46%	-1%	0%	3%	5%
<b>FIH</b>	0.1	0.1	1.3	1.1	4.6	4.0	0.5	0.4	15%	13%	18%	14%	4%	4%	10%	10%
<b>LG Electronics</b>	0.3	0.3	2.8	2.4	9.0	7.4	1.2	1.0	-32%	0%	-41%	22%	4%	5%	13%	14%
<b>Samsung Techwin</b>	0.5	0.4	6.3	4.0	15.0	10.0	1.7	1.4	-21%	17%	-17%	50%	4%	5%	11%	14%
<b>HTC Corporation</b>	0.9	0.7	4.9	4.0	7.9	7.0	3.1	2.6	11%	17%	-4%	13%	18%	17%	39%	37%
<b>Asustek</b>	0.1	0.1	2.6	1.7	6.8	6.5	0.7	0.6	-1%	3%	-20%	4%	3%	2%	10%	10%
<b>Acer Inc.</b>	0.1	0.1	3.6	3.0	8.8	7.6	1.3	1.2	4%	8%	14%	21%	3%	3%	15%	16%
<b>Quanta</b>	0.1	0.1	6.0	3.6	9.7	9.2	1.1	1.0	-11%	7%	-20%	5%	2%	2%	11%	10%
<b>Delta Electronics</b>	0.5	0.5	4.9	4.2	11.6	10.7	1.9	1.7	1%	12%	3%	9%	8%	8%	16%	16%
<b>Lenovo Group</b>	0.1	0.1	4.6	6.2	11.9	14.8	1.2	1.2	0%	-8%	-62%	-20%	1%	1%	10%	8%
<b>Compal Electronics</b>	0.0	0.0	0.2	-	7.6	7.2	0.8	0.8	-11%	8%	-34%	6%	2%	2%	11%	11%
<b>Foxconn Tech</b>	0.3	0.3	4.2	3.8	10.8	10.5	1.0	1.0	-6%	1%	-23%	3%	5%	5%	9%	9%
<b>Wistron</b>	0.1	0.1	4.9	4.6	7.1	6.4	1.0	0.9	-2%	8%	-34%	10%	2%	2%	14%	14%
<b>AAC Acoustic Tech</b>	0.3	0.0	0.7	0.1	2.4	2.0	0.6	0.4	29%	25%	33%	24%	33%	33%	23%	22%
<b>Coretronic</b>	0.2	0.0	6.0	0.8	3.2	3.0	0.5	0.5	-10%	15%	0%	6%	1%	1%	17%	16%
<b>Venture Corporation</b>	0.2	0.2	2.8	2.3	6.8	4.8	0.6	0.6	-12%	3%	-342%	43%	6%	6%	9%	12%
<b>D-Link</b>	0.1	-0.1	1.5	-	5.1	4.7	0.6	0.6	5%	8%	3%	8%	6%	6%	12%	12%
<b>ZTE</b>	0.4	0.4	5.4	5.0	9.4	7.8	1.4	1.4	31%	14%	35%	21%	6%	6%	15%	18%

Note: Above data as at 2 December 2008. Source: UBS estimates

Table 21: Asia tech valuation by sector—components, LED, solar, software, IT services

	EV/Sales (x)		EV/EBITDA (x)		PE (x)		P/BV (x)		Sales growth		EPS growth		EBIT margin		ROE	
	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E	09E	10E
<b>Components</b>	0.8	0.7	5.6	4.5	5.6	6.0	0.8	0.8	-10%	10%	-11%	18%	9%	9%	14%	14%
<b>Catcher Technology</b>	1.8	1.7	7.8	6.9	8.2	7.0	0.9	0.8	-15%	7%	-25%	17%	23%	24%	11%	11%
<b>Cheil Industries</b>	0.4	0.3	3.9	3.0	11.0	9.6	0.9	0.8	-20%	8%	-32%	15%	6%	7%	8%	8%
<b>SEMCO</b>	0.6	0.5	4.2	3.5	18.5	15.6	1.1	1.0	-19%	6%	-2%	18%	4%	5%	6%	7%
<b>Silitech</b>	0.4	0.3	2.5	2.0	5.7	5.2	1.3	1.1	7%	16%	3%	10%	14%	13%	22%	21%
<b>Largan</b>	2.9	2.8	5.5	5.1	9.1	8.6	1.7	1.5	-23%	6%	-27%	6%	42%	41%	18%	17%
<b>Tripod</b>	0.5	0.3	2.3	1.4	3.8	3.2	0.8	0.6	15%	20%	29%	26%	11%	11%	21%	20%
<b>Paragon Technologies</b>	1.4	1.4	3.4	3.3	5.2	4.6	1.1	1.0	17%	16%	10%	14%	37%	36%	21%	22%
<b>Digitech Systems</b>	1.1	0.6	3.0	1.8	5.1	3.8	1.3	1.0	34%	49%	24%	35%	28%	26%	25%	25%
<b>Merry Electronics</b>	0.3	0.3	2.7	2.3	6.1	6.2	0.7	0.7	-9%	9%	-28%	-2%	7%	7%	12%	11%
<b>Simple Technology</b>	0.3	0.2	3.0	2.1	6.6	5.9	1.4	1.2	10%	15%	4%	12%	9%	9%	21%	20%
<b>LED</b>	1.1	0.9	5.5	4.7	13.3	11.8	0.9	0.9	-4%	16%	-22%	11%	11%	11%	7%	8%
<b>Epistar</b>	1.2	1.0	6.1	5.1	15.1	13.2	0.8	0.7	1%	16%	2%	14%	10%	10%	5%	6%
<b>Everlight</b>	0.9	0.7	4.2	3.6	11.6	10.5	1.4	1.3	-9%	16%	-31%	10%	12%	12%	12%	12%
<b>Solar</b>	0.8	0.7	3.8	2.5	3.4	2.4	0.9	0.7	34%	15%	51%	47%	18%	22%	27%	28%
<b>LDK Solar</b>	0.8	0.6	2.8	1.5	2.7	1.7	0.9	0.6	46%	10%	42%	62%	23%	32%	34%	36%
<b>Suntech Power</b>	1.0	0.8	5.0	3.5	3.9	2.8	0.8	0.6	27%	11%	119%	39%	16%	20%	21%	23%
<b>E-Ton</b>	0.8	0.7	6.8	6.5	4.7	4.5	1.1	0.9	39%	19%	18%	11%	9%	9%	23%	20%
<b>SAS</b>	1.0	0.8	3.6	3.2	4.8	4.2	1.3	1.1	21%	34%	4%	14%	21%	18%	27%	27%
<b>Motech</b>	0.5	0.4	3.1	2.7	3.7	3.6	0.8	0.7	21%	24%	53%	4%	12%	11%	22%	19%
<b>Internet</b>	3.2	2.6	7.8	6.3	13.1	11.2	5.1	3.5	-17%	13%	-21%	17%	37%	38%	39%	31%
<b>NHN</b>	3.2	2.6	7.8	6.3	13.1	11.2	5.1	3.5	-17%	13%	-21%	17%	37%	38%	39%	31%
<b>IT Services</b>	1.2	1.4	4.9	5.7	7.7	8.0	2.4	2.0	14%	2%	12%	-4%	21%	20%	30%	24%
<b>Infosys Technologies</b>	2.4	2.3	7.7	7.5	10.9	11.3	3.9	3.1	14%	1%	12%	-3%	28%	27%	35%	28%
<b>TCS</b>	1.5	1.4	6.0	6.0	8.4	9.1	3.2	2.6	8%	-1%	0%	-8%	23%	21%	38%	28%
<b>Satyam</b>	0.8	0.7	3.4	3.2	6.2	6.7	1.7	1.4	18%	0%	17%	-7%	21%	19%	28%	21%
<b>Wipro</b>	1.1	1.1	5.7	5.9	8.1	8.4	2.3	1.9	13%	2%	2%	-4%	17%	16%	28%	23%
<b>HCL Technologies</b>	0.3	n/a	1.5	n.a	4.8	4.7	1.0	0.9	16%	10%	31%	3%	17%	15%	22%	19%

Note: Above data as at 2 December 2008. Source: UBS estimates

## Cash dividend yield

The following tables rank the top and bottom 10 companies under our coverage by free cashflow yield and dividend yield.

**Table 22: Ranking by cash dividend yield within UBS Asia tech universe (%)**

	2009E		2010E	
<b>Top 10</b>				
<b>1</b>	Wistron	15.08	AUO	16.99
<b>2</b>	Nanya PCB	12.78	Venture	11.79
<b>3</b>	AUO	12.13	Asustek	11.69
<b>4</b>	Venture	11.79	Nanya PCB	10.33
<b>5</b>	Powertech	10.42	Powertech	10.31
<b>6</b>	HTC	9.74	HTC	10.04
<b>7</b>	Compal Elec	9.20	Wistron	9.91
<b>8</b>	Siliconware	9.13	Compal Elec	9.78
<b>9</b>	ASM Pacific	8.45	ASM Pacific	8.92
<b>10</b>	Asustek	8.13	Acer	8.10

Note: Above data as at 2 December 2008. Source: UBS estimates

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### ■ Statement of Risk

Technology sector investing involves a high degree of risk. Rapid technological changes, increasing competition and exposure to macroeconomic cycles are amongst the many risks faced by investors in technology stocks. Tech sector earnings tend to be volatile due to rapid changes in both supply and demand and unit ASPs. Most tech products are subject to long-term price erosion and product life cycles tend to be short. Several tech sub-sectors, including memory, semiconductor foundry and LCD-Panels are highly capially intensive and require companies to sustain a high level of R&D investment. Tech shares tend to be highly volatile, with short-term trading driven largely by news flow and incremental changes to investor sentiment. Investors in Asia tech face additional risks due to the sector's dependence on the consumer electronics sector and the predominance of outsourcing business models.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.



# UBS Investment Research

## Asia Telecoms - Outlook 2009

Asia

Telecommunications

Sector Comment

### Bigger is safer

#### ■ Summary

Asia Telecoms have proved fairly defensive in the economic slowdown because of their non-discretionary nature, cash generating capabilities and strong balance sheets. We believe well-capitalised operators with strong free cash flow and high dividend payouts should outperform small leveraged operators with a high beta in 2009.

#### ■ What are the likely key themes for 2009?

We believe the key theme in 2009 will be bigger is safer. We think the leading operators in each market should be more defensive to an economic downturn given: 1) a dominant market share provides more on-net pricing flexibility; 2) larger scale could lead to margin resilience; 3) more complete network coverage requires less capex; and 4) stronger balance sheets point to lower debt costs and less earnings pressure.

#### ■ What may surprise on the upside or downside?

Competition and regulation are two key swing factors in the industry. We expect competition to stabilise and ease slightly in Singapore, Taiwan and Indonesia, and for Korea and Malaysia wireless, but remain challenging in China, India, Thailand and the Philippines, and for Korea and Malaysia wireline.

#### ■ Highlighted stocks

We prefer high-quality and high-yield companies such as China Mobile, Bharti Airtel and Taiwan Mobile in 2009, as we believe these stocks will outperform in a bear market and even in the first phase of a recovery. Our least preferred companies are China Unicom, SK Broadband and Total Access.

**4 December 2008**
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**Table 1: Asia Telecoms Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
China Mobile (HK) Ltd	0941.HK	178.4	Buy	70.30	80.00	9.7
Bharti Airtel Ltd.	BHTV.BO	25.5	Buy-Short Term Buy	671.00	1,000.00	16.1
Taiwan Mobile	3045.TW	5.4	Buy	47.70	60.00	9.2
<b>Least Preferred</b>						
China Unicom Ltd.	0762.HK	13.8	Sell	8.53	9.00	12.1
SK Broadband	033630.KQ	0.8	Neutral	5,090	6,500	nm
Total Access	TACC.SI	2.0	Neutral	29.50	36.00	8.8

Data as at 2 December 2009. Source: UBS estimates

**This report has been prepared by UBS Securities Asia Limited**  
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# Outlook 2009 – Summary

## What are the likely key themes?

### Theme 1: Bigger is safer

We believe leading operators in each market should be more defensive in the economic downturn because: 1) their dominant market share offers more on-net pricing flexibility; 2) larger scale could lead to margin resilience; 3) more complete network coverage requires less capex; and 4) stronger balance sheets point to lower debt costs and less earnings pressure. Thus, in general, we prefer larger operators in each market.

**Leading operators to be more defensive in an economic downturn**

### Theme 2: A trigger for M&A

Telecom is a capital intensive industry, particularly in the early stages for newcomers, who require aggressive rollouts to gain market share. We believe smaller operators could face difficulties, given their highly-g geared balance sheets and higher financing costs. We believe India and Indonesia are two markets with low market concentrations and a large number of small operators. Furthermore, a sharp decline in asset prices has created potential acquisition opportunities for operators with large cash positions and strong cash flow. China Mobile, SK Telecom, Chunghwa Telecom, and SingTel have expressed interest in expanding overseas, but may be cautious due to the financial environment.

**India and Indonesia have low market concentrations among the smaller operators**

**China Mobile, SK Telecom, Chunghwa and SingTel have expressed their overseas ambitions**

### Theme 3: Network rollout in China and India to drive up regional capex

We expect operators to be prudent on capex plans in 2009 because of the tighter funding environment and high penetration rates, except for China and India. China and India are moving into capex uptrend given: 1) both markets are still under penetrated, at 44% in China, and 24% in India as at mid-2008; 2) cross-industry network rollouts driven by new entrants; and 3) the Chinese government's recent stimulus package should encourage Chinese telcos to spend more in 2009.

**Operators to be conservative with capex in 2009 except for China and India**

## What is our central thesis for 2009?

Telcos have proved fairly defensive in the economic slowdown, because of their non-discretionary nature, cash generating capabilities and strong balance sheets. Hence, we believe the telecom sector will likely outperform in 2009. In particular, we believe investors value earnings visibility, strong balance sheets and high yields in times of uncertainties. We think well-capitalised operators with strong free cash flow and high payouts should outperform smaller leveraged operators with a high beta in 2009.

**Well capitalised operators with strong free cash flow to outperform small leveraged players in 2009**

## What may surprise on the upside or downside?

Competition and regulation are two key swing factors in telecom service industry. We expect competition to stabilise and ease slightly in Singapore, Taiwan and Indonesia, and for Korea and Malaysia wireless, but remain challenging in China, India, Thailand, and the Philippines, and for Korea and Malaysia wireline.

**Competition and regulation are key risk factors**

## What are the likely key catalysts?

We believe earnings results, dividend announcements, and M&A news will be key catalysts.

## Key stock ideas

We overweight high-quality and high yield companies such as China Mobile, Bharti Airtel and Taiwan Mobile in 2009, as we believe those stocks will outperform in a bear market and even in the first phase of a recovery. Our least preferred companies are China Unicom, SK Broadband and Total Access (DTAC).

**Most preferred: China Mobile, Bharti Airtel and Taiwan Mobile**

**Least preferred: China Unicom, SK Broadband and DTAC**

# Asia Telecoms Most & Least Preferred

In this section, we present commentary on stocks in our Asia Telecom Most & Least Preferred stock list.

## Asia Telecoms Most & Least Preferred

Stock	Rating	PT (LC)	Overview
<b>Most Preferred</b>			
China Mobile	Buy	80.00	China Mobile has the ability to maintain its leading position by leveraging its large subscriber base, strong brand name and management quality, and low integration risk from restructuring.
Bharti Airtel	Buy-ST Buy	1,000.00	Bharti Airtel is the best-positioned mobile operator in terms of brand strength, execution capabilities, spectrum and balance-sheet strength.
Taiwan Mobile	Buy	60.00	Taiwan Mobile is our preferred stock amongst Taiwan telecom companies, given undemanding valuations, both relative to local peers and the regional operators.
<b>Least Preferred</b>			
China Unicom	Sell	9.00	China Unicom will face substantial integration risk and tough competition after restructuring, as well as depreciation pressure because of its high capex budget for WCDMA, in our view. We believe its valuation has factored in potential positives from WCDMA. However, we are bearish on 3G roll-out in China.
SK Broadband	Neutral	6,500	SK Broadband's margins and earnings to be under pressure from competition for broadband market share, the launch of IP-TV, and introduction of number portability for VoIP.
Total Access	Neutral	36.00	We believe Total Access (DTAC) has a weaker strategy and positioning in strong upcountry business than AIS. We expect DTAC's ARPU to decline more quickly than AIS.

Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

## Most China Mobile

**Investment case:** China Mobile is our top pick among Chinese telcos, despite competitive pressure and regulatory risk. We believe China Mobile will be able to maintain its leading position by leveraging its large subscriber base, its strong brand name and management quality, and low integration risk from restructuring. We do not expect asymmetry regulations to have a major impact on China Mobile, and technology risk from TD-SCDMA should be manageable with the parent company's help.

**Valuation:** We base China Mobile's price target of HK\$80.00 on a DCF methodology with a WACC of 11.7% and a long-term growth rate of 2%. We estimate net cash to reach Rmb183bn by the end of 2008, which represents HK\$10.60 per share and 16% of its market cap. In addition, the dividend yield of 4.1% in 2009E is also the highest among Chinese telcos. We believe China Mobile is a defensive play in the current market.

**2009 catalysts:** We expect China Mobile to report strong results in 2008 and 2009, with net profit growth of 32% and 12%, respectively. This is compared with flat earnings in 2008E and an approximate 20% earnings decline in 2009E for China Telecom and China Unicom. Its downside risks could be unexpectedly harsh asymmetric regulations and worse-than-expected TD-SCDMA roll out.

**Sector:** China Wireless Communications

**Rating:** Buy

**PT:** HK\$80.00

**Analyst:** Jinjin Wang

## Bharti Airtel

**Investment case:** Bharti Airtel (Bharti) is the largest mobile operator in India. It pioneered the mobile revolution in India and benefited from first-mover advantage in tower sharing and backbone expansion. Bharti continues to dominate India's mobile space with its vision, focus on execution, strong brand and wide distribution network, indicated by its strong quarterly results and monthly subscriber additions. We believe Bharti will emerge as a major beneficiary from its joint venture Indus Towers (Indus), as Indus is likely to become the tower provider of choice for Indian GSM operators, given its deep tower portfolio (73,000 towers at the end of FY08).

We believe the critical success factors for Indian mobile operators are: 1) brand strength; 2) execution capabilities; 3) the amount of spectrum available; and 4) balance sheet strength. We believe Bharti is the best positioned Indian mobile operator in each of these areas, and it is therefore our top pick in the Indian mobile space.

**Valuation:** We maintain our Buy rating, and Short-Term Buy rating, with a sum-of-the-parts-based price target of Rs1,000.00, assuming a terminal growth rate of 2%. Indus and Bharti Infratel (excluding Indus) contribute Rs197.00 to our price target and constitute 19.7% of Bharti's equity value.

**2009 catalysts:** We believe the key catalysts for stock performance are: 1) the announcement of a commercial agreement between Bharti, Vodafone, Idea and Indus, likely in the next few weeks; 2) financial disclosures on Indus, which will provide more visibility; and 3) quarterly results and monthly subscriber additions, showing a continued successful track record.

## Taiwan Mobile

**Investment case:** We believe pricing competition in Taiwan's mobile market remains in check, which benefits the three dominant operators. With good earnings visibility, stable cash flow, and a high dividend yield, we believe the Taiwan telcos are attractive in the current volatile market. Taiwan Mobile is our preferred stock among the Taiwan telcos, given undemanding valuations, both relative to local peers and the regional operators. Growing cable and fixed-line contributions should continue to add to its revenue base.

**Valuation:** We have a Buy rating on the Taiwan Mobile and a price target of NT\$60.00. We derive our price target using DCF-methodology assuming a WACC of 8.5% and a terminal growth rate of -0.5%.

**2009 catalysts:** 1) Taiwan Mobile owns 20% of its shares in treasury, which could be used to engage in cable MSO M&A activities to enhance earnings; 2) falling asset prices should benefit the company in negotiations; and 3) solid execution and cost control should also boost investor confidence in Taiwan Mobile.

**Sector:** India Wireless Communications

**Rating:** Buy

**PT:** Rs1,000.00

**Analyst:** Suresh Mahadevan

**Sector:** Taiwan Wireless Communications

**Rating:** Buy

**PT:** NT\$60.00

**Analyst:** Shirley Tse

## Least China Unicom

**Investment case:** China Unicom is our least preferred stock in the Chinese telco sector, because of 1) the weak combination of China Unicom and China Netcom, which we believe will face tough competition, not only from China Mobile but also China Telecom after restructuring; 2) the substantial integration risk from restructuring; and 3) its relatively expensive valuation, which we believe has factored in potential positives from the WCDMA licence. We are bearish on 3G in China because there is low demand and we expect a relatively short market period as China Mobile will push LTE (4G).

**Valuation:** China Unicom is the most expensive Chinese telco, trading at 9.9x and 12.1x PE (regional average of 12.9x and 12.3x), and 2.7x and 2.8x EV/EBITDA (regional average of 4.3x and 4.2x) for 2008E and 2009E respectively. We base our China Unicom's price target on a DCF methodology, assuming a WACC of 11.8% and a terminal growth rate of 2%.

**2009 catalysts:** We expect net profit to decline 19% in 2009 and 13% in 2010, because of mounting competition after restructuring and its high capex budget for WCDMA. We view upside risks as unexpectedly harsh asymmetric regulations and better-than-expected WCDMA roll out.

## SK Broadband

**Investment case:** We have a cautious view on the Korean wireline sector as we expect competition to intensify for broadband market share, the launch of IP-TV and the introduction of number portability for VoIP. This should pressure SK Broadband's margins and earnings

**Valuation:** SK Broadband's EV/EBITDA multiple seems fair at 2009E 4.3x EV/EBITDA but this number should be higher if we include its subsidiary Broadband Media. We forecast SK Broadband to generate net loss and negative free cash flow in 2009. Our DCF-based price target of Won6,500, assumes a WACC of 8.6% and a terminal growth rate of 0.0%.

**2009 catalysts:** We forecast a weak earnings trend for SK Broadband, which should be negative for investor sentiment.

## Total Access

**Investment case:** We are cautious on Total Access (DTAC). Although the stock has undemanding valuations, we expect earnings to decline in 2011, when concession fees rise from 25% to 30% of revenue. Furthermore, AIS has a stronger upcountry business than DTAC, so it should be better positioned in an economic upturn.

**Valuation:** We value DTAC at Bt36.00 using a DCF methodology, assuming a WACC of 9.1% and terminal growth of 1%.

**2009 catalysts:** We think the start of wireless Internet business in Thailand could be a positive catalyst for DTAC if it can take market share from True Corp. In 2009, the NTC also plans to issue the 2.1 GHz 3G licence. However, if this is delayed, it could affect investor sentiment, which would be a negative catalyst for DTAC's shares

**Sector:** China Wireless Communications

**Rating:** Sell

**PT:** HK\$9.00

**Analyst:** Jinjin Wang

**Sector:** Korea Fixed-Line Communications

**Rating:** Neutral

**PT:** Won6,500

**Analyst:** Josh Bae

**Sector:** Thai Wireless Communications

**Rating:** Neutral

**PT:** Bt36.00

**Analyst:** Athaporn Arayasantiparb

# Asia Telecoms -Country Outlook

Table 2: 2009 outlook by country

	Competition	Regulation	Execution	Fundamentals (revenue, margin, capex trends & cash position)	Most preferred country stock
<b>China</b>	<p>Competition likely to intensify as:</p> <ul style="list-style-type: none"> <li>- China Telecom and China Unicom try to gain market share after industry restructuring.</li> </ul>	<p>Discussions on MNP and interconnection rate changes could be positive for Unicom and China Telecom, but negative for China Mobile; however could be noises rather than fundamental impact</p>	<p>China Telecom has the clearest strategic roadmap and China Mobile has the best execution, in our view. China Telecom intends to launch bundling services, and Unicom plans the launch of WCDMA by the end of 2009.</p>	<ul style="list-style-type: none"> <li>- High single digit industry revenue growth. Declining ARPU trend to reflect increasing competition and economic slowdown.</li> <li>- Declining margins driven by competition.</li> <li>- Capex uptrend as China Telecom and China Unicom expand network roll out.</li> <li>- China Mobile has the strongest cash position and free cash flow.</li> </ul>	China Mobile
<b>Hong Kong</b>	<p>Mobile competition likely to intensify as:</p> <ul style="list-style-type: none"> <li>- operators push for net adds in the economic slowdown.</li> </ul>	<p>We do not expect major regulatory action in 2009.</p>	<p>For HTIL, strong execution in Hong Kong and Israel has translated into good revenue growth, while start-ups in Indonesia and Vietnam are still facing headwinds.</p>	<ul style="list-style-type: none"> <li>- For HTIL, there is a potential for a break-up or privatisation after the special dividend payout.</li> </ul>	HTIL
<b>India</b>	<p>Competition likely to intensify as:</p> <ul style="list-style-type: none"> <li>- Idea launches in new service areas and RCOM launches GSM services on a nationwide basis.</li> <li>- green-field operators to launch services in 2009 given their roll-out obligations.</li> </ul>	<p>Expect 3G auction in February 2009, MNP is likely to come into action in 2009.</p>	<p>Idea and RCOM will roll-out aggressively in 2009E. Bharti has the best execution capability.</p>	<ul style="list-style-type: none"> <li>- ARPU to continue to decline, while subscriber growth to continue at an average monthly net adds of 8.9m for the entire market.</li> <li>- EBITDA margins could come under pressure from the increase in competitive intensity. We expect a decline of 150-200bp in 2009E (FY10E).</li> <li>- 2008E (FY09E) has been the peak year for capex among existing mobile operators, especially RCOM. We expect mobile capex to decline as passive infrastructure sharing is likely to increase.</li> </ul>	Bharti Airtel
<b>Indonesia</b>	<p>Competition likely to ease as:</p> <ul style="list-style-type: none"> <li>- Excelcomindo is unlikely to cut prices significantly as it does not have significant excess capacity anymore.</li> </ul>	<p>Interconnect cuts are due to be reviewed now and at the start of 2009. Any changes will most likely be announced during Q109.</p>	<p>Telkomsel and Excelcomindo are likely to continue launching new promotions, which Indosat will need to react to. Excelcomindo has had the best execution and strategy in 2008, in our view. Telkomsel's strategy may improve with new management.</p>	<ul style="list-style-type: none"> <li>- Revenue growth in mid to high-single digits. Subscriber growth to slow due to overstated numbers in 2008 (due to multiple SIM cards).</li> <li>- Margins trending down slightly as competitive intensity eases</li> <li>- Similar capex in 2009E with downside risk. Focus will likely be on strengthening current coverage areas</li> <li>- Telkom has the strongest cash position. Industry consolidation is always a possibility since Indonesia has 11 operators.</li> </ul>	Telkom Indonesia
<b>Korea</b>	<p>Mobile competition to remain stable in the short term as:</p> <ul style="list-style-type: none"> <li>- The portion of subscribers on lock-up contracts increases.</li> </ul> <p>Fixed-line competition to intensify due to</p> <ul style="list-style-type: none"> <li>- market share ambitions by SK Broadband, introduction of number portability for VoIP and the launch of IP-TV.</li> </ul>	<p>After the interconnection rate decision in Q408, we do not foresee major regulatory events in the Korean telecom sector. Some of the potential risks for wireless operators are tariff cut pressures and MVNO introduction.</p>	<p>In the Korean wireline sector, we expect smaller operators such as SK Broadband and LG Dacom/Powercom to try to take market share from KT.</p>	<ul style="list-style-type: none"> <li>- Low single digit revenue growth in the Korean telecom market.</li> <li>- Margin recovery for the Korean wireless sector, while we forecast margins to remain low in the Korean wireline sector.</li> <li>- Capex to fall slightly in 2009 as the 3G upgrade is completed.</li> <li>- We believe SKT is continuing to seek overseas M&amp;A opportunities. However, execution may be difficult in the near term due to the tight financial markets.</li> </ul>	LG Telecom

Table 2: 2009 outlook by country (cont'd)

	Competition	Regulation	Execution	Fundamentals (revenue, margin, capex trends & cash position)	Most preferred country stock
<b>Malaysia</b>	<p>Fixed competition to increase: Fixed-line broadband competition could intensify on mobile broadband and WiMAX new entrants. Mobile to stay competitive.</p> <p>Mobile relatively rational with top three operators focused on profitability. The economic slowdown could affect MOU.</p>	<p>TM will spearhead the country's high-speed broadband rollout, with government subsidy to aid initial capex.</p> <p>Discussions on potential to cut roaming fees among ASEAN countries.</p>	<p>Digi maintains strong execution while Celcom has stepped up its game.</p>	<ul style="list-style-type: none"> <li>- High single digit to low double-digit revenue growth for mobile.</li> <li>- We expect margins to contract on higher acquisition costs.</li> <li>- TM capex to sales to rise significantly on HSBB rollout.</li> <li>- Digi and TM low gearing/ net cash. TMI highly leveraged.</li> </ul>	Digi.com
<b>Philippines</b>	<p>Competition is intense due to:</p> <ul style="list-style-type: none"> <li>- 3rd player DigiTel having ramped up subscribers at a fast pace and continues to roll-out its network</li> <li>- Bucket pricing of SMS is increasing with sharply falling ARPU's. This could become more acute with market penetration at 75% and a more difficult macro-environment in 2009.</li> </ul>	<p>The regulator has been pushing to reduce high interconnect rates. PLDT has opposed this and contends that interconnect rates are bilateral agreements which should not be influenced by the regulator, but has not come up with alternatives to regulator's proposal.</p>	<p>PLDT has a significant competitive advantage because of its large subscriber base (52% market share in cellular and over 60% in fixed line), which allows it inter-network pricing flexibility and bundling. It also has a first mover advantage in broadband with broadband revenue at 5x that of Globe.</p>	<ul style="list-style-type: none"> <li>- Flat-ish revenue growth due to peaking penetration (75%), competition and prevalence of bucket pricing and slower GDP growth.</li> <li>- Falling margins (especially with current levels higher than 60%) on increased promotional activities to retain existing and attract new subscribers.</li> <li>- Flat-ish capex trend as companies spend on fixed and wireless broadband infrastructure.</li> <li>- PLDT and Globe generate over 10% FCF yield and net debt to equity levels are below 0.6x. Potential dividend yields of between 8% and 9%, including special dividends.</li> </ul>	PLDT
<b>Singapore</b>	<p>Competition intensified in 2008 due to:</p> <ul style="list-style-type: none"> <li>- MNP introduction and SingTel seeking to grow market share, which resulted in margin erosion for all three operators.</li> <li>- We assume only a modest recovery in margins in 2009 due to the risk of SingTel continuing to be aggressive.</li> </ul>	<p>NBN will continue to be the key regulatory issue to watch for. OpCoc selection is due in Q109 and details of NetCo will be finalised by April 2009.</p>	<p>We believe the key factor that would determine the competitive environment in 2009 is whether SingTel continues to be aggressive in seeking market share growth.</p>	<ul style="list-style-type: none"> <li>- Low single digit revenue growth.</li> <li>- Modest margin recovery in 2009E compared with 2008E</li> <li>- Capex to fall in 2009-10E as 3G upgrade and M1's backhaul build gets completed.</li> <li>- SingTel continues to look for M&amp;A opportunities overseas. SingTel's debt level is well below its mid-term target of 1.5-2.0x net-debt-to-EBITDA.</li> </ul>	MobileOne
<b>Taiwan</b>	<p>Fixed competition to increase: Fixed broadband net adds and ARPU could come under pressure as cable MSOs push for triple play.</p> <p>Mobile competition to ease:</p> <p>Expect the three smaller operators to reduce marketing activities, which will benefit the dominant operators.</p>	<p>Drafting of Convergence Law.</p> <p>Three-year mandatory tariff cuts for ADSL and prepaid will end after April 2010. Potential for NCC to introduce new round of cuts.</p>	<p>All three operators focused on profitability</p>	<ul style="list-style-type: none"> <li>- Revenue growth muted with stable margins.</li> <li>- Capex to sales in check.</li> <li>- TWM could use its 20% treasury shares to engage in M&amp;A.</li> </ul>	Taiwan Mobile
<b>Thailand</b>	<p>Competition to intensify due to:</p> <ul style="list-style-type: none"> <li>- That wireless penetration reaching 99.2%;</li> <li>- Continued impact of global recession on the Thai economy</li> </ul>	<p>Regulator plans to issue the 2.1 GHz licence by mid-2009 (potentially delayed to 2011). The most recent draft puts the licence reserve price at US\$200-300m, and the minimum concession fee at 6.5% of revenue.</p>	<p>We prefer AIS's strategy to DTACs and True Corp's due to its more conservative tariffs. DTAC may roll out wireless Internet to challenge True's ADSL.</p>	<ul style="list-style-type: none"> <li>- ARPU will decline 9.4% on average with the biggest decline for True Move, in our view.</li> <li>- Operating margin for all three operators will decline as operating costs rise faster than its revenue.</li> <li>- Given its challenging financial condition, True Corp should be quite conservative with capex. AIS should have no problems with regards to debt repayment, capex, and dividend payouts.</li> </ul>	AIS

Source: UBS



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■ **Statement of Risk**

Changes in the competitive landscape, consumer preferences and regulatory stance could materially affect our estimates. Technological advances could also cannibalise earnings

■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

# UBS Investment Research

## Asia Transport - Outlook 2009

Asia

Transport

Sector Strategy

### Fundamentals difficult but value emerging

#### ■ Summary

The fundamentals of the transport industry (volumes/pricing) have materially deteriorated over the course of 2008 and we expect this to continue into 2009. Supply growth is of great concern in shipping but we expect global aviation capacity to decline in 2009 (albeit at a slower pace than demand). Sector valuations appear generally 'attractive' and we see potential for parts of the sector to perform if the macro fundamentals stabilise and risk appetite recovers.

#### ■ What are the likely key themes for 2009?

The scale of the 'global recession' combined with the impact this may have on globalisation is likely to remain the key focus of investors. The direction of oil prices (and magnitude of change) is interrelated with growth and is particularly important for the sector. The limited availability of credit could pose challenges for weaker operators and also restrict potential cleansing restructuring/M&A.

#### ■ What may surprise on the upside or downside?

The pace of the demand downturn remains highly uncertain. This, combined with the impact of lower oil prices, will probably drive the largest surprises. We think the pricing power of airlines will likely be the key upside surprise, given capacity reductions, but it appears the China domestic market faces overcapacity.

#### ■ Highlighted stocks and sectors

In the context of a difficult economic environment (ex. the oil price), we focus on quality franchises that we think are oversold. Cathay Pacific is our preferred exposure to airlines; Guangshen Railway is our preferred exposure to transport infrastructure.

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**Table 1: Asia Transport Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
Cathay Pacific	0293.HK	3.82	Buy	7.52	12.00	17.0
Sinotrans Shipping	0368.HK	0.95	Buy	1.84	3.50	20.9
Pacific Basin	2343.HK	0.66	Buy	3.30	4.00	15.7
China Merchants	0144.HK	4.41	Buy	14.76	42.95	7.9
Guangshen Railway	0525.HK	2.40	Buy	2.62	4.18	10.4
<b>Least Preferred</b>						
Korean Air	003490.KS	1.91	Sell	38,600	30,000	-15.0
Beijing Airport	0694.HK	2.34	Sell	4.19	3.80	131.0
Hanjin Shipping	000700.KS	0.77	Sell	15,800	13,000	-3.1
Yang Ming Marine	2609.TW	0.76	Sell	11.70	7.20	-3.8
Tianjin Port - A	600717.SS	2.14	Sell	8.72	8.17	14.6

Data as at 2 December 2008. Source: UBS estimates

**This report has been prepared by UBS Securities Asia Limited and UBS Securities Co. Limited  
SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

### The future of outsourcing/globalisation

The outsourcing of manufacturing to developing countries over the past decade has been a key driver of global transport volumes. The extremely high oil price earlier in 2008 (which inflated the cost of transportation) arguably undermined the economic incentive to outsource, particularly for low-value goods. Therefore, we think the recent declines in oil prices (assuming these are sustained) provide a double benefit for transport companies because it provides cost benefits and it is also supportive of the medium-term demand outlook. However, the difficult economic environment globally raises the political appeal of protectionism which may present medium-term demand challenges for the transport industry.

**Economic downturn raises the political appeal of protectionism**

### The interplay between the global economy and oil prices

UBS expects a ‘global recession’ in 2009 followed by a modest recovery in 2010. Our oil team expects the average oil price (Brent) to be US\$60/bbl (down 40% on the 2008 average), which should provide transport sector margins with a higher-than-average degree of buffer. That said, there is a link between GDP growth trends and the oil price, which adds to the complexity of forecasting earnings.

**Lower oil prices should support margins**

Lower corporate profitability is already having a material impact on corporate travel demand and while leisure travel can be stimulated with lower fares, we think higher unemployment and low consumer confidence are likely to ensure this segment also faces a difficult 2009. That said, the recent movements in forex rates are likely to change the relative attractiveness of some markets (for example, the strong Yen should stimulate outbound Japanese demand). We expect global airline revenue to decline in 2009, a situation that has only occurred once before (following the 11 September attacks on the US) although demand in China should rebound from the depressed 2008 levels, which were impacted by a variety of one-off factors.

**Sustained changes in forex rates may change passenger and cargo flows**

Demand for air freight, logistics and container shipping is highly correlated with the consumer demand but also tends to be fairly ‘early cycle’ because demand is linked to the inventory cycle. Therefore, we think these companies will be watched very closely for signs of a macro recovery in H209. Bulk shipping is more exposed to commodity volumes and hence emerging markets are likely to be the primary driver of the outlook.

### The supply response

Higher oil prices and aircraft delays have kept aviation capacity ‘under control’ in recent years and, at least in the short-term, we think weak demand will continue this trend. High oil prices combined with the industry’s weak financial position are forcing managers to behave rationally. The credit crunch is likely to limit start-up activity, at least in 2009, which should also assist large operators. Shipping companies have started to ‘lay-up’ vessels and we expect more of this in 2009. However, the scale of the order book and the allure of marginal revenue are likely to ensure that many vessels are ‘run for cash’. Freight forwarders are likely to attempt to capture some of the benefit of lower rates, but it is not clear that this will be a net positive for margin given the volume challenge. We expect many smaller freight forwarders to exit the industry in this downturn.

**Consolidation is likely across the industry—smaller operators exiting the industry part of this process**

## What is our central thesis for 2009?

### Bulk Shipping

We think bulk freight rates have collapsed too quickly for operators to reduce costs and we now expect losses for most companies in 2009 and 2010. In our view, the recent rapid decline in rates has been exacerbated by disruption to the iron ore market and the difficulties smaller companies face in obtaining trade finance. We assume financing conditions will normalise over the coming months and this should help underpin a rebound in rates, although excessive new vessel supply is likely to ensure that any recovery is capped. In our view, valuations reflect the difficult outlook or have become distressed. Sinotrans Shipping (Buy) stands out in this environment, trading at less than net cash.

**We expect losses for the bulk shippers in 2009 and 2010**

### Container Shipping

Container shipping faces similar supply challenges in 2009 as the bulk shipping market and is also highly exposed to the most difficult part of the economy (US and European consumer spending). While in some cases valuations have become distressed (for example, OOIL), the expected losses are likely to erode shareholders' equity for many of the larger operators. Deep and/or sustained losses could exacerbate the high financial leverage of Hanjin Shipping and Yang Ming Marine, which are our least preferred exposure to the sector.

**Losses likely to erode shareholders' equity in container shippers**

### Airlines

With the benefit of hindsight, many airline managers may now be thankful that the crude oil price almost reached US\$150/bbl in mid 2008. This led many carriers to start restructuring/downsizing before demand took another leg-down in September. Asian airline revenue is likely to be down in 2009 but the combination of materially lower oil prices (if current spot prices persist, average jet fuel prices will be down c40% in 2009) and capacity cuts should mean that operating margins improve. Chinese domestic volumes have started to recover following a very difficult 2008 but we are seeing increasing evidence of discounting. This combined with the weak financial position of the industry leads us to think that aircraft orders will be deferred. We think the leading carriers in the sector (Cathay Pacific and Singapore Airlines) have been oversold and China Southern is a high risk/potentially high return exposure to a better Chinese domestic market in 2009.

**We expect airline margins to improve in 2009**

### Transport infrastructure (railways, ports, etc)

The 'quasi-monopoly' nature of many transport infrastructure assets means that the impact of slowing demand is normally not compounded by lower pricing. However, the investment programmes of many ports and airports have been predicated on ongoing rapid volume growth and recent disappointment has exposed some over-capitalisation (for example, Beijing Airport). In our view, railways remain attractive because decades of under-investment have ensured that capacity is constrained. Our preferred exposure is Guangshen Railway, which we think is attractively valued and is leveraged to potential increases in passenger fares.

**Transport infrastructure should be more defensive; Guangshen is our preferred exposure**

## What may surprise on the upside or downside?

### Demand

The key drivers of volume growth for most transport companies are economic and trade development. UBS expects a 'global recession' in 2009 with real GDP expected to contract in the US and Western Europe (our forecast is that global GDP growth will be 1.3%, which means we expect the slowest global growth since the 1981-82). This is likely to mean that volumes contract in many segments of transport despite ongoing outsourcing of manufacturing. We also expect growth in emerging markets to slow, with Chinese GDP forecast at 7.5% (from 9.6% in 2008E). Any positive or negative surprise versus these expectations could have implications for our volume and pricing expectations.

**We expect real GDP to contract in Western Europe and the US; emerging markets are expected to slow**

### Oil prices

The volatility of oil prices has been the most pressing challenge for transport managers over the past four years. We believe the recent declines are demonstrably good news for the sector, although any oil user that has been active in the hedging market over the past two years is now likely to be experiencing mark-to-market losses. Changes to fuel surcharges may add to revenue volatility but declines in pricing should also support volume growth. Our forecasts generally use spot oil prices at the time of each update.

**Lower oil prices are good news but there is likely to be further hedging losses**

### Impact of forex volatility

Until recently, the weakness of the US dollar was a fundamental positive for most Asian companies given the prevalence of US dollar debt and because fuel and capital expenditure is commonly denominated in US dollars. Moreover, the strength of US exports was rebalancing trade flows in a way that improved the efficiency of transport networks. The recent strength of the dollar is now presenting challenges particularly for operators with dollar debt (for example, Korean Air). Sustained changes in forex rates may lead to changes in passenger and freight flows (for example, Yen strength may lead to strong outbound passenger demand but could also have a negative impact on Japanese exports).

### Pricing power

Conventional wisdom in the transport sector is that aside from the quasi-monopoly assets such as airport and ports, the sector has limited pricing power, particularly in the context of a cyclical downturn. However, pricing in the airline industry (both passenger and cargo) has surprised on the upside over the past few years, underpinned by robust demand, strong corporate travel and fuel surcharges. It is possible this pricing strength unwinds during this downturn but given the modest capacity growth (both now and during the upturn) it is also possible that airline pricing growth continues to surprise on the upside.

**2009 is likely to demonstrate how much of the recent pricing improvements were structural (versus cyclical)**

### Restructuring/industry consolidation

Economies of scale and the benefits of extending geographic reach mean that consolidation is commonly an attractive proposition in the transport industry, particularly in the context of a cyclical downturn. Regulatory barriers and the power of labour unions ensure that mergers are rarely simple to execute but attractive equity values and the difficulties in raising new capital may lead to surprising deals in 2009. Government intervention in the sector is common, particularly in emerging markets and we expect it to be a material feature in 2009.

## What are the likely key catalysts?

December quarter reporting season (January-March 2009)

The unprecedented events in financial markets have materially increased revenue forecasting risk across most parts of the transport sector. Many companies report monthly volumes statistics but this rarely provides investors with the full picture on profitability, particularly given the recent moves in the oil price. This high forecasting risk is likely to ensure that the upcoming reporting season is more important than normal because it will provide investors with some clarity on the 'base' of demand. Management commentary on the outlook for 2009 is also likely to be central to recalibrating investor views on the sector. Companies with significant operations in Southern China (e.g. Guangshen Railway/China Southern) should benefit in Q109 given that the comparable period was materially impacted by the snowstorms in early 2008.

Freight rate negotiations (Asia-Europe Jan 09, Transpacific April 09)

Freight rate negotiations will be important indicators of the container shipping industry's ability to stand its ground, stem losses and reverse the recent pattern of competitive price cutting. With falling fuel prices, surcharges and headline freight rates are likely to decline. However, we believe it would be a positive result if the industry can preserve underlying margins. For dry bulk, a restoration of trade credit is crucial to allowing normal trade conditions to return, in our view. Iron ore price negotiations in H109 may again cause disruptions but resolution of iron ore prices could pave the way for a volume recovery.

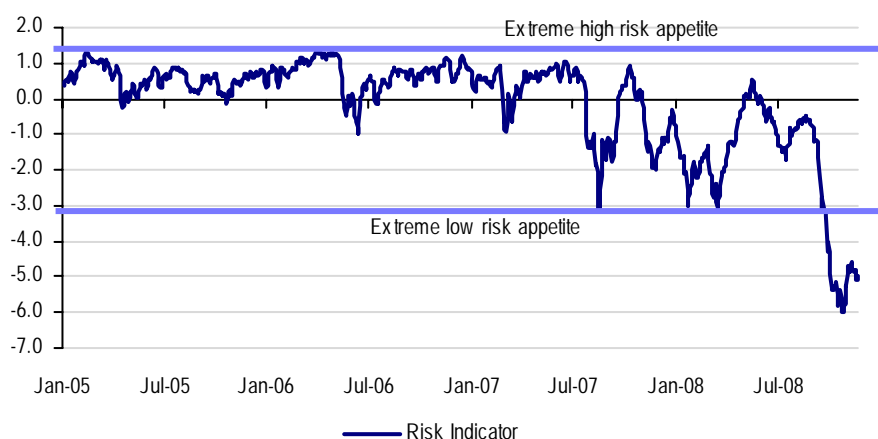
The return of 'risk appetite'

The cyclical nature of earnings, high operating leverage and in many cases, high capital intensity mean that large parts of the transport sector are considered 'high risk' for many investors. The UBS Global Risk Radar (*see UBS Investment Research, Global Risk Radar, Delaney, et al, 24 November 2008*) remains deep in extreme risk aversion territory and this is also reflected in the valuations of many transport companies. In our view, any normalisation of risk appetite would be good news for the transport sector, particularly for the least fundamentally attractive sub-segments, airlines and shipping.

**This quarter is likely to be extremely difficult and the volatile oil price adds to forecasting risk**

**An unprecedented aversion to risk has pushed transport valuations lower in most segments**

**Chart 1: UBS Global Equity Strategy Risk Indicator**



Source: UBS estimates

## Key stock ideas

In our view, the combination of capacity rationalisation and lower oil prices should ensure that airline earnings will recover in 2009. Our preferred exposure is Cathay Pacific. The shipping, logistics and transport infrastructure segments are less exposed to lower oil prices but we believe value is emerging. Our preferred exposures are Sinotrans Shipping, China Merchants and Guangshen Railways. High financial leverage and the weak Won is likely to present a variety of challenges for Korean Air and Hanjin Shipping, which are among our least preferred exposures to the sector.

# Asia Transport Most & Least Preferred

In this section, we present company commentary on stocks in our Most & Least Preferred stock list.

## Asia Transport Most & Least Preferred

Stock	Rating	PT (LC)	Overview
<b>Most preferred</b>			
<b>Cathay Pacific</b>	Buy	12.00	Lower oil prices should underpin a recovery in 2009. Strong balance sheet, competitive position and attractive valuation
<b>Sinotrans Shipping</b>	Buy	3.50	Our top pick in Asia dry bulk shipping. Net cash of >HK\$2.30 per share and one of the lowest cost bases
<b>Pacific Basin</b>	Buy	4.00	Well capitalised and well positioned to emerge even stronger from the down-cycle
<b>China Merchants</b>	Buy	42.95	Quality port portfolio and proven management track record
<b>Guangshen Railway</b>	Buy	4.18	Potential beneficiary of passenger fare hikes. One-off events depressed 2008 earnings
<b>Least preferred</b>			
<b>Korean Air</b>	Sell	30,000	High financial leverage is being compounded by the weak Won. Valuation yet to fully reflect the risk profile, in our view
<b>Beijing Airport</b>	Sell	3.80	We do not expect economic returns until 2017, given high investment and operating costs at Terminal 3
<b>Hanjin Shipping</b>	Sell	13,000	Deteriorating container shipping cycle compounded by high US\$ debt and weak Won
<b>Yang Ming Marine</b>	Sell	7.20	Deteriorating container shipping cycle compounded by high financial leverage
<b>Tianjin Port - A</b>	Sell	8.17	High exposure to the weak steel demand domestically and globally

Source: UBS estimates

We summarise our investment case into 2009, current valuation and likely catalysts for each of the Most & Least Preferred List below:

## Most preferred Cathay Pacific

**Investment case:** Cathay Pacific's margins have been hit in 2008 by the rapid increase in fuel prices in H1 and their rapid capacity growth on North American routes, which limited management's ability to move pricing higher. Demand has taken another step-down over the past few months but, assuming oil prices remain at current levels, we think this will be offset by lower jet fuel prices and margins will recover in 2009. While this downturn is likely to be severe from a revenue perspective, we believe Cathay is in a stronger competitive position, following the acquisition of Dragonair in 2006, than it was in the previous downturn (and Cathay has emerged from each of the past three downturns in a stronger competitive position). Valuation multiples (price/book) are close to all-time lows and even in the context of a difficult revenue environment, we think the stock can recover to previous support levels (1x book) implying about 50% upside.

**Valuation:** We base our HK\$12.00 on the UBS VCAM model, assuming long-term operating margins reach 10% (the average since the start of this decade).

**2009 catalysts:** Stabilisation of revenue trends, ongoing capacity cuts by weaker airlines, possible deferrals of aircraft by the Chinese airlines (less competition at mainland hubs).

**Sector:** Hong Kong Airlines

**Rating:** Buy

**PT:** HK\$12.00

**Analyst:** Damien Horth



## Sinotrans Shipping

**Investment case:** Sinotrans Shipping (SSL) is our top pick in the Asian dry bulk shipping sector. We believe SSL is well placed to withstand the collapse in spot freight rates because it has a low cost base relative to most of its peers (the majority of the fleet was acquired 8-10 year ago, when ship prices were lower and it does not have a charter-in/charter-out operation). We estimate breakeven for its dry bulk fleet at around US\$6,000/day. With US\$1.2bn net cash as of June 2008 (that is, more than HK\$2.30 net cash per share), we think SSL is also well placed to take advantage of attractive vessel acquisition opportunities likely in the next few years.

**Valuation:** We base our HK\$3.50 price target on the UBS VCAM model, assuming WACC of 13.1% and a long-term operating margin of 40%. Our price target implies 1.0x P/BV or 0.4x P/BV excluding cash as of end-2009E.

**2009 catalysts:** Normalisation of trade finance and improvements in demand for commodities shipments; rebound in the Baltic Dry Index; news on an increase in vessel scrapping and/or vessel cancellations. Acquisition of sister company Sinochart from its parent (the acquisition price will be key).

## Pacific Basin Shipping

**Investment case:** Pacific Basin Shipping is well capitalised (management raised significant equity and sold a significant proportion of the fleet during the recent bull market) with US\$800m in gross cash. We believe this ensures the group is well positioned, not only to survive this downturn, but to make accretive acquisitions that should benefit shareholders long term. Pacific Basin's diversified (largest customer is less than 6% of total revenue) and mainly blue-chip customer base should limit the impact of defaults that some parts of the industry have experienced since spot dry bulk rates collapsed.

**Valuation:** We base our HK\$4.00 price target on the UBS VCAM model, assuming WACC of 10% and a long-term operating margin of 16%. Our price target implies 0.6x P/BV and a 5% dividend yield for 2009E.

**2009 catalysts:** Normalisation of trade finance and improvement in demand for commodities shipments; rebound in the Baltic Dry Index; news on an increase in vessel scrapping and/or vessel cancellations.

## China Merchants Holdings

**Investment case:** While China Merchants is highly exposed to slowing global trade and earnings forecast risk remains high, the stock has materially de-rated over recent months while management has reinforced the balance sheet via the sale of non-core assets. Newsflow in the short-term is likely to remain negative, but given the quality of its port portfolio and impressive management track record, we believe this will be one of the first transport infrastructure stocks investors will focus on, once there are signs of export demand returning.

**Valuation:** Our PT of HK\$42.95 was derived using SOTP analysis, which implies a 27.7x 08E PE and 4.1x 08E P/BV, with ROE of 14.9%.

**2009 Catalysts:** Interplay between global and Chinese economic conditions. Return of risk appetite.

**Sector:** China Marine Transport

**Rating:** Buy

**PT:** HK\$3.50

**Analyst:** Alex Chang

**Sector:** Hong Kong Marine Transport

**Rating:** Buy

**PT:** HK\$4.00

**Analyst:** Alex Chang

**Sector:** China Transportation Services

**Rating:** Buy

**PT:** HK\$42.95

**Analyst:** Edmond Huang, CFA

## Guangshen Railway

**Investment case:** Despite a slower rate of traffic growth in 2009, we expect an improved earnings outlook for Guangshen Railway (GSR) due to reduced cost pressure, an easy comparison because of the disruptions from the snowstorms in Q108, and potential upside to revenues from long-distance passenger fares increases. We think Guangshen is the most likely to benefit from future passenger fare reform. The basic nationwide ordinary passenger tariff has not been raised for more than a decade and we believe the central government is under increasing pressure to reform the current rail passenger fare structure; to ensure that investment in the sector will reach long-term targeted levels.

**Valuation:** We base our price target of HK\$4.18 on 9.8% WACC and a 5% terminal growth rate.

**2009 catalysts:** Chinese economic conditions; newsflow on passenger fare reform.

## Least preferred Korean Air

**Investment case:** Korean Air remains our least preferred airline in Asia. The high financial leverage (net debt/equity of 400%) is being compounded by a weak Won (US\$ debt is over US\$5bn). The weak Won also offsets the benefits of lower fuel prices. While forex and the visa-waiver from the US should help revenue, we doubt Korean Air will escape the volume declines likely in global aviation in 2009. Moreover, we do not think the current valuation fully reflects the challenges the company faces.

**Valuation:** We base our price target of Won30,000 on an EV/Fleet multiple of 120%.

**2009 catalysts:** Interplay of oil prices, global and Korean economic conditions and Won volatility.

## Beijing Capital International Airport

**Investment case:** Our concern that Terminal 3 at Beijing Capital Airport is overcapitalised has intensified, following the H108 results. Higher structural costs (for example, maintenance and utilities) and the high initial investment lead us to expect sub-economic returns until 2017. As a result, we believe the current valuation (a premium to book value) remains excessive, despite our expectation of a domestic traffic recovery in 2009. The performance of the retail operations at Terminal 3 was strong in H108, but this was broadly in line with our expectations.

**Valuation:** Our UBS VCAM-based price target of HK\$3.80 implies a 2010E price/book of 1x.

**2009 catalysts:** 1) Update on injection of Terminal 3 (listco currently rents the Terminal 3 assets from the parent company); 2) 2008 results should provide a clearer picture of the medium-term cost structure; 3) pace of Chinese domestic airline traffic recovery; and 4) newsflow on the possibility of a new airport for the Beijing catchment area.

**Sector:** China Railroads

**Rating:** Buy

**PT:** HK\$4.18

**Analyst:** Richard Wei

**Sector:** Korea Airlines

**Rating:** Sell

**PT:** Won30,000

**Analyst:** Damien Horth

**Sector:** China Transportation Services

**Rating:** Sell

**PT:** HK\$3.80

**Analyst:** Damien Horth

## Hanjin Shipping

**Investment case:** Following the recent collapse in dry bulk rates, Hanjin shareholders are now more exposed to the loss-making container shipping operations. Hanjin also has material US\$ gearing (among the highest in Asia) and a depreciating Won adds a variety of challenges. We expect significant operating losses in both 2009 and 2010, and think the current valuation remains expensive both on an absolute and relative context.

**Valuation:** Our price target of Won13,000 is based on an EV/DFMV multiple of 83%. Our price target implies 0.6x P/BV for 2009E.

**2009 catalysts:** 1) Interplay of oil prices, global and Korean economic conditions; 2) Won volatility; and 3) Asia-Europe rate reset in January. Transpacific rate reset negotiations start in March.

## Yang Ming Marine

**Investment case:** We expect Yang Ming Marine (YMM) to suffer greater losses than its peers in 2009-10. YMM is highly exposed to the particularly difficult Asia-Europe trade. In addition, the group has high financial leverage and substantial fleet growth (capital expenditure) plans. We expect load factors to continue to fall in 2009, driving unit costs higher. We project 100% net debt/equity in 2010, higher than in the 2001-02 downturn. New vessel orders suggest about 15% pa fleet growth 2008-10E, again higher than in 2001-02. We believe significant transpacific exposure is also a drag on earnings and we estimate intra-Asia trade contributes very little profit. Also, following discussions with management, we expect very limited positive impact from direct shipping links with the mainland.

**Valuation:** We have a Sell rating on YMM and price target of NT\$7.20, which is based on an EV/DFMV of 66% and WACC of 7.4%. We assume no dividend payment in 2009-10 and do not rule out an equity issuance if operating conditions worsen.

**2009 catalysts:** Aggressive company specific rate cuts are possible in an attempt to boost volumes and load factors.

## Tianjin Port Holdings-A

**Investment case:** Tianjin Port Holdings (TPH) is highly exposed to bulk shipping volumes, which combined with its location, means it also has high exposure to the recent weakness in China steel production. Our forecasts are about 30% below consensus and we see further downside risk as we expect the recovery in steel production/coal output to be skewed to the second half of 2009. We think the valuation is unattractive (PE of 15x 2009E) and we expect particularly weak monthly throughput statistics for the balance of the year (both container and bulk operations).

**Valuation:** Our price target of Rmb8.17 is based on a DCF analysis, assuming 8.3% WACC and a 5% terminal growth rate. Our price target implies 13.7x 2009x PE, 1.4 P/BV and a 2.5% dividend yield in 2009.

**2009 catalysts:** Interplay between global and Chinese economic conditions; and monthly throughput data.

**Sector:** Korea Marine Transport

**Rating:** Sell

**PT:** Won13,000

**Analyst:** Alex Chang

**Sector:** Taiwan Marine Transport

**Rating:** Sell

**PT:** NT\$7.20

**Analyst:** Alex Chang

**Sector:** China Transportation Services

**Rating:** Sell

**PT:** Rmb8.17

**Analyst:** Robin Xu

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### ■ Statement of Risk

Forecasting earnings and corporate financial behaviour is difficult because it is affected by a wide range of economic, financial, accounting and regulatory trends, as well as changes in tax policy.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**  
**Asia Utilities - Outlook 2009**

Asia

Electric Utilities

Sector Strategy

## Margin expansion as fuel prices fall

### ■ Summary

We think utilities in relatively weak regulatory environments will do better in 2009. Large, well-regulated utilities have outperformed significantly in 2008 and appear to be well owned. Utilities that have suffered from margin compression in a period of high economic growth, because of high fuel prices, should benefit from falling costs. Some companies that operate under stable regulatory regimes have been sold down, yet margins remain stable and growth is still strong.

### ■ What are the likely key themes for 2009?

We believe there is significant downside potential for fuel prices, particularly coal prices, in Asia. This should help margins recover for companies that have been affected by margin compression in the past few years. At the same time, while demand growth is likely to soften, we still expect demand for power, gas and water to be resilient.

### ■ What may surprise on the upside or downside?

Fuel prices could fall further than our current commodities forecasts suggest. Although we think the risk is low, we cannot rule out adverse regulatory changes from governments seeking to protect consumers from an economic slowdown.

### ■ Highlighted stocks

We like companies that could record margin expansion from lower fuel costs (China IPPs), and companies that have experienced major share price corrections but have strong growth and secure returns (Glow Energy, Xinao Gas, Aboitiz Power and Perusahaan Gas Negara). Reliance Power is our least preferred stock due to challenges on fuel availability, execution and financial closure.

**4 December 2008**
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**Table 1: Asia Utilities Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price	Price Target	PE 2009E (x)
<b>Most Preferred</b>						
China Resources Power	0836.HK	6,846	Buy	HK\$13.88	HK\$22.60	14x
Huaneng Power International - H	0902.HK	7,201	Buy	HK\$4.63	HK\$5.70	34x
Glow Energy	GLOW.BK	811	Buy	Bt19.70	Bt49.00	7x
Xinao Gas Holdings	2688.HK	942	Buy	HK\$7.50	HK\$12.40	11x
Aboitiz Power	AP.PS	529	Buy	P3.55	P7.50	6x
Perusahaan Gas Negara	PGAS.JK	3,454	Buy	Rp1,850.00	Rp2,500.00	10x
<b>Least Preferred</b>						
Reliance Power	RPOL.BO	5,052	Sell	Rs105.40	Rs80.00	45x

Data as at 2 December 2008. Source: UBS estimates.

**This report has been prepared by UBS Securities Asia Limited**  
**SEE REQUIRED DISCLOSURES SECTION AT END OF NOTES**

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# Outlook 2009 – Summary

## What are the likely key themes?

### Moderating near-term demand growth

Demand for electricity and gas is likely to be lower in 2009 than in recent years because of lower, or no economic growth. However, we expect demand to be more resilient than underlying economic activity. Even if industrial activity falls and unemployment rises, people still have a basic level of demand for resources.

### Still strong medium-to-long-term growth opportunities

Although economies across Asia are likely to be weak in 2009, the long-term growth prospects for the region remain strong, in our view. This means continuing growth in power needs and gas demand in the medium-to-long term, so we expect connections for gas to keep rising and new power plant construction opportunities to remain.

### Falling fuel prices

We expect low demand growth in the near term to result in falling fuel prices. There have already been seen sharp corrections in global oil prices and regional coal prices, as shown in the charts below. Freight rates of transporting the fuel have also been declining sharply. We believe there is potential for further declines in spot prices. This should filter through into lower contract prices for coal and other fuels too.

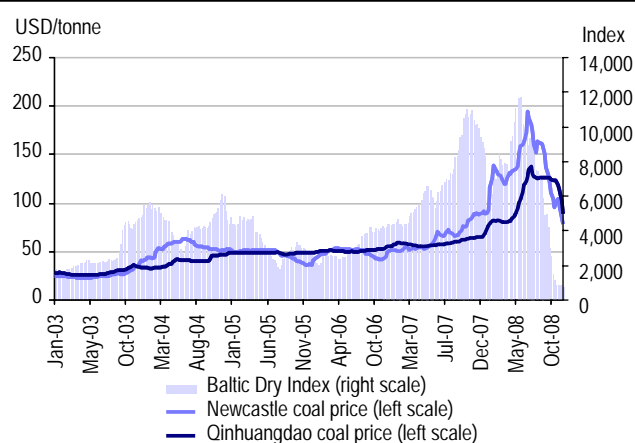
We think the role of government in deciding tariffs is significant for many Asian countries, including China and India. In general, the governments try to strike a balance between providing enough incentives for utilities to maintain/add capacity and the purchasing power of end consumers. Nonetheless, this risk is considerably less significant in the light of the fall in fuel prices.

**Chart 1: WTI Crude Oil Spot Price**



Source: Datastream

**Chart 2: Qinhuangdao and Newcastle Spot Coal Prices, Freight Rate (Baltic Dry Index)**



Source: Bloomberg, globalcoal, sxcoal

## What is our central thesis for 2009?

We think companies with the potential for margin expansion as fuel costs fall should perform well in 2009. In general, these companies have experienced significant margin erosion because they have been unable to fully recover the effect of higher fuel prices because of relatively weak regulatory regimes. As fuel prices fall, the lower costs should result in recovery of margins. Low fuel prices will achieve the same financial effect as tariff increases. In general, fuel costs are substantial for these companies—accounting for between half and 70% of firm revenues.

We also like companies that still have strong medium-term growth opportunities and returns protected through regulation, but have nonetheless experienced significant share price declines in the general stock market sell-off. Several of the smaller utilities in the region, such as some IPPs in Southeast Asian and Chinese gas utilities, fall into this category.

We also expect some of the companies to face challenges in project financing and execution. This is more relevant for countries where demand exceeds supply and for companies that do not have operating plants and are planning significant capacity additions. For debt financing, the better placed companies are those that already have cash available for equity funding of projects.

## What may surprise on the upside or downside?

Our earnings forecasts could be too conservative if fuel prices fall more than we currently assume. Demand growth could slip even further than we assume, but in this case, it would imply fuel cost falls could be larger still.

Utilities tend to be quite capital intensive and therefore have significant levels of debt. In general, the companies have more than sufficient cash on hand to cover refinancing needs. This is not the case for many of the Chinese IPPs, but we have found that Chinese banks continue to be willing to lend to Chinese IPPs, which are largely state-owned.

The Korean Won has tended to be quite volatile against other currencies in recent months, and a decline in the currency could partially offset the benefits of lower fuel prices, which are quoted in US dollars. Currency volatility could spread to other Asian currencies too.

## What are the likely key catalysts?

We believe key catalysts will be further declines in spot prices for major fuel types, such as coal, which could lead to lower agreed contract prices for the utilities. We think demand growth is likely to be weak through much of 2009.

## Key stock ideas

Our most preferred picks fall into two categories:

**Beneficiaries of lower fuel costs:** Chinese IPPs, in particular China Resources Power (CR Power) and Huaneng Power International H shares (Huaneng-H). These companies have significant fuel costs and their share prices have been penalised because they have either been unable to recover higher fuel costs through tariff increases or investors are concerned they may not be able to recover higher future fuel costs. Although Korea Electric Power (KEPCO) would benefit from lower fuel costs in US dollar terms, we expect further weakness in the Korean Won to offset this benefit, so we have a Neutral rating on KEPCO.

**Companies with strong growth, stable returns yet a low share price:** Some Chinese gas utilities such as Xinao Gas have experienced large declines in their share prices, yet margins remain intact. Investors are worried about debt refinancing risk but we do not think this is a concern as the Chinese gas utilities have cash holdings greater than short-term debt. Although earnings could be affected by a weaker Chinese property market, leading to fewer new household connections, the majority of new household connections are in fact retrofitting of gas supplies to existing, largely government-owned housing. Glow Energy (Glow) and Aboitiz Power both have significant growth opportunities through the construction of new power plant projects and their returns are protected by long-term power purchase agreements. Perusahaan Gas Negara has a defensive business model and could benefit from possible volume/price increase and rupiah depreciation, in our view.

Reliance Power is our least preferred pick, because it falls into the following category:

**Companies facing challenges in project financing and execution:** This is more relevant for Indian power producers. Reliance Power is encountering difficulties with fuel availability, execution capability, and cash constraints, as the country still demands high level of capacity additions.



# Asia Utilities Most & Least Preferred

In this section, we present commentary on stocks in our Asia Utilities Most & Least Preferred stock list.

## Asia Utilities Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
China Resources Power	Buy	HK\$22.60	Best return and margin among the peers; Upside risk from lower than expected coal prices.
Huaneng - H	Buy	HK\$5.70	Possibly lower coal prices can improve margin; geographical diversification can reduce downside risk of utilisation rate.
Glow Energy	Buy	Bt49.00	Strong track record in execution. Upside risks may come from lower coal prices and potential securing of new projects.
Xiniao Gas	Buy	HK\$12.40	Margin protection from pass-through, strong track record in execution and organic growth focused strategy
Aboitiz Power	Buy	P7.50	Upside from the contribution of recently acquired asset, possible further acquisitions and possible distribution rate hike.
Perusahaan Gas Negara	Buy	Rp2,500	Upside risk from higher than expected volume in 2009, possibly higher price in 2010.
<b>Least Preferred</b>			
Reliance Power	Sell	Rs80.00	Fuel availability, execution, and financial closure are the key challenges

Notes: Data as at 2 December 2008.

Source: UBS estimates.

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list:

## Most preferred China Resources Power

**Investment case:** We think the Chinese IPPs will benefit from low coal costs during 2009, which will drive margin and return recovery. Declining coal costs is a more significant driver of earnings than a moderation in power plant utilisation rates.

CR Power is our top pick among the Chinese IPP group. It has the highest margins and returns, with the best medium-term growth potential and least sensitivity to any demand weakness. Although its gearing is the lowest among its peers (143% 2008E net debt to equity), management is still prudent about capex spending, planning to scale back capacity addition to conserve cash.

Despite falling demand growth in China, the decline in power plant utilisation rates should only be modest, given coincidental low capacity additions, due to slow government approvals and IPPs' financial constraints. This should lead to stable revenue, while margin and return should improve on falling coal costs, in our view.

**Valuation:** Its valuation (excluding coal) is close to its 1x P/BV trough. Our price target HK\$22.60 is based on three-stage DCF methodology using WACC of 9.3%, explicit cash flow to 2012 followed by a medium-term growth rate of 7.5% and 11% ROIC for 10 years, and a terminal growth rate of 5.0% at an 9.3% ROIC.

**Sector:** China Electric Utilities

**Rating:** Buy

**PT:** HK\$22.60

**Analyst:** Stephen Oldfield

**2009 catalysts:** Settlement of most contracts with coal producers around January 2009 may surprise on the downside relative to our forecast of a 10% YoY rise. We also expect Q109 results of the sector, released around April 2009, to show margin recovery.

## Huaneng Power International-H

**Investment case:** Huaneng-H's geographical diversification makes it relatively well-protected against any potentially sharp downside in the utilisation rate of a particular region. The company's earnings are highly sensitive to coal price changes—our analysis suggests that for every 1% decrease in coal prices, the company's earnings would rise 31%.

Despite falling demand growth, the decline in power plant utilisation rates should only be modest, given coincidental low capacity addition, due to slow government approvals and IPPs' financial constraints. We think this should lead to stable revenue, while margin and return should improve on falling coal costs.

**Valuation:** Its valuation is close to its 1x P/BV historical trough. Our price target of HK\$5.70 is based on three-stage DCF methodology, using WACC of 9.1%, explicit cash flow to 2012 followed by a medium-term growth rate of 3%, and 6.75% ROIC for 10 years and a terminal growth rate of 5.0% at a 8.25% ROIC.

**2009 catalysts:** Settlement of most contracts with coal producers around January 2009 may surprise on the downside relative to our forecast of a 10% YoY rise. We also expect Q109 results in the sector (including Huaneng-H), released around April 2009, to show margin recovery and potentially, a decline in the utilisation rate less than market expectations.

## Glow Energy

**Investment case:** Glow is our top pick in Thai utilities, given management's strong track record in securing and executing value-accretive projects such as the 2007 IPP win, the 380MW cogeneration project, and the 115MW industrial contract for Siam Cement

**Valuation:** We value Glow at Bt49.00 using a DCF valuation, assuming WACC of 8% and finite life for PPAs and industrial contracts. We think Glow's valuation is attractive on an EV/CE to ROACE/WACC basis, and the stock trades at a 35% discount to regional IPPs on 2009E PE. It is trading on a 2008E dividend yield of 8.4%.

**2009 catalysts:** Upside risk may exist at each earnings announcement if coal prices continue to weaken, as part of Glow's coal procurement is on spot basis. Other potential upside risk for the company includes the potential securing of new projects, such as the industrial contract (estimated to be 400MW) for Siam Cement's proposed industrial contract in Vietnam

**Sector:** China Electric Utilities

**Rating:** Buy

**PT:** HK\$5.70

**Analyst:** Stephen Oldfield

**Sector:** Thai Electric Utilities

**Rating:** Buy

**PT:** Bt49.00

**Analyst:** Athaporn Arayasantiparb

## Xiniao Gas

**Investment case:** We like Xiniao Gas's strategy of focusing on boosting penetration for existing projects. We are confident in the company's execution track record. Less than half its connections are made to new housing, which should reduce the risk to connection income from a potential property market slowdown.

Even under our conservative earnings forecasts, Xiniao would still earn above its cost of capital with 13%-15% RoE in 2008-10E, with margin protection from pass-through of gas purchase costs for gas sales.

**Valuation:** Its current P/BV of around 1x is close to its historical trough. Our price target of HK\$12.40 is based on DCF valuation. Our two-stage DCF uses a WACC of 8.7%, explicit cash flows to 2015 and a terminal growth rate of 5% at a 11% ROIC.

**2009 catalysts:** We expect the company to report strong core earnings growth of 41% YoY for 2008 in April 2009, driven by robust gas connections and gas sales. We think this should provide further evidence of management's track record.

## Aboitiz Power

**Investment case:** Aboitiz Power's diversified portfolio of both generation assets and distribution utilities ensures operational stability (due to long-term generation off-take contracts and predictable cash flow from its distribution assets) and provides opportunities from asset reflation.

Aboitiz Power continues to expand, growing its effective generation capacity to 1,325MW (from 490MW in end-2007) on its three acquisitions since mid-2007. Some 82% of its capacity is renewable (geothermal and hydro). We think there could be significant upside to our earnings growth forecast of 12% in 2009 coming from the contribution of the recently acquired geothermal asset (which if consolidated in mid-2009, could result in a 50% growth in 2009).

**Valuation:** Our price target of P7.50 is based on a sum-of-the-parts NAV calculation, in which we value Aboitiz Power's subsidiaries/affiliates using DCF analysis. Aboitiz Power currently trades at a 2009E PE of 5.9x (compared with Philippine utility average of 8.3x), which could come down to 4.5x if we factor in the impact of the new geothermal asset.

**2009 catalysts:** Further acquisitions (it is interested in bidding for IPP administration contracts being privatised in February 2009, the 246MW Angat hydro plant in February 2009, 192MW Palinpinon geothermal plant in July 2009 and the 113MW Tongonan geothermal plant in August 2009); the implementation of Meralco's distribution rate rise, which could be a benchmark for other distribution utilities.

**Sector:** China Gas Utilities

**Rating:** Buy

**PT:** HK\$12.40

**Analyst:** David Pow

**Sector:** Philippine Electric Utilities

**Rating:** Buy

**PT:** P7.50

**Analyst:** Karisa Magpayo

## Perusahaan Gas Negara

**Investment case:** We like Perusahaan Gas Negara's (PGAS) combination of EPS growth and defensive business model, where all the gas supply for a 30% volume CAGR in 2007-10 is already contracted. We believe we are conservative in forecasting 2009 volume of 700mmscfd, 5% lower than that implied by PLN contracts alone. The South Sumatra-West Java (SSWJ) pipeline that will transport this additional gas was already completed at end-September 2008, and so far is operating well.

We think upside risks to our base case scenario are higher-than-expected volume in 2009, and possibly higher prices in 2010. The government is moving towards a free market domestic gas price compared with a controlled environment in the past year. PGAS currently sells its gas at US\$5.5/mmbtu to local industries, a 50% discount to domestic diesel price. We now assume no price increase in 2009 and 2010.

**Valuation:** Our DCF-based price target of Rp2,500 assumes a WACC of 15.2% and a long-term growth rate of 5.0%. PGAS currently trades at 10.4x 2009E PE with a 1.8% dividend yield.

**2009 catalysts:** 1) Quarterly volume and results announcements and 2) more volume contracts signed with PLN.

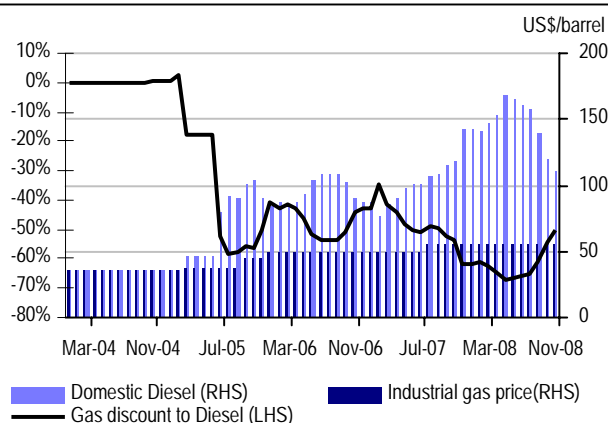
**Sector:** Indonesia Gas Utilities

**Rating:** Buy

**PT:** Rp2,500

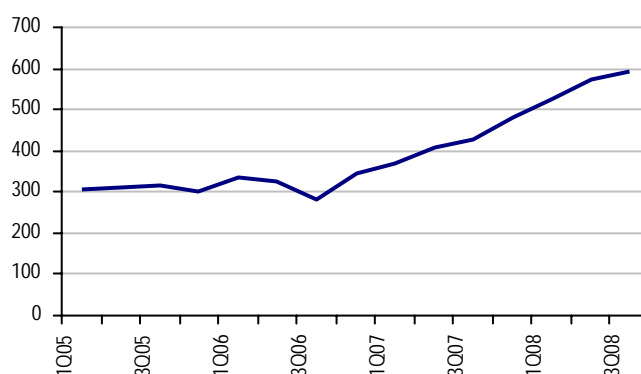
**Analyst:** Sebastian Tobing

**Chart 3: Indonesia Gas Price Is Only 50% Of Domestic Diesel**



Source: Company data, Pertamina

**Chart 4: PGAS Volume Has Risen Steadily Since Q306(mmscfd)**



Source: Company data

## Least Preferred Reliance Power

**Investment case:** We believe fuel availability, execution, and financial closure are the key challenges for Reliance Power: 1) the availability and pricing of gas for the 10,280MW gas based capacity remain uncertain; 2) the development plan of the Indonesian coal mine for the 4,000MW Krishnapatnam project is unknown; 3) the 3,960MW Sasan project has yet to achieve financial closure; and 4) only 60% of land for projects has been acquired. After assessing the above risks, we only value 14,620MW of coal-based capacity (52% of the total portfolio of 28,200MW), where fuel risks are potentially lower, and the capacity can be funded from the existing equity base.

**Valuation:** We have a Sell rating on Reliance Power and a price target of Rs80.00. We base our price target on a three-stage DCF methodology, assuming a mid-term growth rate of 7%, a terminal growth rate of 5%, and cost of equity of 13.9%.

**2009 catalysts:** 1) clarity on gas availability; 2) financial closure/EPC awards for projects; and 3) new project wins.

**Sector:** India Electric Utilities

**Rating:** Sell

**PT:** Rs80.00

**Analyst:** Pankaj Sharma / Suhas  
Harinarayanan

Table 2: Regional valuation

Company	Country	Ticker	Year end	Rating	Price(local currency)		Total return %	3-mth avg T/O US\$m	12mth price		Market cap (mn)	
					Current	Target			Upside (%)	High	Low	local ccy
<b>Independent power producers</b>												
China Power Int'l	China	2380.HK	31-Dec	Buy	1.58	1.60	1.3%	1.8	4.04	1.16	5,696	735
China Resources Power	China	0836.HK	31-Dec	Buy	13.88	22.60	62.8%	23.0	28.20	10.70	53,065	6,846
Datang - H	China	0991.HK	31-Dec	Buy	3.38	4.60	36.1%	25.4	7.37	2.26	77,643	10,017
Huadian - H	China	1071.HK	31-Dec	Sell	1.50	0.70	-53.3%	2.8	4.45	1.10	23,713	3,059
Huaneng - H	China	0902.HK	31-Dec	Buy	4.63	5.70	23.1%	27.0	8.78	3.25	90,101	11,624
China Yangtze Power	China	600900.SS	31-Dec	Sell	14.65	13.10	-10.6%	NA	20.33	11.37	137,887	20,044
Datang - A	China	601991.SS	31-Dec	Buy	7.30	9.20	26.0%	4.1	22.16	5.25	77,643	10,017
Huadian - A	China	600027.SS	31-Dec	Sell	4.17	3.90	-6.5%	8.1	9.93	2.99	23,713	3,059
Huaneng - A	China	600011.SS	31-Dec	Buy	7.49	9.20	22.8%	3.0	15.79	5.68	90,101	11,624
Reliance Power	India	RPOL.BO	31-Mar	Sell	105.40	80.00	-24.1%	7.5	450.40	90.10	252,623	5,052
Tanjong	Malaysia	TJPL.KL	31-Jan	Buy	13.10	15.50	18.3%	2.1	18.80	9.90	5,283	1,451
YTL Power	Malaysia	YTL.P.KL	30-Jun	Buy	1.93	2.00	3.6%	2.2	2.83	1.67	10,504	2,886
First Generation	Philippines	FGEN.PS	31-Dec	Buy	11.50	28.50	147.8%	0.7	62.00	11.00	9,315	188
PNOC-EDC	Philippines	EDC.PS	31-Dec	Buy	2.42	4.40	81.8%	2.8	7.10	2.26	35,353	715
Electricity Generating	Thailand	EGCO.BK	31-Dec	Buy	53.00	127.00	139.6%	1.0	117.00	51.50	27,875	784
Glow Energy	Thailand	GLOW.BK	31-Dec	Buy	19.70	49.00	148.7%	0.6	36.25	17.30	28,819	811
Ratchaburi Electricity	Thailand	RATC.BK	31-Dec	Buy	31.00	62.50	101.6%	1.2	47.50	27.75	44,950	90,681
<b>Electric companies</b>												
Hongkong Electric	Hong Kong	0006.HK	31-Dec	Neutral	42.10	47.50	12.8%	32.7	51.75	37.35	89,852	11,592
Reliance Infrastructure	India	RLIN.BO	31-Mar	Buy	492.70	700.00	42.1%	23.1	2,584.15	381.45	113,750	2,275
Tata Power	India	TTPW.BO	31-Mar	Neutral	644.15	825.00	28.1%	3.7	1,626.80	570.25	142,177	2,844
Korea Electric Power	Korea	015760.KS	31-Dec	Neutral	25,200.00	26,000	3.2%	53.3	42,950.00	21,000.00	16,147	11,026
Sarawak Energy	Malaysia	SARA.KL	31-Dec	Sell	2.15	2.00	-7.0%	0.2	3.30	2.00	3,266	897
Tenaga Nasional	Malaysia	TENA.KL	31-Aug	Buy	5.90	7.00	18.6%	12.3	10.00	5.90	25,574	7,027
Abotiz Power	Philippines	AP.PS	31-Dec	Buy	3.55	7.50	111.3%	0.5	6.00	3.25	26,123	529
Manila Electric	Philippines	MER.PS	31-Dec	Buy	57.00	63.00	10.5%	1.2	88.50	37.50	63,096	1,277
<b>Gas companies</b>												
China Gas	China	0384.HK	31-Mar	Buy	0.75	1.70	126.7%	1.8	3.74	0.50	2,318	299
Towngas China	China	1083.HK	31-Dec	Buy	1.53	2.40	56.9%	0.2	4.37	1.32	2,690	347
Xiniao Gas	China	2688.HK	31-Dec	Buy	7.50	12.40	65.3%	1.9	15.48	5.40	7,299	942
GAIL	India	GAIL.BO	31-Mar	Sell	198.00	223.72	13.0%	2.5	361.36	183.40	251,159	5,023
GSPL	India	GSPT.BO	31-Mar	Buy	27.05	80.00	195.7%	0.8	109.95	27.05	15,193	304
Perusahaan Gas Negara	Indonesia	PGAS.JK	31-Dec	Buy	1,850.00	2,500	35.1%	12.2	3,350	1,110	42,489	3,454
Samchully	Korea	004690.KS	31-Dec	Buy	130,500.00	245,000.00	87.7%	0.8	219,000	99,500	529,830	362
Petronas Gas	Malaysia	PGAS.KL	31-Mar	Buy	9.70	11.50	18.6%	2.4	11.10	9.25	19,194	5,274
CitySpring	Singapore	CITY.SI	31-Mar	Buy	0.50	1.45	192.9%	0.2	0.96	0.49	243	159
<b>Water companies</b>												
Guangdong Investment	China	0270.HK	31-Dec	Buy	2.64	3.30	25.0%	3.6	4.54	1.66	16,080	2,075
Tianjin Capital	China	1065.HK	31-Dec	Sell	1.13	0.65	-42.5%	0.4	4.03	0.58	6,872	887
<b>Multi utilities</b>												
Beijing Enterprises	China	0392.HK	31-Dec	Buy	26.00	35.00	34.6%	10.2	41.10	21.95	16,185	2,088
Cheung Kong Infrastructure	Hong Kong	1038.HK	31-Dec	Buy	28.50	41.00	43.9%	6.9	36.80	24.50	64,245	8,288
<b>90,681</b>												
<b>37,465</b>												
<b>16,163</b>												
<b>2,961</b>												
<b>10,376</b>												

Note: Based on closing prices as of 2 December 2008. Source: Bloomberg, UBS estimates

Table 2: Regional valuation (cont'd)

Company	Country	Ticker	Price/earnings					Dividend yield					EV/EBITDA				
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E			
<b>Independent power producers</b>																	
China Power Int'l	China	2380.HK	28.3x	-12.5x	9.3x	5.8x	1.3%	0.0%	3.1%	5.1%	16.7x	12.0x	6.9x	9.3x			
China Resources Power	China	0836.HK	22.7x	32.9x	14.5x	12.5x	1.3%	1.1%	2.2%	2.5%	14.1x	12.8x	8.8x	7.7x			
Datang - H	China	0991.HK	19.6x	175.4x	15.0x	8.7x	2.1%	0.0%	2.8%	4.8%	11.4x	12.8x	10.1x	7.3x			
Huadian - H	China	1071.HK	25.0x	-4.0x	-6.9x	-5.9x	1.6%	0.0%	0.0%	0.0%	9.9x	15.9x	12.1x	11.3x			
Huaneng - H	China	0902.HK	17.6x	-10.0x	34.3x	33.9x	3.8%	0.0%	1.6%	1.6%	9.3x	22.3x	10.0x	8.9x			
China Yangtze Power	China	600900.SS	36.9x	32.5x	23.9x	18.0x	1.9%	1.8%	2.5%	3.3%	16.8x	16.7x	11.9x	9.9x			
Datang - A	China	601991.SS	46.6x	427.0x	36.4x	21.1x	0.9%	0.0%	1.1%	2.0%	16.8x	18.0x	13.4x	9.3x			
Huadian - A	China	600027.SS	50.3x	-12.5x	-21.5x	-18.3x	0.8%	0.0%	0.0%	0.0%	13.8x	20.9x	14.9x	13.4x			
Huaneng - A	China	600011.SS	26.6x	-18.2x	62.4x	61.9x	2.5%	0.0%	0.9%	0.9%	12.5x	30.0x	12.6x	11.1x			
Reliance Power	India	RPOL.BO	NA	41.1x	44.7x	23.3x	0.0%	0.0%	0.0%	NA	NA	NA	NA	25.3x			
Tanjong	Malaysia	TJPL.KL	12.6x	9.2x	8.7x	8.4x	3.8%	5.6%	5.9%	5.8%	9.5x	6.4x	6.0x	5.7x			
YTL Power	Malaysia	YTLP.KL	12.7x	10.4x	10.0x	10.6x	9.1%	5.8%	5.8%	5.8%	8.7x	8.5x	8.4x	8.9x			
First Generation	Philippines	FGEN.PS	10.1x	4.3x	2.9x	2.9x	4.2%	0.0%	0.0%	0.0%	14.2x	6.0x	5.7x	5.7x			
PNOC-EDC	Philippines	EDC.PS	14.9x	6.1x	6.2x	5.6x	1.6%	11.2%	4.1%	3.9%	10.9x	5.9x	5.3x	4.8x			
Electricity Generating	Thailand	EGCO.BK	7.3x	3.1x	3.0x	3.1x	3.9%	11.3%	13.2%	15.1%	7.0x	0.5x	-1.3x	-3.3x			
Glow Energy	Thailand	GLOW.BK	11.0x	6.5x	7.2x	6.5x	4.8%	8.4%	8.6%	8.6%	7.4x	5.1x	4.7x	4.0x			
Ratchaburi Electricity	Thailand	RATC.BK	12.7x	5.9x	6.5x	9.2x	4.6%	7.1%	7.4%	7.7%	9.5x	4.7x	4.6x	4.6x			
Simple average			22.2x	37.9x	13.9x	14.6x	2.7%	2.9%	3.3%	3.7%	12.1x	12.1x	8.5x	8.4x			
Weighted average			26.8x	75.0x	29.7x	24.2x	2.3%	1.1%	2.1%	2.7%	12.5x	16.7x	10.3x	10.0x			
<b>Electric companies</b>																	
Hongkong Electric	Hong Kong	0006.HK	11.4x	11.4x	15.3x	15.2x	5.1%	4.8%	4.8%	4.8%	8.2x	8.4x	10.5x	10.1x			
Reliance Infrastructure	India	BSES.BO	28.0x	11.6x	11.5x	11.1x	0.4%	0.9%	0.9%	0.9%	46.0x	15.6x	11.0x	8.7x			
Tata Power	India	TTPW.BO	32.2x	11.2x	10.3x	7.6x	1.2%	2.0%	2.3%	2.6%	10.7x	7.4x	7.7x	10.1x			
Korea Electric Power	Korea	015760.KS	17.8x	-20.0x	-7.4x	-12.7x	1.8%	0.0%	0.0%	0.0%	5.1x	6.0x	10.6x	7.5x			
Sarawak Energy	Malaysia	SARA.KL	11.8x	11.3x	11.1x	10.5x	1.4%	1.7%	1.3%	1.4%	5.8x	6.1x	6.3x	6.9x			
Tenaga Nasional	Malaysia	TENA.KL	13.2x	14.4x	13.8x	10.8x	2.3%	2.3%	1.8%	1.5%	9.0x	9.2x	8.0x	7.2x			
Aboitiz Power	Philippines	AP.PS	9.6x	6.6x	5.9x	5.3x	0.0%	5.3%	5.0%	5.7%	7.3x	0.8x	1.8x	1.7x			
Manila Electric	Philippines	MERB.PS	19.8x	15.8x	14.8x	14.2x	0.4%	1.8%	1.8%	1.8%	11.7x	10.8x	10.4x	9.8x			
Simple average			17.5x	8.5x	12.6x	11.5x	1.9%	2.6%	2.5%	2.6%	12.5x	8.1x	8.5x	7.9x			
Weighted average			16.5x	2.8x	13.7x	12.5x	2.7%	2.3%	2.2%	2.2%	10.0x	8.1x	9.6x	8.5x			

Table 2: Regional valuation (cont'd)

Company	Country	Ticker	Price/earnings				Dividend yield				EV/EBITDA			
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E
<b>Gas companies</b>														
China Gas	China	0384.HK	44.0x	10.6x	6.6x	5.7x	0.4%	3.4%	7.0%	9.9%	18.8x	8.6x	6.4x	5.5x
Towngas China	China	1083.HK	51.1x	11.9x	8.3x	7.1x	0.0%	0.0%	1.2%	2.8%	18.8x	3.3x	3.0x	2.7x
Xiniao Gas	China	2688.HK	23.5x	11.1x	11.1x	9.9x	1.2%	3.2%	3.6%	5.0%	10.2x	5.2x	5.2x	5.0x
GAIL	India	GAIL.BO	12.2x	8.9x	9.1x	7.8x	2.7%	3.9%	3.9%	4.5%	8.2x	5.4x	4.1x	2.8x
GSPL	India	GSPT.BO	35.6x	12.1x	6.3x	6.2x	0.7%	2.5%	4.8%	4.8%	12.7x	5.8x	4.1x	3.6x
Perusahaan Gas Negara	Indonesia	PGAS.JK	25.2x	14.5x	10.4x	7.8x	1.9%	2.4%	1.8%	7.1%	14.0x	8.3x	6.0x	4.6x
Samchully	Korea	004690.KS	12.3x	7.7x	7.0x	6.6x	0.8%	1.1%	1.1%	1.1%	5.3x	3.9x	3.7x	3.2x
Petronas Gas	Malaysia	PGAS.KL	18.7x	18.0x	17.7x	17.3x	5.0%	5.9%	6.3%	6.3%	9.8x	8.9x	8.6x	8.2x
CitySpring	Singapore	CITY.SI	240.5x	60.9x	33.0x	31.8x	5.7%	15.2%	16.2%	NA	24.3x	13.4x	11.2x	11.0x
Simple average			49.9x	17.7x	12.8x	11.6x	2.1%	4.1%	5.0%	5.1%	13.8x	7.8x	6.6x	5.9x
Weighted average			21.9x	13.8x	12.4x	11.2x	3.0%	4.1%	4.3%	5.6%	10.7x	7.2x	6.1x	5.2x
<b>Water companies</b>														
Guangdong Investment	China	0270.HK	18.6x	9.5x	9.3x	8.8x	2.4%	3.9%	4.7%	5.2%	10.2x	6.8x	6.4x	5.6x
Tianjin Capital	China	1065.HK	29.6x	6.6x	7.2x	6.3x	1.0%	4.6%	4.2%	4.8%	20.9x	13.5x	13.7x	13.1x
Simple average			20.5x	9.3x	8.6x	7.4x	2.0%	3.7%	4.0%	4.6%	12.3x	8.3x	8.1x	8.4x
Weighted average			21.9x	8.7x	8.7x	8.1x	2.0%	4.1%	4.5%	5.1%	13.4x	8.8x	8.6x	7.9x
<b>Multi utilities</b>														
Beijing Enterprises	China	0392.HK	26.0x	15.4x	12.7x	10.4x	2.1%	2.1%	2.4%	2.9%	6.3x	4.0x	3.1x	2.3x
Cheung Kong Infrastructure	Hong Kong	1038.HK	13.8x	12.7x	14.6x	13.3x	3.9%	4.2%	4.2%	4.6%	57.4x	37.6x	34.9x	31.5x
Simple average			19.9x	14.1x	13.6x	11.9x	3.0%	3.1%	3.3%	3.7%	31.8x	20.8x	19.0x	16.9x
Weighted average			16.2x	13.3x	14.2x	12.7x	3.5%	3.8%	3.8%	4.2%	47.1x	30.9x	28.5x	25.6x

Note: Based on closing prices as of 2 December 2008.

Source: Bloomberg; UBS estimates



Table 2: Regional valuation (cont'd)

Company	Country	Ticker	EV/Operating cash flows				Price/book value				Return on invested capital					
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E		
<b>Independent power producers</b>																
China Power Int'l	China	2380.HK	58.7x	-21.2x	19.2x	23.9x	1.2x	0.5x	0.4x	3.3%	0.5%	5.0%	4.4%			
China Resources Power	China	0836.HK	15.0x	11.0x	10.0x	8.6x	2.9x	2.1x	1.6x	12.4%	5.4%	8.9%	9.1%			
Datang - H	China	0991.HK	20.9x	20.9x	24.1x	12.1x	2.2x	1.4x	1.1x	6.7%	2.7%	4.0%	5.9%			
Huadian - H	China	1071.HK	17.3x	85.3x	69.3x	35.2x	1.5x	0.6x	0.8x	4.2%	-0.9%	2.0%	2.8%			
Huaneng - H	China	0902.HK	14.6x	59.0x	84.0x	18.1x	2.0x	1.5x	1.4x	7.4%	-2.8%	2.2%	3.4%			
China Yangtze Power	China	600900.SS	32.6x	25.2x	18.6x	16.2x	3.6x	3.2x	2.8x	10.4%	11.0%	9.3%	9.1%			
Datang - A	China	601991.SS	30.0x	26.3x	28.4x	13.8x	5.3x	3.3x	2.7x	6.7%	2.7%	4.0%	5.9%			
Huadian - A	China	600027.SS	23.5x	99.8x	75.9x	37.3x	3.2x	1.9x	2.4x	4.2%	-0.9%	2.0%	2.8%			
Huaneng - A	China	600011.SS	19.2x	70.6x	94.7x	20.1x	3.1x	2.7x	2.5x	7.4%	-2.8%	2.2%	3.4%			
Reliance Power	India	RPOL.BO	114.6x	20.6x	34.6x	34.3x	6.1x	1.7x	1.5x	-10.0%	-0.9%	-0.3%	3.6%			
Tanjong	Malaysia	TJPL.KL	21.8x	25.4x	17.5x	14.9x	1.9x	1.0x	0.9x	11.1%	10.6%	10.4%	10.5%			
YTL Power	Malaysia	YTLP.KL	13.6x	22.6x	22.0x	23.9x	1.9x	1.5x	1.4x	9.5%	7.7%	7.5%	6.7%			
First Generation	Philippines	FGEN.PS	516.6x	367.6x	371.6x	502.5x	2.0x	0.3x	0.2x	10.6%	7.2%	7.7%	7.8%			
PNOC-EDC	Philippines	EDC.PS	14.5x	6.1x	11.5x	6.8x	2.7x	1.1x	0.8x	12.1%	9.7%	13.8%	15.4%			
Electricity Generating	Thailand	EGCO.BK	-7.8x	-3.6x	10.5x	6.1x	1.4x	0.6x	0.5x	12.3%	9.7%	13.6%	9.6%			
Glow Energy	Thailand	GLOW.BK	11.9x	6.8x	7.0x	8.8x	1.8x	1.0x	0.8x	12.4%	11.7%	10.7%	10.4%			
Ratchaburi Electricity	Thailand	RATC.BK	11.9x	4.9x	5.9x	7.8x	1.8x	1.1x	1.2x	10.9%	15.3%	14.0%	9.8%			
Simple average			50.4x	45.3x	49.1x	42.7x	2.6x	1.5x	1.4x	8.2%	5.5%	7.0%	7.4%			
Weighted average			28.8x	37.6x	42.7x	18.9x	3.2x	2.2x	2.1x	7.4%	3.6%	5.3%	6.2%			
<b>Electric companies</b>																
Hongkong Electric	Hong Kong	0006.HK	8.9x	9.1x	10.1x	10.2x	1.8x	1.7x	1.6x	15.6%	15.5%	10.6%	10.7%			
Reliance Infrastructure	India	BSES.BO	10.7x	17.9x	14.1x	12.3x	2.3x	1.0x	0.8x	15.8%	-21.0%	-3.3%	-0.9%			
Tata Power	India	TTPW.BO	13.0x	20.1x	19.8x	21.6x	2.3x	1.6x	1.3x	9.7%	10.0%	8.9%	8.8%			
Korea Electric Power	Korea	015760.KS	6.3x	6.1x	10.2x	7.9x	0.6x	0.4x	0.4x	2.8%	NA	NA	NA			
Sarawak Energy	Malaysia	SARA.KL	6.6x	7.0x	9.1x	10.2x	1.3x	1.2x	1.0x	10.9%	9.6%	7.7%	6.7%			
Tenaga Nasional	Malaysia	TENA.KL	8.9x	10.4x	9.6x	8.5x	1.9x	1.4x	0.9x	9.7%	6.9%	5.6%	6.5%			
Aboitiz Power	Philippines	AP.PS	4.4x	0.8x	1.9x	1.9x	1.4x	0.8x	0.7x	25.8%	21.0%	12.8%	10.5%			
Manila Electric	Philippines	MERB.PS	22.1x	14.7x	13.7x	13.1x	1.8x	1.2x	1.1x	4.5%	4.2%	3.9%	4.0%			
Simple average			10.3x	10.8x	11.0x	10.7x	1.7x	1.2x	1.1x	12.0%	7.2%	6.8%	6.8%			
Weighted average			8.9x	9.8x	11.0x	10.2x	1.5x	1.2x	1.0x	9.9%	6.2%	5.3%	5.6%			

Table 2: Regional valuation (cont'd)

Company	Country	Ticker	EV/Operating cash flows				Price/book value				Return on invested capital			
			2007	2008E	2009E	2010E	2007	2008E	2009E	2010E	2007	2008E	2009E	2010E
<b>Gas companies</b>														
China Gas	China	0384.HK	26.2x	12.5x	5.1x	7.3x	3.0x	0.8x	0.7x	0.7x	6.7%	6.1%	8.2%	8.7%
Towngas China	China	1083.HK	19.7x	10.4x	4.9x	4.5x	1.5x	0.5x	0.4x	0.4x	2.9%	4.2%	4.8%	4.9%
Xinao Gas	China	2688.HK	10.7x	7.5x	11.8x	15.4x	2.7x	1.5x	1.4x	1.3x	15.3%	15.5%	13.7%	13.1%
GAIL	India	GAIL.BO	10.0x	5.3x	4.1x	3.3x	1.5x	1.1x	1.0x	0.9x	25.7%	19.2%	14.9%	14.4%
GSPL	India	GSPT.BO	11.6x	5.2x	3.6x	3.4x	3.2x	1.3x	1.1x	1.0x	6.5%	6.8%	10.6%	10.8%
Perusahaan Gas Negara	Indonesia	PGAS.JK	19.3x	10.3x	9.8x	6.8x	8.5x	7.3x	4.2x	3.4x	15.7%	22.9%	30.1%	34.5%
Korea Gas	Korea	KS36460	-7.0x	4.0x	3.7x	3.3x	1.1x	0.7x	0.6x	0.6x	8.5%	7.1%	6.8%	7.0%
Samchully	Korea	004690.KS	11.7x	10.3x	10.0x	9.4x	2.6x	2.4x	2.3x	2.2x	15.4%	15.5%	16.4%	17.5%
Petronas Gas	Malaysia	PGAS.KL	61.1x	13.4x	11.7x	NA	1.4x	1.2x	1.3x	1.4x	2.2%	3.1%	4.6%	4.8%
CitySpring	Singapore	CITY.SI	18.0x	9.1x	8.1x	7.6x	2.9x	1.9x	1.6x	1.4x	13.1%	12.1%	13.0%	13.5%
Simple average			13.3x	8.4x	7.8x	6.8x	3.5x	2.8x	2.1x	1.9x	17.8%	17.3%	17.9%	19.0%
Weighted average			26.2x	12.5x	5.1x	7.3x	3.0x	0.8x	0.7x	0.7x	6.7%	6.1%	8.2%	8.7%
<b>Water companies</b>														
Guangdong Investment	China	0270.HK	12.4x	8.9x	7.9x	6.8x	2.0x	1.1x	1.0x	1.0x	9.1%	8.9%	9.0%	9.4%
Tianjin Capital	China	1065.HK	142.7x	14.8x	26.4x	26.0x	1.9x	0.5x	0.4x	0.4x	5.6%	6.2%	5.5%	5.6%
Simple average			54.5x	9.8x	13.1x	12.3x	2.0x	1.1x	1.0x	0.9x	10.4%	10.3%	9.9%	10.5%
Weighted average			51.4x	10.7x	13.4x	12.5x	1.9x	0.9x	0.8x	0.8x	8.1%	8.1%	7.9%	8.2%
<b>Multi utilities</b>														
Beijing Enterprises	China	0392.HK	7.8x	4.6x	3.4x	2.7x	1.2x	1.0x	0.9x	0.9x	7.0%	6.0%	7.5%	9.9%
Cheung Kong Infrastructure	Hong Kong	1038.HK	7.8x	6.0x	6.1x	5.1x	1.6x	1.5x	1.5x	1.4x	42.7%	51.4%	59.3%	58.5%
Simple average			7.8x	5.3x	4.8x	3.9x	1.4x	1.3x	1.2x	1.1x	24.9%	28.7%	33.4%	34.2%
Weighted average			7.8x	5.7x	5.6x	4.6x	1.5x	1.4x	1.4x	1.3x	35.5%	42.3%	48.9%	48.7%

Note: Based on closing prices as of 2 December 2008. Data shown for December year-end, or the nearest year-end to December. Market cap is expressed in billions of local currency for Korea and Indonesia. China Resources Power, Datang-H and Datang-A are trading at 1.2x, 0.9x, 2.6x 2009E P/BV on ex-coal basis, respectively.

Source: Bloomberg, UBS estimates

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#### ■ **Statement of Risk**

The main risks for the utilities are lower than expected returns, adverse regulatory changes or higher-than-expected fuel costs.

#### ■ **Analyst Certification**

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

**UBS Investment Research**
**Memory Semiconductors - Outlook 2009**

## Survival of the fittest

### ■ Summary

We expect the global memory sector to remain in oversupply through 2009 in the face of weakening demand and (as yet) insufficient supply cuts. With ASPs below cash costs for most Dram and Nand Flash players, we expect more substantial supply cuts across the industry in early 2009. While these may help to stabilise unit pricing (and could even drive some recovery), we are doubtful pricing will rebound substantially in 2009, given the weakening demand outlook and macro uncertainties. We believe the memory industry recovery has been pushed out to 2010 and expect the path to recovery to be long and difficult.

### ■ What are the likely key themes for 2009?

With the Dram industry set to enter a third consecutive year of downturn, we think the debate has changed from a focus on the potential for an industry-wide recovery to a question of which companies can survive a prolonged downturn.

### ■ What may surprise on the upside or downside?

We see downside risks to demand in Dram and Nand Flash given slowing PC growth and slowing demand for portable consumer electronics. We see upside risks to our supply forecasts, as companies in the sector are likely to cut capacity further.

### ■ Global Sector Preferences

Our least preferred stocks are Hynix Semiconductor (Sell, Won6,200 PT); SanDisk (Neutral, US\$6.00 PT) and Qimonda (Neutral US\$1.05 PT). We do not have any preferred stocks, in line with our cautious view on the sector.

**2 December 2008**
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**Table 1: Global Memory Semiconductors Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	P/BV 2009E (x)
<b>Least Preferred</b>						
Hynix Semiconductor	000660.KS	US\$2.3bn	Sell	Won7,410	Won6,200	1.0
SanDisk	SNDK.O	US\$1.8bn	Neutral	US\$8.00	US\$6.00	0.4
Qimonda	QI.N	US\$0.1bn	Neutral	US\$0.19	US\$1.05	0.3

Data as at 28 November 2008. Source: UBS estimates

**This report has been prepared by UBS Securities Pte. Ltd., Seoul Branch**  
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## Outlook 2009 – Summary

### What is the outlook for memory semiconductor and our central thesis for 2009?

We expect the global Dram and Nand Flash segments to remain in oversupply through 2009 in the face of weakening demand and (as yet) insufficient supply cuts. With ASPs below cash costs for most Dram and Nand Flash players, we expect more substantial supply cuts across the industry into 2009. While these may help to stabilise unit pricing (and could even drive some recovery), we are doubtful pricing will rebound substantially in 2009, given the weakening demand outlook and macro uncertainties. We therefore believe the recovery of the memory industry has been pushed out to 2010.

### What are the likely key themes for 2009?

With the Dram industry set to enter a third consecutive year of downturn, we think the debate has changed from a focus on the potential for an industry-wide recovery to a question of which companies can survive a prolonged downturn. Company balance sheets—with the exception of Samsung Electronics—are under immense pressure in the Dram sector and are set to weaken further as the ASP has now fallen below cash costs. We expect pressures for industry consolidation to rise into 2009 and see risks that undercapitalised, tier-two players might not survive.

We see scope for potential state intervention in the sector in 2009, particularly in Taiwan, where the government has identified semiconductors, along with flat panel displays as one of its target “One Trillion NT\$ industries” in 2002. We think the Taiwan government will also be motivated to protect its already fragile banking sector, which is owed a combined NT\$420bn (US\$12.6bn) from the four domestic Dram companies. As far as Qimonda is concerned, we believe there is a possibility that the Lander of Saxony will step up to offer assistance. We believe the most likely form will be bank guarantees. Qimonda runs a production plant in Dresden, the capital of Saxony, Germany.

We do not see government intervention as a positive for the memory industry given the pressing need for consolidation in the face of an extended industry slump. Financial support from government sources risks prolonging the downturn as it potentially interferes with the evolutionary process and the principle of fair competition, in our view. Any company receiving state aid is potentially at risk from having punitive import tariffs placed on its products, as in the case of Hynix in 2003 when the EU ruled it had been unfairly subsidised. Allowing nature to take its course will be the fastest and most efficient way to ensure that the industry returns to a more solid footing, in our view.

Turning to the memory sub-sectors, we expect investors in Dram to increasingly focus on the demand outlook in 2009, rather than just supply growth. Concerns on demand rarely surface in Dram given the usual steady unit growth in the PC industry. In addition, Dram makers have had strong growth in memory content growth per PC in recent years, as users have needed additional memory resources to support data-intensive multi-media functionality and rising broadband usage. We expect this to change in 2009 in the face of a potential contraction in PC unit growth and slowing growth in the Dram content per PC.

Within Nand Flash, we expect demand concerns to focus on the outlook for mainstream portable consumer electronics items such as mobile phones, MP3 players and digital still cameras (DSCs). We expect the growth prospects in the nascent SSD (solid state drive) segment to become a mainstream topic of debate in Nand in 2009, although we expect the market to remain at an early stage of development.

We expect the operating performance of most memory companies to bottom-out sometime in the second quarter of 2009. This forecast assumes that industry ASPs stabilise in Q2, helped by a combination of 1) reducing inventory levels and 2) the positive impact of likely additional supply cuts. However, while there could be a technical bottoming out of the sector in Q2, we expect the road to recovery to be a long and arduous one for all sector companies, in light of the likely global recession in 2009. We suspect most companies will have to raise additional financing along the way.

### What may surprise on the upside or downside?

Memory semiconductors are commodity products and industry pricing is determined by the relative balance of supply and demand in the sector. Investors therefore need to consider the likely risks to the supply and demand outlook in both Dram and Nand Flash in order to take a view on the likely future direction of pricing and earnings in the industry.

The risks to demand are more on the downside in our view, due to the high probability of a global recession in 2009. Demand for Dram is largely driven by the PC sector, which we estimate accounts for some 85% of total Dram industry demand. We think the risks to PC demand are on the downside, as corporations (c60% global PC demand) are likely to rein back IT spending in 2009. We expect consumers to reduce their spending on electronics in light of the likely global recession in 2009. We expect incremental growth in the Dram content per PC to slow next year, given already adequate levels of Dram loading per system.

We see downside risks to demand for Nand Flash due to slowing consumer demand for portable electronics. The Nand Flash market is reliant on several mature consumer electronics segments including DSCs and MP3 players, which we estimate will account for 38% of Nand industry demand in 2008. As mature product segments, we believe demand for DSCs and MP3 is more vulnerable in a consumer downturn as these markets are more reliant on replacement demand as penetration rates are high. Replacement cycles tend to be more vulnerable in a downturn, as many consumers opt to keep their current camera or MP3 player, rather than purchase a new one.

We see greater upside risks to our supply estimates (particularly in Dram) due to the current oversupply and balance sheet pressures in the sector. Several Dram vendors have announced supply reductions during the last quarter, as ASPs have fallen below cash costs. Supply cuts, where these have been announced, have so far been small in magnitude and have not had a meaningful impact on the oversupply in the sector in the face of weakening demand. As a result, industry pricing in Dram has continued to fall. With ASPs below cash costs for most Dram and Nand players, we expect more substantial supply cuts across the industry into the new year.

## What are the likely key catalysts in 2009?

Trading in memory stocks is highly volatile and the sector attracts a greater proportion of short-term speculators than long-term investors, in our view. Memory stocks tend to have a high beta and can be subject to large intra-day swings, driven by short-term newsflow and sentiment. We identify the following potential catalysts for the sector:

### Potential negative catalysts

- **PC sector news flow:** With the risks to PC shipments on the downside, in our view, we expect Dram stocks to react negatively to any further disappointment in the PC sector. We therefore expect Dram stocks to react to newsflow the PC OEM companies (Dell, HP, Acer, and Lenovo); other PC-related names such as Intel, AMD and Seagate, and PC forecast updates from market forecasters such as Gartner Dataquest, IDC and iSuppli.
- **ASP pricing data:** We expect sector stocks to react to changes to pricing in the Dram and Nand Flash segments. Contract pricing is announced twice a month, with spot pricing announced on a daily basis. Investors can monitor pricing trends in both Dram and Nand Flash on the [www.dramexchange.com](http://www.dramexchange.com) website.
- **Quarterly operating results:** We expect operating results to deteriorate further in Q4 for all memory companies, including Samsung Electronics. Given the high margin of error in accurately forecasting profits at memory companies, quarterly results have been coming in below market expectations for most memory companies over the past few quarters. Memory companies are due to report Q4 earnings in January 2009. We expect Q1 guidance for most memory stocks to be weak.
- **Refinancing news:** Given the current cash constraints impacting almost every memory company, we would view any news of refinancing (or government intervention) as negative for memory stocks given the risk of dilution to existing shareholders.

### Potential positive catalysts

- **Capex reductions:** We expect memory stocks to react positively to news of capacity or capex reductions, given the current significant oversupply in both memory segments.
- **Industry consolidation:** We expect memory stocks to react positively to any news of industry consolidation, given the current significant oversupply in both the Dram and Nand Flash segments.

## Key ideas

We do not have any most preferred stocks. Our least preferred stocks are Hynix Semiconductor, SanDisk and Qimonda.

# Global Memory Semiconductor Least Preferred

We do not have any most preferred stocks, given our cautious view on the sector. We have three least preferred stocks, as listed below.

## Global Memory Semiconductor Least Preferred

Stock	Rating	PT	Overview
<b>Least Preferred</b>			
<b>Hynix Semiconductor</b>	Sell	Won6,200	Hynix is the most indebted company in the global Dram sector. We foresee a risk that it will have to raise up to Won2trn new financing in 2009
<b>SanDisk</b>	Neutral	US\$6.00	We are cautious on SanDisk due to its exposure to the consumer and due to uncertainty over its future royalty income
<b>Qimonda</b>	Neutral	US\$1.05	We believe Qimonda is fighting for survival. M&A/financial assistance are upside risks. Maintaining the status quo is a downside risk as Qimonda is sub-scale and faces financial risks.
<b>Other memory stocks</b>			
<b>Samsung Electronics</b>	Neutral	Won470,000	We expect Samsung to emerge a winner in global memory once the market recovers. However, we think it too early to buy into the name given the current valuation and ongoing risks in its LCD-panel and handset divisions
<b>Toshiba</b>	Buy	¥810.00	The UBS Japan team has a favourable view on Toshiba given that the Nand Flash outlook might improve in 2009
<b>Elpida</b>	Neutral	¥470.00	The Japan team is neutral on Elpida given the challenging outlook for the Dram industry
<b>Micron Technology</b>	Neutral	US\$5.00	The UBS US team is neutral on Micron given the stock's valuation and the challenging outlook for the Dram industry
<b>Powertech Technology</b>	Buy	NT\$105.00	We maintain a positive view on Powertech on valuation and given the group's robust industry positioning and support from cash-rich parent Kingston
<b>Phison</b>	Sell	NT\$50.00	We expect Phison to face continued ongoing margin pressure in 2009 given the limited change for an industry recovery

Source: UBS estimates

We summarise our investment case for 2009, current valuation, and likely catalysts for each of the stocks in our Least Preferred list below:

### Hynix Semiconductor

**Investment case:** With the downturn in Dram set to enter a third consecutive year, we expect Hynix's operating outlook to worsen in 2009. We expect this to add further pressure on its cash reserves and foresee a risk that it will have to raise new financing in 2009. We do not expect any new financing to be on favourable terms to the company and see a risk of potential dilution for existing shareholders if any new money is raised via a CB or equity placement.

**Valuation:** We base our price target on a P/BV multiple of 0.5x, versus 0.4x for the pure-play peer group (excluding Samsung Electronics and Toshiba).

**2009 catalysts:** We expect Hynix's stock to react to incremental news on industries ASPs and newsflow in the PC sector (which accounts for about 85% of Dram demand) and quarterly operating results in the sector (Hynix reports Q4 results in late January 2009). We expect memory stocks to react positively to any news of industry consolidation or capex reductions, given the current oversupply in Dram and Nand Flash.

**Sector:** Korea Semiconductors

**Rating:** Sell

**PT:** Won6,200

**Analyst:** Robert Lea



## SanDisk

**Investment case:** SanDisk is a technology leader in the NAND flash industry with key patents on multi-level cell storage, memory controllers, and USB flash drives. With products available at over 240,000 store fronts worldwide and memory cards bundled with OEM handset and camera products, There are two key reasons for which we are cautious on the stock: 1) consumer exposure—SanDisk's revenue is effectively 100% consumer driven, which is unfavourable in the consumer-led recessionary environment that will weigh on 2009 prospects; 2) uncertainty over royalty revenues—in addition to expectations for downside risk to product demand and heavy pricing pressure, the continuity and size of SanDisk's royalty revenue stream post August 2009 when Samsung's NAND licence expires also remain a key risk to the business model. Balance sheet preservation is also a critical theme to watch given continued negative FCF for the foreseeable future.

**Valuation:** Our DCF-based price target of US\$6.00 is equivalent to 0.3x P/BV (versus historical 0.3-2.5x). We assume a WACC of 7.5% and terminal growth of 2%.

**2009 catalysts:** Key catalysts in 2009 include: 1) completion of SanDisk's JV restructuring with Toshiba in Q109; 2) Samsung's royalty renegotiation by August 2009; 3) launch of MLC-based SSD and adoption trend for SSDs in notebooks; 4) industry consolidation that may or may not involve SanDisk; and 5) NAND ASP and industry inventory trends.

## Qimonda

**Investment case:** We believe Qimonda has now entered a phase of fighting for survival. In the current format, we doubt the company has the scale to compete with Samsung and Hynix in the DRAM industry. Hence, we believe either M&A or future alliances will be/should be considered. Infineon (which owns 77.5% of Qimonda) has made references as recently as last week to consider M&A for Qimonda. This is, in our view, the main upside risk to the stock. If does not materialize, Qimonda would need to raise additional finances (we forecast about €500m) by Q209. Note that financial help (probably through guarantees to cover bank loans) from the Lander of Saxony could be considered.

**Valuation:** We base our price target for Qimonda on 0.15x FY08E book value.

**2009 catalysts:** Main upside risk to the stock would come from M&A and/or financial help. Main downside risk is the status quo, with Qimonda remaining a sub-scale DRAM player facing financial risks.

**Sector:** US Semiconductors

**Rating:** Neutral

**PT:** US\$6.00

**Analyst:** Uche Orji

**Sector:** US Semiconductors

**Rating:** Neutral

**PT:** US\$1.05

**Analyst:** Nicolas Gaudois

Table 2: Global peer group valuation

	Mkt cap	EV/sales (x)		EV/EBITDA (x)		PE (x)		P/BV (x)		Sales growth		EPS growth		EBIT margin		ROE	
	US \$m	08E	09E	08E	09E	08E	09E	08E	09E	08E	09E	08E	09E	08E	09E	08E	09E
<b>Samsung Elec</b>	48.7	0.4	0.6	2.2	5	8.6	25.8	1.3	1.3	22%	8%	-16%	-55%	7%	2%	11%	5%
<b>Hynix Semi</b>	2.3	1.3	1.9	10.5	-338.6	-0.6	-1.2	0.5	1	-21%	-15%	-1299%	-30%	-29%	-43%	-53%	-60%
<b>Inotera (NR)</b>	0.8	2.2	2.4	6	5.5	-	-	0.4	0.5	-15%	4%	-	-	-35%	-	-25%	-30%
<b>Nanya Tech (NR)</b>	0.7	2.5	2.5	-7.8	-24.1	-	-	0.7	1.5	-25%	13%	-	-	-61%	-39%	-70%	-89%
<b>Powerchip (NR)</b>	0.7	1.8	1.9	31.6	7.5	-	-	0.4	0.7	-23%	0.30%	-	-	-64%	-45%	-56%	-62%
<b>ProMOS (NR)</b>	0.3	2.3	2.2	29.2	7.6	-	-	0.2	0.2	-25%	20%	-	-	-62%	-34%	-43%	-44%
<b>Elpida</b>	0.6	1.5	0.5	8.6	-14.8	-13.2	-0.4	1.4	0.3	-17%	0%	-173%	229%	-6%	-30%	-12%	-51%
<b>Micron</b>	2.1	1.9	1.4	13	5.1	-4.9	-2.7	1	0.4	3%	-5%	221%	-36%	-20%	-13%	-17%	-14%
<b>Qimonda</b>	0.1	0	0.2	-0.1	-0.5	-	-	-	0.3	-51%	-14%	745%	-40%	-97%	-83%	-85%	-154%
<b>Toshiba</b>	11.8	0.5	0.4	7.1	5.9	23	39.6	2.5	1.1	8%	2%	-8%	-45%	3%	1%	12%	3%
<b>SanDisk</b>	1.8	0.8	0.9	-11.2	-16.9	-5.6	-6.7	0.4	0.4	-15%	-26%	-216%	-24%	-15%	-18%	-7%	-6%
<b>Average</b>		1.4	1.4	13.5	6.1	15.8	32.7	0.8	0.7	-14%	-1%	-107%	0%	-34%	-30%	-31%	-46%
<b>Pure play average</b>		1.6	1.5	16.5	6.4	-	-	0.6	0.6	-21%	-3%	-122%	9%	-43%	-38%	-41%	-57%

Note: Reuters estimates used for Inotera, Nanya Tech, Powerchip and ProMOS. Prices at 28 November 2008. NB: Pure play average excludes Toshiba and Samsung Electronics.

Source: UBS estimates

# Memory industry outlook

## Oversupply set to worsen in 2009E

The Dram industry is about to enter its third year of downturn, in our view. A three-year downturn is not unprecedented and the last one was in the mid-1990s. Looking back to previous cycles, the chief cause of oversupply in Dram has usually been overly aggressive capacity growth, in our view. Concerns on demand rarely surface given the usual steady unit growth in the PC industry. In addition, Dram makers have had strong growth in memory content growth per PC in recent years, as users have needed additional memory resources to support data-intensive multi-media functionality and rising broadband usage.

The current downturn in the Dram industry started in the first quarter of 2007 and was initially caused by excessive supply growth. One year later, the industry appeared to be on the road to recovery as supply growth began to moderate, leading to a partial recovery in industry ASPs. However, the recovery began to falter in May 2008, as the demand outlook began to slow.

The slowdown in demand for Dram has resulted from two main factors: 1) slowing growth in Dram content per PC; and 2) rising concerns about slowing unit growth in PCs. As a result, we expect industry demand growth for Dram (in terms of total bits) to slow to 30% YoY growth in 2009, from 69% YoY growth in 2008 and 82% YoY growth in 2007. On the supply side, we forecast industry capacity growth of 67% in 2008 and 37% in 2009. We therefore expect the industry to remain locked in oversupply through 2008 and 2009. We forecast Dram oversupply of 2.0% in 2008 and 7.5% in 2009.

**Table 3: UBS global Dram industry supply-demand (512Mb equivalents)**

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Sales (US\$ m)</b>	6,265	8,482	7,982	6,058	28,787	5,349	5,776	6,929	6,873	24,927	29,352
<b>QoQ (%)</b>	-1.0%	35.4%	-5.9%	-24.1%		-11.7%	8.0%	20.0%	-0.8%		
<b>YoY (%)</b>	-35.2%	11.7%	0.9%	-4.3%	-8.6%	-14.6%	-31.9%	-13.2%	13.4%	-13.4%	17.8%
<b>Bit growth (m)</b>	3,500	4,264	4,667	5,077	17,508	4,890	5,186	6,006	6,646	22,728	32,357
<b>QoQ (%)</b>	12.8%	21.8%	9.4%	8.8%		-3.7%	6.1%	15.8%	10.6%		
<b>YoY (%)</b>	76.6%	74.7%	66.4%	63.6%	69.5%	39.7%	21.6%	28.7%	30.9%	29.8%	42.4%
<b>Blended ASP (US\$)</b>	1.79	1.99	1.71	1.19	1.64	1.09	1.11	1.15	1.03	1.10	0.91
<b>QoQ (%)</b>	-12.3%	11.1%	-14.0%	-30.2%		-8.3%	1.8%	3.6%	-10.3%		
<b>YoY (%)</b>	-63.3%	-36.0%	-39.3%	-41.5%	-46.1%	-38.9%	-44.0%	-32.6%	-13.3%	-33.3%	-17.3%
<b>Bit supply (m)</b>	3,562	4,159	4,804	5,339	17,864	5,601	5,828	6,289	6,707	24,426	32,054
<b>Growth QoQ</b>	9.2%	16.7%	15.5%	11.1%		4.9%	4.1%	7.9%	6.6%		
<b>Growth YoY</b>	71.9%	63.5%	68.6%	63.7%	66.6%	57.2%	40.1%	30.9%	25.6%	36.7%	31.2%
<b>Bit demand (m)</b>	3,500	4,264	4,667	5,077	17,508	4,890	5,186	6,006	6,646	22,728	32,357
<b>Growth QoQ</b>	12.8%	21.8%	9.4%	8.8%		-3.7%	6.1%	15.8%	10.6%		
<b>Growth YoY</b>	76.6%	74.7%	66.4%	63.6%	69.5%	39.7%	21.6%	28.7%	30.9%	29.8%	42.4%
<b>Over (+) / Under (-) supply</b>	<b>1.8%</b>	<b>-2.5%</b>	<b>3.0%</b>	<b>5.2%</b>	<b>2.0%</b>	<b>14.6%</b>	<b>12.4%</b>	<b>4.7%</b>	<b>0.9%</b>	<b>7.5%</b>	<b>-0.9%</b>

Source: UBS estimates

## Dram demand outlook

We expect PC unit growth to slow as corporate IT spending (60% total PC demand) likely slows in the face of global recession. We expect corporate IT budgets to either tighten or remain frozen in 2009, as companies look to cut operating costs. Turning to the consumer, we expect demand for notebooks to slow given the growing pressures faced by consumers around the world.

We estimate the average Dram content of a desktop PC has increased nearly four times in the past three years. We estimate an average Dram content of 2.35GB per desktop and 2.24GB per notebook by the end of 2008, increasing to an average of 2.73GB in desktops and 2.59GB in notebooks by Q409.

**Table 4: Dram content assumptions (MB per system)**

	Q107	Q207	Q307	Q407	2007	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Desktop</b>	1,123	1,290	1,450	1,560	1,364	1,823	2,222	2,289	2,357	2,180	2,452	2,550	2,652	2,731	2,596	3,326
<b>QoQ</b>	32%	15%	12%	8%	-	17%	22%	3%	3%	-	4%	4%	4%	3%	-	-
<b>YoY</b>	63%	67%	77%	83%	74%	62%	72%	58%	51%	60%	34%	15%	16%	16%	19%	28%
<b>Notebook</b>	980	1,160	1,325	1,490	1,266	1,802	2,033	2,109	2,236	2,058	2,325	2,418	2,515	2,590	2,462	3,154
<b>QoQ</b>	36%	18%	14%	12%	-	21%	13%	10%	6%	-	4%	4%	4%	3%	-	-
<b>YoY</b>	68%	78%	92%	107%	90%	84%	75%	59%	50%	63%	29%	19%	19%	16%	20%	28%
<b>Servers</b>	4,950	5,250	5,600	6,110	5,502	7,210	9,012	10,995	12,314	9,958	13,053	14,097	15,225	16,443	14,760	20,272
<b>QoQ</b>	6%	6%	7%	9%	-	18%	25%	22%	12%	-	6%	8%	8%	8%	-	-
<b>YoY</b>	20%	21%	26%	31%	25%	46%	72%	96%	102%	81%	81%	56%	38%	34%	48%	37%

Source: UBS estimates

There is ample evidence, in our view, that growth in Dram content per system is moderating. We think this is due to several reasons:

- Average PC users do not demand ever-increasing amounts of memory given the lack of new memory hungry applications, in our view. We think an average memory content of 2-2.5GB per PC is adequate for the average home or office user.
- Microsoft will continue to offer mainstream support for Windows XP until April 2009, after which time there will be five years of extended support, until 2014. With no immediate support deadline looming, there is little immediate need for most corporations to upgrade to the more memory-hungry Vista operating system. With corporate IT spending likely under pressure in 2009, we expect incremental upgrades at corporations from XP to Vista to slow.
- We sense a certain degree of hesitance among PC OEMs to load their systems with increasing levels of Dram. This hesitance stems, in our view, from the fear that loading up on very high levels of Dram per PC could leave them exposed should the Dram ASP rebound substantially in the future. After all, PC OEM margins are thin and Dram is an input cost. At current loadings, we estimate the Dram content per box accounts for about 4% of the bill of materials (BOM) of a typical desktop, which is currently towards the bottom of the historical range.

- A 50% ASP increase (although highly unlikely in the short term, in our view) would see the Dram cost rise to 6% of the BOM, squeezing OEMs' margins. Given all tech companies are currently in 'margin-preservation mode', we sense a limited appetite to load up with more Dram per PC. Furthermore, Dram content per PC is less of a key differentiating factor for OEMs these days, in our view, given already high levels of Dram content per box.

## Dram supply outlook

Several Dram vendors have announced supply reductions during the last quarter, as the Dram ASP has fallen below cash costs. Supply cuts, where these have been announced, have so far been small in magnitude and account for some 10% of the global Dram supply base. We believe supply reduction measures include the following:

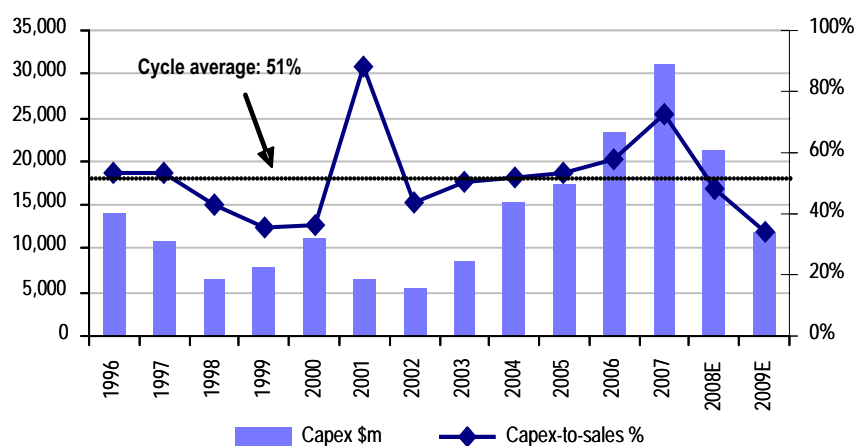
- Nanya has delayed expansion plans for both its Meiya JV with Micron and the Fab3 Phase 2. Its Fab3 Phase 1 will likely reduce production from 30K to 15K wafer per month until Q109.
- Inotera has recently cut production by 20%, from about 120k wafers per month to 100K at its Taiwan Dram fab.
- Powerchip (PSC) has confirmed it plans to cut Dram capacity 10-15% (fabs P1, P2 and P3).
- Elpida has confirmed it will cut production in its Hiroshima fab (around 12k wafers per month) by approximately 10% (around 5% of total capacity).
- Micron has confirmed it will acquire Qimonda's 35.6% stake in Inotera, the Taiwan Dram foundry, for US\$400m. Qimonda has also announced a major restructuring that should result in about a 3k headcount reduction and closure of its legacy 8-inch production facility in Richmond by January 2009, as well as the closure of the back-end facility in Dresden by March 2009.

In aggregate, the supply cuts have not had a sustained impact on industry pricing and Dram unit pricing has continued to fall, as the demand environment continues to weaken. Note, however, that manufacturing cycle times are about 45 days—implying that the impact of most of these cuts may yet come. However, we have incorporated them all in our company supply forecasts for 2009 and 2010.

With ASPs currently below cash costs, we expect further capacity reductions before year-end and into 2009. With balance sheets under pressure at every vendor except Samsung Electronics, we think the ability of memory companies to continue investing in capacity is being heavily curtailed.

We forecast combined Dram and Nand Flash capex to decline 44% YoY in 2009, following an estimated 32% decline in 2008. Excluding Samsung Electronics and Toshiba—the only two memory manufacturers with ample balance sheet strength—we expect Dram and Nand capex to fall 50% YoY in 2009. This leaves combined capital intensity at 34%, the lowest level over the past 15 years. We usually view this as a leading indicator of supply/demand rationalisation. However, considering 1) high demand uncertainty; 2) an approximately six-month lag between capex and actual changes in wafers out; it is unlikely to play out before 2010, in our view.

**Chart 1: Memory sector (Dram and Nand Flash) capital intensity**



Source: UBS estimates

## Balance sheets under immense pressure

The balance sheets of most Dram companies (except Samsung Electronics) are under great pressure. The following table summarises the latest reported gross cash numbers within the sector. Gross cash balances in Taiwan increased following the end of Q3 at Nanya Tech and Powerchip, following fund-raising/new loans. Inotera's cash balance was largely unchanged in Q3 given its strong free cash generation.

**Table 5: Dram manufacturers—gross cash (including marketable securities)**

	2002	2003	2004	2005	2006	2007	Q108	Q208	Q308
<b>SEC (US\$ m)</b>	6,213	6,733	7,311	6,972	6,990	8,418	7,439	6,143	6,857
<b>Hynix (US\$ m)</b>	55	101	957	1,268	2,272	2,193	1,554	1,389	1,153
<b>Micron (US\$ m)</b>	658	1,172	1,052	1,377	2,638	2,031	1,853	1,584	1,362
<b>Qimonda (US\$ m)</b>	-	-	-	-	2,091	1,489	329	1,213	910
<b>Inotera (US\$ m, NR)</b>	-	-	-	299	717	210	101	189	190
<b>Nanya Tech (US\$ m, NR)</b>	166	163	99	263	914	76	35	195	25
<b>Powerchip ((US\$ m, NR)</b>	368	375	1,126	1,175	1,437	774	663	628	546
<b>ProMOS ((US\$ m, NR)</b>	139	161	529	337	643	274	203	100	90

Note: NR = not rated.

Source: Company data, FactSet, TEJ, UBS estimates

The net debt position of most Dram companies has worsened since the industry downturn commenced. Debt-to-equity levels have risen over 100% in the Taiwan Dram sector and the Taiwanese banks appear unable/unwilling to further increase their lending to local Dram vendors.

**Table 6: Dram manufacturers—net debt**

	2002	2003	2004	2005	2006	2007	Q108	Q208	Q308
<b>SEC (US\$ m)</b>	-4,838	-5,757	-7,209	-6,869	-6,889	-8,318	-7,343	-6,047	-6,759
<b>Hynix (US\$ m)</b>	3,383	2,730	901	578	1292	3,328	4,397	5,433	6,202
<b>Micron (US\$ m)</b>	-222	-102	32	-270	-2,070	186	553	837	1,364
<b>Qimonda (US\$ m)</b>	-	-	-	-	-1,426	-1,041	872	341	-1
<b>Inotera (US\$ m, NR)</b>	-	-	-	764	382	1,721	2,057	2,326	2,192
<b>Nanya Tech (US\$ m, NR)</b>	814	716	870	760	449	1,441	2,095	2,131	2,383
<b>Powerchip (US\$ m, NR)</b>	283	258	-344	274	342	1,946	2,588	2,513	2,673
<b>ProMOS (US\$ m, NR)</b>	619	395	4	928	483	1,874	2,264	2,358	2,080

Note: NR = Not Rated.

Source: Company data, FactSet, TEJ, UBS estimates

### The door to fund-raising has not completely closed—yet

Elpida announced in early October that it would raise new finance (¥50bn of unsecured CBs and draw down on a ¥110bn credit facility) to enable it to invest in die shrink to 54nm. News of Elpida's refinancing suggests an appetite remains, among some investors, to invest in Dram debt. The route to refinancing for Dram companies has therefore not completely closed, despite tough credit market conditions. If Dram companies can refinance, then they can potentially continue to invest in capex. This is unlikely to help the current oversupply situation in the industry, in our view.

In addition, we see scope for potential government investment in the sector. Recent press reports in Taiwan (*Economic Daily*) suggest the government may be looking to invest up to US\$15bn in a special fund for Dram and LCD panel companies. Although unconfirmed, this suggests alternative routes for financing may also become available to Taiwanese memory vendors.

Finally, we see a potential route for refinancing through industry relationships. For example, Nanya Tech and Inotera are both part of the cash-rich Formosa group in Taiwan. We therefore see potential for intra-company loans through the parent.

Turning to Powerchip and Elpida, we are aware both companies maintain close ties with Kingston, which is the world's largest Dram memory module house. Kingston is privately owned and its founders have considerable financial assets, in our view. Kingston maintains close contacts with its suppliers and has, in past downturns, provided financial assistance to several companies in the Dram sector. Whether Kingston still has the appetite to finance its customers remains debatable. However, we do not think it should be ruled out as a potential route to financing.

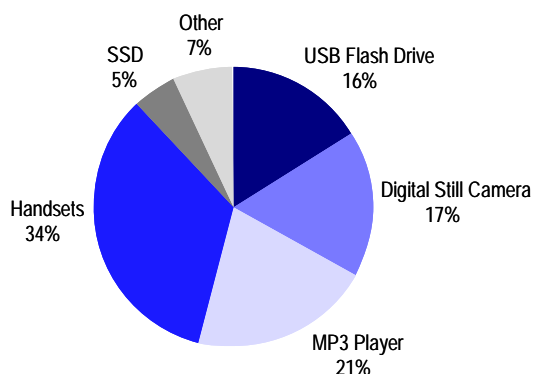
As a result, although balance sheets are under immense pressure and more capex cuts are likely in 2009, we expect leading Dram houses to be able to stay in the game into early 2009. The same cannot be said about tier-two companies, such as ProMOS, given their general lack of cost competitiveness. ProMos in particular is reliant on legacy 8-inch production fabs and is due to complete an ECB fund-raising shortly, although the outcome cannot be assured at this point.

## Nand Flash industry outlook

### Risks from falling consumer demand

Demand across all the main Nand Flash product categories is slowing, as a result of falling consumer demand for portable electronics. The Nand Flash market is reliant on several mature consumer electronics product segments including DSCs and MP3 players, which we estimate will account for 38% of Nand industry demand in 2008. As mature product segments, we believe demand for DSCs and MP3 players is more vulnerable in a consumer downturn as these markets are more reliant on replacement demand given already high penetration rates. Replacement cycles tend to be more vulnerable in a downturn, as many consumers opt to keep their current camera or MP3 player, rather than purchase a new one.

**Chart 2: Nand Flash demand drivers (2008E)**



Source: UBS estimates

The SSD segment remains at an early stage of development, in our view and pricing remains too high to make it affordable to mainstream consumers. For example, at current pricing, a 64GB (SLC) Nand SSD drive would cost close to US\$500, compared with around US\$50 for an 80GB hard disc drive. Dell charges an additional US\$600 for a 64GB SSD option on its standard XPS M1330 laptop, which retails for US\$999. We expect SSD demand to remain modest over the next 18-months.

We estimate the global Nand Flash industry will be in 8.0% oversupply in Q408 (versus 7.4% in Q308) rising to a substantial 20.7% oversupply in Q109E. As in Dram, we expect the oversupply situation to moderate through the remaining quarters of the year, reaching 2.9% oversupply in Q409E.



We forecast Nand industry demand growth of 112% in 2008 and 74% in 2009. We forecast industry supply growth of 128% in 2008 and 77% in 2009. As a result, we forecast oversupply of 7.6% in 2008 and 9.6% in 2009.

Samsung Electronics and Toshiba, the two major players in the Nand Flash market, have maintained aggressive bit growth through 2008. We estimate Samsung Electronics' bit growth will reach 129%, with Toshiba growing shipments by 143% in 2008. We forecast 81% bit growth at Samsung Electronics in 2009 and 101% at Toshiba (post the SanDisk transaction). We believe strong bit growth from both leading players has exacerbated the current oversupply situation in Flash.

**Table 7: UBS global Nand Flash supply-demand model summary (4Gb equivalents)**

	Q108	Q208	Q308	Q408E	2008E	Q109E	Q209E	Q309E	Q409E	2009E	2010E
<b>Sales (US\$ m)</b>	3,556	4,064	3,480	3,371	<b>14,470</b>	2,863	3,202	3,816	4,006	<b>13,886</b>	<b>20,626</b>
<b>QoQ (%)</b>	-20.2%	14.3%	-14.4%	-3.1%		-15.1%	11.8%	19.2%	5.0%		
<b>YoY (%)</b>	43.5%	29.0%	-23.0%	-24.3%	-0.9%	-19.5%	-21.2%	9.7%	18.8%	-4.0%	48.5%
<b>Bit growth (m)</b>	1,265	1,626	1,815	2,197	<b>6,903</b>	2,196	2,585	3,242	4,004	<b>12,027</b>	<b>25,692</b>
<b>QoQ (%)</b>	-4.8%	28.5%	11.6%	21.1%		-0.1%	17.7%	25.4%	23.5%		
<b>YoY (%)</b>	171.7%	172.5%	111.1%	65.2%	<b>112.3%</b>	73.5%	58.9%	78.7%	82.2%	<b>74.2%</b>	<b>113.6%</b>
<b>Blended ASP (US\$)</b>	2.81	2.50	1.92	1.53	<b>2.10</b>	1.30	1.24	1.18	1.00	<b>1.15</b>	<b>0.80</b>
<b>QoQ (%)</b>	-16.1%	-11.1%	-23.3%	-20.0%		-15.0%	-5.0%	-5.0%	-15.0%		
<b>YoY (%)</b>	-47.2%	-52.7%	-63.5%	-54.2%	<b>-53.3%</b>	-53.6%	-50.4%	-38.6%	-34.8%	<b>-44.9%</b>	<b>-30.5%</b>
<b>Bit supply (m)</b>	1,456	1,648	1,949	2,373	<b>7,426</b>	2,650	2,964	3,448	4,119	<b>13,181</b>	<b>23,993</b>
<b>Growth QoQ</b>	19.9%	13.2%	18.3%	21.8%		11.7%	11.9%	16.3%	19.5%		
<b>Growth YoY</b>	169.4%	158.3%	125.3%	95.4%	<b>127.9%</b>	82.0%	79.9%	76.9%	73.6%	<b>77.5%</b>	<b>82.0%</b>
<b>Bit demand (m)</b>	1,265	1,626	1,815	2,197	<b>6,903</b>	2,196	2,585	3,242	4,004	<b>12,027</b>	<b>25,692</b>
<b>Growth QoQ</b>	-4.8%	28.5%	11.6%	21.1%		-0.1%	17.7%	25.4%	23.5%		
<b>Growth YoY</b>	171.7%	172.5%	111.1%	65.2%	<b>112.3%</b>	73.5%	58.9%	78.7%	82.2%	<b>74.2%</b>	<b>113.6%</b>
<b>Over (+) / Under (-) supply</b>	<b>15.1%</b>	<b>1.3%</b>	<b>7.4%</b>	<b>8.0%</b>	<b>7.6%</b>	<b>20.7%</b>	<b>14.7%</b>	<b>6.3%</b>	<b>2.9%</b>	<b>9.6%</b>	<b>-6.6%</b>

Source: UBS estimates

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### ■ Statement of Risk

We classify memory stocks as high risk investments. The memory sector is highly cyclical, characterised by large fluctuations in supply, demand and capital spending. Order visibility in the memory sector is low and lead-times on new capital investment are long. As a result memory ASPs and company earnings tend to be highly volatile. This in turn leads to high share price volatility. Technology risks are high, as memory fabrication uses cutting edge semiconductor fabrication techniques. The long-term pricing trend in the memory products is negative. As a result, memory companies need to sustain a high level of R&D and capital expenditure in order to stay cost competitive. Economies of scale are a source of competitiveness in the memory sector. As a result, sector companies continuously battle each other to maintain/ increase their market share through adding new capacity. Undisciplined capex spending has pushed the memory sector into downturn on multiple occasions in the past, as companies are loath to lose share.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## Facing demand issues for the first time

### ■ Summary

The LCD industry is at risk from major oversupply in 2009. While oversupply is not new, the LCD industry also faces uncertainties on demand. As LCD panel demand slows to 8% growth in 2009E compared with 19% in 2008E, we expect LCD panel makers to reduce supply growth by cutting production and delaying new capacity. We expect only the strongest makers in the LCD supply chain to emerge from the downturn in good shape.

### ■ What are the likely key themes for 2009?

We believe the key themes in 2009 will be: 1) industry consolidation, in particular balance sheet risks and the importance of captive customers; 2) cost reductions, with outsourcing of low-cost TV model manufacturing, and increased R&D/commercialisation of new cost-saving technology, such as AM-OLED; and 3) the search for a new growth area, possibly thin-film solar.

### ■ What may surprise on the upside or downside?

For downside risk, we think demand growth from China and other emerging markets could be worse than expected, if slowing GDP growth and weak stock markets weigh on consumer spending. LCD TV demand might surprise on the upside if falling TV prices trigger price elasticity.

### ■ Global Sector Preferences

Our preferred stocks are LG Display (LGD) and Best Buy. As leaders in market share, with strong balance sheets, we expect them to weather the downturn and benefit from a sector recovery. Depressed valuations are reflecting the downturn, in our view. Our least preferred stocks are Chi Mei Optoelectronic for balance sheet risk, and Asahi Glass for its weak position among glass makers.

**2 December 2008**
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**Table 1: TFT-LCD Most and Least Preferred List**

Company	RIC	Market Cap (US\$ bn)	UBS Rating	Share Price (LC)	Price Target (LC)	PE 2009E (x)
<b>Most Preferred</b>						
LG Display	034220.KS	5.04	Buy	20,700	30,000	91.0
Best Buy Co Inc	BBY.N	10.45	Buy	21.08	30.00	9.03
<b>Least Preferred</b>						
Chi Mei Optoelectronic Corp	3009.TW	1.57	Neutral	9.73	13.40	-3.16
Asahi Glass	5201.T	6.67	Neutral	536	600	7.82

Above data as at 28 November 2008. Source: UBS estimates

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## Outlook 2009 – Summary

### What is the outlook for the TFT-LCD sector and central thesis for 2009?

Oversupply looms in 2009 for the LCD panel industry and presents a challenge for the panel makers. In past cycles, when the industry overbuilt capacity and fell into oversupply, demand could be stimulated with lower panel prices to stabilise the industry. Supply cuts were the last resort and often unnecessary. With the global economic slowdown depressing demand growth and possibly altering price elasticity dynamics, stimulating demand might not be enough this time around, in our view. We believe panel makers need to cut supply aggressively and pre-emptively.

**Table 2: TFT-LCD panel supply-demand forecasts**

(K m2)	Q108	Q208	Q308E	Q408E	Q109E	Q209E	Q309E	Q409E	2008E	2009E	2010E
<b>Supply</b>	16,954	18,100	17,864	19,994	18,451	19,183	20,446	21,479	72,912	79,559	95,571
<b>Demand</b>	16,143	16,750	16,547	18,472	15,854	17,425	19,362	20,608	67,912	73,249	88,648
<b>Overcapacity ratio</b>	5.0%	8.1%	8.0%	8.2%	16.4%	10.1%	5.6%	4.2%	7.4%	8.6%	7.8%
<b>Chg - QoQ/YoY</b>											
<b>Supply</b>	5%	7%	-1%	12%	-8%	4%	7%	5%	30%	9%	20%
<b>Demand</b>	-2%	4%	-1%	12%	-14%	10%	11%	6%	19%	8%	21%

Source: Displaysearch, UBS estimates

We forecast demand growth to slow in 2009 but our forecasts could be subject to more downside risks. For monitor panels, we assume no growth in 2009, but as we expect global desktop PC units to decline 11% in 2009, a decline in monitor panel demand cannot be ruled out. For the notebook panels, we expect 12% unit growth but only 6% area growth, because of growth from smaller screen net-books. Downside risk exists from net-books cannibalising notebook demand, in our view. For LCD TVs, the question is on price elasticity of demand. We believe a slowdown only shifts the price elasticity curve to the left with the slope intact. However, a severe economic slowdown could change consumer behaviour structurally, to the extent that the slope would become steeper than our expectation.

**Table 3: LCD demand forecast**

	Area (m m2)			Unit (m)		
	2008E	2009E	2010E	2008E	2009E	2010E
<b>Total LCD panel</b>	67.9	73.2	88.6	452.9	482.3	557.0
<b>Monitor panel</b>	19.6	19.9	22.7	181.1	181.1	201.0
<b>Notebook panel</b>	9.3	9.8	11.4	151.5	169.5	200.9
<b>LCD TV panel</b>	35.1	39.3	49.8	106.4	116.8	138.4
<b>* LCD TV set</b>				101.6	110.0	126.7
<b>Chg YoY</b>						
<b>Total panel</b>	19%	8%	21%	14%	6%	16%
<b>Monitor panel</b>	6%	1%	14%	2%	0%	11%
<b>Notebook panel</b>	31%	6%	16%	33%	12%	19%
<b>LCD TV panel</b>	25%	12%	27%	15%	10%	19%
<b>* LCD TV set</b>				28%	8%	15%

Source: UBS estimates

## What are the likely key themes for 2009?

### 1) Industry consolidation

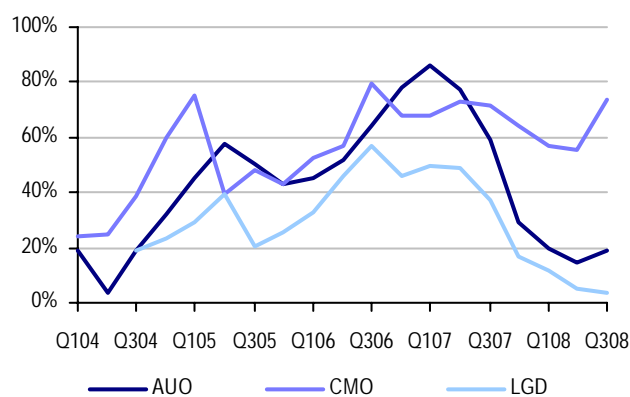
The LCD panel industry went through some consolidation in the past-cycle but still has more than 10 makers in the market. We expect the downturn in H208-H109 to trigger further consolidation. We think this will not necessarily be M&A activity, as incentive for first-tier makers to acquire lower-tier makers with older generation lines is low. We focus on an increase in concentration of supply among the top four to five makers.

#### First-tier makers: captive TV customers

Compared with previous down-cycles, LCD TV now represents a larger portion of the market than IT (monitor and notebook panels). This trend will favour panel makers with captive TV panel customers, in our view. Samsung is best positioned with two major captive customers in Samsung and Sony. LG Display and Sharp are next in line with LG Electronics and Sharp as customers.

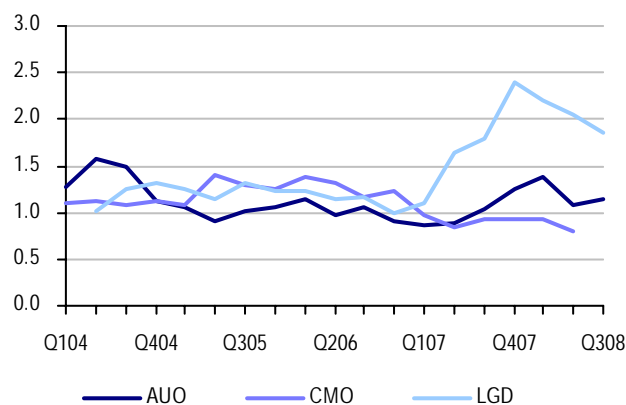
This leaves AU Optronics (AUO) and Chi Mei Optoelectronic (CMO) as merchant players who could experience more substantial order declines if oversupply and sluggish demand growth persist. This is already visible, as AUO and CMO cut production more than Korean and Japanese peers in H208. We believe CMO is the most at risk of the two, with its net debt to equity ratio likely to reach 100% by the end of Q408. We estimate CMO will need external financing of at least NT\$30bn in 2009, even after halving its capex to NT\$50bn. CMO's market position could be significantly weakened through this downturn, in our view.

**Chart 1: Net debt to equity ratio comparison**



Source: Company data

**Chart 2: Current ratio comparison**



Source: Company data

#### Second/third-tier makers: limited expansion

We believe the gap between first-tier and the rest will widen, as capex has stopped from the likes of CPT and Hannstar. Most low-tiers do not have the balance sheet to build G7+ lines for TVs. Since G4-6 lines have become uneconomical with monitor panel prices reaching cash costs, most will be forced to exit the market or turn to small panels. We believe the only makers in this group that will be making investments are those with captive customers (for example, IPS-Alpha and Innolux) or with government help (for example, BOE). However, the impact on industry supply growth in 2009 will be limited, in our view.

## 2) Cost reduction

### Panel makers and component/materials

Taiwanese panel makers began incurring losses in Q308. We expect Korean makers to sustain losses in Q109. We believe this will limit further panel price declines to 20-25% in 2009, since many will stop production as prices fall below cash costs. As for component/material vendors that are still making profits, we expect pricing pressure to pick up in 2009. Commoditised components such as driver ICs, polarisers, CCFLs and BLUs are most at risk, but we believe price declines will reach more protected segments such as glass.

### Set/OEM, brand makers, and retailers

Given weak demand, we believe the retail TV price could drop at least 20-30% in 2009. Despite a panel price decline of 25%, contraction in the channel margin is likely, in our view. If we assume some costs are more or less fixed such as freight, warranty and royalties, a 25% drop in the retail price in 2009E would leave little to no profit in the channel. To reduce costs, more outsourced 'fighter' models will be in demand. For these orders, traditional OEM companies (for example, TPV, Innolux and Wistron) will have competition from new entrants with integrated panel and sets (that is LGD & Amtran, and AUO & Qisda).

**Table 4: LCD TV cost breakdown and case analysis in 2009E**

(US\$)			End-08	End-09	Chg (\$)	Chg (%)				
<b>Panel</b>		Panel price	380	285	-95	-25%	Panel	380	285	-25%
<b>Set</b>	Set/OEM	Set components	133	106	-27	-20%				
		Packaging & accessories	15	15	0	0%				
		Labour & overhead	36	32	-4	-10%				
		Royalties	10	10	0	0%				
		Set/OEM margin	15	-	-15	-100%				
	Brand	Warranty	19	19	0	0%	FOB	589	449	-24%
		Freight, Insurance & handling	13	13	0	0%				
		Brand overhead	31	28	-3	-10%				
		Brand margin	15	-	-15	-100%				
<b>Retail</b>		Retailer overhead	100	90	-10	-10%				
		Retailer margin	32	-	-32	-100%				
		<b>Retail price (42" LCD TV)</b>	<b>799</b>	<b>599</b>	<b>-200</b>	<b>-25%</b>				

Source: UBS estimates, Displaysearch

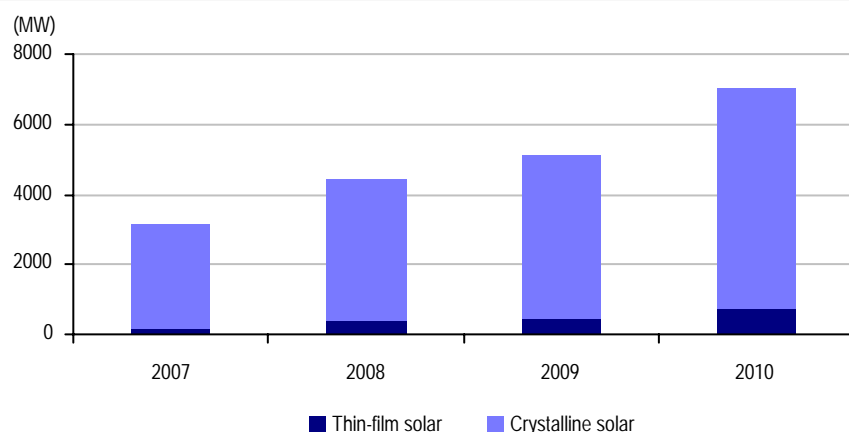
### AM-OLED

Traditional methods of cost reduction cannot keep up with the rate of the TV price decline, in our view. The need for more extreme cost reductions will accelerate R&D and commercialisation of new technologies, such as AM-OLED. AM-OLED eliminates the need for a back-light unit, liquid crystal and colour filters, which would theoretically lower panel costs by as much as 40-50%. Current low yields make it difficult for panel makers to realise those cost savings. Moreover, the technology needs further improvements in areas such as lifetime and backplane. Nonetheless, leading panel makers will likely allocate more resources for development, given the deteriorating profitability of existing TFT-LCD production lines, in our view.

### 3) New growth: thin-film solar

We expect solar demand to grow at a CAGR of 41% from 2007-12. An economic slowdown and reductions in government subsidies could slow demand growth in 2009E, but growth potential, particularly for thin-films, remains promising. Thin-films are thin layers of silicon on glass/plastic substrate that are low-cost (use less silicon than crystalline) and are scalable in terms of production. To increase share in the market, we believe power conversion efficiency will need to improve as single layer cells run at 7-8% conversion. Tandem and multiple junction cells could increase efficiency.

**Chart 3: Solar PV demand forecast**



Source: UBS estimates

In addition to industry growth potential, similarity in the production process to TFT-LCD has triggered interest from LCD panel makers. Compared with TFT-LCD, the process is much simpler and requires substantially less capex, as the lithography step is not needed for thin-film. For example, Sharp's capex for the new thin-film plant was approximately 72bn yen for 480MW/year of capacity, much lower than over 300bn yen required for the new G8 or G10 line.

**Table 5: aSi-based thin-film solar supply chain**

Monosilane	CVD equipments	aSi-based Cell/module
MEMC	Applied Materials	Sharp
REC	Ulvac	Schott Solar
Sodiff	Tokyo Electron	Sanyo
Mitsui Chemical	Oerlikon	Suntech Power
	Jusung Engineering	

Source: Company data

We believe LCD panel makers will face significant competition in this market as turn-key equipment solutions keep the entry barrier low. Moreover, many module makers have internal cell production. LCD makers would need to establish captive customers (that is, LGD with LGE for modules) as with LCD TVs. Sharp is the early leader with 160 MW/year of capacity in Q408 (with a ramp-up to 480 MW/year in 2009E). With an uncertain outlook for the LCD sector, we expect other first-tier LCD panel makers to enter the market in 2009/10.

## What may surprise on the upside or downside?

### Downside: growth from emerging markets

For 2009E, we believe LCD TV demand growth will come from emerging markets such as China. This is based on our assumption most emerging market countries will record some GDP growth (we expect the G7 countries to be in recession). However, even if some countries do not fall into recession, a sudden slowdown in the growth rate could be enough to slow demand growth more than expected.

### Upside: resilience from US demand

Despite the US recession, if price elasticity remains intact, TV demand could surprise on the upside in the US. Surprisingly, the latest Q308 demand figures from Displaysearch show 7.98m units were sold in North America, which was up 20% YoY. We believe demand growth will slow in Q408 and will be substantially below the 35% QoQ achieved in Q407. However, this illustrates there is still some resilience in demand although unit numbers could be misleading if consumers are trading down to smaller screen sizes.

**Table 6: LCD TV set demand forecast by region**

LCD TV Sets	2007	2008E	2009E	2010E	Chg - YoY		
					2008E	2009E	2010E
<b>Total demand in units (000)</b>	79,293	101,617	109,995	126,666	28%	8%	15%
<b>North America</b>	24,241	29,243	28,088	30,862	21%	-4%	10%
<b>Western Europe</b>	24,931	25,842	24,581	25,359	4%	-5%	3%
<b>Japan</b>	7,721	8,595	8,453	8,837	11%	-2%	5%
<b>China</b>	8,745	13,381	17,800	22,807	53%	33%	28%
<b>ROW</b>	13,654	24,557	31,074	38,800	80%	27%	25%
<b>Total demand in value (US\$ bn)</b>	69.7	77.8	65.9	65.9	12%	-15%	0%
<b>North America</b>	22.2	24.2	18.7	18.2	9%	-23%	-3%
<b>Western Europe</b>	21.2	18.7	13.8	11.9	-12%	-26%	-13%
<b>Japan</b>	5.5	5.7	4.5	3.9	2%	-20%	-13%
<b>China</b>	9.0	11.6	11.5	12.2	29%	-1%	7%
<b>ROW</b>	11.7	17.7	17.4	19.6	51%	-1%	13%

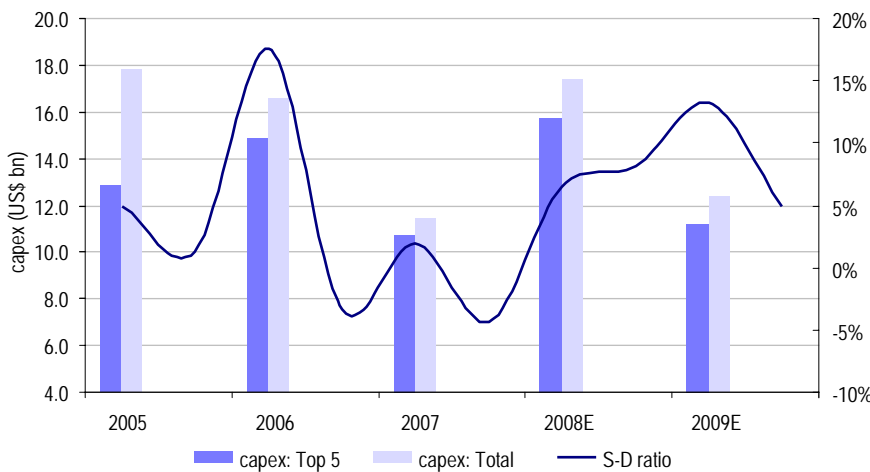
Source: UBS estimates, Displaysearch

## What are the likely key catalysts in 2009?

Panel makers have not formally announced 2009E capex figures but we expect the top four panel makers to lower capex 20-50% on a YoY basis. Among the second/third-tiers, some makers such as CPT and Hannstar will not invest. Nonetheless, given macro concerns weighing on demand, some could question capex cuts being perceived as a catalyst. However, most of the 2009E capex is for capacity expansion in 2010. Thus, by cutting industry capex in 2009E, the industry has two years to work through the problem of the supply-demand imbalance. If oversupply can be brought under control in 2009E, the industry could have a favourable backdrop for the subsequent 12-18 months.



**Chart 4: Capex trends versus supply-demand ratio**



Source: UBS estimates

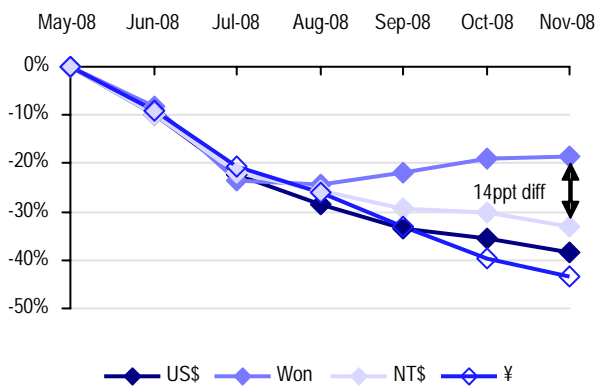
## Key ideas

### Prefer Korean makers: forex impact

Panel prices have collapsed over the past six months, dropping 35-45% for monitor and notebook panels. Consequently, Taiwanese panel makers, with the exception of AUO, fell into loss territory in Q308. However, Korean panel makers (LGD and Samsung Electronics) have remained profitable and the weak Korean Won is making a meaningful difference.

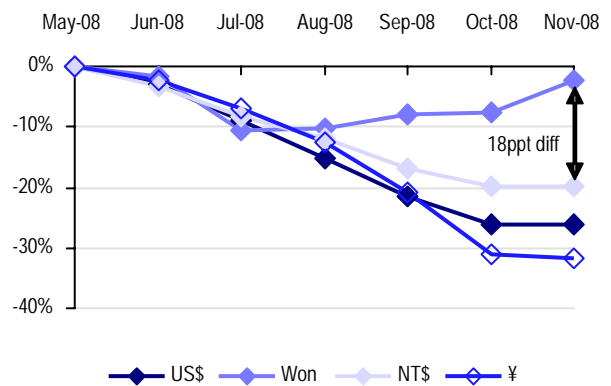
In the charts below, we use 15.4" notebook and 42" LCD TV panel price trends to illustrate the forex impact. For 42" LCD TV panels, the price declined 26% in US\$ terms from May 2008 to November 2008. However, if prices are translated into local currencies, the price decline is 20% in NT\$ but only 2% in Won for a difference of 18ppt between the two. This difference would not all filter down to profit as there are some offsetting cost items. However, this shows how forex differences could give Korean makers more pricing power than competitors in Taiwan or Japan.

**Chart 5: 15.4" notebook panel price change by currency**



Source: Displaysearch, UBS

**Chart 6: 42" LCD TV panel price change by currency**



Source: Displaysearch, UBS

Forex impact could also explain why there are such discrepancies in utilisation among the top makers. For Q408E, we believe two Korean makers are operating at over 90% utilisation, whereas Taiwanese makers are barely hitting 60%. The lack of captive TV customers for Taiwanese makers explains some of the difference, but a more significant factor is the effect of the forex disparity. We believe the weak Won is allowing LGD and Samsung Electronics to meet more aggressive price demands from panel customers.

**Table 7: Capex, capacity plan, utilisation rates for major panel makers**

	Samsung	LGD	AUO	CMO	Sharp
<b>2008E capex (US\$ bn)</b>	3.9	4.0	3.2	3.1	2.1
<b>2009E capex</b>	2.5	1.7	2.5	1.6	2.6
<b>New line for 2009E</b>	L8-2-1 (G8 w/ Sony, Q209), L8-2-2	P9 (G8, Q109), P10 (G6, Q209)	L7B (G7.5, Q309), L8A (G8, Q209)	F8 (G8, Q409)	Sakai 1 (G10, Q309)
<b>Possible delays</b>	L8-2-1 by 1 quarter, L8-2-2 cancellation for G10/11 line in 2010	P9 and P10 ramp-up delay	L7B delay to 2010, L8A delay to H209	F8 delay to 2010, No ramp-ups for F6 (G6) and F7 (G7.5)	G10 delayed 2010
<b>Utilisation Rate for Q408E</b>	90-95%	90-95%	60%	50-60%	90%

Source: UBS estimates, Company data

## TV set outsourcing

Given weaker demand and fierce competition for market share, we expect continued price declines in LCD TVs. The retail price of mainstream 32" and 42" LCD TVs could decline over 20% in 2009E and reach US\$399 and US\$599, respectively. Even as panel prices drop, this would leave little profit to be shared by TV brands and retailers. To save costs, we think the outsourcing rate of TV assembly will increase in 2009.

From the perspective of the PC EMS/ODMs, there is little growth left in PCs, and they need to explore new opportunities. Since outsourcing TV set manufacturing is in an early stage of growth, revenue growth potential from LCD TV outsourcing is attractive to EMS/ODMs despite low margins (many use cost-plus or fixed dollars per set of profits). For 2009, we believe LGE and Sony will be more aggressive among the premium brands in outsourcing. Hence, TPV, Innolux, Wistron and LGD/Amtran could be beneficiaries, in our view.

**Table 8: TV set outsourcing customer-base**

ODM/EMS	2009 Major TV brand customers
TPV	Samsung, Philips, LGE, Sharp
Funai	Philips
Jabil	JVC, Sharp, LGE
Wistron	Sony, Westinghouse
Compal	Toshiba
AUO (Qisda)	LGE, Philips, Sony, Samsung
Foxconn/Innolux	Sony, LGE
Flextronics	Sony
LGD (Amtran)	LGE, Visio

Source: UBS estimates

## TFT-LCD Most & Least Preferred

In this section we present company commentary for the most and least preferred stocks in the TFT-LCD sector in conjunction with the company analysts.

### TFT-LCD sector Most & Least Preferred

Stock	Rating	PT	Overview
<b>Most Preferred</b>			
<b>LG Display</b>	Buy	30,000	Historical low valuation, first-tier, strongest balance sheet among pure-play
<b>Best Buy</b>	Buy	30.00	Beneficiary of Circuit City bankruptcy, valuation merit
<b>Least Preferred</b>			
<b>Chi Mei Optoelectronic</b>	Neutral	13.4	Balance sheet risk, requires external funding in 2009E, losing market positioning
<b>Asahi Glass</b>	Neutral	600	Exposure to Taiwan LCD makers and low generation lines, production cuts at LCD makers

Source: UBS

We summarise our investment case into 2009, current valuation, and likely catalysts for each of the stocks in our Most & Least Preferred list below:

Our most preferred stock picks are LGD and Best Buy. We are aware of the challenging operating environment in the near term. However, given depressed valuation levels, we believe leading companies with strong balance sheets can weather the downturn and could be in an even stronger position when the industry recovers in H209 or 2010. Both companies could benefit from weaker makers exiting the market. We did not include AUO on our preferred list because forex differences favour Korean makers.

Our least preferred stock picks are CMO and Asahi Glass. CMO's gearing has created uncertainty about its ability to keep pace with first-tier makers. For Asahi glass, we do not question its viability but downside risks exist both for volume and pricing in 2009. Moreover, Asahi glass is in a relatively weaker position compared with peers. We remove Circuit City from this list as it has filed for bankruptcy.

### Most preferred

#### LG Display

**Investment case:** LG Display has the strongest balance sheet (4% net debt to equity as of Q308) among the pure-play LCD panel makers and this will enable LGD to weather the downturn and retain its top two position, in our view. We believe industry consolidation through this downturn could provide good market share and earnings growth opportunities when the industry eventually recovers in H209 or 2010.

**Valuation:** LGD is trading at a historical low of 0.6x P/BV 2009E (its previous low was 1.1x P/BV during the 2005/6 downturn). Even though we expect LGD to fall into losses in H109, its valuation prices in much of the downside in 2009E, in our view. We therefore believe it could be an attractive opportunity since LGD's viability through the downturn is not at risk. Our price target of Won30,000 is based on 1.06x P/BV, using UBS's franchise spread model (near-term ROE of 2.6%, mid-term ROE of 13% and COE of 10.1%).

**Sector:** Korea Technology Hardware

**Rating:** Buy

**PT:** Won30,000

**Analyst:** Sean Kim

**2009 catalysts:** LGD has partnered Amtran (maker of Visio-brand) in an effort to integrate panel and TV sets to offer cost competitive OEM solutions for TV brand makers. Initial customers will be Visio and LGE, but this could also present opportunities with Japanese premium brands. We believe this is well-timed as many TV set makers are looking to outsource manufacturing to save costs. Growth of OEM set orders could bolster LGD's TV panel customer-base, which has been its weak point compared with Samsung and Sony.

## Best Buy

**Investment case:** Over the next few quarters, trends at consumer electronics chains are likely to suffer as the weakening macro environment continues to weigh upon discretionary spending. However, longer-term, well-positioned and better capitalised chains such as Best Buy should benefit as Circuit City continues to struggle and close stores. At current levels, we believe Best Buy's share price has factored in near-term challenges.

**Valuation:** Our US\$30.00 price target assumes a mid-teen PE multiple for our FY09 (year-end February 2010) EPS estimates of US\$1.95—a level consistent with the valuations for leading hard-line stocks.

**2009 catalysts:** Share gains should add significantly to sales/EPS at Best Buy and help the chain to better weather a challenging environment. Domestic sales at Circuit City measure about US\$10bn. We estimate the market share opportunities for Best Buy in a possible Circuit City liquidation at about US\$8.2bn.

## Least preferred

### Chi Mei Optoelectronic

**Investment case:** CMO's balance sheet is the most leveraged of the panel makers. Even after cutting 2009E capex about 50% to NT\$50bn, CMO would need external financing of at least NT\$30bn to make it through this downturn, in our view. The company still has NT\$60bn of syndicated loans available for 2009. However, we are concerned CMO's market position could be significantly damaged to the extent it might not be able to recover fully in time to benefit from a possible industry recovery in H209/2010E.

**Valuation:** CMO is trading at 0.3x P/BV, lower than peers such as LGD at 0.6x. However, questions over its financials and market position overshadow low multiples. Our price target is based on 0.49x P/BV 2009E using our UBS franchise spread model (near-term ROE of -4%, mid-term ROE of 7% and cost of equity of 11.3%).

**2009 catalysts:** We see limited positive catalysts for CMO in 2009E. Industry-wide production and capex cuts can stabilise the market but, we believe much of the reduction could come at the expense of CMO, in our view.

**Sector:** US Retailers, Specialty

**Rating:** Buy

**PT:** US\$30.00

**Analyst:** Brian Nagel

**Sector:** Taiwan Technology Hardware

**Rating:** Neutral

**PT:** NT\$13.40

**Analyst:** Robin Cheng

## Asahi Glass

**Investment case:** In Q308, operating profit margin declined from 14% to 11% on slight volume and price decline. We think price declines could accelerate as panel price declines continue and panel makers move into loss-making territory. Moreover, two new kilns slated for launch in Taiwan and Korea could be put on hold as panel production is being cut, particularly in Taiwan. We are also concerned Asahi Glass does not have a strong relationship (compared with leading peers) with Korean panel makers, who are holding up better through the downturn.

**Valuation:** Our price target of ¥600 is based on 0.8x P/BV, derived from a three-year forecast average ROE of 6.5% and COE of 8%.

**2009 catalysts:** Glass makers have faced less pricing pressure during previous downturns compared with other LCD competent makers. Given panel production cuts and delays in new capacity could bring oversupply to the glass segment, the price decline could be in excess of our assumption of 15% in 2009.

**Sector:** Japan Building Materials

**Rating:** Neutral

**PT:** ¥600

**Analyst:** Takaaki Muramatsu

Table 9: TFT-LCD-related Stock coverage list

Company	Code	Share price	Rating	EV/Sales	EV/EBITDA	PE	P/BV	ROE	EBIT%
<b>Equipment</b>									
Canon	7751.T	2,825	Buy	0.6x	3.2x	15.9x	1.1x	6.8%	9%
Nikon	7731.T	1,076	Neutral	0.4x	3.2x	7.7x	1.0x	13.4%	10%
Applied Materials Inc.	AMAT.O	9.73	Buy	2.5x	16.6x	39.5x	1.8x	4.5%	7%
Tokyo Electron	8035.T	2,595	Buy	0.2x	2.8x	24.6x	0.8x	3.4%	5%
<b>Components / Materials</b>									
Corning Inc.	GLW.N	9.39	Neutral (CBE)	-1.5x	-9.8x	11.0x	1.0x	9.5%	3%
Nippon Electric Glass	5214.T	545	Neutral	0.6x	1.5x	4.5x	0.7x	16.3%	27%
Asahi Glass	5201.T	536	Neutral	0.6x	3.5x	8.5x	0.6x	7.5%	9%
Nitto Denko	6988.T	1,593	Neutral	0.3x	2.1x	11.2x	0.7x	6.1%	5%
Sumitomo Chemical	4005.T	333	Neutral	0.4x	4.0x	36.9x	0.7x	1.9%	3%
LG Chemical	051910.KS	69,500	Suspended	0.3x	3.3x	8.2x	1.0x	12.3%	6%
Cheil Industries	001300.KS	39,900	Buy	0.4x	4.1x	11.2x	0.9x	8.6%	6%
Coretronic Corporation	5371.TWO	15.60	Buy	0.2x	1.9x	3.2x	0.5x	17.1%	1%
<b>Panels</b>									
LG Display	034220.KS	20,700	Buy	0.6x	3.4x	91.0x	0.7x	0.8%	1%
AU Optronics	2409.TW	20.55	Buy	0.7x	4.6x	-14.2x	0.6x	-4.3%	-2%
Chi Mei Optoelectronic Corp.	3009.TW	9.73	Neutral	0.6x	3.6x	-3.2x	0.4x	-10.5%	-5%
Sharp	6753.T	644	Neutral	0.3x	2.3x	97.1x	0.6x	0.6%	3%
<b>TV Set</b>									
Sony	6758.T	1,843	Neutral	-0.3x	-4.7x	22.4x	0.5x	2.4%	2%
Philips	PHG.AS	13.00	Buy	0.8x	8.0x	11.9x	0.6x	4.7%	6%
Sharp	6753.T	644	Neutral	0.3x	2.3x	97.1x	0.6x	0.6%	3%
LG Electronics	066570.KS	78,500	Neutral	0.3x	2.9x	9.3x	1.2x	13.6%	4%
Panasonic	6752.T	1,144	Buy	0.2x	3.0x	52.3x	0.7x	1.3%	4%
<b>Outsource</b>									
Innolux Display Corporation	3481.TW	19.10	Buy	0.1x	0.9x	6.3x	0.5x	8.0%	4%
TPV Technology Limited	0903.HK	1.42	Suspended	0.1x	3.1x	2.8x	0.3x	9.3%	2%
Wistron Corporation	3231.TW	22.00	Buy	0.1x	4.8x	6.6x	0.9x	13.6%	2%
Hon Hai Precision	2317.TW	64.40	Neutral	0.2x	4.1x	9.1x	1.1x	12.5%	4%
Compal Electronics Inc.	2324.TW	17.20	Neutral	0.0x	-0.1x	7.3x	0.8x	11.0%	2%
Quanta	2382.TW	36.00	Sell	0.1x	6.0x	9.5x	1.1x	11.9%	2%
<b>Retail</b>									
Best Buy Co. Inc.	BBY.N	21.08	Buy	0.2x	4.4x	9.0x	1.8x	21.1%	4%
Circuit City Stores Inc.	CCTYQ.PK	0.22	Neutral (CBE)	0.0x	0.3x	-0.1x	0.0x	-32.4%	-4%
Costco Wholesale Corp.	COST.O	51.45	Neutral	0.3x	9.0x	16.5x	2.1x	13.5%	3%
Wal-Mart Stores	WMT.N	56.69	Buy	0.6x	8.6x	16.3x	3.1x	20.2%	6%
DSG International	DSG.LL	12.38	Neutral	0.0x	1.5x	3.9x	0.3x	6.3%	1%
hhgregg Inc.	HGG.N	5.67	Buy	0.2x	3.9x	7.1x	1.6x	26.1%	4%

Above data as at 28 November 2008, Source: UBS estimates

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### ■ Statement of Risk

We believe the TFT-LCD sector faces several risks, including industry cyclicality, volatile demand, rapid technology migration, intense competition and capital-intensive investment. The TFT-LCD business has high operating leverage, and therefore any change in panel prices could have a significant impact on a firm's bottom line.

### ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

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## Other regional outlook snapshot

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**UBS Investment Research**  
**US Equity Strategy - Outlook 2009**

Americas  
 Equity Strategy  
 Investment Strategy

Outlook for 2009: Signs of Dawn

■ **We see opportunity in the crowded consensus outlook for a year of gloom**

We present our 2009 outlook with its up and downside risks and we weigh our expectations against those of the market. What strikes us most is how certain investors have become in their near- and even longer-term pessimism.

■ **The Panic of 2008 created a confidence vacuum that policy is rushing to fill**

Filling the void is a challenge, but we take comfort in that now every policy maker in the world is trying to jump-start confidence in the system. Once this happens, powerful positive underlying economic forces such as the worldwide proliferation of technology and globalization should make confidence shine again.

■ **An opportunity to buy the big-cap global growth stocks of the S&P 500**

We see recent sharp market declines – from capital being pulled from leveraged investment strategies – as an opportunity to buy the leading big-cap growth stocks of the S&P 500 at deep discounts to intrinsic value. Their world class assets, backed by strong balance sheets, are enviably positioned to benefit from global growth. These stocks will be sought after when capital returns from the sidelines.

■ **Large S&P 500 gains expected in 2009. There will be new “early cyclicals”**

Our 2009 year-end S&P target is 1300. We are over-weight Energy, Technology & Industrials. Worldwide stimulus spending on infrastructure should make Industrials a new “early cyclical” sector. Our “Sweet 35” basket (Bbrg. Ticker: UBS\_ST35) includes tilts toward government infrastructure spending, clean & efficient energy and the longer-term global growth potential of non-financial S&P big-cap stocks.

2 December 2008

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Table 1: UBS US Equity Strategy Price Target and Recommendations

S&P 500 2009 year-end Price Target:	1300		
S&P 500 Pro-forma EPS Forecast:	2008: \$74.00	2009: \$73.00	2010: \$82.00

Recommended Sector Allocation

Over weight	Equal weight	Under weight
Energy	Financials	Consumer Discretionary
Information Technology	Materials	Telecommunication Services
Industrials	Consumer Staples	Utilities
	Healthcare	

**Portfolio Strategy: “UBS Sweet 35” Basket (BBG Ticker: UBS\_ST 35) - Strong B/S, Dividend paying, Big-cap Global Growth Stocks**

ABT, ACN, APA, BA, BAC, BAX, CAT, CL, CSCO, DIS, EMR, FDX, GD, GE, HPO, INTC, MMM, MON, NKE, NOC, NUE, ORCL, PG, PRU, PX, RIG, SLB, STT, SYK, TMO, UNP, UTX, WMT, XOM and YUM

Tracking Error	3.46	Standard Deviation	16.55	Beta	1.03
2009 PE	10.1x	2009 EPS Growth	6.9%	Dividend Yield	2.4%
International Sales	45%	Net Debt/EV	9.1%	Gross Cash/M. Cap	8.9%

Note: All prices as of December 1 2008. Source: UBS US Equity Strategy

*This is an extract from the Outlook 2009 Document from UBS’ Global Equity strategists.*

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■ **Statement of Risk**

Equity market returns are influenced by corporate earnings, interest rates, and investor demanded risk premiums. The outlook for any and all of these variables is subject to change.

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## Outlook 2009

### ■ Cheap valuations vs. weak macro and earnings

The macroeconomic and corporate profit outlook for 2009 is horrible. We expect GDP growth of -0.9% in the euro zone, and -1.8% in the UK. From a top-down perspective, we expect European EPS to decline 25% next year, after falling 10% in 2008. But share prices have moved well ahead of this and are now pricing in a multi-year recession/depression. Using a 13x P/E multiple on forecast trough earnings, we target 1,050 for the FTSEurofirst 300 by end-2009, some 25% upside from current levels.

### ■ Looking for signposts

Our Global Equity Strategy team pinpoints seven areas to monitor as potential signposts for an equity market recovery: inter-bank spreads, corporate bond spreads, mortgage rates, corporate bond issuance, house prices, volatility and economic lead indicators (see Table 4). We expect the US to show the first signs of recovery, as it was first into recession.

### ■ Investment themes

We expect the UK to outperform continental Europe in local currency terms, given that: the UK was earlier into the slowdown; has implemented a more aggressive policy response; benefits from sterling weakness; and is likely to have more robust earnings momentum. Dividends will likely remain in focus and, given the cost and difficulty of financing, we expect double-digit declines in 2009. We expect solid, high-yielding stocks to outperform in the next few months.

### ■ European Key Calls

We add HSBC and BASF to our European Key Calls list; we remove Scottish & Southern.

#### UBS Key Calls - Europe

Company	Market Cap. (€ bn)	UBS Rating	Price Target	Company	Market Cap. (€ bn)	UBS Rating	Price Target
BASF	23.1	Buy	€ 40	Next	2.7	Buy	1350p
BG Group	38.2	Buy	1250p	Novartis	86.1	Buy	CHF75
CRH	9.1	Buy	€ 21.50	Pearson	6	Buy	900p
E.ON	57.2	Buy	€ 35	Smiths Group	3.9	Buy	1350p
HSBC	98.2	Buy	770p	Soc Gen	17.2	Buy	€ 52
Intesa SanPaolo	29.6	Buy	€ 4.20	TOTAL	93.5	Buy	€ 58
KPN	20.5	Buy	€ 15	Vodafone Group	81.6	Buy	170p

Source: UBS. Priced as at market close on 2 December 2008. \* stocks are also in the UBS Corporate Change Portfolio.

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**2 December 2008**

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### ■ **Statement of Risk**

Forecasting earnings is difficult because they are affected by a wide range of economic, financial, accounting and regulatory trends, as well as changes in tax policy.

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## Outlook 2009

### ■ Will the true dividend yield please step forward

There is a strong chance that because of the cost of debt and the threat of deflation, dividends could fall by at least as much as earnings in 2009. But, even if dividends fall by 15% (our earnings forecast), the market is still yielding 4.2% – higher than gilt yields.

### ■ A confidence freeze

Unfortunately, value and visibility rarely coincide. At 1.3x, the median price-to-book is now down at the 1990 low (1.75x ex financials). Assuming a little confidence eventually returns, then a modest re-rating is justified on the back of the policy action we have seen. Using a 13x PE multiple, we believe the FTSE-100 index can make it to 5,800.

### ■ Gently raising banks

We are cutting pharmaceuticals to neutral and channelling the proceeds into banks, while remaining neutral. To reflect this change, we are swapping Scottish & Southern for HSBC in our 1st XI stock list.

### ■ Value or growth?

As growth has continued to outperform value, the PE spread has now hit a historic high. How much further can this run? While its success will probably depend on financials, our preference is for value.

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# UBS Investment Research

## Japan Strategy - Outlook 2009

Japan

Equity Strategy

Investment Strategy

### Strong market in weak economic times

#### ■ TOPIX target 1,100

Although the economy and corporate earnings may worsen, we think the equity risk premium, which has risen sharply, will decline to early 2008 levels thanks to successful measures to tackle the extraordinary financial crisis. We expect valuations to rise and offset deteriorating earnings, resulting in a strong market during weak economic times.

#### ■ EPS under downward pressure

Corporate earnings are likely to decline substantially for a second straight year, owing to the global economic downturn and a strong yen. However, after a supplementary budget is approved following the government's first shift to expansionary fiscal policy in several years, domestic demand is likely to rebound after worsening since 2006.

#### ■ Decline in equity risk premium to drive stocks higher

More than half of the market's decline since 2007 can be attributed to PER contraction. We may see valuation improvements that offset earnings deterioration and lead to positive returns, as in 1992–1993, assuming some normalization of investor confidence underpinned by measures to address the financial crisis.

#### ■ Investment strategy and attractive sectors

Stocks are driven upward not only by EPS growth but also by valuation improvements. We like sectors with below-average ROE and valuation levels, such as financials, construction, and retail; small- and mid-caps; and domestic demand-driven sectors, which should benefit from the yen's strength.

3 December 2008

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#### Japan Top Picks: Buy rated stocks

Company	UBS Rating	Share Price (Cur)	Price Target (Cur)	Company	UBS Rating	Share Price (Cur)	Price Target (Cur)
Kajima (1812)	Buy	¥248	¥400	Honda (7267)	Buy	¥1,886	¥3,100
Tokuyama (4043)	Buy	¥674	¥800	OSE (8697)	Buy	¥425,000	¥700,000
Shionogi (4507)	Buy	¥2,000	¥2,900	Mitsubishi Estate (8802)	Buy	¥1,265	¥2,100
Yahoo Japan (4689)	Buy	¥28,640	¥46,000	Hitachi Transport (9086)	Buy	¥1,370	¥1,550
Jupiter Telecom (4817)	Buy	¥78,500	¥110,000	KDDI (9433)	Buy	¥597,000	¥1,070,000
Idemitsu Kosan (5019)	Buy	¥5,370	¥11,500	Tokyo Gas (9531)	Buy	¥455	¥520
Bridgestone (5108)	Buy	¥1,520	¥2,100	Square Enix Holdings (9684)	Buy	¥2,590	¥3,600
Kubota (6326)	Buy	¥513	¥700	Fast Retailing (9983)	Buy	¥9,790	¥13,000
MHI (7011)	Buy	¥359	¥700				

Source: UBS estimates

Note: Price at 2 December

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## UBS Investment Research

# Australian Equity Strategy

Australia

Equity Strategy

Market Comment

## Outlook 2009

### ■ Summary

We expect a meaningful rise in the Australian market from what we believe are very depressed valuation levels. We believe the market has material re-rating potential over the next year, with a 40% return a reasonable expectation.

### ■ What are the likely key themes for 2009?

A key theme will be whether investors are prepared to re-rate P/E ratios in the face of falling earnings expectations. The market will need greater comfort that global credit conditions are improving and consequently economies have the capacity to stabilize and ultimately revive.

### ■ What may surprise on the upside or downside?

On the downside the stress in the global banking system may prove more intractable than we expect, meaning risk aversion and dislocation in credit markets may persist. This would raise even greater downside risks for the real economy both globally and domestically. On the upside the extent of the snap-back in equity markets could surprise based on a discernible sign of inflection in the credit picture (and by association) the economic outlook.

### ■ Highlighted Stocks and Sectors

We retain our neutral view on the Resource sector, despite heavily discounted valuations, given an expectation of poor economic newsflow. In Financials we retain a neutral view on banks and an underweight in REITs. We retain our overweight in non-financial industrials. Our preferred stock picks include BHP Billiton, Boral, Computershare, CSL, Tabcorp Holdings and Westpac Banking Corporation.

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**This report has been prepared by UBS Securities Australia Ltd**

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**UBS Investment Research**
**LatAm - Outlook 2009**
**LatAm Outlook 2009**
**3 December 2008**
[www.ubs.com/investmentresearch](http://www.ubs.com/investmentresearch)
**■ Summary**

We believe LatAm equities offer attractive value going into 2009 given the dramatic cut in multiples since mid year and the likelihood that Brazil, Mexico, and Chile avoid major recessions and default. Risks remain high if the global financial crisis continues, and earnings will likely disappoint. However, low private sector leverage and sound public finances make us confident the region can withstand the global downturn better than markets currently discount.

**■ What are the likely key themes for 2009?**

Growth, debt default (corporate and public sector), and interest rates/inflation are the key issues. Can Latin America follow the developed world and eventually cut rates into a slowdown? Or will a lack of confidence in local currencies and resulting high inflation force high rates, and exacerbate the downturn? Will investors roll over the corporate debt coming due?

**■ What may surprise on the upside or downside?**

Growth above 3% in Brazil would surprise on the upside, as would any rebound in the prices of major commodities. Default in any of the mainline countries, or a move to economic populism, would surprise negatively.

**■ Market valuation and targets, highlighted stocks and sectors**

Brazil is our top pick on valuations and resilient local GDP growth but focus is on non-cyclicals. We prefer large-cap, underleveraged, cash-generating sector leaders—America Movil, CCR, Cemig, Itau, NET Servicios, Petrobras, Santander Chile, Televisa, URBI, and Vale.

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**LatAm Top 10 Stock List**

Company	Market Cap (US\$, bn)	UBS Pactual Rating	Share Price (trading curr)	Price Target (trading curr)	PE 2009E (US\$, times)
America Movil (AMX.N)	50,580	Buy (CBE)	30.0	54.9	7.9
CCR (CCRO3.SA)	3,960	Buy (CBE)	22.6	30.0	11.3
Cemig (CIG.N)	7,701	Buy (CBE)	15.8	33.5	9.7
Grupo Televisa (TV.N)	8,373	Buy (CBE)	14.9	29.0	10.7
Itau (ITU.N)	34,734	Buy (CBE)	11.6	16.0	9.1
NET Servicios (NETC4.SA)	1,961	Buy (CBE)	13.7	27.0	16.0
Petrobras (PBRa.N)	78,002	Buy (CBE)	17.8	60.5	5.8
Santander-Chile (SAN.N)	6,275	Buy (CBE)	33.3	55.0	8.4
URBI (URBI.MX)	1,439	Buy (CBE)	20.0	52.5	6.1
Vale (PN) (RIO_p.N)	58,160	Buy (CBE)	10.9	25.0	5.2

Note: Priced as at market close on 28-Nov-08.

Source: UBS Pactual estimates

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### ■ **Statement of Risk**

In addition to industry- and company-specific risk, there are potential risks inherent in Argentina, Chile, Peru, and Colombia. Potential risks include, but are not limited to, the volatile nature of the currency, regulatory and sociopolitical risk, and abrupt potential changes in the cost of capital and economic growth outlook. Valuations can also be affected by "contagion" from developments in other emerging markets.

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### UBS Investment Research: Global Equity Rating Allocations

UBS 12-Month Rating	Rating Category	Coverage <sup>1</sup>	IB Services <sup>2</sup>
Buy	Buy	56%	36%
Neutral	Hold/Neutral	35%	33%
Sell	Sell	8%	27%
UBS Short-Term Rating	Rating Category	Coverage <sup>3</sup>	IB Services <sup>4</sup>
Buy	Buy	less than 1%	32%
Sell	Sell	less than 1%	14%

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category.

4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS. Rating allocations are as of 30 September 2008.

### UBS Investment Research: Global Equity Rating Definitions

UBS 12-Month Rating	Definition
Buy	FSR is > 6% above the MRA.
Neutral	FSR is between -6% and 6% of the MRA.
Sell	FSR is > 6% below the MRA.
UBS Short-Term Rating	Definition
Buy	Buy: Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.
Sell	Sell: Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.



## KEY DEFINITIONS

**Forecast Stock Return (FSR)** is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

**Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).

**Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation.

**Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case.

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Buy: Positive on factors such as structure, management, performance record, discount; Neutral: Neutral on factors such as structure, management, performance record, discount; Sell: Negative on factors such as structure, management, performance record, discount.

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**UBS Securities Asia Limited:** Bill Sohn; Herman Chan.

## Company Disclosures

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
<b>3M Company</b> <sup>2e, 4, 5b, 6a, 6b, 6c, 7, 16c, 18b</sup>	MMM.N	Buy	N/A	US\$59.14	04 Dec 2008
<b>Abbott Laboratories</b> <sup>16c</sup>	ABT.N	Buy	N/A	US\$52.03	04 Dec 2008
<b>Aboitiz Power</b> <sup>2e, 4</sup>	AP.PS	Buy	N/A	P3.65	04 Dec 2008
<b>Accenture Ltd.</b> <sup>2d, 16c</sup>	ACN.N	Buy	N/A	US\$29.13	04 Dec 2008
<b>ACE Limited</b> <sup>16c</sup>	ACE.N	Buy	N/A	US\$47.35	04 Dec 2008
<b>Acer Inc.</b>	2353.TW	Buy	N/A	NT\$42.00	04 Dec 2008
<b>Advanced Info Services</b>	ADVAf.BK	Not Rated	N/A	Bt77.50	04 Dec 2008
<b>Air Products &amp; Chemicals Inc.</b> <sup>16c</sup>	APD.N	Buy	N/A	US\$45.84	04 Dec 2008
<b>AKR Corporindo</b>	AKRA.JK	Buy	N/A	Rp530	04 Dec 2008
<b>America Movil</b> <sup>2e, 16c, 20, 22</sup>	AMXL.MX	Buy (CBE)	N/A	P19.20	04 Dec 2008
<b>AMMB Holdings</b> <sup>10</sup>	AMMB.KL	Buy	N/A	RM2.11	04 Dec 2008
<b>Anadarko Petroleum Corp.</b> <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c</sup>	APC.N	Buy	N/A	US\$33.45	04 Dec 2008
<b>Anglo American</b> <sup>2e, 3f, 4, 5b, 6a, 14, 16c, 22</sup>	AAL.L	Buy	N/A	1,314p	04 Dec 2008
<b>Antam</b> <sup>20</sup>	ANTM.JK	Sell (CBE)	N/A	Rp990	04 Dec 2008
<b>Apache Corporation</b> <sup>2e, 6c, 16c</sup>	APA.N	Buy	N/A	US\$65.50	04 Dec 2008
<b>Apollo Group Inc.</b> <sup>16c</sup>	APOL.O	Buy	N/A	US\$74.05	04 Dec 2008
<b>Asahi Glass</b> <sup>16c</sup>	5201.T	Neutral	N/A	¥482	04 Dec 2008
<b>Asian Paints Ltd.</b>	ASPN.BO	Buy	N/A	Rs885.85	04 Dec 2008
<b>Astra Agro Lestari</b>	AALI.JK	Buy	N/A	Rp8,050	04 Dec 2008
<b>Astra International</b>	ASII.JK	Buy	N/A	Rp8,800	04 Dec 2008
<b>Avon Products</b> <sup>16c, 22</sup>	AVP.N	Buy	N/A	US\$20.33	04 Dec 2008
<b>Ayala Corp</b> <sup>2d</sup>	AC.PS	Buy	N/A	P181.00	04 Dec 2008
<b>Ayala Land</b>	ALI.PS	Buy	N/A	P5.80	04 Dec 2008
<b>BAE SYSTEMS</b> <sup>2e, 4, 5b, 6a, 14, 16c</sup>	BAES.L	Buy	N/A	341p	04 Dec 2008
<b>Bakrie Brothers</b> <sup>3c</sup>	BNBR.JK	Sell	N/A	Rp50	04 Dec 2008
<b>Banco Itau Holding</b> <sup>2e, 16c, 20</sup>	ITAU4.SA	Buy (CBE)	N/A	R\$26.93	04 Dec 2008
<b>Banco Santander-Chile</b> <sup>16c, 20, 22</sup>	SAN.N	Buy (CBE)	N/A	US\$30.21	04 Dec 2008
<b>Bangkok Bank</b>	BBL.BK	Buy	N/A	Bt62.00	04 Dec 2008
<b>Bangkok Expressway</b>	BECL.BK	Buy	N/A	Bt13.10	04 Dec 2008
<b>Bank Mandiri</b> <sup>2d</sup>	BMRI.JK	Neutral	N/A	Rp1,600	04 Dec 2008
<b>Bank of America Corp.</b> <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c, 20, 22</sup>	BAC.N	Neutral (CBE)	N/A	US\$14.34	04 Dec 2008
<b>Bank of China (Hong Kong)</b> <sup>2e, 16b, 16c, 22</sup>	2388.HK	Buy	N/A	HK\$8.34	04 Dec 2008
<b>Bank of Nova Scotia</b> <sup>5c, 14, 16c</sup>	BNS.TO	Buy	N/A	C\$32.26	04 Dec 2008
<b>Bank Rakyat Indonesia</b>	BBRI.JK	Buy	N/A	Rp3,450	04 Dec 2008
<b>BASF</b> <sup>2c, 4, 5b, 6a, 14, 16c</sup>	BASF.F	Buy	N/A	€23.45	04 Dec 2008
<b>BAT UK</b> <sup>4, 5b, 8, 14, 16c, 18u</sup>	BATS.L	Buy	N/A	1,697p	04 Dec 2008
<b>Baxter International Inc.</b> <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c</sup>	BAX.N	Buy	N/A	US\$52.10	04 Dec 2008
<b>Beijing Capital International Airport</b> <sup>2c, 3a, 4, 16b</sup>	0694.HK	Sell	N/A	HK\$3.84	04 Dec 2008
<b>Belle International Holdings</b>	1880.HK	Buy	N/A	HK\$3.63	04 Dec 2008
<b>Best Buy Co. Inc.</b> <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c</sup>	BBY.N	Buy	N/A	US\$22.14	04 Dec 2008
<b>BG Group</b> <sup>5b, 16c</sup>	BG.L	Buy	N/A	850p	04 Dec 2008
<b>Bharti Airtel Ltd.</b> <sup>2e, 4, 6a, 12</sup>	BRTI.BO	Buy	Buy	Rs685.20	04 Dec 2008
<b>BHP Billiton Limited</b> <sup>2e, 4, 5a, 5b, 8, 16c, 17, 22</sup>	BHP.AX	Buy	N/A	A\$27.50	04 Dec 2008
<b>Boeing Co.</b> <sup>4, 5b, 6a, 6b, 7, 8, 15, 16c</sup>	BA.N	Sell	N/A	US\$39.19	04 Dec 2008
<b>Boral Limited</b>	BLD.AX	Buy	N/A	A\$3.80	04 Dec 2008
<b>Bridgestone</b> <sup>16c</sup>	5108.T	Buy	N/A	¥1,356	04 Dec 2008
<b>Bristol-Myers Squibb</b> <sup>2c, 4, 6a, 6b, 6c, 7, 16c, 22</sup>	BMY.N	Buy	N/A	US\$20.70	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
British Land <sup>2e, 4, 5b, 6a, 14</sup>	BLND.L	Buy	N/A	518p	04 Dec 2008
Bukit Asam (PTBA)	PTBA.JK	Buy	N/A	Rp6,350	04 Dec 2008
Bumi Resources <sup>3c</sup>	BUMI.JK	Buy	N/A	Rp810	04 Dec 2008
Bursa Malaysia <sup>2d, 5b, 20</sup>	BMYS.KL	Sell (CBE)	N/A	RM5.05	04 Dec 2008
Campbell Soup Co. <sup>4, 5b, 6a, 6b, 6c, 7, 16c</sup>	CPB.N	Neutral	N/A	US\$29.58	04 Dec 2008
CapitaCommercial Trust <sup>2e, 4, 19</sup>	CACT.SI	Sell (CBE)	N/A	S\$0.62	04 Dec 2008
CapitaLand Ltd. <sup>4, 16c</sup>	CATL.SI	Buy	N/A	S\$2.49	04 Dec 2008
CapitaMall Trust <sup>2e, 4, 19, 22</sup>	CMLT.SI	Buy (CBE)	N/A	S\$1.48	04 Dec 2008
Caterpillar Inc. <sup>6b, 7, 15, 16c, 18c</sup>	CAT.N	Sell	N/A	US\$37.52	04 Dec 2008
Cathay Financial Holding	2882.TW	Buy	N/A	NT\$31.90	04 Dec 2008
Cathay Pacific <sup>16b, 16c, 20</sup>	0293.HK	Buy (CBE)	N/A	HK\$7.56	04 Dec 2008
Central Japan Railway <sup>2e, 22</sup>	9022.T	Buy	N/A	¥816,000	04 Dec 2008
Central Pattana <sup>2e</sup>	CPN.BK	Buy	N/A	Bt11.30	04 Dec 2008
Champion Real Estate Investment Trust <sup>18a</sup>	2778.HK	Buy	N/A	HK\$1.38	04 Dec 2008
Cheung Kong <sup>2c, 4, 6a, 16b, 16c, 18a</sup>	0001.HK	Neutral	N/A	HK\$65.50	04 Dec 2008
Cheung Kong Infrastructure <sup>4, 16b</sup>	1038.HK	Buy	N/A	HK\$28.90	04 Dec 2008
Chi Mei Optoelectronic Corp.	3009.TW	Neutral	N/A	NT\$8.88	04 Dec 2008
China (Peoples Republic of) <sup>2d</sup>					
China Coal Energy <sup>16b, 22</sup>	1898.HK	Buy	N/A	HK\$4.70	04 Dec 2008
China Coal Energy - A <sup>22</sup>	601898.SS	Neutral	N/A	Rmb7.23	04 Dec 2008
China Communications Construction <sup>1, 2e, 4, 5b, 13, 16b, 22</sup>	1800.HK	Buy	N/A	HK\$8.52	04 Dec 2008
China Life Insurance <sup>2d, 4, 16b, 16c, 22</sup>	2628.HK	Buy	N/A	HK\$20.40	04 Dec 2008
China Merchants Bank <sup>2c, 4, 16b, 22</sup>	3968.HK	Buy	N/A	HK\$12.60	04 Dec 2008
China Merchants Holdings International <sup>16b, 22</sup>	0144.HK	Buy	N/A	HK\$13.30	04 Dec 2008
China Mobile (HK) Ltd <sup>16b, 16c, 22</sup>	0941.HK	Buy	N/A	HK\$73.20	04 Dec 2008
China Molybdenum <sup>2e, 13, 16b</sup>	3993.HK	Buy	N/A	HK\$2.68	04 Dec 2008
China National Offshore Oil Corporation <sup>2d, 16b, 16c</sup>	0883.HK	Buy	N/A	HK\$5.88	04 Dec 2008
China Overseas Land & Investment <sup>13, 16b, 18a, 22</sup>	0688.HK	Buy	N/A	HK\$10.22	04 Dec 2008
China Railway Construction <sup>16b</sup>	1186.HK	Neutral	N/A	HK\$10.58	04 Dec 2008
China Railway Group <sup>2e, 5b, 16b</sup>	0390.HK	Buy	N/A	HK\$5.02	04 Dec 2008
China Resources Power	0836.HK	Buy	N/A	HK\$14.28	04 Dec 2008
China Shenhua Energy <sup>2c, 4, 16b, 22</sup>	1088.HK	Buy	N/A	HK\$13.90	04 Dec 2008
China Shenhua Energy - A <sup>2e, 22</sup>	601088.SS	Buy	N/A	Rmb19.03	04 Dec 2008
China South Locomotive&Rolling Stock	1766.HK	Buy	N/A	HK\$3.48	04 Dec 2008
China Southern Airlines <sup>16c, 20, 22</sup>	1055.HK	Buy (CBE)	N/A	HK\$0.93	04 Dec 2008
China Southern Airlines - A <sup>22</sup>	600029.SS	Sell	N/A	Rmb3.33	04 Dec 2008
China Steel <sup>16c</sup>	2002.TW	Buy	N/A	NT\$21.00	04 Dec 2008
China Unicom Ltd. <sup>3b, 16b, 16c</sup>	0762.HK	Sell	N/A	HK\$9.10	04 Dec 2008
China Yurun Food <sup>2e, 4</sup>	1068.HK	Buy	N/A	HK\$8.46	04 Dec 2008
Cia. de Concessoes Rodoviaras - CCR <sup>2c, 4, 16a, 20</sup>	CCRO3.SA	Buy (CBE)	N/A	R\$23.80	04 Dec 2008
Cia. Energetica de Minas Gerais <sup>13, 16c, 20</sup>	CMIG4.SA	Buy (CBE)	N/A	R\$35.85	04 Dec 2008
Cia. Vale do Rio Doce (PN) <sup>2e, 4, 6a, 6b, 7, 16c, 20</sup>	VALE5.SA	Buy (CBE)	N/A	R\$21.96	04 Dec 2008
Cisco Systems Inc. <sup>2e, 4, 6a, 6b, 6c, 7, 8, 16c, 18d</sup>	CSCO.O	Neutral	N/A	US\$15.33	04 Dec 2008
Colgate-Palmolive <sup>2c, 4, 16c, 22</sup>	CL.N	Buy	N/A	US\$61.76	04 Dec 2008
Compal Electronics Inc.	2324.TW	Neutral	N/A	NT\$17.50	04 Dec 2008
Computershare <sup>4, 6a</sup>	CPU.AX	Buy	N/A	A\$6.79	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
CP All Plc	CPALL.BK	Buy	N/A	Bt11.60	04 Dec 2008
CRH <sup>2c, 4, 5b, 6a, 14, 16c</sup>	CRH.I	Buy	N/A	€17.67	04 Dec 2008
CSL Limited <sup>2d</sup>	CSL.AX	Buy	N/A	A\$32.00	04 Dec 2008
Cummins Engine Co. <sup>16c, 18e</sup>	CMI.N	Buy	N/A	US\$22.51	04 Dec 2008
Danaher Corporation <sup>2c, 4, 5b, 6a, 16c</sup>	DHR.N	Buy	N/A	US\$49.63	04 Dec 2008
DBS Bank <sup>4, 16c</sup>	DBSM.SI	Buy	N/A	S\$9.09	04 Dec 2008
Denway Motors <sup>16b</sup>	0203.HK	Buy	N/A	HK\$1.97	04 Dec 2008
Deutsche Post <sup>2e, 3g, 15, 22</sup>	DPW.Gn.DE	Buy	N/A	€10.64	04 Dec 2008
Digi.com	DSOM.KL	Buy	N/A	RM21.80	04 Dec 2008
Dongfeng Motor Group <sup>20</sup>	0489.HK	Buy (CBE)	N/A	HK\$1.85	04 Dec 2008
Dongkuk Steel Mill	001230.KS	Buy	N/A	Won22,500	04 Dec 2008
E.ON <sup>2e, 4, 6a, 13, 15, 16c, 22</sup>	EONGn.DE	Buy	N/A	€24.98	04 Dec 2008
Electricity Generating Co.	EGCO.BK	Buy	N/A	Bt56.50	04 Dec 2008
Elpida Memory <sup>2d</sup>	6665.T	Neutral	N/A	¥364	04 Dec 2008
Emerson Electric Co. <sup>2c, 4, 5b, 6a, 16c, 18f</sup>	EMR.N	Not Rated	N/A	US\$31.55	04 Dec 2008
Energi Mega Persada	ENRG.JK	Suspended	N/A	Rp96	04 Dec 2008
Energy Development Corp	EDC.PS	Buy	N/A	P2.38	04 Dec 2008
Esprit <sup>16b</sup>	0330.HK	Buy	N/A	HK\$39.20	04 Dec 2008
Evergreen Marine	2603.TW	Sell	N/A	NT\$16.50	04 Dec 2008
ExxonMobil Corp. <sup>6b, 7, 15, 16c</sup>	XOM.N	Buy	N/A	US\$76.27	04 Dec 2008
Fast Retailing	9983.T	Buy	N/A	¥11,710	04 Dec 2008
FedEx Corp. <sup>16c</sup>	FDX.N	Buy	N/A	US\$70.93	04 Dec 2008
Fluor Corporation <sup>2e, 4, 5b, 6a, 6b, 6c, 7, 16c</sup>	FLR.N	Buy	N/A	US\$42.84	04 Dec 2008
Formosa Petrochemical Corporation	6505.TW	Sell	N/A	NT\$69.80	04 Dec 2008
Foxconn Technology	2354.TW	Sell	N/A	NT\$60.20	04 Dec 2008
General Dynamics Corp. <sup>16c</sup>	GD.N	Neutral	N/A	US\$49.95	04 Dec 2008
General Electric Co. <sup>2c, 4, 6a, 6b, 6c, 7, 8, 15, 16c, 18g, 22</sup>	GE.N	Buy	N/A	US\$17.55	04 Dec 2008
Genting <sup>2e, 16c</sup>	GENT.KL	Buy	N/A	RM3.78	04 Dec 2008
GlaxoSmithKline <sup>16c, 18h, 22</sup>	GSK.L	Neutral	N/A	1,172p	04 Dec 2008
Globe Telecom <sup>2d</sup>	GLO.PS	Neutral	N/A	P750.00	04 Dec 2008
Glow Energy PCL	GLOW.BK	Buy	N/A	Bt18.20	04 Dec 2008
Golden Agri-Resources <sup>4, 6a</sup>	GAGR.SI	Buy	N/A	S\$0.20	04 Dec 2008
Government of Indonesia <sup>2e, 4</sup>					
Government of Sri Lanka					
Great Wall Motor	2333.HK	Neutral	N/A	HK\$2.30	04 Dec 2008
Gree Electrical Appliance	000651.SZ	Buy	N/A	Rmb19.35	04 Dec 2008
Grupo Televisa <sup>2e, 6b, 6c, 7, 16c, 20</sup>	TLVACPO.MX	Buy (CBE)	N/A	P40.02	04 Dec 2008
Guangshen Railway <sup>16c</sup>	0525.HK	Buy	N/A	HK\$2.60	04 Dec 2008
Halfords Group <sup>2e</sup>	HFD.L	Buy	N/A	226p	04 Dec 2008
Halliburton Co. <sup>2c, 4, 5b, 6a, 16c</sup>	HAL.N	Buy	N/A	US\$13.78	04 Dec 2008
Hana Financial Group <sup>2d, 4, 6a, 22, 23a, 23r</sup>	086790.KS	Buy	N/A	Won17,050	04 Dec 2008
Hang Lung Properties <sup>2e, 16c, 18a</sup>	0101.HK	Neutral	N/A	HK\$14.82	04 Dec 2008
Hanjin Shipping <sup>23q</sup>	000700.KS	Sell	N/A	Won14,500	04 Dec 2008
HCL Technologies	HCLT.BO	Sell	N/A	Rs120.00	04 Dec 2008
Henan Shuanghui Investment & Development	000895.SZ	Neutral	N/A	Rmb31.75	04 Dec 2008
Hero Honda Ltd.	HROH.BO	Buy	N/A	Rs749.95	04 Dec 2008
Hewlett-Packard Co. <sup>6b, 7, 15, 16c</sup>	HPQ.N	Neutral	N/A	US\$33.39	04 Dec 2008
Hidili Industry Int'l Development <sup>2e, 13</sup>	1393.HK	Buy	N/A	HK\$1.60	04 Dec 2008
Hindalco Industries <sup>4, 6a, 20</sup>	HALC.BO	Neutral (CBE)	N/A	Rs52.35	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
Hindustan Unilever	HLL.BO	Buy	N/A	Rs236.85	04 Dec 2008
Hitachi Transport System	9086.T	Buy	N/A	¥1,410	04 Dec 2008
Hite Brewery	103150.KS	Buy	N/A	Won171,000	04 Dec 2008
Honda Motor <sup>16c, 22</sup>	7267.T	Buy	N/A	¥1,685	04 Dec 2008
HSBC <sup>2c, 4, 6a, 16b, 16c, 22</sup>	HSBA.L	Buy	N/A	710p	04 Dec 2008
HTC Corporation <sup>20</sup>	2498.TW	Buy (CBE)	N/A	NT\$304.50	04 Dec 2008
Huaneng Power International <sup>16b, 16c</sup>	0902.HK	Buy	N/A	HK\$4.70	04 Dec 2008
Hutchison Telecommunications Int'l Ltd. <sup>16c</sup>	2332.HK	Buy	N/A	HK\$1.91	04 Dec 2008
Hynix Semiconductor <sup>2d, 23g, 23p</sup>	000660.KS	Sell	N/A	Won7,300	04 Dec 2008
Hyundai Department Store <sup>20</sup>	069960.KS	Suspended	N/A	Won50,800	04 Dec 2008
Hyundai Mobis <sup>22</sup>	012330.KS	Buy	N/A	Won53,300	04 Dec 2008
Hyundai Motor <sup>14, 22, 23d, 23f, 23v</sup>	005380.KS	Buy	N/A	Won37,600	04 Dec 2008
Hyundai Steel <sup>22, 23e</sup>	004020.KS	Neutral	N/A	Won30,000	04 Dec 2008
ICICI Bank <sup>2d, 16c</sup>	ICBK.BO	Buy	N/A	Rs364.20	04 Dec 2008
Idea Cellular <sup>2e</sup>	IDEA.BO	Buy	Buy	Rs48.55	04 Dec 2008
Idemitsu Kosan <sup>2e</sup>	5019.T	Buy	N/A	¥5,780	04 Dec 2008
Inco Indonesia <sup>2e, 20</sup>	INCO.JK	Sell (CBE)	N/A	Rp1,930	04 Dec 2008
<b>India</b>					
<b>India (Republic of)</b>					
Indo Tambangraya Megah (ITM) <sup>2e, 4</sup>	ITMG.JK	Buy	N/A	Rp8,600	04 Dec 2008
Indocement	INTP.JK	Buy	N/A	Rp3,475	04 Dec 2008
Indofood Agri Resources	IFAR.SI	Buy	N/A	S\$0.45	04 Dec 2008
Industrial & Commercial Bank of China <sup>16b, 22</sup>	1398.HK	Buy	N/A	HK\$4.00	04 Dec 2008
Inner Mongolia Yili Industrial	600887.SS	Sell	N/A	Rmb8.83	04 Dec 2008
Intel Corp. <sup>4, 6a, 6b, 6c, 7, 8, 16c, 18i</sup>	INTC.O	Buy	N/A	US\$12.77	04 Dec 2008
InterContinental Hotels Group <sup>16c</sup>	IHG.L	Buy	N/A	530p	04 Dec 2008
Intesa SanPaolo <sup>2d, 4, 5b, 6a</sup>	ISP.MI	Buy	N/A	€2.23	04 Dec 2008
IOI Corporation <sup>2d</sup>	IOIB.KL	Buy	N/A	RM3.16	04 Dec 2008
<b>Islamic Republic of Pakistan</b>					
ITC	ITC.BO	Buy	N/A	Rs173.85	04 Dec 2008
JBS S.A. <sup>2c, 4, 13, 20</sup>	JBSS3.SA	Buy (CBE)	N/A	R\$5.20	04 Dec 2008
Jiangxi Copper <sup>16b, 16c, 20, 22</sup>	0358.HK	Sell (CBE)	N/A	HK\$4.51	04 Dec 2008
JT <sup>2d, 4, 22</sup>	2914.T	Buy	N/A	¥339,000	04 Dec 2008
Jupiter Telecommunications	4817.Q	Buy	N/A	¥75,100	04 Dec 2008
K+S	SDFG.DE	Buy	N/A	€32.42	04 Dec 2008
Kajima <sup>16c</sup>	1812.T	Buy	N/A	¥262	04 Dec 2008
Kasikornbank	KBAN.BK	Buy	N/A	Bt39.00	04 Dec 2008
KDDI <sup>4</sup>	9433.T	Buy	N/A	¥621,000	04 Dec 2008
KEPCO <sup>16c, 22, 23m, 23t</sup>	015760.KS	Neutral	N/A	Won24,950	04 Dec 2008
Kimberly-Clark <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c, 22</sup>	KMB.N	Buy	N/A	US\$54.71	04 Dec 2008
KL Kepong	KLKK.KL	Sell	N/A	RM8.25	04 Dec 2008
KLCC Property Holdings	KCCP.KL	Buy	N/A	RM2.70	04 Dec 2008
Komatsu <sup>16c</sup>	6301.T	Buy	N/A	¥943	04 Dec 2008
<b>Korea (Republic of)<sup>2d</sup></b>					
Korea Exchange Bank <sup>2e, 4</sup>	004940.KS	Buy	N/A	Won7,240	04 Dec 2008
Korean Air <sup>20, 23b, 23j</sup>	003490.KS	Sell (CBE)	N/A	Won36,300	04 Dec 2008
KPN Telecom <sup>16c, 22</sup>	KPN.AS	Buy	N/A	€10.99	04 Dec 2008
KT&G	033780.KS	Buy	N/A	Won77,800	04 Dec 2008
Kubota <sup>16c</sup>	6326.T	Buy	N/A	¥495	04 Dec 2008
Ladbrokes <sup>4, 5b, 6a, 8, 14, 22</sup>	LAD.L	Buy	N/A	182p	04 Dec 2008
Lagardere	LAGA.PA	Buy	N/A	€27.23	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
Land & Houses	LH.BK	Buy	N/A	Bt2.82	04 Dec 2008
LG Telecom <sup>20, 22</sup>	032640.KS	Buy (CBE)	N/A	Won9,720	04 Dec 2008
Lianhua Supermarket Holdings	0980.HK	Buy	N/A	HK\$9.00	04 Dec 2008
Lotte Shopping <sup>4</sup>	023530.KS	Neutral	N/A	Won165,000	04 Dec 2008
Maanshan Iron & Steel - A	600808.SS	Sell	N/A	Rmb3.84	04 Dec 2008
Malayan Banking <sup>2e</sup>	MBBM.KL	Neutral	N/A	RM5.20	04 Dec 2008
<b>Malaysia</b>					
McDonalds Corp. <sup>6b, 7, 16c, 22</sup>	MCD.N	Buy	N/A	US\$60.84	04 Dec 2008
MediaTek Inc.	2454.TW	Buy	N/A	NT\$195.00	04 Dec 2008
Meggitt <sup>13</sup>	MGGT.L	Buy	N/A	136p	04 Dec 2008
Micron Technology Inc. <sup>16c</sup>	MU.N	Neutral	N/A	US\$1.81	04 Dec 2008
Microsoft Corp. <sup>5b, 6b, 6c, 7, 16c</sup>	MSFT.O	Buy	N/A	US\$19.11	04 Dec 2008
Mitsubishi Estate <sup>16c</sup>	8802.T	Buy	N/A	¥1,214	04 Dec 2008
Mitsubishi Heavy Industries <sup>2e, 4</sup>	7011.T	Buy	N/A	¥355	04 Dec 2008
Mizuho Financial Group <sup>2d, 16c, 22</sup>	8411.T	Neutral	N/A	¥225,900	04 Dec 2008
MobileOne	MONE.SI	Buy	N/A	S\$1.31	04 Dec 2008
Monsanto Co. <sup>16c</sup>	MON.N	Buy	N/A	US\$73.41	04 Dec 2008
National Aluminium Co. Ltd. <sup>20</sup>	NALU.BO	Neutral (CBE)	N/A	Rs175.55	04 Dec 2008
National Bank of Greece <sup>2c, 4, 6a, 16c</sup>	NBGr.AT	Buy	N/A	€14.38	04 Dec 2008
Neptune Orient Lines <sup>13, 16c</sup>	NEPS.SI	Neutral	N/A	S\$0.99	04 Dec 2008
NET Servicos de Comunicacao <sup>2e, 16c, 20, 22</sup>	NETC4.SA	Buy (CBE)	N/A	R\$14.00	04 Dec 2008
News Corporation, Inc. <sup>6b, 7, 16c, 22</sup>	NWSa.N	Buy	N/A	US\$7.84	04 Dec 2008
Next <sup>4, 6a, 14</sup>	NXT.L	Buy	N/A	1,058p	04 Dec 2008
Nike Inc. <sup>6b, 7, 16c, 18j</sup>	NKE.N	Not Rated	N/A	US\$51.96	04 Dec 2008
Nintendo <sup>16c</sup>	7974.OS	Buy	N/A	¥30,300	04 Dec 2008
Northrop Grumman Corp. <sup>16c</sup>	NOC.N	Buy	N/A	US\$39.21	04 Dec 2008
Novartis <sup>2c, 4, 5b, 6a, 13, 15, 16c, 22</sup>	NOVN.VX	Buy	N/A	CHF56.65	04 Dec 2008
Nucor Corp. <sup>16c</sup>	NUE.N	Buy	N/A	US\$33.82	04 Dec 2008
Oracle Corporation <sup>6b, 7, 16c, 18k</sup>	ORCL.O	Buy	N/A	US\$15.44	04 Dec 2008
Osaka Securities Exchange <sup>2d</sup>	8697.OJ	Buy	N/A	¥397,000	04 Dec 2008
Pacific Basin Shipping <sup>16b</sup>	2343.HK	Buy	N/A	HK\$3.15	04 Dec 2008
Parkson Retail <sup>2c, 4</sup>	3368.HK	Buy	N/A	HK\$7.30	04 Dec 2008
Parkway Life REIT <sup>2e, 19</sup>	PWLR.SI	Buy (CBE)	N/A	S\$0.72	04 Dec 2008
Pearson <sup>4, 6a, 16c</sup>	PERSON.L	Buy	N/A	625p	04 Dec 2008
Pekao <sup>22</sup>	BAPE.WA	Buy	N/A	PLN117.50	04 Dec 2008
PepsiCo Inc. <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c, 18l, 22</sup>	PEP.N	Neutral	N/A	US\$52.33	04 Dec 2008
Perusahaan Gas Negara	PGAS.JK	Buy	N/A	Rp1,890	04 Dec 2008
PetroChina <sup>1, 2e, 5b, 16b, 16c, 22</sup>	0857.HK	Buy	N/A	HK\$6.20	04 Dec 2008
Petroleo Brasileiro <sup>2e, 16c, 20, 22</sup>	PETR4.SA	Buy (CBE)	N/A	R\$18.60	04 Dec 2008
Philippine Long Distance Telephone Co. <sup>2e, 16c</sup>	TEL.PS	Neutral	N/A	P2,305.00	04 Dec 2008
Philippines (Republic of) <sup>2e</sup>					
POSCO <sup>2e, 4, 16c, 22, 23c, 23n, 23o</sup>	005490.KS	Buy	N/A	Won326,000	04 Dec 2008
Praxair Inc. <sup>16c, 18m</sup>	PX.N	Buy	N/A	US\$52.20	04 Dec 2008
Preuksa Real Estate	PS.BK	Buy	N/A	Bt3.30	04 Dec 2008
Procter & Gamble <sup>2c, 4, 6a, 6b, 6c, 7, 8, 16c, 18n, 22</sup>	PG.N	Buy	N/A	US\$61.25	04 Dec 2008
Prudential Financial Inc. <sup>2c, 4, 5b, 6a, 6b, 6c, 7, 16c, 22</sup>	PRU.N	Buy	N/A	US\$21.17	04 Dec 2008
PTT Exploration & Production	PTTE.BK	Buy	N/A	Bt99.00	04 Dec 2008
PTT Public Company Ltd.	PTT.BK	Buy	N/A	Bt144.00	04 Dec 2008
Qimonda <sup>16c</sup>	QI.N	Suspended	N/A	US\$0.12	04 Dec 2008
Quanta	2382.TW	Sell	N/A	NT\$36.10	04 Dec 2008
Reliance Industries <sup>2e</sup>	RELI.BO	Buy	N/A	Rs1,159.30	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
<b>Reliance Power</b> <sup>2c, 4</sup>	RPOL.BO	Sell	N/A	Rs107.80	04 Dec 2008
<b>Resorts World</b>	RWBW.KL	Neutral	N/A	RM2.28	04 Dec 2008
<b>Rexam</b> <sup>16c</sup>	REX.L	Buy	N/A	337p	04 Dec 2008
<b>Rockwell Collins Inc.</b> <sup>4, 5b, 6b, 7, 8, 16c, 18o</sup>	COL.N	Buy	N/A	US\$32.08	04 Dec 2008
<b>Samsung Electronics</b> <sup>16c, 23h, 23i, 23k, 23l, 23s, 23u</sup>	005930.KS	Neutral	N/A	Won430,500	04 Dec 2008
<b>SanDisk Corp.</b> <sup>3i, 16c, 20</sup>	SNDK.O	Neutral (CBE)	N/A	US\$8.08	04 Dec 2008
<b>Schlumberger Ltd.</b> <sup>16c, 18p</sup>	SLB.N	Buy	N/A	US\$40.00	04 Dec 2008
<b>Scottish &amp; Southern Energy</b> <sup>4, 6a, 16c</sup>	SSE.L	Buy	N/A	1,068p	04 Dec 2008
<b>SembCorp Marine</b> <sup>22</sup>	SCMN.SI	Buy	N/A	S\$1.40	04 Dec 2008
<b>Seven &amp; I Holdings</b>	3382.T	Buy	N/A	¥2,800	04 Dec 2008
<b>Shenzhen Zhongjin Lingnan Nonfemet</b>	000060.SZ	Sell	N/A	Rmb8.42	04 Dec 2008
<b>Shinsegae</b> <sup>2c, 4, 6a</sup>	004170.KS	Buy	N/A	Won399,000	04 Dec 2008
<b>Shionogi</b>	4507.T	Buy	N/A	¥2,100	04 Dec 2008
<b>Siliconware</b> <sup>2c, 4, 6a, 16c</sup>	2325.TW	Neutral	N/A	NT\$23.00	04 Dec 2008
<b>Sime Darby (M)</b>	SIME.KL	Sell	N/A	RM5.15	04 Dec 2008
<b>Singapore</b>					
<b>Singapore Airlines</b>	SIAL.SI	Buy	N/A	S\$10.40	04 Dec 2008
<b>Singapore Exchange</b> <sup>13, 20</sup>	SGXL.SI	Buy (CBE)	N/A	S\$4.60	04 Dec 2008
<b>Singapore Post</b>	SPOS.SI	Buy	N/A	S\$0.74	04 Dec 2008
<b>Singapore Press</b>	SPRM.SI	Neutral	N/A	S\$3.50	04 Dec 2008
<b>Sinopec</b> <sup>1, 2e, 5b, 16b, 16c, 22</sup>	0386.HK	Buy	N/A	HK\$4.75	04 Dec 2008
<b>Sinotrans Shipping</b> <sup>2e, 5b</sup>	0368.HK	Buy	N/A	HK\$1.79	04 Dec 2008
<b>Sinotruk (Hong Kong)</b>	3808.HK	Buy	N/A	HK\$4.83	04 Dec 2008
<b>SK Broadband</b> <sup>2d</sup>	033630.KQ	Neutral	N/A	Won5,050	04 Dec 2008
<b>SM Investments Corp.</b> <sup>2c, 4</sup>	SM.PS	Buy	N/A	P169.00	04 Dec 2008
<b>SM Prime Holdings</b>	SMPH.PS	Neutral	N/A	P6.90	04 Dec 2008
<b>Smith &amp; Nephew</b> <sup>4, 16c</sup>	SN.L	Buy	N/A	443p	04 Dec 2008
<b>Smiths Group</b>	SMIN.L	Buy	N/A	853p	04 Dec 2008
<b>Société Générale</b> <sup>2e, 4, 5b, 16c, 22</sup>	SOGN.PA	Buy	N/A	€32.36	04 Dec 2008
<b>SOHO China</b> <sup>2e, 4, 18a</sup>	0410.HK	Buy	N/A	HK\$2.57	04 Dec 2008
<b>S-Oil</b>	010950.KS	Neutral	N/A	Won62,000	04 Dec 2008
<b>Square Enix Holdings</b>	9684.T	Buy	N/A	¥2,665	04 Dec 2008
<b>ST Engineering Ltd</b>	STEG.SI	Neutral	N/A	S\$2.32	04 Dec 2008
<b>State Bank of India</b>	SBI.BO	Sell	N/A	Rs1,169.30	04 Dec 2008
<b>State Street</b> <sup>2c, 4, 6a, 6b, 7, 16c, 18q</sup>	STT.N	Buy	N/A	US\$37.32	04 Dec 2008
<b>Steel Authority of India</b>	SAIL.BO	Buy (CBE)	N/A	Rs70.60	04 Dec 2008
<b>Sterlite Industries</b> <sup>16c, 20</sup>	STRL.BO	Neutral (CBE)	N/A	Rs257.05	04 Dec 2008
<b>Stockland</b> <sup>2a, 2e, 4, 5a, 19, 22</sup>	SGP.AX	Neutral (CBE)	N/A	A\$3.85	04 Dec 2008
<b>Straits Asia Resources Limited</b>	STRL.SI	Buy	N/A	S\$0.79	04 Dec 2008
<b>Stryker Corporation</b> <sup>16c</sup>	SYK.N	Buy	N/A	US\$36.88	04 Dec 2008
<b>Summarecon Agung</b>	SMRA.JK	Buy	N/A	Rp190	04 Dec 2008
<b>Sun Hung Kai P.</b> <sup>16b, 16c, 18a, 22</sup>	0016.HK	Buy	N/A	HK\$54.60	04 Dec 2008
<b>Tabcorp Holdings Limited</b> <sup>2d, 5a, 13</sup>	TAH.AX	Buy	N/A	A\$6.97	04 Dec 2008
<b>Taishin Financial Holding</b>	2887.TW	Sell	N/A	NT\$5.70	04 Dec 2008
<b>Taiwan</b>					
<b>Taiwan Cement</b>	1101.TW	Buy	N/A	NT\$24.65	04 Dec 2008
<b>Taiwan Mobile</b> <sup>13</sup>	3045.TW	Buy	N/A	NT\$47.50	04 Dec 2008
<b>Taiwan Semiconductor Manufacturing</b> <sup>16c, 22</sup>	2330.TW	Buy	N/A	NT\$37.05	04 Dec 2008
<b>Takeda Pharmaceutical</b> <sup>4, 6a</sup>	4502.T	Buy	N/A	¥4,520	04 Dec 2008
<b>Tata Motors Ltd.</b> <sup>5b, 16c, 22</sup>	TAMO.BO	Sell	N/A	Rs150.90	04 Dec 2008
<b>Telefonica</b> <sup>2e, 4, 5b, 16c, 22</sup>	TEF.MC	Buy	N/A	€15.97	04 Dec 2008

Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
Telkom Indonesia <sup>14, 16c</sup>	TLKM.JK	Buy	N/A	Rp5,800	04 Dec 2008
Tesco <sup>2c, 4, 5b, 16c</sup>	TSCO.L	Buy	N/A	326p	04 Dec 2008
Thai Beverage	TBEV.SI	Buy	N/A	S\$0.22	04 Dec 2008
Thai Union Frozen Products	TUF.BK	Buy	N/A	Bt17.90	04 Dec 2008
<b>Thailand (Kingdom of)</b>					
The Link Real Estate Investment Trust <sup>2d, 18a, 22</sup>	0823.HK	Buy	N/A	HK\$14.08	04 Dec 2008
Thermo Fisher Scientific Inc. <sup>16c, 18r</sup>	TMO.N	Buy	N/A	US\$32.51	04 Dec 2008
Tianjin Port Holdings	600717.SS	Sell	N/A	Rmb9.68	04 Dec 2008
Tokuyama	4043.T	Buy	N/A	¥703	04 Dec 2008
Tokyo Gas	9531.T	Buy	N/A	¥477	04 Dec 2008
Toshiba <sup>3i, 4, 5b, 13, 16c, 22</sup>	6502.T	Buy	N/A	¥299	04 Dec 2008
TOTAL <sup>2c, 4, 12, 16c</sup>	TOTF.PA	Buy	N/A	€39.13	04 Dec 2008
Total Access	DTAC.BK	Neutral	N/A	Bt29.50	04 Dec 2008
Toyota Motor <sup>2b, 2e, 4, 5b, 16c, 22</sup>	7203.T	Neutral	N/A	¥2,700	04 Dec 2008
Transocean Incorporated <sup>2c, 4, 5b, 6a, 6c, 16c, 18s</sup>	RIG.N	Buy	N/A	US\$47.98	04 Dec 2008
Unilever Indonesia	UNVR.JK	Buy	N/A	Rp7,500	04 Dec 2008
Union Pacific Corp. <sup>16c</sup>	UNP.N	Buy	N/A	US\$47.39	04 Dec 2008
Unitech <sup>3e, 4, 5b, 6a, 20</sup>	UNTE.BO	Neutral (CBE)	N/A	Rs30.25	04 Dec 2008
United Business Media	UBM.L	Buy	N/A	453p	04 Dec 2008
United Overseas Bank <sup>16c</sup>	UOBH.SI	Buy	N/A	S\$11.96	04 Dec 2008
United Technologies Corp. <sup>3d, 8, 16c, 18t</sup>	UTX.N	Buy	N/A	US\$47.16	04 Dec 2008
URBI - Desarrollos Urbanos <sup>2e, 4, 5b, 6a, 16c, 20</sup>	URBI.MX	Buy (CBE)	N/A	P18.13	04 Dec 2008
Vodafone Group <sup>3h, 3j, 4, 5b, 6a, 14, 15, 16c, 22</sup>	VOD.L	Buy	N/A	126p	04 Dec 2008
Wal-Mart Stores <sup>2c, 4, 5b, 6a, 6b, 7, 15, 16c</sup>	WMT.N	Buy	N/A	US\$55.11	04 Dec 2008
Walt Disney Co. <sup>2e, 6c, 16c</sup>	DIS.N	Buy	N/A	US\$21.79	04 Dec 2008
Want Want China Holdings <sup>2c, 4, 5b</sup>	0151.HK	Buy	N/A	HK\$3.08	04 Dec 2008
Weir <sup>4, 5b, 6a, 14</sup>	WEIR.L	Buy	N/A	305p	04 Dec 2008
Western Mining	601168.SS	Neutral	N/A	Rmb6.84	04 Dec 2008
Westfield Group <sup>5a, 16c, 19, 22</sup>	WDC.AX	Buy (CBE)	N/A	A\$13.14	04 Dec 2008
Westpac Banking Corporation <sup>2a, 2c, 4, 6a, 16c, 22</sup>	WBC.AX	Buy	N/A	A\$16.94	04 Dec 2008
Wilmar International Limited	WLIL.SI	Buy	N/A	S\$2.65	04 Dec 2008
Wistron Corporation <sup>2d</sup>	3231.TW	Buy	N/A	NT\$21.55	04 Dec 2008
Wuhan Steel	600005.SS	Neutral	N/A	Rmb6.67	04 Dec 2008
Xin角度 Gas Holdings <sup>2e</sup>	2688.HK	Buy	N/A	HK\$7.43	04 Dec 2008
Xstrata Plc	XTA.L	Buy	N/A	630p	04 Dec 2008
Xtep International Holdings <sup>2c, 4</sup>	1368.HK	Buy	N/A	HK\$1.49	04 Dec 2008
Yahoo Japan <sup>20</sup>	4689.T	Buy (CBE)	N/A	¥30,700	04 Dec 2008
Yang Ming Marine	2609.TW	Sell	N/A	NT\$10.45	04 Dec 2008
Yanzhou Coal Mining <sup>13, 16b, 16c, 22</sup>	1171.HK	Buy	N/A	HK\$4.29	04 Dec 2008
Yanzhou Coal Mining - A <sup>13, 22</sup>	600188.SS	Sell	N/A	Rmb9.64	04 Dec 2008
Yulon Motor	2201.TW	Sell	N/A	NT\$13.30	04 Dec 2008
Yum! Brands Inc. <sup>16c</sup>	YUM.N	Buy	N/A	US\$27.71	04 Dec 2008
Yunnan Chihong Zinc & Germanium	600497.SS	Sell	N/A	Rmb10.23	04 Dec 2008
Zhejiang Expressway Co Ltd. <sup>2e</sup>	0576.HK	Buy	N/A	HK\$3.73	04 Dec 2008

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date



1. UBS Securities Co. Limited is acting as manager/co-manager, underwriter or placement agent in regard to an offering of securities of this company/entity or one of its affiliates.
- 2a. UBS AG, Australia Branch or an affiliate has acted as manager/co-manager, underwriter or placement agent in regard to an offering of securities for this company/entity or one of its affiliates within the past 12 months.
- 2b. UBS AG, Australia Branch or an affiliate has acted as manager/co-manager, underwriter or placement agent in regard to an offering of securities of this company/entity within the past three years.
- 2c. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company/entity or one of its affiliates within the past 12 months.
- 2d. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company/entity or one of its affiliates within the past five years.
- 2e. UBS AG, its affiliates or subsidiaries has acted as manager/co-manager in the underwriting or placement of securities of this company/entity or one of its affiliates within the past three years.
- 3a. UBS AG is acting as financial adviser to Beijing Capital International Airport on the announced agreement to acquire the Beijing Airport Terminal 3 Assets from Capital Airports Holdings Company.
- 3b. UBS AG is acting as financial advisor to China Telecom on its proposed acquisition / restructuring.
- 3c. UBS AG is acting as Financial Advisor to Northstar Pacific Partners in its proposed acquisition of a 35% stake in Bumi Resources from Bakrie Brothers.
- 3d. UBS AG is acting as Financial Advisor to United Technologies Far East Ltd, the subsidiary of United Technologies Corp., in the possible voluntary conditional cash offers of shares of GST Holdings Ltd.
- 3e. UBS Investment Bank is acting as sole financial advisor to Unitech on the induction of Telenor ASA as a strategic partner in its new telecom venture.
- 3f. UBS Limited is acting as adviser to Anglo American with respect to the sale of its Tarmac building materials unit.
- 3g. UBS Limited is acting as advisor to Deutsche Postbank on the disposal of its shareholder, Deutsche Post's, stake in Deutsche Postbank to Deutsche Bank.
- 3h. UBS Limited is acting as financial advisor to Vodafone on the acquisition of a stake in Vodacom from Telkom.
- 3i. UBS Securities Japan Ltd is acting as an advisor to Toshiba on its restructuring Joint Ventures set up by Toshiba and SanDisk.
- 3j. UBS Securities LLC is acting as advisor to Vodafone Group on Verizon Wireless's announced agreement to acquire Alltel.
4. Within the past 12 months, UBS AG, its affiliates or subsidiaries has received compensation for investment banking services from this company/entity.
- 5a. UBS AG, Australia Branch or an affiliate expect to receive or intend to seek compensation for investment banking services from this company/entity within the next three months.
- 5b. UBS AG, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from this company/entity within the next three months.
- 5c. UBS Securities Canada Inc or an affiliate expect to receive or intend to seek compensation for investment banking services from this company/entity within the next three months.
- 6a. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and investment banking services are being, or have been, provided.
- 6b. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and non-investment banking securities-related services are being, or have been, provided.
- 6c. This company/entity is, or within the past 12 months has been, a client of UBS Securities LLC, and non-securities services are being, or have been, provided.
7. Within the past 12 months, UBS Securities LLC has received compensation for products and services other than investment banking services from this company/entity.
8. The equity analyst covering this company, a member of his or her team, or one of their household members has a long common stock position in this company.
10. The equity analyst covering this company, a member of his or her team, or one of their household members is an officer, director, or advisory board member of this company.
12. A director or an employee of UBS AG, its affiliates or subsidiaries is a director of this company.
13. UBS AG, its affiliates or subsidiaries beneficially owned 1% or more of a class of this company's common equity securities as of last month's end (or the prior month's end if this report is dated less than 10 days after the most recent month's end).

14. UBS Limited acts as broker to this company.
15. UBS AG, its affiliates or subsidiaries has issued a warrant the value of which is based on one or more of the financial instruments of this company.
- 16a. Banco UBS Pactual S.A. makes a market in the securities of this company.
- 16b. UBS Securities (Hong Kong) Limited is a market maker in the HK-listed securities of this company.
- 16c. UBS Securities LLC makes a market in the securities and/or ADRs of this company.
17. UBS AG, Australian Branch and UBS Limited are acting as financial adviser to BHP Billiton with regard to its proposed combination with Rio Tinto
- 18a. The equity analyst covering this company or a member of his or her team may maintain a personal portfolio of Hong Kong and/or China residential and/or commercial property which may be bought or sold at any time.
- 18b. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in 3M Company.
- 18c. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Caterpillar Inc.
- 18d. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Cisco Systems Inc.
- 18e. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Cummins Engine Co.
- 18f. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Emerson Electric Co.
- 18g. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in General Electric.
- 18h. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in GlaxoSmithKline.
- 18i. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Intel Corp.
- 18j. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Nike Inc.
- 18k. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Oracle Corporation.
- 18l. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in PepsiCo Inc.
- 18m. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Praxair Inc.
- 18n. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Procter & Gamble Co.
- 18o. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Rockwell Collins Inc.
- 18p. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Schlumberger.
- 18q. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in State Street.
- 18r. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Thermo Electron Corp.
- 18s. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in Transocean Inc.
- 18t. The U.S. equity strategist, a member of his team, or one of their household members has a long common stock position in United Technologies Corp.
- 18u. UBS South Africa (Pty) Limited acts as JSE sponsor to this company.
19. Because UBS believes this security presents lower-than-normal risk, its rating is deemed Buy if the FSR exceeds the MRA by 5% and Sell if the FSR is more than 5% below the MRA (compared with 6% and 6%, respectively, under the normal rating system).

20. Because UBS believes this security presents significantly higher-than-normal risk, its rating is deemed Buy if the FSR exceeds the MRA by 10% (compared with 6% under the normal rating system).
22. UBS AG, its affiliates or subsidiaries held other significant financial interests in this company/entity as of last month's end (or the prior month's end if this report is dated less than 10 working days after the most recent month's end).
- 23a. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 1,337,370 units of Hana IB&Securities Inc. ELW 8246 (Hana Financial Group call warrants) as of 4 Dec 2008.
- 23b. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 1,790,640 units of Meritz Securities ELW 8091 (Korean Air Lines call warrants) as of 4 Dec 2008.
- 23c. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 11,556,030 units of Meritz Securities ELW 8092 (POSCO call warrants) as of 4 Dec 2008.
- 23d. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,022,900 units of Hana IB&Securities ELW 8249 (Hyundai Motor call warrants) as of 4 Dec 2008.
- 23e. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,603,720 units of Hana IB&Securities ELW 8260 (Hyundai Steel call warrants) as of 4 Dec 2008.
- 23f. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,633,030 units of HANA IB & SECURITIES INC.ELW8277 (Hyundai Motor Call warrant) as of 4 Dec 2008
- 23g. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,663,320 units of HANA IB & SECURITIES INC.ELW8281(Hynix Semi conductor call warrants)as of 4 Dec 2008.
- 23h. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,693,990 units of DAISHIN SECURITIES ELW 8540[Samsung Electronics call warrants) as of 4 Dec 2008.
- 23i. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,699,000 units of DAISHIN SECURITIES ELW 8540[Samsung Electronics call warrants) as of 28 Nov 2008.
- 23j. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,699,960 units of DAISHIN SECURITIES ELW 8541(Korean AirLines call warrants) as of 4 Dec 2008.
- 23k. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,799,900 units of Hana IB&Securities ELW 8250 (Samsung Electronics call warrants) as of 4 Dec 2008.
- 23l. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,799,900 units of Hana IB&Securities ELW 8254 (Samsung Electronics call warrants) as of 4 Dec 2008.
- 23m. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,800,000 units of Hana IB&Securities ELW 8257 (KEPCO call warrants) as of 4 Dec 2008.
- 23n. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,800,000 units of Hana IB&Securities ELW 8261 (POSCO call warrants) as of 4 Dec 2008.
- 23o. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,800,000 units of Hana IB&Securities Inc. ELW 8242 (POSCO call warrants) as of 4 Dec 2008.
- 23p. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,800,000 units of Hana IB&Securities Inc. ELW 8244 (Hynix Semiconductor call warrants) as of 4 Dec 2008.
- 23q. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,932,510 units of HANA IB & SECURITIES INC.ELW8284( Hanjin Shipping call warrants) as of 4 Dec 2008.
- 23r. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,991,900 units of DAISHIN SECURITIES ELW 8547(Hana Financial GroupInc.call warrants) as of 4 Dec 2008.
- 23s. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 2,999,980 units of Meritz Securities ELW 8070 (Samsung Electronics call warrants) as of 4 Dec 2008.
- 23t. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 3,349,950 units of Meritz Securities ELW 8077 (KEPCO call warrants) as of 4 Dec 2008.

- 23u. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned 4,707,340 units of Hana IB&Securities Inc. ELW 8236 (Samsung Electronics call warrants) as of 4 Dec 2008.
- 23v. UBS Securities Pte. Ltd., Seoul Branch is a liquidity provider for the equity-linked warrants of this company and beneficially owned zero units of Meritz Securities ELW 8090 (Hyundai Motor call warrants) as of 4 Dec 2008.

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

For a complete set of disclosure statements associated with the companies discussed in this report, including information on valuation and risk, please contact UBS Securities LLC, 1285 Avenue of Americas, New York, NY 10019, USA, Attention: Publishing Administration.

Additional Prices: AAC Acoustic Technologies Holdings Inc., HK\$2.42 (04 Dec 2008); ABB Limited (India), Rs440.50 (04 Dec 2008); Aboitiz Equity Ventures, P5.40 (04 Dec 2008); Alliance Global Group Inc., P1.50 (04 Dec 2008); Asahi Kasei, ¥350 (04 Dec 2008); ASE, NT\$9.85 (04 Dec 2008); Asiatic Development, RM3.18 (04 Dec 2008); ASM Pacific Technology, HK\$20.55 (04 Dec 2008); Asustek Computer Inc., NT\$34.00 (04 Dec 2008); AU Optronics, NT\$19.65 (04 Dec 2008); Bakrie Sumatera Plantations, Rp230 (04 Dec 2008); Banco de Oro Universal Bank, P22.75 (04 Dec 2008); Bangchak Petroleum, Bt6.35 (04 Dec 2008); Bank of the Philippine Islands, P39.00 (04 Dec 2008); Benesse Corp., ¥4,220 (04 Dec 2008); Bharat Petroleum Corporation, Rs363.00 (04 Dec 2008); Cairn India Limited, Rs139.70 (04 Dec 2008); Capcom, ¥2,030 (04 Dec 2008); Catcher Technology, NT\$47.60 (04 Dec 2008); Chartered Semiconductor Manufacturing, S\$0.19 (04 Dec 2008); Cheil Industries, Won34,200 (04 Dec 2008); China BlueChemical, HK\$2.72 (04 Dec 2008); Compal Communications, NT\$14.30 (04 Dec 2008); Coretronic Corporation, NT\$15.90 (04 Dec 2008); CyberAgent, ¥58,800 (04 Dec 2008); Dabur India Ltd., Rs82.00 (04 Dec 2008); Delta Electronics, NT\$58.50 (04 Dec 2008); D-Link, NT\$18.35 (04 Dec 2008); Don Quijote, ¥2,120 (04 Dec 2008); East Japan Railway, ¥706,000 (04 Dec 2008); Electric Power Development (J-Power), ¥3,520 (04 Dec 2008); en-japan, ¥59,100 (04 Dec 2008); Epistar Corporation, NT\$27.20 (04 Dec 2008); Esso (Thailand) PCL, Bt4.06 (04 Dec 2008); E-Ton Solar Tech, NT\$81.00 (04 Dec 2008); FamilyMart, ¥4,160 (04 Dec 2008); Filinvest Land, P0.39 (04 Dec 2008); First Financial Holding, NT\$14.25 (04 Dec 2008); First Gen Corporation, P11.50 (04 Dec 2008); First Philippine Holdings, P16.00 (04 Dec 2008); Formosa C&Fibre, NT\$47.50 (04 Dec 2008); Formosa Plastics, NT\$48.85 (04 Dec 2008); Foxconn International Holdings Ltd., HK\$1.90 (04 Dec 2008); FP, ¥4,340 (04 Dec 2008); Fubon Financial Holding, NT\$19.35 (04 Dec 2008); Fuji Media Holdings, ¥118,100 (04 Dec 2008); Fukuoka Financial Group, ¥305 (04 Dec 2008); GAIL (India) Ltd., Rs203.10 (04 Dec 2008); GMO Internet, ¥257 (04 Dec 2008); GS Holdings, Won19,700 (04 Dec 2008); Gujarat State Petronet, Rs26.90 (04 Dec 2008); Hamakyorex, ¥1,994 (04 Dec 2008); Hang Seng Bank, HK\$101.40 (04 Dec 2008); Hap Seng Plantations, RM1.43 (04 Dec 2008); HDFC Bank, Rs912.85 (04 Dec 2008); Hindustan Petroleum, Rs239.80 (04 Dec 2008); Hon Hai Precision, NT\$58.00 (04 Dec 2008); Honam Petrochemical Corp, Won41,200 (04 Dec 2008); Hong Leong Bank, RM4.98 (04 Dec 2008); Housing Development Finance Corporation, Rs1,509.35 (04 Dec 2008); HSBC Holdings, HK\$78.55 (04 Dec 2008); HT Media Ltd., Rs69.10 (04 Dec 2008); Hua Xia Bank, Rmb8.11 (04 Dec 2008); ICBC (Asia), HK\$7.03 (04 Dec 2008); IJM Plantations, RM1.76 (04 Dec 2008); Indian Oil Corp., Rs398.40 (04 Dec 2008); Industrial Bank, Rmb15.10 (04 Dec 2008); Industrial Bank of Korea, Won7,260 (04 Dec 2008); Infosys Technologies Ltd., Rs1,194.75 (04 Dec 2008); Innolux Display Corporation, NT\$19.00 (04 Dec 2008); International Container Terminal Svcs, P14.50 (04 Dec 2008); JGC, ¥989 (04 Dec 2008); Jollibee Foods Corp, P37.50 (04 Dec 2008); KB Financial Group, Won29,200 (04 Dec 2008); Kiatak Bank, Bt8.70 (04 Dec 2008); Kintetsu World Express, ¥1,649 (04 Dec 2008); KOSE, ¥2,250 (04 Dec 2008); Krung Thai Bank, Bt3.26 (04 Dec 2008); KTF, Won29,000 (04 Dec 2008); Kyushu Electric Power, ¥2,400 (04 Dec 2008); Largan Precision, NT\$173.50 (04 Dec 2008); LAWSON, ¥5,270 (04 Dec 2008); LDK Solar Co Ltd, US\$14.03 (04 Dec 2008); Lenovo Group Ltd, HK\$1.79 (04 Dec 2008); LG Chemical, Won59,400 (04 Dec 2008); LG Display, Won20,650 (04 Dec 2008); LG Electronics, Won72,000 (04 Dec 2008); Lion, ¥530 (04 Dec 2008); Lite-On Technology Corp., NT\$23.70 (04 Dec 2008); London Sumatra Indonesia, Rp2,600 (04 Dec 2008); Macquarie Group Ltd, A\$28.30 (04 Dec 2008); Maeda Corp., ¥353 (04 Dec 2008); Maharashtra Seamless, Rs137.55 (04 Dec 2008); Manila Electric, P57.50 (04 Dec 2008); Manila Water Company, P13.25 (04 Dec 2008); MCB Bank, Rs235.75 (04 Dec 2008); Medco Energi Internasional, Rp1,690 (04 Dec 2008); Mega Financial Holding, NT\$10.25 (04 Dec 2008); Megaworld Corporation, P0.54 (04 Dec 2008); Metrobank, P23.50 (04 Dec 2008); Milbon, ¥2,550 (04 Dec 2008); Mitsubishi UFJ Financial Group, ¥460 (04 Dec 2008); Mitsui Fudosan, ¥1,235 (04 Dec 2008); mixi, ¥610,000 (04 Dec 2008); Motech Industries, NT\$54.10 (04 Dec 2008); Nan Ya Plastics, NT\$38.50 (04 Dec 2008); Nanya PCB Corporation, NT\$64.20 (04 Dec 2008); National Australia Bank, A\$19.46 (04 Dec 2008); National Bank of Pakistan, Rs93.02 (04 Dec 2008); Nestle India Ltd., Rs1,401.15 (04 Dec 2008); NHN Corp, Won104,500 (04 Dec 2008); Nichi-iko Pharmaceutical, ¥2,400 (04 Dec 2008); Nippon Chemipharm, ¥257 (04 Dec 2008); Nippon Television Network, ¥9,400 (04 Dec 2008); Nissan Chemical, ¥746 (04 Dec 2008); Nissen Holdings, ¥404 (04 Dec 2008); Nitoni, ¥7,270 (04 Dec 2008); Novatek Microelectronics Corp., NT\$26.80 (04 Dec 2008); NTT, ¥455,000 (04 Dec 2008); NTT Urban Development, ¥91,700 (04 Dec 2008); OCBC, S\$4.85 (04 Dec 2008); Oil & Natural Gas Corporation, Rs674.50 (04 Dec 2008); Okinawa Electric Power, ¥6,600 (04 Dec 2008); Oriental Bank of Commerce, Rs146.95 (04 Dec 2008); Osaka Gas, ¥407 (04 Dec 2008); Ozeki, ¥2,625 (04 Dec 2008); Paragon Technologies, NT\$54.50 (04 Dec 2008); Pepsi-Cola Products Philippines, P0.66 (04 Dec 2008); Petron, P4.30 (04 Dec 2008); Petronas Gas, RM9.65 (04 Dec 2008); Petronet LNG, Rs31.95 (04 Dec 2008); Phil. National Bank, P14.75 (04 Dec 2008); Phison Electronics, NT\$46.00 (04 Dec 2008); Phoenix Precision Technology, NT\$5.94 (04 Dec 2008); Piramal Healthcare, Rs214.00 (04 Dec 2008); Point, ¥5,240 (04 Dec 2008); Powertech Technology, NT\$45.50 (04 Dec 2008); PTT Aromatics and Refining, Bt7.40 (04 Dec 2008); PTT Chemical, Bt28.00 (04 Dec 2008); Public Bank, RM8.25 (04 Dec 2008); Punjab National Bank, Rs451.15 (04 Dec 2008); Pusan Bank, Won5,600 (04 Dec 2008); Qinghai Salt Lake Potash, Rmb88.12 (04 Dec 2008); Rakuten, ¥55,800 (04 Dec 2008); Realtek Semiconductor Corp., NT\$28.20 (04 Dec 2008); Reliance Infrastructure, Rs545.80 (04 Dec 2008); Reliance Petroleum Ltd, Rs73.55 (04 Dec 2008); Resona Holdings, ¥134,000 (04 Dec 2008); RHB Capital, RM3.50 (04 Dec 2008); Richtek Technology, NT\$112.00 (04 Dec 2008); Robinsons Land Corp, P5.80 (04 Dec 2008); Ryohin Keikaku, ¥4,240 (04 Dec 2008); Saint Marc Holdings, ¥2,495 (04 Dec 2008); Samsung Card, Won32,000 (04 Dec 2008); Samsung Electro-Mechanics, Won30,950 (04 Dec 2008); Samsung SDI, Won53,700 (04 Dec 2008); Samsung Techwin, Won26,300 (04 Dec 2008); San Miguel - B, P41.50 (04 Dec 2008); Satyam Computer Services Ltd., Rs232.55 (04 Dec 2008); Seino Holdings, ¥492 (04 Dec 2008); Semiconductor Manufacturing Intl Corp, HK\$0.17 (04 Dec

2008); Shanghai Pudong Bank (G), Rmb13.36 (04 Dec 2008); Shenzhen Development Bank, Rmb10.00 (04 Dec 2008); Shin Kong Financial Holding, NT\$8.15 (04 Dec 2008); Shin-Etsu Chemical, ¥3,430 (04 Dec 2008); Shinhan Financial Group, Won30,750 (04 Dec 2008); Shiseido, ¥1,690 (04 Dec 2008); Shizuoka Bank, ¥895 (04 Dec 2008); Shoei, ¥873 (04 Dec 2008); Siam City Bank, Bt6.15 (04 Dec 2008); Siam Commercial Bank, Bt41.25 (04 Dec 2008); Silitech Technology, NT\$39.95 (04 Dec 2008); Simplo Technology Co. Ltd., NT\$73.80 (04 Dec 2008); Sino American Silicon Products, NT\$50.20 (04 Dec 2008); Sinofert Holdings, HK\$3.40 (04 Dec 2008); SinoPac Financial Holding, NT\$6.46 (04 Dec 2008); SK Energy, Won64,900 (04 Dec 2008); SK Telecom, Won212,000 (04 Dec 2008); Softbank, ¥1,267 (04 Dec 2008); St George Bank, A\$22.10 (04 Dec 2008); Standard Chartered, 760p (04 Dec 2008); Sumitomo Mitsui Financial Group, ¥306,000 (04 Dec 2008); Sumitomo Realty & Development, ¥1,201 (04 Dec 2008); Sumitomo Trust & Banking, ¥416 (04 Dec 2008); Sun Pharmaceuticals Industries Limited, Rs1,029.80 (04 Dec 2008); Suntech Power Holdings, US\$7.31 (04 Dec 2008); Suruga Bank, ¥976 (04 Dec 2008); Taisei, ¥193 (04 Dec 2008); Tata Chemicals, Rs151.55 (04 Dec 2008); Tata Consultancy Services Ltd., Rs549.75 (04 Dec 2008); Tencent Holdings, HK\$43.40 (04 Dec 2008); T-Gaia, ¥98,400 (04 Dec 2008); Thai Oil, Bt19.30 (04 Dec 2008); Thanachart Capital, Bt6.35 (04 Dec 2008); TISCO Bank, Bt6.80 (04 Dec 2008); Tokyu Corporation, ¥380 (04 Dec 2008); Towa Pharmaceutical, ¥3,780 (04 Dec 2008); TPV Technology Limited, HK\$1.29 (04 Dec 2008); Tripod Technology Corporation, NT\$32.10 (04 Dec 2008); UMC, NT\$6.90 (04 Dec 2008); Uni-Charm, ¥6,670 (04 Dec 2008); Unimicron, NT\$14.00 (04 Dec 2008); Universal Robina Corp., P4.90 (04 Dec 2008); Vanguard, NT\$6.15 (04 Dec 2008); Venture Corporation, S\$4.01 (04 Dec 2008); Vista Land and Lifescapes, P0.94 (04 Dec 2008); Wing Hang Bank, HK\$37.00 (04 Dec 2008); Wing Lung Bank, HK\$153.50 (04 Dec 2008); Wipro Ltd., Rs232.40 (04 Dec 2008); Woori Finance Holdings, Won6,200 (04 Dec 2008); Xebio, ¥1,831 (04 Dec 2008); Yusen Air & Sea Service, ¥1,042 (04 Dec 2008); ZTE Corporation, HK\$17.40 (04 Dec 2008); Source: UBS. All prices as of local market close.

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