Asia Economics Analyst

Issue No: 08/22

November 24, 2008

GS GLOBAL ECONOMIC WEBSITE
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India: The ripples from real estate

India's property market is poised for a deep correction.

We estimate prices may need to fall by up to 30% from current levels, with significant knock on effects on the economy.

In particular, it will slow construction activity, which directly accounts for 7.3% of GDP, but has sector linkages which we estimate to be 14% of GDP.

After India's last housing bust in 1996, real property prices fell some 40% over three years, negatively affecting consumption and investment demand.

Mitigating factors—favorable demographics, low mortgage penetration, ongoing infrastructure demand.

Singapore: Coping with crisis

We are revising our GDP growth forecasts to 2% for 2008 and decidedly lower for 2009 to -2.2% from 3% and 2% previously. Growth could slow beyond our forecasts, if decisive policy action fails to materialize over the coming months.

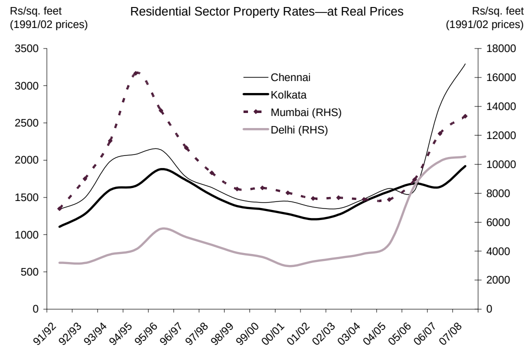
Taiwan: Further growth weakness ahead

We are revising down our 2008 and 2009 GDP growth forecasts to 1.5% and -2.0% respectively, from our already below-consensus forecasts of 3.0% and 2.2% previously. Our forecasts imply GDP growth to remain in negative territory through to 3Q2009.

China: Lower growth and inflation in the near term—revising down our 2008 and 2009 GDP growth and inflation forecasts

We revise down our 2008 and 2009 GDP growth forecasts to 9.0% and 7.5% from 9.8% and 8.7% respectively, given the sharp deterioration in the external environment, and the challenges facing domestic fixed asset investments, in particular, the real estate sector.

India: Residential prices have surpassed 1996 peaks



Source: Knight Frank, CEIC, Goldman Sachs Economics Research.

India: The construction sector has deep linkages in the economy

Source: Ministry of Statistics and Programme Implementation, CEIC, Goldman Sachs Economics Research.

China: Our revised forecasts

(percentage change, unless otherwise indicated)

	2006	2007	2008F		2009F	
GDP by expenditure (at 1990 prices)			**New**	Old	New	Old
GDP	11.6	11.9	**9.0**	9.8	**7.5**	8.7
Domestic demand	9.9	9.4	**8.9**	8.9	**6.9**	8.5
Private consumption	8.4	9.3	**9.0**	10.0	**8.0**	9.0
Government consumption	9.7	9.5	**9.5**	9.5	**6.5**	8.0
Fixed investment	11.4	10.6	**8.5**	10.6	**6.5**	8.5
Net exports (contribution to growth)	2.4	3.2	**1.0**	1.0	**1.3**	1.1
Exports (G&S)	19.6	19.0	**11.8**	11.8	**-3.0**	6.5
Imports (G&S)	18.1	16.8	**12.0**	12.0	**-5.0**	6.0
Memo:						
CPI inflation (period average)	1.5	4.8	**6.1**	6.3	**1.0**	1.5

Source: CEIC, Goldman Sachs Economics Research.

Goldman Sachs

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India: The ripples from real estate

- **India's property market is poised for a deep correction**. Property prices have risen dramatically over the past three years, supply exceeds demand in most geographies, and affordability lags prices. Our India Real Estate Team believes that residential property prices in some geographies may need to fall by up to 30% from current levels for affordability to catch up. As elsewhere globally, we think this will have negative effects on the economy.

- **The imminent slowdown in construction activity can potentially have a big impact on the economy**. By using an input-output matrix, we estimate that although the sector directly accounts for 7.3% of GDP, its backward linkages in terms of the sector's usage of iron, steel, cement etc., and forward linkages to other sectors, impacts an estimated 14% of GDP. Therefore, a slowdown in the construction sector can potentially have large knock-on effects on the economy.

- **From the demand side, a property downturn, we think, will have negative effects on consumption and investment**. As housing forms the largest component of household wealth, consumer demand will be impacted. The fall in collateral will also hurt firms' balance sheets, increase their funding costs, hurt confidence, and reduce investment demand. However, the impact on demand will be lower than in developed countries.

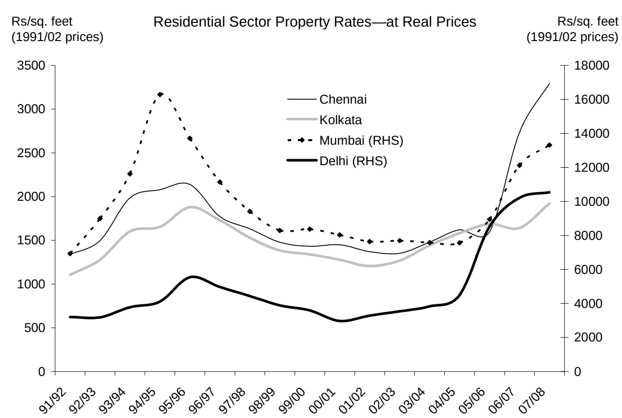
- **Lessons from previous housing busts suggest that they tend to be prolonged episodes with considerable macro consequences**. After India's last housing bust in 1996, real property prices fell some 40% over three years, and did not recover to their previous peaks for a decade. Consumption and investment demand were both negatively affected, and growth slowed from an average of 6.8% in the four years prior to the bust to 5.4% in the four years after it. Typically, housing busts in OECD countries have lasted six years with a 30% decline in prices and substantial negative implications for the economy.

- **Mitigating factors, such as India's favorable demographics, low mortgage penetration, falling interest rates, and ongoing infrastructure demand, in our view, will keep the property downturn from being protracted**. However, we believe a sharp slowdown is imminent. We therefore remain negative on the real estate sector, and its supplier industries such as cement, iron, and steel, and reiterate our below consensus estimate of 5.8% GDP growth in FY10.[1]

I. A property slump ahead

In general, property prices in India have surpassed previous peaks, supply exceeds demand, and affordability lags prices. Although there are of course large geographical differences in the real estate market, some general conclusions can be made. First, there has been massive property price appreciation over the past three years. Looking at prices in the four major cities, inflation-adjusted real estate prices have now surpassed the previous peak of 1996 (see Exhibit 1). Second, supply considerably exceeds demand, especially in commercial real estate where firm estimates are available (see Exhibit 2). Third, affordability lags property prices in major geographies (see Exhibit 3).

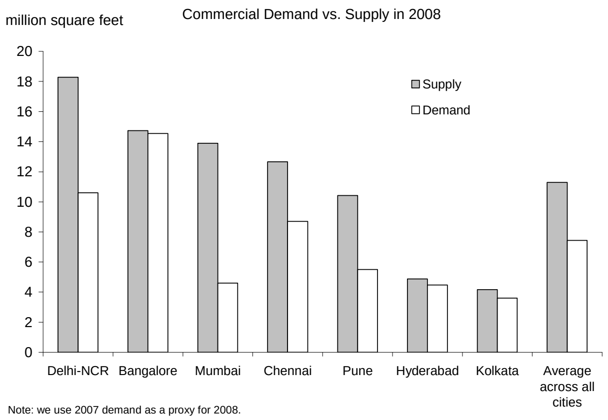
Exhibit 1: Residential prices have surpassed 1996 peaks



Source: Knight Frank, CEIC, Goldman Sachs Economics Research.

1 See *India: Growth, interrupted*, Asia Economics Analyst 08/21, November 10.

Exhibit 2: Supply substantially outstrips demand in commercial real estate



Source: Cushman & Wakefield, CEIC, Goldman Sachs Economics Research.

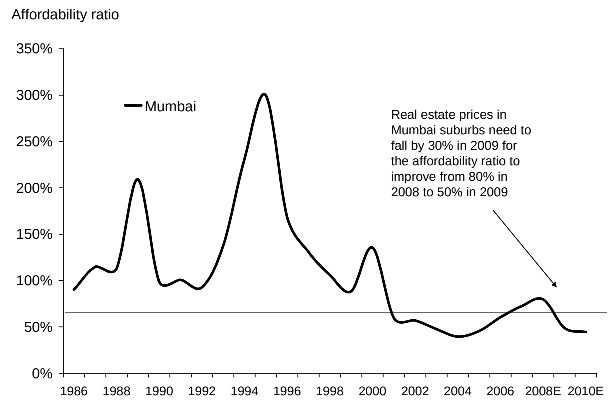
Our India Real Estate Team believes that prices may have to fall by up to 30% in some geographies for affordability to catch up. Although prices over the past three years have gone up in line with other economies globally, they have not corrected substantially, unlike its global peers. Our affordability versus price analysis by our Real Estate Team suggests prices may need to fall by up to 30% in areas such as the suburbs of Mumbai and Bangalore.

As economic growth slows going forward, we think demand for property will continue to decline. Demand for real estate is largely driven by income growth, demographics, interest rates, and inflation, but also people's expectations of future prices. As the economy continues to slow due to the knock-on effect of the global financial crises (see *India: Growth interrupted*, Asia Economics Analyst 08/21, November 10), income growth will come off, thereby reducing demand for housing. Demand for commercial real estate will also be adversely affected due to the slowdown in the IT and Business Process Outsourcing (BPO) sectors, which contribute a large part of the sector's total demand.

II. The importance of construction

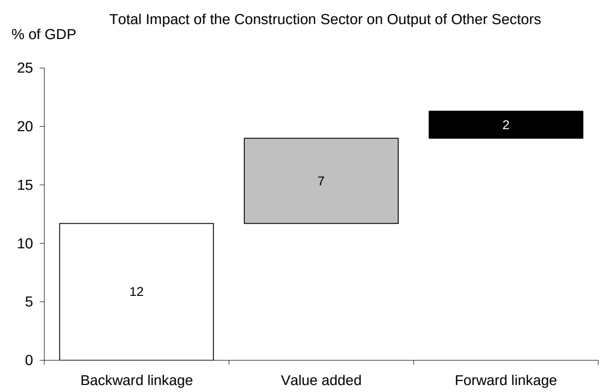
The construction sector has strong linkages with the economy. By using a commodity-industry input-output matrix, we estimate all the linkages that construction has with the rest of the economy. Although the direct impact of construction is 7.3% of GDP, the indirect impact through backward linkages in terms of the sector's usage of iron, steel, cement etc we estimate to be roughly 12% of GDP in FY08 (see Exhibit 4). Of the inputs going into the construction sector, industrial goods account for some 64%, while services such as trade account for a further 34% (see Exhibit 5). Forward linkages of the sector such as hotels, trade and transport account for a further about 2% of GDP. Thus, a slowdown in the

Exhibit 3: Prices need to come off for affordability to improve



Source: CEIC, Goldman Sachs Economics Research.

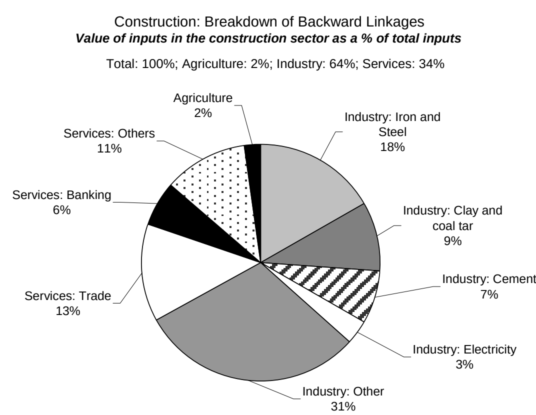
Exhibit 4: The construction sector has deep linkages with the economy



Note: the direct linkages are calculated through coefficients from the input output matrix, using the output to GDP conversion factor.

Source: Ministry of Statistics and Programme Implementation, CEIC, Goldman Sachs Economics Research.

Exhibit 5: What goes into construction?



Source: Ministry of Statistics and Programme Implementation, CEIC, Goldman Sachs Economics Research.

construction sector is likely to have a substantial impact on the economy through multiplier effects, in our view.

In previous downturns, construction growth has fallen significantly. Although not all construction activity will be affected, especially, the estimated 30% which is government-related, private construction activity, in our view, will slow significantly. We estimate that the sector alone, along with its linkages will subtract about 0.7 percentage point (ppt) from GDP in FY09 relative to the previous year, and a further 0.4 ppt in FY10 (see Exhibit 6).

A slowdown in construction will also have a significant impact on employment. The sector has been at the forefront of job creation growing at a CAGR of 7% yoy compared with overall employment growth of 2% yoy. It has seen the fastest growth in employment over the past decade, albeit from a small base (see Exhibit 7). In absolute terms, however, the sector's direct employment of 6% of total employment, remains small.

III. The impact on demand

Falling property prices will, in our view, have a negative impact on domestic demand. Here we elaborate on the channels through which demand will be affected in India.

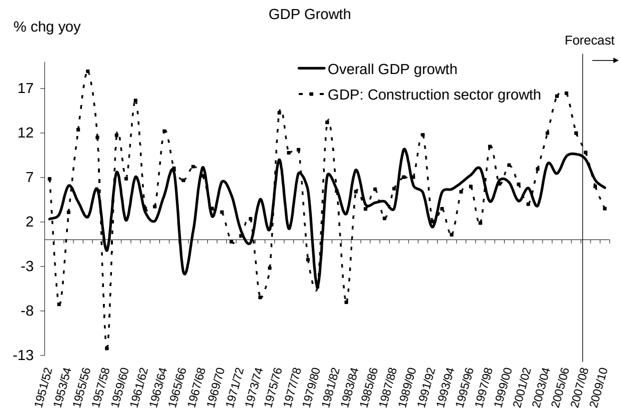
The impact on **consumption** will be felt through the following channels:

- *Negative wealth effects*: Property is traditionally the largest component of household wealth in India. According to the last census, households held more than half of their total assets in property (see Exhibit 8). Hence, a decline in prices will have a significant impact on household wealth, and thereby restrain consumption spending.

- *Lower income growth*: The decline in property prices is also being accompanied by an economic slowdown, which will lead to job losses and lower income growth. As declines in property prices also signals slower growth ahead, peoples' expectations about job losses and lower income growth, whether actual or expected, will act to reduce current consumption.

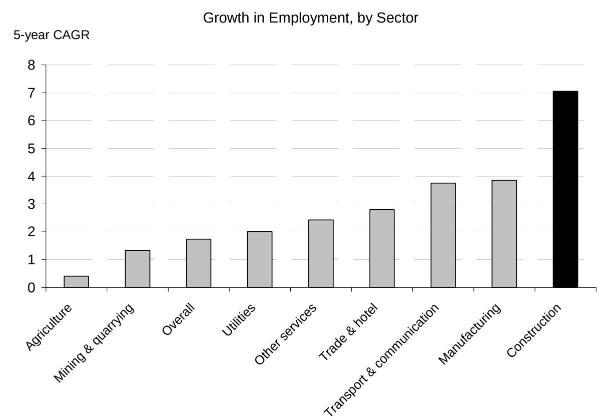
- *Rising borrowing costs*: Declining asset values will erode households' value of collateral and their net worth, making it difficult for them to borrow to finance current consumption. Therefore, their ability to get auto, credit card or other loans also decreases reducing their consumption further.

Exhibit 6: Construction is set to fall sharply after a big boom



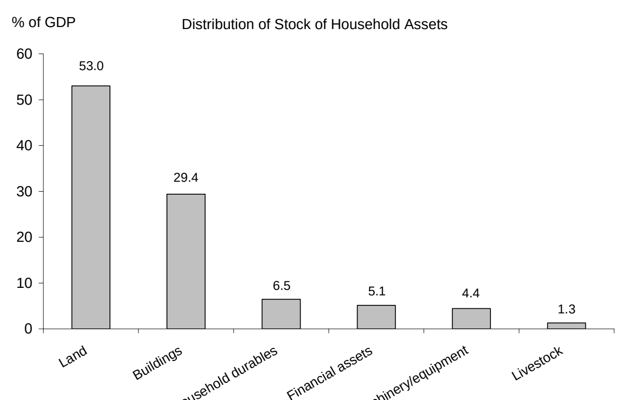
Source: CEIC, Goldman Sachs Economics Research.

Exhibit 7: Where the jobs are—construction employment growth strongest



Source: NSSO, CEIC, Goldman Sachs Economics Research.

Exhibit 8: A large chunk of household assets held as property



Note: as per 2001 census.

Source: NSSO, CEIC, Goldman Sachs Economics Research.

Exhibit 9: Sharp fall and a prolonged slump defined the 1996 real estate bust

Property—real rates and trends in the 1996 bust

Rs / sq. foot	Sharp fall from peak to trough		Number of years from peak to trough		Number of years from trough to recovery	
	% chg yoy		*no. of years*		*no. of years*	
	Residential	Commercial	Residential	Commercial	Residential	Commercial
Mumbai	-49	-51	4	3	6	7
Delhi	-46	-46	5	2	4	7
Chennai	-31	-45	3	2	7	8
Bangalore	-52	-57	3	3	4	6
Kolkata	-26	-35	3	4	3	6
Pune	-32	-40	3	3	8	6
Average	-40	-46	4	3	5	7

Source: Frank Knight, CEIC, Goldman Sachs Economics Research.

Impact on **investment** demand:

- *Financial 'decelerator'*: Falling asset prices hurts the balance sheets of firms reducing their net worth, inducing banks to charge a higher finance premium, which then worsens firms' balance sheets even more. This is particularly true of small and medium sized enterprises (SMEs) for whom access to credit is severely constrained, and for whom property forms a larger proportion of their collateralized assets.[2]

- *Confidence effects*: Falling real estate and equity prices provide entrepreneurs with information about market expectations of future demand, thus influencing investment decisions, and will therefore, we think, reduce investment demand.

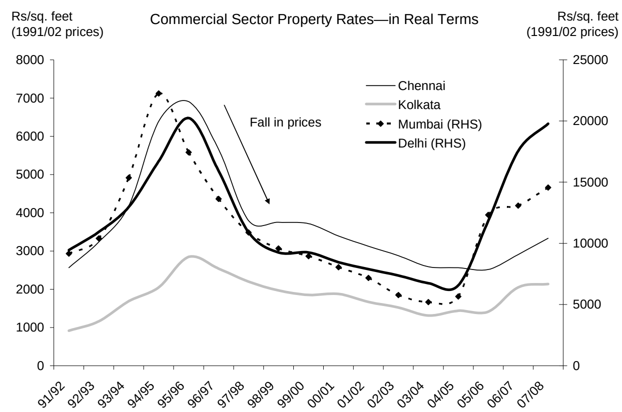
IV. Lessons from previous property busts

The Indian property market witnessed a prolonged trough following a bust in 1996. Residential real estate prices which had seen an increase of on average 70% cumulatively in the three years preceding the 1996 bust, fell 40% in the three years after 1996. After the trough, prices witnessed a prolonged slump of five years before recovering (see Exhibits 9 and 10).

The property market bust was accompanied by a period of relatively lower economic growth. GDP growth which had averaged 6.8% in the four years prior to the bust, fell to 5.4% on average in the four years after it (see Exhibit 11). Although the causes of the growth slowdown were myriad and beyond the scope of this note, there was some impact of the real estate decline on consumption and investment demand.

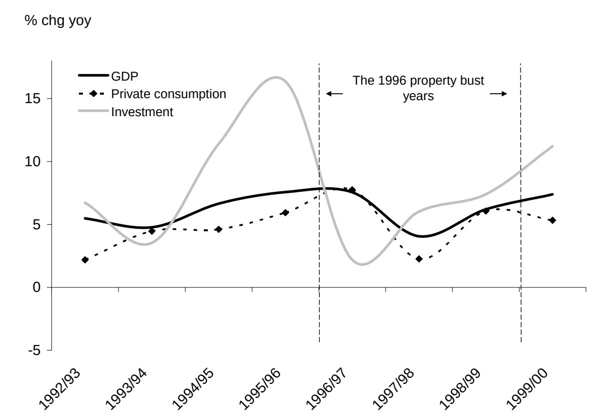
In the current context, we think the impact of a property slowdown can potentially be stronger than in post-1996. In the three years prior to 2008, residential prices had increased some 80% on average. There has also been a large increase in mortgages, albeit from a low base (see Exhibit 12), and more household wealth in absolute terms is in housing. Furthermore, the importance of construction in the economy has progressively increased, from 5.6% of GDP in 1997 to 7.3% of GDP in 2007.

Exhibit 10: Commercial prices fell rapidly after the 1996 bust



Source: Knight Frank, CEIC, Goldman Sachs Economics Research.

Exhibit 11: Economic growth slowed after the 1996 bust



Source: CEIC, Goldman Sachs Economics Research.

[2] For more on the impact of the financial crisis on corporate balance sheets, see *India: Growth, interrupted*, Asia Economics Analyst 08/21, November 10.

International experience also suggests that housing busts are generally prolonged episodes with significant and long-lasting macro consequences. Our Global Economics Team looked at 24 house price busts since the 1970s, across 15 OECD countries.[3] The ‘typical’ housing bust involves a sharp slowing in growth followed by sluggish recovery, significant declines in equity prices and credit growth. Real house prices tended to fall around 30% and only bottomed after six years.

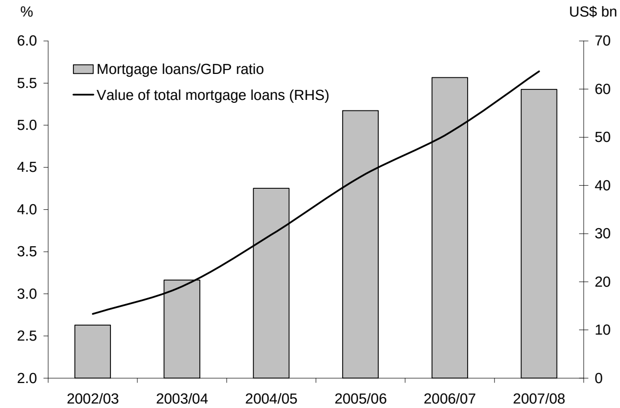
Housing busts generally have larger wealth effects on consumption, deeper effects on the banking system, and a high degree of contagion to other asset classes, compared with equity busts. The IMF, in its study on housing busts[4] found that they are associated with declines in growth rates of consumption, investment in machinery and equipment, investment in construction. Private consumption fell sharply and immediately in the case of housing price busts.[5] Output usually started to recover about nine quarters after the start of a housing/equity bust. The magnitude of the asset price fall during a bust depended on the size of the run-up in prices prior to the bust. In India’s case, the impact will be significantly lower than in the OECD due to less reliance on rising house prices to access more consumer credit, and also substantially lower wealth effects.

V. The mitigating factors

Although property prices are set for a sharp fall, there are several factors that will help keep the slowdown from being excessively protracted, in our view. First, India’s favorable demographics with a large number of young people, high savings rate, and low mortgage penetration suggest that demand for housing will continue to rise structurally. Second, falling interest rates will boost demand. Third, low-cost housing remains woefully undersupplied. Finally, there is significant demand for infrastructure.

All of these factors suggest that we are in a cyclical bear market in the property space rather than a structural one. Therefore, a slowdown can be expected, but not a prolonged bust.

Exhibit 12: Mortgages have increased rapidly, albeit from a low base



Source: Knight Frank, CEIC, Goldman Sachs Economics Research.

We believe that the swifter the policy response, the less-protracted the downturn is likely to be. Lessons from the Japanese property bust[6] suggest a speedy disposal of non-performing loans and a quick fall in property prices can stimulate demand. Additionally, an emphasis on low-cost housing, incentivizing state governments to deliver on infrastructure, increased efficiency of government spending, and movement in urban infrastructure will help keep construction activity from falling too rapidly. Although the near-term outlook remains negative as a cyclical slowdown is exacerbated by a large negative external shock, amidst the desolation of the current crisis will be sown the seeds of the next bloom in the sector.

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[3] See *The US Housing Bust in International Perspective*, Global Economics Weekly 08/14, April 16.

[4] See *When Bubbles Burst*, IMF study, April 2003.

[5] Property busts were also associated with stronger effects on banking systems than equity price busts, due to rapid increases in provisioning costs, capital-to-asset coverage of banks decreasing by more and faster, constraining lending capacity, and lower pre-tax profits leading to a reduced willingness to lend.

[6] See *Financial Crisis: History Repeats Itself (Part III)*, Japan Economics Analyst 08/25, November 17.

Appendix: Activity indicators in a snapshot

% chg yoy	Unit	Latest	FY08	FY09	FY08	FY09
			Latest month		Year to date	
Monetary						
M3	% chg yoy	7-Nov	23.8	19.2	21.4	20.6
Currency with public	% chg yoy	7-Nov	16.6	17.4	13.8	19.7
Total bank credit	% chg yoy	7-Nov	23.5	27.7	23.8	26.3
Non-food credit	% chg yoy	7-Nov	24.1	27.5	24.1	26.6
Foreign inflows						
Net FII (equity)	US$ bn	Oct	4.3	-3.5	15.7	-9.7
Gross FDI	US$ bn	Sep	0.7	2.6	7.3	17.2
Gross External Commercial Borrowings	US$ bn	Sep	11.2	15.3	77.1	99.7
Central government budget						
Income tax revenue	% chg yoy	Sep	37.1	20.6	35.3	30.8
Corporate tax revenue	% chg yoy	Sep	32.4	31.2	38.6	38.2
Government capital expenditure	% chg yoy	Sep	-14.0	12.2	176.6	-56.0
Government total expenditure	% chg yoy	Sep	26.0	49.3	26.2	9.8
Production						
Industrial Production Capital Index	% chg yoy	Sep	20.9	18.8	20.2	10.6
Industrial Production Overall Index	% chg yoy	Sep	7.0	4.8	9.5	4.9
Infrastructure Index	% chg yoy	Sep	5.8	5.1	6.9	4.0
PMI Index	Index	Oct	61.7	52.2	56.0	57.0
Cement production	% chg yoy	Sep	4.9	8.6	8.4	6.7
Transport						
Commercial vehicle sales	% chg yoy	Oct	13.3	-34.9	5.2	-2.6
Maruti Suzuki sales	% chg yoy	Oct	15.4	-7.1	-	3.7
Tata Motors sales	% chg yoy	Oct	6.0	-19.5	-	-2.2
Bajaj Autos	% chg yoy	Oct	-1.0	-34.0	-	-
Domestic airline traffic	% chg yoy	Sep	24.3	-20.7	31.4	-6.7
Railway goods traffic (volume)	% chg yoy	Sep	9.2	8.2	-	-
Port cargo traffic (volume)	% chg yoy	Sep	-	-	13.7	7.2
Others						
Tourism revenue (USD)	% chg yoy	Oct	15.4	-9.0	22.1	8.8
Cellular subscribers	% chg yoy	Oct	67.5	50.8	71.1	54.5
Non-oil imports	% chg yoy	Sep	-4.5	36.2	32.9	29.3
Total exports	% chg yoy	Sep	16.1	10.4	16.8	32.1
Agriculture						
			FY08		**FY09**	
Kharif (monsoon) crop	mn tons	Jun-Sept (First est.)	112.2		115.3	

Source: CEIC, Bloomberg, Reuters, RBI, SEBI, Goldman Sachs Economics Research.

Singapore: Coping with crisis

This article was first published on November 21, 2008.

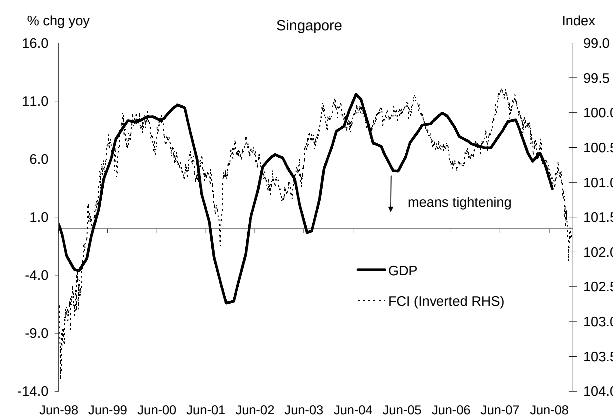
- The scale of global financial market turmoil and the resultant tightening in financial conditions will weigh on growth, on top of the gloomy export picture that we have already built into our previous forecasts.
- We are revising our GDP growth forecasts to 2% for 2008 and decidedly lower for 2009 to -2.2% from 3% and 2% previously. Growth could slow beyond our forecasts, if decisive policy action fails to materialize over the coming months.
- Fortunately, Singapore does have the flexibility to ease both monetary and fiscal policies. We believe inflationary pressures will recede much quicker with the commodity price declines and the continued growth slowdown, leaving the Monetary Authority of Singapore (MAS) room to ease further from its current neutral stance. There is also scope for considerable fiscal stimulus.
- We think the urgency of the situation could have the MAS bring forward policy easing before its meeting next April, especially if SGD NEER tests the weak side of the band in the near term. We are shifting our USD/SGD forecasts to 1.56, 1.60 and 1.52 on 3, 6 and 12-month horizons, to reflect this possible inter-meeting ease.

The scale of turmoil that we have been seeing in the global financial markets and the larger-than-expected tightening in financial conditions (mainly from the plunge in equity markets) pose an additional risk to growth, on top of the already slowing exports picture that we had factored into our previous growth forecasts (see Exhibit 1).

We have recently looked at the impact of tightening financial conditions across the region and have estimated the Financial Conditions Index (FCI) for each country including Singapore (see *Financial conditions tightening in Asia—further policy responses needed to mitigate additional downside risks*, Asia Economics Flash, November 14). Looking at the historical impact of the FCI tightening on growth, we estimate that a 100-bp tightening in Singapore's FCI implies a reduction in GDP growth by 230 bp, with a lag of around 2-3 quarters. Given the over 200 bp of tightening that we have seen in the 3Q2008 alone (and 400 bp year-to-date), this implies that real GDP growth could easily plunge below -4% yoy in 1H2009.

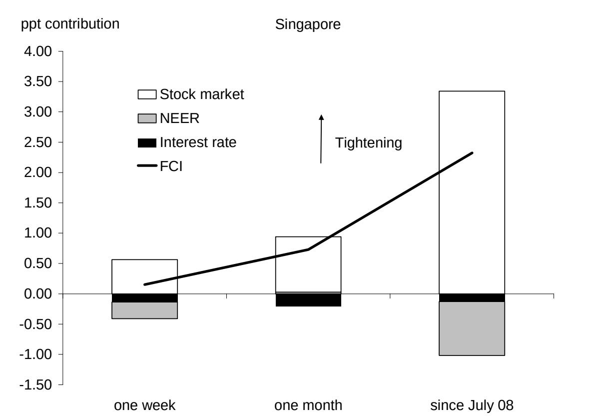
Of course, there are mitigating factors that will alleviate the downside risks to growth, including import compression. However, this is more of a side-effect of slowing domestic demand, which isn't a positive by itself. The other bright spot is the steep fall-off in oil prices which will no doubt boost real incomes. Overall though, things do not look like they are getting any better—our Global Leading Indicator (GLI, our proprietary leading index of the global industrial cycle) continues to point towards further deceleration with November's growth at -1.5% yoy from last month's

Exhibit 1: Tightening in financial conditions will weigh on growth, on top of the gloomy export picture



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

Exhibit 2: FCI tightening led by plunge in stock markets



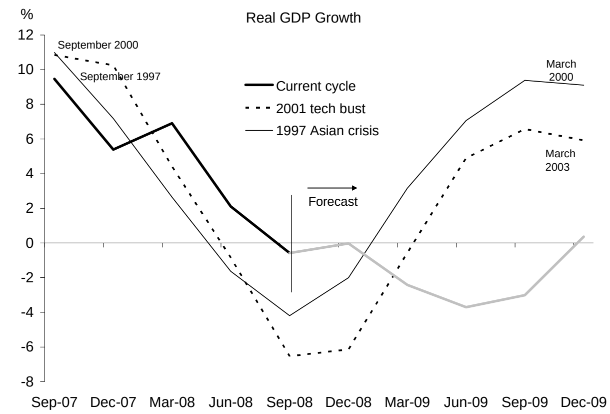
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

-1.3% yoy. The downside risks are clear and threaten to pull Singapore into a steeper and more prolonged recession, in our view. This warrants quick and forceful policy stimulus in the form of both monetary and fiscal easing.

In light of the factors discussed above, **we are revising our GDP growth forecasts to 2% for 2008 and decidedly lower to -2.2% for 2009 from 3% and 2% previously**. Our forecasts already assume that we will see policymakers utilize the full extent of their policy toolkit to prevent a sharper slowdown. Growth could slow beyond our forecasts, if decisive policy actions fail to materialize over the coming months.

The government also revised down its forecasts on November 21 with the release of the final 3Q 2008 GDP numbers. There were no surprises to the final 3Q2008 numbers at -0.6% yoy, roughly inline with the advanced reading. However, the government does forecast slower growth in 2009 at -1.0% to +2.0%.

Exhibit 3: GDP forecasts: Not as steep as previous recessions (if decisive policy action is taken) but the recovery will also be less sharp



Source: CEIC, Goldman Sachs Economics Research.

There is a need to ease policy and Singapore has the flexibility and tools

We had previously thought that the MAS would wait till its scheduled meeting next April before enacting a possible downward re-entering of the SGD policy bands. However, it now looks like growth will slow much faster than expected in 1H2009.

A weaker SGD may not actually provide that much of a boost to exports, given the cause is one of demand compression rather than competitiveness, i.e., any beneficial impact from a weaker currency would be more than outweighed by the slowdown in global demand. Nonetheless, given the scale of global disruption and the amount of tightening in financial conditions, there is an increasingly pressing need to make use of the full range of policy tools available to minimize the downside risks to growth.

Inflationary pressures are also fading fast, leaving the path clear for the MAS to ease. We believe the sharp declines that we have witnessed in global oil prices and the quickly narrowing domestic output gap will also see inflationary pressures recede quicker than previously anticipated. We will also likely see CPI inflation drop off more significantly starting from January next year as the base effects from the earlier revisions to public housing annual values kick in. **We now expect CPI inflation to average 2% in 2009, from our previous forecast of 3.4%**.

We think an inter-meeting ease by the MAS is likely

With inflation fears out of the picture, the MAS will be able to focus on the pressing need to boost growth. However, we think that it is more likely that the inter-meeting ease comes in the next few months, possibly in January, rather than in the next few weeks.

Recall the MAS's policy actions in the last recession of 2001. Then, the MAS shifted from a modest appreciation stance to a neutral one in June 2001. This was followed by a band widening in October 2001, after the extreme volatility immediately after the September 11 attacks. MAS then followed up with a downward re-centering of the band in January 2002 (as the SGD NEER traded through the weak side of the band), but still leaving the slope of the bands unchanged at zero percent appreciation.

Currently, there is still room within present settings for the SGD NEER to weaken—the SGD NEER has not really tested the weak side of the band yet (see Exhibit 4). Thus no immediate rush for an imminent inter-meeting move. We think January could be more likely, especially if SGD NEER is threatening to push though the weaker end of the band by then. We would also have inflation drop off more significantly, as well as the advanced 4Q GDP numbers by then. Timing an inter-meeting ease with the planned fiscal budget announcement then would send a powerful and welcomed intent of policy decisiveness.

We are shifting our USD/SGD forecasts to 1.56, 1.60 and 1.52 on 3, 6 and 12-month horizons, to reflect this possible inter-meeting ease. We expect the SGD NEER to trade to the weak side of the band in the next 3-6 months, even with the possible downward re-centering of the band. There is some scope for SGD NEER to rebound off the weak side, but that is more likely further out (12 months) as recovery prospects build. We believe the expectation for further SGD weakness will set the stage for gradual upward pressure on rates. However, the authorities will likely not be comfortable with a further tightening in financial conditions via interest rates. **We expect the 3-month SGD SIBOR to head up now to 1%, 1.5% and 2% on a 3, 6 and 12-month basis**, more gradually than our previous forecast path of 2%, 2.5% and 3%.

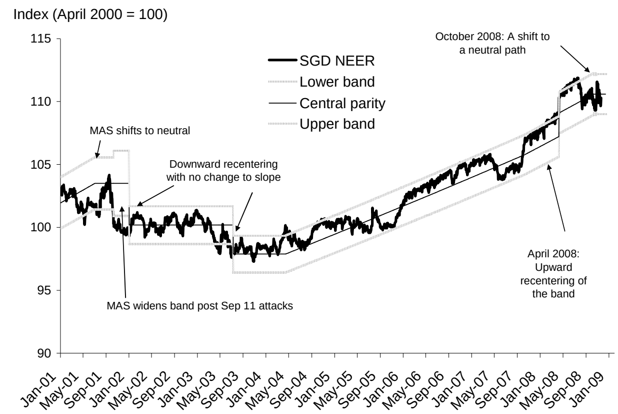
The main upside risk to our rather dim growth outlook is if the global demand recovers more forcefully than our baseline forecasts suggest. We see the risks to that fairly balanced for now. We would highlight the main indicator to watch here is our GLI. The main upside surprise could come from a more significant and coordinated policy response to stimulate growth globally, particularly in US and China. Outside of external demand, we would look out for further signs of normalization in global credit markets, possibly against the backdrop of stabilization in growth outlook. We believe the recent decline in money market rates highlights the likelihood that the dislocations in the money market are gradually easing. This could provide offsetting downward pressure to our SIBOR forecasts.

The government is already lining up a sizable fiscal boost next year

The recent decision to allow the government to tap into 50% of its investment returns for expenditure (including capital gains, where previously it was limited to just interest and dividend payments) will provide additional room to manoeuvre. The recent announcement to bring forward the budget announcement to January from February also hints at the government's realization of the urgency of the situation.

The government announced this morning (November 21) that it will support an additional loan support of S$2.3 billion to improve credit access for local firms effective December 1, 2008. They are also allocating S$600 million over the next 2 years for local workers to upgrade their skills. Indeed, these latest measures announced by the government are just the beginning of what should be a more concerted effort to provide direct aid to businesses and workers. The main objective of the upcoming budget will be to alleviate the pain of low-

Exhibit 4: SGD NEER vs. bands: The MAS still has room within current settings to guide the SGD weaker, so no rush for an immediate policy move



Source: Bloomberg, Goldman Sachs Economics Research.

income households, minimize job losses and helping businesses (especially small and medium enterprises).

The only fear is that although they are warming up to the idea of providing stimulus to the economy, they may not choose to frontload the stimulus and instead save their bullets depending on how bad growth gets. We could possibly see four consecutive quarters of negative growth next year. The government has been accumulating surpluses in the boom years and we believe now is the time for decisive policy action.

Mark Tan
Enoch Fung

Taiwan: Further growth weakness ahead

This article was first published on November 20, 2008.

Exhibit 1: Breakdown of GDP growth by components

% chg yoy	3Q08	2Q08	1Q08	4Q07	3Q07
Real GDP	**-1.0**	4.6	6.3	6.5	6.9
Private consumption	**-2.0**	0.5	2.0	1.9	3.5
Fixed investment	**-10.7**	-8.0	4.4	-1.7	5.0
Government consumption	**1.3**	-0.2	1.7	1.5	1.7
Exports (G&S)	**-0.6**	9.9	11.8	12.9	11.1
Imports (G&S)	**-2.4**	0.2	8.9	5.2	7.7

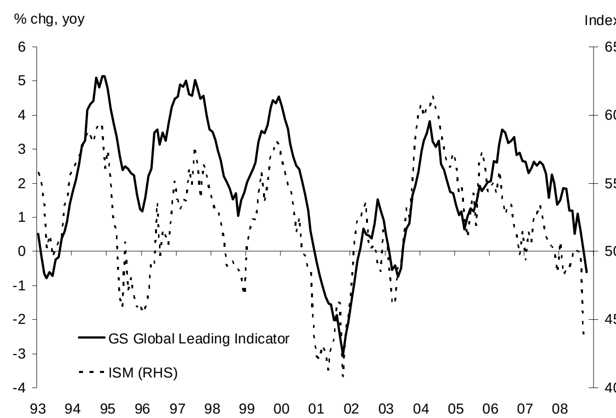
Source: CEIC, Goldman Sachs Economics Research.

3Q2008 GDP to show continued weakness. 3Q2008 GDP contracted by 1.0% yoy, after registering growth of 4.6% yoy in 2Q2008. This is lower than our and the market's expectation of 1.0% yoy growth. Domestic demand contracted again by 2.2% yoy, following a 2.6% contraction in 2Q2008. We see a notable slowdown in private consumption and investments Exports also declined sharply by 0.6% yoy, after growing by 9.9% yoy in 2Q2008.

We are revising down our 2008 and 2009 GDP growth forecasts to 1.5% and -2.0% respectively, from our already below-consensus forecasts of 3.0% and 2.2% previously. Our forecasts imply GDP growth to remain in negative territory through to 3Q2009. The government has also revised their official GDP growth forecasts to 1.9% and 2.1% for 2008 and 2009 respectively, from 4.3% and 5.1% previously. With a weaker global industrial cycle ahead, our global economists have downgraded growth projections. We have also recently downgraded our China GDP growth forecasts, and now see GDP growth slowing to 7.5% in 2009, from 9.0% in 2008 (versus our previous expectations of 8.7% and 9.8% for 2009 and 2008 respectively). Our Global Leading Indicator, an early indicator for the global industrial cycle, continues to foretell deterioration in external demand (see Exhibit 2).

With a more opaque exports outlook ahead, we see few catalysts in lifting domestic demand. October's exports fell sharply by 8.3% yoy, following a gain of

Exhibit 2: Latest Global Leading Indicator points to a weaker global industrial cycle ahead



Source: CEIC, Goldman Sachs Economics Research.

8.1% yoy in 3Q2008. Exports to developed economies are already exhibiting signs of notable slowdown since 2Q2008. Exports growth to other emerging markets held up relatively better thus far, but its contribution was too small to offer much offset to the slower demand elsewhere. Historically, Taiwan's domestic investment cycle is intertwined with the exports cycle. On the other hand, construction activities have already been slowing, as the positive sentiments in the property market after the presidential election fade. Hence, we also expect construction investments to offer little buffer to the

Exhibit 3: Table of forecasts

	2005	2006	2007	2008F		2009F	
				old	new	old	new
GDP (%)	**4.2**	**4.9**	**5.7**	3.0	**1.5**	2.2	**-2.0**
Private Consumption (%)	**3.0**	**1.8**	**2.6**	0.5	**-0.4**	0.9	**-1.5**
Fixed asset investments (%)	**1.2**	**0.6**	**2.4**	-4.6	**-6.3**	1.7	**-6.4**
Exports of goods and services (%)	**7.6**	**10.4**	**8.8**	4.9	**3.5**	-1.5	**-5.7**
Imports of goods and services (%)	**3.8**	**5.2**	**4.0**	0.2	**-0.4**	-1.5	**-7.6**

Source: CEIC, Goldman Sachs Economics Research.

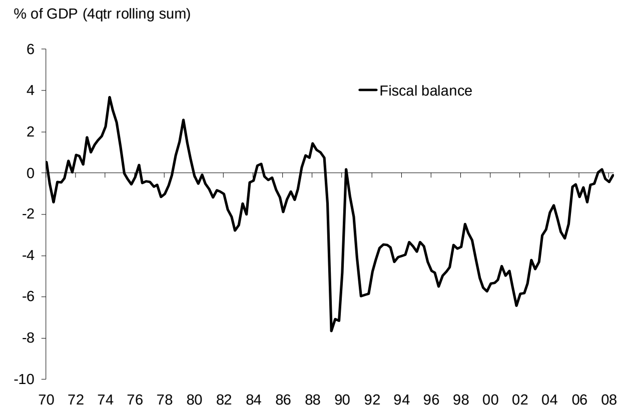
domestic investment cycle. As for consumption, with the weaker export and domestic capex cycle ahead, we do not see any major catalysts in lifting the labor market and the domestic consumption cycle either.

We expect the central bank to continue its aggressive monetary easing in 2009. Taiwan is also amongst the first in the region to provide guarantees to deposits and interbank loans, and raised the government guarantee levels of banks' loans to small and medium enterprises (SME). We believe the swift and anticipatory policy actions would help Taiwan mitigate further downside risks to our growth foreasts. As we highlighted before in *Taiwan: Policy mix turning more supportive, but cyclical headwinds still prevails*, Asia Economics Flash, September 29, the silver lining is that we believe Taiwan can afford to ease monetary policy, when faced with intensifying global cyclical headwinds. This is largely owing to the moderating domestic inflation pressures. **Therefore, we expect another rate cut of 25 bp in its upcoming policy meeting in December. Going into 2009, we expect another 100 bp of reduction in the policy rate by the central bank, bringing the policy rate to 1.50%**. We believe the central bank would most likely front-load most of the policy rate reduction in 1H2009, rather than waiting until the scheduled policy meeting at the end of each quarter.

We have long highlighted that the government does have the flexibility to pursue a more expansionary fiscal policy. Nonetheless, we believe the cyclical headwinds from a weakening global macro outlook should still prevail in the near term. Given the lack of government spending as a result of the political stalemate in the past years, the government's fiscal position has been improving (see Exhibit 4). Ironically, this has now allowed the government greater flexibility to pursue a more expansionary fiscal policy. With a more stable domestic political environment since the inauguration of the new Kuomintang (KMT) government and an absolute majority enjoyed by the KMT in the Legislative Yuan, we expect the political resistance towards the proposed fiscal stimuli package to be minimal. Taiwan's cabinet announced that they have drafted a NT$482.9 billion (around US$15 billion) economic stimulus proposal to stimulate the economy:

1. NT$3,600 worth of shopping vouchers will be issued to each Taiwan citizen (total NT$82.9 billion) before the Lunar New Year to boost domestic spending. The coupons could only be used to purchase goods at local retail outlets. We are doubtful of the impact of these measures, especially when consumer confidence is falling sharply (see Exhibit 5).

Exhibit 4: The "improved" fiscal position allows more room for fiscal stimulus



Source: CEIC, Goldman Sachs Economics Research.

Exhibit 5: Consumer confidence falling sharply

Source: CEIC, Goldman Sachs Economics Research.

2. Expansion of public infrastructure spending, including railways, transport infrastructures, sewage system, rural area redevelopments etc. It is estimated to cost NT$400 billion over the next four years.

3. Measures to strengthen private investment, including the extension of the existing SME investment and interest payment subsidies and trade financing program.

4. Urban renewal program, including land development and urban planning etc.

In terms of the timeline of the government spending, the government will give out the NT$82.9 billion in shopping vouchers before end-January 2009, and the NT$400 billion infrastructure spending above would be spread over the next four years (i.e., NT$100 billion per year). Therefore, the total size of stimulus by the government in 2009 will amount to NT$182.9 billion (or around 1.5% of GDP). There could be more details on the infrastructure expenditure plan next week, as the proposal is submitted to the Legislative Yuan.

We also expect more affirmative progress on cross-strait relationship and policies. Taiwan's Straits Exchange Foundation (SEF) and mainland China's Association for Relations across the Taiwan Straits (ARATS) have signed agreements on a number of cross-strait economic policies this year. We believe greater economic ties with the mainland economy should help support growth in the longer term, as we highlighted in our recent article (see *Taiwan: From cross-strait relationship normalization to sustaining longer-term growth*, Asia Economics Flash, July 28). **However, we expect the economic impact from these positive cross-strait economic policies to come to fruition in late-2009 the earliest, and will unlikely offer much immediate offset to the strong global cyclical headwinds in near term**.

Enoch Fung

The Hong Kong Monetary Authority curbs HKD strength, brings aggregate balance to record high

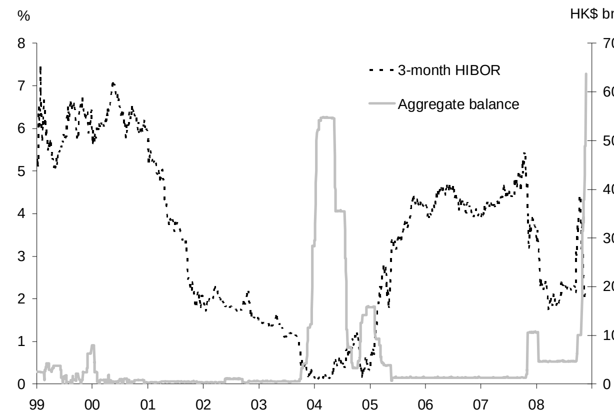
This article was first published on November 19, 2008.

The Hong Kong Monetary Authority (HKMA) intervened again in the foreign exchange (FX) market to stem HKD strength on November 19, resulting in additional liquidity in the system. The HKD had been consistently hitting the stronger side of the convertibility undertaking band of 7.75 in recent weeks. In response, the HKMA intervened in the FX market four times today by buying USD and selling HKD to the market. The exercise resulted in an addition of HK$10.6 billion into the market. As a result of the liquidity injections in the past two months, the additional HKD in the system brings the aggregate balance to a record level of HK$63.7 billion. The last peak in the aggregate balance level was HK$54.7 billion recorded in early-2004. When the aggregate balance was at the previous record high in early-2004, the HIBOR was hovering around the 0% level.

We expect more FX intervention by the HKMA, due to the ongoing deleveraging activities in the market, resulting in more liquidity additions to the system. We believe the strength in the HKD spot against the USD has been driven by the demand for HKD cash, as local investment companies face redemption pressures, combined with the ongoing deleveraging activities in the market as financial institutions demand for liquidity rises. The deleveraging activities resulted in the unwinding of carry trades, whereby investors had previously taken advantage of the negative yield differentials between HKD and USD interest rates by selling HKD to buy USD. We also suspect there could be some repatriation of offshore savings, in response to local demand for HKD. We expect these factors to continue to create strong-side pressure for the HKD, prompting the HKMA to actively intervene in the FX market and inject more liquidity into the system.

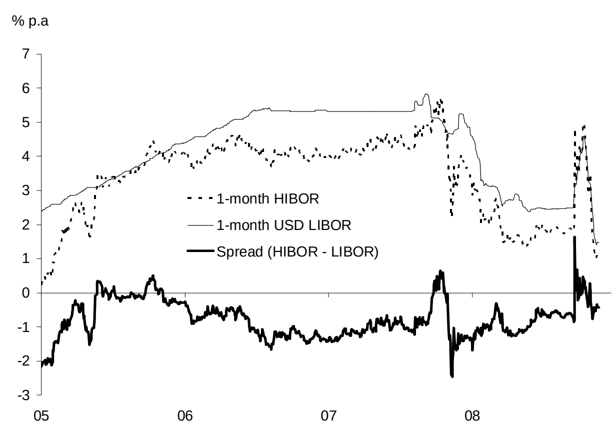
The HIBOR has stabilized back to (or lower than) August levels. The 3-month HIBOR fell sharply back to around the 2% level recently, after spiking up to almost 4.5% in October. For HIBOR with durations shorter than 3-months, their levels are already below August levels. This is in line with the trends in the global money market rates, especially the LIBOR, as the money market dislocations gradually eased (see Exhibit 2). We believe the record level of liquidity injected into the system by the HKMA in the past two months also contributed to the HIBOR collapse significantly. Thus far, local commercial banks' appetite to lend is subdued, given the credit quality concerns in a deteriorating growth environment. The lack of confidence by banks to lend

Exhibit 1: Aggregate balance reaching a record high



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

Exhibit 2: The HIBOR fell sharply on the easing of global money market distress



Source: CEIC, Goldman Sachs Economics Research.

implies that the monetary base expansion is not translating into an increase in credit activities (absence of credit multiplier effect). However, given time, as credit market normalizes and funding costs continue to fall, we believe the pressure on banks to lend should begin to build.

The easing of local money market rates could offer some relief to the tight financial conditions locally. Relative to the rest of the region, the overall financial conditions in Hong Kong have tightening the most (see

Exhibit 3: Recent policy actions by the HKMA

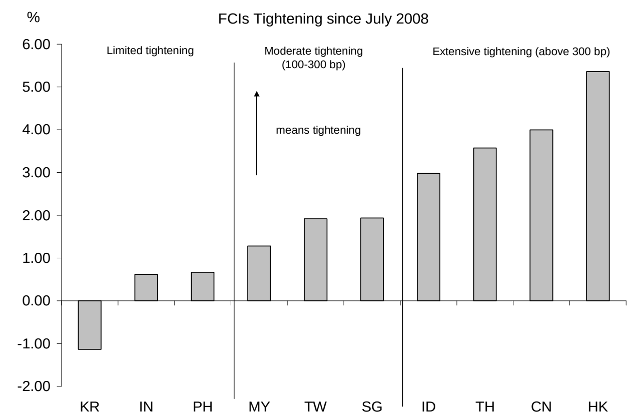
Date	Policy actions
Since Sep 18	Almost HK$60 bn of net injection into the system through FX intervention
30-Sep	Five liquidity assistance measures
8-Oct	Reduction of base lending rate
20-Oct	Issues EFBN to improve banks' liquidity management

Source: HKMA, Goldman Sachs Economics Research.

Exhibit 4), as highlighted in our recent article (see *Financial conditions tightening in Asia—further policy responses needed to mitigate additional downside risks*, Asia Economics Flash, November 14). Amalgamating the weakness in equity prices, higher interest rates and a stronger currency, the sharp tightening of overall financial conditions will likely drag asset prices and growth (see *Hong Kong: Tighter local financial conditions exacerbates growth concerns*, Asia Economics Flash, October 31).

However, we still expect growth to slow sharply in the coming quarters. Our forecasts already imply that the economy will remain in recession mode through mid-2009. We expect GDP growth to slow to -0.5% yoy in 1H2009, from our forecasted 3.0% in 2008. We see risks to our forecasts skewed to the downside. We expect consumption growth to slow further, as indicated by the weak retail sales figures recently, with the impact of a softer labor market and the negative wealth effect setting in. We forecast domestic demand growth to slow sharply to 0.8% yoy in 2009 from 2.7% yoy in 2008. We expect the unemployment rate to begin to trend up, reaching 3.8% by end-2008, and reaching 5.0% by end-2009. We see risks that the unemployment rate would reach higher than our current forecasts.

Exhibit 4: Financial conditions tightening most in Hong Kong, China, Indonesia and Thailand



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

Enoch Fung

China: Lower growth and inflation in the near term—revising down our 2008 and 2009 GDP growth and inflation forecasts

This article was first published on November 15, 2008.

- We revise down our 2008 and 2009 GDP growth forecasts to 9.0% and 7.5% from 9.8% and 8.7% respectively, given the sharp deterioration in the external environment, and the challenges facing domestic fixed asset investments, in particular, the real estate sector.

- We also revise down our 2008 and 2009 CPI inflation forecasts to 6.1% and 1.0%, from 6.3% and 1.5% respectively, on the back of slower growth and lower commodity prices.

- We expect policy responses to be active and aggressive in the coming quarters, on both fiscal and monetary fronts. We now expect at least 150 bp of cuts in the benchmark lending and deposit rates by end-2009, accompanied by a few more cuts in the reserve requirement ratio, which are likely to be front-loaded between now and 1H2009. We also expect a significant pickup in government *investment* expenditures, especially in infrastructure building, though we believe this will be partially at the expense of other government *consumption* expenditures.

- Given the government's determination to response to this cyclical (not secular) downturn, we expect China's growth momentum to start recovering in 2H2009 as the monetary easing and fiscal stimulus take hold and external economic environment improves.

Exhibit 1: Our revised forecasts

Summary Indicators

(percentage change, unless otherwise indicated)

	2006	2007	2008F		2009F	
GDP by expenditure (at 1990 prices)			**New**	Old	New	Old
GDP	11.6	11.9	**9.0**	9.8	**7.5**	8.7
Domestic demand	9.9	9.4	**8.9**	9.8	**6.9**	8.5
Private consumption	8.4	9.3	**9.0**	10.0	**8.0**	9.0
Government consumption	9.7	9.5	**9.5**	10.0	**6.5**	8.0
Fixed investment	11.4	10.6	**8.5**	9.8	**6.5**	8.5
Net exports (contribution to growth)	2.4	3.2	**1.0**	1.0	**1.3**	1.1
Exports (G&S)	19.6	19.0	**11.8**	11.8	**-3.0**	6.5
Imports (G&S)	18.1	16.8	**12.0**	12.0	**-5.0**	6.0
Memo:						
CPI inflation (period average)	1.5	4.8	**6.1**	6.3	**1.0**	1.5

Source: CEIC, Goldman Sachs Economics Research.

We further revise down our 2008-2009 GDP growth forecasts on a gloomier outlook for exports on the back of the intensified global economic turmoil, as well as deteriorating domestic demand, given the expected further corrections in the real estate and manufacturing industries. **We now expect GDP to grow by 7.5% in 2009 vs. our previous forecast of 8.7% and the consensus forecast of 8.1%**. We also tune down our 2008 GDP growth forecast to 9.0%, from 9.8% previously (see Exhibit 1).

Downgrading 2009 GDP and inflation forecasts on intensified cyclical headwinds

Growth has surprised significantly on the downside after the Olympic/Paralympic-related restrictions on transportation, construction and production were lifted in late-September. Instead of showing a rebound in real activity growth, October activity data surprised on the downside across the board. In particular, electricity production growth reached negative territory for the first time since 1998 (-4% yoy) while industrial production growth also softened to post Asian Financial Crisis levels (8.2% yoy).

We believe that the sharp slowdown in production is driven by the deceleration in both external and domestic demand, as suggested by the latest trade and investment growth data.

External environment is deteriorating quickly

World growth has clearly lost momentum over the past few months and our Global Leading Indicator continued to decline, pointing to a further slowdown in activity the coming months. Our Global Economics Team has recently further downgraded their global GDP growth forecast for 2009 to 2.2% from 2.7%, implying a step down to 1.3% from 1.9% for growth elsewhere than China [China accounts for 11% of the global economy at purchasing-power-parity exchange rates,[1] and so is contributing 0.9 percentage point (ppt) to global growth in 2008. Therefore, our global growth forecast would have to be further revised down after our revision of China's GDP growth forecast] (see Exhibit 2 and *More growth pressure, more stimulus*, Global Economics Weekly 08/39, November 12).

With gloomier growth prospects in both the advanced economies and emerging markets, we now expect China's export volume to fall by 3% yoy in 2009, vs. our previous forecast of 6.5% yoy growth and 11.8% yoy growth in 2008.

Domestic investment demand has also been weakening, with more challenges ahead in 2009

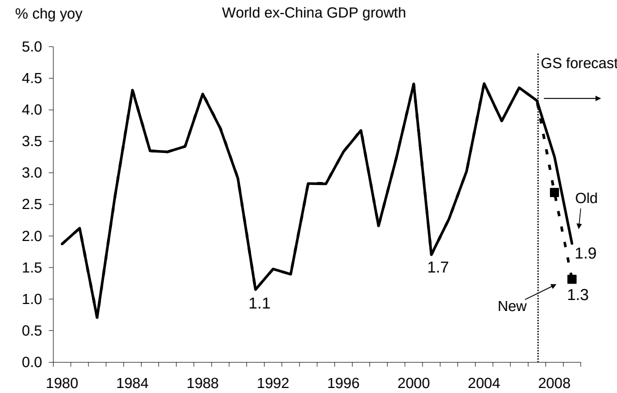
We expect gross fixed capital formation to grow at 6.5% yoy only in 2009, revised down from our previous forecast of 8.0% yoy, indicating a significant slowdown from the expected 8.5% yoy growth in 2008. Despite the active efforts of the government on fiscal stimulus and monetary easing, we still expect overall investment demand growth to decelerate in 2009, driven by a sharp correction in real estate investments and a moderation in manufacturing capital formation growth.

We have been flagging the risk of a significant downturn in real estate investment (see *China: Lower growth, lower inflation, and more active policy support—our forecasts changed for 2008-2009*, Asia Economics Analyst 08/18, September 26). Although official nominal real estate investment growth has remained at a relatively robust level up to now, our estimated real estate investment growth has been slowing significantly since this time last year (see Exhibit 3).

Based on information including rising property inventory level, we expect the corrections in property prices and real estate investment to be a lengthy process which is likely to continue well into 2009. Against this backdrop, our property and banks analysts have also anticipated a cash-flow squeeze for developers, particularly in 4Q2008 and 1H2009 (see *China: Banks: Property developer loans: S/T risks, low systemic risks; be selective*, September 9).

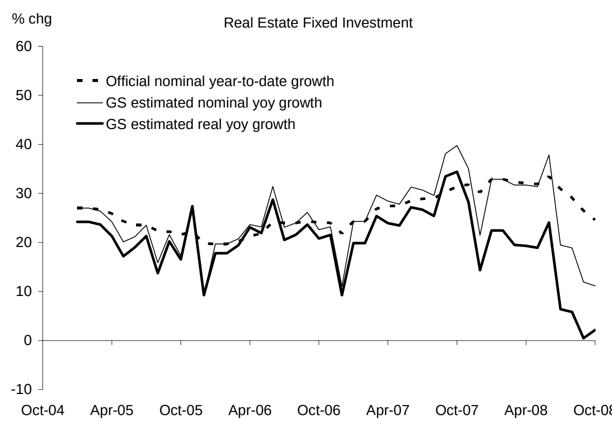
[1] IMF estimate, World Economic Outlook Database, October 2008.

Exhibit 2: External environment has become much more challenging



Source: CEIC, Goldman Sachs Economics Research.

Exhibit 3: Real estate investment growth has softened significantly over the past year



Source: CEIC, Goldman Sachs Economics Research.

Given the headwinds facing the property sector, our property analyst is expecting a -20% negative growth in 2009, compared with 20%+ yoy growth in 2008. We estimate that when holding other things equal, a 40 ppt slowdown in nominal real estate investment growth translates into around a 2.0 ppt subtraction of contribution to nominal GDP growth.[2]

Meanwhile, a sharp slowdown in exports will weigh on manufacturing capital formation, since the flip side of the rapid rise in exports to GDP ratio in China is the rapid

[2] Nominal real estate investment (REI) constitutes about 17%-18% of nominal fixed asset investment, which in turn takes up about 40% of GDP. From these we calculate nominal REI to be 18% *40% = 7% of GDP. However, this number might be overstating the share of REI as REI statistics include 30% or more of land purchasing premium which should not be counted as part of the value-added GDP. Therefore, we estimate that real estate investment makes up about 5%-6% of real GDP and a 40-ppt decline in its growth rate reduces its contribution to nominal GDP growth by about 2 ppt (5%*40 ppt).

capital formation in the exports sector (see Exhibit 4). Therefore, equipment purchases alone (not including the factory construction and other manufacturing investments), which takes up about 23% of total fixed asset investment (FAI), will also likely experience some notable slowdown as export demand decelerates.

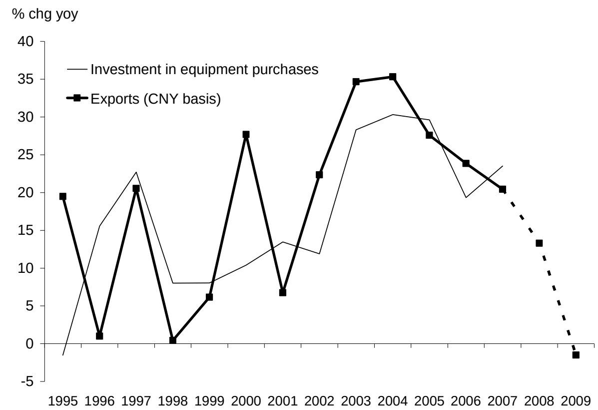
Given the challenging environment for investment in the real estate and manufacturing sectors, we now expect investment growth to slow to 6.5% yoy in 2009, revised down from 8.5% yoy previously.

Household consumption expenditure growth faces some, but more modest, headwinds ahead too

Official retail sales data and corporate level data/anecdotal stories have been projecting very different pictures in terms of household consumption expenditure since the start of this year—real retail sales growth have been picking up continuously from February to September, and only moderated slightly in October 2008. On the other hand, same-store sales data from our retail analyst suggests that consumer purchasing growth has been moderating since 4Q2007. We have more confidence in the often-ignored household survey data which suggests household expenditure growth softened in 3Q2008 but was still at a fairly robust level of 8%[3] (see Exhibit 5).

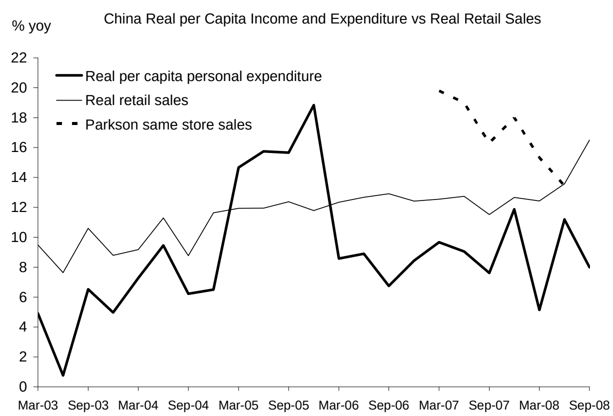
We expect a moderate slowdown in household consumption in 2009, with cyclical headwinds in terms of slower expected income growth and negative wealth effects[4] (see Exhibit 6) being mitigated by the announced/expected policy initiatives which include increasing the income of agricultural laborers and other policies to subsidize lower-income households.

Exhibit 4: Equipment investment contingent on exports



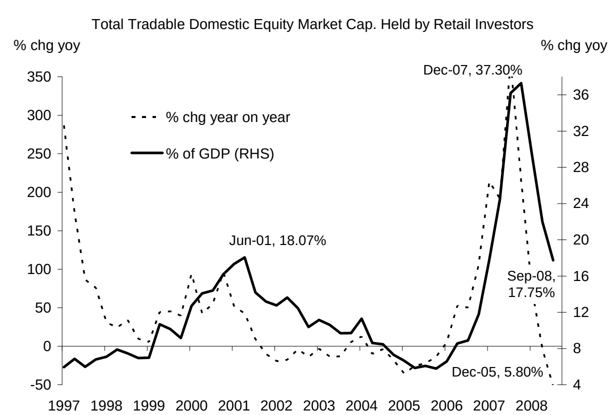
Source: CEIC, Goldman Sachs Economics Research.

Exhibit 5: Real household consumption growth softened in 3Q2008 but remains at a firm level



Source: CEIC, company data, Goldman Sachs Economics Research.

Exhibit 6: Wealth effect from equity market is likely to be bigger this time round



Source: CEIC, Goldman Sachs Economics Research.

[3] We believe the usefulness of retail sales data as a proxy for household consumption is limited given it 1) does not include the more volatile and responsive spending on services, which takes up about one-third of total consumption but only constitutes 15% in retail sales; and 2) sales to non-households including the government and firms are also included. On the hand other, there are considerable uncertainties in terms of the reliability of the same-store sales data in China given its short history and the rapid opening of new stores.

[4] It was in June 2007 when we wrote about the (positive) wealth effect of equity prices on consumption—in that article, we argued that changes in household wealth feeds into consumer demand with a lag of about one year, and will likely play out in a gradual fashion. Furthermore, we estimate that for every Rmb100 increase in their equity assets, Chinese households spend Rmb1-1.5 more in the following two years, and vice versa. We estimate that in the most recent domestic equity market cycle, household equity assets surged from Rmb0.84 trillion by end-2005 to Rmb6.04 trillion in 3Q2007, before falling to Rmb3.4 trillion as of 2Q2008 (and even lower now). Consequently, the potential wealth effect of equity assets swung from a 0.5-0.7 ppt boost to consumption growth, to a 0.3-0.4 ppt drag on consumer spending, over a one to two-year horizon.

With lower growth, we are likely to get lower inflation as well

On the back of our new forecasts of slower growth and a bigger output gap in 2009, we also expect both upstream and downstream inflation pressures to continue dissipating quickly.

We expect CPI inflation to trend down to an average of 1.0% in 2009, from an anticipated 6.0% in 2008 and revised down from 1.5% previously. We expect the decline in PPI inflation to be more dramatic than in CPI inflation, given the sharp declines in commodities prices (see Exhibit 7).

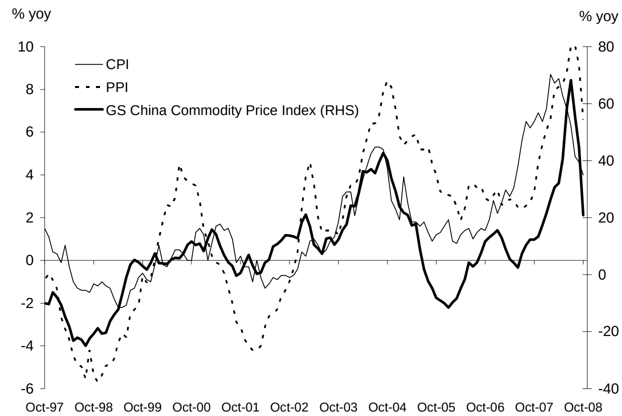
Policy responses have become more active and will likely stay so

So is it all doom and gloom? Active policy responses in the past two months on both the monetary and fiscal policy fronts have alleviated some of the concerns on the health of the real economy (please refer to the appendix for the full list of fiscal and monetary stimulus initiatives announced). However, we expect activity growth to weaken further in the near term and to continue to stay on the weak side until 1H2009, given that 1) it takes time for the fiscal stimulus package to be finalized and eventually implemented; and 2) it takes time for the real economy to respond to fiscal and monetary easing.

Furthermore, easing from the administrative side, although very clear in direction, still lacks details on the size of "extra" stimulus—i.e., how much investment is newly-added and how much would have been made without the stimulus.

On the monetary policy front, **we now expect at least 150 bp of rate cuts in both the benchmark lending and deposit rates, accompanied by a few more cuts in the reserve requirement ratio (RRR) by end-2009, which are likely to be front-loaded between now and 1H2009**. Besides, moral suasion is likely to be used as a main policy tool. However, past experience shows that it tends to be much less effective during loosening cycles compared with tightening cycles. Furthermore, its effectiveness is likely to be even lower now compared with before as commercial banks have become increasingly commercially oriented. On currency front, we expect CNY appreciation to be halted in the next six months given concerns over the health of the export sector. However, we maintain our long-held view that the CNY is significantly undervalued and CNY appreciation will likely resume at some point, driven by 1) USD NEER depreciation as the global deleveraging wanes down; 2) the expected domestic demand recovery in 2H2009 as the monetary easing and fiscal stimulus starts to take hold; and 3) the rising trade surplus on the back of import compression and falling commodity

Exhibit 7: Both upstream and downstream inflation receding rapidly



Source: China Coal Information Center, Mysteel, CISA, CRU, Great Wall Futures, CEIC, Goldman Sachs Economics Research.

prices. **Therefore, we expect no CNY appreciation on the 3 to 6-month horizon, and 3% appreciation between 6 and 12 months**.

Road to recovery

A cyclical, not a secular slowdown

We believe the present economic difficulties facing China are mainly cyclical in nature, and the fundamentals for China's secular growth story remain intact. Sustained strong growth in China has been driven by continuous market-oriented reforms and efforts in opening up, which tend to be accelerated during economic downturns. In addition, the balance sheets of Chinese households, corporates, and the government still remain robust.

Policies to watch

We believe the recent stimulus package should be viewed as a clear and loud signal that the government is willing to take necessary measures to revive the economy, as supposed to a fixed amount of policy measures. The crucial difference between the two views is the former implies further policy measures can be expected if growth continues to surprise on the downside. We believe the following policies will be the most important ones to watch for:

1. Increase in government investment expenditure

Although the share of infrastructure investment in FAI (around 20%) is smaller than the total of real estate and manufacturing capital formation (above 50%), a significant increase in government investment can still help mitigate the slowdown in investment demand.

Nevertheless, pressures on short term growth will remain significant as the investment implementation process will likely to be complicated and the policy impact will likely have to wait for 1-2 quarters to be seen.

2. Increase in other government expenditures

The recent stimulus package included measures to improve social welfare, especially for low income and rural households. Although building up a new social security system is likely to be a long-term task, speeding up the process will not only be beneficial to the stability of the Chinese economy over the longer term but will also provide tailwinds for household consumption in the short term as well.

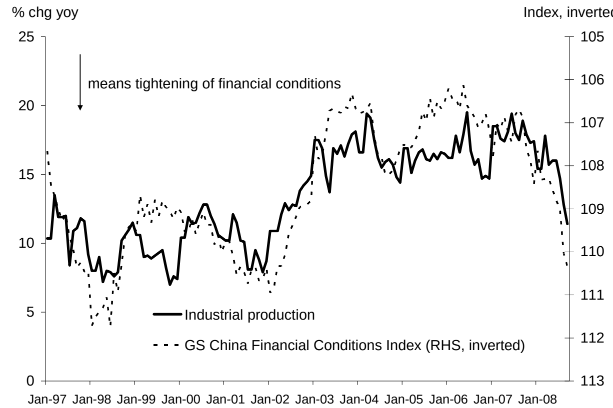
3. Tax reforms

The government has already announced a change in VAT tax reform, which is scheduled to take effect January 1, 2009. We believe it will be effective in transferring wealth from the public sector to the corporate sector, and encourage more facility investments. Apart from that, we may see other tax cuts as well. In particular, the raising of the income tax threshold is still subject to on-going discussions. We believe it would be a positive move as it will alleviate some of the tax burden of lower-income households and boost household consumption. Despite the lack of mentioning of it in recent policy statements, we believe there is still a possibility of it being adopted at some point next year. However, on the downside, we see a modest risk that the government may increase the effective tax burden on the economy by strengthening the compliance in tax collection (while lowering tax rates at the same time), amid rapidly falling government revenue growth and increased commitments in terms of government investment expenditure.

4. Interest rate cuts

We believe monetary easing will be able to offer the quickest and most effective relief in the short run. We estimate that a 200-bp cut in the lending rate will reduce around Rmb700 billion (or 2% of GDP) in interest costs for the corporate sector. There is plenty of room for policymakers to manoeuvre too, given that the nominal lending rate is still close to the 7% level. The central bank has already cut the 1-year benchmark lending rate by 81 bp in the past 2 months, and we believe they will likely cut another 150 bp or more before the end of 2009. On the other hand, if they do not adjust interest rates sufficiently, the real interest rate is likely to rise further amid rapidly falling inflation.

Exhibit 8: The FCI indicates dark clouds ahead for production growth



Source: CEIC, Goldman Sachs Economics Research.

What are the leading indicators of a recovery in growth momentum?

The effective loosening in financial conditions

Our Goldman Sachs China Financial Conditions Index (GS China-FCI) was still tightening up till September, driven by slower money supply growth, higher real interest rate and a NEER appreciation on the back of USD strength. We can expect to see some recovery in growth momentum after the FCI starts to loosen, since our empirical study shows that the GS China-FCI leads activity growth by 1-2 quarters (see Exhibit 8).

A pickup in money and credit growth

Commercial banks will likely become increasingly cautious with their lending as the cyclical outlook becomes more challenging, and corporates will be less keen on borrowing, given the declines in profitability and rising real interest rate. However, given time, lower funding costs (i.e., lower interest rates) and input prices (price deflation in commodities and slower wage growth) will likely bring about a recovery in profit margins and the willingness to borrow/lend. Therefore, we would watch for a recovery in money and credit growth as a sign of repaired profitability in the corporate sector and the growth momentum in the broader economy.

Risks to our views

We see the risks to our forecasts slightly tilted towards the downside. Apart from the policy risks mentioned above, in terms of insufficient adjustments in interest rates and an increase in the effective burden, the loosening of policies on real estate transactions can potentially make the property market correction process less severe but more prolonged. Externally, a worse-than-expected external environment will create additional headwinds. On the other hand, if the government shows more willingness in terms of adjusting monetary policy more aggressively, especially in terms of interest rate, we will become more optimistic about China's macro outlook.

Yu Song
Eva Yi

Exhibit A1: Active fiscal stimulus and monetary easing policies over the past two months

Date	Stimulus/easing policy	Effective from	Comments
Nov. 13 2008	The State Council approved investment projects totalling Rmb500 bn	n.a.	However, these are likely to be a follow-up to the "4 trillion package" announced on November 9. Furthermore, there will likely be a lag between the "approval" and the "implementation" of these investment projects
Nov. 13 2008	The State Council annouced the abolishment of the export tax on some steel, chemical and food products. It also raised the export tax rebate for 3770 export products, covering 27.9% of total export products.	Dec. 1 2008	
Nov. 9 2008	The State Council announced 10 measures to boost domestic demand growth—a package of fiscal and monetary easing totalling (alledgedly) Rmb4 trillion by 2010	n.a.	The announcement sends out a very strong signal of the government's willingness and capability to support economic growth during a cylical downturn. However, the total amount of additional investment is unclear—it is highly likely that most of the measures have already been announced/ acknowledged, and the incremental new policy stimulus could still be quite limited.
Nov. 5 2008	The NDRC officially announced the details for the Sichuan earthquake reconstruction program. The planned investments total Rmb1 trillion over the next 3 years	n.a.	
Nov. 2 2008	It is reported that the quantity control by the PBOC on new bank loan issuances has been removed	n.a.	
Oct. 29 2008	The PBOC cut the 1-year benchmark lending and deposit rates by 27 bp each, to 6.66% and 3.60% p.a. respectively	Oct. 30 2008	1. The demand deposit rate was left unchanged, the long-end deposit rate was reduced more than the short end (deposit rate for 5 years or above cut by 45 bp) 2. The benchmark lending rate cut by 27 bp except the lending rate for 6 month-1year, which was reduced by 9 bp
Oct. 27 2008	The State Council approved Rmb2 trillion of investment in rail road construction over the next 3-5 years, among which Rmb0.75 trillion was newly added investment	n.a.	Rmb1.25 trillion out of the Rmb2 trillion have already been planned in the 11th 5-year plan
Oct. 22 2008	The State Council announced 10 policies to help domestic demand growth, which include policies to support the real estate sector	Oct. 22 2008	Details include: 1) lower the deed tax for first-time home buyers (for units with sizes below or equal 90 sqm) to 1% from 1.5%; 2) removed stamp duty (0.05%) for individual property purchases or sales; 3) temporarily removed the LAT charge for individual property transfers; 4) lowering the mortgage rate floor to 70% of the base lending rate from 85% for first-time buyers; 5) lowering the down payment requirement to 20% for all first-time and "self-use upgrade" buyers; 6) lowered the Provident Fund mortgage rate by 27 bp
Oct. 22 2008	The Ministry of Finance raised the export tax rebate rate for textile and apparel, toys, plastic and porcelain products, furniture, some medicine products etc. by 4-5 ppt	Nov. 1 2008	The rebate increase covers 3486 products in the customs' product category, or about 25% of the total
Oct. 8 2008	The PBOC cut the 1-year benchmark lending and deposit rates by 27 bp each, to 6.93% and 3.87% p.a., respectively	Oct. 9 2008	1) The demand deposit rate was left unchanged, benchmark deposit rate for 3 months was cut by 18 bp, and those for all other durations were cut by 27 bp; 2) the benchmark lending rates cut by 27 bp except lending rated for 6 months -1 year, which was only cut by 9 bp
Oct. 8 2008	The Provident Fund mortgage rate lowered by 27 bp	Oct. 9 2008	
Oct. 8 2008	The PBOC reduced the reserve requirement ratio by 50 bp to 17.00%	Oct. 15 2008	
Oct. 8 2008	The State Council abolished the interest income tax of 5.00%	Oct. 9 2008	

Source: PBOC, Ministry of Finance, Xinhua News Agency, Goldman Sachs Economics Research.

Exhibit A2: Active fiscal stimulus and monetary easing policies over the past two months…continued

Sep. 18 2008	The Ministry of Finance abolished the 0.1% stamp duty for equity purchases (while keeping the 0.1% stamp duty tax for equity sales)	Sep. 19 2008	
Sep. 15 2008	The PBOC cut the 1-year benchmark lending rate by 27 bp to 7.20% p.a.	Sep. 16 2008	Lending rates for 6 months-1 year cut by 36 bp, those for 3-5 years cut by 18 bp and those for >5 years cut by 9 bp, benchmark lending rates for all other durations was cut by 27 bp
Sep. 15 2008	The PBOC reduced the reserve requirement ratio of smaller banks by 100 bp	Sep. 25 2008	1."Smaller Banks": all commercial banks except ICBC, BOC, BOCOM, CCB, ABC, and postal saving banks 2. All commercial banks in the regions "severely damaged by the Sichuan earthquake" will have their RRR cut by 200 bp.

Source: PBOC, Ministry of Finance, Xinhua News Agency, Goldman Sachs Economics Research.

Financial conditions tightening in Asia—further policy responses needed to mitigate additional downside risks

This article was first published on November 14, 2008.

- Financial conditions have tightened in the region led by a widening in credit spreads, tougher loan conditionality as well as the equity market sell-off.
- Policymakers need to loosen policy aggressively to counter the negative growth shock from tighter financial conditions, especially when Asia will not be able to export itself out of the slump this time round.
- We estimate the amount of tightening for each country using a Financial Conditions Index (FCI) framework, looking at daily interest rates, exchange rates and equity market moves. We also screen the countries across various metrics (inflation, current account and fiscal balances) to gauge the room for possible easing in these countries.
- In this regard, Indonesia and Thailand look ill-positioned as they have seen the most amount of tightening relative to their ability to ease. In contrast, although we have seen a fair amount of tightening in China, Malaysia, Singapore and Taiwan, the downside risks to growth can be mitigated by their ability to ease policy. The retracement in oil prices will also negate some of the negative impact.

Financial conditions have tightened significantly in the region since July 2008 where we saw the onset of the worst leg of the credit crisis so far, led by rising interest rates, tougher loan conditionality and the equity market slide. We examine the extent of financial tightening in each country in the region by looking at the moves in interest rates, currencies (nominal trade weighted) and equity markets. Using a FCI framework, a rise in interest rates, currency appreciation and a fall in equity markets all contribute to a rise in the FCI, i.e., a tightening in financial conditions which will negatively affect future economic activity.[1]

The negative growth shock brought about by the tightening in financial conditions will need to be countered by significant policy easing. As we discussed recently in our comparisons with the 1997-1998 Asian Financial Crisis, (see *Asian crisis comparison—not homebuilt today but homing in nonetheless*, Asia Economics Analyst 08/20, October 27), Asia will not likely be able to export itself out of the slump this time round, thus giving added importance to the role of policy and the ability of governments to respond.

China has already demonstrated its willingness to respond by cutting policy rates three times over the past two months and announcing a potentially large economic stimulus package (although the true amount of new spending and the funding sources remain unclear). Korea has also announced a US$10 billion fiscal stimulus package as well as cutting rates 100 bp over the past month. India has also been cutting rates pre-emptively, reducing the cash reserve ratio by 350 bp and the repo rate by 150 bp since October. Going forward, the room by which policymakers have to ease policy (monetary or fiscal) will be an increasingly important differentiating factor, in our view, as markets become more focused on the extent of the slowdown and the scope for recovery further out.

What the FCIs are telling us

In general, we have seen financial conditions tighten across the region with the exception of Korea where the outsized weakening in the exchange rate has outweighed the effects from higher interest rates (since July this year) and lower equity markets.

[1] We have launched official FCIs for India and China in the past, which contain slightly different components and are on a monthly basis (see *Introducing the Goldman Sachs India Financial Conditions Index (GS India-FCI)*, Asia Economics Flash, April 13, 2007 and *Introducing the Goldman Sachs China Financial Conditions Index (GS China-FCI)*, Global Economics Paper No. 111, May 19, 2004. We have limited our components to interest rates, FX and equity markets in this report so as to obtain a consistent comparison across countries and a more timely read as these components are available on a daily basis. These new daily FCIs are broadly consistent with the monthly, more detailed series, with a correlation of 0.68 for China and 0.9 for India.

Hong Kong has seen the most tightening of 540 bp since July this year with the HIBOR spiking over 200 bp during September and October this year, although rates have normalised recently. The equity market slump and the trade-weighted HKD appreciated 9%, given the unchanged peg to the USD, also contributing to the overall tightening.

China, Thailand and Indonesia have also witnessed a fair amount of tightening ranging from 300 bp to 400 bp over this period. Most of China's tightening came through an 11% TWI appreciation over the past four months and the stock market sell-off.

Meanwhile, Malaysia, Singapore and Taiwan have seen a more moderate amount of tightening (see Exhibit 1).

(Please refer to the appendix section at the end of this article, where we detail the contributions to FCI tightening in each country by the interest rate, NEER and stock market components)

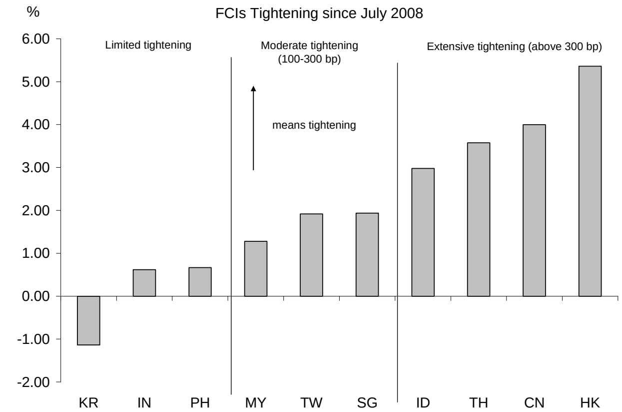
How should policymakers respond?

We have been highlighting the downside risks to growth from weaker exports on the back of a US-led global slowdown. However, the tightening in the FCIs seen over the past few months will pose further downside risks to growth. Policymakers need to loosen policy to counter the negative growth shock from tighter financial conditions, especially when exports will not be able to provide a lift. Indeed, some governments have been actively pursuing easing measures over the past few months.

Hong Kong, having seen the most tightening in financial conditions, has been actively injecting liquidity to ease tensions in the credit markets (the additional HKD in the system brings the aggregate balance to HK$48.8 billion, the highest level since May 2004). It also has demonstrated its willingness to provide fiscal stimulus and in that regard, will be able to alleviate part of the downside risks to growth.

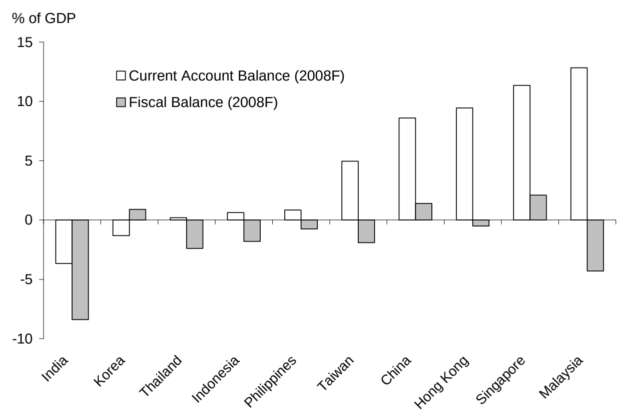
China too has seen a fair amount of tightening but as mentioned before, has shown its willingness to act and does have more than ample firepower to negate a hard landing scenario with powerful large scale fiscal stimulus. We also expect an additional 100-150 bp reduction in benchmark interest rates by the end of next year (with the credit ceilings removed and in any case no longer that binding, the interest rate is now of more importance).

Exhibit 1: Financial conditions tightening most in Hong Kong, China, Indonesia and Thailand



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

Exhibit 2: Malaysia, Singapore, China and Taiwan have room to ease monetary policy, given their huge current account buffers



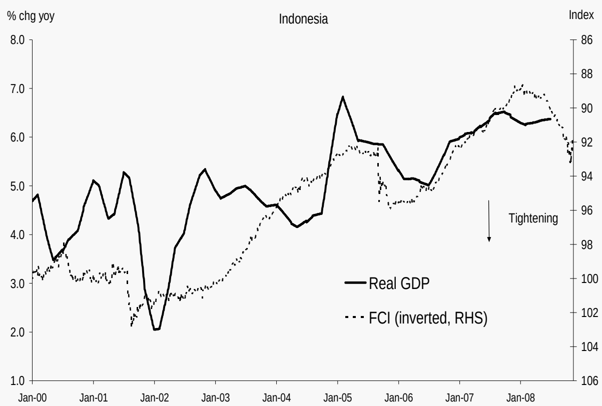
Source: CEIC, Goldman Sachs Economics Research.

Korea, which arguably has suffered the most volatility in its financial markets so far in the region, has cut rates and rolled out an economic stimulus package. India too has taken the initiative to slash policy rates by 150 bp since October 20. We expect continued rate cuts in both countries by mid-2009, 50 bp for Korea and a meaningful 200-250 bp for India.

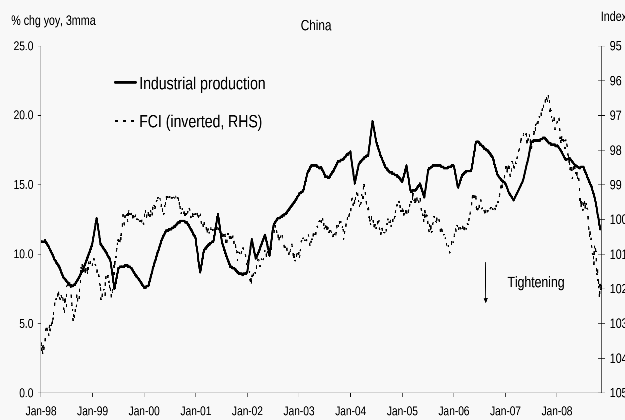
The responses in the rest of the region though have generally been less meaningful so far and perhaps telling, as some countries in the region just do not have the room to ease policy aggressively, either through lowering interest rates or introducing fiscal stimulus.

Box1: Selected FCIs vs. activity indicators

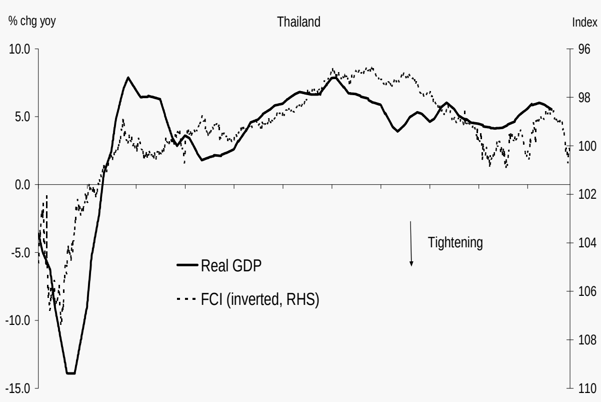
The FCI is a broad measure of policy stance and typically leads growth by around one to two quarters. We will be monitoring the FCIs going forward as a way for us to track the stance of monetary policy on a timelier basis. This is also a way of allowing us to estimate the trough of the downturn and help us to identify turning points in the growth cycle.



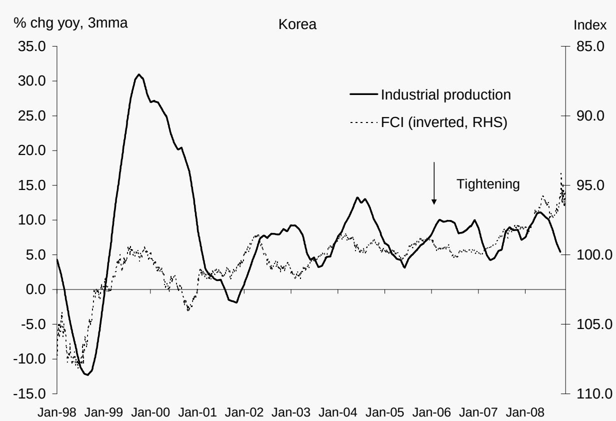
Source: CEIC, Bloomberg, Goldman Sachs Economics Research.



Source: CEIC, Bloomberg, Goldman Sachs Economics Research.



Source: CEIC, Bloomberg, Goldman Sachs Economics Research.



Source: CEIC, Bloomberg, Goldman Sachs Economics Research

Exhibit 3: Flexibility to loosen policy versus the amount of FCI tightening seen: Indonesia and Thailand do not measure up well

	Low Real rates/High inflation	Low current account surplus or deficit	Fiscal deficit	Extent of FCI tightening
Indonesia	x	x	x	Extensive
Thailand	x	x	x	Extensive
China	x			Extensive
Taiwan	x		x	Moderate
Hong Kong			x	Extensive
Singapore	x			Moderate
Malaysia	x		x	Moderate
Philippines	x	x	x	Limited
India		x	x	Limited
Korea		x		Limited

Source: Goldman Sachs Economics Research.

Which countries have the greatest room to ease?

Countries that still have high inflation and low or negative real interest rates will face the risk of capital flight and thus currency vulnerability if they were to embark on aggressive rate cut cycles. This is especially critical if they have small current account buffers. Indonesia, Thailand and Philippines fall into this category and thus have very little room to ease monetary policy by cutting interest rates. These countries also do not have much leeway in ramping up fiscal expenditure given that they are already facing budget constraints (see Exhibit 3).Perhaps more importantly, their attempts to introduce fiscal stimulus may prove to be ineffective arguably, as implementation is often a key stumbling block. This is especially so for Thailand, which is still mired in political turmoil. Unfortunately, Indonesia and Thailand have seen significant tightening in financial conditions and thus are most in need of policy stimulus to negate the downside risks to growth.

In addition to China, which has ample policy flexibility as mentioned above, Taiwan, Singapore and Malaysia, having had moderate FCI tightening over the past few months, and at least have the flexibility to ease monetary policy. This, without being as susceptible to currency weakness given their huge current account buffers. Singapore also has the room to pack a meaningful fiscal punch given the budget surpluses that it has been accumulating over the years. Singapore needs to make full use of the available policy tools and flexibility it has to minimise the downside risks to growth and prevent a sharper slowdown. The recent decision to allow the government to tap into 50% of their investment returns for expenditure (including capital gains, where previously it was limited to just interest and dividend payments) will provide additional room to manoeuvre. Indeed, the recent hints by government officials are that they are preparing to adopt a very expansionary fiscal stance at the upcoming budget announcement in February.

Moves so far in the right direction and oil will help but more needs to be done...

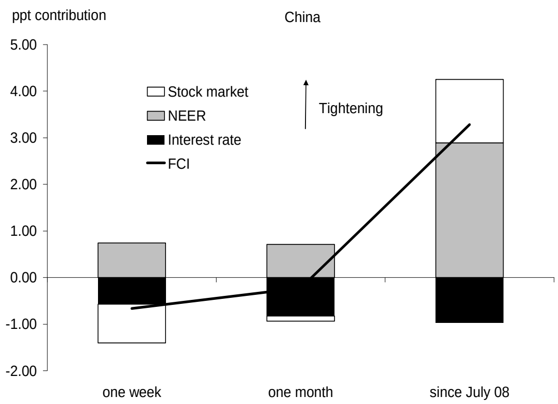
One key offsetting factor though that we have not captured in our FCI analysis is the sharp drop-off in global oil prices which will alleviate some of the tightening, especially for the major net oil importers of Thailand, Philippines, Korea, Taiwan and India.

Overall, official growth expectations still look too high in Indonesia and Thailand. While expectations look more realistic for the rest of the region, the onus is still on those governments that have the flexibility to loosen policy to continue to pursue such policies. In that regard, the willingness to act by Korea, Hong Kong, India and especially China are encouraging and continued action on this front will be welcomed.

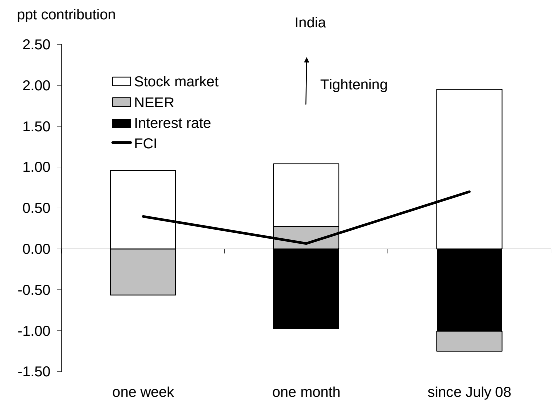
Mark Tan
Michael Buchanan

Appendix: FCI contribution charts for Asia ex Japan

This section tracks the tightening of financial conditions in the region as measured by the Financial Conditions Index (FCI) that we have constructed for each country. The charts below show the contribution to the tightening/loosening of the FCI by the subcomponents of interest rates, nominal effective exchange rates (NEER) and equity markets. (for more detail, please refer to *Financial conditions tightening in Asia—further policy responses needed to mitigate additional downside risks*, on page 25 of this issue).



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



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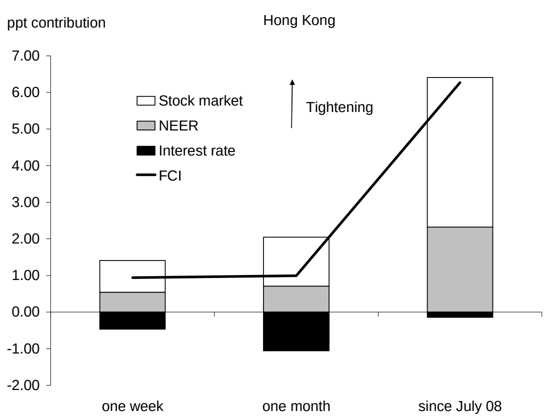
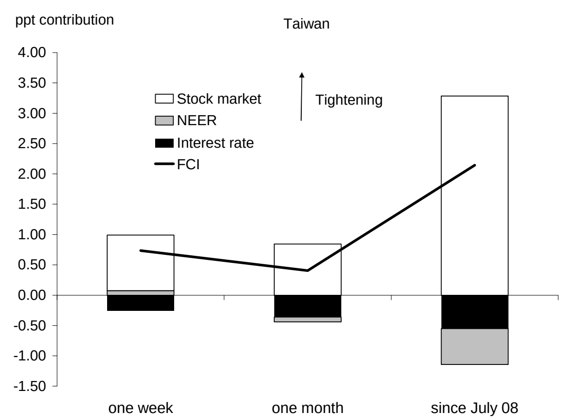
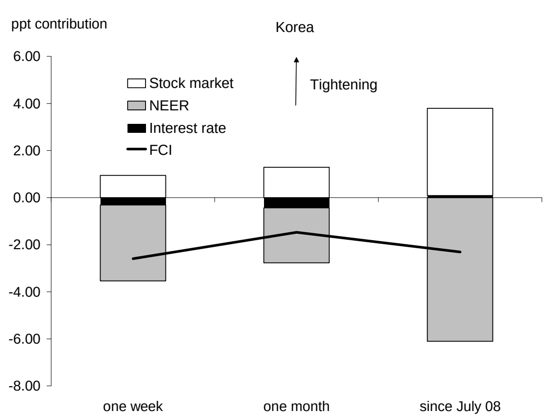


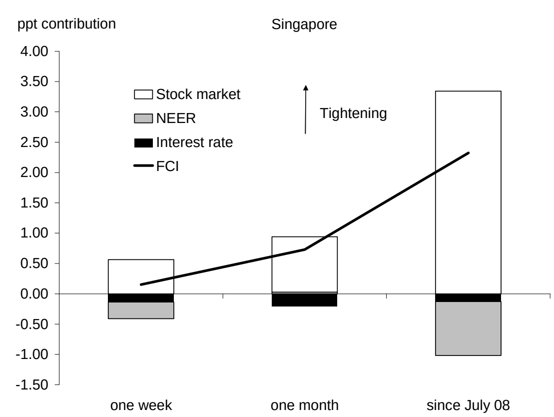
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



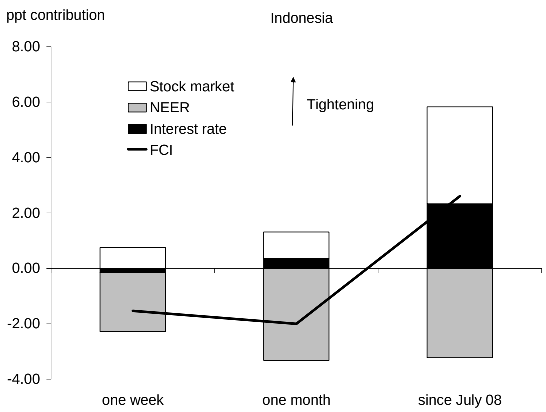
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



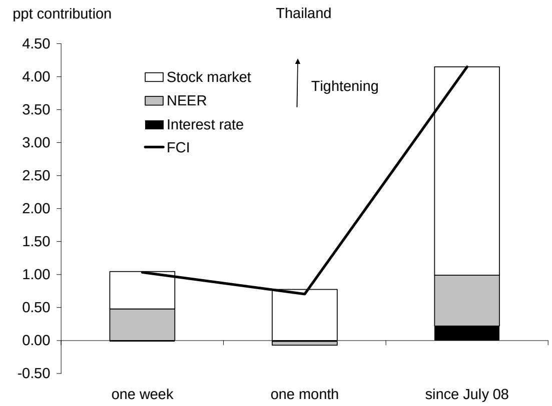
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



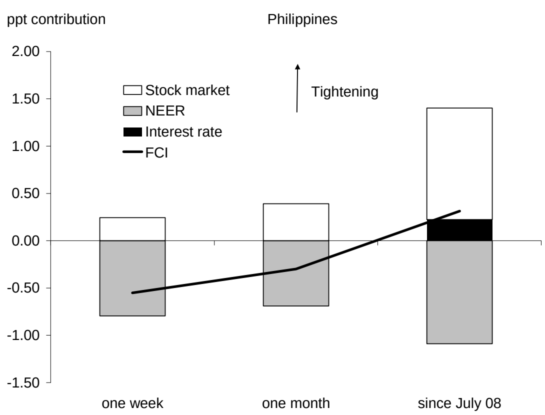
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



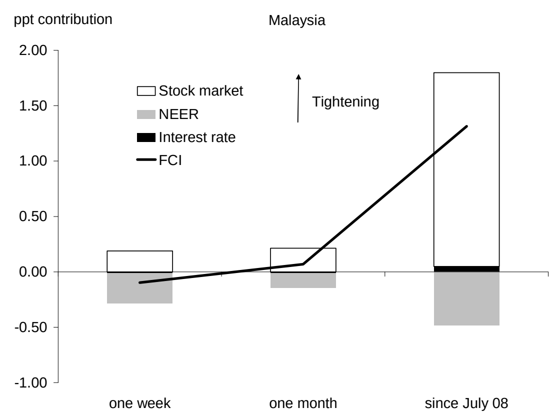
Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.



Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

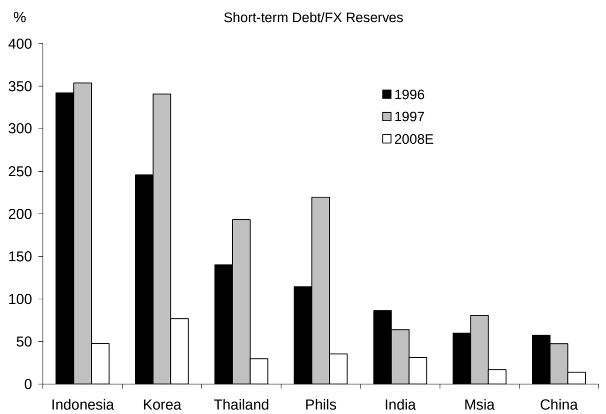


Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

Regional Risk Indicators

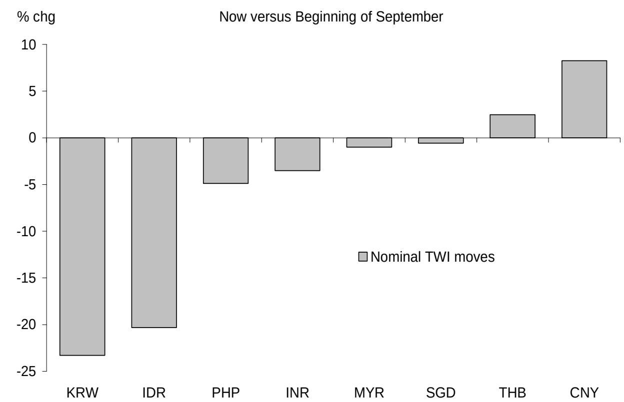
These are the key risk indicators that we continue to keep a close eye on amidst the ongoing global financial crisis, as discussed in our Asia Economics Analyst 08/20 issue published on October 27. Going forward, we will continue to provide updates on these key metrics.

Short-term debt: Much improved but Korea a touch more exposed than others



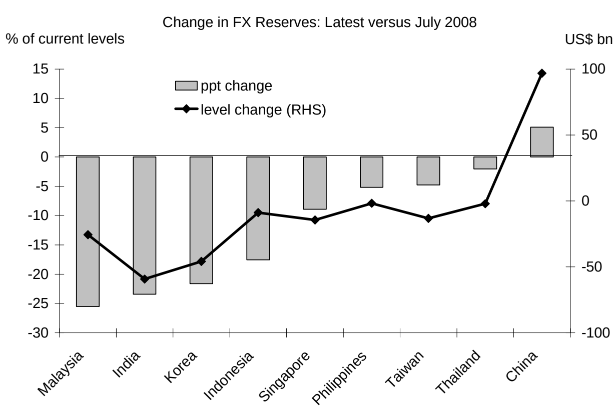
Source: IIF, IMF, Goldman Sachs Economics Research.

The KRW and IDR have fallen the most



Source: Goldman Sachs Economics Research.

Reserves under pressure in Malaysia, India, Korea and Indonesia



End-September data for China, end-October data for all other countries.

Source: CEIC, Goldman Sachs Economics Research.

Short-term credit indicators worsening in AEJ

%	Policy rate	3m OIS	3m bank borrowing	Short corp borrowing rate	3m T bills	3m Deposit rates	3m bank and policy spread	Corporate-policy rate spread	Corporate and 3m bank spread
China	3.60	-	3.6	6.7	2.0	2.9	0.04	3.1	3.02
Hong Kong	-	2.37	2.0	5.0	0.0	0.5	-	-	3.00
Singapore	-	1.1	0.9	4.3	0.5	0.4	-	-	3.38
Taiwan	2.75	-	1.4	4.4	1.4	1.8	-1.38	1.7	3.07
Malaysia	3.50	-	3.6	6.8	3.3	3.3	0.11	3.3	3.14
Thailand	3.75	-	4.0	7.3	3.2	2.4	0.21	3.5	3.29
Korea	4.00	-	5.5	6.9	5.5	3.0	1.49	2.9	1.37
Philippines	8.00	-	4.4	10.2	6.4	5.2	-3.56	2.2	5.78
India	7.50	6.53	10.2	14.0	7.2	5.6	2.72	6.5	3.78
Indonesia	9.50	-	12.4	14.2	11.5	8.7	2.93	4.7	1.74

Short bank rates: China: SHIBOR; Hong Kong: 3-month HIBOR, CEIC, Indonesia: 3-month JIBOR, Korea: 3-month certificate of deposit, Malaysia: 3-month KLIBOR, Philippines: 3-month PHIBOR, Singapore: 3-month SIBOR, Taiwan: 31-90 day commercial paper, Thailand: 3-month BIBOR, India: 3-month MIBOR.

Policy rates: China: 1-year deposit rate, Indonesia: 1-month SBI rate, Korea: 7-day repo, Malaysia: overnight policy rate, Philippines: repo rate, Taiwan: rediscount rate, Thailand: 1-day repo, India: repo rate.

Short-term corporate borrowing rate: China: 1-year lending rate; India: Prime LR, Korea: 6-month corp bond; Singapore: PLR, Malaysia: Base LR, Indonesia: Base LR; Thailand: Min LR; Taiwan: Base LR; Hong Kong: Best LR.

Source: Bloomberg, CEIC, Goldman Sachs Economics Research.

External and fiscal stresses vary widely

	Current Account as % of GDP (2008F)	Fiscal balance as % of GDP (2008F)	FX reserves		
			Latest (US$ bn)	change from July 2008 (US$ bn)	Change from July 2008 (% of current levels)
China	8.6	-0.3	1906	96.8	5.1
India	-3.7	-8.4	253	-59.2	-23.4
Korea	-1.3	2.3	212	-45.8	-21.6
Taiwan	5.0	-0.8	278	-13.3	-4.8
Singapore	11.4	-1.2	162	-14.5	-8.9
Malaysia	12.8	-4.3	100	-25.6	-25.5
Indonesia	0.6	-1.8	51	-8.9	-17.5
Thailand	0.2	-2.4	101	-2.1	-2.0
Philippines	0.8	-0.8	34	-1.8	-5.2

* The fiscal number for India represents the amortised value of off-budget bonds. Taking the actual value of bonds issued is likely to raise the fiscal deficit to 9.2%.

Source: CEIC, Goldman Sachs Economics Research.

Statistical Appendix

Interest Rate Outlook

(%)		Current	3-Month Horizon		6-Month Horizon		12-Month Horizon	
		Nov 20	Forward	Forecast	Forward	Forecast	Forward	Forecast
Japan	3M	0.80	0.80	0.60	0.70	0.60	0.70	0.60
NJA								
ASEAN								
Indonesia	3M	12.40	13.35	11.50	12.89	11.50	13.08	11.00
Malaysia	3M	3.65	3.66	3.75	3.66	3.50	3.24	3.50
Philippines	3M	6.28	6.56	6.25	6.66	6.00	6.79	6.00
Thailand	3M	3.96	4.34	4.00	4.06	3.75	4.05	3.75
Singapore	3M	0.90	1.16	1.00	1.37	1.50	1.48	2.00
China	3M	2.02	NA	NA	NA	NA	NA	NA
India	3M	7.15	6.93	8.88	6.77	8.97	6.74	8.58
NIE								
Hong Kong	3M	2.10	2.69	2.00	2.67	2.00	2.74	2.00
Korea	3M	5.49	5.01	5.82	4.54	5.82	4.46	5.47
Taiwan	3M	1.80	2.11	1.75	1.23	1.50	1.47	1.00

Hong Kong: 3M HIBOR, CEIC, Bloomberg (GINAY91), **India:** 91D T-bill, **Indonesia:** 3M JIBOR, CEIC, **Korea:** 3M certificate of deposit, CEIC, **Malaysia:** 3M KLIBOR, CEIC, **Philippines:** 3M T-bill, CEIC, **Singapore:** 3M Interbank, CEIC, **Taiwan:** 61-90D New Taiwan dollar, Secondary, Bloomberg (NTSEC90), **Thailand:** 3M BIBOR, GS estimates, **China:** 3M PBOC Bill yield.

Exchange Rate Outlook

(Local per USD)	Current	3-Month Horizon		6-Month Horizon		12-Month Horizon	
	Nov 20	Forward	Forecast	Forward	Forecast	Forward	Forecast
Japan	97.4	97.1	90.0	96.7	100.0	96.0	105.0
NJA							
ASEAN							
Indonesia	12,400	14,850	12,000	15,950	11,500	16,350	11,500
Malaysia	3.63	3.67	3.65	3.68	3.55	3.69	3.45
Philippines	49.99	52.69	51.00	53.89	50.00	55.14	50.00
Thailand*	35.24	35.31	35.50	35.34	36.50	35.36	36.50
Singapore	1.53	1.53	1.56	1.52	1.60	1.52	1.52
China	6.84	6.93	6.82	6.97	6.82	7.01	6.62
India	50.10	53.28	50.50	54.56	48.00	55.63	46.90
NIE							
Hong Kong	7.75	7.75	7.80	7.74	7.80	7.74	7.80
Korea	1,508	1,491	1,250	1,483	1,200	1,476	1,200
Taiwan	33.40	33.48	33.50	33.36	33.00	33.12	33.00

* Forecasts are for onshore Thai baht.

Global Macroeconomic Outlook

					2007				2008				2009			
	2006	2007	2008E	2009E	1Q	2Q	3Q	4Q	1Q	2Q	3QE	4QE	1QE	2QE	3QE	4QE
Real GDP Growth (% yoy)																
Advanced Economies	3.1	2.7	1.2	-0.6	2.6	2.6	3.0	2.7	2.5	1.9	0.8	-0.2	-1.0	-1.1	-0.6	0.5
United States	2.8	2.0	1.2	-1.6	1.3	1.8	2.8	2.3	2.5	2.1	0.8	-0.4	-1.4	-2.3	-2.0	-0.5
Euroland	3.0	2.6	1.0	-0.3	3.2	2.6	2.6	2.1	2.1	1.4	0.7	0.0	-0.9	-0.7	-0.2	0.5
Japan	2.4	2.2	0.3	-0.6	3.2	2.0	1.8	1.8	1.4	0.7	-0.1	-0.8	-1.5	-0.6	-0.4	0.1
CPI Inflation (% yoy, avg.)																
Advanced Economies	2.3	2.2	3.5	1.1	1.9	2.0	1.8	3.0	3.4	3.7	4.4	2.6	1.7	0.9	0.3	1.4
United States	3.2	2.9	3.9	0.0	2.4	2.6	2.4	4.0	4.2	4.3	5.3	1.9	0.6	-0.1	-1.3	1.0
Euroland	2.2	2.1	3.4	1.9	1.9	1.9	1.9	2.9	3.4	3.6	3.8	2.7	2.2	1.5	1.5	2.2
Japan	0.2	0.1	1.6	0.5	-0.1	-0.1	-0.1	0.5	1.0	1.4	2.4	1.5	0.9	0.5	0.2	0.2
Interest Rates (% p.a. eop.)																
Fed funds	5.25	4.25	1.73	0.50	5.25	5.25	4.75	4.25	2.25	2.00	2.00	0.50	0.50	0.50	0.50	0.50
UST 10-year	4.71	4.03	2.75	3.60	4.65	5.03	4.58	4.03	3.43	3.98	3.79	2.75	2.75	3.20	3.40	3.60
Euro yield 10-year	3.95	4.33	3.00	3.30	4.07	4.57	4.32	4.33	3.90	4.58	4.01	3.00	3.00	3.00	3.20	3.30
Exchange Rates (eop.)																
USD/EUR	1.32	1.45	1.45	1.30	1.31	1.35	1.37	1.45	1.50	1.56	1.50	1.45	1.27	1.30	1.30	1.30
JPY/USD	119.1	113.1	96.0	104.7	119.4	120.7	117.8	113.1	105.2	104.5	107.6	96.0	91.6	99.2	102.5	104.7
WTI Oil (average $)	66.2	72.2	115.0	110.0	58.2	65.0	75.2	90.5	97.7	123.9	118.0	59.0	70.0	86.0	102.0	102.0

Central Bank Watch

Country	Likely Decision / Reasons	Date of Next Policy Meeting
UNITED STATES	The Federal Reserve cut the Fed Funds rate by 50 bp to 1.00% on October 29. We expect the Fed to cut the target rate by 50 bp to 0.50% at the next meeting.	December 16
JAPAN	The Bank of Japan cut the overnight call rate by 30 bp to 0.3% on October 31. We expect the central bank to keep the policy rate at 0.3% throughout FY2008-2009.	December 18/19
EUROLAND	The European Central Bank cut rates by 50 bp to 3.25% on November 6. We expect the central bank to cut rates to 2.00% by the end of 1Q2009.	December 4

Main Economic Indicators

	GDP						Inflation					
	2006	2007	2008E	2009E	Latest	(yoy)	2006	2007	2008E	2009E	Latest	(yoy)
Pan Asia*	7.9	7.9	5.5	4.3	6.5	(2Q)	2.7	3.4	6.3	2.5	6.1	(Sep)
NIE + ASEAN	5.7	6.0	4.1	2.4	5.1	(2Q)	4.8	3.3	7.5	4.7	8.0	(Sep)
ASEAN	6.0	6.4	4.9	3.2	5.5	(2Q)	7.3	4.2	9.8	6.8	11.2	(Sep)
Indonesia	5.5	6.3	5.8	3.5	**6.1**	**(3Q)**	13.1	6.4	10.5	8.2	**11.8**	**(Oct)**
Malaysia	5.8	6.3	5.0	3.4	6.3	(2Q)	3.6	2.0	6.0	4.1	**7.6**	**(Oct)**
Philippines	5.4	7.2	4.0	3.2	4.6	(2Q)	6.3	2.8	9.6	6.8	**11.2**	**(Oct)**
Thailand	5.1	4.8	4.3	3.3	5.3	(2Q)	4.6	2.2	7.5	5.0	**3.9**	**(Oct)**
Singapore	8.2	7.7	2.0	(2.2)	2.1	(2Q)	1.0	2.1	6.5	2.0	6.7	(Sep)
Vietnam	8.2	8.5	6.6	6.0	**6.5**	**(3Q)**	7.4	8.3	22.0	14.0	**26.7**	**(Oct)**
Japan	2.4	2.2	0.3	(0.6)	**(0.1)**	**(3Q)**	0.2	0.1	1.6	0.5	2.1	(Sep)
China	11.6	11.9	9.0	7.5	**9.0**	**(3Q)**	1.5	4.8	6.1	1.0	**4.0**	**(Oct)**
India (FY Basis)	9.6	9.0	6.7	5.8	7.9	(2Q)	5.5	4.6	11.5	5.3	**11.0**	**(Oct)**
NIE	5.3	5.4	3.1	1.3	**2.0**	**(3Q)**	1.7	2.2	4.6	1.9	**3.6**	**(Oct)**
Hong Kong	7.0	6.4	3.0	2.2	**1.7**	**(3Q)**	2.0	2.0	4.8	2.0	**1.8**	**(Oct)**
Korea	5.1	5.0	4.2	3.1	**3.9**	**(3Q)**	2.2	2.5	5.1	2.5	**4.8**	**(Oct)**
Taiwan	4.9	5.7	1.5	(2.0)	**(1.0)**	**(3Q)**	0.6	1.8	3.7	0.7	**2.4**	**(Oct)**

	3 M Interest Rates					Exchange Rates				
ASEAN										
Indonesia	9.8	8.0	11.5	10.5	12.4	9020	9419	12000	11500	9975
Malaysia	3.7	3.6	3.8	3.5	3.7	3.53	3.31	3.65	3.45	3.63
Philippines	4.8	3.7	6.3	6.0	6.3	49.1	41.4	51.0	50.0	50.0
Thailand	5.3	3.9	3.8	4.0	4.0	35.8	33.7	35.5	36.5	35.2
Singapore	3.4	2.4	1.0	2.0	0.9	1.53	1.44	1.56	1.52	1.53
Vietnam	—	—	—	—	—	16055	15995	17325	18802	16828
Japan	0.5	0.9	0.6	0.6	0.8	119.1	113.1	96.0	104.7	97.4
China	—	—	—	—	—	7.81	7.30	6.82	6.59	6.84
India	8.0	7.2	9.0	8.0	7.2	43.6	40.0	48.8	46.9	50.1
NIE										
Hong Kong	3.8	3.3	2.0	2.0	2.1	7.77	7.80	7.80	7.80	7.75
Korea	4.9	5.8	5.7	5.4	5.5	930	938	1300	1200	1508
Taiwan	1.8	2.0	1.9	1.9	1.8	32.6	32.4	33.5	33.0	33.4

*Pan Asia includes India.

GDP and inflation are annual averages. Interest rates and exchange rates refer to end-period. Figures in bold indicate recent revisions.

Hong Kong: 3M HIBOR, CEIC, Bloomberg (GINAY91), **Indonesia**: 3M JIBOR, CEIC, **Korea**: 3M certificate of deposit, CEIC, **Malaysia**: 3M KLIBOR, CEIC, **Philippines**: 3M T-bill, CEIC, **Singapore**: 3M Interbank, CEIC, **Taiwan**: 61-90D New Taiwan dollar, Secondary, Bloomberg (NTSEC90), **Thailand**: 3M BIBOR, CEIC. **India:** 91 D T-bill

Asia in a Nutshell

	Present Situation	Key Issues
CHINA	Instead of showing a rebound in real activity growth, October activity data surprised on the downside across the board. In particular, electricity production growth reached negative territory for the first time since 1998 (-4% yoy) while industrial production growth also softened to post Asian Financial Crisis levels (8.2% yoy). We revise down our 2008 and 2009 GDP growth forecasts to 9.0% and 7.5% from 9.8% and 8.7% respectively, given the sharp deterioration in the external environment, and the challenges facing domestic fixed asset investments, in particular, the real estate sector. We also revise down our 2008 and 2009 CPI inflation forecasts to 6.1% and 1.0%, from 6.3% and 1.5% respectively, on the back of slower growth and lower commodity prices.	We expect policy responses to be active and aggressive in the coming quarters, on both fiscal and monetary fronts. We now expect at least 150 bp of cuts in the benchmark lending and deposit rates by end-2009, accompanied by a few more cuts in the reserve requirement ratio, which are likely to be front-loaded between now and 1H2009. We also expect a significant pickup in government investment expenditures, especially in infrastructure building, though we believe this will be partially at the expense of other government consumption expenditures. On currency front, we expect no CNY appreciation on the 3 to 6-month horizon, and 3% appreciation between 6 and 12 months.
HONG KONG	The 3-month HIBOR fell sharply back to around the 2.0% level recently, after spiking up to almost 4.5% in October. The easing of local money market rates could offer some relief to the tight financial conditions locally. However, we still expect growth to slow sharply in the coming quarters. Our forecasts already imply that the economy will remain in recession mode through mid-2009. We expect GDP growth to slow to -0.5% yoy in 1H2009, from our forecasted 3.0% in 2008. We expect consumption growth to slow further, as indicated by the weak retail sales figures recently, with the impact of a softer labor market and the negative wealth effect setting in.	We believe that a HKD-CNY peg should be the endgame for the HKD in the future, but the timing there is still uncertain. For now, the political incentive to changing (or modifying) the HKD peg system is still low, especially when the uncertainties in the near-term global growth outlook may hold the authorities back from making changes in the current HKD peg system. However, when the capital account in China liberalizes in the long run, we expect the circulation of the CNY in the Hong Kong economy to increase rapidly, paving the way for a natural transition towards an eventual HKD-CNY peg in the distant future.
INDIA	September IP growth recovered to 4.8% yoy from the historic low of 1.4% yoy in August. Growth in capital goods rebounded while growth in consumer goods softened. August's record-low IP number was an exaggeration and although September's print marked some improvement, it continued the slowing trend we have been seeing in the last few months.	Recent activity data on exports, non-oil imports, excise duty collections and the Purchasing Managers Index, have been much weaker than expected. We think the large negative global and domestic financial sector shocks will continue to slow activity across the board in capex plans, exports growth, and consumption demand. Our GDP growth forecast is 6.7% in FY09 and 5.8% in FY10.
INDONESIA	Indonesia 3Q2008 real GDP growth came in at a 6-quarter low of 6.1% yoy. Given Indonesia's small current account surplus, it faces risks of capital flight and currency vulnerability if it were to embark on an aggressive rate-cutting cycle. Its fiscal deficit too, leaves little room for a substantial fiscal stimulus.	BI kept the benchmark Bank Indonesia rate unchanged at 9.50%, which marked the end of the 6-month-long tightening cycle which started in May to counter double-digit inflation. However, given its focus on maintaining IDR stability, we do not expect BI to start cutting rates this year.
KOREA	Given a rapidly deteriorating global growth outlook and continued financial market turbulence, we assess downside risks for the Korea economy. We see much downside risk to exports while we expect fiscal stimulus and monetary easing to backstop downside risks for domestic demand. Vulnerabilities do exist but many of them, in particular external sustainability, have been overstated in our view and, given the strong public finances and high national savings rates, could be mitigated by macro stimulus and micro policy measures. We revise our growth forecast for 2009 from 3.9% to 3.1%, mostly due to the prospect of an exports slowdown. Domestic demand will likely get a boost from the fiscal stimulus and interest rate cuts, which we anticipate will be translated into gains in real activity by 2Q2009	Our new USD/KRW forecasts are 1250, 1200, and 1200, for 3, 6, and 12-month horizons. While we continue to believe that the USD/KRW is an overshoot at the current level of much above 1300, the cyclically weaker export outlook warrants a slower pace of KRW appreciation against the USD compared with our previous trajectory of 1250, 1150 and 1120. We also continue to expect pressure on the KRW in the near term due to overall USD strength and strong end-year redemption pressure. As regards to interest rates, we maintain our policy interest rate view of 50 bp in cuts to 3.5% by mid-2009. We believe that, given the prospects of moderating inflation and a global easing cycle, the BOK could cut another 50 bp in 2H2009 if global financial conditions and economic outlook do not improve as we currently envisage.

Asia in a Nutshell (Cont'd)

	Present Situation	Key Issues
MALAYSIA	September industrial production fell by 1.7% yoy, which is the first yoy contraction in 18 months. This reaffirms our view that domestic demand is moderating. Also, although the political turbulence seems to be stabilizing, the weaker external environment will likely dampen export growth and corporate capex. Our 2009 GDP growth forecast is at 3.4%, below the consensus at 4.5%.	In light of the continued deterioration in the global growth outlook and the ongoing financial market turmoil, the risk of rates is to the downside. We think that BNM will look to ease policy, possibly as soon as the next meeting, especially if the growth risks become clearer and inflation risks diminishes.
PHILIPPINES	The Philippines reported a budget deficit of P9.0 billion for October. This widened the year-to-date deficit to P62.4 billion from a deficit of P41.4 billion over the same period last year. A further widening in the fiscal deficit looked likely this year as revenue growth was expected to slow on the slowing economic growth. Our 2009 GDP growth forecast remains at 3.2%, below the consensus of 3.6% and also below the government's recently revised forecast range of 3.7%-4.7%.	BSP kept policy rates unchanged on November 20. PHP weakness would be a factor holding BSP back from rate cuts. We have seen the PHP weaken over 3% on a nominal trade-weighted basis in the last 2 weeks alone. With remittances growth slowing and the balance of payments recording a hefty US$1.2 billion deficit in October, BSP may not want to add to further depreciation pressure by cutting rates at the moment.
SINGAPORE	We are revising our GDP growth forecasts to 2.0% for 2008 and decidedly lower for 2009 to -2.2% from 3.0% and 2.0% previously. Our forecasts already assume that we will see policymakers utilize the full extent of their policy toolkit to prevent a sharper slowdown. Growth could slow beyond our forecasts, if decisive policy action fails to materialize over the coming months. We will also likely see CPI inflation drop off more significantly starting from January next year as the base effects from the earlier revisions to public housing annual values kick in. We now expect CPI inflation to average 2.0% in 2009, from 3.4% previously.	We believe inflationary pressures will recede much quicker with the commodity price declines and the continued growth slowdown, leaving the MAS room to ease further from its current neutral stance. We think the urgency of the situation could have the MAS bring forward policy easing before its meeting next April, especially if the SGD NEER tests the weak side of the band in the near term. We are shifting our USD/SGD forecasts to 1.56, 1.60 and 1.52 on 3, 6 and 12-month horizons, to reflect this possible inter-meeting ease.
TAIWAN	3Q2008 GDP contracted by 1.0% yoy, lower than our and the market's expectation of 1.0% yoy growth. We are revising down our 2008 and 2009 GDP growth forecasts to 1.5% and -2.0% respectively, from our already below-consensus forecasts of 3.0% and 2.2% previously. Our forecasts imply GDP growth to remain in negative territory through to 3Q2009. With a more opaque exports outlook ahead, we see few catalysts in lifting domestic demand.	We expect another rate cut of 25 bp in the upcoming policy meeting in December. Going into 2009, we expect another 100 bp of reduction in the policy rate by the central bank, bringing the policy rate to 1.50%. On the fiscal policy front, we have long highlighted that the government does have the flexibility to pursue a more expansionary fiscal policy. Nonetheless, we believe the cyclical headwinds from a weakening global macro outlook should still prevail in the near term.
THAILAND	2Q2008 real GDP growth came in at 5.3% yoy, slower than the revised 6.1% yoy in 1Q2008 and below the consensus expectation of 5.7% yoy. This moderation in headline growth momentum was in line with our expectations and we expect continued moderation over the coming quarters. We believe the domestic demand recovery is still at a fragile stage and we should see continued downward pressure from the deteriorating consumer sentiment and spending on the back of rising inflationary pressures and ongoing political uncertainty.	The focus has swung from inflation to growth fears, heightened by the continued concerns in the external environment. We are already below consensus with our well held GDP growth forecasts at 4.3% for Thailand in 2008. October headline CPI inflation eased to 3.9% yoy versus 6.0% yoy in September. This was much lower than the consensus of 4.9% yoy. Given that inflation has eased off more significantly, we think it is likely that the BOT will move to an easing bias (cutting rates by 25 bp) at its December meeting.

Key Things to Watch

The potential policy responses around the world to the recent financial market volatilities and the continued weakness in economic data remain the key focus for investors. Therefore, comments from policymakers remain the key thing to watch in the coming weeks. On the data front, the latest advance November reading for Global Leading Indicator shows that the momentum in the global industrial cycle continues to weaken. This does not bode well for Asian exports, and so the US durable goods orders data would be another useful indicator to watch. Most Asian economies which reported 3Q GDP data all confirmed that growth experienced a notable slowdown from 1H2008. We expect the 2QFY09 GDP data from India to show similar trends. Lastly, Korea's domestic demand indicators could reaffirm that domestic demand is already slowing, amid weaker export growth.	
US Existing home sales (Oct) (Nov 24) GDP annualized (3Q P) (Nov 24) S&P/Case Shiller Home Price Index (Sep) (Nov 25) Durable goods orders (Oct) (Nov 26) U of Michigan Confidence (Nov F) (Nov 26) New home sales (Oct) (Nov 26) ISM (Nov) (Nov 28) Fed Beige Book (Dec 4) Non-farm payrolls (Nov) (Dec 5) Unemployment (Nov) (Dec 5)	Further weakness in manufacturing sector? ▪ Yes. We expect headline durable goods orders to decline by 2% mom, after a slight bounce of 0.9% mom in September. ▪ Various surveys of industrial activity, including the Philadelphia Fed Survey, are all pointing towards a glimmer outlook. ▪ With Asian exports growth already moderating, the deterioration seen in the Global Leading Indicator and the US industrial activity indicators hints for more weakness ahead for Asian exports. ▪ The recent homebuilders' index set another record low. The weakness came in current sales and buyer traffic; expectations for the future were unchanged albeit at a very weak level. This likely foreshadows more weak housing data to come.
Korea Industrial production, capex and consumption indicators, construction orders (Oct) (Nov 28) Trade and CPI (Nov) (Dec 1) Central bank policy meeting (Dec 4)	Further slowdown in production activities? ▪ **Forecast: likely**. We expect industrial production growth to slow down further given the moderation in exports growth and further deterioration in domestic demand on both the investment and consumption fronts.
India GDP (2QFY09) (Nov 28)	GDP to slow? ▪ Yes. We expect GDP growth to slow to 7.1% yoy in 2QFY09 from 7.9% in the previous quarter due to slowdown in both domestic and external demand. ▪ The larger-than-expected shock to the financial sector and its knock-on effects are expected to reduce growth to 6.7% in FY09 from 9.0% in FY08.
Indonesia CPI (Nov) (Dec 1) Central bank policy meeting (Dec 4)	Bank Indonesia to cut rates? ▪ **Forecast: no**. Given the substantial depreciation pressures on the IDR, we do not expect the central bank to start easing rates soon. We expect the benchmark rate to hold steady at 9.50% this year.
Thailand CPI (Nov) (Dec 1) Central bank policy meeting (Dec 3)	Bank of Thailand to cut rates? ▪ **Forecast: yes**. The focus has swung from inflation to growth fears, heightened by the continued concerns in the external environment. Given that inflation has eased off more significantly, we think it is likely that the central bank will move to an easing bias (cutting rates by 25 bp) at its December meeting.
Japan Industrial production (Oct) (Nov 28) National/Tokyo CPI (Oct/Nov) (Nov 28)	Production looking increasingly weak? ▪ We expect October-December to mark the fourth quarterly decline. Now that exports have slowed, we envisage a longer and deeper production correction in capital goods. ▪ We expect CPI inflation to subside. We forecast a fall to +1.5% yoy for the national overall index in October (September +2.1%), as gasoline prices declined. We also expect the "core core" index to stay low, given the widening deflationary gap and stalled wages under recessionary conditions.

Additional things to watch: **Hong Kong retail sales (Oct)** (Dec 1), **Philippines CPI (Nov)** (Dec 5).