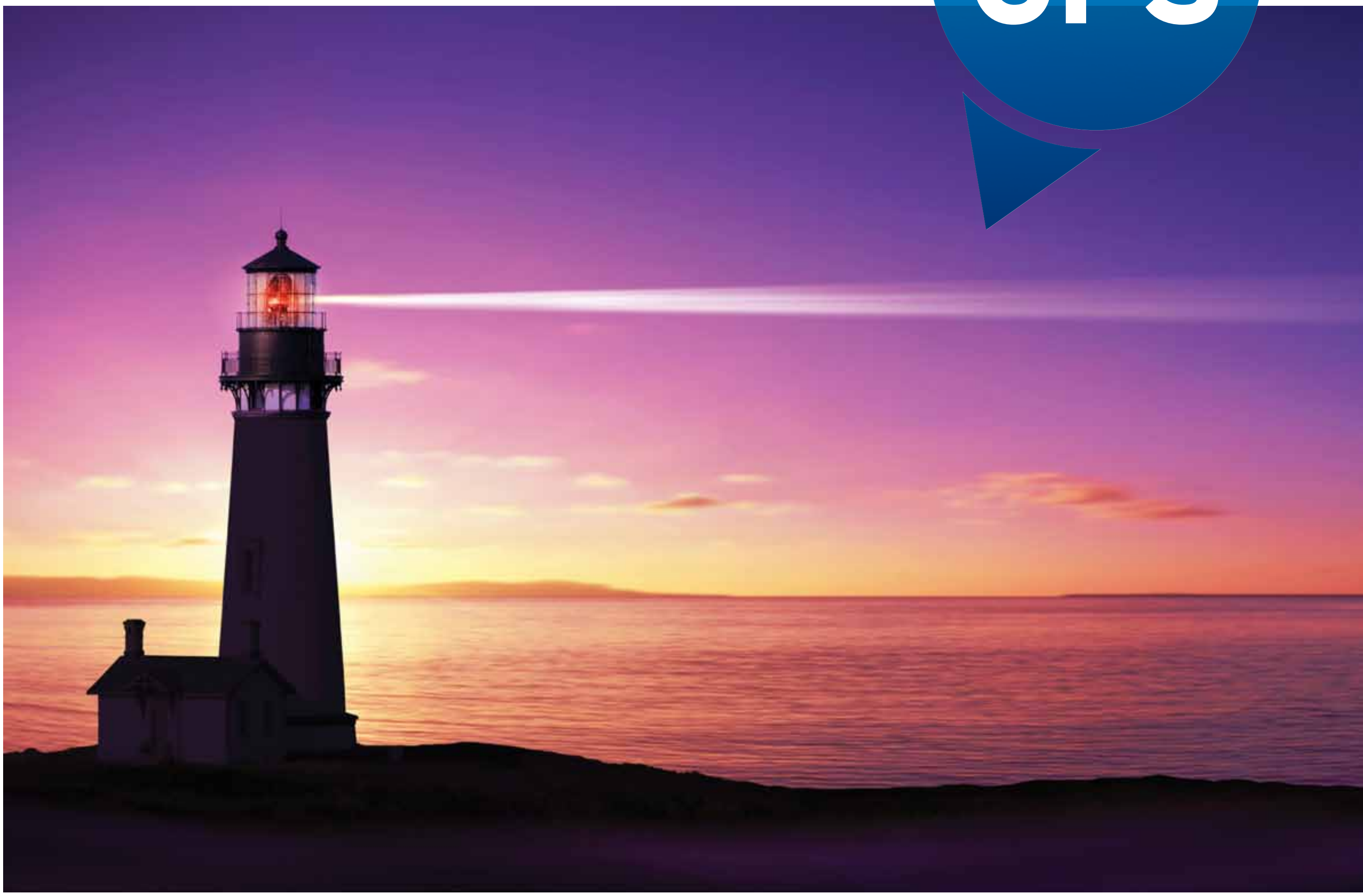

2013 INVESTMENT THEMES

The Search Goes On

Citi GPS: Global Perspectives & Solutions

January 2013

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2013 INVESTMENT THEMES

The Search Goes On

Andrew Pitt
Global Head of Citi Research

Despite many of the macro and political themes which dominated financial markets in 2012 not achieving clear resolution, the returns from a number of major asset classes exceeded historical averages last year. This was particularly the case in developed market equities and broadly across credit markets with the additional stimulant of much lower volatility. Moreover, despite the consensus bearishness on Europe at the start the year, European equities and EMU government bonds outperformed in 2012 while the slowdown in China, which made less headline news at the start of last year, precipitated a weak commodities market and poorer performance in commodity-linked emerging markets equities.

Our base case for global GDP growth in 2013, outlined in the first section of this report, is below consensus forecasts and little changed over 2012, with an expectation of continued recession in 2013 and 2014 in the euro area. With several important European elections taking place in 2013, the political dimension to policy making — as seen so clearly in the US with the year-end scramble to the edge of the fiscal cliff — should remain a major factor inhibiting the clear resolution of a number of structural issues. High private sector debts and high fiscal deficits mean that Europe in particular will most likely require a series of sovereign restructurings that will occur over a protracted number of years, thereby prolonging investor concerns.

In contrast to the concerns on Europe, our base case assumes that the US will manage a “Goldilocks” policy transition with lower energy and transportation costs supporting a growing industrial recovery. China managed an orderly leadership change in late 2012. and its economy is now transitioning to a slower growth path of about 7% per annum, with a marked pickup in consumer spending. Despite slower growth, China can be expected to remain a global powerhouse, with real GDP doubling every ten years or so and directly accounting for about a third of estimated global growth in 2013-17, on our forecasts.

Our selection of investment themes for 2013 is influenced by our base case economic scenario and by our asset allocation framework and methodology. Over the course of 2013 as a whole, our asset allocation framework, outlined in the second section of this report, suggests a positive view on equities, a neutral view on credit and an underweight view on government bonds and commodities. Around these views, we discuss some shorter term nuances and amplify some particular themes in other sections of the report.

In equities in particular, we believe that investors need to understand the serious implications on corporate behavior of a global equity market increasingly dominated by income-seeking investors where share buy-backs and higher dividends are being rewarded and increases in capex penalized by shareholders. We also see an increase in M&A and spin-offs as a significant theme in the corporate sector in 2013 aimed at unlocking shareholder value. In Commodities, we discuss the consequences for investors in the year ahead of the commodity super-cycle being over as well as the implications of radically changing conditions in the oil market.

We have selected several investment themes for 2013 that come from our global analysis across industry segments and which we believe have the prospect of strong investor interest. These themes are urbanization in China, how to play the revolution in Gas within the global energy sector, the explosion of smartphone devices, and US real estate.

1. Recovery & Recession in a Divergent Outlook

Willem Buiter - Chief Global Economist
Nathan Sheets - Global Head of International Economics
David Lubin – Head of Emerging Markets Economics
Guillermo Mondino - Head of Emerging Markets Economics & Strategy
Tina M Fordham – Senior Political Analyst
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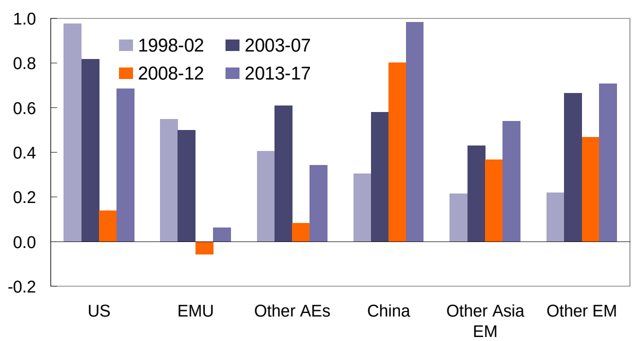
We expect 2013 will be another year of modest global growth, a little below its long-run average, with sizeable differences between regions and individual countries. Our base case is for global growth of 2.6% in 2013 and 3.1% in 2014 (at current exchange rates), after growth of 2.5% in 2012. Our forecasts are a little below both consensus and International Monetary Fund (IMF) forecasts (the IMF expects global growth of 2.9% in 2013 and 3.5% in 2014 at constant exchange rates). But, we do expect modest near-term growth to give way to faster expansion subsequently, with real global gross domestic product (GDP) growth of 3.5%-4.0% year-on-year in 2015-17 (although our forecasts for later years are also a little below IMF forecasts). Against this backdrop, major central banks will probably continue to keep policy loose near-term, and generally loosen further in 2013, with tightening not occurring until 2015 in the US and rather later in Europe and Japan.

China's growth is slowing but it will remain a global powerhouse

Consumption and investment will grow rapidly across emerging markets in coming years

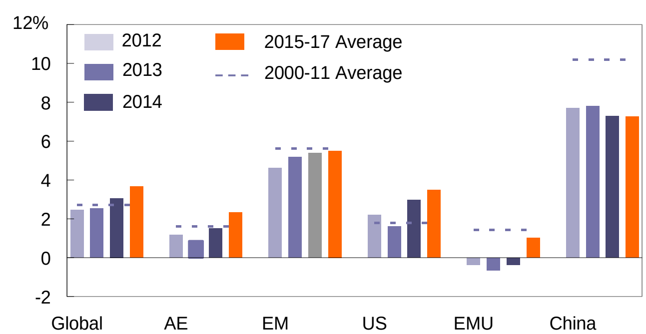
Over the last five years, global growth has been heavily China-dependent and China's growth has been heavily investment-dependent. In all, China's GDP has accounted for 45% of global growth in 2008-12 and an even bigger share including the spillovers from China's expansion to other countries. China's economy is now transitioning to a slower growth path of about 7% per year, with a marked pick-up in consumer spending. China will remain a global powerhouse, with real GDP doubling every ten years or so and directly accounting for about a third of estimated global growth in 2013-17. Nevertheless, this impetus will be supplemented by a gradual but powerful renewed acceleration in US growth. In addition, we expect consumption and investment will grow rapidly across many emerging markets in coming years, especially in Asia and the Middle East, reflecting policy loosening plus background drivers of rapid growth in middle-income consumers, urbanization, and major infrastructure projects by cash-rich governments and state-linked bodies.

Figure 1. Global – Contributions to Global GDP Growth, Annual Averages, 1998-2017E



Note: Contributions measured at current FX rates; AE = Advanced Economies
Source: IMF and Citi Research Note: Contributions measured at current FX rates

Figure 2. Global - YoY Real GDP Growth by Region, 2000-2017E



Source: Citi Research

US real GDP growth should outperform the euro area and Japan's "lost decade"

Although the global financial crisis hit both the US and Europe in 2007-09, we expect very different recovery paths, reflecting different policy choices in managing the deleveraging process plus underlying differences in terms of the supply-side and energy availability. In 2012, US real GDP growth outperformed the euro area by 2.75%, the widest gap since 1993. We expect similar sustained US outperformance in coming years. With improving private sector balance sheets and falling energy costs, we believe that — provided near-term fiscal tightening is gradual — US growth will gradually transition to 3%+ from late 2013 and in subsequent years. US real GDP per head will probably regain its 2007 level in 2013 or 2014, and rise about 9-10% above the 2007 level by 2017 — clearly outperforming Japan's "lost decade" where from 1992-02 real GDP per head rose by 5%.

Europe will continue to struggle, with greater shortfalls in many periphery countries

By contrast, in the euro area we expect continued recession in 2013 and 2014 and prolonged weakness thereafter — with ongoing financial strains plus a series of sovereign debt restructurings over the next few years. In the euro area and the UK, real GDP per head will probably remain 3-4% below the 2007 level even in 2017, with a greater shortfall in many periphery countries — markedly underperforming versus Japan's "lost decade". The European economies still have underlying potential to grow, but we expect that private sector deleveraging, a weak banking system, early fiscal austerity, and financial strains resulting from flawed European Monetary Union (EMU) structures, will continue to cap demand for an extended period.

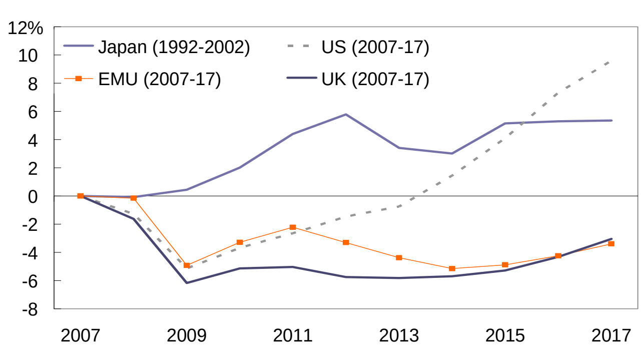
Fiscal deficit handling continues to be important and differs from region to region

The main uncertainties in the outlook concern the interplay between high private sector debts and the high fiscal deficits across many advanced economies. Our base case assumes the US will manage a "goldilocks" policy transition, with gradual fiscal tightening kicking in as private deleveraging eases. If fiscal consolidation is excessively deferred, then bond yields could back up sharply, especially as private savings fall. Conversely, as Europe's experience shows, aggressive early fiscal tightening could tip the US economy back into stagnation or worse. In Europe, we assume that in the near term, as recently, creditor nations will continue to do just enough — through official support — to prevent the disintegration of the EMU, but not enough to return the periphery countries to sustainable fiscal paths. Eventually, we still expect Grexit (Greek exit) and a series of sovereign debt restructurings, alongside moves towards tighter integration among EMU countries.

Current account surplus in EM is likely to vanish but China is expected to continue to run surpluses

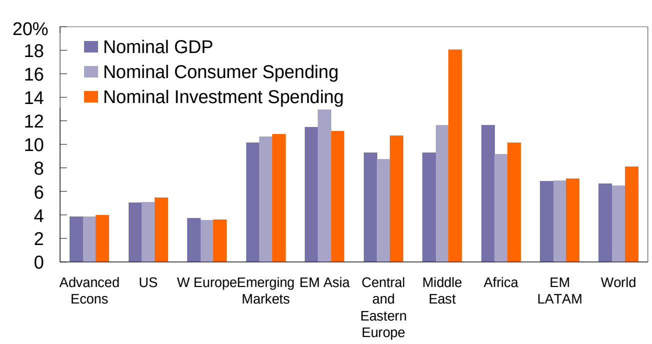
The aggregate current account (CA) surplus of emerging market countries is likely to vanish in coming years as the growth of domestic demand and imports continues to outpace advanced economies. However, sizeable imbalances probably will remain and some new ones will develop. We still expect China will continue to run CA surpluses in coming years, while in aggregate other emerging market countries will run modest deficits. At the same time, the US will probably remain in CA deficit, while in the euro area (like Japan) sluggish domestic demand probably will produce persistent surpluses and capital outflows. By and large, we do not expect CA imbalances to be a major destabilizing factor in the global outlook, but there may be strains in some individual emerging market countries.

Figure 3. US, Euro Area, Japan and UK – Cumulative Change in Real GDP per Head After Banking Crisis, 1992-2017E



Source: World Bank, Datastream and Citi Research

Figure 4. Global – Expected Average YoY Growth of Nominal Economic Activity in USD Terms, 2012-20E



Note: We aggregate nominal GDP at forecast exchange rates to 2017 then extrapolate
Source: IMF and Citi Research

2. Asset Allocation: Evolution not Revolution

Jeremy Hale
Head of Global Macro Strategy Product

Looking back on 2012, the lesson we learn is to beware the consensus. In early 2012, bearishness on Europe was everywhere yet European stocks and EMU government bonds outperformed. Bad news if you followed the doomsayers. Meanwhile, the China slowdown story, which got much less news print in early 2012, showed up in poor commodity market performance and underperformance by EM equities, especially Chinese and Brazilian markets.

The strongest concern going into 2013 was the US fiscal situation. We think this has likely been resolved in a way that could see accelerated US economic growth by 2H 2013, supporting US market outperformance. Meanwhile, investors who believe risks in Europe have receded may be right near-term but less correct over 12 months where we see underperformance in European financial stocks/ credits and EMU government bonds. The consensus that China has slowed is probably right, and EM more broadly has followed this trend. But with better valuations and probably more earnings clarity than in some developed markets, we see a catch up in EM equity market performance medium term.

Equity returns expected to outperform credit and commodities in 2013

Overall for 2013, equity returns are generally still expected to be relatively strong and commodity returns weak. But credit should do less well than in 2012, partly reflecting developments in risk-free rates. There is also a case for expecting equity returns to be higher than credit returns, at least in a bull market, as we believe the macro background has probably passed the best point for credit outperformance. That said, the flow of investor money into credit remains strong, not least because credit returns exhibit low volatility relative to equities.

Over 12 months we are long equities, neutral credit, underweight government bonds

Over 3 months we are long equity and credits, neutral on governments

For our 12-month asset allocation, we are long equities, neutral credit and underweight government bonds with a clear bias for equity over fixed income. But our short-term allocation is more cautious as the trend toward lower yields in core governments may not be over yet, credit funds continue to be awash with investor money and equity markets remain volatile. On a 3-month basis, we favor equity and credits and are neutral on governments.

Monetary policy will be a driver of asset market performance

We think a huge driver of asset market performance in 2013 will be the stance of monetary policy in the industrialized economies. The latest central bank to join the party, at least potentially, may be the Bank of Japan (BoJ). A shift to open ended quantitative easing-type (QE-type) operations plus a weaker Japanese yen objective, if realized, would certainly support a better outlook for Japanese stocks.

But possible BoJ machinations simply add to bursts of super easy money elsewhere, including from the European Central Bank (ECB), Bank of England (BoE) and Swiss National Bank (SNB) in Europe plus of course QE3 from the Fed in the US. We expect large scale asset purchases (LSAPs) by the Fed to be extended well into 2013, not least because the Fed's change in modus operandi from targeting inflation expectations to focusing on the labor market suggests that the end of this period for accommodation may be further away than markets have been used to under QE1 or QE2. This is bullish for stocks and credit spreads for at least so long as these markets are not overvalued against regular criteria.

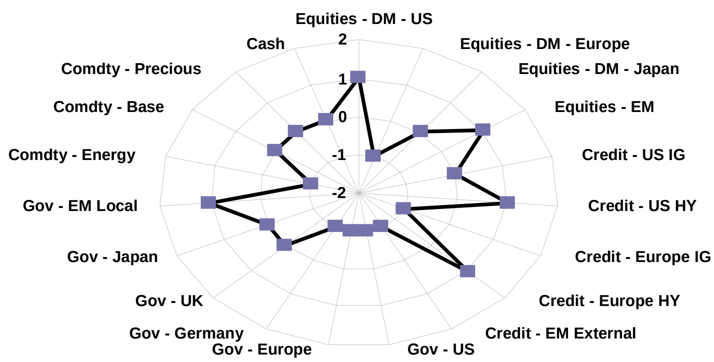
Equity valuations do not look expensive yet

Our assessment is that this is not the case yet. Equity valuations on traditional trailing or forward price/earnings (P/Es) or price/book value (P/B), look okay. To be bearish you need to refer to cyclically adjusted P/E comparisons and assume high margins are set to contract. We remain skeptical that this is imminent. Meanwhile, corporate credit spreads are still wider than model projections — even if those models do not suggest fair value will ever get back to levels seen prior to the global financial crisis.

Higher inflation expectations could hurt government bond returns

Fed easing into higher inflation expectations may, however, eventually be less helpful for government bonds, at least at the longer end of the curve. Core government bond yields have tended to go up in the early stages of prior easy money episodes like QE1 and QE2 and remain positively correlated with changes in equity prices. We think this is because reflationary expectations (higher forward implied rates) more than outweigh direct buying and portfolio balance effects from the LSAPs and liquidity additions. Returns are likely to be low and the case for being long governments is really a bearish one on risk assets in portfolios.

Figure 5. Medium Term Recommended Asset Allocation



	Medium Term*				
	-2	-1	0	+1	+2
Equities					
Credit					
Governments					
Commodities					
Cash					

Source: Citi Research -2 = very underweight; -1 = underweight; 0 = neutral; +1 = overweight, +2 = very overweight; * Allocations do not necessarily sum to zero

EM should be more resistant to US dollar depreciation than in QE2

Fed QE could also mean downward pressure on the US dollar in currency markets although if other countries are also in the currency weakening game (SNB, BoJ and even the BoE have all discussed this), then implications are harder to draw out. For the rest of the world, QE by the Fed (and other developed country central banks) is a challenge. In the EM countries, our assessment is that inflation concerns are lower than during the QE2 episode and concerns about growth are greater. As such, we expect more resistance to US dollar depreciation.

We are overweight EM equities and local rates but only external debt on a 3m basis

We think this means less US dollar downside than in QE2 and helps EM local rates market returns and equity performance more than in that episode. The case for some catch-up in relative share price performance in EM countries is growing, and this is reflected in our asset market return projections and our asset allocation recommendations. Over 3 months, we are overweight EM equities, EM local rates markets and external debt. Over 12 months, we remain long in EM local rates and equities but we think deteriorating underlying balance sheets in EM economies — as countries target greater domestic demand growth — suggest poor relative returns in EM external debt, and we go underweight.

Neutral commodities short term; underweight longer term

Easy money should continue to support commodity prices, particularly precious metals, which, for the short term at least, we think will remain the strongest performers in the complex. For this horizon, we are neutral commodities, with precious outperforming and energy lagging. But, longer term, we are less positive as China is no longer a sure-fire growth driver in the global economy and certainly not with the same focus on infrastructure/ real estate. We prefer Chinese/ EM equities to commodities as a bullish China play. Over 12 months, our allocation is underweight commodities, with metals neutral and oil underweight.

3. QE Isn't Working: An Equity Perspective

Robert Buckland
Head of Global Equity Strategy

With expectations that central bank monetary easing will extend well into 2013, and amid controversy around whether spending or austerity is the right path to global economic recovery/ growth, we felt it was worth taking a moment and looking at the economic effects of the already implemented QE policies.

The economics textbooks teach us that expansionary monetary policy, which lowers interest rates and eases credit, can be used to combat unemployment and economic recession. So, with inflationary pressures waning and the world economy slowing, policymakers around the globe have put this theory into practice and continued a "race to the bottom" for global interest rates. Many of those countries with policy rates still high enough to make it worth cutting have done so. Those where rates were already rock-bottom have resorted to increasingly creative means to lower borrowing costs even further.

Low interest rates should help to support consumer spending through reduced mortgage and credit card costs. In addition, by purchasing sovereign debt, QE policies help to reduce market pressures for governments to pursue growth-sapping austerity policies. But lower rates for overleveraged consumers and governments look more like damage limitation than growth promotion.

Corporate sector is best hope for economic growth and job creation

That leaves the corporate sector as the policymakers' best hope for economic growth and especially for job creation. Balance sheets are strong, profitability is high and the cash is piling up. Add ultra-low rates to the mix and it is very likely CEOs will kick off a capital expenditure (capex) and hiring binge. But this has not really been happening, in the listed corporate sector at least. Indeed, capex/sales ratios for publicly listed companies across the world have been heading downward for much of the past decade even given a backdrop of progressively lower interest rates. Recent ultra-low rates have not noticeably reversed this trend.

Such corporate caution is usually blamed on global economic uncertainties. Amongst these, the US fiscal cliff, the China slowdown and the ongoing EMU crisis look most obvious. But we can't help feeling that there is something more fundamental going on here. The economic outlook is always uncertain at weak points in the cycle. Nevertheless, low interest rates usually prod CEOs into action.

Global equity market now trading on a dividend yield above treasuries

We think one answer to this conundrum can be found in the equity market itself. As aggressive monetary policy has pushed interest rates to all-time lows, so the dividend yield available on equities becomes more attractive. The global equity market now consistently trades on a dividend yield above treasuries for the first time in over 50 years. Income-starved investors have noticed.

Global equities have reinvented themselves as an alternative bond market…

If the global equity asset class has reinvented itself as an alternative bond market, this has profound implications for companies and, ultimately, policymakers. Textbooks suggest that investors should buy equities for growth and bonds for income. But low rates and QE have turned that traditional mantra on its head. Investors are increasingly looking to equities to fulfil their income requirements. And as the global equity market becomes dominated by these income-seeking investors, companies will become increasingly sensitive to their requirements.

…and equity investors are extracting capital from the market

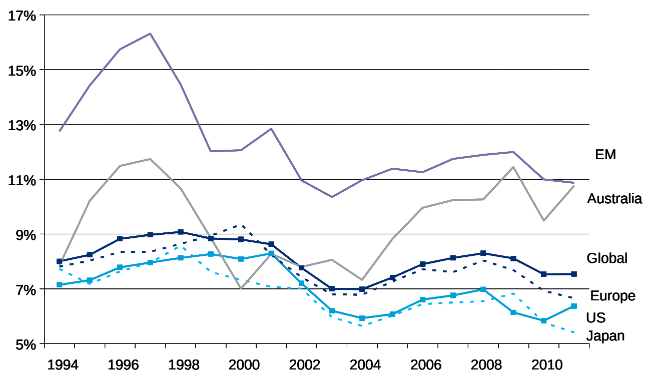
Textbooks also say that the equity market exists to bring together those who supply capital and those who require it. Equity investors provide the riskiest capital to a company. They give up security of return in order to participate in the future growth of the business. Again, that looks less appropriate in current capital markets. Rather than providing new capital to companies, equity investors now seem more interested in extracting existing capital through share buybacks or dividends.

This brings us to a basic observation: companies remain reluctant to expand because increasingly income-obsessed shareholders don't want them to. If anything, ultra-low interest rates have exacerbated this theme. Policymakers should take note.

Equity markets have been supported by dividends and share buybacks

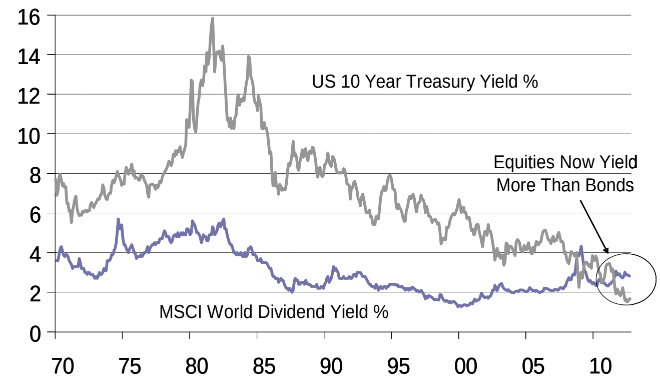
In 2011, US companies spent $650 billion on share buybacks and dividends compared to $580 billion on capex. While this is supportive of share prices, it does not help other stakeholders who would presumably prefer the capital be spent on new investments and jobs. In markets where shareholder requirements have a greater influence upon companies, the suspicion of capex and preference for distributions is evident. In Europe, those sectors that invest the most are given lower valuations and in the US, share buyback and dividend ETFs have outperformed handsomely in recent years. It seems that the market is sending clear signals to companies: "if you want your shares to outperform then distribute, don't invest."

Figure 6. Listed Company Capex to Sales (Non-Financials)



Source: Factset, Citi Research

Figure 7. Dividend Yield and US 10Y Treasury



Source: Citi Research, Datastream, MSCI

The equity market effect on corporate behaviour needs to be considered

If policymakers really do want to encourage stronger economic growth (and especially higher employment), we would suggest that they take a closer look at the equity market's part in driving corporate behaviour. If anything, low interest rates are increasingly part of the problem rather than the solution. Perversely, they may be turning the world's largest companies into capital distributors rather than investors. Perhaps rates should be allowed to rise back to more natural levels. This might be painful at first, but it could stop equity investors being so income-obsessed. Or maybe the real problem here is depressed equity valuations. Low PEs and high dividend yields reflect the long slow death of the equity cult. At the margin, current valuations encourage CEOs to distribute through buybacks or dividends. They discourage capex and job creation. Perhaps instead of buying government bonds, the next round of freshly minted QE cash should be used to buy the stock market instead.

Investor interest in share buybacks and dividends will continue to hamper corporate expansion plans

If policymakers hope that listed companies can help drive down current high levels of unemployment, it could be a long wait. Corporate expansion plans are likely to remain constrained by uncertainties about the global economy and a shareholder base that is more interested in share buybacks and dividends than capex and job creation. But despite our misgivings about their effectiveness, interest rates are likely to remain very low for some time.

4. Positive for a Little Longer on Credit

Stephen Antczak, CFA
Head of Credit Strategy

Our 2013 outlook is cautiously optimistic, which is unfortunately more-or-less in line with consensus. While many valuation metrics are not particularly attractive, at the end of the day, the Fed will continue to push investors into riskier assets, including corporates. However, we probably will see more risk to this view than the typical investor, particularly in the longer term. Bottom line: gains are likely in 2013, but we firmly advocate not getting "married" to positions

Credit spreads to end 2013 at modestly tighter levels

Our base case is that credit spreads will end 2013 at modestly tighter levels, although tightening potential varies meaningfully across market segments. Each market has its own nuances, but four positive factors resonate across all:

1. **Low default risk**: One key reason we expect tighter spreads is simply because, away from a few idiosyncratic cases, default risk is so low. Indeed, our quantitative team's model suggests that defaults over the next year in the high-grade space could be the lowest in 15 years.

2. **Fed still pushing**: In fact, one could argue that the Fed may be pushing a bit *too* aggressively at this stage. Historically, monetary policy (defined as the funds rate and the Fed's balance sheet) and a "market health" index (comprised of economic factors, systemic risk metrics, and valuation metrics) have tracked well. But recently, the health index is firming, but policy is getting easier, not tighter.

3. **Light supply**: "Not enough paper" was the resounding complaint from investors for much of the past year. Despite our expectation that companies will re-lever going forward, we do not expect net supply to increase — actually, we expect it to fall 5%-10% year over year.

4. **Is credit the new cash?**: Much has been made of flows from equity to credit, but one could argue that in a no-default environment with muted Treasury rate volatility, some investors may be viewing credit as the new cash. Consider a $100 portfolio held in cash versus one invested in a typical high-grade exchange traded fund (ETF) — neither is volatile, but the ETF over the past year would have given you a 30% return.

Risks for 2013 are fiscal cliff, European challenges and corporate re-leveraging

As for the risks for 2013, most of them seem to still be focused on the debt issues in the US, continued challenges in Europe, and, to a lesser extent, corporate re-leveraging. We agree that these are important, but we also believe that there are some longer-term risks which may not be getting quite enough attention.

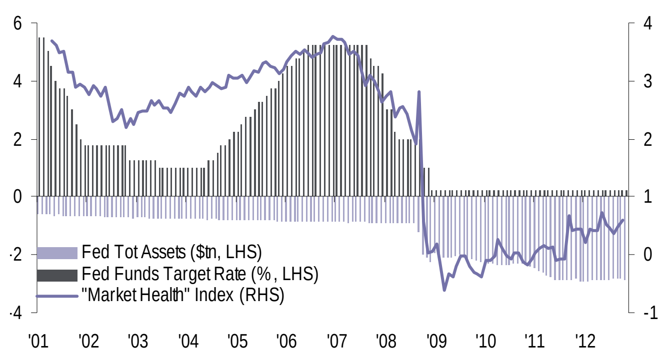
1. **Long credit trade is crowded**: Fed data show that, overall, investors have maintained or trimmed exposure to corporate bonds in recent years. But three types of investors have been increasing exposure meaningfully — life insurance companies, mutual funds, and ETFs. In the longer-term, this presents a problem for two reasons: first, mutual fund flows tend to follow total returns; in particular, when total returns are negative, outflows increase sharply. And if our economists' expectation for Treasury rates prove to be correct (a 2.5% 10-yr rate by the end of 2013), negative total returns in the corporate market are certainly possible. Second, who will take the other side of the trade if outflows do pick up? With everyone on the same side, any selling pressure could be magnified.

2. **Investors have been pushed, not pulled**: Fed policy has helped and will continue to help both the fundamental backdrop and valuations in the near-term for credit. However, by some metrics, valuations are benefiting more than fundamentals for these efforts. For example, comparing gains in the labor market to S&P 500 price performance since 2010, we see the two are trending in different directions — valuations are trending higher, but the labor market is more-or-less steady. This isn't a problem per se, but there is at least some risk that valuations do the adjusting, instead of labor markets improving or catching up.

3. **Valuations getting full**: Spread levels are well north of the lows reached in previous credit cycles — high yield cash is 550 basis points now vs. 240 basis points in 2007 — but in risk-adjusted terms, many valuation metrics look less attractive. For example, when considering spread per unit of leverage in the high-grade market, we see the amount that investors get paid for taking leverage risk is less than in early 2007. Dollars-at-risk is another metric that seems full. Indeed, some non-financial sectors in high-grade currently trade near their cyclical spread tights in nominal terms, but well through the tights after adjusting for high-dollar prices. All-in yields and credit market valuations versus other asset classes tell a similar story.

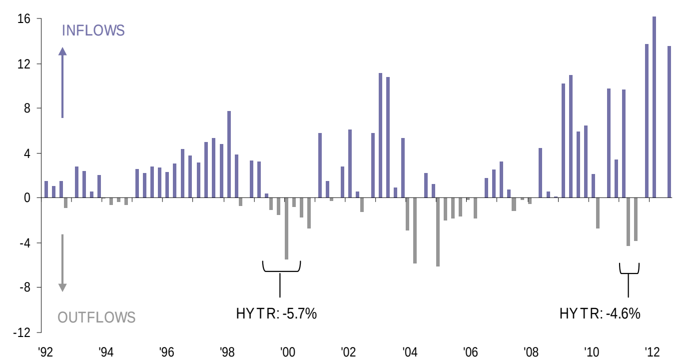
4. **Complacency reigns supreme**: Investors across asset classes appear to be fairly complacent about the potential for negative catalysts. For example, implied volatility in the Treasury market is hovering near the all-time lows. The problem is that when we have traded at these levels before, we haven't stayed there for all that long.

Figure 8. Is the Fed Pushing Too Hard?



Note: Index based on 30Y BE, employment rate, avg bank CDS spread, credit spread
Source: Citi Research, Bloomberg, BLS, As or October 31, 2012

Figure 9. Mutual Fund Outflows vs. Total Returns in High-Yield Space



Source: Citi Research, EPFR Note: As of 3Q 2012

Comfortable edging down the quality spectrum near-term but deleveraging brings in risk longer term

In the near-term, we are still comfortable edging down the quality spectrum, in part because short-run default risk is so low and on a risk-adjusted basis spreads down the quality spectrum look relatively wide. But longer-term, fundamental risk is very different, in part because companies are deleveraging. In fact, our models show that the 10-year default risk for the typical BBB bond is more than twice as much as the average single-A or better credit.

We favor the back-end of the yield curve near-term

Looking at maturity, in the near-term, we favor the back-end of the yield curve as: 1) the back-end is higher beta and could benefit if the risk-on scenario that we expect comes to fruition; 2) curves are steep and could benefit from a back-up in Treasuries combined with a reach for yield; 3) the back-end has underperformed as investors look to avoid duration to protect year-to-date performance, but this is a "crowded" short, and 4) the market doesn't always value high-dollar prices properly, in our view, resulting in attractive opportunities.

5. Commodities 2013 – The New Abnormal

Edward L. Morse
Head of Global Commodities Research

The past year has been a mixed bag for commodities with significant volatility and differentiation across the complex. The confluence of tail risks — geopolitics, extreme weather, the ongoing European sovereign debt and banking crises — led to significant price swings for individual commodities despite almost no change in benchmark commodity index levels for the full year. This is likely part of the 'new abnormal' for commodities as it is now clear that the commodity super-cycle is over and underlying prices will no longer see the nominal returns expected during 2002-2008, nor will conditions close to those of the last decade return any time soon.

New supply surplus coupled with emerging market demand is new paradigm

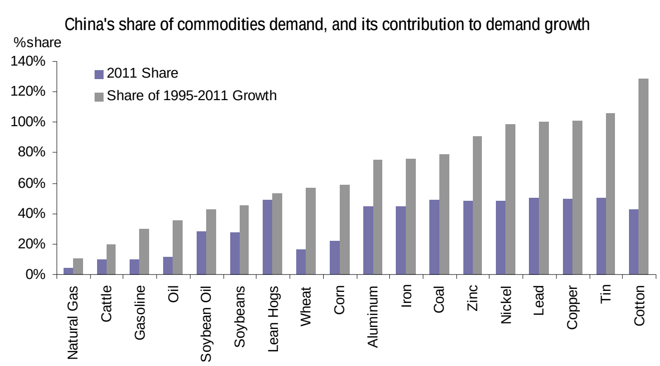
There are both supply and demand aspects to the unfolding commodities paradigm. On the supply side, what first occurred in US natural gas — a marshalling of capital and a new supply surplus — is being replicated across most commodities, including critical industrial and bulk commodities and in other longer-lead time products such as oil, despite risks of supply disruptions. On the demand side, the main drivers will come from emerging markets.

Restructuring of Chinese growth is a key risk across the commodities market

Both the overall slowing and the restructuring of the Chinese growth model should mark a watershed in global commodity markets, if only because China has played such an outsized role in these markets over the past decade. For many industrial metals, China was responsible for all of net global demand growth after 1995, and is also one of the largest global consumers of energy, grain and soft commodities.

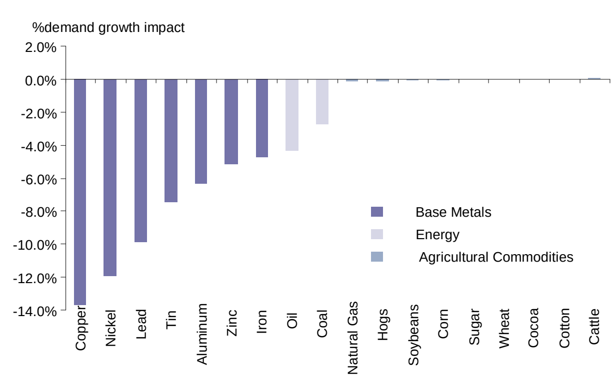
Two structural shifts in China are now forcing a re-evaluation of commodity demand. First is the shift from robust 10%+ annual GDP growth to a significantly lower c.7% annual rate in the medium term (at some point in the near term China will likely have to confront an even more significant short-term rebalancing). Additionally, Chinese growth is likely to be much less energy and commodity-intensive than it has been following huge increases in fixed asset investment and industrial production. An elimination of subsidies is occurring, slowing electricity and major primary energy sources as well as base metals and bulk commodities. The combination of these two factors has repercussions across commodities, particularly those linked to industrial output.

Figure 10. Share of China in World Commodity 2011 Demand and 1995-2011 Demand Growth



Source: Citi Research

Figure 11. Impact on Commodity Demand Growth of Chinese "New Normal"



Source: Citi Research

Policy stimuli should provide a bounce in demand…

…but not a large bounce in commodity prices

Nonetheless, in the short-term, we expect a global rebound in commodities demand from today's weak levels, perhaps by the end of 2013 given all of the policy stimuli packages that are being implemented (albeit inflation expectations across developed and emerging markets are tempered for next year). To be sure, some markets will tighten more quickly than others, but as demand rebounds along with global growth, commodity prices are unlikely to move sharply higher. As a result of these new supply and demand conditions, commodity performance is likely to become increasingly differentiated, with winners and losers dependant on the fundamentals for individual commodities.

Performance will be differentiated across the commodity spectrum

We expect industrial metals to see mostly steady prices from 2012 into 2013, but with copper and lead weakening and nickel, tin and zinc showing modest strength. Crude oil looks to be under pressure with the weight of incremental supply balanced less by demand than by punctuated supply disruptions. Precious metals look to remain firm, particularly gold, platinum and palladium, with major bulk commodities mildly weakening. Grains markets will be adjusting to tight inventory conditions ahead but should weaken as more normalized weather patterns re-emerge. Most soft commodities will likely remain subdued, with cocoa possibly seeing modest strength in the period ahead on stronger confectionary demand and a deficit market.

Market conditions are volatile in the oil market

Radically changing market conditions are also at work. In oil there has been a marked increase in the normal scale of supply disruptions; more than doubling from 400-500-thousand barrels a day before the Libyan revolution. Add to that imposed boycotts on Iranian crude oil as we approached 2013 and over two million barrels a day of oil that could be available are off-line. In addition, significantly higher oil and gas production is a possibility if not a probability in a wide variety of places (Angola, Australia, Brazil, Canada, China, Colombia, Cyprus, Iran, Iraq, Israel, Kurdistan, Mexico, Russia, Sudan, much of East Africa), but "above ground" issues keep preventing the oil from either being produced or delivered efficiently to markets. As a result, the residual inventory for the world — Saudi spare production capacity — has been limited, buoying prices.

Commodities could be used to protect against unexpected inflation

As simple long-only strategies lose attractiveness in the face of the end of the commodity super-cycle and extended periods of negative real yield, investors may shift to more enhanced-beta or alpha-focused commodity strategies. Investor interested in commodities to protect against unexpectedly high inflation may also grow as global policymakers continue to provide monetary largess in the face of fiscal austerity and weak economies, heightening the risk of overpowering general deflationary weakness and un-anchoring inflationary expectations. The 'new normal' for weather should add both volatility in commodity prices and drive seasonality-driven risk premia in commodity markets. This also provides new opportunity for investors.

Enhanced seasonality, commodity differentiation and macro conditions will continue to create new long-short strategic contexts and investment opportunities for speculators, governments and upstream/downstream entities to consider in the years ahead. Combining commodities with foreign exchange as well as other asset markets including equities, is also likely to have a bigger impact on prices as hard asset markets become more 'financialized' globally.

6. Releasing Value through Spin-Offs

Adrian Cattley
Pan-European Equity Strategy

Over the past 20 years there have been two periods of performance for mega-caps and mid-caps. Mega-caps (roughly the top 50% of market cap in a large cap index) were the outperformers of the 1990s in both the US and Europe. They were the beneficiaries of flows into equities, commanded a premium rating and used that cheap capital to drive an M&A boom which peaked with the TMT bubble. This period of building-up helped them become mega-caps and gave them a broad range of operations.

Mid-caps have outperformed mega-caps for the last decade creating large disparity – ideal for value-creating opportunities

Since then, mega-caps' share prices have lagged in both the US and Europe with one of the defining characteristics of the last decade being the consistent outperformance of mid-cap stocks over mega-caps. At the end of 2012, mid-caps (and large-caps) trade at nearly a 20% premium to mega-caps in Europe and closer to a 50% premium in the US. This disparity now presents mega-cap companies with a clear value-creating strategy — spin off the businesses that are discount-rated within the mega-cap to get a higher rating as a stand-alone mid-cap.

Extreme value gap between mega- and mid-caps favor releasing value through spin-offs as does the low cost of debt

The strategy of releasing the value in a sum-of-the-parts valuation is not new but we see two reasons that make this a more powerful option now. First is the extreme gap in the value between mega-caps and the rest of the market. From a shareholder value perspective, this is an easy win. Let's take a simple example of a mega-cap trading at a 50% discount to the mid-cap that decides to spin off 20% of its earnings. If the remaining 80% of earnings means the stock is still a mega-cap, the valuation doesn't change. If, however, the 20% gets a 50% re-rating, overall this would see the value of the group rise by nearly 10%. Second is the low cost of debt. One of the justifications for not breaking up a conglomerate is that the larger entity could secure funding at lower rates than the individual businesses could. However in the current environment, with funding costs low across the entire credit spectrum, this makes for a much less powerful argument.

Activist fund managers shine a light on underperforming or under-valued assets

While the value that can be released by big companies getting smaller or by using access to cheap debt is clear, this is often not enough to precipitate action. Companies, like individuals, prefer the status quo. It is easier to do nothing than change and sunk costs are a powerful brake on action. One catalyst for upsetting the status quo is the activist fund manager, who often shines a light on underperforming or under-valued assets.

Private equity has historically played the role of activist fund manager

The activist fund manager is also particularly powerful as an agent for change. Throughout the 2003-2007 time period the role of activist fund manager was played by the private equity industry. Equity from investors and an accommodating credit market gave private equity the firepower to go out and buy businesses. This was one of the drivers for companies doing spin-offs in the last market cycle as company management responded to the looming threat of a private equity action. Deal-hungry private equity also provided ready buyers for listed companies that were looking to release value. Today there has been a pick-up in private equity activity, albeit from low levels and this could again be a potential catalyst for corporate action to release sum-of-the-parts value.

Japan would benefit from private equity activism

Private equity as an activist is particularly applicable to the US but only to a lesser extent in the European market. One country where the financial argument is perhaps strongest for private equity is in Japan. Low return-on-equity businesses with cash on the balance sheet and unrelated operations are ripe for value-releasing plans. However, the market for corporate control works differently in Japan, so private equity hasn't been able get through the gates.

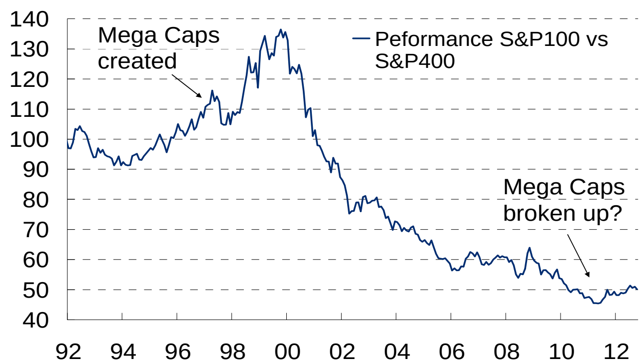
A corporates tax position is a key to whether it creates value through demerger or sale

A company's tax position will always play a large role in influencing how it deals with a potential value-creating demerger or sale of assets. In general, demergers are simpler from a tax basis as no gains are crystallized. Conversely, business unit sales can generate large tax gains. This is one reason why potentially value-creating transactions don't come to fruition and highlights the importance of individual stock knowledge in determining whether a deal is likely to work or not.

Academic studies suggest spin-offs create value

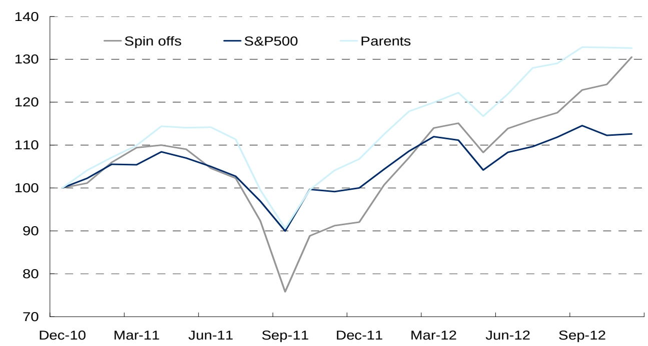
The key question about spin-offs is whether or not they work for shareholders. There have been a number of academic studies that have considered spin-offs since the 1990s in the US and Europe[1]. These have looked mainly at the short-term performance and suggest that spin-offs create value. Longer term studies also point towards value being released[2].

Figure 12. . US Mega vs. Mid Cap, 1992-12



Source: Datastream and Citi Research

Figure 13. US Spinners, Spun and the Market, 2010-2012



Source: Bloomberg, DataStream and Citi Research

We find that that value is created through spin-offs in both the parent and the spin-off

To validate their findings, we looked at the performance in the US of companies that have been spun off to see if value was created. Using a US-listed spin-off ETF as a proxy and comparing it to the S&P 500, we found that over the life of the ETF (since 2007), it has outperformed the broader market by 4%. Looking at a list of companies that have been spun off since 2003, we find that since the start of 2010, the group has consistently outperformed, outstripping the S&P 500 by 13%. If we compare the same set of spun-off stocks but include the performance of the parents as well from the end of 2010, we find that both the spun part and the parents have outperformed. Just announcing a spin-off can be positive for stock performance — over the last two years, companies that announced spin-offs have been outperformers, up by 25% compared to the MSCI AC World index, which was up by 7%. This is consistent with the academic evidence that spin-offs work for both parties.

With open funding markets and activists returning, spin-offs are increasingly likely

So, demergers create value and the valuation arbitrage is supportive. The funding markets are open, making a big parent unnecessary and activists are coming back. The stars are aligning for more companies to demerge businesses. Value can be released either through spin-offs or sales of businesses. Companies that are spun-off tend to outperform. Companies who create spin-offs also tend to outperform both from announcement and demerger. There thus appears much to recommend spin-offs.

[1] Academic studies include Schipper and Smith (1983) – The Case of Voluntary Spin-Offs; Hite and Owens (1983) – Security Price Reactions Around Corporate Spin-Offs; Copeland et al (1983) – Corporate Spin-Offs

[2] Kirchmaier (2003) – Performance Effects of European Demergers

7. China: The Urbanization Dividend

Minggao Shen
Head of China Research

Shuang Ding
Senior China Economist

Enjiang Cheng
China Country Economist

Although likely to be a theme that plays out over the next decade, the Chinese government reshuffle in November has placed renewed focused on China's changing growth model and opened up new hopes for long-waited reforms and rebalance. Urbanization is viewed as one way to drive rebalancing and growth and is a positive for the equity market in the longer term. We look at which sectors would benefit from an 'urbanization dividend'.

In general, urbanization switches sectoral composition away from agriculture into industry and as technology advances in domestic agriculture, releases labor to migrate to cities. But in China, urbanization with Chinese characteristics has lagged both industrialization and labor migration. This provides an opportunity to exploit the benefits of urbanization once it starts to accelerate.

China could be about to enter a fast decade of urbanization

China's official urbanization rate was 51.3% in 2011, and for the first time, China passed the tipping point, i.e., its urban population exceeded its rural population. However, about 250 million migrants are only quasi-urbanized — they work in an urban area but their family and major consumption spending remains in a rural area. Based on the *hukou* system (China's household registration system), the real urbanization rate is only 35%, far behind the industrialization rate of more than 60%, as measured by the share of non-farm jobs. This indicates that China could be about to enter its fastest decade of urbanization if the potential is fully exploited.

150 million surplus rural laborers could migrate to cities over next decade plus

Potentially around 600 million of China's population could be urbanized in the next two decades. We estimate about 300 million migrants will be allowed to settle as "new urban residents" (i.e. quasi-urbanization becomes real urbanization) and 300 million rural dwellers will move to urban areas, assuming the real urbanization rate can be elevated from the current 51% to around 70-75% by 2030. In our view, urbanization could bring another 150 million surplus rural laborers to the cities.

Urbanization likely to be critical to a rebalancing of China's economy

Urbanization is well positioned to balance between investment and consumption, manufacturing and services, and even between external and internal demand. As urbanization requires huge amounts of investment, it should be able to help contain the downside risk to the economy during the period of transition. We forecast urbanization may require Rmb30-90 trillion of investment in the next decade from investment in urban infrastructure (e.g., subways, sewage systems) and public goods (i.e. healthcare and social welfare). As urbanization proceeds, we note that the services sector should benefit as urban households spend less proportionally on manufactured goods and food but more on services (i.e. healthcare, transport, communication and entertainment).

Reforms will be necessary…

This shift in population cannot run at full speed without critical reforms. The key reforms needed are to the *hukou* system, social security (which requires fiscal policy reform) and the land system, along with decentralization. The pace of these reforms will determine the pace of real urbanization

…but result in high economic growth

Ultimately, urbanization should boost economic growth from both the supply and demand side as it involves a re-allocation of resources toward high-productivity activities. The process also promotes specialization and innovation, thereby increasing an economy's capacity to produce more goods and services. In addition, it is typically accompanied by the adoption of urban lifestyles and an improvement in living standards, entailing massive investment in infrastructure and housing and an upgrading of consumption tastes and preferences.

Shift to urbanization good for equity market sentiment

Fast-paced urbanization would be positive to market sentiment in general. It would help contain the risk of an investment cliff and thus a hard landing, improve the efficiency of resource allocation, and boost and sustain growth. A re-rating in the Chinese equity market is possible as a set of positive catalysts (i.e. more reforms and better domestic demand) unfolds over time.

Key sectors that should benefit from urbanization include infrastructure, agriculture, selected manufacturing sectors, consumption and services

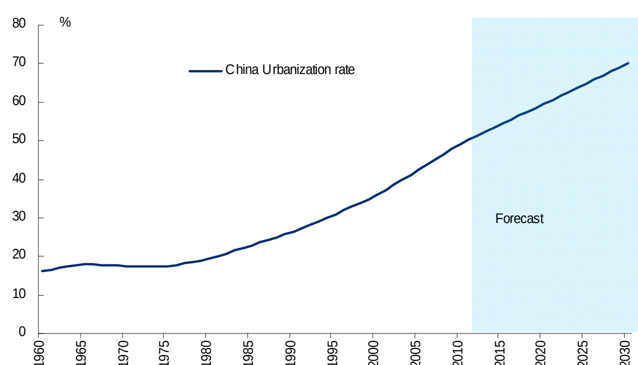
Assuming needed reforms are implemented in a timely fashion domestic demand would first supplement the falling external demand and then potentially rise as a key driver of growth going forward. Key sectors that should benefit from urbanization are:

- **Infrastructure** – Infrastructure investment will shift from high-speed rail, highways and airports, to subways, light rail and urban roads & facilities (e.g. water, gas, and waste processing). By shifting from relatively inefficient areas to more productive ones, investment can continue to be an important source of growth.

- **Agriculture and selected manufacturing sectors** – Both the manufacturing and agriculture sectors should gain from economies of scale in urbanization. By moving more people to the urban areas and providing them with better education and training, the manufacturing sector can enjoy a balance between higher labor costs and a steady supply of productive labor. With enlarged farm sizes, the agricultural sector would be able to adopt new technologies, a necessary step in the modernization process.

- **Consumption and services** – Demand for consumption and service should be sustained by the income and wealth effects of urbanization. A larger urbanized population with better social services can generate a steady marginal demand for the consumption and service sectors. These include manufacturing and property for the mass market, healthcare, financials, IT, education and transportation.

Figure 14. China's Official Urbanization Rate and Forecast



Source: World Bank and Citi Research

Figure 15. Urbanization: Investment Themes and Intra-Sector Divergence

	Infrastructure/ Manufacturing	Agriculture	Property	Consumption / Services
Location	+ / -	+	+ / -	+ / -
Economics of Scale	+ / -	+	+	+ / -
Domestic Demand	+	+	+	+

Source: Citi Research

Portfolio characteristics for an 'urbanization portfolio'

In constructing an urbanization portfolio, we look to position investors for the emerging trend. The portfolio would consist of those companies that 1) have large exposure to the centers of urbanization, economies of scale and strengthening domestic demand; 2) are fundamentally solid; and 3) have relatively large market caps in their respective sectors.

8. How to Play the Gas Revolution

Kingsmill Bond, CFA
Head of Russian Strategy

Gas is expected to transform the global energy market, substitute for coal and oil in a number of sectors and locations, and open up new growth opportunities after a rash of major gas discoveries worldwide in recent years. These discoveries could lead to a surge in gas consumption, whereas previously the reliability, availability and cost of supply were concerns that hindered growth. Structural and policy-driven changes, partly a result of environmental concerns since gas is much cleaner burning than other fossil fuels and partly a result of fuel diversification, should drive gas demand growth. The gaping divergence between oil and gas prices is also spurring conversions from oil to gas, particularly in both land and marine transport.

Discovery of major new energy sources has wide-ranging consequences

This is not the first time that the world has discovered a major new energy source with wide-ranging consequences. Other examples include the switch from wood to coal in the nineteenth century, the switch from coal to oil at the turn of the twentieth century, or the switch of oil out of power generation in the 1980s in response to high prices. During changes of this magnitude, there are generally four areas which provide investment opportunities for investors:

- **Asset-rich companies**: those which own the gas assets. While this is the most obvious way to play the opportunity, it is the one which has been around for the longest, is mostly widely understood, and has possibly the most pitfalls as the assets have in some cases already changed hands a number of times. The best equity plays in this group lie in the ongoing land grab in new territories.

- **Infrastructure companies**: those which bring the gas to market. The value chain stretches from the oil field servicers to pipeline, processing, storage and shipping companies in the midstream sector, to construction and machinery companies. As is commonly appreciated, it is often these providers of "shovels" which offer a more lucrative way to invest in a commodity revolution than the asset plays themselves.

- **Arbitrage plays**: on the cheap new energy source**.** Cheap gas in North America creates three immediate sources of arbitrage – gas-on-energy (e.g. substituting coal and renewables in the US), gas-on-gas (i.e. US chemical companies using cheap gas to gain share from their Asian and European rivals), and gas-on-oil (e.g. the opportunity for gas to push oil out of a series of sectors from trucking to ships to petrochemicals). While some arbitrage opportunities have been realized, we believe that there are many more yet to come.

- **Domestic companies**: In the long term these can be the key winners or losers from lower energy prices in countries where energy is a dominant factor. Clearly currencies and domestic companies in petrostates stand to lose from lower energy prices, while those in energy importers are likely beneficiaries.

Figure 16. The Heat Map - Potential Winners and Losers

Theme	Incumbent	Challenger	Aspirant
Assets	Loser	Intermediate	Winner
Infrastructure	Loser	Winner	Winner
Arbitrage	Intermediate	Winner	Loser
Domestics	Loser	Winner	Intermediate

Source: Citi Research

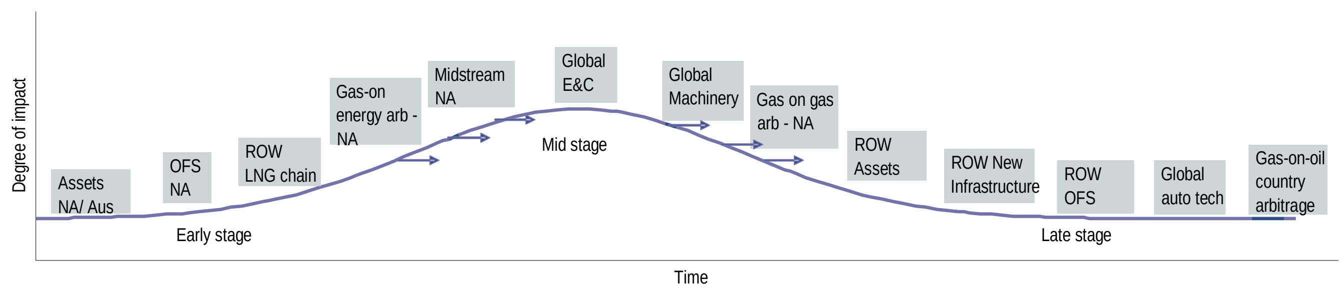
We also identify three broad groups of countries impacted by the gas revolution:

- **Incumbents**: Countries (like Russia and Qatar) already selling gas at elevated prices. They are clearly damaged by the prospects of cheaper gas from new entrants.
- **Challengers**: Countries which are increasing their gas production to such a degree that they either stop importing and look to export (the US), look to export to new areas (Canada) or export in far greater volumes (Australia). They are clearly the primary beneficiaries as the higher revenues from gas will tend to strengthen exports and currencies.
- **Aspirants**: Countries (such as China, Poland, Israel or the nations of East Africa) which have aspirations to increase gas production markedly.

Different opportunities develop at different stages in the cycle

As the exploitation of new gas reserves evolves, peaks, and stabilizes, so it creates as series of opportunities at different stages of the story. Using the analogy of a pig (the gas revolution) in the python (the world), we seek to show those sectors which are early stage in the process versus those that are later stage.

Figure 17. The passage of the gas revolution through global sectors



Source: Citi Research

Some early stage opportunities are winding down…

For example, asset rich companies in the "challengers" markets like the US and Australia have been growing for many years, and we have already seen a number of major transfers of ownership and many asset write-downs. We believe therefore that this area has already passed its peak in stock market terms, and should be seen as an early stage story that has largely already priced the event in.

…but there is more to come with mid-stage opportunities like gas-on-gas arbitrage…

In contrast, gas-on-gas arbitrage in chemical and fertilizers has merely seen North American companies expand margins and some market share at the expense of European and Asian competition. However, we believe that there is much more to come. We therefore see it as a mid-stage opportunity to invest in the gas revolution which is still in progress.

…and late-stage gas-on-oil arbitrage

A late stage opportunity would be gas-on-oil arbitrage, where we are only now seeing the first impacts with news that the US truck fleet and the global shipping fleet are starting to make the switch. As yet, oil prices remain high, and companies in the petrostates remain relatively resilient.

9. The Explosion of Smartphone Devices

Kevin Chang
Head of Asia-Pac Technology/ Hardware Equity Research
Jim Suva, CPA
IT Hardware & Technology Supply Chain Equity Research

With quality improving rapidly, and prices eroding faster than expected, we see huge upside to shipments of low-end smartphones. We continue to see a rapid expansion in overall smartphone growth and now forecast unit shipments of 1.1 billion in 2013, 25-30% higher than the market is expecting and almost 50% above 2012 shipment levels. We also forecast significantly higher tablet sales than the consensus, and collectively these have positive implications for the beneficiaries of mobile computing. However, this higher unit growth is driven by lower price assumptions and the smartphone market faces dramatic structural changes, leading to a decline in smartphone industry profitability over the next few years and the exit of multiple incumbents from the industry. Our bullishness is based on our assumption of 1) huge smartphone growth rates driven by rapid conversion of feature phones into smartphones; 2) Chinese brand and whitebox players dominating the sub-US$200 segment; and 3) software and internet companies with zero hardware margin business models dominating the $200-$300 segment.

Many investors are still under the impression that whitebox market smartphones are of low quality and barely usable. During our multiple trips to China in the past 6 months, we've witnessed a huge improvement in whitebox smartphone quality and, with better economies of scale prices have come down very rapidly.

We do believe that most consumers are willing to pay a premium for branded products over Chinese brand/ whitebox smartphones, especially in the mid- to high-end segment. But in the low-end segment, consumers are generally more price sensitive with lower brand loyalty and in the sub-$200 segment, whitebox makers can offer similar form factor design with much better hardware specifications at lower prices, making it extremely difficult for branded players to compete with whitebox makers in this segment.

Emergence of zero-margin hardware business model

We believe both that internet and software companies such as Google, Amazon, Microsoft and Baidu have plans to launch their own-branded smartphones. Companies like Google and Amazon do not attempt to make money on hardware. Their goal is to achieve breakeven on hardware and generate profit through services, advertisements and on-line sales of books, music and even groceries. With zero brand margin and lower retail margin (many of the devices are sold through the manufacturer's own websites) these phones could be sold below those of traditional branded companies. Given the strong brand awareness of the Internet companies, consumers generally are not worried about their hardware quality and are already seeing their low priced tablets as bargains. This is likely to materially impact industry profitability and market share allocation. Driven by high-end hardware specifications, low price and strong brand recognition, we believe that internet/ software companies could take meaningful share in the middle to high-end smartphone segment.

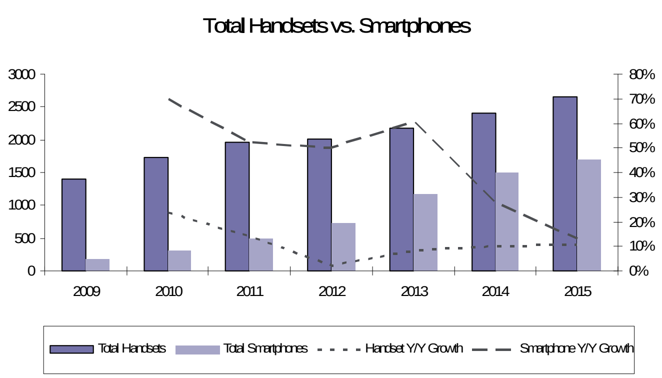
Mid-range Android phones are at risk to substitution because of lack of brand loyalty

An Internet company-manufactured smartphone may not have a big impact on premium models such as the iPhone as iPhone users tend to be aspirational customers and rather insensitive to price points. However, Android phone users tend to be much more price sensitive, especially at the middle ranges. With respectable brands launching smartphones with comparable hardware specifications to high-end Android models and lower prices than even the mid-end Android models, we believe most of the mid-end Android users could potentially turn to smartphones launched by internet/ software companies.

Internet/ software companies are already known by consumers which is an advantage

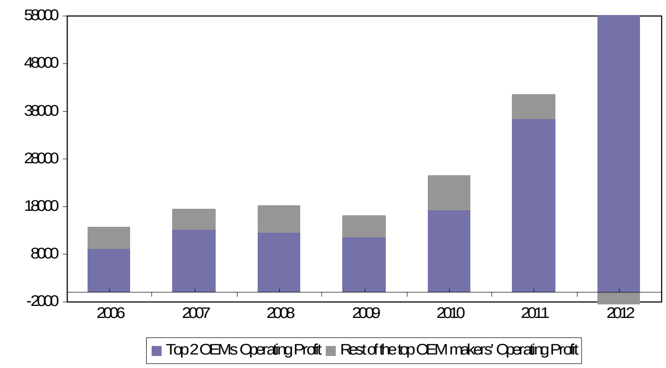
Given the zero margin hardware business model, internet companies are already pricing models at half the price of comparable phones and the after-subsidy price of those models can go to zero if carriers provide about US$250 of subsidies. Moreover, the internet/ software companies generally have their own consumer marketing and media programs, which give them direct access to the consumer and neutralizes the marketing advantage of some of the bigger branded handset companies. Lastly, most consumers are already using multiple services/ software from internet companies such as Amazon, Google and Microsoft so those phones may have many more selling points than models from pure hardware companies. As such, we believe carriers have strong incentives to push these models.

Figure 18. Handset vs. Smartphone Shipment Forecasts



Source: Citi Research

Figure 19. Industry Profit Trends



Source: Citi Research

Conversion over next 18 months will be substantially above expectation

According to Gartner, Basic Communication Devices will account for 40% of total emerging market handset shipments in 2012. The majority of these device shipments were feature phones (a phone with additional features vs. a standard mobile phone but not considered to be a smartphone). With low-end smartphone retail prices falling below US$60 in 1H12 and expected to fall to US$50 in 1Q13, we forecast an almost 80% conversion rate of Basic Communication Devices to smartphones in 2013 in the Emerging Markets. China is the primary region where we see smartphone shipment increases as whitebox smartphone makers are triggering a wave of substantial price erosion. For non-China emerging markets, the availability of whitebox smartphones is still much lower than in China. The pricing is also higher due to much higher logistic cost as well as import tax. However, we expect the China whitebox makers to aggressively convert their feature phone business in India and Southeast Asia to smartphones.

Industry profitability to decline and incumbents to exit

Since 2007 both handset sales and profitability have boomed. Sales for the top 8 OEM's (original equipment manufacturers) have grown from $133 billion in 2007 to $223 billion in 2012 and operating profits have risen from $17.7 billion to $55.1 billion. However the blended operating profit margin of 24.7% masks the fact that Apple and Samsung made $57 billion operating profit and the rest lost money. This is before the onset of whitebox makers in the sub-US$200 segment and the threat of internet/software makers entering the market with a zero handset margin business model. As a result we expect industry profitability to decline and many OEMs to exit the market in the next few years.

10. Why You Should Own US REITs in 2013

Michael Bilerman
Head of US Real Estate & Lodging Equity Research

Real Estate Investment Trusts (REITs) continue to benefit from central bank intervention, which has all but guaranteed that low rates will be around for a long time, keeping REITs' cost of capital low and fueling cap rate compression. REITs have preformed quite well in 2012 relative to the market, and the gain in REIT shares has generally followed the decline in the cost of capital and the wide availability of that capital, which has continue to drive cap rates lower. The global thirst for yield is helping to push up asset prices which offer income and commercial real estate (and de-facto REITs) fit the bill quite well. It has also helped that fundamentals are moving in the right direction, with higher occupancies and rents, driven by stable demand and continued low supply. Given the elevated pricing, should the economy falter, asset values (and hence REITs) are likely at risk. That being said, we believe REITs are better positioned from a balance sheet perspective than prior to the Great Recession, lessening the steep impact we saw in late 2008 to early 2009.

The REIT sector has historically has a "dedicated" shareholder base…

Most investors are aware that there is a significant "dedicated" ownership in the REIT sector. Based on our proprietary analysis, ownership of REIT securities is currently divided between dedicated REIT mutual funds (~20% of total shares outstanding), dedicated REIT ETFs (~5%), direct dedicated pension fund ownership (~8%), significant dedicated institutional mandates (pension funds, endowments, advisors, etc,) and significant ownership by Japanese dedicated registered real estate mutual funds (~10%). Add in another ~5% for insiders and ~15-20% for retail investors and there is really not a lot of room left for "non-dedicated" investors.

We estimate that non-dedicated mutual funds represent only ~4% of the sector, with another 4% of ownership that is actually included as mutual funds but are actually index funds sold as mutual funds. There is another ~5% owned by non-dedicated broad market ETFs given that REITs are very large components of a lot of indices, especially the Russell 2000 Value Index (~8% or the index), Financials (~14%) and the S&P 400 (9.5%).

…but ETF's now own over 12% of the REIT sector

Indeed, REITs have some of the highest levels of ETF/ index ownership across all of the sectors. Including mutual funds that are technically index funds (i.e. market weight), we estimate ETFs own over 12% of the sector. Part of this may simply be driven by the sheer number of companies and investors looking to get real estate exposure rather than getting bogged down choosing one of over 100 stocks in the REIT space.

…and pension funds are increasing their levels of ownership

In addition, we have seen pension funds increase their allocation directly to the REIT sector with increasing levels of ownership. Retirement savings and investments — ranging from defined benefit plans (i.e., public, corporate and Taft-Hartley pension funds), defined contribution plans (i.e., 401(k) plans) and individual retirement plans — is another large piece of the asset pie that the REIT industry has and continues to target. In total, this represents almost $15 trillion in assets that could potentially be looking to invest in the REIT sector. Another opportunity is for additional pension funds to start REIT allocations and/ or carve out part of their real estate allocation to REITs. For instance, CalPERS announced a plan in 2012 to increase REIT allocation in their $3 billion Long-Term Care Fund to 12% from 8%.

Retirement funds are also starting to increase their REIT ownership

Getting REITs into target-date funds is another big opportunity which could attract capital from both the defined contribution and individual retirement plan segments. Casey, Quirk & Associates estimates target-date funds will draw ~80% of new and reallocated fund flows in defined contribution plans over the next decade. Including

REITs in the asset allocation of a plan would drive significant capital funds into the sector. Add the continued push to offer REITs as a 401(k), endowment and foundation option and the pool of potential assets increases again.

What's behind the increased interest in REIT ownership and why should a generalist add them to a portfolio?

When asked about owning REITs, the common pushback from generalists include high equity valuations in the REIT sector, feelings that they "missed it" due to outperformance, risk to interest rates and a "specialized" asset class that is "different" and "difficult " to analyze. While we sympathize with these concerns, we do believe they can become a larger piece of a generalists' portfolio based on:

1) **Positive internal growth** driven by increased occupancies and rents with a continued backdrop of reasonable demand and low new supply.

2) **Opportunity for continued external growth** through acquisitions, redevelopment and selective new development. While overall supply continues to be muted, REITs' development pipelines have been rising and should be additive to forward growth, and REITs have continued to be active on the acquisition front.

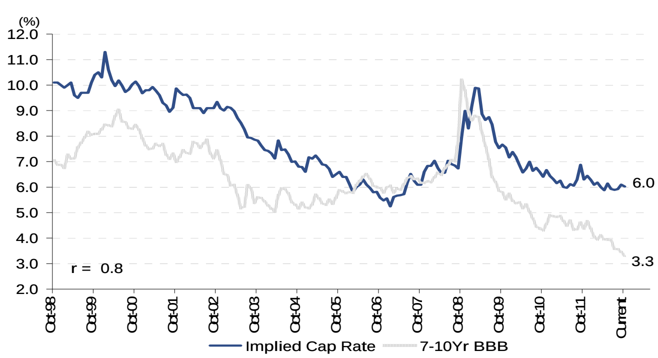
3) **Reasonable and growing dividends** with REIT dividend yields, although low on an absolute basis, stacking up well to Treasuries and bonds. We estimate dividends will continue to grow alongside cash flow with 7-10% increases likely in each of the next 2 years.

4) **Improved balance sheets** can support growth but also protect in a downturn as balance sheets are improved compared to pre-'07 levels.

5) **Wide access to low cost capital** provides REITs with a unique opportunity to term out balance sheets and execute on external growth in an accretive manner.

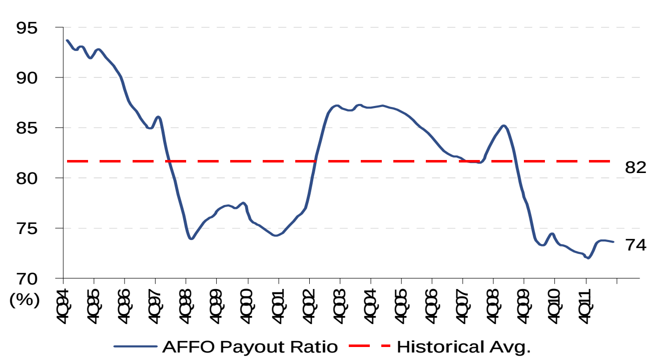
6) **Attractive valuation relative to bonds.** While the REITs' equity multiple spread to the broad market is about 2.5 percentage points (just above levels seen in 2010 and 2011), the sector screens well versus bonds with an implied capitalization rate[3] currently standing at about a 270bp spread to BBB corporate bonds versus their 140bp historical average.

Figure 20. REIT Dividend Yields Stack Up Well to Treasuries…



Source: Citi Research, YieldBook

Figure 21. REIT Dividend Payout Rations



Source: Citi Research

[3] The capitalization rate is a real estate industry metric for the profitability of real estate holdings. It is defined as the expected net operating income for a given property, divided by the purchase price of that property

IMPORTANT DISCLOSURES

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