Emerging Markets Strategy Upside, downside

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IN BRIEF

Investors continue to be frustrated by the lackluster performance of emerging market equities. But why has the asset class disappointed? Is something fundamentally broken? Is it a valuation problem or a profitability problem?

In this paper, George Iwanicki, emerging market macro strategist, addresses these questions to establish the root of emerging markets underperformance. He then considers the troubles facing two of the BRIC markets, India and China, and focuses on some of the tactical opportunities available at the country and sector level.

Weak absolute and relative returns

One way of looking at the performance of emerging market equities is to apply the same metric that many clients would apply to a fund manager, namely to assess the extent to which they capture in market rallies and participate in bear corrections, i.e.: How well do they lead the upside and hold up on the downside? Part of the disappointment in the performance of emerging market equities over the past year or two stems from a deterioration in their upside/downside performance relative to global equities.

Exhibit 1 shows the participation of emerging market equities in positive global equity market moves and in bear market phases over different time periods. In the last year, in particular, there has been deterioration in that upside versus downside capture for emerging markets equities. In other words, emerging markets have been participating more in the bear phases than in the bull phases over the past couple of years. This has been disappointing for investors, particularly relative to the positively skewed performance that we saw until 2007.

EXHIBIT 1: WEAKER PARTICIPATION ON THE UPSIDE AND INCREASED PARTICIPATION ON THE DOWNSIDE Upside/downside capture for MSCI EM vs. MSCI ACWI

| MSCI EM vs. MSCI ACWI | Upside Market Capture | Downside Market Capture | Ratio |
|-----------------------|-----------------------|-------------------------|-------|
| Feb 00 to Aug 12 | 148.72% | 119.29% | 1.25 |
| Oct 02 to Oct 07 | 176.56% | 112.89% | 1.56 |
| Nov 07 to Aug 12 | 123.76% | 118.91% | 1.04 |
| Jul 07 to Aug 12 | 132.28% | 116.36% | 1.14 |
| Jul 09 to Aug 12 | 97.99% | 106.29% | 0.92 |
| Jul 11 to Aug 12 | 103.59 | 134.75 | 0.77 |

Source: MSCI Barra. Monthly returns, data as of August 2012.

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Beyond the deteriorating upside/downside capture ratio, correlations between emerging and developed markets have been, and continue to be, stubbornly high. This is not uniquely an emerging market problem; correlations within developed markets have been high as well. However, the return profile of emerging markets is still more volatile than that of the U.S. and even that of Europe. This combination—more volatility than, and stubbornly high correlations with, developed markets, as well as a deterioration in upside/downside capture—hasn't been good news for emerging markets equities. So, what are the problems?

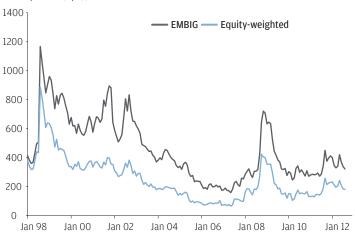
Macro fundamentals are intact

One assumption by investors faced with disappointing performance might be that macro fundamentals are deteriorating. However, using emerging market debt as a proxy for macroeconomic risk, it appears that little has changed. In an environment in which markets have become particularly discriminating about sovereign risk-witness spread variations within the eurozone (Exhibit 2)—emerging market debt has traded well. One or two countries have seen spreads widen over the past year, but the general performance of emerging market debt suggests that there is not a fundamental breakdown in the secular growth and macroeconomic policy story for emerging markets.

EXHIBIT 2: EMERGING MARKET DEBT GIVES LITTLE INDICATION OF FUNDAMENTAL MACRO PROBLEMS

EM sovereign spreads

Basis points (bps), end of month

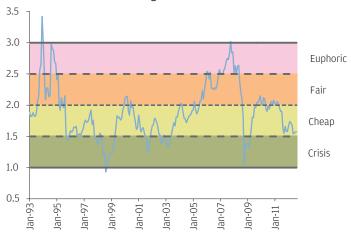


Source: JPM-EMSTAR. Data as of August 2012.

Valuations are attractive

Could valuations be the cause of the problem? As regular readers will know, we focus on a crude but useful measure to answer this question, looking at the price-to-book (P/B) ratio for the asset class (Exhibit 3). In 2007 this standard measure of valuation had become quite rich. However, the global financial crisis of 2008 swiftly corrected that, and over the past two years emerging market equities have actually traded at or below their notional fair value by this measure. This year we have taken a round trip in terms of valuations, ending up back at the 1.6x P/B level at which we started 2012. At this level, investors have historically been rewarded for accumulating emerging markets equities, so the problem does not appear to be valuations.

EXHIBIT 3: OUR STANDARD VALUATION METRIC STILL LOOKS ATTRACTIVE GEM Price-to-Book: 1993 - August 2012

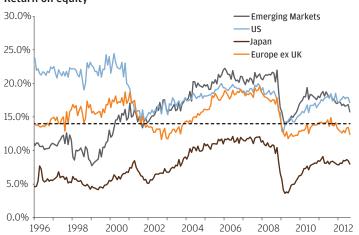


Source: Bloomberg, Factset, UBS, Data as of August 31, 2012.

Profitability is struggling as margins are normalizing

So then we turn to profitability. Over the last decade, emerging markets have moved from challenging for the bottom end of the league table in terms of return on equity (ROE) - the most basic measure of profitability - to competing with the U.S. and Europe for the top of the league table globally. Exhibit 4 shows this convergence and indicates that today's levels are still quite healthy. However, the slight decline in ROE over the past two years reflects the fact that earnings per share (EPS) growth in emerging markets has lagged developed markets (particularly the U.S.), despite the stronger growth in emerging economies.

EXHIBIT 4: PROFITABILITY REMAINS GLOBALLY COMPETITIVE, BUT HAS TAILED OFF Return on equity



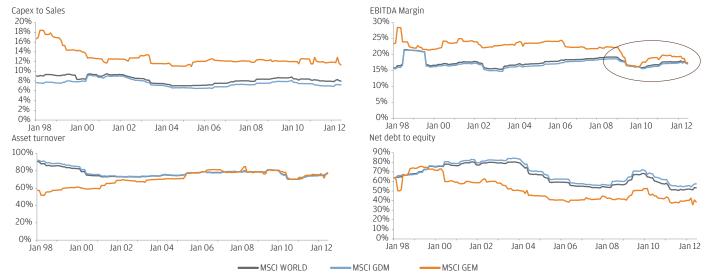
Source: Thomson Datastream, J.P. Morgan Asset Management as of August 2012. Past performance is not a guide for the future. Shown for illustrative purposes only.

The question this presents is whether something is breaking down in emerging market profitability and, if so, whether it is a short-term, cyclical breakdown or a long-term, secular change. To answer this question, we have updated our previous DuPont decomposition work to examine the drivers of profitability.

Exhibit 5 shows the factors we focus on in this DuPont analysis. An important piece of the emerging market story is the multiyear improvement in corporate capital discipline that unfolded in the 2000-06 period and the resulting improvement in ROE. In this period, there was a significant convergence in capital expenditure (capex)-to-sales ratios-think of these as corporate reinvestment ratios—toward developed market norms. As a result, operating leverage (or asset turnover) moved from very low levels toward developed world levels. There was a net deleveraging of corporate balance sheets, exceeding that in the developed world, so that net debt-to-equity ratios fell below developed world levels.

However, the long-standing gap in EBITDA margins, which favored emerging relative to developed markets, closed sharply at the height of the crisis in 2008. After an attempted restoration, margins have reverted back to developed market levels over the past two years. We believe that this can be seen as the last, and for investors the least pleasant, phase of the convergence of emerging market profitability drivers toward developed world norms. That is to say, we do not think there has been a breakdown in corporate capital discipline, but rather, that margins are finally converging, and unfortunately converging downwards, serving as a drag on EPS.

EXHIBIT 5: DUPONT ANALYSIS SUGGESTS CONVERGENCE TOWARD DEVELOPED MARKET NORMS

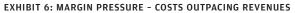


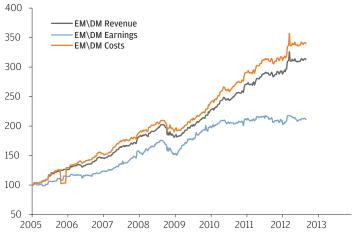
Source: J.P. Morgan Securities LLC. Data as of June 2012

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Looking at EBITDA margins sector by sector, it is striking that virtually all sectors are seeing downward pressure on margins. Margin convergence is not being driven by sector-specific issues in one or two sectors, but is broad based.

Why is this? Although emerging revenue growth has outpaced the developed world - little surprise given the sustained differential in GDP growth - costs have also outpaced those in developed markets, and are now offsetting revenue growth (Exhibit 6). As a result, profit outperformance has abated over the past two years.





Source: IBES, MSCI, Datastream and Citi Investment Research and Analysis. As of August 2012.

Although part of the cost pressure may be secular, we believe at least part of it is attributable to cyclical factors, reflecting the legacy of economic decoupling. The secular part is that emerging market indices are still more skewed toward commodity stocks and sectors. The commodity boom period (or supercycle) became self-reinforcing as high commodity prices prompted a rise in the cost base not only of other sectors but also of commodity producers themselves. For example, it takes steel to build a new steel mill and it takes energy to drill a new well in search of oil or gas.

On the cyclical side, we believe what is unfolding is the lagged effect of inflation pass-through arising because economic cycles in the developed and emerging world are out of sync. In particular, we suspect that the primary culprit is labor costs—witness the anecdotal evidence of wage pressure in the last couple of years in China and Brazil. The Chinese and Brazilian economies

both avoided the worst of the financial crisis in 2008 and boomed thereafter, while most developed market economies experienced sharp recession and minimal recovery. Labor market tightness in these emerging economies, juxtaposed with slack labor conditions in the developed world, means that the pricing power of labor is much stronger in emerging than in developed markets. As a result, large segments of the developed world are benefiting from productivity gains, while in several emerging markets, tighter labor markets are having the opposite effect, as evidenced by the earlier rise in inflation and the resultant policy-induced slowdown.

In summary, we acknowledge that there is margin pressure. It appears that we are in the least pleasant phase of the long profitability convergence, from the perspective of investors. However, this convergence is, in part, cyclically driven. As a result, we think it is premature to worry that margins will not only correct but fall materially or permanently below developed world levels.

Fundamental earnings-based valuations still look reasonable

Given the chink in the armor of the emerging market profit story, it is worth revisiting earnings-based valuation measures. **Exhibit** 7 shows cycle-adjusted price-to-earnings ratios (P/Es) based on ten-year trailing earnings (these are often referred to as Shiller valuations but are properly known as Graham-Dodd valuations). Using ten-year trailing earnings as a model of 'normal' earnings is conservative for emerging markets as it includes a period of weaker corporate capital discipline, but even so emerging markets are trading in the lower part of their historical range under this measure. This valuation therefore echoes the signal from price-to-book valuations.

One noticeable difference, however, is that emerging market equities face unusual valuation competition from a segment of developed markets. Emerging markets were historically sought by investors looking for a risk-on trade because they were generally cheaper and provided higher beta. However, the ongoing eurozone crisis has pushed European equity valuations to very cheap levels, creating some competition for emerging markets as the new risk-on trade. Nonetheless, this earnings-based valuation measure does tell us that valuations still look reasonable in emerging markets, based on long-term profits.

EXHIBIT 7: VALUATIONS ARE HISTORICALLY LOW, BUT ABOVE THOSE IN CRISIS-STRICKEN EUROPE Cycle-Adjusted PEs (10-year smoothed earnings)



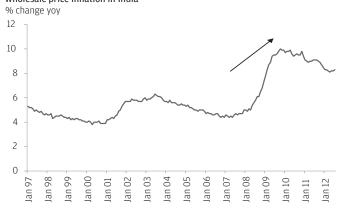
Troubled BRICs: India after the Shining

In our view, all of the BRIC markets today have warts on. We want to focus on two of these markets in particular: India and China. Many readers will remember the 'India Shining' story. What began as an advertisement for tourism in India became a sort of political and economic mantra. Following strong growth in the 2004-06 period, the belief took hold that India could continue to grow at a rate of 8-10% in the same way as China. However, this optimism proved excessive, and, in our view, generated three responses that have returned to haunt India and ultimately caused the hard landing that is still unfolding.

The first problematic response was that the Reserve Bank of India (RBI) decided that growth could be fueled by easy money, and therefore adopted sustained pro-growth policies even as inflation rose above target. The second was that corporate managers thought, "I've got to be positioned to take advantage of this rapid growth," and as a result, capex-to-sales ratios accelerated markedly in what had historically been a corporate sector with strong capital discipline. The third was that governments at both national and state levels failed to address structural deficits or bureaucratic logiams as they believed 8-10% growth would take care of both as revenue poured in.

The results were untenably high inflation and deteriorating profitability (Exhibit 8). First, there was a big pop in inflation wholesale price inflation spiked to 10% in 2009 - and then a very slow reversion back to what we (and more importantly the RBI) would consider tolerable levels. Overall, headline numbers remain not only above the formal RBI target, but also above what we would consider to be the top end of the RBI's tolerance band (approximately 6%). Second, strong corporate investment at a time when the economy was forced to slow because of the inflation problem produced a material correction in relative profitability. The long-standing ROE premium for India versus the emerging market average has largely dissipated over the last

EXHIBIT 8: HIGH INFLATION AND DETERIORATING PROFITABILITY Wholesale price inflation in India



Source: People's Bank of China. Data as of August 2012.



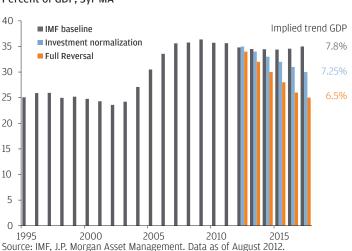
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four years, creating cyclical pessimism that is now morphing into a secular worry that the long-term growth story in India is threatened. Although we have long warned about cyclical problems in India, we think it is time to start resisting over-bearish long-term views on the market.

Recognizing that overall investment spending (i.e., private and public) is starting to shift from its peaks, we looked at potential growth under different investment-to-GDP ratio scenarios (Exhibit 9). As a baseline, we used the investment level the International Monetary Fund (IMF) is expecting over the next five years. This leads to trend growth numbers of nearly 8%, similar to those produced by our own calculations. We then assessed how much retrenchment in investment spending would be needed for growth to revert to pre-reform levels. In our view, the assumption of a reversion to sub-7% trend GDP growth on a fiveyear view requires an assumption that investment-to-GDP reverts to pre-reform levels. This strikes us as a very bearish expectation. We are inclined to anticipate a more gentle reversion, as we are not seeing a complete reversal of the reform process. We therefore expect investment-to-GDP to normalize near the mid-point and accordingly still see trend growth above 7%. That is still a favorable number by virtually any standard other than the India Shining belief that it was actually 8-10%.

In summary, it has been a difficult cycle in India. However, we do not think a bad cycle spells long-term doom. It is worth remembering that demographics in India remain very favorable, among the most supportive to growth in any of the investable emerging markets.

EXHIBIT 9: NO CALL FOR EXCESSIVE BEARISHNESS ON LONG-TERM INDIAN GROWTH India investment share Percent of GDP, 3yr MA

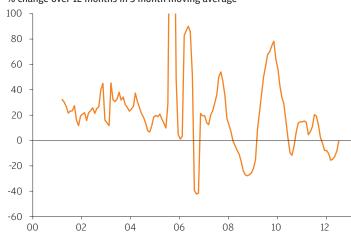


Troubled BRICs: Bumping along the bottom of a U-shaped cycle in China

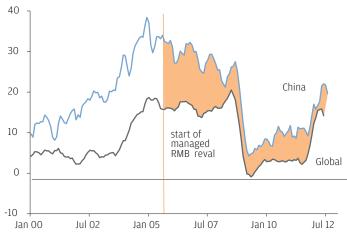
We would characterise China's story today as one of a U-shaped business cycle in which we are currently bumping along the bottom of the U. Unlike some commentators, we do not believe this is a crash. What is being described as a "real estate crash" is, in our view, a correction, not a crash, and is showing signs of stabilizing. Although Chinese housing data is choppy, demandside data (**Exhibit 10**) and our conversations with real estate companies support this view. Our real estate analyst is also beginning to hear similar anecdotal evidence of a stabilization on the production side. Consequently, we think we are now seeing stabilization after a correction, not a crash.

EXHIBIT 10: HOUSING DEMAND CORRECTION IS PAST ITS WORST Private residential floor space sold

% change over 12 months in 3 month moving average



Merchandise export growth 3 year % change in 3 month moving average



Source: IMF. National Bureau of Statistics China. Data as of July 2012.

While the Chinese currency was pegged to the U.S. dollar, Chinese exports enjoyed an uber-competitiveness that provided a significant boost to Chinese growth over the first part of the decade. Since the start of the managed revaluation of the renminbi, the gap between Chinese export growth and global export growth has gradually closed. Struggling exports are, of course, also reflective of the weakness abroad. However, the diminishment of China's uber-competitiveness after seven years of slowcrawl revaluation (on top of the wage gains discussed earlier) has erased a lot of the competitive advantage that China historically enjoyed. This has reduced the lift to growth supplied by the export sector.

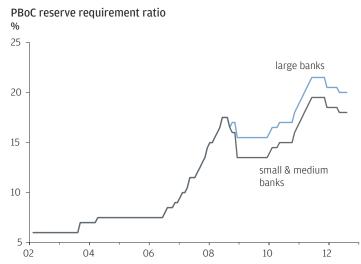
Meanwhile, the response from policymakers has been very grudging. The People's Bank of China was willing to cut the reserve requirement earlier in 2012, but it remains higher than at the peaks of prior tightening cycles (**Exhibit 11**). Accordingly, M1 - the money measure that corresponds most closely with inflation - is stuck at mid single digit growth rates, which historically has meant further downward pressure on inflation. We believe this is reflective of stubbornly tight policy that has failed to motivate recovery in money growth from notable lows. As such, we expect China to continue to bump along the bottom of this U-shaped cycle for some time.

Actionable ideas: Sectors, countries and currencies

Starting at the sector level, our standard global cycle indicators (earnings revisions and policy rate changes) began to signal that it was time to rotate into early cyclical sectors at the start of the year as we saw a bottoming in earnings estimates by global analysts. That trade worked well for the first four months of the year, but renewed concerns about Europe and lingering uncertainty about China meant that sector leadership got stuck in the middle of a rotation from back-end defensives to front-end cyclicals. We think this situation is similar to the 2002-03 period. when a couple of false starts in our two global cycle proxies ultimately resulted in front-end cyclical leadership. We therefore believe early-cycle sectors are favored into 2013, but for the moment are retaining some positions in selected defensive sectors (consumer staples in particular) in recognition of this choppy rotation.

Looking at country ideas, we see the legacy of last year's risk-on/ risk-off moves as an asset class that is polarized between the cheap BRIC markets and the more expensive, defensive, smaller markets, such as Mexico, Indonesia, Chile and Malaysia. In our

EXHIBIT 11: CHINESE POLICY STILL ONLY GRUDGINGLY MOVING TOWARDS STIMULUS





Source: IMF. National Bureau of Statistics China. Data as of July 2012.

top-down informed portfolios, we are staying with the overweight in China. We accept that so far we have been early on the trade, but, as discussed above, we do not see China as a crash and we are simply waiting for some economic and market momentum to appear.

Over the summer we re-established an overweight in Turkey, given our view that the macro risks (inflation and the current account deficit) were peaking and the market could begin to perform as they receded. This has worked well, but we continue to see some value in this trade. The second change over the summer is that we have covered another slice of our multi-year underweight in India. As noted above, this has been a difficult

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cycle, with a hard landing, but we are not giving up on the long-term story. Most of the valuation premium that India enjoyed for years has now been washed out by poor performance. We have funded our moves toward Turkey and India with a rotation away from Brazil, where the valuation discount has narrowed and our concerns over the interventionist trajectory of government policy have risen.

Turning briefly to currencies, the dispersion of currencies around notional fair value has narrowed over the past few months as the long-standing split between richly valued commodity currencies and cheaply valued manufacturing currencies has diminished in the wake of sluggish commodity price action. We would highlight that the Indian rupee now stands out as the cheapest currency in our universe. Finally, after sticking with our best guesstimate of fair value for the renminbi for more than a decade ('guesstimate' given the absence of a long trading history due to the peg) we have made a moderate adjustment. This is largely a reflection of the decline in competitiveness on the export side, but also takes into account some of the wage re-rating discussed earlier. (One can think about that from a labor cost perspective as a currency re-rating in disguise.) As a result, the Chinese currency still looks moderately cheap to us, but it doesn't look as cheap as it did in the years in which China was enjoying its advantage of uber-competitiveness.

Conclusion

With regard to the recent disappointing emerging market equity performance, we believe that margin reversion - the last phase of convergence to developed world norms for profitability drivers - is the culprit, rather than macro fundamentals or market valuation. However, we believe that elements of the reversion are cyclical and that this is not the start of a secular contraction. Even assuming that EM profitability reverts to its ten-year average (reversing much of the improvement in corporate capital discipline seen from 2002-06), valuations appear to be reasonably attractive, at levels that have historically suggested investors should accumulate the asset class and top up strategic allocations. However, it is worth recognizing that those same valuation measures show crisis-bound Europe to be historically very cheap, providing unusual competition for emerging markets as a way to play risk-on equity market rallies.

Among the troubled BRICs, we believe investors should be careful not to give up on the long-term growth prospects for India in the wake of the post-Shining bust and should recognize that China remains stuck in the bottom of a U-shaped cycle, in part due to stubborn policy response.

Finally, in terms of actionable ideas, the sector rotation from defensives to front-end cyclicals became choppy over the summer, but we believe it will ultimately be resolved with renewed pro-cyclical leadership. In terms of countries, cheap valuations encourage us to hold on to our overweight position in China. We have trimmed our Brazil overweight in favor of a renewed overweight in Turkey and a further covering of the long-standing underweight in India as valuations cheapened further.

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