

December 14, 2007

Outlook 2008: Turning the Page

Hazardous global markets and wavering local policy are testing EM's mettle. But the asset class is set to move forward.



PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES ON THE BACK COVER.

LEHMAN BROTHERS

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EMERGING MARKETS 2008 OVERVIEW

Turning the page

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How will EM navigate the growth slowdown?

We expect a year of two halves: the first dominated by global concerns and technicals, the second by macroeconomic factors. Macro conditions will likely be more challenging, yet EM should still close the year with 6-6.5% total returns.

Much has changed in emerging markets (EM) in the past year. Our broadly optimistic 2007 outlook, written in mid-December 2006 when spreads were close to 170bp, projected them to tighten another 20-30bp. This was predicated on the notion that there had been significant structural improvements in EM and assumed that world conditions would hold up well. Although the world has grown more in 2007 than we predicted (2.6% as opposed to our forecast 2.1%), EM has backed-up significantly. As of December 11 2007, EM spreads were 277bp, 120bp wider than at the beginning of the year, while excess returns for the year are -4.93%. Two factors explain this performance: (i) the global capital market freeze-up; and (ii) a gradual deterioration of the fundamental story behind EM. Looking to 2008, we think that both of these factors have more room to play out their consequences. As a result, we have a much more cautious outlook. In fact, 2008 should present EM with an opportunity to turn the page. The question is, will it be forward or back?

A glimpse at global markets

Growth is expected to decelerate in all regions

Lehman Brothers economists predict a significant global deceleration in 2008, persisting into 2009. World growth is expected to decelerate from 2.6% in 2007 to 1.9% in 2008, recovering to 2.0% in 2009. Figure 1 shows Lehman Brothers' forecasts of regional contributions to world growth and how the slowdown will likely affect all regions.

The forecast world slowdown has three basic causes: a potentially protracted US housing recession; a complex capital market freeze-up with significant negative consequences for the dominant model of risk distribution and management; and idiosyncratic factors (See *Global Outlook 2008: Crunch time*, for more details).

EM may be affected through several channels

There are several direct channels via which a global slowdown could affect EM (see "Focus: Why contagion might be non-linear"). We focus on four: commodity prices, global real interest rates, spread sector risk premia and capital flows.

Figure 1. Macroeconomic outlook

| % y-o-y | 2007 | 2008 | 2009 |
|-------------------|------|------|------|
| US | 2.2 | 1.8 | 2.0 |
| Euro area | 2.6 | 1.5 | 1.4 |
| UK | 3.1 | 1.7 | 2.0 |
| Japan | 1.8 | 1.4 | 1.8 |
| Emerging markets* | | | |
| Asia ex-Japan | 8.7 | 7.6 | 8.0 |
| EMEA | 6.2 | 5.7 | 5.2 |
| Latin America | 5.0 | 4.1 | 3.6 |

*Countries covered in the emerging markets are: Asia ex-Japan: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand; EMEA (Europe, Middle East and Africa): Czech Republic, Hungary, Israel, Poland, Russia, South Africa, Turkey; Latin America: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico and Peru.

Source: Lehman Brothers.

Figure 2. Net capital inflows estimates

| \$bn | 2006 | 2007e | 2008f | Chg 07/08 |
|----------------------|--------------|--------------|--------------|---------------|
| IIF estimates | | | | |
| Asia | 260.5 | 208.3 | 197.2 | -5.3% |
| EMEA | 259.8 | 305.9 | 307.8 | 0.6% |
| Latin America | 52.6 | 106 | 88.1 | -16.9% |
| TOTAL | 572.9 | 620.2 | 593.1 | -4.4% |
| IMF estimates | | | | |
| Asia | 40.5 | 157.2 | 5.1 | -96.8% |
| EMEA | 170.4 | 254.4 | 238.7 | -6.2% |
| Latin America | 9.9 | 83.7 | 47.5 | -43.2% |
| TOTAL | 220.8 | 495.3 | 291.3 | -41.2% |

Source: IMF, World Stability Report 2007 and Institute for International Finance, 2007.

2008 US rates outlook

US Interest Rates Strategy Team

Markets are pricing a bleaker growth outlook next year than either the Fed or Lehman Brothers' economic projections imply (Figure 1). Applying the estimated Fed response to economic conditions suggests that the Fed would cut rates to 4% (using Fed economic forecast) or 3.5% (using Lehman Brothers growth and inflation forecasts). In contrast, the market is pricing a funds rate trough 3%. Since the market-implied inflation outlook is fairly consistent with the Fed/Lehman Brothers projections, the divergence reflects a difference in growth expectations. Further, the market expects a fairly quick reversal of Fed cuts, with tightening beginning in 2009. In contrast, both Lehman Brothers and Fed economic projections indicate a longer business cycle.

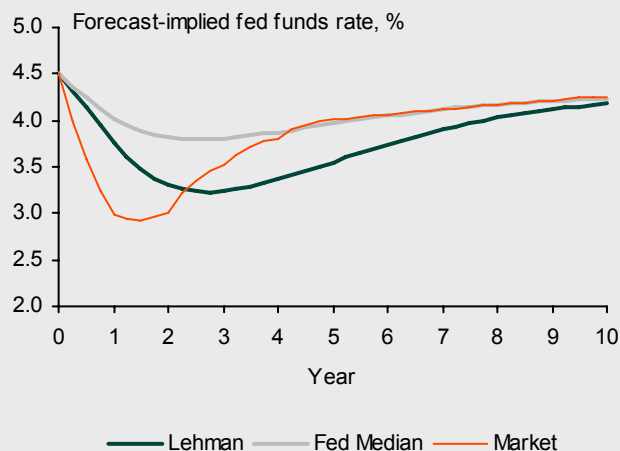
Translating the path of funds to fair values for yields (Figure 2) suggests: (1) 10-year nominal yields are fair relative to most projections; (2) 2-year and 5-year nominals are rich if the Fed's forecast were to come to pass but in line with Lehman Brothers' more pessimistic growth outlook; (3) Intermediate real yields are low compared to all economic projections (4) All economic forecasts suggest a flatter curve than implied by current market pricing due to the slower pace of recovery from the growth shock in 2008.

The supply and demand for duration should remain in balance, maintaining term premiums at current levels. We expect a sharp reduction in issuance of fixed-income product to be balanced out (in 10-year equivalent terms) by the reduced demand from financial intermediaries as well as overseas investors. In particular, we expect about \$750 billion less net issuance of non-financial debt in 2008 relative to 2007, translating to a reduced duration supply of about \$200 billion 10-year equivalents. Reduced mortgage debt issuance almost entirely accounts for this swing, as lower home prices constrain new home sales and cash-out refinancing.

The reduction in duration supply would be very bullish for long-term bonds were it not offset by the lack of demand from financial intermediaries (banks in particular) and overseas investors, which collectively accounted for about 60% of net fixed-income purchases in 2007. In particular, we expect bank asset growth to slow dramatically from about \$700 billion to \$200 billion, as losses on mortgage loans and securities deplete capital. The diversification of overseas flows out of fixed income into equities/alternative assets should shave another \$200 billion from demand.

Financial intermediaries will recapitalize, but this could take time as many cannot raise preferred stock and may balk at raising equity capital at current valuations. Trust preferred issuance is set to continue to be the instrument of choice for those not constrained by regulation or rating agency limits, leading to depressed longer maturity implied volatility. We expect slow growth in GSE balance sheets, which should bode well for their debt. On the other hand, agency MBS will not find a home as the surge of net issuance will meet limited appetite; GSEs are conserving capital and banks have more attractive assets to invest in. Finally, inflation targeting will debut in 2008, though our analysis suggests that the steadily declining breakeven volatility has already incorporated this information. Nevertheless, we believe long-term breakevens have room to compress.

Figure 1. Market-implied fed funds path much more aggressive than implied by economists' forecasts



Source: Lehman Brothers. U.S. Rates Strategy Weekly. Outlook 2008.

Figure 2. Forward real rates are too low compared with a range of economic scenarios

| | Rate Forecasts Implied by Economic Forecasts | | | Market |
|-----------------------------|--|------------|-----------------|-------------|
| | Lehman | Fed Median | Fed Pessimistic | |
| 1y2y | 3.11 | 3.60 | 3.15 | 3.07 |
| 1y5y | 3.51 | 3.97 | 3.51 | 3.64 |
| 1y10y | 4.15 | 4.45 | 4.15 | 4.42 |
| Real 1y2y | 1.55 | 1.80 | 1.63 | 1.00 |
| Real 1y5y | 1.74 | 1.96 | 1.76 | 1.46 |
| Real 1y10y | 2.03 | 2.17 | 2.04 | 1.72 |
| <i>Eco Forecasts (2008)</i> | | | | |
| Core CPI | 2.20 | 2.10 | 2.05 | |
| Real GDP | 1.60 | 2.15 | 1.60 | |

Source: Lehman Brothers. U.S. Rates Strategy Weekly. Outlook 2008.

Commodities, as priced by futures markets and forecast by Lehman Brothers' economics team, should remain high (see "Energy: Three scenarios for 2008"). A critical commodity price for EM is that of oil. Our forecast is that prices will average \$84 in 2008, 16% above the 2007 average. However, our energy team sets out two alternative scenarios: a 15% chance that oil falls to \$65 and a 25% probability that it rises to \$95. All in all, 2008 should be good for oil exporters, e.g., Venezuela and Ecuador.

Commodity prices should provide a favorable backdrop While the Fed is expected to cut rates, real interest rates are low and could rise

As the US economy slows, Lehman Brothers economists expect the Fed to cut interest rates significantly, to 3.25%, with a risk of further reductions. While inflation should decrease (1.8% is the forecast for 2009), the real interest rate that should prevail towards the end of 2008 ought to be at least 20bp lower than the current 1.65% real rate. In fact, markets seem to be pricing in more Fed cuts, resulting in even lower intermediate real interest rates (see "2008 US Rates Outlook"). On the other hand, the Lehman Brothers interest rate strategy group thinks 10y Treasuries are fairly priced given the profile of future Fed actions. They also find that the inflation risk priced in 10Y breakevens is likely to keep dropping which, given 10y yields, would imply rising long-term real rates. In the short run, falling US short interest rates should help restore overall liquidity and boost demand for local currency securities. But if our forecasts are correct, real rates could rise a little given what we view as excessively low 1yly forward real rates and inflation risk.

Credit markets will heal but, in the meantime, spreads are likely to widen

World capital markets seem to reflect a number of potentially enduring challenges. The "originate and distribute" model that characterized markets in the past few years is set to undergo a structural transformation. Perhaps the first phase of such a change is to reach a full understanding of the extent of the damage and the feasibility of utilizing some of the "credit plumbing" already in place. In the meantime, spread sectors are likely to reflect significant risk premia and dislocation across asset prices. As part of the early healing process, price discovery will have to take place and for that, liquidity must be gradually restored. However, as that process unfolds, fundamentals are likely to turn negative on credit. We expect default rates to increase to just above 2% in the High Yield (HY) universe from a decade-low of 1.14%. In the High Grade (HG) space, Lehman Brothers' credit strategy team expects an eventual rally in financials and a spread widening in industrials (see "2008 US Credit Outlook"). Overall, the credit space should yield a moderate spread widening of 15-20bp in HG and 100bp in HY. Given the co-movements observed between EM and HG and HY in the past, and despite its potential outperformance, we think EM may follow some of this spread-widening path.

In 2007, demand flows into EM were still strong...

One frequently heard argument is that the strength of fundamentals in EM and the weakness of opportunities in the developed world will bring large capital inflows into the space. The argument is often augmented by anecdotal evidence of increased asset allocations by sovereign wealth funds (SWFs) and other institutional investors to alternative asset classes, among them EM. It is indeed the case that record capital inflows poured into EM during the first part of 2007, and even as late as October. There are many episodes of strategic mandates being allocated to dedicated investors by cross-over funds. There have also been reports of the growth of such allocations by some of the best known SWFs. Finally, EM mutual funds have outperformed other asset classes at the time of attracting retail flows.

...but statistical models predict lower capital flows

The arguments about future flows into the asset class tend to extrapolate past trends, when in fact flows are more responsive to market opportunities. In fact, both the IMF and the Institute for International Finance (IIF) report in their model forecasts of net capital flows a reduction in those flows to EM in 2008 (Figure 2). While the institutions differ in terms of coverage and models, we find their results informative. For instance, both estimate a reduction in net capital inflows in 2008. Both report a deceleration in capital flows to Latin America of 17-40%. Interestingly, both see almost no change in capital flows to EMEA. Finally, there is a

2008 US credit outlook

US Credit Strategy Team

US credit markets have turned to the forefront of volatility as slowing growth and stretched balance sheets have unfolded throughout 2H 2007. The environment signals that the credit cycle is turning and that fundamentals are increasingly important. Currently, liquidity constraints are the single biggest issue in the credit markets and are likely to remain so in the near term, maintaining pressure on credit. An eventual improvement in liquidity, however, is likely as 2008 unfolds and the financial story plays out. The crucial question revolves around the timing of events. Once financials clean up their balance sheets, some stabilization should follow in many of these markets; however, the traditional sources of liquidity are unlikely to provide as strong a tailwind for credit as they once did. After accounting for the gradual recovery, credit is expected to produce modest returns in 2008: 75-100bp for the Lehman Brothers Credit index. A more bullish outcome is possible if macro and equity investors identify relative value opportunities in credit. Investments from the Middle East and alternative uses for capital raised by private equity could thus be important driving forces.

One of the consequences of the liquidity draught has been that funded assets in credit, including those in the leveraged loan market, have become historically cheap. These valuations, in turn, have led to negative CDS basis across US credit. This is a theme likely to continue in the early part of 2008 and could give rise to some attractive trading opportunities in 2008.

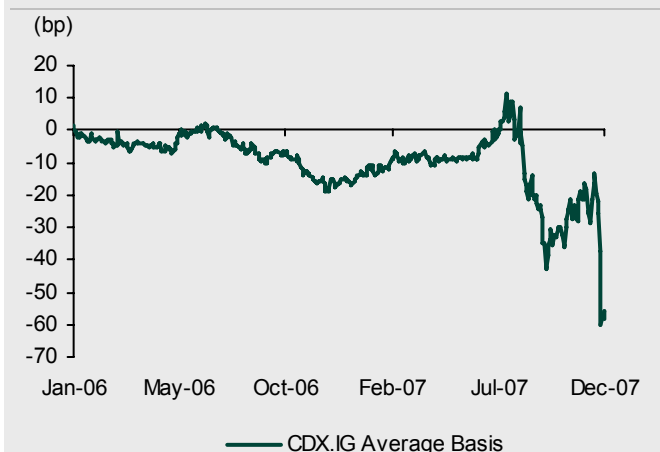
Investment grade: Although negative news is likely to keep coming from financials – along with supply pressures due to a heavy issuance schedule – this sector should present one of the best buying opportunities in 2008. Normalization in the short-term market would be one of the primary triggers for the turnaround in financials. Credit fundamental deterioration can be expected to accelerate in other sectors as the economy slows, resulting in spread widening, especially in industrials. Default risk in monolines, mortgage insurers and mortgage lenders could pose an additional drag to investment grade securities during 1H 2008. For the remainder of the year, the concerns shift to the effects of a slowing economy on industrials.

High yield: This asset class is expected to return 3.5%-4.5% as current volatility should continue for much of 2008. Similarly, supply overhang should weigh on the market through the spring. Low quality issuance should be limited once that pipeline clears. The main fundamental concern resides with the cyclicals in general but, in the short term, the main risk is to homebuilders as further declines in the housing market could weigh heavily, especially on the highly leveraged ones.

Leveraged loans/CLOs: This market is farther from recovery. Volatility is expected to persist as investors gauge the state of the economy and arrangers take advantage of short-term rallies to roll out new issues. Fundamentally, loans represent solid relative value within credit. Nonetheless, technical considerations advise caution as the CLO machine has been shut off and there is substantial interest rate risk in the front end of the curve.

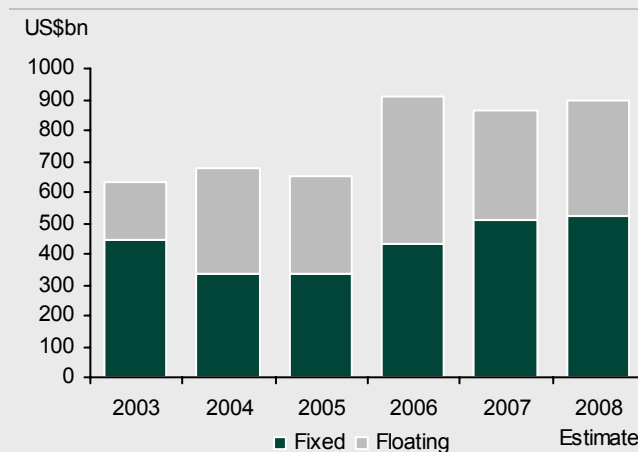
CDOs: An increase in defaults and rating downgrades in 2008 is likely to even out any easing of technicals, leading to little spread compression. The importance of funding efficiency means that the destiny of the corporate CDO market is exposed to the healing of balance sheets at large banks. The structured credit market will come back, but it is likely to be on stand-by for some time until demand for highly rated securities returns. ■

Figure 1. Recent cash/CDS basis



Source: Lehman Brothers.

Figure 2. Gross investment grade supply trends



Source: Lehman Brothers.

remarkable contrast in the forecast of capital inflows to Asia. We think part of the difference relates to the IMF prediction that the (partial) reduction in capital controls on outflows will bring a sharp rise in investments abroad.

In Asia, gross flows could be strong, forcing some central banks to fight the tide

The resistance to letting currencies float in Asia and parts of the Middle East at a time when the economies continue to grow strongly and their financial systems are relatively immune to the credit malaise (perhaps with the exception of South Korea) is likely to attract significant flows of private capital to the region. Central banks are likely to resist market pressures, at least for a while, and accumulate reserves that will most likely be invested abroad. This trend is unlikely to withstand market forces for long and is the basis for one of our key investment themes in the currency space (see “Local Markets Strategy: Searching for value and rate cuts”). On the other hand, in LatAm, where currencies tend to float more freely, we think much of the FX response has already happened. There, the effects of the slowing economies that we forecast, plus the lagged effects of currency appreciation, will probably allow governments to take a path of easier monetary policy than that priced in markets. In any event, the forecast flows to LatAm suggest a region likely to face a more challenging 2008 than is typically recognized.

Back from the future

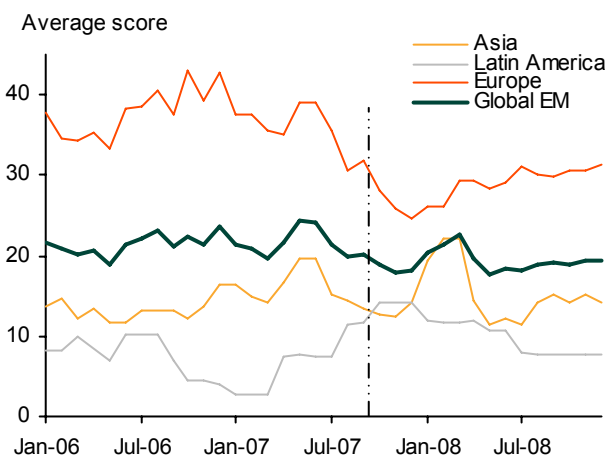
Global imbalances that led to EM countries exporting capital, have begun to turn

The world environment of recent years has led to EM nations exporting capital through current account surpluses to developed nations, particularly the US. EM nations behaved like developed ones, while mature economies had macroeconomic policy stances typical of a developing country. This suboptimal result was more general and not just the case of China or a few oil exporting nations. To a large extent, this was the result of a set of macroeconomic policies that allowed for a significant reduction in external debt, public sector indebtedness, accumulation of international reserves and improved liability management that helped create domestic capital markets in local currencies. While the current account surpluses may have been undesirable in theory, these other results were most welcome and allowed for a sharp reduction in risks of macroeconomic crisis (see “Damocles: More than meets the eye”). But that policy framework is gradually changing.

Macroeconomic policies are weakening in many countries

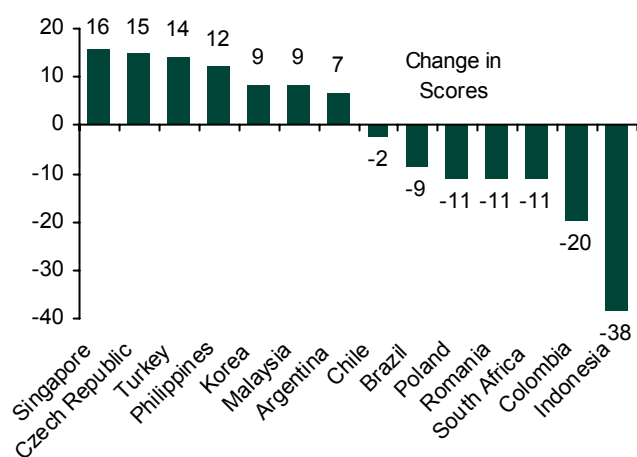
Some LatAm and EMEA countries are showing signs of “good-policy fatigue” - the relaxation of strong policies after long periods of austerity (see Focus: *Stress test*). The temptation to abandon such policy standings is dangerous in an environment where capital markets are drying up. Furthermore, an austere fiscal policy is desirable not just to reduce

Figure 3. Damocles forecast scores for three regions



Source: Lehman Brothers

Figure 4. Change in scores between Sep 07 and Dec 08



Source: Lehman Brothers

debt and facilitate domestic capital formation. In several countries suffering from fiscal dominance, an expansionary fiscal policy may result in hyper-crowding out: a reduction in growth instead of the typical Keynesian effect (see “How long to escape fiscal dominance?”). Looking to 2008, the threat is that fiscal policy might turn pro-cyclical, with some countries enjoying fast growth loosening policies while others, more challenged by external or domestic circumstances forced to tighten their stance.

Current accounts are swinging into more pronounced deficits but risks seem contained

Similarly, fast growth, rising currencies and looser fiscal policies will likely result in current account swings. We do not find this objectionable in principle, but we would worry if this were accompanied by a deterioration of macroeconomic indicators, which could increase a country’s vulnerability. Our model of balance of payments vulnerability, *Damocles*, is a useful, if blunt, tool to gauge the potential risks in the 12 months following an external crisis. When we simulated the model forward, under our baseline assumptions for the evolution of EM nations, we found that fundamental risk conditions stay roughly constant for the universe of EM (Figure 3) with the scores well below the 65 level that marks a 1 in 3 chance of a balance of payments crisis. Individual countries that merit some attention are Turkey and Philippines, while Indonesia appears to be headed for an improvement in risk conditions (Figure 4). In other words, it is reassuring that although current accounts may swing towards (larger) deficits, balance of payment risks do not appear to be on the way up.

Slower growth, slipping policies and weaker current accounts make us wary

To summarize the macro outlook, the risks of a deeper slowdown in the US, the potential drying up of capital flows and the change in policy stance in several EM countries may increase, perhaps even significantly, the fundamental risks of investing in EM. Our baseline simulations, however, do not pick up a sharp increase at the level of the balance of payments. But our bias is towards imagining other alternative, riskier, scenarios which could lead to a deterioration of the EM landscape.

Back to basics

The year in markets will be one of two halves

One of our forecasts is that the first few months of 2008 will be dominated by technical/liquidity factors while the second half will probably be more influenced by macro trades and relative value considerations. In fact, we believe H2 2008 will be characterized by a “back to basics” trading environment.

Investors should return to credit and classic local market products

Back to basics in EM should entail several things. To begin with, in an asset class where average spreads are 150bp, there is not much room for additional tightening. But it is a different story when spreads are 275bp. EM investors who had abandoned the credit world are likely to pay greater attention to this than to more sophisticated and, perhaps, less liquid instruments. It also means monetary policy and FX trades driven by macroeconomics. We also expect corporate credits to take a less central role in the expansion of the asset class as a more detailed evaluation of credit risk and liquidity becomes necessary (see “Focus: Two sides to the story”).

Appetite for complex, illiquid, products will likely be limited

In general we believe “funky” products will take a back seat: structured products, EM mortgages, correlation, CLNs will likely be a less fertile growth area in 2008. With clogged plumbing in the originate-and-distribute business in the developed world, it is unlikely that there will be high appetite for such products in EM.

The first half of the year will be marked by recovering liquidity

Liquidity looks set to remain scarce in the first few months of 2008. Even if central banks find the artillery to resolve money market problems, uncertainty over the macroeconomic outlook will likely remain high and the process of price discovery will likely continue to play out. This, we think, will continue to be reflected in two areas with trading implications for 2008: curve steepening in bond cash markets and CDS basis trades.

As liquidity recovers, credit curve slopes will steepen

On one hand, one of the most remarkable market trends of the past few months has been the sharp flattening of EM cash curves. Our average indicator of the 5/30 bond curve slope stands at -6bp, indicating an inverted curve (Figure 5). We have long argued that curves in EM

should flatten and think the trend had been gradually materializing. However, a sharp flattening has taken place since late July, when an aggressive sell-off began. We think one of the main factors behind this phenomenon is increased demand for liquidity. Investors have reshuffled their portfolios, shifting to benchmark instruments with greater liquidity, even at the expense of sacrificing yield. In the EM universe, given the many liability-management exercises that have taken place, most liquid benchmarks are long bonds. We illustrate the relative demand for liquidity by constructing a ratio of an index of a subset of benchmark bonds to the weighted average of the index of each of the individual sovereigns.¹ This has gone from long benchmarks having a 17% higher spread than the average index, to 0%. The demand for liquidity is likely to remain in place for a few more months as markets heal. One of our investment themes for 2008 is to remain invested in liquid instruments during the early, volatile, part of the year, eventually migrating towards the intermediate segments of curves.

CDS basis should swing back from negative to positive

Another dimension of the liquidity premia can be observed in CDS markets. Basis has turned negative, for the first time in EM, in sympathy with basis in US credit (Figure 6). We think that there are a number of reasons why EM basis will tend to return more rapidly to positive territory than would be suggested by a pure liquidity premia story (see “Sovereign Credit Strategy: Three themes for the new year”).

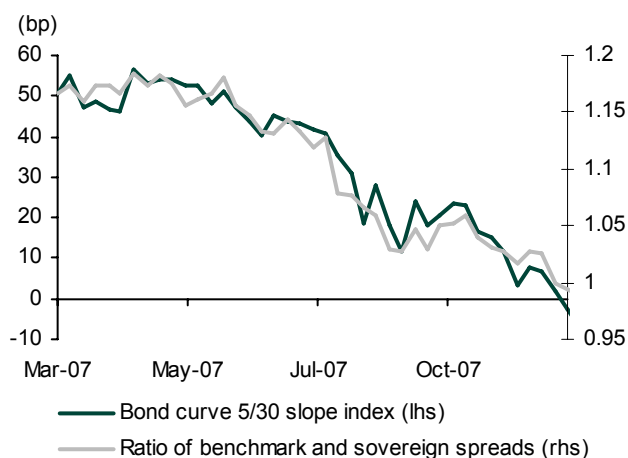
EM’s lower volatility than other credit classes will continue

Another feature of markets that characterized the end of 2007 is the lower beta of EM *vis-à-vis* other asset classes. Rather than belaboring the notion that EM will co-move with other credit and equity markets, we think it is more productive to emphasize the reduced volatility of EM. Interestingly, during the last six months of 2007, EM volatility has been between the volatility of CDS indices in HG and HY (Figure 7). But that computation is perhaps not entirely informative. The July-August period was marked by strong deleveraging that biases results against EM, as the asset class was more leveraged and used as a hedging vehicle by cross-over investors. When we consider the post-deleveraging period that began in October 2007, EM shows a lower volatility than HY and IG-HVOL. We believe EM volatility will remain relatively favorable for EM in 2008.

Local markets pricing central banks too hawkishly

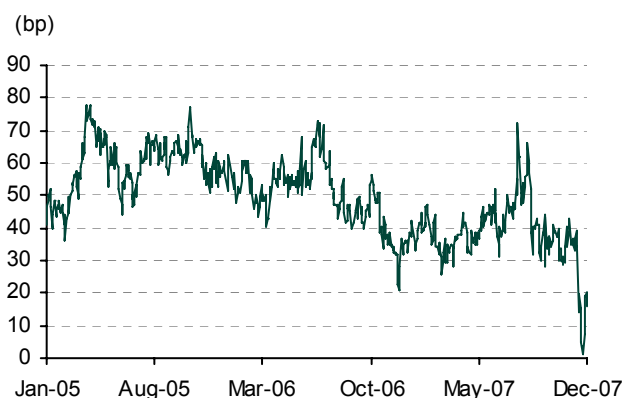
As macroeconomic factors become more important, sharpening up predictions of future monetary policy actions becomes critical. One theme that we find in most of EM is that markets seem to be pricing more hawkish actions by central banks than we do (Figure 8). Although a fraction of that difference may be to the result of the existence of risk premia, we

Figure 5. Credit: cash slope and benchmark bond premia



Source: Lehman Brothers

Figure 6. EM CDS basis



Source: Lehman Brothers

¹ Argentina 33; Brazil 37; Colombia 37; Mexico 34; Peru 37; Philippines 31; Russia 30; Turkey 30; Venezuela, 27

Real rates should continue to drop and corporates should benefit from the return of liquidity

To capture alpha, investors will have to work hard and sharpen their views

We expect the EM index to widen by 25bp

We expect total returns of around 6.5% with the greatest underperformance by high-beta credits

think that in most cases there is substantial room to implement trades with a view towards more dovish central bank actions (see “Local risk aversion: The case of Brazil”).

Several other themes are likely to also play an important role in generating alpha during 2008. These include continued pent-up demand for inflation-linked instruments in the EM space as the process of real rate convergence regains traction (see “LATAM inflation-linked bonds”); and the purchase of corporate credits hedged with sovereign CDS to take advantage of the deep negative basis that results for some quasi-sovereigns.

Hard work ahead

Our outlook is not as bright as we would like. We do not foresee a crisis in EM however, nor a continuously depressed market. Rather, we imagine a year that will require both concentration on market technicals and a more refined view of macroeconomic forces. It will also demand a dynamic trading strategy, managing portfolios to limit the impact of the high frequency volatility we think will be present throughout the first semester. Generating alpha in 2008 will take a lot of hard work, and/or a good dose of luck.

Our analysis suggests that the EM index will probably end 2008 slightly wider, perhaps reaching 300bp or more. We expect the asset class to outperform equally rated US credit, although not by as much as firm believers in the decoupling hypothesis would hold. We think the low beta behind this projected outperformance testifies to the macroeconomic sturdiness of the countries and the maturity of the asset class. But the complex nature of the global capital market crisis and the growth slowdown will still take a toll on EM.

Our analysis of the outlook leads us to conclude that the EM index will post a spread widening of 20-25bp in 2008, for a **total return of 6.0-6.5%**. We also estimate the widening for the various components of the sovereign space, based on a linear distribution. That is, we do not take into consideration other factors, such as supply, time-varying beta, macroeconomic outlook, etc. Our results suggest that the HG components of the EM space will widen by about 15bp, mid-beta credits by about 20bp and high-beta ones by 40-45bp (Figure 9).

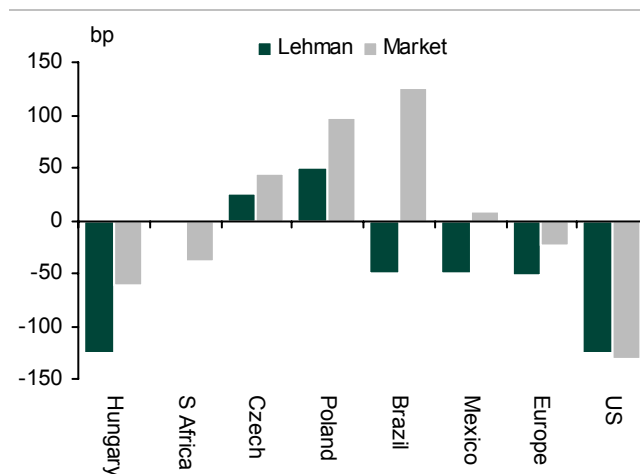
As 2008 unfolds, we will see whether EM is moving ahead, with the concomitant anxieties that would imply, or turning the page back towards a more volatile asset class. ■

Figure 7. Annualized price volatility of CDS indices

| Index | Annualized volatility since 6/1 | Annualized volatility 6/1-9/28 | Annualized volatility 10/1-12/10 |
|-------------|---------------------------------|--------------------------------|----------------------------------|
| CDX.EM | 5.6% | 6.3% | 4.4% |
| CDX.HY B | 7.7% | 8.2% | 6.9% |
| CDX.HY 100 | 8.3% | 8.5% | 8.0% |
| CDX.IG HVOL | 5.0% | 4.9% | 5.1% |
| CDX.IG | 2.3% | 2.4% | 2.0% |

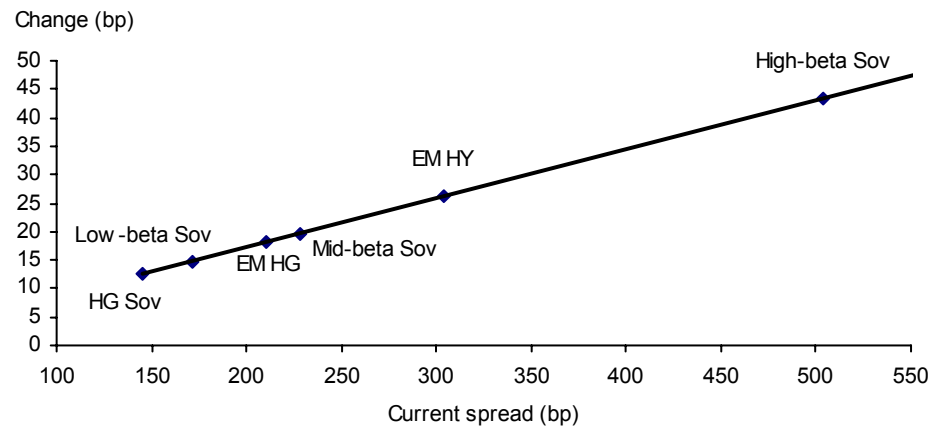
Source: Lehman Brothers and Market Partners

Figure 8. Expectations of end-2008 policy rates



Source: Lehman Brothers, Bloomberg

Figure 9. Outlook 2008: Expected widening of spreads, cash index components



Source: Lehman Brothers

SOVEREIGN CREDIT STRATEGY

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*Basis has fallen in corporates
as well as EM*

Three themes for the new year

We discuss three important themes for EM debt: the outlook for CDS basis, the determinants of credit betas and the effects of upgrades.

I: NEGATIVE BASIS – A TEMPORARY PHENOMENON?

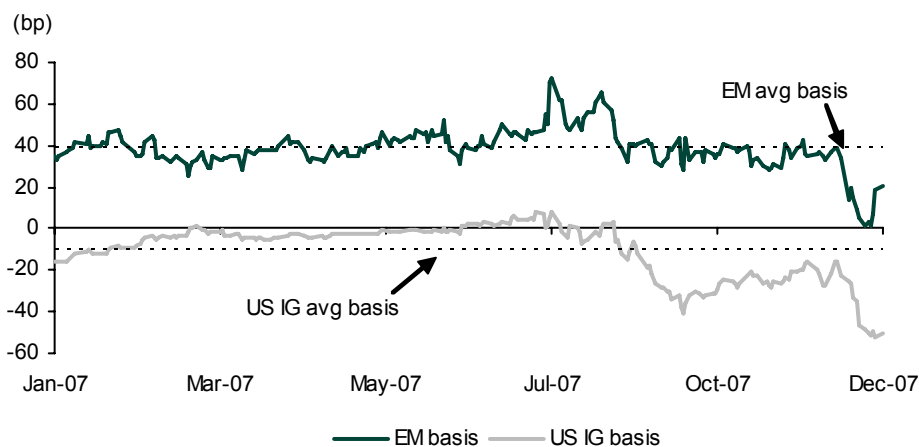
In previous publications, we have argued that EM CDS basis would eventually tighten and converge to the levels of US corporates (“CDS basis as the next convergence trade” *Emerging Markets Compass*, September 14 2006). In fact, this came sooner than expected; on December 7th, EM basis went negative for the first time. We had originally expected it to converge against a positive backdrop of falling risk premia, but the recent basis tightening in EM has occurred in just the opposite environment.

With basis at historical tight, some investors think basis will snap back to more ‘normal’ levels while others believe that the technical conditions that initially drove basis tighter will persist. We discuss the merits of both views.

The case for negative basis

The recent basis tightening is not just an EM phenomenon. It has affected US IG and HY, too (Figure 1).

Figure 1. Basis tightening is not just an EM event



Source: Lehman Brothers

*Increased funding costs for
bonds are the most common
explanation*

Market-wide factors may be at work here. The most often cited factor is funding cost. The current liquidity drought has driven GC rates in EM higher, a situation exacerbated by investors attempting to lock in term liquidity before end-year. Money markets show evidence of the high funding costs as the 3m Libor-Fed Fund basis has widened by as much as 109bp (current level is 103bp), while the average since 1996 has been 18bp. More specifically to EM, overnight GC used to trade at a spread of only 5-10bp to 1-week Libor, while the Libor was just a few basis points above the Fed Funds effective rate. Not only has the Libor-FFR spread widened, but as recently as this week, we saw GC in EM quoted at around 75bp above 1-week Libor. Tighter liquidity conditions have pushed credit spreads higher not only in EM, but in other asset classes as well. These liquidity constraints may have accelerated the deleveraging process, causing bond spreads to widen relative to CDS.

Basis trades are costly in the current environment

Meanwhile, bid-ask spreads have widened on many bonds and CDS. The upshot is that putting on basis trades has become costlier as the investor would conceivably have to pay higher spreads on both legs of the trade. Furthermore, basis trades use up more balance sheet than a standard directional trade; with balance sheet at a premium, many investors may choose not to enter such trades. Finally, many broker-dealers have wider CDS levels than the EM names they trade. The heightened counterparty risk with CDS may in the future drive down the price that protection buyers are willing to pay.

The case for basis widening

Price stickiness may be responsible for basis widening as well

We are not sure that funding cost is as important a determinant of basis in EM as many investors suggest. True, the correlation between funding cost and basis is strong, as shown in Figure 2, where we use the 3M Libor-Fed Funds basis as a proxy for the rise in funding cost. Nevertheless, basis has also been highly correlated with movements in US 10yr Treasury yields in the past few months (Figure 3). Although price stickiness is a trait of EM bonds, it does not normally last; EM bonds are eventually re-marked at the correct prices.

Investors like negative basis trades

The advantage of buying basis when it is negative is that there is no fear of a short squeeze on cash bonds and it is a positive-carry trade. Those factors suggest that negative basis could correct quickly.

Hedging by EM equity and EM corporate investors should increase

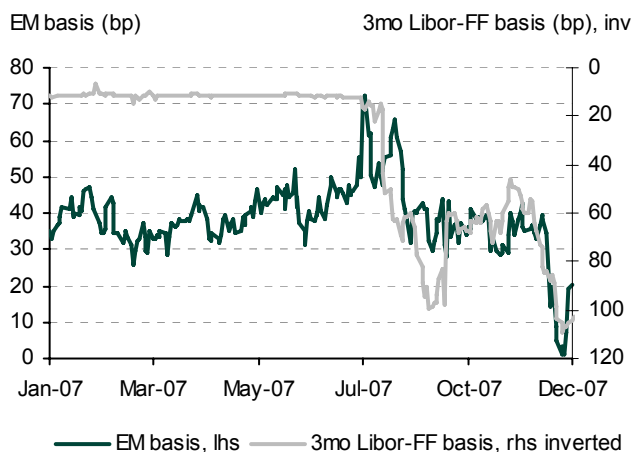
Meanwhile, we expect the use of CDS as a hedge for other EM asset classes to accelerate. As the role of macro factors in asset valuations has increased, the correlation between the CDX.EM index and equities has also gone up. Similarly, high issuance of EM corporates in the past few years has left many investors, who are unaccustomed to such high volatility, trying to hedge these less liquid instruments with more liquid sovereign CDS. These buyers of protection will find no natural sellers of protection. Unlike the US IG and HY space, there is no synthetic CDO bid pushing CDS tighter. Therefore, one of the main reasons why IG and HY has historically had negative basis does not exist in EM. If volatility persists, we would expect CDS spreads to widen relative to bond spreads as more investors try to hedge their positions.

Outlook for basis

Basis can widen under both bullish and bearish scenarios

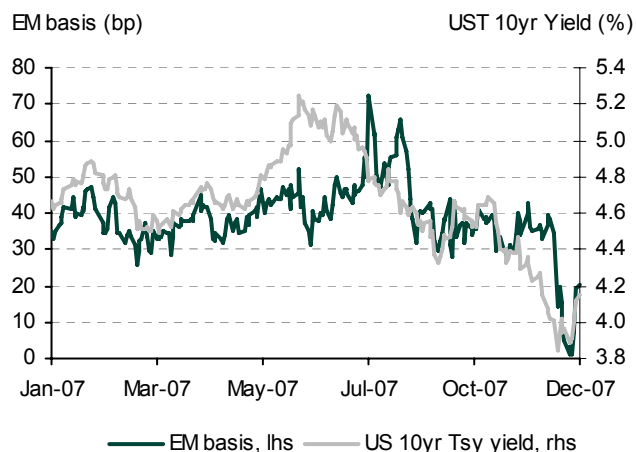
In part, the outlook for basis may depend on the restoration of liquidity to financial markets and subsequent reduction in funding cost. This suggests that buying basis is merely one way to express a bullish view on EM. On the other hand, we can think of scenarios where basis normalizes even in a bearish environment. For example, a negative idiosyncratic EM event

Figure 2. Basis shows little correlation with funding cost



Source: Lehman Brothers.

Figure 3. Basis has recently tracked US 10yr Tsy yields



Source: Lehman Brothers.

could leave investors scrambling for protection, causing basis to widen considerably, as it normally does in response to large increases in default probabilities. We expect basis and basis trades to get increasing attention in early 2008.

II. LOW BETA VS. HIGH BETA

Why do different countries have different betas?

High-beta countries have significantly underperformed in the past six months. For example, since June 1, Venezuela has widened by 257bp while Mexico has widened by 40bp. EM investors routinely classify credits according to their market beta; some may even trade the credits based on deviations from movements predicted by historical betas, forcing future prices to stay in line with those betas. Yet, without an underlying theory linking credit characteristics with their betas, it is hard to justify these beta classifications. We thus review three competing explanations for the high betas of Venezuela and Argentina and discuss the implications for the trading of these credits in 2008.

Sensitivity of future cash flows explains variations in corporate betas but does less well on sovereigns

First, betas may indicate the sensitivity of a credit's expected future cash flows to systematic risk. In the case of high-yield corporates, the explanation is simple. Corporates tend to default more when the US economy slows. Some corporates have poor balance sheets, small margins, and higher debt ratios. These are the corporates that will suffer most during a recession and, for this reason, they will also have lower credit ratings and higher betas. This simple reasoning does not do a very good job at explaining why Venezuela is a high-beta country, however. The key determinant for cash flows received by the Venezuelan government is the world oil price. Yet, as shown in Figure 4, there has been no correlation during 2007 between oil price and Venezuelan spreads. If anything the correlation has the opposite sign that we might expect—spreads actually increased when oil price increased. Instead, Venezuelan spreads were highly correlated with spreads on US banks (Figure 5), which have a much less direct impact on Venezuelan cash flows.

Sensitivity to changes in risk premium is another possible explanation

Second, betas may reflect the sensitivity of credits to changes in the risk premium. Venezuela and Argentina are certainly more risky than Russia and Mexico. In good times, spreads on these countries would merely compensate investors for the probabilities of default. In bad times, when liquidity is expensive, and especially when the health of the financial system is uncertain, investors are unwilling to accept a small probability of a large loss. Although we do not think Venezuela will default, at least in the short term, it is still more likely to default than a low-beta country like Russia. As risk premia rise, spreads on Venezuela must rise more than on Russia to compensate investors.

Figure 4. No recent correlation between Venezuela CDS and oil price

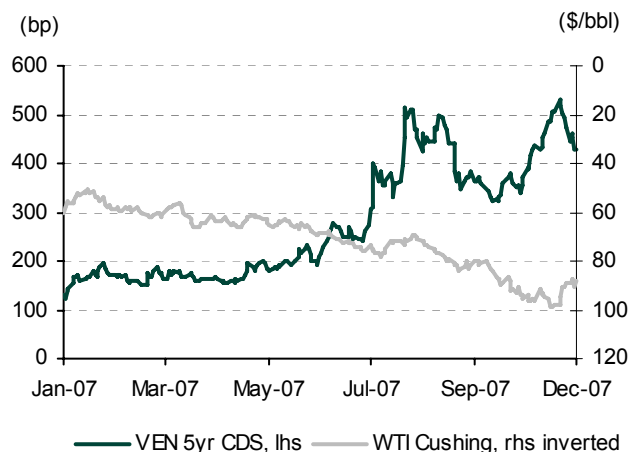


Figure 5. High correlation between Venezuela CDS and Financials



Source: Lehman Brothers, Reuters

Source: Lehman Brothers

So why are betas so unstable?

This second theory is part of the explanation, but it still seems incomplete. Figure 6 shows the betas of individual credits against CDX over time. Interestingly, betas are not constant. For example, in 2005, the beta of Brazil was higher than that of Venezuela, but this year it was much lower. Why should the beta of Venezuela have increased so much? Meanwhile, the beta of Turkey seems low relative to credits of similar risk.

Figure 6. Credit betas over time

| Country | 2005 ¹ | | 2006 | | 2007 | |
|-----------|-------------------|------|------|------|------|------|
| | Beta | R-sq | Beta | R-sq | Beta | R-sq |
| Brazil | 1.23 | 0.77 | 1.24 | 0.84 | 0.73 | 0.87 |
| Colombia | 0.88 | 0.53 | 1.11 | 0.78 | 0.83 | 0.84 |
| Mexico | 0.35 | 0.59 | 0.34 | 0.56 | 0.33 | 0.71 |
| Panama | 0.26 | 0.18 | 0.43 | 0.40 | 0.65 | 0.82 |
| Peru | 0.38 | 0.24 | 1.05 | 0.49 | 0.76 | 0.82 |
| Russia | 0.31 | 0.26 | 0.19 | 0.20 | 0.27 | 0.27 |
| Argentina | 1.39 | 0.60 | 1.66 | 0.81 | 1.79 | 0.79 |
| Turkey | 0.69 | 0.27 | 0.78 | 0.27 | 0.55 | 0.28 |
| Venezuela | 0.84 | 0.54 | 1.25 | 0.78 | 1.60 | 0.68 |

Source: Lehman Brothers

1. Argentina data starts on June 13, 2005; all others start March 22, 2005.

Sentiment provides the final explanation

Venezuela and Argentina are hard to value and to arbitrage, boosting their sentiment beta

A third explanation comes from the behavioural finance literature, which has started to address the role of sentiment in predicting the prices of certain types of stocks, even arguing that different stocks have different sentiment betas.² Under this theory, stocks that are hard to value and hard to arbitrage, such as the stocks of young firms, unprofitable firms, or firms in financial distress, have a high sentiment beta, meaning that they are more sensitive to changes in investor optimism. Political risk is often harder to measure accurately than economic risk and opinions on it are varied. As a result, Venezuela and Argentina are difficult to value. While there are few difficulties in shorting these credits through the CDS market in the short-run, these credits can be hard-to-arbitrage in the long-run. High idiosyncratic risk makes hedging difficult and returns volatile. Unlike stocks, credit might only pay off in the event of an actual default, leaving the arbitrageur unhedged and subject to large-mark-to-market risk. Therefore, there is reason to believe that these credits have high sentiment betas.

Understanding the drivers of beta can help understand the requirements for a recovery in these credits

These distinctions are important for the outlook of these high-beta credits. If cash flow betas are not responsible for recent movements, then country economic fundamentals may matter less. If risk premia betas are the drivers, then these credits may take their cue from US equity markets, particularly during bear markets. Finally, if sentiment betas are large, then technical factors like flows to the asset class will dominate the performance of the credits.

² See Malcolm Baker and Jeffrey Wurgles, "Investor Sentiment in the Stock Market," NBER Working Paper 13189.

2008 EM supply outlook

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2007 saw the continuation of a now familiar trend in EM: lower sovereign and increasing corporate issuance of external debt. Up to the end of November, sovereign issuance stood at \$31.6bn, down from \$41.6bn in 2005. Corporate supply, on the other hand, increased from \$119.1bn to \$150.8bn (Figure 1).

Sovereigns continued to aggressively perform liability-management transactions, in many cases as part of their strategy to shift from foreign currency-denominated debt into domestic-currency debt. Brazil, Colombia and Uruguay extended their global local currency curves, Peru made its debut in that market and Mexico issued more debt-swap warrants. Turkey, the Philippines and South Africa were also among the main countries that cleaned up their external curves throughout the year.

The EMEA region dominated the picture in 2007 accounting for 54% of total EM supply, with Russian and Kazakh banks, along with Russian energy-related companies being the largest contributors to issuance in this region. Asia – led by the banks – and Latin America were roughly even in their share of issuance (Figure 2). However, most of the activity was concentrated in the first half of this year: about 75% percent of 2007's supply took place during that period. Unsurprisingly, the turmoil in global credit markets in H2 took a toll on what would have otherwise been a much busier schedule.

Although a roughly similar pattern will carry into 2008, the difficult state of financial markets and the uncertainty regarding the timing of a return of liquidity will weigh on the supply pipeline. We forecast sovereigns to issue about \$28bn of external debt next year. The fall in overall sovereign issuance should be somewhat more muted as countries finance some of the fiscal slippage taking place in EM, and also as they make up for the limited pre-funding of 2008 liabilities that took place given the market conditions in H2 2007. The increased access that governments have gained in their domestic markets should provide enough room to limit external issuing, especially if global capital markets were to remain closed for an extended period of time. Some of the largest issuers will be Turkey (\$5.5bn), the Czech Republic (up to \$4.7bn) and Brazil (\$3.5bn). Nevertheless, we expect sovereign external net issuance to remain negative. On a separate note, Argentina and Venezuela are likely to sell \$4.7bn and \$5.0bn, respectively, on top of our total forecast figure. Note that this issuance is not included in the data for sovereigns because its sale is taking place in the domestic market; however, most of these bonds will eventually reach the international markets.

We will also see additional liability-management operations, including more issuance of global local currency-denominated debt and debt-swap warrant instruments comparable to Mexico's. The Philippines recently announced its intention to go ahead with a similar transaction.

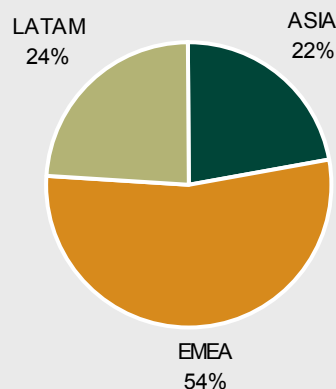
Another novelty will be "frontier" issuance from countries that are debuting in capital markets. Late in 2007 Ghana and Gabon sold \$500mn and \$1bn of debt, respectively, making them the first post-HIPCs (Heavily Indebted Poor Countries) to tap international markets. Kenya, Mongolia and Cambodia are among potential new issuers in 2008.

Figure 1. External debt issuance



Source: Bond Radar, Lehman Brothers.

Figure 2. Regional distribution of issuance in 2007

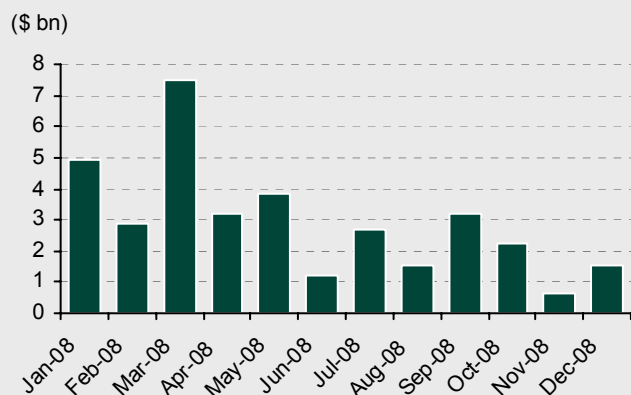


Source: Bond Radar, Lehman Brothers.

On the corporate front, given expected market developments next year and in a context where 42% of 2007 debt sales came from banks, issuance is likely to drop from the lofty levels seen in 2007, to about \$130bn. Bank issuance will likely account for an important share of next year's drop in issuance. However, these levels are still high by historical standards and may create supply pressures during certain periods of the year.

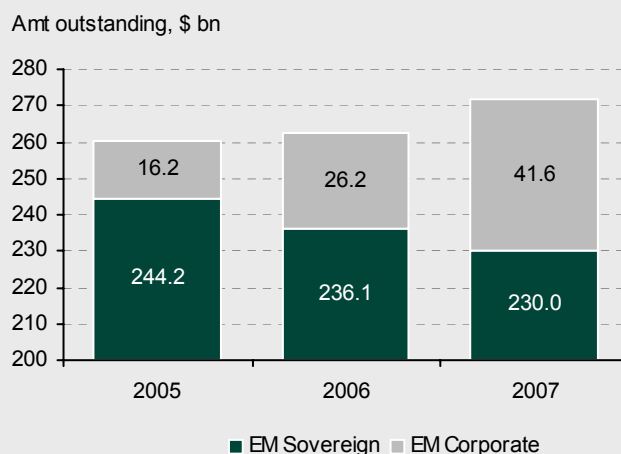
So how will the supply picture affect the asset classes in 2007? As mentioned earlier, we expect another year of negative net supply for sovereigns, with over \$35bn expected in amortization and interest (Figure 3). On the other hand, we expect the opposite to be true for EM corporates. The corporate portion of our EM \$ Index has increased dramatically over the last few years, from 6.2% in 2005 to 15.3% in 2007 (Figure 4). If we include quasi-sovereigns such as Pemex and Gazprom, EM corporates would account for nearly 30% of the index. We would expect this trend to continue in 2008. ■

Figure 3. Amortization and interest in 2008 is expected to reach \$35bn for countries in our EM Index



Source: Lehman Brothers.

Figure 4. EM corporates have grown while EM shrunk in both absolute and percentage terms in our EM \$ Index



Source: Lehman Brothers.

Brazil, Colombia and Peru may get upgraded to investment grade in 2008 or 2009

Investment grade status may matter a lot

Investment grade status would broaden the investor base

III: INVESTMENT GRADE PROSPECTS

A few major EM sovereigns have entered the race for investment grade, namely Brazil, Colombia and Peru, representing about 19.3% of the Lehman EM \$ index (Figure 7). We expect Peru to be upgraded in 2008 as fiscal performance exceeds expectations. On the other hand, we think Colombia will have to wait at least until 2009 as the government's fiscal deficit and security concerns remain high. As for Brazil, a case of particular importance, the rating agencies judge that it is moving in the right direction and that continued improvement of debt management and fiscal austerity will determine future rating moves. We see some policy fatigue slowing down the improvement in closely-watched indicators, such as debt-to-GDP and the external debt-to-exports ratios. Although an upgrade in 2008 is possible, 2009 may be more likely.

While it is true that the underlying economic variables are continuous, there are strong technical and structural reasons to focus on the attainment of investment grade, particularly for Brazil.

First, an upgrade implies the broadening of the investor base and additional demand from high-grade accounts. Consider the following simple calculation of the immediate implications of the inclusion of Brazilian debt in the Lehman US Aggregate and US Credit indices, the two most widely tracked high-grade indices. Brazil debt would account for \$49bn by market value or 0.48% of the US Aggregate index. Our \$2.5tr estimate of assets under management benchmarked against this index suggests at least \$12bn of new money allocated to Brazil's external bonds. Brazil would become the third largest issuer in the US Credit index, at 2.1%,

The credits would become more correlated with high-grade and less with EM

That has slowly happened with Mexico

An upgrade could have positive implications for sovereign bonds, corporate bonds and other asset classes

behind General Electric (3.2%) and Goldman Sachs (2.2%). Clearly, this underestimates potential new demand: not all asset managers following our US indices enter the estimation survey; many others are benchmarked against other high-grade indices or have mandates that would let them buy newly upgraded debt.

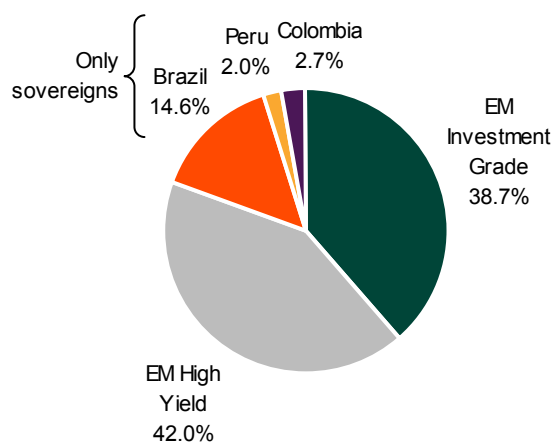
Second, the potential inclusion of Brazil in the high-grade indices would increase its beta to those indices, while the beta against more fundamentally similar EM sovereigns could drop. An academic paper on co-movement of asset prices found that stocks included in the S&P 500 index begin to move more with other assets in the index and less with those outside of it, referred to as “category-based” co-movement.³ We see no reason why this behaviour would not apply to credit markets, too.

Third, we can use Mexico as an example of the consequences of reaching investment grade. When the sovereign was upgraded in 2000, it became the 17th largest issuer in the US Credit index, with a market weight of 0.95%. Figure 8 shows that the correlation between Mexico and Brazil spreads has fallen significantly since then, while the correlation with the BBB portion of the US Credit index has moved in the opposite direction, as predicted by the category-based theory. A study by Roberto Rigobon confirms our argument, concluding that the Mexico upgrade resulted in a structural change in the co-movement between Mexican sovereign bonds and EM debt – and also against Brazil. The paper argues that almost a third of the co-movement was reduced by the upgrade.⁴

Upgrade implications

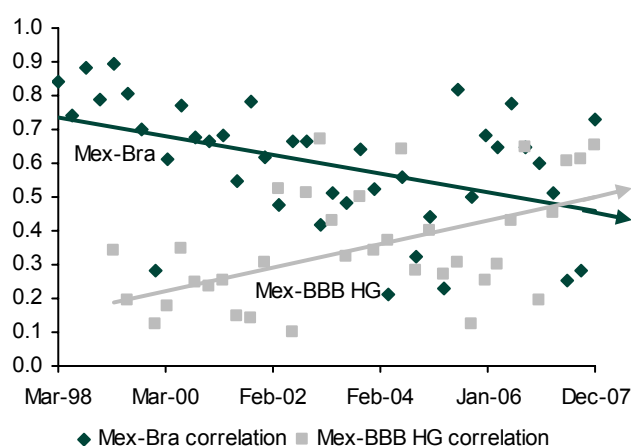
In conclusion, we would expect price and spread volatility of sovereign debt to drop following an upgrade and converge to that of high-grade corporates, as suggested by the “category-based” co-movement theory.⁵ The upgrade would be accompanied by lower relative spreads for both the sovereign and corporates, which means cheaper, longer term and more stable access to credit. As the sovereign ceiling is raised, we could see possible upgrades for existing corporate issuers and a market opening for many small or low quality credits. Demand for local equities should also increase. As the general level of interest rates fall and economic activity improves, the upgrade should facilitate the development of local markets for structured finance instruments, such as ABS and MBS.

Figure 7. Composition of Lehman EM \$ Index



Source: Lehman Brothers.

Figure 8. Changes in Mexico correlation after upgrade



Source: Lehman Brothers.

³ Barberis, B., A. Shleifer, and J. Wurgler. (2002) Comovement. NBER working paper 8895.

⁴ Rigobon, R. (2002). The curse of non-investment grade countries. MIT and NBER.

⁵ In Mexico, volatility appeared to come down from the pre-investment grade period, however it still remains high compared to BBB US corporates. This may be the case because of price stickiness (Mexico trades in price, rather than spread) and because it still remains a significant component EM credit indices.

LOCAL MARKETS STRATEGY

Searching for value and rate cuts

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As the world economy deals with the aftermath of turbulence in global credit markets, we expect the normalisation of risk premium to continue throughout 2008. That said, given our base case that the global economy will experience a soft landing and G10 central banks will ease policy rates in aggregate, our general view of the asset class remains reasonably constructive. However, we think that there is likely to be a greater than usual dispersion of performance across countries and product segments. We see the greatest scope for FX appreciation in Asia, while CEE currencies should benefit from ECB rate cuts in 2008. But overall, and in contrast to 2007, all evidence is pointing towards a much better performance of local rates in 2008 in EMEA and LATAM.

KEY TRADES

FX POSITIONS:

We see bigger upside in Asia FX in 2008 and expect INR to outperform.

In EMEA, we expect CZK, ILS and PLN to outperform. ZAR is the weak link (again).

In LATAM, we expect BRL and COP to depreciate moderately and MXN and CLP to be range-bound.

We buy a Damocles basket: Long (TRY, BRL, INR)/(HUF, RON, KRW).

We buy a Valuation basket: Long (INR, ILS, SGD, MXN)/(KRW, HUF, ZAR).

We buy a China appreciation basket: Long (MYR, INR, TWD) against USD.

RATES POSITIONS

Receive rates in low beta local markets with an easing bias in 2008. We think these are countries where central banks can afford to ease monetary policy even if general risk aversion increases. We believe Poland, Czech and Mexico belong in that category, and that Chile should too at some point in 2008. Although primarily front-end oriented monetary policy trades, the lower degree of vulnerability in these countries should allow for duration risks at various points in the year.

Receive rates in countries where monetary policy is too tight and/or risk premium built into the market is excessive. Brazil, Israel, Hungary, Korea and Turkey fall into this category. The higher degree of vulnerability should command a more trading oriented style and possibly hedging of these positions.

Our chosen convergence trade is to receive the Hungary-Poland spread in the intermediate sector of the IRS curve.

In Korea we see upside in buying 3Y KTB futures against paying KRW IRS rates. We believe that the significant USD liquidity led sell-off in the local bond market will stabilise.

EM FX SHRUGGED OFF THE RISE IN RISK PREMIUM

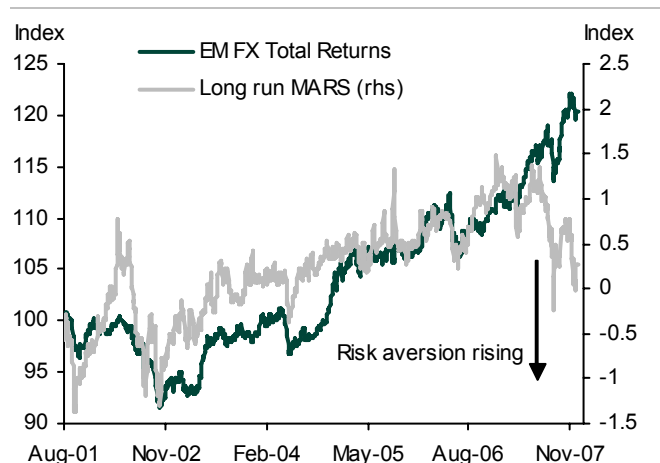
At the end of 2006, we argued that risk premium would rise, thanks to a combination of tighter global liquidity conditions, weaker global growth and a greater variation of growth across countries. Related to this, we argued that macro fundamentals would play a greater role in driving FX returns and we stated that given the challenging environment for FX (except in Asia), the main upside in local markets was to be found in interest rates. Our expectation of a rising risk premium proved correct, as did our view that macro fundamentals would play a greater role. But unfortunately our view that interest rates would provide stronger upside than FX markets was proved wrong.

Risk premium did indeed rise in 2007. The trading signal of our indicator of risk conditions (MARS) was in risk aversion about ten times in 2007 and the total number of days it spent in risk aversion was the highest in the history of the index (since 1993). But despite that, 2007 was a strong year for EM FX returns (Figure 1). GDP weighted, EM FX returned around 10% in 2007, compared with 7% in 2006, and had its strongest year since 2004. As in the past few years, LATAM outperformed returning 12%, driven by BRL (which returned an impressive 22%) and COP (12%). The EMEA region beat 2006's performance, thanks to TRY's top performance of 34%. Asia lagged in 2007 even against the weak dollar – in trade weighted terms, Asian currencies (excluding INR and PHP) were weaker on the year.

The results are even more striking, considering that carry returns contributed very little to overall returns in 2007 and were lower overall than in 2006 (Figure 2). One obvious reason for the apparent resilience of EM FX returns has been the weak dollar, as much of the dollar weakness rotated from G10 to EM FX, especially in the second half of the year. Indeed looking at nominal returns against the euro, EM FX actually showed negative returns in 2006 and 2007 (Figure 2). For 2007, one explanation for that is that the Fed cuts have increased the carry of USD-based EM currencies.

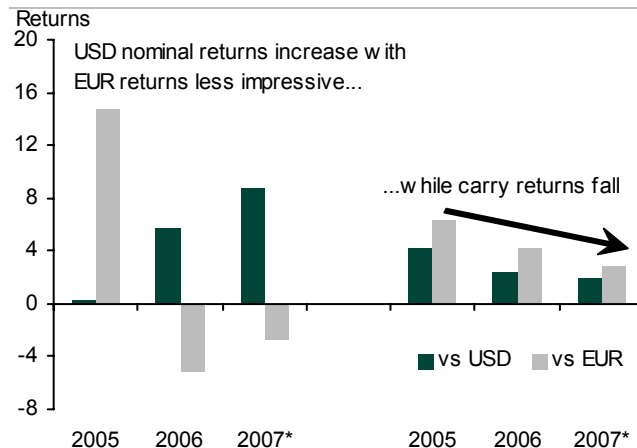
That said, there were fundamental factors driving FX returns too. We would characterise 2007 as the continuation of the “search for growth” theme in EM, driven by rising FDI, foreign bank lending to local institutions in emerging market countries and foreign investor purchases of local equity markets (Figure 3). And this was justified to a large extent – according to IMF forecasts, EM is likely to have made a greater contribution to world growth than developed markets in 2007 as it did in 2006 (Figure 4). EM central banks, by and large, did not fight this trend: faced with a sharp rise in “real” flows, and a rise in inflation pressures, they allowed for greater currency appreciation.

Figure 1. EM FX returns and long-run MARS



Source: Lehman Brothers; Bloomberg.

Figure 2. EM FX returns in 2007 (nominal and carry returns)



* Year to 4 December Source: Lehman Brothers; Bloomberg.

LOOKING AHEAD: THE WORLD ECONOMY AT AN INFLEXION POINT

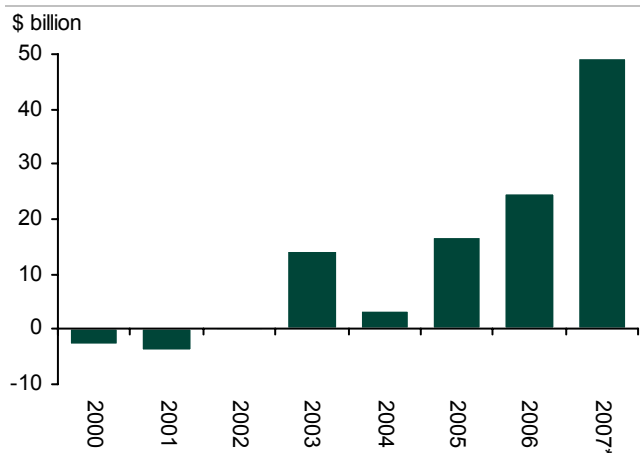
There is a flip-side to this, however. The sharp rise in credit flows into the private sector, equity markets and FDI confirm investors’ optimism about emerging market countries’ growth prospects. In that sense, the flows also imply that EM currencies by and large have become that much more growth sensitive. The outlook for equity markets will clearly be very important in 2008, especially given the amount of funds that EM equity funds have received and channelled in the past two years. And the rise in foreign borrowing by the private sector in the past few years is a key vulnerability that could threaten local markets in 2008, in the context of a much weaker global credit environment (see below).

The trouble is that as we look ahead to 2008 it is hard to become enthused about the overall macro and risk backdrop. There are several conflicting forces at work that could push the outlook either way. If history is any guide, we should expect the credit market downturn to remain with us for 2008. And even more important, the world economy is at a key inflexion point, grappling with the aftermath of the turbulence of credit markets. Set against that however, is G10 central bank action to ease monetary policy, which has historically helped to push risk premium lower.

Our base case forecasts suggest a continuation of mixed risk conditions (Figure 5). We updated our macro model of risk premia, using three separate scenarios for 2008: (1) Lehman’s base case (modestly weaker growth and some policy easing), (2) a good slowdown outcome (slower growth but a proactive response from central banks because of low inflation), and (3) the negative scenario (a recession with only modest policy response due to higher inflation). The results suggest that under nearly any scenario, the macro backdrop for risk will remain challenging in 2008, although our base scenario assumes only a modest deterioration in risk conditions. The outlook could worsen in the two other cases: (i) if there is a hard landing in the world economy which would cause a sharper rise in risk premium, even if policy rates fall commensurately (Case 2 in Figure 5); or worst of all (ii) if there is a hard landing but central banks are unable to ease policy aggressively due to latent inflationary pressures (Case 3).

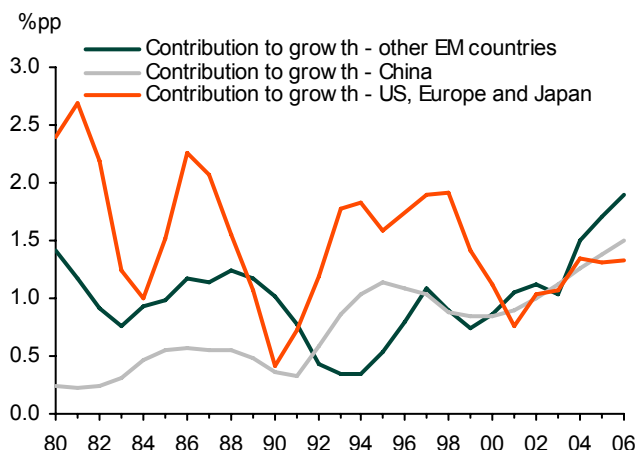
We see three basic implications for local markets. First, we would expect a larger difference in macro performance across EM countries as each country differs in its vulnerability to a slowdown in the world economy and a tightening of global credit conditions. Second, we expect FX valuation to become a greater driver for FX direction. Third, we think that markets should become less growth-centric in 2008 and we expect the “search for yield” to

Figure 3. Flows into dedicated EM equity funds



*Year to November Source: Lehman Brothers; Emergingportfolio.com.

Figure 4. Contribution of EM countries to global growth



Source: Lehman Brothers; IMF WEO Oct 2007.

make a (gradual) comeback thanks to lower core market yields. And although EM central banks are likely to lag the easing by the Fed and ECB, we think they are unlikely to hike as much as is priced in by markets. Hence, we think, as we did last year, that the next year will be one of significant upside in local interest rate markets.

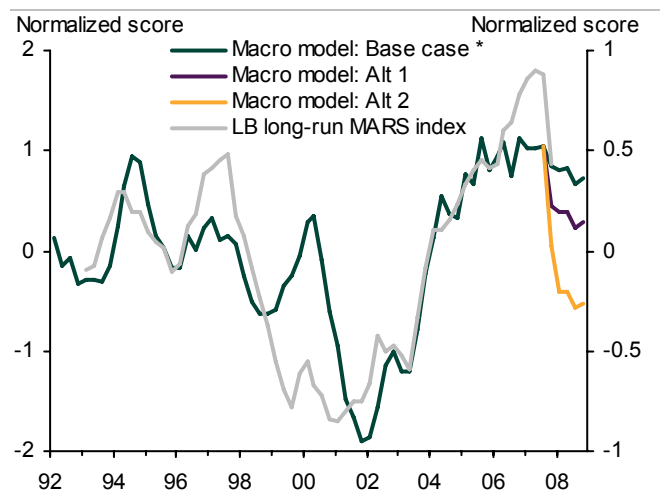
THE SLOWDOWN – WHERE ARE THE VULNERABILITIES?

To the extent that economies will differ in their responses to a slowdown in the world economy, one way to assess which countries are more vulnerable than others is through our *Damocles* index of external vulnerability (see Box: “*Damocles: More than meets the eye*”) cite the appendix box). Indeed, we have used the *Damocles*-carry ratio as one of the indicators for taking directional views in EM currencies. Such an approach did well in 2007, with the likes of Romania and Korea underperforming. The current metrics suggest that Romania and Iceland remain vulnerable to a substantial currency correction and that TRY, BRL and INR offer decent risk-reward given their relatively high carry and lower *Damocles* scores. The metrics suggest that HUF, PLN, IDR, and CZK bear close watching and that ZAR is a borderline case. Note that *Damocles* scores are also higher on average for EMEA countries (Figure 6).

But *Damocles* is a blunt instrument. It is designed to predict “critical values” for a financial crisis and is a summary indicator which can hide some of the important details. In addition to the *Damocles* score, two additional factors could determine vulnerabilities, especially if the “fat tail” of a hard landing comes about: relative openness and external leverage ratios. The results point to interesting regional differences.

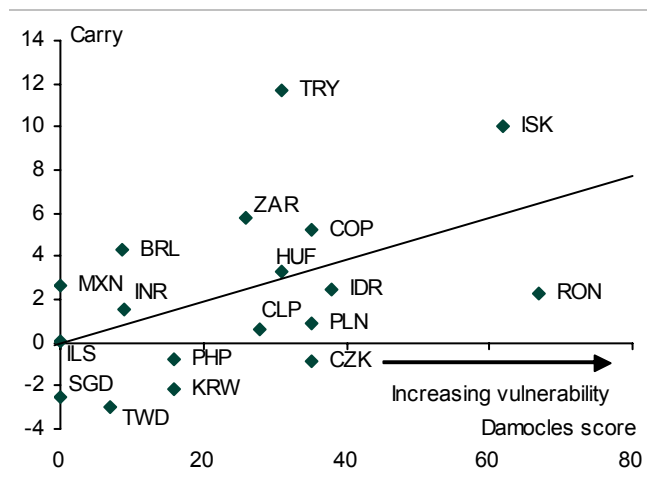
Countries in Asia and EMEA stand out as far more open (measured as a ratio of total trade to GDP) than LATAM countries; suggesting that they would be more vulnerable to a sharp slowdown in the world economy (Figure 7). That said, the domestic demand dynamics are strong for most of the Asian countries – with the exception of Thailand – and the *Damocles* scores are in a “safe zone”. It is remarkable how little exposed LATAM economies seem to be from an openness perspective, given how closed (and therefore domestic demand driven) Brazil, Mexico and Colombia have remained relative to other countries, although clearly Mexico is relatively more exposed given its exposure to the US. In that sense, however, both South Africa and Turkey are less exposed to weaker global trade.

Figure 5. LB’s macro model for risk premia



Note: Base case is Lehman 2008 forecast; Alternative 1 includes a deeper slowing, but more easing; Alternative 3 is a 2001 style recession, but only modest easing due to inflation pressures
Source: Lehman Brothers; Bloomberg.

Figure 6. Current *Damocles*-score to-carry ratio



Source: Lehman Brothers; Bloomberg

Furthermore, Asian and LATAM governments are in stronger shape to loosen fiscal policies to compensate for weakness in external demand conditions – not only are budget deficits reasonably low, but they also do not have the institutional constraints to contain budget deficits that are prevalent in EMEA. In contrast, EMEA countries have to contain their budget deficits to below 3% of GDP for euro-entry criteria lest investors question their ability and willingness to make “euro convergence” happen. However, most CEE governments are running budget deficits close to that number already, meaning that they may face the unpleasant task of tightening fiscal policy during a sharp slowdown. In CEE, Hungary, the Czech Republic and Slovakia all have total openness ratios well above 100% with about 70% of exports going into the euro area. Of the three, Hungary is the most vulnerable by far with economic growth – the weakest in the EU year-to-date – entirely driven by external demand.

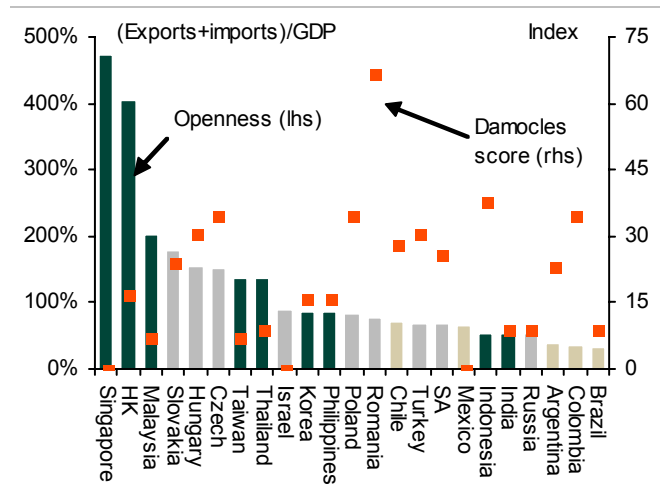
Private sectors in many EM countries have taken advantage of abundant global liquidity and low risk premium to accumulate cheaper hard currency borrowing in the past few years. But given the tightening of global credit conditions, if foreign institutions start to retrench their cross-border credit exposures, we would expect both growth (because of lack of financing) and currencies to be relatively more affected in countries with higher external indebtedness. Again, the regional differences are striking: private sectors in EMEA economies have accumulated a large amount external debt and are thus much more leveraged than Asia and LATAM. Once again, Hungary is the most exposed given that it has the highest private sector external debt as a percentage of GDP (Figure 8). This is cushioned somewhat by the fact that short-term external debt of the private sector is low. Watch Turkey on this score, given its high indebtedness and its high current account deficit. LATAM and Asian economies seem relatively less vulnerable to a global credit crunch on this score.

To take advantage of these differences in vulnerability, we buy a “Damocles basket” of currencies that offer high carry, low Damocles scores and relatively low vulnerability to external debt and trade linkages: Long (TRY, BRL, INR)/(HUF, KRW, RON).

THE RETURN OF VALUE

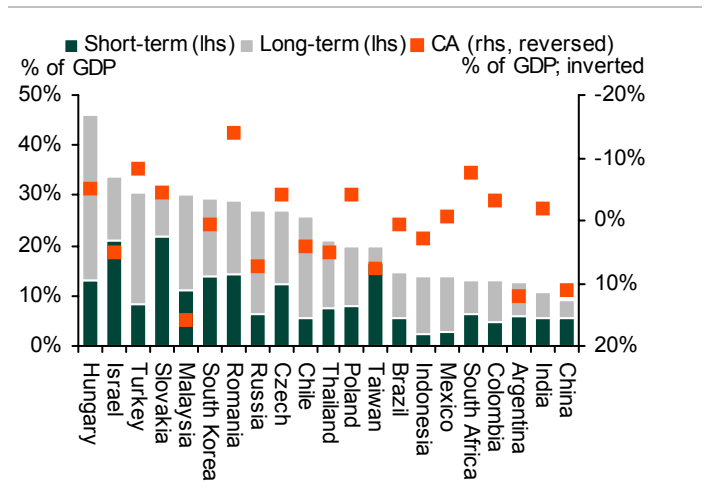
So all in all, EMEA economies would be more vulnerable to a hard landing scenario, through both trade and credit linkages. But although these vulnerabilities are instructive, they say little about the misalignments of currencies relative to sustainable capital flows.

Figure 7. Openness and Damocles scores



Source: Lehman Brothers, World Bank, IMF.

Figure 8. External debt and current account balances



Source: Lehman Brothers, World Bank, IMF.

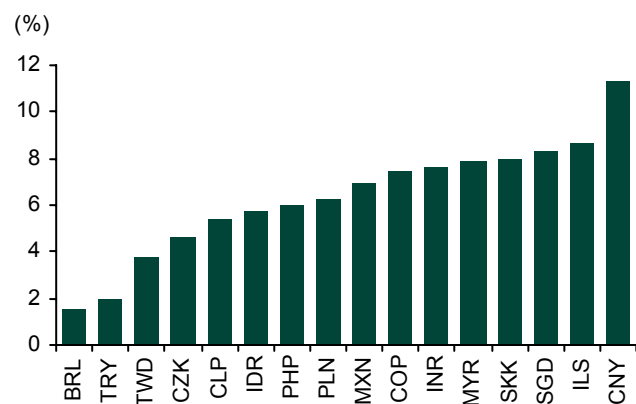
Figure 9 presents the misalignments for different EM currencies according to our FEER methodology (see “A Macro Balance approach to currency valuation in EM” in this publication for more details.) In general terms, and leaving aside those currencies that are highly managed, the main characteristic is that while most currencies still show pressure to appreciate in the medium term, undervaluation is relatively small. This is a consequence of the strong performance of many EM currencies in 2007. From a fundamental valuation, there is still room for further appreciation, but entering a year in which we expect higher volatility and risk aversion, it will be particularly important to identify the best opportunities.

The undervaluation of the main **LATAM** currencies has been the result of important current account surpluses originating from soaring commodities prices. Our FEER analysis shows that BRL is now approaching its fair value after being one of the best EM performers in 2007. And if we consider that the current account may slip into a deficit during 2008 as we estimate, the outlook for BRL is not particularly attractive. It turns out that COP is the most undervalued currency in the region. Colombia has been improving its macroeconomic fundamentals and institutions, but the high volatility that is characteristic of this currency due to thin liquidity and the bouts of risk aversion over recent months have prevented COP adjusting faster towards its fair value. As a consequence, COP has underperformed other currencies in the region and pressures for appreciation persist.

We find misalignment pressures on **EMEA** currencies over the medium term to be mild, with the exception of ZAR. Turkey and Hungary show the least valuation pressure, which is consistent with our definition of the sustainable balance. Israel, with one of the larger undervaluation pressures, is an interesting case. As a highly competitive economy that has run huge surpluses, it can afford to let its currency appreciate. Slovakia is a similar case and other countries have scores which we consider unsurprising. South Africa is the standout of the region. We have long said that it was overly reliant on portfolio flows (equity in particular) and that this was a key weakness. Indeed, when we exclude the portfolio flows to compute the FEER estimate, the current account looks dangerously under-funded.

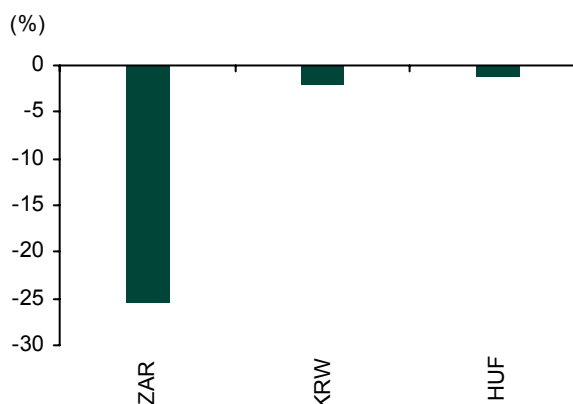
The strong fundamental undervaluation of **ASIAN** currencies, particularly CNY, SGD, MYR and INR has been underpinned by a combination of solid current account surpluses and robust FDI inflows. Notably, China’s real exchange rate is the most undervalued according to our macro-balance model. Gradual capital account liberalisation and heavy intervention by Chinese authorities have kept the nominal bilateral exchange rate of the CNY artificially low, supporting exports and the current account surplus. The other major driver has been the strength of net FDI, which along with the trade surplus is seeing structural support from

Figure 9. FEER Framework: Undervalued Currencies



Source: Lehman Brothers.

Figure 10. FEER Framework: Overvalued Currencies



Source: Lehman Brothers.

foreign-invested enterprises using China as an outsourcing platform. At the other end of the spectrum, our FEER model suggests that KRW is slightly overvalued in real terms, and consistent with official rhetoric. This overvaluation has emerged on the back of the sustained capital outflow since June 2005.

To take advantage of these differences in vulnerability, we buy a “Valuation basket” of currencies that sustain different pressures to appreciate or depreciate from our analysis of macroeconomic fundamentals. Long (INR, ILS, SGD, MXN)/(KRW, HUF, ZAR). We also buy a 6-m USD/ZAR call (strike=8.5, KO=9.0, cost approx 20bp).

Combining the Damocles analysis, the results of our FEER valuation, and looking at the correlations between currencies, we find long MXN/ZAR attractive from many angles. Mexico has a Damocles score of 0 and even though it may suffer from a severe slowdown in the US, its external vulnerabilities are much lower than those of South Africa with a Damocles score of 26. We also think MXN is undervalued and ZAR is considerably overvalued. Finally, the trade has some good risk properties based on a relatively high correlation between these currencies of 70%.

THE RETURN OF RATES WITH A VENGEANCE

As mentioned above, our forecast that 2007 would be a year of strong performance in local interest rate markets was proved wrong. Even as currencies recovered from the various bouts of risk aversion in 2007, local yields have continued to suffer. As we look ahead to 2008, we find that markets have priced in considerably more policy tightening by the end of 2008 in EMEA and LATAM, while at the same time looking for significant policy easing by the Fed and no change in rates by the ECB (Figure 11).

In effect, markets are telling us that policy rates in EM will “decouple” significantly from the ECB and the FOMC, looking for a large amount of policy rate divergence, recognising the strength of growth in these economies. But the extent of the divergence priced in is now very large: the market is pricing marginal hikes in Mexico next year just as the FOMC is supposed to ease by another 125bp and in Brazil, the market is pricing in around 5 hikes of 25bp each for 2008 against our expectations of 50bp easing in both countries. The RPP in Poland is priced to hike four times in the next 13 months and the CNB in the Czech Republic is priced to hike twice when we expect the ECB to ease rates by 50bp. As we imply above, we do not think that the growth trajectory of EM economies can differ that markedly from developed economies.

That said, markets are also recognising rising inflationary pressures in some EM economies. But headline inflation has been rising everywhere, including in the US and euro area, without the same market reaction. So by pricing in significant rate hikes in EM relative to the ECB and the Fed, the market is questioning policy credibility – to the extent that inflation expectations are not well enough anchored and rises in headline inflation eventually lead to rising core inflation. But the rise in inflation is likely to be temporary in most cases (except Asia), with inflation rising in the first half of 2008 but falling in the second as supply-side pressures ebb away.

It is also probably true that rising local yield spreads are just part of an overdue repricing of risk conditions more generally and recognition by investors that the credit crunch will bring to light fiscal and macro vulnerabilities in EM economies. But we think that markets have not been discriminatory enough in pricing risk premium and have been too aggressive in pricing in hikes as we move to 2008. This has opened up several opportunities in EMEA and LATAM as we discuss below.

EMEA: ECB TO GIVE A HELPING HAND, FRONT ENDS OFFER VALUE

We see three themes in EMEA in 2008. First, we expect CEE currencies and ILS to benefit from ECB and Fed rate cuts next year (Figure 12). Second, we see inflation rising in H1 and falling in H2 2008 (Figure 13). Third, we think there will be significant divergences in fiscal accounts if there is a sharper slowdown in global growth. Fourth, we see value at the front ends of curves in CEE. Finally, South Africa and Turkey stand to be two key idiosyncratic stories that provide opportunities next year.

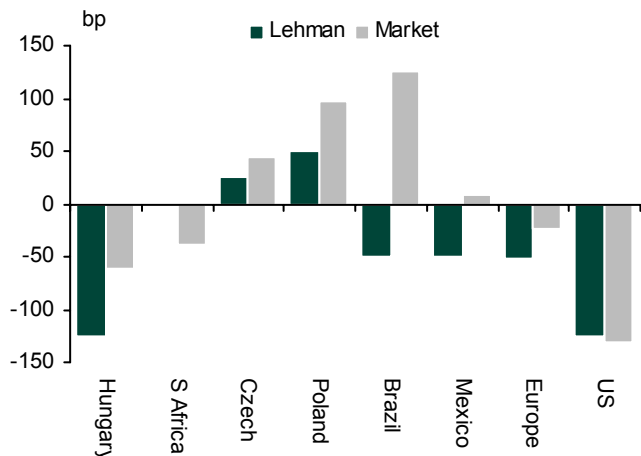
We see some limited upside in EMEA currencies in 2008, with CZK, ILS and PLN outperforming. All three currencies look undervalued from our FEER metrics. And all three countries stand to benefit from policy easing by the Fed (in ILS's case) and the ECB (in CEE's case). In both Poland and Czech, we expect (limited) policy tightening. But with ECB easing, it would add up to a sharp rise in policy rate differentials from very low levels. Czech policy rates are likely to be above the ECB's for the first time in around three years. Although we expect no policy tightening in Israel, 100bp of Fed easing in 2008 should bring Israel yields to well above US rates. We expect HUF to remain range-bound in 2008 and to underperform its peers with the NBH easing rates and Hungary's greater vulnerability to a hard landing scenario.

As mentioned above, we also see significant value in receiving rates at the front end of curves in CEE, given our view of ECB easing. In particular:

Hungary: receive 2-yr IRS. NBH is in a difficult situation, with weak growth reliant on external demand while supply shocks have slowed the disinflation path. And as we have discussed, Hungary is more vulnerable to a hard landing. But do not underestimate the strides the government has taken on fiscal austerity and the likely improvement in external balances in 2008. All in, we now expect a more gradual easing path by the NBH and expect policy rates at 6.25% by end-2008 and 5.5% in 2009. This still adds up to about 100bp of more easing than has been priced in for the next two years. Our forecast for EUR/HUF at 255 should not be an obstacle.

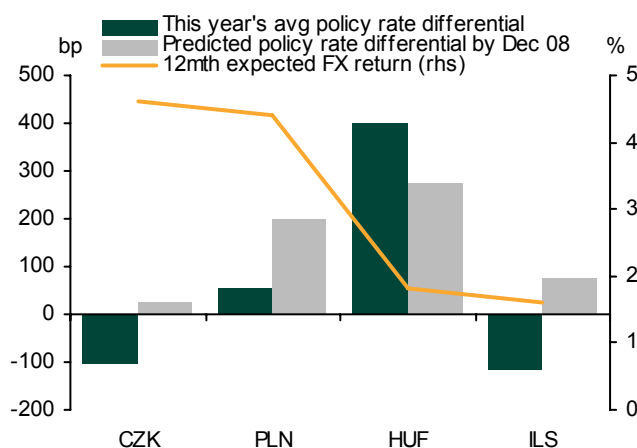
Poland: Receive 2-yr IRS. The market is overestimating how hawkish the RPP will be with the current inflation path. With the ECB cutting by 50bp, we think that the RPP will push for only two more 25bp hikes especially as inflation will likely fall in H2. Four hikes are now priced in.

Figure 11. Market and Lehman expectations of policy rates by end-08



Source: Lehman Brothers; Bloomberg.

Figure 12. CEE: change in policy rate differentials in 2008



Source: Lehman Brothers; Bloomberg.

Czech: Receive 1y1y forward. With the currency so much stronger, the CNB is already beginning to cool about further policy tightening and will be sensitive to what the ECB does. With two hikes priced in and the curve steeper than the euro curve, receiving Czech rates is another way to trade a dovish ECB view, with more carry.

From a convergence angle, we continue to receive the Hungary/Poland spread in the five-year sector. Hungary is the only country that has made important strides in improving its structural fiscal balance managing to reduce its deficit by around 3% of GDP in a year when the economy grew by less than 2%. In Poland, with growth turning out close to 2pp better in 2007 than what was budgeted, the budget outcome was not particularly impressive. Furthermore, the new government is unlikely to be able to reverse some of the pro-social fiscal measures already set for 2008, so the deficit should widen. In fact, a whole host of indicators suggest the two countries are set to command similar macro numbers (policy rates, inflation, current account and fiscal balance) in 2008 (Figure 14).

REST OF EMEA: TURKEY, ISRAEL BONDS OFFER VALUE NOW, SOUTH AFRICA BONDS FROM Q2

Moving out of CEE, things become more complicated. We are bullish on Israel, moderately bullish in Turkey and are uncertain about South Africa.

Israel: Buy Shahar 16s. As we discuss above ILS is undervalued relative to its sustainable basic balance and is likely to be one of the strongest performers. But even if ILS does not appreciate any further, the inflation outlook is very positive. It does not make sense to us for Israel's bonds to trade at a spread of 180bp to the US when inflation is likely to collapse in the second half of 2008, and Fed funds to fall 75bp below the BoI's policy rate.

Turkey: Buy March'12 bonds. Although the central bank is unlikely to meet its inflation target, it is committed to policy easing in our view. With inflation likely to be favourable in the first half of 2008, we look for policy easing to 14-14.5% in 2008 and 13% in 2009. This suggests about 250bp of excess return being invested in March'12 bonds. We are more conservative, looking for 100-150bp of downside in yields.

South Africa: Pay rates until March, look for a rally in R157 bonds from Q2, but ZAR and politics hold us back. Having remained bearish ZAR and paid rates throughout 2007, we are in two minds about 2008. Paying 1y2y forwards and 5-yr IRS still makes sense at this

Figure 13. EMEA inflation forecasts

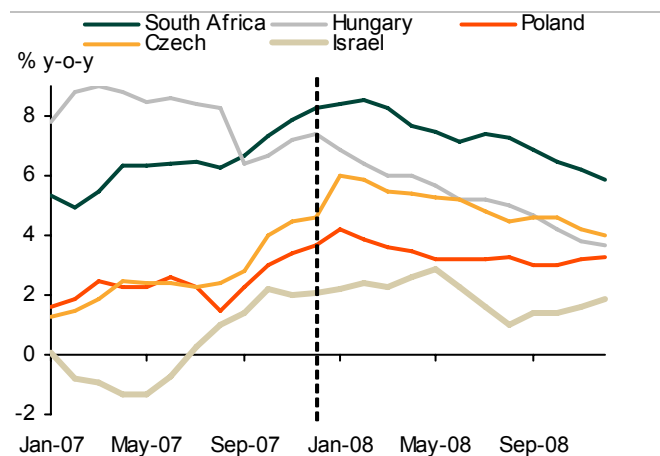
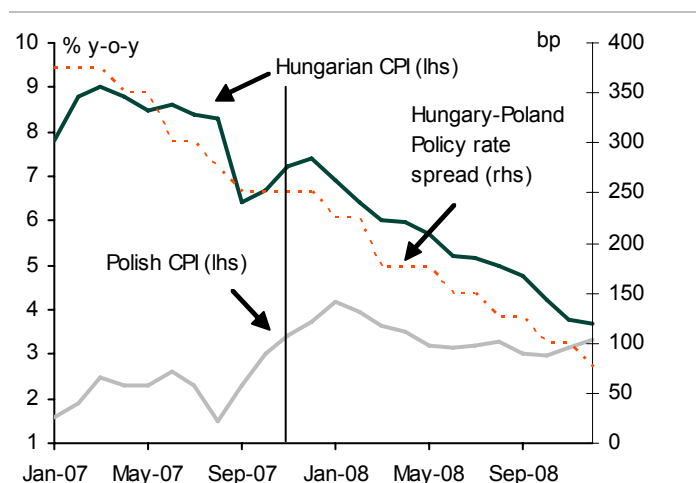


Figure 14. Hungary and Poland's policy and inflation rates are converging



Source: Lehman Brothers and National Statistics Agencies.

Source: Lehman Brothers; NBH, NBP.

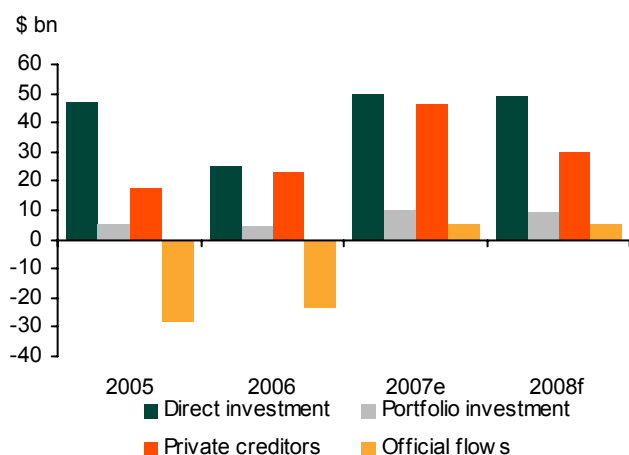
point, given that inflation is likely to head a great deal higher, with risk of another hike in policy rates by the SARB in January. But looking ahead, with inflation falling sharply from Q2 and the technical picture very bullish (local funds very underweight fixed income), we would love to put the 8-year benchmark R157 bond on our “Buy” list, but we can’t. Given ZAR’s overvaluation relative to its sustainable basic balance, the possibility of a sharp correction of the currency is a key tail risk. And politics should not be ignored especially if Jacob Zuma becomes leader of the African National Congress – such a prospect could make markets nervous, especially if finance minister Trevor Manuel proves an early casualty.

LATAM: THE RETURN OF THE RATE TRADE

We expect 2008 to provide compelling investment opportunities in LATAM local markets. In a sense, given our expectation for local rates to outperform currencies, 2008 looks like being a mirror image of 2007. The strength of LATAM currencies in 2007 was largely driven by strong trade and capital flows. Given our external base scenario, we do not expect any upside from the record levels in 2007 and anticipate a mild shrinkage of capital flows (Figure 15). Also clear from the numbers is that a sudden stop of capital inflows, though certainly not our base case, poses the biggest threat to LATAM currencies. Across the region, we expect growth, fiscal balances and current account balances to weaken (Figure 16), which would exert further pressure on currencies. Not surprisingly, our year-end currency forecasts for 2008 show nominal depreciations across the region. This should weigh on currency valuations, which are for the most part close to their “equilibrium” levels. However, given the strides the region has made in lowering its macro vulnerabilities, none of our macro prognoses implies major gyrations on the currency side. But with macro uncertainty high, we anticipate significant volatility around our currency forecasts, and as a general trend, expect many of the corrections to occur only later in 2008. We even see room for further currency appreciation in the first few months of 2008. So once again, choosing the right FX exposure in LATAM will require a high degree of dexterity, and we continue to favour expressing many of our currency views either in contingent format or via intra-EM relative value trades.

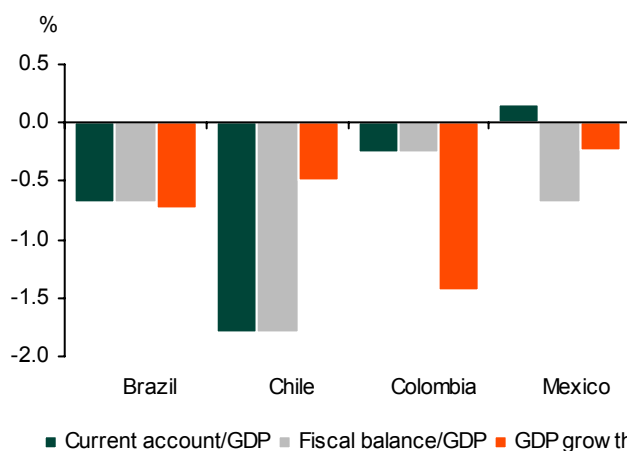
On the rates side, after years of secular disinflation, inflation made a pronounced (and unexpected) comeback in nearly every corner of the region. Inflation exceeded the target levels or bands in all four of the major LATAM local markets, forcing central banks to either halt rate cuts (Brazil) or move towards hikes (Chile, Colombia, Mexico). With our view of inflation normalising and growth decelerating, we see room for monetary policy easing in the

Figure 15. LATAM capital flows to decline



Source: Lehman Brothers, IIF

Figure 16. LATAM fundamentals to weaken (on the margin)



Source: Lehman Brothers, absolute change in macro variable from 2007E to 2008F.

Local risk aversion: the case of Brazil

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At the beginning of the year there was little doubt that Brazilian local rates were among the most promising assets in local markets. Unfortunately, throughout the year, they proved to be one of the most challenging instruments as well. At the time of writing and after 200bp of rate cuts by Banco Central throughout 2007, the yield of the NTN-F 17 is trading 25bp higher than at the beginning of the year and the Jan-08/Jan-10 curve has steepened by more than 230bp from its low in May/June. With around 150bp of rate hikes for 2008 priced into the DI strip, we believe (once again) that Brazilian rates represent one of the most important opportunities in local markets in the year ahead. Of course, there are abundant risks to that view: the external environment, rising inflation expectations and the risk of fiscal slippage and/or policy mistakes (such as the current debate around the renewal of the CPMF demonstrates) are the main ones. While we will not downplay these risks, we do believe there is an excessive risk premium incorporated into the the yield curve. Interestingly, the average forecast (as polled by the central bank) for SELIC at the end of 2008 is still 85bp below the current target rate, which means that the actual risk premium is even larger than the visible one. Capturing this risk premium will be the main challenge in LATAM local markets next year.

To support our point, we conduct a simple decomposition of the yield curve changes into its various drivers. Historical SELIC data and inflation expectations from the central bank enable us to map reasonably accurate yield curve movements to changes in the levels of these components. We focus on the yield spread between the Jan-08 and Jan-09 contracts, as it gives us an uncontaminated view of the market's change in expectations and risk aversion over time with respect to the upcoming calendar year. We assume that any change in slope can be explained by changes in monetary policy expectations for the year ahead as well as by changing risk premium. Optically the steepening of the DI yield curve starting in June this year coincides with the increase in breakeven inflation (BEI) (Figure 1). Taking mid-June as a starting point of our analysis makes for an interesting comparison, as our estimations show that at this point, the embedded risk premium was very close to zero, with DI contracts priced in line with polled market expectations and BEIs on average close to zero. Since then, the 5y BEI has increased by about 120bp, while the DI curve has steepened from -70bp to 65bp. Meanwhile, the average market expectation for SELIC at end-2008 has moved from 9.75% in mid-June to 10.40% now. Using the compounding convention for DI contracts, this increase explains about 40bp of the 135bp of observed curve steepening. Since we only estimate changes in risk premium, we do not need to concern ourselves with other yield curve components such as convexity and the rest of the 95bp of steepening can be attributed to risk aversion. This risk aversion premium can be separated further into inflation risk premium and general market risk premium. From the price behaviour of NTN-B, we estimate that 67bp, or 55% of the increase in BEI, was due to a rise in inflation risk premium, leaving the remaining 28bp as pure market risk premium (Figure 2). By extension, our analysis indicates that the risk premium rises disproportionately with increasing maturity. Our main findings are: (1) That current risk premium priced by the market is misaligned with actual and expected levels for inflation (which are both still below the central bank's target) and the fact that the market consensus is still expecting rate cuts (even if we set this to zero). (2) Most of the risk premium is explained by inflation risk, which is consistent with historical evidence. The good news is that much of that risk can be hedged by using inflation-linked assets. ■

Figure 1. Brazil DI curve slope and break-even inflation

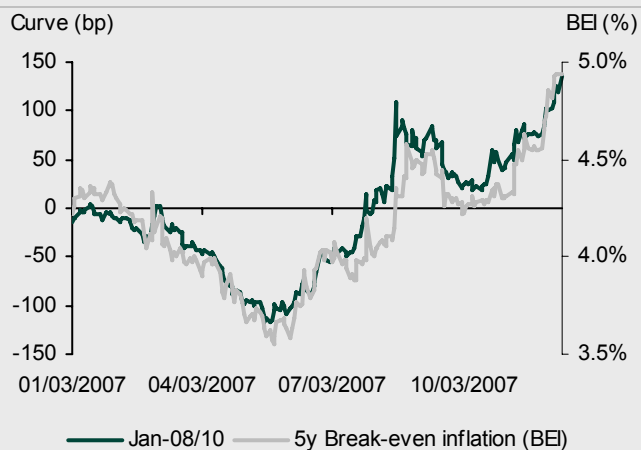
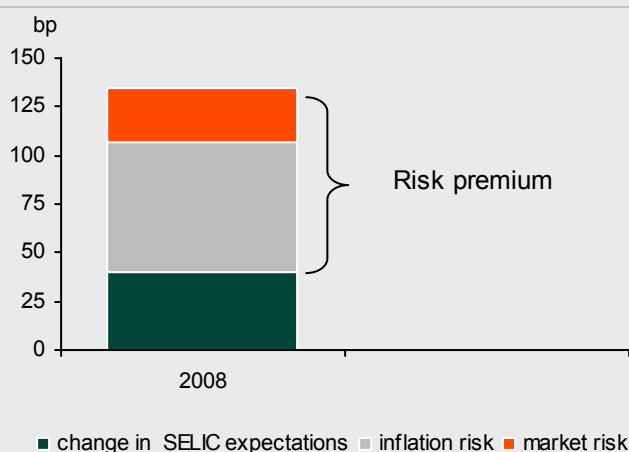


Figure 2. Yield curve decomposition into risk drivers



Source: Lehman Brothers, Banco Central do Brasil.

Source: Lehman Brothers, Banco Central do Brasil.

year ahead and consequently expect rate cuts in all four countries. But inflation still poses a threat to our baseline scenario and we still see value in owning inflation protection in the form of inflation-linked bonds.

In **Brazil**, we expect mild currency depreciation, in line with weaker growth and declining trade and current account surplus. A reversal of external conditions that have been so supportive for Brazilian assets remains the largest risk, but on top of that there is a growing list of domestic concerns, mainly regarding inflation and fiscal slippage, which has started to add pressure, so far mainly on the rates side. In terms of monetary policy, we expect the central bank to resume its easing campaign at the end of Q1 2008. Unlike in the previous three years, when BCB delivered a combined 850bp of rate cuts, we only expect a modest amount of rate cuts (50bp) in 2008. However, we think the risk premium built into the market is excessive and offers significant value. **Receive Jan-09 DI as a monetary policy play, look to enter FRA or DI curve flatteners.**

In **Mexico**, we also expect moderate policy adjustments towards the middle of 2008 – a total of 50bp of rate cuts. This view is predicated on a significant growth slowdown and our view that inflation will continue to fall. The curve is still priced for marginal rate hikes in 2008 and should steepen precipitously once the central bank signals the switch towards monetary policy easing. We express our monetary policy and curve views through **selling caps on TIE and bullish steepeners**, the latter preferably with at least six months expiry. We also consider **receiving rates outright** in Mexico as attractive, given the high yield spread to the US curve. On the currency side, with little prospect of further progress on the reform agenda before the mid-term elections, we see the drivers for peso appreciation and depreciation to be roughly in balance and hence expect the peso to be relatively range-bound. The risk of a sharp depreciation would require a sharp slowdown of the Mexican manufacturing sector, but this is not our base case. In terms of trades, we position for a range (for example, through range accruals).

In **Colombia**, we expect growth to moderate from the very high levels of the past two years. We expect inflation to recede on the back of tight monetary policy, opening the door for 50bp of rate cuts in the later part of 2008. We expect the current account deficit to widen further and the currency to weaken in a more difficult environment with a declining interest rate advantage. More than any other currency in LATAM, COP is vulnerable to a sudden stoppage of K flows. While rates look compelling at an absolute level, we would like more confirmation on the inflation side before we seriously consider adding to that exposure. **Look to buy global COP '15 or '27 or take local TES exposure.**

In **Chile**, we look for mild currency depreciation, in line with a shrinking current account surplus. Inflation remains uncomfortably high, but is expected to decline sharply throughout the year, leaving room for at least one 25bp rate cut, especially given our expectation of moderating growth (though still above trend). We believe that receiving rates will be a good opportunity at that point. Overall we feel more confident in our view that the currency will remain range-bound, and hence see value in selling volatility, given its richness. **Look to receive 10y CLP x Camara swaps.**

ASIA: FOCUS ON RELATIVE VALUE, CNY BASKET, KOREA AND HK RATES

We think low inflation FX regimes, in place since late 200, are unlikely to be sustained in 2008 given our central view of only slightly weaker growth. Asia central banks may attempt to hold currencies stable in the early part of 2008 due to growth uncertainties, but intensifying inflation pressures should eventually force policymakers to allow for greater FX flexibility. We forecast another year of decent FX returns against the USD (especially the INR) with more support from carry. But there are risks to this view if global demand slows more than expected given the build-up of foreign equity positioning in the region in recent

LATAM inflation-linked bonds

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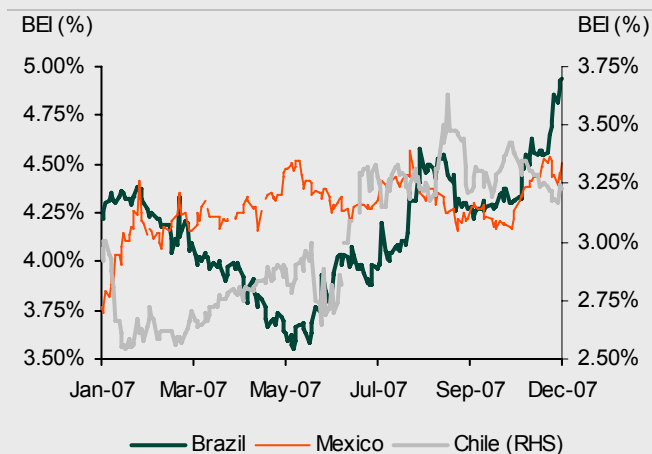
There is no doubt that 2007 has been a year when inflation has made a strong and unforeseen comeback in many emerging countries, possibly marking a temporary end to the secular, multi-year trend of prolonged disinflation. As a consequence, many central banks were forced to adopt tighter monetary policy than was forecast at the beginning of the year.

Rising inflationary pressures in 2007 have been seen not only in EM, but also in the US and euro area. However, the market and central bank responses to these inflation spikes have been significantly more resolute in EM than elsewhere – but perhaps unsurprising given the long memory of inflation at the onset of many EM crises. LATAM illustrates this dynamic well: in Mexico, Chile and Colombia, the central banks come into action as soon as inflation began to accelerate on fears that it would become increasingly difficult to meet their inflation targets. In Brazil, the central bank halted its two-year easing cycle as the year-over-year headline inflation rate bounced 120bp higher.

Into 2008, our benchmark scenario is for inflation pressures to normalize throughout LATAM, the exceptions being Argentina and Venezuela. Given our expectation of slower growth in the region and more-or-less tight monetary policies in most countries (and also factoring in the expected implicit tightening by the Fed this year), we see room for monetary policy to ease and expect rate cuts in all four of the major local markets (Brazil, Chile, Colombia and Mexico). This view, in conjunction with the fact that markets are pricing in further tightening, is the basis for our claim that nominal rates will outperform real rates this year. Further, breakeven inflation (BEI) rates in Chile, Brazil and Mexico have increased rapidly from their levels at the beginning of the year, which in the case of Brazil and Chile were even below their inflation targets (Figure 1). In Colombia, BEI has been very volatile, with a sharp tendency to increase in the last months. Based on how elevated BEIs are, we see little scope to buy them for the time being. Still, inflation poses a threat to our baseline scenario. As our analysis for Brazil shows (see Box: *Local risk aversion: the case of Brazil*), most of the increase in risk premia in the Brazilian local curve has been due to a steep increase in the inflation risk premium. As a hedge, we see value in owning inflation protection in the form of inflation-linked bonds. On a more medium-term horizon, our view remains that the process of real rate convergence will continue into 2008, and so we recommend receiving real rates in Brazil and Colombia.

Given these developments, it is not surprising that trading in inflation-linked assets and in their derivatives has continued to gain traction with local market investors. We see an increasingly important role for inflation-linked assets in the EM investment process. We believe that inflation-linked assets should be considered for three distinct reasons. (1) Investors can buy or sell inflation-linked assets to express a *directional view on real yields*. (2) As a more trading-oriented strategy, where the assets can be used as part of *relative value strategies between nominal and real yields*: investors buy breakeven inflation if they see inflation rising and vice versa. (3) Adding inflation-linked assets to a portfolio provides valuable *diversification*. The latter proved important this year when real rates outperformed nominals with a beta of 0.5 (a 10bp move in real yields for each 20bp move in nominals) during the sell-off. ■

Figure 1. Breakeven Inflation (5y) in LATAM



Source: Lehman Brothers.

Figure 2. Comparative Real Rates and BEI

| | Real Yield (5 Year) | Break Even Inflation (5 Year) | Lehman's Inflation Forecast (2008) | Inflation Target |
|---------------|---------------------|-------------------------------|------------------------------------|------------------|
| Brazil | 7.60 | 4.94 | 4.3 | 4.5 |
| Chile | 2.90 | 3.23 | 3.4 | 3 +-1 |
| Colombia | 5.20 | 4.70 | 4.3 | 4 +- 0.5 |
| Mexico | 3.64 | 4.51 | 3.7 | 3 +-1 |
| United States | 1.00 | 1.96 | 2.6 | - |

All figures are in percentages.

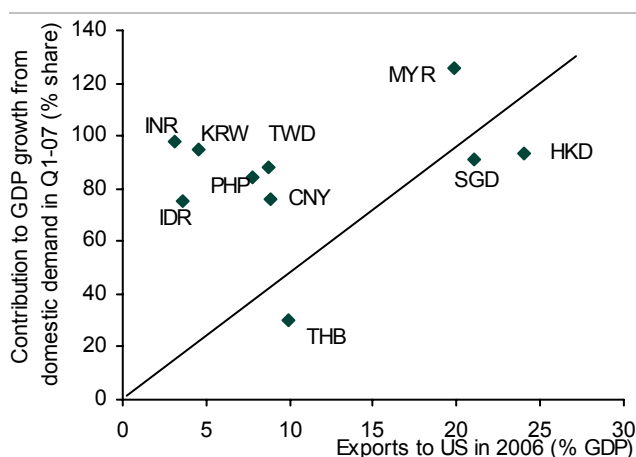
Source: Lehman Brothers.

years (over the past three years Taiwan has accumulated the largest amount of net foreign equity inflow in the region at 18.3% of GDP). The silver lining to a sharper-than-expected external slowdown is that Asia would see some resilience from strong current account surpluses, healthy corporate and financial sectors, excess FX reserves and capacity to expand both fiscal and monetary policies.

Relative value in Asia should remain a strong theme in 2008 and we **build on a long INR and PHP against KRW position**. **India** remains one of our more bullish views in Asia for several reasons including its strong domestic demand and the fact that it has the least exposure in the region to a US slowdown (Figure 17). India also has a low *Damocles* score with relatively high carry, while our FEER valuation analysis shows that the INR is 7.6% undervalued in 3Q07. There may be some resistance to INR appreciation ahead of the national elections. We are also positive on the **Philippines** based on *Damocles* and FEER valuations, but the PHP should see support from the fiscal improvement (even if it is being led by asset sales) and overseas worker remittances (US\$10.4bn and +15% y/y in Jan-Sep 2007). A slower US economy should have a small effect on remittances as they show a low correlation with GDP - 50.3% of remittances in Jan-Sep-07 is from the US (Figure 16). We expect the **KRW** to underperform the region for several reasons. Those include unfavourable FX valuations with our FEER model showing the KRW as the only overvalued currency in the region (by 2.2% as of 3Q07). Korea still has a high *Damocles* score relative to its negative carry, but the score has fallen because of slowing credit growth. We are more concerned about South Korea's balance of payments with the BoK forecasting a sharp deterioration in the current account to a US\$3bn deficit in 2008 (estimated US\$6.5bn surplus in 2007). Oil is seen as the major contributor to the current account deficit (petroleum imports account for 20.7% of total imports). The capital account also remains weak (June-Oct deficit of US\$6.6bn) led by portfolio outflows, while there have also been USD borrowing restrictions placed on local banks and corporates.

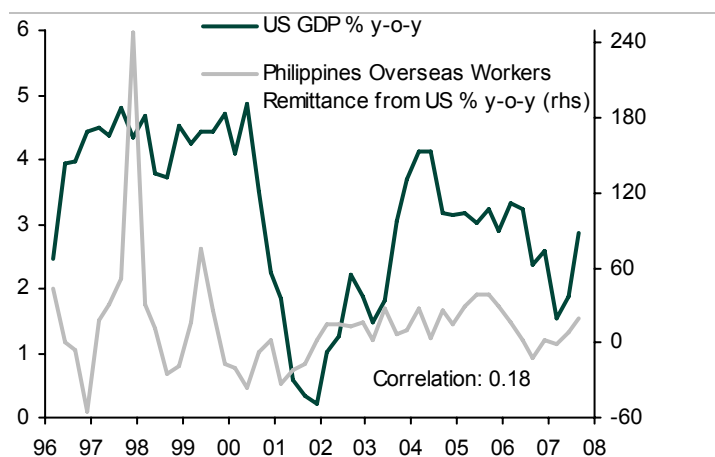
In **China**, even if there is a cyclical slowdown in Asian exports and a temporary narrowing of the trade surplus, strong capital inflows and structural strength of the trade surplus should continue to pose a challenge to the PBOC in managing domestic liquidity and upside inflation pressures. To reduce the massive balance of payments surplus, the government will likely continue to relax FX controls on capital outflows in 2008 through QDII, FDI, M&A and other investment schemes. A faster pace of CNY appreciation is also expected in 2008 to support the PBOC's monetary tightening bias, but this may still come more from appreciation through the fall in the daily fixing rate rather than flexibility after the fix. A widening in the USD/CNY daily trading band from the current +/-0.5% is possible, but is

Figure 17. Exposure to a US slowdown



Source: Lehman Brothers, CEIC

Figure 18. Philippines remittances resilient to US GDP cycle



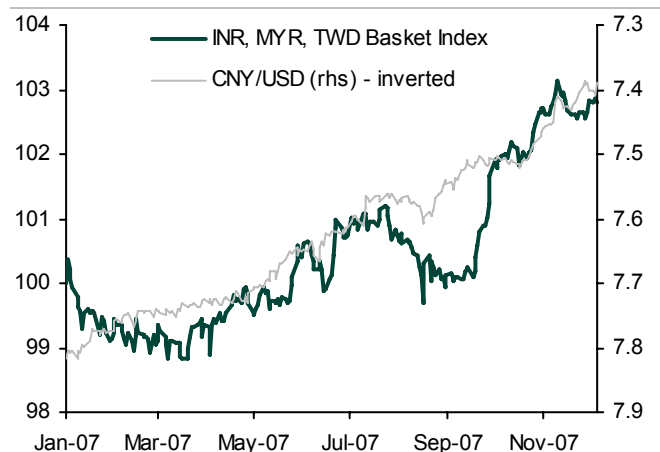
Source: Lehman Brothers, CEIC

questionable since it has yet to even break the initial +/-0.3% policy band. Given the large negative carry on a short USD/CNY position, we will establish a **long CNY proxy basket of INR, MYR and TWD** with weightings of 13.5%, 11.5% and 75% respectively (Figure 19). The correlation with USD/CNY is 60% and the negative carry is reduced to around -3.0% (12M basis) compared with -8.7% from a short 12M USD/CNY position.

On the rates front, our base case is that regional central banks will keep benchmark rates unchanged in 2008 with some risk of tightening towards the end of the year (likely to be a theme for 2009). Hong Kong's USD peg is likely to gain more focus. We do not expect a break of the peg, but the appreciation risk on the HKD should increase from a soft USD into 2008, CNY appreciation, rising inflation, and strong capital inflows, whether IPO or China policy related. This may lead to another test of the USD/HKD strong side convertibility undertaking rate, which means that if there are additional HKD liquidity injections, HKD forwards and local rates could fall sharply (similar to October-November 2007). We will build on a **receive 1Y HKD IRS rates position** if spot USD/HKD breaks below 7.770 again.

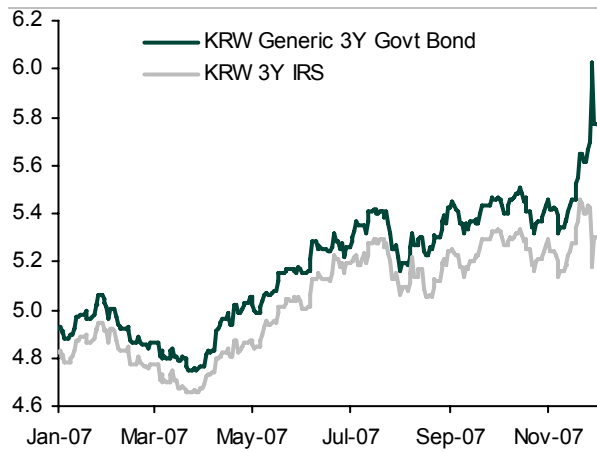
We also consider the risk premium on Korea local bonds to be too high and favour **buying 3Y KTB futures vs paying KRW IRS rates** into 2008 (Figure 20). Bond-swap spreads have blown out and we expect at least another 40bp pull back. The widening in bond-swap spreads is stated to be on the back of large long bond-swap spread positions being unwound and triggering an avalanche of stop-losses. One other reason is related to "power-structure" notes, where market makers have over-hedged their coupon payments. We also see the recent USD liquidity-led problems as presenting an opportunity to **position for a narrowing in the 2/5/10Y KRW IRS butterfly spread (receive wings, DV01 neutral)** at -40bp compared with an average -10bp in Jan-Oct-07. The fundamental support for these trades comes from the BoK's forecast of a "soft landing" in 2008, but it is also important that the global credit crunch does not worsen significantly.

Figure 19. USD/CNY proxy basket



Source: Lehman Brothers, Bloomberg.

Figure 20. Korea KTB-swap spreads to narrow



Source: Lehman Brothers, Bloomberg.

FOCUS: GLOBAL OUTLOOK 2008

Crunch time

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We expect global growth to slow in 2008 as the US consumer retrenches and credit market dislocation triggers tighter financial conditions and crimps growth.

In our *Outlook 2007* published in December 2006 we forecast that the global economy would “weather the slowdown” set in train by the US housing recession that started in mid-2006. This much we appear to have got right: our measure of “global” growth turned out to be a little stronger than we expected: 2.6% instead of 2.1%. But the big story of 2007 was that, notwithstanding the headline resilience, the global economy was hit by two related shocks.

*Two shocks in 2007:
 housing and credit*

First, the US housing recession turned out to be much worse than we – and most observers – expected (Figure 1). Whereas we had expected housing investment in the US to stop declining quarter-on-quarter by the Q4 2007 as the housing market came back into balance, the fall in housing investment turned out to be much more severe; it now appears that housing investment will not stop falling until Q1 2009. Second, the resulting subprime mortgage crisis triggered serious credit and financial market dislocation, ricocheting around the global financial system and sowing the seeds of a full-fledged credit crunch (Figure 2).

*They stand to slow growth in
 2008*

The ongoing and cumulative impact of these shocks stands to slow global growth in 2008 – we expect growth to be lower in all major regions – and provide serious headwinds to any recovery in 2009 (Figure 3).

*Housing is set to hit the US
 consumer ...*

Our core view is that the ongoing, deep recession in US housing is set to hit the consumer in 2008 and to slow growth. Although the housing recession has been one of the worst in US postwar history – real housing investment is down by 23.5% since end-2005 – the consumer has been surprisingly oblivious, real consumption annualizing 3.0% in the same period. This looks set to change as the housing recession hits the consumer in earnest: rising foreclosure rates and falling home prices stand to dint consumer confidence and turn housing-related wealth effects from the strong tailwind of recent years into at least a mild headwind.

*... and tighter credit to crimp
 growth widely*

It is unclear how the financial market turbulence and credit market dislocation of 2007 will play out in 2008. Our baseline view factors in a sizeable degree of tightening of financing conditions in terms of both spreads and availability of credit, pointing to crimping of

Figure 1. US house prices and residential investment

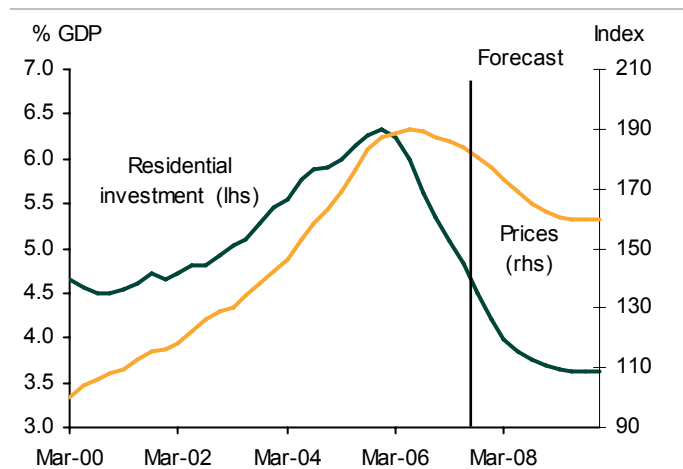
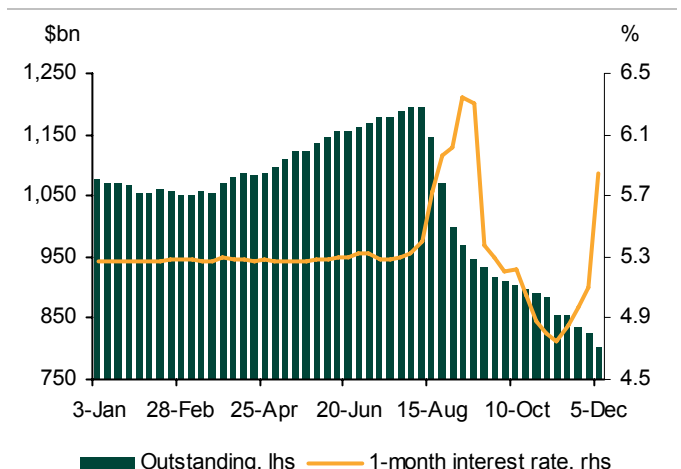


Figure 2. US asset-backed commercial paper market



Source: BEA, S&P/Case-Shiller, Lehman Brothers Global Economics.

Source: Federal Reserve.

investment and consumption across the major economies. And there is also a considerable risk that further financial turbulence and dislocation occurs from time to time, adding to the tightness of financial conditions.

A full-fledged credit crunch could ensue

In a worst-case scenario, a full-fledged credit crunch could develop, should unexpectedly large mark-to-market losses or assets coming back onto balance sheets lead banks to pull back on lending in order to shore up balance sheets. It is unclear still how much damage has been done to the originate-and-distribute capital markets model, but it seems wise to factor in some tightening associated with a permanent reduction in capacity.

Two factors temper pessimism

Despite the depressing forces at work, a couple of factors argue for the global economy to avoid a serious downturn or outright recession.

Central banks are on the case

First, central banks, led by the Fed but now joined by the Bank of England (BOE), are on the case (Figure 4). When the credit crisis started to unfold in August, the major central banks appeared to be thrown off balance, as they struggled with the heightened uncertainty and the challenges of meeting their twin goals of managing the economy and preserving the stability of the financial system. However, they appear now to have found their feet.

The Fed is set to ease aggressively

Given the heightened risk of a housing-led recession and the possible malign interactions with financial markets, we expect the Fed to continue easing monetary policy aggressively, cutting the Fed funds rate to 3.25% by the end of 2008. We also expect the BOE to cut two more times, by 25bp each, in the first half of 2008. With headline inflation significantly above target, the ECB is likely to be slower off the mark, but we expect it to deliver two rate cuts of 25bp each next year, starting in June. The Bank of Japan, much to its frustration, is likely to have to keep rates on hold at 50bp throughout the whole of 2008.

Monetary easing should cushion the slowdown

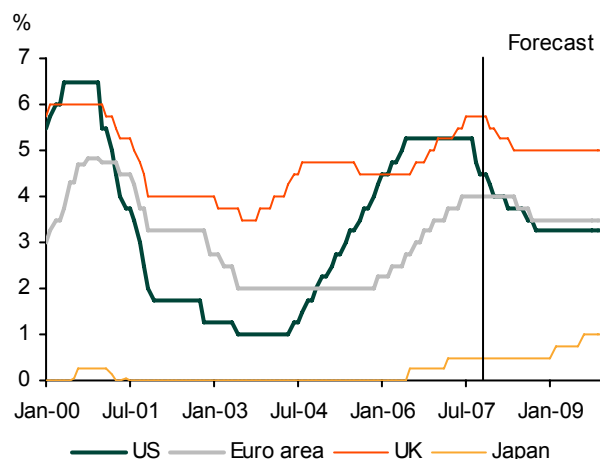
We do not expect this amount of monetary easing, given the size and malign nature of the shocks, to be able to prevent some across-the-board slowing of growth. But it should serve to cushion the blow by alleviating some tightening of financial conditions and via the normal monetary transmission channels, which if somewhat muted in a deteriorating environment still operate to some extent. And if conditions turn out worse than we expect, central banks are likely to be correspondingly more aggressive; most major ones have considerable leeway to cut rates, as long as the inflation outlook remains contained, as we expect (Figure 4).

Figure 3. Growth forecasts for major regions (real GDP)

| % y-o-y | 2007 | 2008 | 2009 |
|-------------------|------|------|------|
| US | 2.2 | 1.8 | 2.0 |
| Euro area | 2.6 | 1.5 | 1.4 |
| UK | 3.1 | 1.7 | 2.0 |
| Japan | 1.8 | 1.4 | 1.8 |
| Emerging markets* | | | |
| Asia ex-Japan | 8.7 | 7.6 | 8.0 |
| EMEA | 6.2 | 5.7 | 5.2 |
| Latin America | 5.0 | 4.1 | 3.6 |

*Countries covered in the emerging markets are: Asia ex-Japan: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand; EMEA (Europe, Middle East and Africa): Czech Republic, Hungary, Israel, Poland, Russia, South Africa, Turkey; Latin America: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico and Peru.

Figure 4. Official interest rates in major regions



Source: Lehman Brothers Global Economics.

Source: Lehman Brothers Global Economics.

Energy: three scenarios for 2008

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1) OPEC as a balancer: Light sweet crude (Brent) averages \$84: \$60% probability

Our base-case calls for oil prices to rise by 17% above 2007 levels, to \$84, based on tightening conditions in both the crude oil and refining sectors and reinforced by financial flows.

We expect product prices to be led by distillate demand both East and West of Suez facing supply imbalances caused by a tight refining market and deep refinery maintenance programs. Gasoline markets should lead a spring product price increase, following seasonal trends for one more year.

Globally, new refining capacity should make a more balanced product slate available to markets by end-2008 or early 2009, ending distortions that have prevailed since 2003 and reducing seasonal upside gains in gasoline and, to a lesser extent, in distillate. Growth in refining capacity for the next five years should create 4-5m b/d of spare downstream capacity and, with the addition of non-conventional fuels, should lower margins.

The medium-term crude oil market is anchored by strong product demand growth in emerging markets and in commodity-producing countries, which confronts near-zero growth in non-OPEC supply. While spare capacities upstream should increase in Saudi Arabia through 2012, expectations of limited OPEC supply increases afterward without improving politics should keep deferred prices firmly above \$60 per barrel. We see \$70-\$80 prices prevailing from 4Q08 through 2009, and \$60-\$80 prices through 2012, with a rebound starting thereafter. Passive investments into commodities reinforce historically high prices over the entire forecast period.

2) The vice tightens: Light sweet crude (Brent) averages \$95: 25% probability

Prices could rise higher than our base case in two scenarios: a short-lived weather or geopolitical spike, or persistent supply disappointment stemming from higher decline rates and slower Former Soviet Union and OPEC production increases. With increased duration, these scenarios could spell price increases at accelerating rates until they stem demand growth. A radical increase in prices could tip weakening OECD GDP growth into a recession; it could also cause Asian GDP growth to falter. Deferred prices would fall along with global product demand growth, weakening two critical spot price anchors.

Despite the recent US intelligence assessment of Iran's nuclear development, the threat of military action remains real. If anything, the assessment may have whittled away middle ground for compromise on the issue and possibly re-energized hawks in the US and Israel convinced of the UN's inability to address the Iran threat. A disruption to shipping through the Strait of Hormuz could reduce global flows by 10m b/d or more, shutting in some of the world's largest fields. Ramping back up would be complex and difficult, and could result in a temporary or permanent loss of some 10% of shut-in capacity.

Tighter supply conditions could also come about through an accelerated decline in traditional non-OPEC non-FSU production by 5%, failure of FSU to mobilize capital fast enough to raise production by more than 150k b/d annually in Russia, and delays in current projects elsewhere, such that total non-OPEC supply is flat or negative over the next two years. In this scenario all incremental supply would come from OPEC (NGLs and crude oil) and non-conventional supplies. Risks to OPEC production include slides in oil output in Venezuela, Iran and Iraq by a combined 300k b/d per annum as a result of limited capital expenditures, with the rest of OPEC adding no more than a combined 300k b/d per annum.

3) Economic slowdown and a fall in prices: Light sweet crude (Brent) averages \$65: 15% probability

In a global economic slowdown through 2008-2009, prices would fall before settling in a range of \$60-\$70 as US problems spread to the rest of the OECD and, with a lag, to emerging market countries. China's export sector, in particular, would confront lower demand and expose overcapacities, leading to a slowdown in Chinese GDP and oil demand growth.

New refining capacities east of Suez, continued de-mothballing of Japanese capacity, de-bottlenecking in the US and upgrading in Russia could result in greater capacity surplus coming on-line even earlier than in our base case, resulting in heightened petroleum product competition globally. Non-OPEC output, including non-conventional fuels, surprise to the upside, resulting in no net increase in demand for OPEC crude for three years, meaning Saudi Arabia does not need to produce any of the 2.5m of b/d new capacity it is developing over the medium term.

The market believes that upstream and downstream spare capacities will build to 5m b/d or more by 2012, radically reducing demand for inventory. As a result, a rebound in prices is delayed beyond 2015 or later. Deferred prices fall back to the \$50-\$70 range, but do not collapse.

| | |
|--|--|
| <i>The US economy is quite resilient ...</i> | Second, some perspective needs to be maintained on the resilience of the US economy and on the favourable global backdrop against which the shocks are playing out. The US economy in recent years has proved to be remarkably resilient in the face of any number of shocks: the bursting of the IT bubble and associated accounting and corporate governance scandals; 9-11 and the threat of domestic terrorism; the Iraq war; and so far even a deep housing recession and emergent credit crunch. With the corporate sector in the US in strong balance-sheet health, at least outside of financials, and the consumer still upbeat, the economy appears to have enough momentum to avoid a recession, even if the risk of that outcome is considerably higher than usual (we put it at 35%). |
| <i>... and EM fundamentals are strong</i> | We do not buy the “decoupling” hypothesis in its extreme form (that growth outside the US can more than offset a slowdown in the US). If the US and other major economies slow, as we expect, Asia and other emerging markets stand to be impacted via the trade channel in particular but also via financial and confidence channels. But the fundamentals in much of high-growth Asia and other emerging markets are much improved from the crisis of a decade ago. In the current environment it probably takes quite a bit, by way of adverse shocks, to push the global economy into recession. |
| <i>What are the risks?</i> | What are the risks to our cautious but still somewhat sanguine outlook? |
| <i>The US consumer may prove resilient</i> | The main upside risk has already been touched upon: that, helped by the slow-moving nature of the housing shock and irrepressible animal spirits, the US economy and consumer prove to be surprisingly resilient. Furthermore, it may be that a series of housing-targeted fiscal or regulatory responses are forthcoming that head off the looming spike in foreclosures. |
| <i>EM may boom and markets self-correct</i> | On the global front, the risk is that developed world monetary easing and continued resistance by monetary authorities in the developing world to upward pressure on domestic currencies fuels boom-like domestic conditions in China and other emerging markets, in turn helping to provide some export growth stimulus to the US. And, aided by the ability to tap new sources of liquidity, the considerable self-corrective powers of markets may assert themselves, averting a serious credit crunch. |
| <i>Japan could reflate</i> | A surprise would be if Japan were to finally exit from deflation and return a growth pole to the world economy, but this looks increasingly unlikely. |
| <i>A full-fledged credit crunch could develop</i> | It strikes us that there are more downside risks. One is that a full-fledged credit crunch develops in major economies, which then interacts in a malign fashion with the real economy, in ways reminiscent of Japan’s recent deflationary experience. Whereas the current situation and outlook seem to represent a scenario in which the much-discussed global (current account) imbalances start to unwind in a relatively orderly way, this scenario is more indicative of imbalances unwinding as part of a hard landing. |
| <i>Central banks could be hemmed in by inflation</i> | Another downside risk is that central banks get hemmed in by stubbornly high or even escalating inflation and are unable to take sufficiently aggressive easing action to head off a hard landing. Our energy call does not lead us to put a high weight on this risk. But this could happen for instance if central banks were to lose their hard-earned inflation-fighting credibility, leading to an unhinging of currently well-anchored inflation expectations. |
| <i>And geopolitical risks lurk</i> | A third one of course is the ever-present set of geopolitical risks. While it is inherently difficult to predict such “black swan” events, we take some solace in the observation that economies and markets appear to have a high threshold of resistance at least to the run-of-the-mill kind of geopolitical events. |
| <i>Read all about it</i> | This is just a skimming across the surface of the analysis of the outlook for countries, regions and issues contained in the Global Economics <i>Outlook 2008: Crunch Time</i> publication. ■ |

Geopolitical risks: Ten to watch in 2008

Alastair Newton (alastair.newton@lehman.com)

Amid tighter financial conditions, weaker global growth and increased broad risk aversion, we expect both geopolitical risk – notably around oil – and “local” politics to feature more strongly on the market’s radar in 2008.

1. The Middle East:

Iran: The perceived risk of military intervention against Iran over its nuclear programme is likely to remain the biggest single political influence on the oil price. However, we continue to judge the probability of such an attack as low. Consider:

- Although there are conflicting assessments of Iran’s progress on uranium enrichment, most experts – including the US intelligence agencies – agree that the Iranians are still some years away from possible weaponisation;
- Diplomacy continues and there are clear signs that (non-UN) financial sanctions are starting to bite;
- Political turmoil within Tehran is encouraging hopes that President Mahmoud Ahmadi-Nejad’s supporters may suffer a significant setback in the March 2008 *majlis* – parliamentary – elections;
- The risks military action pose to the global economy stand to weigh heavily, especially in a US election year.

Israel/Palestine/Syria/Lebanon: Despite some positive signs from the November 2007 Middle East peace conference in Annapolis, expectations of significant progress on resolving the region’s conflicts remain low.

2. Pakistan: Civil unrest, terrorist attacks and political uncertainty look set to continue, irrespective of the outcome of the 8 January 2008 parliamentary elections and notwithstanding that President Pervez Musharraf has stepped out of uniform. Further **major terrorist attacks on western targets** by groups with links to Pakistan – where *al Qa’ida*’s high command is believed to be based – cannot be ruled out.

3. US elections: Opinion polls continue to suggest that Hillary Clinton will win the Democratic Party nomination – and, ultimately, become the next US president – and that Rudy Giuliani will win the Republican nomination. But there is still plenty of scope for an upset in either party’s primary season. The Democrats are expected to retain their current majority in the House of Representatives and to increase their seats in the Senate from the current 51 (including two independents).

4. Trade frictions: Failure to reach agreement in the Doha multilateral trade round has highlighted concerns over swelling protectionist sentiment – especially in the run-up to the US elections – with the focus likely to remain on China’s alleged “unfair” trade practices and problems over product safety. Absent accelerated renminbi appreciation, such sentiment could rapidly spread, notably to the EU, where the Commission is seeking additional powers to impose “countervailing duties”.

5. Sovereign Wealth Funds (SWFs): National security concerns – legitimate or otherwise – around the rising power of SWFs, their desire for greater diversification of their holdings and the emergence of new funds in China and Russia stand to fuel protectionist sentiment in Europe and the US.

6. Taiwan: The opposition KMT-led “pan-blue” alliance looks likely to win the 12 January 2008 parliamentary election, with its candidate Ma Ying-jeou favoured to win the March 2008 presidential election. KMT success should bring some easing of cross-Strait economic constraints in the months ahead, but are unlikely to lead to a major political shift.

7. Thailand: Former Prime Minister Thaksin Shinawatra’s supporters, regrouped as the People’s Power Party (PPP), are expected to emerge from the 23 December general election as the largest single party. However, the PPP is still likely to be excluded from government by the army. Watch for further political turmoil, both before and after the election.

8. Russia: The pro-Kremlin United Russia party looks set to emerge from the 2 December 2007 parliamentary elections with the two-thirds majority it requires to push through constitutional amendments. This would facilitate President Vladimir Putin’s intention to retain a grip on power even after he steps down following the 2 March 2008 presidential election.

9. South Korea: The opposition GNP’s Lee Myung-bak is the favourite to win the 19 December 2007 presidential election and to help his party secure victory in the 9 April 2008 parliamentary elections. Pro-business Mr Lee is expected to put significant emphasis on economic growth but looks likely to do little to slow the growth of economic nationalism in Korea. He is also expected to foster closer ties with the US as the six-party talks on dismantling North Korea’s nuclear programme enter a critical phase early in 2008.

10. South Africa: Former Deputy President Jacob Zuma looks increasingly likely to emerge from the 16-20 December ANC conference as party leader, despite the efforts of President Thabo Mbeki to block his progress. This should make Mr Zuma the favourite for the presidential election in early 2009, deepening market concern over possible economic shifts to the left. Protracted political uncertainty looks likely.

FOCUS: MACROECONOMIC OUTLOOK 2008

Stress test

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The strong growth performance of 2007 will be hard to repeat

Contagion from central economies should be contained

EM economies are sturdier and the international environment is still favorable

We expect growth in Latin America to slow by 0.9% to a still robust 4.1%

The more challenging global environment is set to take its toll on the emerging world. Growth will likely slow, current accounts deteriorate and several nations may be forced to undertake pro-cyclical policies. But we see no crisis on the horizon.

As central economies decelerate and global markets continue in distress, emerging market (EM) economies have shown remarkably robust performance: in 2007, we expect growth in Latin America (LatAm) to have averaged 5% while that in emerging Europe, Middle East and Africa (EMEA) could reach a very high 6.2%. The investments EM economies have made in consolidating policy frameworks and reducing external vulnerabilities, including by accumulating large reserves, seem to be paying off (see Box: Damocles: *More than meets the eye*). We acknowledge the very sturdy position of EM, but we expect slower growth and a more challenging domestic policy environment.

Contagious yawning

Just as seeing somebody yawn makes you yawn yourself, EM will likely slow down during 2008, mimicking the developed world. This is quite an improvement over a more dangerous past when EM would catch pneumonia when the US sneezed.

The vehicles for contagion are varied and complex. They range from trade linkages, remittances and FDI, to risk premia, or Keynesian animal spirits. Calibrating the impact on each individual country is complex as it depends not just on global growth and asset prices, but also on the state of the domestic economies and the sturdiness of policies. In our view, the current combination of improved robustness with still favourable global conditions (strong terms of trade and low real interest rates) should help moderate contagion.

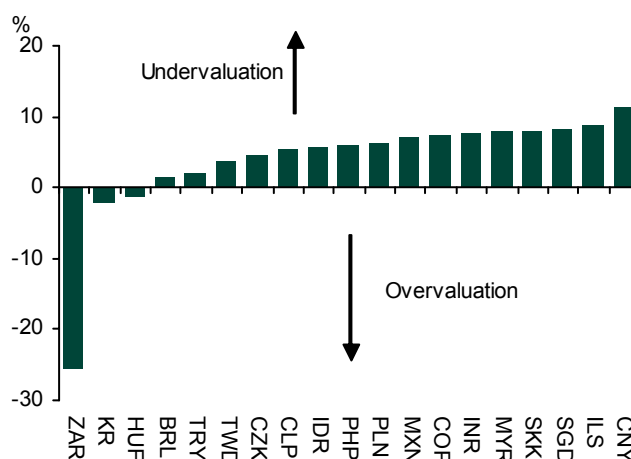
Our outlook for 2008 and 2009 is for growth to decelerate in LatAm and EMEA (Figure 1). We expect LatAm growth to slow by 0.9%: a significant deceleration, but a far cry from the traditional stop-go type behaviour the region has exhibited in the past. Interestingly, while we anticipate that almost all countries in the region will slow (Ecuador is the exception, with a modest 0.4% increase expected), it is countries with very high aggregate demand growth that we expect to decelerate the most. Indeed, Argentina and Venezuela, both with over 8%

Figure 1. Macroeconomic outlook

| | 2007F | 2008F | 2009F |
|--------------------------------|-------|-------|-------|
| Latin America | | | |
| Real GDP Growth (%) | 5.0 | 4.1 | 3.6 |
| Consumer Price Inflation (%) | 5.9 | 6.9 | 6.5 |
| Current Account (% GDP) | 1.1 | 0.3 | -0.4 |
| Primary Fiscal Balance (% GDP) | 3.0 | 2.7 | 2.4 |
| Public Sector Debt (% GDP) | 39.1 | 36.4 | 33.9 |
| EMEA | | | |
| Real GDP Growth (%) | 6.2 | 5.7 | 5.2 |
| Consumer Price Inflation (%) | 7.8 | 6.2 | 5.5 |
| Current Account (% GDP) | -0.3 | -1.1 | -1.9 |
| Primary Fiscal Balance (% GDP) | 2.3 | 1.6 | 1.6 |
| Public Sector Debt (% GDP) | 32.7 | 31.4 | 30.4 |

Weighted by nominal GDP in US\$. Countries covered are: Latin America: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Venezuela. EMEA: Czech Rep, Hungary, Israel, Poland, Russia, South Africa, Turkey.

Figure 2. Valuation of real exchange rates



Source: Lehman Brothers.

Source: Lehman Brothers.

current GDP growth, are forecast to slow by 2.8pp and 3pp respectively. Peru and Colombia should also show sharp drops in growth from very lofty 2007 levels. Thus, part of the forecast deceleration is explained by a return to potential growth. International conditions may contribute but, in the end, domestic forces surely dominate. Brazil and Mexico, on the other hand, are expected to show a much smaller deceleration of 0.7% and 0.2%, respectively – in these cases, international conditions play a bigger role.

In EMEA, growth is expected to slow by 0.5pp yet remain at a lofty 5.7%

In EMEA, the EU deceleration and the tighter world credit conditions should also take their toll. We expect growth to slow by 0.5pp, to 5.7%. Here too, Russia, the Czech Republic and Poland, which sport the fastest growth rates, should suffer the largest deceleration. In the case of South Africa, however, we are forecasting only a minor deceleration. In the case of Turkey, the strength of domestic factors is expected to lead growth to accelerate by almost 1pp, while we also expect Hungary to gradually leave its current growth slump behind.

Policies have turned pro-cyclical

Interestingly, a number of EM countries show signs of overheating: Argentina, Venezuela, Peru, Colombia, Poland, the Czech Republic, Russia and South Africa. In some cases, monetary policy is being tightened to bring inflation under control – but not so in Venezuela or Argentina. Domestic monetary tightening and higher spreads in the world economy, coupled with slower demand for exports, are set to hurt growth. This is not the only example of pro-cyclical policies. There are others that might be more troublesome.

Good-policy fatigue

Fiscal policy is expansionary – primary surpluses are falling ...

EM policymakers exhibit their fiscal results with pride. However, there has been some slippage during 2007 when most EM countries have expanded fiscal policy at a time of booming demand. In LatAm, the region's level of primary surplus went from 3.5% of GDP in 2006 to slightly below 3.0%. In EMEA, we expect the primary surplus to shrink by 0.7% of GDP into 2008. At the same time, both regions were enjoying strong cyclical growth, which should have led to better, not worse, structural fiscal results.

... at a time when economies have been growing strongly

Even with their above-8% output growth, the primary surplus in Argentina and Venezuela has shrunk by 1.3pp and 4.3pp of GDP, respectively. Less extreme, but still worrisome, is the case of Brazil: despite growth above 5%, the primary surplus has shrunk by 0.25pp of GDP. Similarly, in Poland and the Czech Republic, two economies enjoying above-6% growth, the primary fiscal accounts show no improvement. This pro-cyclical fiscal expansion could make future fiscal tightening unavoidable during a slower 2008-09 period. Pro-cyclical fiscal corrections, particularly if strong, are frequently destabilizing, both economically and politically.

Fiscal steps will be needed under less auspicious domestic and external circumstances

A number of countries will be called on to produce (moderate) fiscal adjustments during 2008-09. Poland and the Czech Republic will probably have to undertake some fiscal adjustments as their economies slow down, in order to comply with EU convergence criteria. At the other end of the spectrum, Argentina is intent on adjusting its primary surplus, in order to keep its financial position manageable and improve the government's political capabilities. Pro-cyclical fiscal policies seem to be the norm in EM and reflect a process we term "good-policy fatigue": governments that turn to less efficient policies tempted by past favourable external conditions, and politically fatigued after years of austerity. As this fatigue takes hold, chances for rating upgrades diminish, spreads may widen and external accounts begin to suffer.

Damocles: More than meets the eye

Peter Attard Montalto (pattardm@lehman.com)

Our 10th edition of *Damocles*, published on 30 November, arrives at a time of global market turbulence. The aggregate indices show a sustained low risk of an external crisis, yet some components suggest vulnerabilities should not be underestimated.

Will emerging markets (EM) decouple from slowing central economies and volatile world capital markets? As year-end approaches, fewer analysts believe this will be the case. On the other hand, EM could prove more resilient than in previous episodes. After all, EM nations made use of the “Goldilocks” era to build powerful defences against external shocks. From fast international reserve accumulation to liability management, many sovereigns have made efforts to reduce their vulnerability. Almost six months into this bout of market stress, we think it is time to take stock of the sturdiness of those defences.

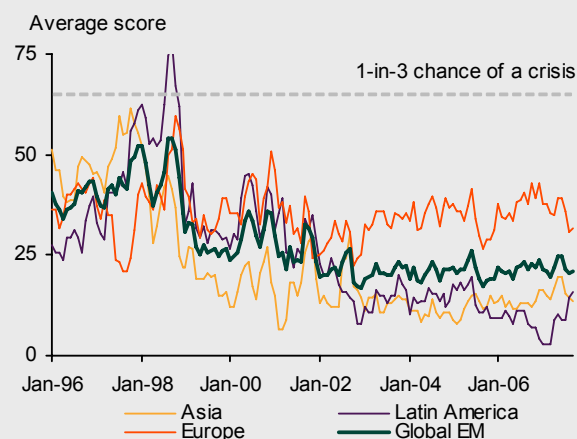
As 2007 comes to a close, *Damocles* provides a reassuring signal of the low likelihood of a sizable external crisis developing in EM. In fact, the average *Damocles* score remains roughly constant at a low risk level (Figure 1). With a score of around 20, the risks of a large external crisis look very low. But the world is not uniform. EMEA still show the highest levels of risk – although with a noticeable improvement – of a sharp external adjustment. In contrast, Latin America sports a very low level of risk – although with a noticeable deterioration during 2007. Argentina and, surprisingly, Chile seem to be responsible for the increase. Nevertheless, while the change is noticeable, the total level of risk for these two countries remains very low. Finally, Asia shows a consistently low level of risk, having recovered some of the (minor) deterioration that was seen in the 12 months through June 2007. We note that South Africa and Turkey, which not long ago presented worrying scores, have now improved to very decent levels of 26 and 31, respectively. Despite some improvements, Iceland and Romania still lead the league of external crisis risks, with one-in-three chances of an external shake-up in the next 12 months.

EM countries may be less sensitive to a slowdown among central economies. Still, the IMF finds in its latest World Economic Outlook that, were the shocks to capital markets to prove prolonged (eight quarters, in the study), the impact on EM would be more significant. Thus, with the latest bout of market weakness adding to concerns about enduring damage to capital markets, balance of payments adjustment scenarios seem more likely. In their most recent estimates of capital flows to EM, both the Institute for International Finance and the IMF forecast a slowdown for 2008. While the forecasts differ significantly, they share the assessment that capital flows will continue, albeit at a slower pace. The studies also suggest that Latin America will suffer a sharper slowdown (20-40%) than EMEA. Both exercises, however, were conducted before the latest round of market dislocations and thus may be somewhat optimistic.

In an environment of slower world growth, higher spreads and slower capital flows, vulnerabilities may become slightly more acute than *Damocles* predicts. EM corporate and banking sectors have undertaken significant borrowing, much of it short-term debt. In some cases, the ratio of such debt to GDP is very high. In Romania, for example, the ratio is 30%, with short-term debt of 100% of international reserves. Other cases present more moderate, but still risky, situations. Among these are Argentina and Turkey. In the event of a longer-lived freeze-up in financial markets, the capacity of borrowers to roll over such debt may be hampered, leading to current account tightening, reserve losses, domestic credit crunches and slowing growth.

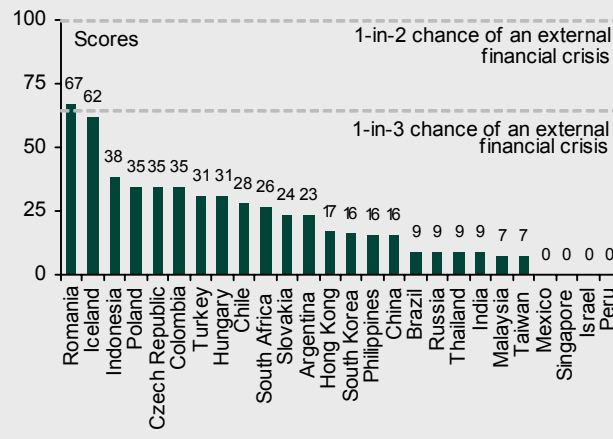
A protracted market freeze-up could spill over to a credit crunch in more remote markets. While fast growth in domestic lending has been one of the forces behind the strong output performance in EM, a credit crunch may be imported. Thus, although the risks of a traditional external crisis appear small, country idiosyncrasies might make them prone to a sharper domestic adjustment not flagged by *Damocles*. As always, using *Damocles* as an input to a wider analysis is recommended. ■

Figure 1. Average *Damocles* scores for three regions



Source: Lehman Brothers Global Economics.

Figure 2. *Damocles* scores, September 2007



Source: Lehman Brothers Global Economics.

While there has been a sizable build-up of reserves, current accounts are deteriorating

One of EM's salient features has been the fact that many of these economies have been running solid current account surpluses. This has allowed most of these countries to build an important line of defence against external shocks in the form of large stocks of international reserves. However, we now expect current account surpluses to gradually turn into deficits. Being a net importer of capital appears to be a more natural situation for an EM nation than the recent situation of there being an excess of savings over investment, which is more typical of mature economies.

We expect LatAm GDP to drop 1.7pp in two years; EMEA by 0.6pp

In LatAm, current accounts have fallen from 2.0% in 2006 to 1.1% in 2007 and are expected to reach 0.3% in 2008, turning to a deficit by 2009. In Brazil, for instance, the downswing could reach 1.4% of GDP in just two years, in Colombia 1.25% and in Argentina almost 2.8%. In EMEA (excluding Russia), from an average current account deficit of 3.0% of GDP, we expect a deterioration to 3.4% in 2007 and 3.6% in 2008. The most alarming move in this region is in South Africa, where the deficit is expected to grow by more than 2% of GDP from an already high 6.4% in 2006.

Exchange rate valuations are slightly undervalued in most countries

One of the engines behind EM's contribution to the resolution of world imbalances is the appreciation of real exchange rates (REERS). Almost all EM REERS have appreciated. Our model of fair valuations for real exchange rates suggests that, with the exception of a significant overvaluation of the South African rand, most EM currencies are reasonably priced to slightly undervalued (Figure 2).

Monetary policy is tight, but we expect it to ease as 2008 progresses

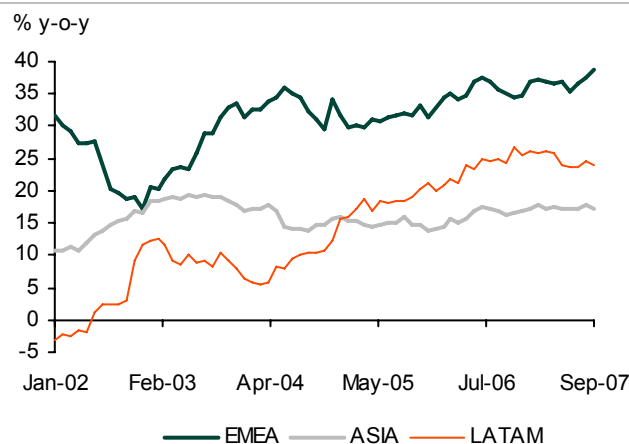
Early 2008 is likely to find many nations with relatively high inflation, which we expect will lead central banks to either maintain their current level of interest rates or opt for a few hikes. As the Fed and ECB start to ease their monetary stance, interest rate differentials are likely to be amplified. This could lead to a further appreciation of EM currencies. However, as the FX appreciation and growth slowdown impact inflation, we expect most central banks in EM to move towards an easier monetary stance later in 2008. Indeed, we believe most EM yield curves (at the short end) are too steep, which translates into a decelerating force today.

Risky business

The risks to our baseline scenario are to the downside

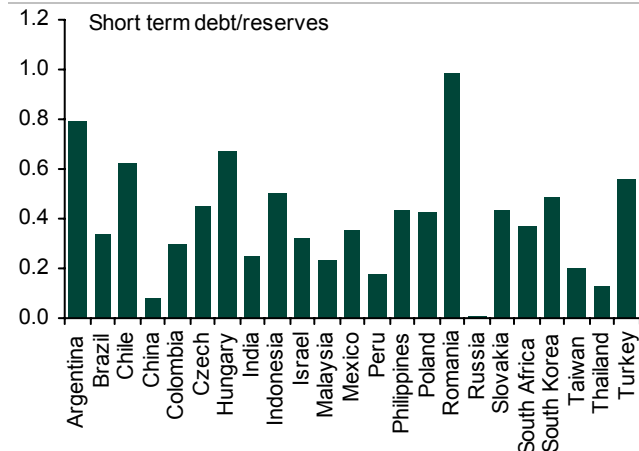
The balance of risks in EM this time is probably biased towards a more dangerous scenario. While many of the countries have built credibility and piled on protective layers, the risk of a sharper correction remains. Even then, we think it highly unlikely that the kind of EM crises that was typical in years past will occur.

Figure 3. Rate of growth in lending to the private sector



Source: Lehman Brothers Global Economics.

Figure 4. Ratio of short-term external debt to reserves



Source: Lehman Brothers Global Economics.

*Vulnerabilities are compounded
where fast credit growth and
sizable short-term debts abound*

Short-term macro risks are concentrated in countries with large current account deficits, where private sector growth has been fuelled by sharp growth in lending – particularly if foreign financed – and where short-term debts relative to international reserves are large (Figures 3 and 4). On this measure, EMEA countries (plus Argentina) seem more vulnerable to a sharp correction.

2008 could be a year of change

2008 stands to bring much change in the EM world. LatAm appears likely to lose some of its recent shining performance as a number of indicators deteriorate. However, it appears in better shape to face a sharper global adjustment than EMEA. The stress test looks more likely to come from within in the Latin world, while in Eastern Europe and South Africa it could come from abroad.■

FOCUS: EM CORPORATES

Two sides to the story

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Emerging market corporates have enjoyed strong growth on the back of accommodating global conditions and high commodity prices over the past few years. Yet, EM corporate credits have underperformed other asset classes in recent months due to weaker technicals. While balance sheets should continue to remain strong in 2008, the asset class may continue to underperform until liquidity conditions improve.

TOPSY TURVY WORLD

Headlines from 2007: the richest man in the world is from Mexico; the second-largest IPO market is not London, but Shanghai (with Brazil fourth); the largest bank by market cap is Chinese; and the trigger for global weakness originated in the US and for a short while, EM was considered a safe haven. No, we are not describing a parallel universe; rather, these are just some of the signs of how far emerging markets have come in recent years. Conversations about the top companies in the world now include those from the emerging world, whether it be telecom (China Mobile, America Movil), mining (CVRD), energy (Gazprom, Petrobras), financials (ICBC), consumer goods (Ambev) or conglomerates (Tata). Armed with strong earnings and healthy balance sheets, EM companies are no longer just the hunted but are now playing a more active role as the hunter – think Tata Motors and Mahindra’s recent bids for British icons Land Rover and Jaguar.

EM firms have benefited over the past few years from market conditions ripe for growth: high commodities prices, booming domestic economies and a combination of a low-interest rate and low-inflation environment. However, as we head into 2008, we see the waters getting murkier. Commodity prices have begun to ebb, the probability of a US recession has increased and global growth is expected to slow. Fundamentals should remain strong in 2008, but continued liquidity issues and growing supply pressure are expected to make for a lackluster performance until H2 2008.

Figure 1. EM corporate debt/EBITDA has steadily declined and is lower than the US

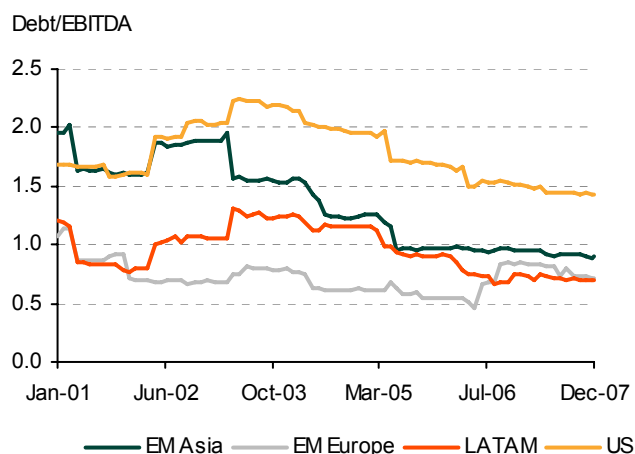
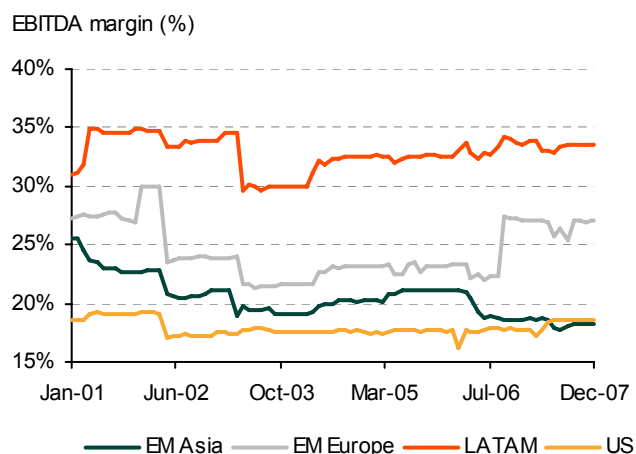


Figure 2. Profitability measures also look better for EM relative to the US



Source: Lehman Brothers, FTSE, Worldscope, Exshare.

Source: Lehman Brothers, FTSE, Worldscope, Exshare.

STRONG FUNDAMENTALS...

The fundamentals seem to justify the “emergence” of EM corporates onto the global scene. Figure 1 shows debt/EBITDA ratios for EM and the US⁶. Since its peak in July 2000, EM’s debt/EBITDA ratio has steadily declined to 0.8x today compared to 1.4x for the US. Other measures (Figure 2) show a similar story: 23% EBITDA margins for EM against 18% for the US, 19.5% return on equity for EM against 19.2% for the US.

The stronger fundamentals have in turn has led to the continuing deterioration of the so-called “sovereign ceiling”, a long-held belief that no firm is more credit-worthy than its government. In Brazil alone, there are 13 companies that exceed the sovereign’s BB+ rating. However, a “ceiling-lite” policy still seems to be in place as EM corporates still lag their sovereigns in spread terms in spite of similar or higher credit ratings (Figure 3).

EM will not be completely immune to the global slowdown, but even with a dip, commodity prices should still remain supportive and continued strong domestic demand in many EM countries should help to offset some of the slowdown. Our Lehman Energy economists forecast the average Brent crude price at \$84/bbl in 2008, \$12 higher than the average price in 2007. Our US Economics team forecasts US real GDP growth in 2008 to be a tepid 1.8% while our economists forecast 4.1% for Latin America, 5.9% for EMEA and 7.6% for Asia ex-Japan. Relative to US firms, EM corporate fundamentals should continue to remain solid throughout 2008.

... OVERSHADOWED BY WEAKENING TECHNICALS

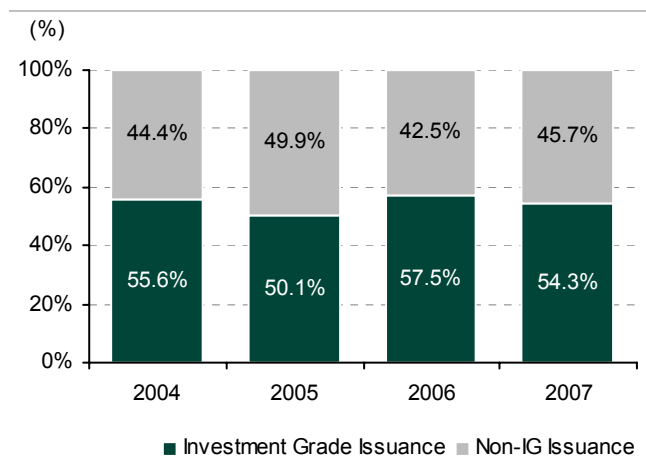
The same may not be true for technicals. Growth in EM corporate external debt issuance has been phenomenal over the last several years and we do not expect much slowdown in issuance in 2008 (see “2008 EM Supply Outlook” on p. 15). In 2006 and H1 2007, lower-quality EM corporates took advantage of the seemingly endless appetite for higher yield by issuing in record numbers. In 2007, HY issuers accounted for over 45% of total EM corporate issuance (Figure 4) – in contrast, US HY issuers accounted for roughly 15% of total US corporate issuance. The combination of higher supply with lower-quality paper has led to an underperformance of EM firms relative to sovereigns, where technicals appear to be healthier (Figure 5).

Figure 3. EM corporates have wider spreads than their sovereigns in spite of similar or better credit ratings

| Bond | Spread diff w/ sov on 1/2/07 (bp) | Spread diff w/ sov on 12/7/07 (bp) | Avg Corp Rating | Avg Sov Rating |
|---------------|-----------------------------------|------------------------------------|-----------------|----------------|
| CVRD '36 | 13 | 87 | BBB | BB+ |
| Petrobras '18 | -11 | 20 | BBB- | BB+ |
| PDVSA '27 | 81 | 114 | BB- | BB- |
| VTB '35 | 32 | 67 | BBB+ | BBB+ |
| Gazprom '34 | 64 | 81 | BBB | BBB+ |

Source: Lehman Brothers.

Figure 4. HY corporate issuers still account for almost half of total EM corporate issuance



Source: Bondradar.

⁶ We use the companies as defined by FTSE.

Lower liquidity of EM corporate bonds is another contributing factor to trading at a discount. For one, there is a lack of large benchmarks – USD sovereign and quasi-sovereign bonds typically exceed \$1bn, while this is not the case for EM corporates. While the EM corporate CDS market is starting to grow, liquidity tends to be concentrated in only a few names, and is nowhere near the size of sovereign or US corporate markets. This, in turn, makes hedging bonds more difficult. EM corporate debt has attracted more interest and inflow from crossover accounts, but the investor base for EM corporate debt is still nowhere as deep as it is for US corporate debt.

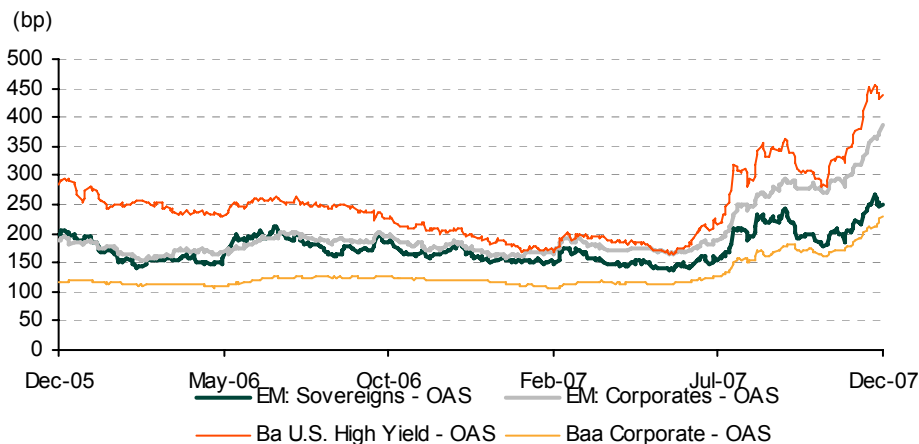
THINGS COULD GET WORSE BEFORE GETTING BETTER

The recent sell-off has made EM corporate debt appear cheap relative to sovereigns and US IG firms (Figure 5). In spite of this, we expect EM corporates to continue to trade at these levels relative to both US IG and sovereigns as long as investors place a premium on liquidity. Some will be more adversely affected than others – a large part of the recent EM corporate index widening has been due to Russian and Kazakh banks, two sectors that have been hit particularly hard by the global liquidity crunch. Russian and Kazakh banks were two of the largest groups of borrowers in 2007 with \$13.5bn and \$6.9bn in Eurobond issuance, respectively, in addition to syndicated loans from foreign institutions (Russian banks and firms alone received over \$39bn in H1 2007). Russian and Kazakh banks will find it challenging to roll their debt obligations in 2008.

Another risk to EM firms is a potential US recession – Lehman economists ascribe a 35% probability to this scenario. While there would be some deterioration of fundamentals under such an event, we would not expect LatAm corporates ex-Mexico to hold up relatively well as they are not very dependent on trade with the US (exports to the US account for less than 16% of Brazil’s total exports).

If liquidity conditions pick up in the latter part of the year as our US credit strategists predict (*Credit Outlook 2008: When Will Liquidity Return?*, Dec 6 2007), EM corporates should outperform given that their fundamentals are expected to hold up better than US companies in a global slowdown. Within EM corporates, we believe that investment-grade names will outperform their high-yield counterparts as investors discriminate between high and low-quality names in this challenging environment.

Figure 5. EM corporates have widened vs sovereigns and US IG but have outperformed US HY



Source: Lehman Brothers.

FOCUS: DECOUPLING

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Every crisis is different and the transmission mechanisms are complex

There is one common pattern, however

Why contagion might be non-linear

A US slowdown would affect EM countries differently than a US recession would. Indeed, our analysis suggests that the EM assets that tend to perform well in a slowdown are not the same as those that hold their value in a recession.

INTRODUCTION

The question of whether the rest of the world would decouple from a downturn in US economy has been addressed by many economists recently.⁷ The objective of most of this analysis has been to calculate the sensitivity of other economies to that of the US, based on theoretical considerations or historical data. Leaving aside the magnitude of the effect, we focus on a slightly different question: whether EM countries, and their main asset classes, could be affected differently by a US slowdown as opposed to a US recession.⁸

A variety of mechanisms covering both trade and financial linkages could transmit a US downturn to other countries. Additionally, the extent and characteristics of the spillovers depend on the conjunction of numerous factors, such as the source and length of the downturn, the initial conditions in the various countries and the degree of commercial and financial openness of each country with respect to the rest of the world. As a result, each downturn is a differentiated event that, in principle, should teach us little about future crisis. Nevertheless, an analysis of the effect of past US downturns on different regions does reveal one common trend: Generally, a US recession is uniformly and significantly detrimental to the economies of other regions while a mere slowdown has mixed effects.

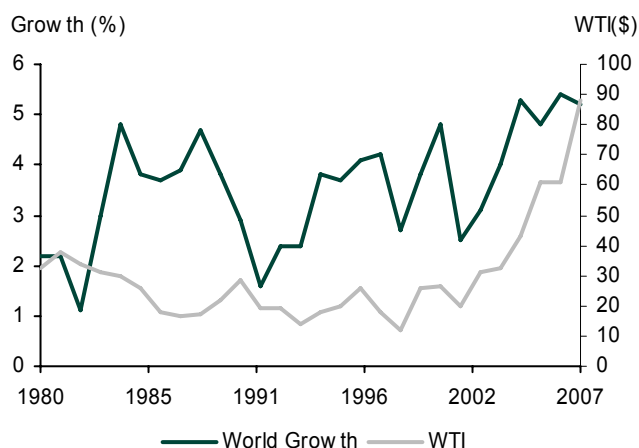
Figure 1. World growth and US downturns

| | Change in GDP growth (median per region, %) | |
|----------------------------|---|-----------|
| | Recessions | Slowdowns |
| United States | -3.8 | -1.1 |
| Other Industrial Countries | -2 | -0.1 |
| Latin America | -1.7 | 0.9 |
| Emerging Europe | -3.6 | 3.8 |
| Middle East and N. Africa | -0.6 | 0.3 |
| Emerging Asia | -1.3 | 0.6 |

| | Countries Experiencing Growth Decline (%) | |
|----------------------------|---|-----------|
| | Recessions | Slowdowns |
| Other Industrial Countries | 73 | 50 |
| Latin America | 70 | 40 |
| Emerging Europe | 76 | 17 |
| Middle East and N. Africa | 50 | 50 |
| Emerging Asia | 68 | 45 |

Source: IMF, WEO April 2007.

Figure 2. World growth and oil prices



Source: IMF, Reuters

⁷ See, for example, Michael Hume, "Global Decoupling: Does the rest of the world still catch a cold when the US sneezes?" Lehman Brothers Economics Publication, 6 July 2007.

⁸ We consider a slowdown to be a situation in which output falls below its potential and a recession when there is a decline in output for two consecutive quarters

US recessions are more uniformly detrimental to EM than US slowdowns

In Figure 1, we present some results of an event study, performed by the IMF, that took into consideration several US downturns of the past 40 years. In the case of a slowdown, the average decline in US GDP growth of 1.1% was followed by only a mild decrease in other industrialized countries and by an *increase* in growth in EM regions. By contrast, US recessions have been followed by an average decline in growth in all the regions under analysis and the extent of that decline has been bigger in proportion to the US decline that caused it. Additionally, in most regions, the proportion of countries that experience a decline in growth is much smaller in a slowdown than in a recession.

Because of the relative importance of trade and financial linkages in each type of downturn

We think that the causes of these non-linearities reside in the role of trade and financial linkages in each case. While both type of linkages operate during a slowdown or a recession, in the first case, the trade linkages are the main contagion vehicles to the rest of the world, while the financial linkages becomes relatively more important in a recession, especially if the recession originates in credit or financial problems in the US.

SLOWDOWN: PREVAILING TRADE LINKAGES

A slowdown could have a noticeable effect on commodity prices...

A slowdown in the US would certainly produce a decline in the amount of goods and services that this country demands from the rest of the world, negatively affecting the current accounts of many developing countries, especially those that trade the most with the US. Yet, it is not the direct effect on export volumes that could be of considerable importance in this case. After all, a 1% reduction in expected growth rates would probably cause less than a 1% fall in US imports from these countries. In the current scenario of record commodity prices, the most important effect of a slowdown could be on prices. Figure 2 shows the evolution of oil prices and world growth. Over the past four years, oil prices have increased three-fold, a rise attributed by most analysts to an unexpected increase in demand rather than to a supply disruption. Consistent with this view, world growth rates, as calculated by the IMF, are at record highs. However, a relatively small change in demand conditions could reverse this scenario. If we also consider that the short-run price elasticity of oil demand is very low, 0.06 for the US by one recent estimate,⁹ a 1% fall in demand for oil could cause prices to drop by approximately 17%. A similar argument can be made for other commodities. If the recent surge in prices is a result of unusually high world growth rates, then a slowdown would suffice to reduce demand pressures, affecting developing countries' export revenues.¹⁰

...especially when prices are high today because of unexpected demand

A slowdown should not produce a considerable impact in financial flows

On the other hand, financial effects are less relevant in a slowdown. In this scenario, we would expect financial markets to stay operational. Although there could be volume falls, higher volatility and wider spreads for some months, markets would tend to normalize.

RECESSION: PREVAILING FINANCIAL LINKAGES

Financial linkages become important in a prolonged US credit squeeze

In the case of a potential US recession, especially one coming from a credit squeeze, the relative importance of the financial linkages would increase dramatically while the trade linkages would be relegated to a secondary position. We think this is the main cause of the non-linearities in the transmission mechanisms that we mentioned earlier.

Financial flows to developing countries are driven, at least in part, by factors that are both non-linear and hard to predict. While Mexico's crisis in 1994-95 produced only a temporary reversal in capital flows to Latin America, and the Asian crisis of 1997 affected Latin America mostly by depressing commodity prices, it was Russia's default of August 1998 that caused a sudden stop. Capital inflows to major Latin American countries fell in one year

⁹ John CB Cooper, "Price elasticity of demand for crude oil: estimates for 23 countries," OPEC Review, March 2003.

¹⁰ Lehman Brothers energy economists are predicting flat to falling commodity prices, though the fall in demand may be delayed until 2009.

The problem this time around would not be the usual balance of payments crisis

Instead, the remarkable increase in credit in EM could reverse rapidly

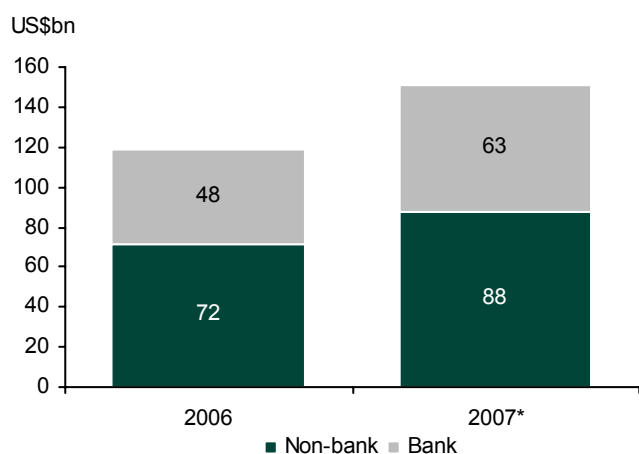
The credit contraction would have a larger effect than the decrease in trade

from 5.5% of GDP on average to 1.9% of GDP. GDP growth in Latin America fell 4.3% and investment as a percentage of GDP fell 5.1%.¹¹

The novelty this time is that developing countries seem particularly vulnerable to a credit squeeze that could be triggered by external contagion, less so to a reversal of capital flows that could lead to the usual balance of payments crisis. The past year has been characterized in general by a decline in sovereign debt and the accumulation of massive international reserves by EM countries. Together with sounder macroeconomic policies, these conditions have diminished the risk of a balance of payment crisis in most countries. Meanwhile, there has been an increase in private credit both from domestic and foreign sources, and, in particular, an important increase in the amount of foreign financing by private corporations and local banks. Figure 3 shows the recent increase as reflected in external bond issuance, though the total increase from foreign sources may be much larger. As Figure 4 shows, overall credit-to-GDP ratios have increased remarkably. It is worth noting the magnitude of that increase in some countries, among them Russia, Turkey, Iceland, Brazil, India and Argentina. Hence, this elevated level of credit funded in part by external sources has increased the risk that EM countries could be directly affected by a credit crunch in the core markets. We expect that in this scenario, credit conditions would become particularly tight for foreign debtors and they would face difficulty in rolling over considerable amounts of debt. The contagion to domestic credit markets would likely be immediate, halting funding for investment and consumption. In this case, EM countries would suffer a noticeable reduction in growth.

The trade effects would still operate in this scenario. And the volume effect would be more important and output would be dragged even lower by falling external demand. However, these trade effects would be much smaller than the consequences of the credit contraction.

Figure 3. External corporate debt issuance in EM



Source: Bond Radar.

Figure 4. Private credit to GDP ratios

| | 2003 | 2004 | 2005 | 2006 | Latest |
|----------------------|------|------|------|------|--------|
| Latin America | | | | | |
| Argentina | 8.4 | 8.6 | 9.5 | 10.8 | 15.6 |
| Brazil | 27.1 | 28.3 | 29.1 | 32.0 | 37.5 |
| Chile | 75.8 | 70.6 | 73.9 | 68.1 | 70.7 |
| Colombia | 19.9 | 20.8 | 21.0 | 25.9 | 28.1 |
| Mexico | 8.5 | 10.0 | 12.1 | 14.6 | 16.5 |
| Peru | 20.5 | 19.1 | 18.5 | 18.1 | 19.6 |
| EMEA | | | | | |
| Czech Rep | 26.4 | 27.8 | 26.9 | 33.6 | 36.7 |
| Hungary | 82.7 | 76.6 | 87.7 | 97.4 | 77.7 |
| Israel | 80.1 | 79.6 | 78.1 | 83.5 | 80.5 |
| Poland | 28.6 | 30.9 | 28.0 | 34.8 | 40.3 |
| Romania | 15.4 | 18.8 | 19.6 | 29.3 | 36.0 |
| Russia | 21.8 | 25.5 | 25.4 | 30.2 | 38.8 |
| South Africa | 79.1 | 79.7 | 76.6 | 82.9 | 91.5 |
| Turkey | 13.6 | 18.0 | 23.9 | 29.2 | 33.9 |

Source: Lehman Brothers, based on various national sources.

¹¹ Guillermo A. Calvo and Ernesto Talvi, "Sudden Stop, Financial Factors and Economic Collapse in Latin America: Learning from Argentina and Chile," NBER Working Paper 11153, February 2005.

RELATIVE PERFORMANCE OF EM ASSETS: TWO SCENARIOS

Lehman economists believe a slowdown is more likely

Our US economists predict only a slowdown in 2008, but others see a higher probability of full-blown recession. The presence of non-linearities in the contagion process implies that relative asset performance in the two scenarios is different, warranting further exploration.

In a slowdown, US rates fall more than Latam rates

In the scenario of a US slowdown, we would expect financial markets to normalize during 2008. The 100bp additional reduction in the Fed Funds rate expected by our US economics team should ease the economic downturn. In EM, a fall in global demand and the weakening of commodities prices would decrease inflationary pressures, leaving more room for the central banks to follow the monetary easing of the Fed. However, we expect the reduction in the reference rates to be more moderate in EM than in the US. In this environment, we would expect nominal rates to outperform real rates, especially when considering the high levels of breakeven inflation in many EM markets (see Box: *LATAM inflation-linked bonds* for a detailed explanation for LATAM countries). We also expect that local stocks will no longer show the extraordinary returns of past years as corporate profits are hit. Regarding FX, we expect the currencies to lose some of their traction due to staggering commodity prices and weaker local equities, but as most EM currencies are still mildly undervalued (see *A Macro Balance Approach to Currency Valuation in EM* in this publication) and carry against the US dollar would increase, FX should have an acceptable performance.

Nominal rates in Latam outperform real rates

EM FX performance is satisfactory

In a recession, EM corporates suffer from the credit squeeze

In the event of a US recession, we would expect considerable underperformance by those assets most directly related to the credit market. Among these, EM corporates stand out as most likely to be adversely affected by the resultant credit squeeze. EM equities would also likely underperform as corporate profits suffered and the flow of capital diminished amid the increase in risk aversion. Inflation could pick up if the central banks were forced to loosen monetary policy aggressively to counteract the credit squeeze. This would affect nominal rates, which would be expected to underperform relative to real rates. FX would also be hurt by the increase in inflation, the decline in carry and outflows by foreign investors. Finally, sovereign debt would be relatively less affected than in previous crises. Interestingly, Venezuela and Argentina, the two high beta credits in external sovereign debt, have trade links with the US but no capital links. As a result, these might not suffer significantly more in a recession than in a downturn.

Inflation picks up in Latam and EM currencies depreciate

FOCUS: LATIN AMERICA

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How long to escape fiscal dominance?

Governments that have a history of using high inflation or default to solve fiscal problems have little or no scope to pursue expansionary or countercyclical fiscal policy. And in many economies, tighter fiscal policy can actually prove expansionary. Governments with such reputations need to keep fiscal effort austere for an extended period to remove any concerns about future creditworthiness.

FISCAL DOMINANCE CAUSES “HYPERCROWDING OUT”¹²

Governments that have to rely on inflation or outright default as opposed to cutting primary expenditure or raising taxes to keep debt-GDP ratios on a sustainable trajectory are said to operate in a regime of fiscal dominance. Since World War II, Latin American governments have had a history of resorting to high inflation to finance fiscal deficits or outright default when faced with unsustainable debt trajectories. This has created credibility problems when Latin American governments have announced adjustment policies, and explains much of the large risk premia that Latin American governments have to pay when borrowing at home or abroad. Latin American central banks have had difficulty fighting inflation because their treasuries have shown a proclivity to expand expenditure beyond tax revenues, and their history of inflation and default constrains their ability to borrow by issuing debt. Unsustainable debt paths have subverted many inflation stabilization attempts by forcing central banks to prematurely lower interest rates and allow inflation to rise to reduce the debt burden and pay down debt by issuing fiat money. And in severe debt crises, inflation may not prove enough as high-inflation countries have a higher tendency to default.¹³ Fiscally dominated countries also have less scope to pursue inflation targeting regimes as the scope for action is constrained by the fiscal position of the government.¹⁴ Successful implementation of inflation targeting depends upon a persistently strong fiscal effort by the government. But the effect of changes in fiscal policy by fiscally dominated governments also run contrary to accepted wisdom for governments with high credibility.

Most analyses of the effects of active fiscal policy allow for some effects on economic activity, even if only partial and temporary. As a result, conventional expansionary (contractionary) fiscal policy may cause GDP to expand (contract). In the worst case, a rise in interest rates caused by larger fiscal deficits completely crowds out private investment and fiscal policy has no effect on GDP. In countries with a history of inflation and default, however, crowding out can prove even stronger. In fiscally dominated regimes, changes in fiscal policy have such extreme effects on interest rates they swamp whatever direct effects the change in fiscal policy may have. An increase in fiscal deficits accordingly becomes contractionary rather than expansionary. We call this phenomenon “hypercrowding out”. Viewed from the opposite direction, hypercrowding out in fiscally dominant countries means that fiscal tightening becomes expansionary. Raising the primary fiscal surplus lowers real interest rates (or discount rates) so much that GDP expands despite the direct contraction of aggregate demand from fiscal tightening.

The appendix presents empirical support for this hypothesis for several Latin American countries using granger causality tests. We find that higher primary fiscal balances directly increase GDP growth in Brazil, Uruguay and Venezuela. Higher primary surpluses reduce

¹² In this essay, I borrow heavily from William C. Gruben and John H. Welch (2008): *Is Tighter Fiscal Policy Expansionary Under fiscal Dominance? Hypercrowding Out in Latin America*, *Contemporary Economic Policy*, forthcoming.

¹³ See Guillermo Mondino, Joe Kogan and Phil Yuhn, “Sovereign Strategy: Where’s My Inflation Protection, Che?,” *Lehman Brothers Emerging Markets Compass* 28 September 2007.

¹⁴ For a recent exploration, see Michael Kumhof, Ricardo Nunes, and Irina Yakadina, “Simple Monetary Rules Under Fiscal Dominance,” *IMF Working Paper WPI/0/271*, December 2007.

real interest rates in Brazil, Colombia, Ecuador, Peru and Uruguay. Lower real interest rates increase GDP growth in Brazil, Chile, Colombia, Peru and Uruguay, and hence, in all these countries except Chile, crowding out works indirectly through the effect on interest rates. The results are particularly stark for Brazil (Figure 1): that real interest rates have declined as a function of the increase in primary surplus as a percentage of GDP is obvious even without controlling for other effects.

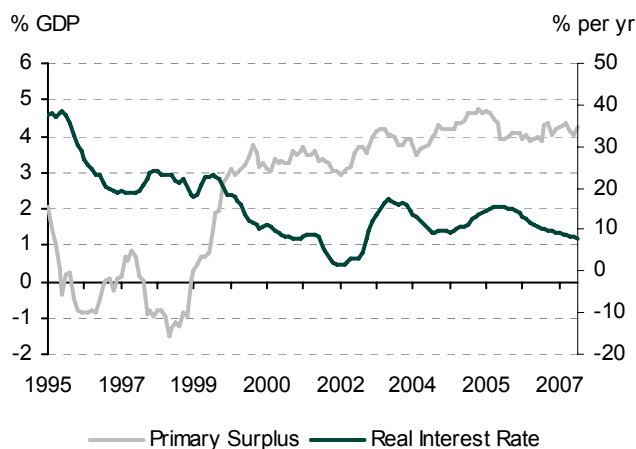
More thorough tests confirm the findings that tighter fiscal policies tend to increase growth in Latin American countries, even in Chile and Mexico and even adjusting for the effects of growth on tax revenue and hence fiscal effort.¹⁵ Hence, even almost two decades since the beginning of Latin America’s recovery, Keynesian experiments where governments loosen fiscal policy to accelerate growth would seem risky endeavors.

LATIN AMERICA’S STRONG ADJUSTMENT

One of the centerpieces of Latin America’s recovery since the early 1990s is the improvement in fiscal effort. Figure 2 shows the evolution of primary surpluses for a number of Latin American countries. Brazil, Colombia, Ecuador, Mexico and Peru show persistently strong fiscal effort which goes far in explaining the improvement in the rate of GDP growth since the 1980s and its lower volatility. Argentine fiscal effort is a relatively recent phenomenon only showing persistently positive primary surpluses after the 2001 crisis and default. Venezuela has recently seen a sharp deterioration in its primary surplus, although its persistent fiscal effort was only interrupted by the stoppage in oil production during the strikes of 2000-2001. As Figure 3 shows, most Latin American countries have succeeded in reducing their debt-to-GDP ratios over time.

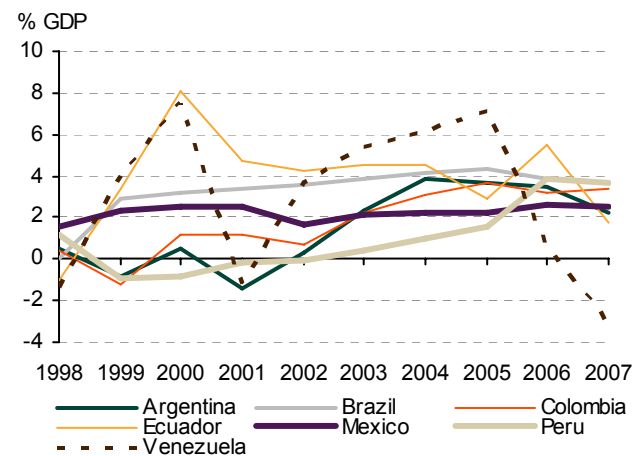
However, policy fatigue has started to creep into many of these credits, most clearly shown in Figure 2 for Venezuela but also entering the picture in Argentina, Brazil, and Ecuador where primary surpluses have moved lower in the past 18 months. The important question for investors is whether these governments have proven their creditworthiness enough to safely move to lower fiscal effort.

Figure 1. Brazil: Primary balance and real interest rates



Source: Banco Central do Brasil and Lehman Brothers.

Figure 2. Latin America: primary surpluses



Source: Gruben and Welch (2008) and Lehman Brothers.

¹⁵ See Gruben and Welch (2008).

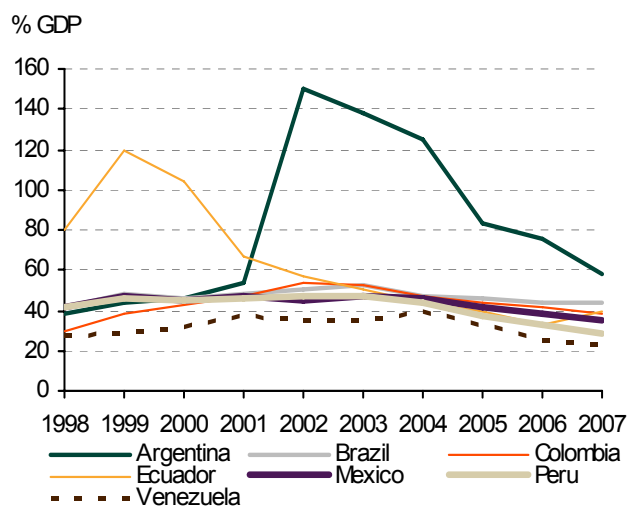
HOW LONG TO LOSE FISCAL DOMINATION?

Many Latin American politicians and even market analysts think that the era of strong fiscal austerity is over as these countries have stuck to the straight and narrow long enough. How quickly a country rids itself of fiscal dominance is not only a function of how long recent fiscal efforts have remained in place, but also depends upon past behavior. Even if a government is pursuing strongly austere fiscal policy now, investors will continue to look with suspicion on governments that have defaulted in the past. Figure 4 plots the effects on output of an increase in the primary surplus – our gauge of fiscal dominance – against the number of years in default on external debt between 1975 and 1992. The graph shows a significant positive slope, meaning that the longer a government is in default the higher the degree of fiscal dominance. In other words, governments who have misbehaved in the past will likely have to behave themselves for a very long time to shed their fiscal domination.

COUNTERCYCLICAL FISCAL POLICY?

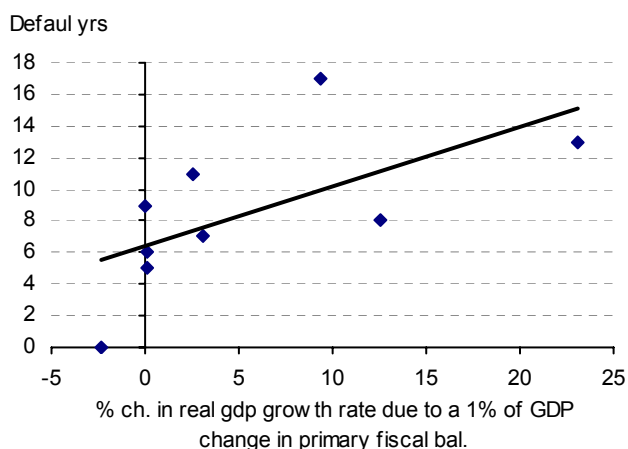
The difficulties that governments have in shedding poor payment reputations caution against any fast movement toward active fiscal policy. Certainly, the only Latin American countries that have successfully moved toward counter-cyclical fiscal policy either are commodity exporters (Chile, Mexico, and for a time Venezuela and Ecuador) or run nominal fiscal surplus under normal times and can allow the nominal – as opposed to the primary – balance to slip negative temporarily when faced with an unforeseen and temporary downturn in economic activity. The discussion of countercyclical policy goes hand-in-hand with Sovereign Wealth Funds (SWFs) because one of the main objectives of SWFs is to invest (public) savings when times are good and sell assets during difficult times to underwrite any temporary deficit. Hence, any Latin American government that moves to undertake countercyclical policy and/or set up an SWF needs a fiscal regime that runs a long-run balanced nominal budget or a surplus (i.e. Chile’s structural 0.5% surplus). Otherwise, the move may constitute a cover for easing fiscal policy that may ultimately prove procyclical. Certainly, the recent fiscal slippage in Argentina, Brazil, and Venezuela has come during robust growth rates and on the margin are worrisome in the medium to long term.

Figure 3. Latin America: Public sector debt-to-GDP ratio



Source: IIF and Lehman Brothers.

Figure 4. Longer defaults increase fiscal dominance



Source: Gruben and Welch (2008) and Lehman Brothers.

APPENDIX

Figure 1. Latin America: Granger causality between primary balance (BAL), real interest rates (Realirate), and real GDP growth (Growth) 1995-2004.

| Bal→Realirate | Brazil | Chile | Colombia | Costa Rica | Ecuador | Mexico | Peru | Uruguay | Venezuela |
|-------------------------|---------------|--------------|-----------------|-------------------|----------------|---------------|-------------|----------------|------------------|
| χ^2 | 8.75 | 2.72 | 11.95 | 1.70 | 32.5 | 2.49 | 11.20 | 13.47 | 1.07 |
| (Prob)) | 0.03 | 0.44 | 0.008 | 0.64 | 0.000 | 0.48 | 0.01 | 0.004 | 0.78 |
| Realirate→Growth | | | | | | | | | |
| χ^2 | 8.3 | 3.6 | 8.95 | 0.51 | 2.47 | 0.42 | 5.61 | 11.6 | 9.3 |
| (Prob)) | 0.04 | 0.3 | 0.03 | 0.92 | 0.48 | 0.94 | 0.13 | 0.01 | 0.731 |
| Bal→Growth | | | | | | | | | 0.02 |
| χ^2 | 8.05 | 0.72 | 1.81 | 0.17 | 1.45 | 3.58 | 0.81 | 9.80 | 14.39 |
| (Prob)) | 0.05 | 0.87 | 0.61 | 0.98 | 0.69 | 0.31 | 0.85 | 0.02 | 0.002 |
| Growth→Bal | | | | | | | | | |
| χ^2 | 11.36 | 10.92 | 2.55 | 1.12 | 4.48 | 1.76 | 3.22 | 4.32 | 6.15 |
| (Prob)) | 0.01 | 0.01 | 0.47 | 0.77 | 0.21 | 0.62 | 0.36 | 0.23 | 0.11 |

Source: Haber Analytics and Lehman Brothers

FOCUS: EM FX STRATEGY

A macro balance approach to currency valuation in EM

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We look at fundamentals to determine the fair value of a currency

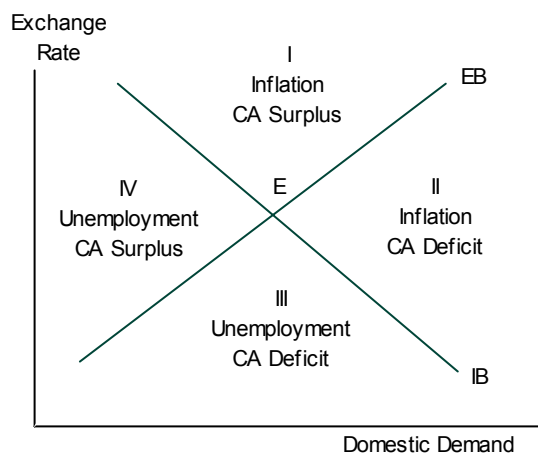
Given the good performance of EM FX during 2007, now seems an appropriate time to gauge if EM currencies present any misalignments with respect to their fair or equilibrium values in order to identify trade opportunities. We take a FEER approach and find that many EM currencies are still undervalued and that the pressure for appreciation is smaller in recent best-performers, like BRL or TRY. We also find that some are overvalued and thus should be considered funding candidates.

A CONCEPT OF EQUILIBRIUM EXCHANGE RATE

Predicting currency movements is a difficult, and some would argue, futile exercise. Perhaps even more difficult is the stipulation of fair or equilibrium values for exchange rates in the real world at any given time. Nonetheless, since the real exchange rate represents the price of domestic goods in terms of foreign ones, there are certain fundamental relationships that ascertain specific price dynamics of exchange rates in the long run. This makes it worthwhile providing a valuation framework based on those fundamentals that can be used as a benchmark.

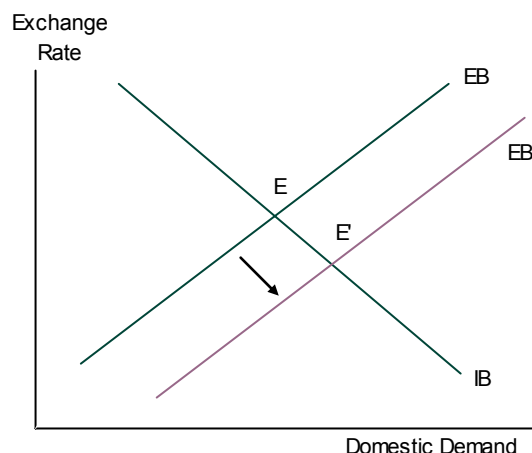
With this aim, we use the *Fundamental Equilibrium Exchange Rate (FEER)* approach to determine the fair value of many EM currencies. This methodology takes into consideration the main macroeconomic fundamentals determining the equilibrium level of a currency. This is defined as that level of a currency that is consistent with both internal and external macroeconomic balance, or in other words, the general equilibrium of the open economy.¹⁶ The rationale behind this concept is that in such equilibrium there will be no intrinsic forces that could modify the exchange rate. We next characterize the macroeconomic equilibrium under FEER and explain.

Figure 1. Internal and External Balances



Source: Lehman Brothers.

Figure 2. The Medium-run Equilibrium



Source: Lehman Brothers.

¹⁶ This concept was introduced by Williamson (1983) and later developed by several authors. See Roca and Kemen (2007) for an application to BRL, and Breedon and Papadavid (2006) for an application to G10 currencies.

Internal balance

The internal balance is achieved when aggregate demand equals the aggregate supply of goods and services produced in the economy. In an open economy, the exchange rate will affect the proportion of domestic output that is demanded by domestic residents (absorption) and by foreign ones (current account). When the currency depreciates, domestic goods become relatively less expensive than foreign goods, increasing the foreign demand for domestic output and creating inflationary pressures. To maintain the internal equilibrium with a given level of output, domestic demand needs to decrease to compensate for the rise in foreign demand. This relationship between the exchange rate and domestic demand that is necessary to maintain the internal balance is represented by schedule IB in Figure 1.¹⁷ Any combination of exchange rate and domestic demand not belonging to that curve represents a situation of internal imbalance where the output gap, the difference between aggregate demand and potential output, is different from zero. When the exchange rate is above the level determined by schedule IB for a given level of output, aggregate supply is not sufficient to satisfy aggregate demand, creating inflationary pressures (quadrants I and II). When the exchange rate is below that schedule, there is not enough demand to produce at full capacity, and consequently some of the available resources are left unemployed (quadrants III and IV).

External balance

The external balance refers to a situation in which the current account is zero. Evidently the exchange rate is one of the main determinants of the current account. A stronger exchange rate increases the price of the domestic goods vis-à-vis foreign goods, diminishing exports and increasing imports, hence creating a deficit in the current account. In this case, the external equilibrium can be re-established via lower domestic demand that will in turn decrease imports. In Figure 1, the combinations of exchange rate and domestic demand that attains the external balance are represented by schedule EB. Hence, when the exchange rate is above the level determined by schedule EB there is a current account surplus (quadrants I and IV), and when it is below that schedule there is a current account deficit (quadrants II and III).

Macroeconomic equilibrium

The macroeconomic equilibrium is characterized by both internal and external balance. In Figure 1, this equilibrium point is denoted by E, and corresponds to the intersection of schedules IB and EB. Any other point in the graph represents a situation of internal and/or external imbalance. The different quadrants characterize those imbalances. However, in the long run the economy will adjust until those imbalances disappear. For instance, if the economy is at some moment in quadrant I in Figure 1, characterized by inflation and a current account surplus, the exchange rate will appreciate diminishing the demand for domestic goods, and domestic demand will adjust accordingly until the general equilibrium is attained. That equilibrium is stable, meaning that once achieved and in the absence of external forces, the economy will remain there. As a consequence, it is natural to define as the fair value of the currency the exchange rate level determined by that equilibrium. In the long run the currency inevitably will tend to attain that level.

The FEER sustainable current account

The FEER approach is based in the above macroeconomic fundamental relation between internal and external balances with only a minor modification. The approach considers that in the short run some countries could consistently have excess domestic savings, reflected in persistent current account surpluses, while others could have excess domestic demand that creates persistent current account deficits. While it is true that in the long run the external

¹⁷ A higher value of the exchange rate in the y-axis represents depreciation.

balance will be attained, it considers that the adjustment period could be so lengthy that it could be more interesting to determine a medium-run benchmark value for the currency given by that persistent external imbalance. This is dubbed the “basic balance.” The difference in the approach compared to the standard macroeconomic framework is represented in Figure 2, in which we represent the case of a country that is commonly a net receiver of capital flows and consequently it can sustain a deficit in the current account in the medium run. The FEER valuation of the exchange rate corresponds to the medium-run sustainable level E' , instead of the long run equilibrium denoted by E .

Therefore, we can determine if a currency is over- or undervalued by comparing the actual levels of the real output gap and the current account balance with those of the particular definition of *macroeconomic equilibrium*. Moreover, we can gauge the change in the real exchange rate that would be necessary to bring the output gap to zero, and the current account to a level consistent with the basic balance. This change describes the deviation of the exchange rate from its fundamental equilibrium value.

Limitations of the analysis

Even when we consider the FEER approach a useful benchmark that is built upon solid fundamentals, the model has some limitations that are worth pointing out to make a more appropriate interpretation of results.

First, the model is purely static; it does not take into account the dynamic nature of any economic system. Hence, while the model is useful to identify and gauge the misalignments of the different currencies, it is unable to explain the speed or the path of the adjustment that the currency will follow towards the equilibrium.

Second, due to its static nature, the model lacks any treatment of expectations about the future evolution of the different variables in the economy. It is nonetheless useful in taking a snapshot of where fair value should be at a certain point in time. The inherent logic of the model is that the currency will tend to reach that value.

Third, the model does not include any nominal variables. Particularly, it explains an equilibrium value for the real exchange rate. Moreover, the model has only one trade equation with respect to the rest of the world, so we need to interpret the exchange rate as a trade-weighted real exchange rate. Consequently, it should be expected that any misalignment identified by the model will be adjusted by both variations in the nominal exchange rates and in the inflation differential with the trading partners.

BRINGING THE MODEL TO THE DATA

We apply our FEER framework to determine the fair value of EM currencies

We apply the FEER methodology to determine a fair value for several EM currencies using the latest quarterly data available (Q3 2007). The details of the model are explained in the appendix. To evaluate the model we proceed in four steps.

1. **Compute a measure of the output gap.** We measure this as the deviation of real GDP from its trend over the entire period, computed using a *Hodrick-Prescott* filter.¹⁸ The resulting output gap indicates the internal imbalance in the economy.
2. **Determine the basic external balance.** This is given by those sustainable capital flows that could finance a given current account imbalance in the medium term. The determination of flows that fall under this category is, to a certain degree, discretionary. We decided to consider only those less volatile capital flows such as FDI and long-term assets and liabilities. Once these particular flows are segregated from the balance of

¹⁸ This filter was introduced by Hodrick and Prescott (1980) in the context of analysis of the business cycle. Intuitively, it is a mathematical construct used to obtain a smooth non-linear trend of a time series by removing the high frequency variation of that series. In other words, it decomposes a time series in its low and high frequency variations, or equivalently, in its long- and short-term components.

payments, we compute their trend using a Hodrick-Prescott filter. The resulting trend indicates the sustainable level of the current account imbalance in the medium term.

3. **Include effects of domestic and foreign output gaps in the external balance.** These effects are given by the trade equations: a positive domestic output gap is consistent with higher import levels and a lower current account, whereas a higher level of economic activity abroad increases exports benefiting the current account. We resort to the literature on empirical international trade to calibrate the trade equations to each particular economy. We use the income and price elasticities of exports and imports estimated by Clavijo and Faini (1990), and Faini *et al.* (1992) for Latin American countries; those estimated by Aglietta *et al.* (2003), Bahmani-Oskooee (1998), and Central Bank of Turkey (2004) for EMEA; and those estimated by Azize (2001), Senhadji *et al.* (1998), Duttgupta *et al.* (2000), Faini *et al.* (1992), and Kee *et al.* (2004) for Asia.

Additionally, we use the measure of world output gap estimated by the OECD to include the effect of external activity on demand for domestic exports.

4. **Compute the change in the real exchange rate that would be necessary to bring the output gap to zero and the current account to its sustainable medium-run level.** This final step determines the misalignment of the currency with regard to its medium-run level that is consistent with internal balance and a sustainable imbalance on the external front.

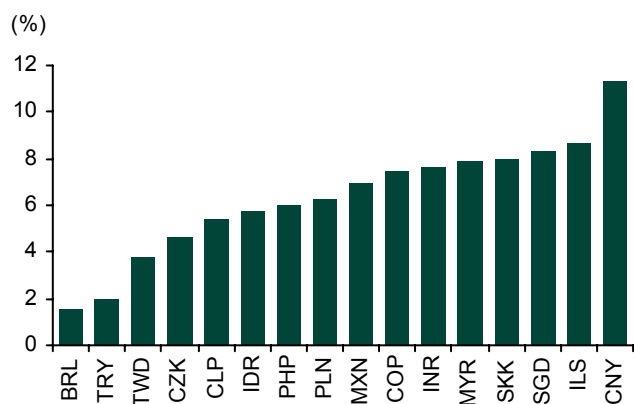
CURRENCY MISALIGNMENTS

On average, EM currencies are still undervalued

In Figure 3 we present the misalignments for different EM currencies according to our FEER methodology. In general terms, and leaving aside those currencies that are highly managed, the main characteristic is that while most currencies still show pressure to appreciate in the medium term, undervaluation is relatively small. This is the consequence of the strong performance that many EM currencies have showed in the last year. From a fundamental valuation, there is still some room for further appreciation, but entering a year in which we expect higher volatility and risk aversion, it will be particularly important to best identify the opportunities.

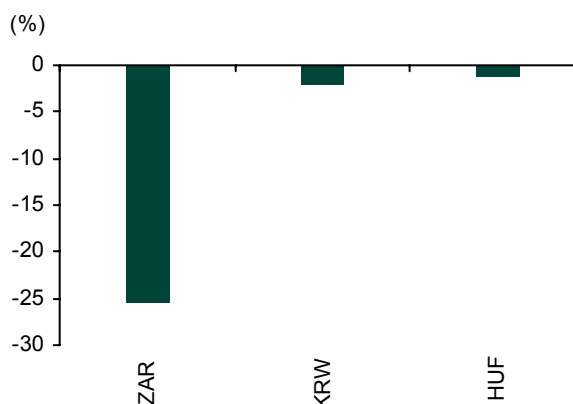
In **LATAM**, the undervaluation of its main currencies has been the result of important current account surpluses originated from soaring commodities prices. Other relevant factors

Figure 3. Undervalued Currencies



Source: Lehman Brothers.

Figure 4. Overvalued Currencies



Source: Lehman Brothers.

have been the important inflow of funds attracted by strong growth and improving economic fundamentals. These were reflected in the surge of FDI and stock market performances.

Our FEER analysis shows that BRL is now approaching its fair value after being one of the best EM performers in 2007. BRL has appreciated considerably during 2007 on the back of a positive current account, attractive carry, and low macro risk, but our model indicates that the pressures for appreciation may be fading. Moreover, if we consider that the current account may slip into a deficit during 2008 as our economists estimate, the outlook for BRL is not particularly attractive.

The analysis also shows that COP is the most undervalued currency in the region. Colombia has been improving its macroeconomic fundamentals and institutions but the high volatility that is characteristic of this currency due to thin liquidity in its market, and the bouts of risk aversion over recent months, have precluded COP from adjusting faster towards its fair value. As a consequence, COP has underperformed other currencies in the region and pressures for appreciation still persist.

From the analysis of the external sectors of several **EMEA** countries, we have generally found that the region is most at risk.¹⁹ However, from our FEER estimates we see that in fact, misalignment pressures on our currencies over the medium term are pretty mild, with the exception of ZAR. Indeed, during the recent Goldilocks years the countries we have analyzed have courted inward investment from Europe and further afield to great effect, and as Eastern Europe moved further towards European integration this has solidified. Turkey and Hungary show the least valuation pressure, which is consistent with our definition of the sustainable balance. Israel, with one of the larger undervaluation pressures, is an interesting case. As an economy that is highly competitive and that has run huge surpluses, it can afford for its currency to appreciate. This appreciation has not yet happened and looking at the real exchange rate in other metrics, produces similar results. Slovakia is a similar case and other countries have scores which we believe are intuitive.

South Africa is the standout of the region. We have long said that it was overly reliant on portfolio flows (equity in particular) and that this was a key weakness. Indeed, when we exclude the portfolio flows to compute the FEER estimate, the current account looks unsustainably underfunded. FDI has only recently picked up as capital controls and other constraints have been lifted, but it is likely to remain sluggish given various domestic macroeconomic problems as well as a strong pickup in outward investment as South African companies gain maturity and size. A deep onshore financial market has been able to accommodate investors so far, although the outlook is uncertain.

The strong fundamental undervaluation of **ASIAN** currencies, particularly CNY, SGD, MYR and INR has been underpinned by a combination of solid current account surpluses and robust FDI inflows. Notably, China's real exchange rate is the most undervalued according to our macro-balance model. Gradual capital account liberalisation and heavy intervention by Chinese authorities have kept the nominal bilateral exchange rate of the CNY artificially low, supporting exports and the current account surplus. The other major driver has been the strength of net FDI, which along with the trade surplus is seeing structural support from foreign-invested enterprises using China as an outsourcing platform. On the other end of the spectrum, our FEER model suggests that KRW is slightly overvalued in real terms, and consistent with official rhetoric. This overvaluation has emerged on the back of the sustained capital outflow since June 2005.

¹⁹ See "Damocles: More than meets the eye", 30 November 2007, *Global Economics*, Lehman Brothers.

Exchange rate response to changes in fundamentals differs across countries

SENSITIVITY ANALYSIS

One of the advantages of having a model of exchange rate determination is that it allows identifying and quantifying the inter-relations among the different variables included in such a model. For our purposes, it is important to understand how the valuation of the different currencies is affected by changes in macroeconomic fundamentals. These differ across countries because the particular characteristics of the economic institutions in each country determine the magnitude of the responses of the exchange rate to changes in fundamentals. Evidently, countries presenting different trade elasticities or different degrees of commercial openness adjust differently to internal and external imbalances. In our simple model, those differences are captured by the different parametric calibration that we make of the trade equations in each country.²⁰

With that purpose, we perform several comparative static exercises to calculate the elasticity of the exchange rate with respect to the domestic and external output gaps, the CA/GDP ratio, and FDI. The results are presented in Figure 5.

In general terms, and as should be expected from this model, the main driver is the change in the current account. The adjustment is clearly heterogeneous among countries with some, such as India, Mexico and Brazil, needing a considerable change in their exchange rates to diminish the CA/GDP ratio by 1%, while other countries like Hungary or Slovakia only need a small change in their exchange rate to produce the same result. In regional terms, LATAM currencies have on average a higher sensitivity to current account movements than EMEA currencies.

Currencies have less sensitivity to variations in domestic and foreign output gaps because these indirectly affect the current account via variations in the demand for exports or imports. On average, the Asian currencies show a greater sensitivity to changes in these variables.

Finally, it is important to understand how FDI influences the exchange rate in this model. As one of the main components of long-term financing, FDI influences the currency indirectly by modifying the sustainable level of the current account. Hence the elasticities in the case are smaller, but nonetheless important when we take into account that the swings in FDI flows are usually of many percentage points. On average, EMEA currencies present the higher sensitivity to these flows.

In a changing environment such as the one we are entering, in which we may see important changes in macroeconomic fundamentals, having a measure of how much each currency responds to its main drivers ought to, in our opinion, prove a useful tool for investors.

Figure 5. Exchange rate sensitivity to fundamentals

| Elasticities | LATAM | | | | ASIA | | | | | | | | EMEA | | | | | | |
|--------------------|-------------|-------|-------------|-------------|-------|-------------|-------|--------------|-------|-------|--------------|--------------|-------|-------|-------------|-------------|-------|-------|-------|
| | BRL | CLP | MXN | COP | CNY | SGD | MYR | INR | PHP | IDR | TWD | KRW | CZK | HUF | ILS | PLN | SKK | ZAR | TRY |
| Domestic OG | 0.09 | 0.59 | 0.67 | 0.77 | 0.55 | 1.49 | 0.68 | 2.40 | 0.78 | 0.69 | 2.41 | 0.68 | 0.01 | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 | 0.01 |
| World OG | -0.39 | -0.19 | -0.47 | -1.14 | -0.38 | -2.69 | -0.47 | -4.29 | -0.39 | -0.61 | -2.64 | -2.26 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 |
| CA/GDP | 4.30 | 0.85 | 5.19 | 2.93 | 0.81 | 0.48 | 0.34 | 6.20 | 0.77 | 2.81 | 3.17 | 1.18 | 0.57 | 0.20 | 1.38 | 0.52 | 0.16 | 1.89 | 0.19 |
| FDI (x 10%) | 0.10 | 0.06 | 0.08 | 0.20 | 0.10 | 0.08 | 0.00 | 0.08 | 0.00 | 0.06 | 0.02 | 0.02 | 0.16 | 0.12 | 0.36 | 0.25 | 0.08 | 0.48 | 0.11 |

Source: Lehman Brothers

²⁰ In the appendix we explain this calibration.

CONCLUSION

We have computed the valuation misalignments of several EM currencies with respect to their FEER value. We have also obtained the magnitude of the sensitivity of those currencies with respect to changes in those fundamentals.

These exercises are important because they help us to identify potential trade opportunities among EM currencies. Since we expect economic forces to tend to act against those misalignments, it is reasonable to use the overvalued currencies to fund long positions in the undervalued ones. From our analysis ZAR, KRW and HUF appear to be funding candidates. On the other side, those that are highly undervalued and float more freely, like MXN or PLN are candidates for a long position. Once we have identified these opportunities it is also important to evaluate the risk/reward properties of the trade and finally check its consistency with our view on the evolution of macroeconomic fundamentals. Please see our trade recommendations in “*Searching for value and rate cuts*” elsewhere in this publication.

APPENDIX

We use a simple balance of payments model. The current account expressed in terms of exports is given by:

$$CA = X - RM,$$

where X represents the exports of good and services, R denotes the real exchange rate, and M is imports of good and services.

Log-linearizing this relation around the balanced level of the current account ($CA=0$) we obtain:

$$ca = \mu(\tau x - r - m), \quad (1)$$

where ca is the change in the current account/GDP ratio, x denotes the change in exports, r is the change in the real exchange rate, and m is the change in imports. The constants μ and τ result from the log-linearization. They respectively represent the import/GDP and export/import ratios.

To close the model, we need to explain the determination of exports and imports. These are functions of their respective demand and of competitiveness (determined by the real exchange rate). Hence, the trade equations can be expressed as:

$$x = \eta_x y_f + \varepsilon_x r, \quad (2)$$

$$m = \eta_m y - \varepsilon_m r, \quad (3)$$

where y_f and y represent respectively the foreign and domestic output gaps, while η and ε are the income and price elasticities.

Equations (1) to (3) form our model. We calibrate the model to each economy by setting the values of μ and τ according to trade and national account data, and by using elasticities values computed in the cited literature on international trade.

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ARGENTINA: OUTLOOK

Fast-paced muddling through

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Rapid growth will likely be challenged by inflation and the distorted business environment

The current pro-cyclical fiscal policy is not being cured, despite an effort to shore up fiscal revenues

Difficult negotiations on remaining defaulted debts

The nominal exchange rate should remain stable

Inflation and poor microeconomic policies will likely put Argentina to the test in 2008.

ECONOMIC OUTLOOK

Argentina is coming to the end of its fifth year of growth above 8%. The strong domestic momentum remains in place and we expect macro policies to maintain the pace of demand growth. On the other hand, potential output has failed to keep pace, spurring inflation. Although the authorities report inflation at 8.5% for 2007, other indicators put the genuine rate of price increases closer to 20%. To contain runaway inflation, the government has resorted to a number of microeconomic distortions which, while temporarily successful, create a very negative business environment. 2008 promises to be a watershed year on this front. The authorities' macro and microeconomic policies look set to be tested early on, and further acceleration of inflation could undermine the government's popularity.

After a very noticeable pro-cyclical fiscal easing in 2006 and 2007, the government is putting in place a tax package that we expect to deliver a fiscal adjustment of more than 1% of GDP. The tax initiatives (exceeding 2% of GDP) are expected to be partially matched by expenditure increases. Furthermore, we judge the taxes to be highly distortive, absorbing the additional positive impulse to aggregate demand stemming from higher terms of trade, rather than containing burgeoning domestic demand. Nevertheless, the additional fiscal revenues should aid the authorities on the financing front and be a handy disciplining political device. Provincial fiscal numbers, already in deficit, look set to keep deteriorating.

On the external front, we see difficult negotiations on curing the six-year-old Paris Club default. After this process is closed, we think the authorities will turn their attention to the creditors who held out in the 2005 debt exchange. Argentina's financing looks manageable, but challenging. In 2008, we estimate that the government needs to raise \$4.7bn in market debt, slightly less than in 2007. But we note that 32% of the bonds issued in 2007 were placed through Venezuela, a distortive last-resort practice that should be wound down.

Fast inflation and low policy credibility, plus the comfort of an undervalued currency, are likely to lead to an increasing focus on the exchange rate as a nominal anchor. We expect continued real appreciation of the peso against the dollar in 2008 and a shrinking of the current account surplus. International reserves should accumulate, but at a slower pace.

The outlook at a glance

| | 2007F | 2008F | 2009F |
|---|-------|-------|-------|
| Real GDP, %chg | 8.3 | 5.5 | 3.7 |
| Unemployment rate % (end of period) | 8.5 | 8 | 8.2 |
| Consumer prices, % chg (Dec/Dec)* | 8.5 | 12 | 15 |
| Short-term interest rates (end of period) | 12 | 15 | 18 |
| Fiscal balance, primary % GDP | 2.2 | 3.6 | 3.3 |
| Total public sector debt % GDP** | 57.1 | 51.5 | 47.3 |
| Exchange Rate ARS/US\$ (end of period) | 3.15 | 3.23 | 3.4 |
| Real Exchange Rate/US\$ (avg Dec 2001=1) | 1.85 | 1.74 | 1.63 |
| Current account balance %GDP | 2.2 | 1.0 | -0.1 |
| International Reserves US\$bn | 45 | 50 | 50 |

Table last revised, 4 December 2007

* Estimated officially reported inflation

** Debt calculation excludes bonds untendered in the 2005 exchange

Manageable financing needs (US\$ bn)

| | 2007F | 2008F |
|---|-------------|-------------|
| Financing Needs | 16.3 | 20.0 |
| Total interest payments | 4.2 | 4.9 |
| IFIs debt amortizations | 2.6 | 2.2 |
| Debt amortizations (ex IFIs) | 7.3 | 9.1 |
| Debt buyback and GDP warrant payments | 1.3 | 2.5 |
| Transfers to provinces and judicial claims | 1.0 | 1.5 |
| Financing Sources | 16.4 | 20.1 |
| Primary Surplus Treasury | 4.4 | 8.7 |
| Tax withholding from provinces (Bogar) | 1.0 | 1.2 |
| Use of previous-year financing cushion | 1.0 | 0.0 |
| WB/IADB rollover | 2.3 | 2.3 |
| Central Bank Assistance to Treasury | 0.0 | 0.0 |
| Intra-public sector debt (rollover + new resources) | 1.5 | 3.2 |
| Market debt | 5.6 | 4.7 |
| Other | 0.6 | |
| <i>Memo: Surplus public agencies</i> | 2.2 | 2.8 |

Source: Lehman Brothers based on MacroVision Consulting.

Source: Lehman Brothers.

December 14, 2007

BRAZIL: OUTLOOK

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Growth will likely continue to accelerate into 2008...

...but a stronger fiscal effort seems unlikely ahead of regional elections in October

This should push the current account into deficit for the first time in six years...

... keeping the Banco Central cautious

And now for something completely different...

Brazil's economy is shaping up very differently from the past four years. High GDP growth will likely tip the current account into deficit keeping the Banco Central cautious.

The economy has continued to accelerate in H2 2007 and we do not expect it to start slowing until late 2008. We expect growth to end 2007 at 5.3%, well above our long-term sustainable growth estimate of 4.2%. Cautious monetary policy and a deteriorating current account should help GDP move back toward the mean in 2008, to end the year at 4.4%.

A stronger fiscal effort is a more efficient way to combat high real demand growth. But the Lula administration has shown no appetite for such action. Faced with the possible rejection of an extension of the CPMF transactions tax, the finance minister has threatened to lower the primary fiscal surplus target and raise income taxes (a move that would not nearly offset the loss of BRL 40bn in CPMF revenues) instead of cutting expenditure. Moreover, regional elections in October will likely generate additional pressure to relax fiscal policy. This means the public sector net debt to GDP ratio will likely decline at a snail's pace; we do not expect it to fall below the key 40% level until 2009.

Robust demand growth and the strong BRL are fostering high import growth. Despite continued strong exports, we expect the current account surplus of 0.6% of GDP in 2007 to turn into a deficit of 0.1% of GDP in 2008 – the first such deficit in six years. We expect a trade surplus of \$30bn in 2008.

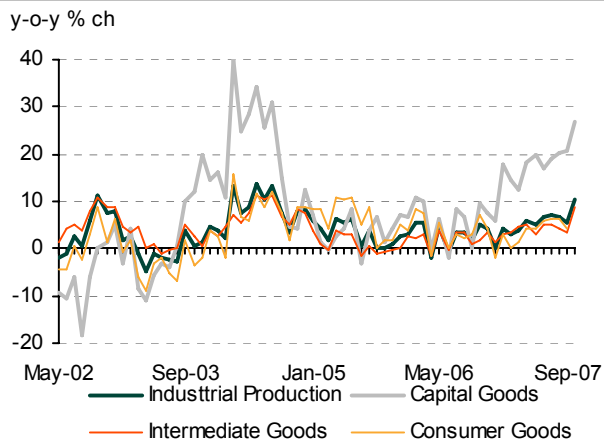
With growth in aggregate demand robust and in the absence of fiscal tightening, the Banco Central will likely remain cautious throughout 2008. We expect it to stay on hold until the end of Q1 2008, then to cut its SELIC target rate cautiously, from 11.25% at present to 10.75% by Q3 2008. The October mid-term elections should encourage the Banco Central to stop cutting for a while to avoid the appearance of trying to influence the outcome. The Q3 2007 spike in inflation has moderated. Inflation has stabilized at around 4.2% y-o-y, which is where we expect inflation to finish in 2007. The recent spike caught a number of market participants by surprise and the local market is now pricing in a significant probability of a SELIC rate rise in 2008. Part of this steepening of the local interest rate curve reflects the effects of financial market turbulence, especially in the US. And although the steepening signals expectations of strong GDP growth, it also suggests increasing concern about slow but continual fiscal easing.

The outlook at a glance

| | 2006 | 2007 | 2008 |
|-----------------------------------|-------|-------|-------|
| Real GDP, % y-o-y | 3.7 | 5.3 | 4.4 |
| Consumer prices, % y-o-y | 3.1 | 4.2 | 4.3 |
| Short-term policy rate, end-yr, % | 13.25 | 11.25 | 10.75 |
| Fiscal balance, nominal, % GDP | -2.9 | -2.0 | -1.1 |
| Total public sector debt, % GDP | 44.4 | 44.0 | 41.2 |
| BRL/US\$, end-yr | 2.14 | 1.81 | 2.00 |
| Current account balance % GDP | 1.3 | 0.6 | -0.1 |
| International reserves US\$ bn | 86 | 173 | 184 |
| Trade balance US\$ bn | 46 | 41 | 30 |
| Total trade, %GDP | 21.5 | 23.0 | 21.0 |
| Total external debt, % GDP | 15.8 | 16.1 | 13.2 |

Source: Lehman Brothers.

Industrial production growth



Source: Lehman Brothers.

CHILE: OUTLOOK

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*Economic activity is
weakening...**... while inflation is
accelerating ...**... and external demand is
losing strength...**... creating a more challenging
environment for policymakers*

At a turning point

*Policymakers will be increasingly challenged by a deteriorating macroeconomic scenario.***ECONOMIC OUTLOOK**

Chile is expected to grow at around potential in 2007, but the economy has not evolved along a balanced path. While economic growth accelerated vigorously above potential in the first half of the year, it slowed just as quickly in the second. On the supply side, the rise in the cost of energy – originating from the shortage of Argentinean gas and the spike in the price of oil – is seen as the main culprit behind growing excess capacity. On the demand side, weaker real disposable income and the highest unemployment rate in more than a year negatively affect private domestic consumption. We expect the economy to continue this decelerating trend during 2008 in a context of lower aggregate demand and only mildly less stringent energy costs.

The second half of 2007 has also been characterized by a turning point in inflation. After being contained for many years, prices have soared in recent months to hit 7.4% y-o-y in November. The acceleration in inflation has been mainly attributed to highly volatile food and energy prices, and as a consequence, it is expected to recede in coming months. Accordingly, inflation expectations two year forward – the horizon of monetary policy – have remained well anchored at 3% y-o-y. While in our benchmark scenario we expect inflation to decrease to 3.4% by the end of 2008, we also consider that there are some warning signs: Core inflation has been rising, together with headline inflation to reach 5.6% y-o-y in November; inflation expectations one year forward have entered an uptrend and now stand at 3.6% y-o-y; nominal wages are now increasing at 8.3% y-o-y, indicating that some pressure may begin to appear from second-round effects.

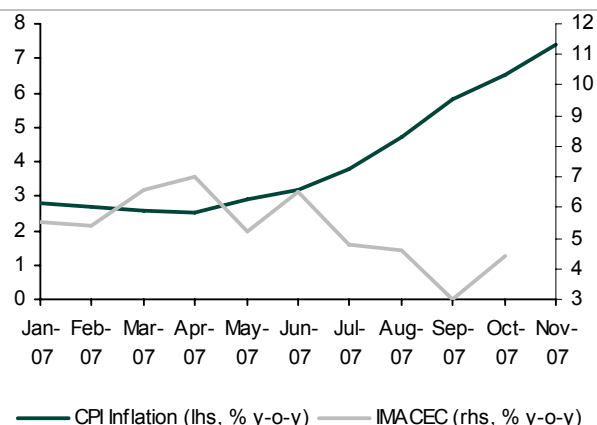
On the external front, we expect a decrease in the current account surplus due to less supportive copper prices in the likely global slowdown. With a reduction in appreciating pressures, we expect the peso to trade range-bound against the US dollar for some months before suffering a mild depreciation due to a recovery of the American currency.

The recently appointed governor of the central bank is undoubtedly facing more complex internal and external scenarios. The well-earned credibility of the central bank is providing some room to maneuver, but if inflation does not come down as fast as expected, that credibility could be reduced, making more difficult an already complicated monetary policy trade-off.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|-----------------------------------|-------|-------|-------|
| Real GDP, % y-o-y | 5.1 | 4.6 | 4.1 |
| Consumer prices, % y-o-y | 7.8 | 3.4 | 3.0 |
| Short-term policy rate, end-yr, % | 6.00 | 5.75 | 5.50 |
| Fiscal balance, nominal, % GDP | 7.9 | 7.0 | 6.7 |
| Fiscal balance, primary % GDP | 8.5 | 7.5 | 7.0 |
| Total public sector debt, % GDP | 29.0 | 27.7 | 26.2 |
| CLP/US\$, end-yr | 505 | 520 | 530 |
| Current account balance, % GDP | 4.1 | 2.3 | 1.0 |
| International reserves, US\$ bn | 16570 | 17126 | 17584 |
| Total external debt, % GDP | 28.5 | 26.0 | 24.7 |

Source: Lehman Brothers.

Diverging paths

Source: Banco Central de Chile.

CHINA: OUTLOOK

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The unmasking of overcapacity

An export-led slowdown could reveal the severity of overcapacity in China.

We see three main trends in China's economy in 2008.

First, real GDP growth should fall below 10% on an annual basis for the first time in six years. Growth should remain buoyant in H1 – as rapid credit growth continues to fuel investment – but, led by exports, will likely start to slow in H2. Chinese exporters are already facing pressures from: an appreciating currency; cuts to VAT rebates; rising prices of land, labour, energy and natural resources; and higher standards relating to environmental protection, labour conditions and product quality. Now global demand is set to slow. We doubt that exporters can avoid feeling the impact of these headwinds.

Second, CPI inflation may decline sharply after Q1 and could fall below 3% in H2. While the long-term trend of inflation is on the rise, the surge in 2007 was mainly driven by accelerating food prices, which should prove temporary as food supply increases in 2008. As a result, annual inflation should fall to 3.8% in 2008 from 4.7% in 2007.

Third, the trade surplus should continue to widen, since import growth will likely slow as well due to the high import content of China's exports and weaker growth. Thus we expect a liquidity surfeit to continue as the central bank intervenes in the FX market.

However, we also see heightened risks in the economy, especially in H2. First, after years of over-investment, China has built up huge production capacity, which has been absorbed largely by ramping up exports. An export-led slowdown would reveal the overcapacity, leading to an inventory build-up and aggressive price cuts in H2, both of which would undermine firms' profitability and ability to repay bank loans. Job losses would likely follow, together with rising non-performing loans (NPLs).

Second, the financial sector may be under significant pressure. Weaker profit growth may undermine the high price-to-earnings ratios of Chinese stocks, a possible trigger for a prolonged market correction. Interest rate hikes in 2007 have increased the burden on the households to repay mortgages, another potential factor for higher bank NPLs. With stock market capitalisation now over 120% of GDP, with 18% of household financial assets in stocks and mutual funds, and with mortgage loans over 10% of total loans outstanding, these risks are no longer negligible for Chinese banks and households.

For its part, we expect the People's Bank of China to (1) keep interest rates on hold; (2) hike the reserve requirement ratio by 350bp; and (3) accelerate the pace of renminbi appreciation against the US dollar from 5% in 2007 to 7% in 2008.

The outlook at a glance

| % y-o-y unless otherwise stated | 1Q07 | 2Q07 | 3Q07 | 4Q07 | 1Q08 | 2Q08 | 3Q08 | 4Q08 | 2007 | 2008 | 2009 |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Real GDP | 11.1 | 11.9 | 11.5 | 10.8 | 10.8 | 10.2 | 9.5 | 8.8 | 11.3 | 9.8 | 8.8 |
| Retail sales | 15.0 | 15.8 | 16.8 | 17.9 | 17.3 | 16.0 | 14.3 | 14.0 | 16.4 | 15.4 | 15.0 |
| Fixed-asset investment (ytd) | 23.7 | 25.9 | 25.7 | 24.0 | 26.0 | 23.0 | 20.0 | 20.0 | 24.0 | 20.0 | 18.0 |
| Industrial production | 18.2 | 18.3 | 18.1 | 17.5 | 18.0 | 15.0 | 14.0 | 12.0 | 18.0 | 14.8 | 12.0 |
| Exports | 27.8 | 27.5 | 26.3 | 22.4 | 20.1 | 18.0 | 15.0 | 15.0 | 25.8 | 16.8 | 10.0 |
| Imports | 18.2 | 18.2 | 20.8 | 22.8 | 17.2 | 16.0 | 16.0 | 15.3 | 20.1 | 16.1 | 14.0 |
| Trade surplus (US\$bn) | 46.4 | 66.2 | 73.2 | 81.9 | 61.6 | 82.7 | 81.6 | 93.4 | 268 | 319 | 307 |
| Current account surplus (% of GDP) | | | | | | | | | 11.0 | 9.8 | 8.8 |
| Consumer prices | 2.7 | 3.6 | 6.1 | 6.5 | 6.0 | 4.6 | 2.4 | 2.2 | 4.7 | 3.8 | 3.0 |
| 1-yr bank lending rate (%) | 6.39 | 6.57 | 7.29 | 7.56 | 7.56 | 7.56 | 7.56 | 7.56 | 7.56 | 7.56 | 7.56 |
| 1-yr bank deposit rate (%) | 2.79 | 3.06 | 3.87 | 4.14 | 4.14 | 4.14 | 4.14 | 4.14 | 4.14 | 4.14 | 4.14 |
| Reserve requirement ratio (%) | 10.00 | 11.50 | 12.50 | 14.50 | 15.50 | 16.50 | 17.50 | 18.00 | 14.50 | 18.00 | 18.00 |
| Exchange rate (CNY/USD) | 7.73 | 7.61 | 7.51 | 7.38 | 7.25 | 7.10 | 7.00 | 6.90 | 7.38 | 6.90 | 6.50 |

Note: All forecasts are modal (ie, the most likely single outcome). Table last revised on 11 December, 2007.

Source: CEIC and Lehman Brothers.

COLOMBIA: OUTLOOK

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Moderating expansion

Next year, calibrating the slowdown in economic growth will be a challenge for policy makers. The current account and fiscal deficits remain the weakest links in 2008.

Following two impressive years of growth near 7%, growth should decelerate in 2008 to about 5% on monetary tightening this year and a generally uncertain outlook for the world economy. Private consumption and investment will remain the primary drivers of GDP. Investment, in particular, now figures at over 25% of GDP and it is lifting the long-term sustainable rate of growth.

In 2008, external accounts will be worth watching closely: more deterioration is likely in the current account from the already appreciable shortfall there, largely due to slower growth in exports, in particular to the US and Venezuela, Colombia's main markets. Import growth is also set to moderate, yet not at the pace of exports. Nonetheless, long-term capital inflows, particularly FDI in the oil sector, should continue to provide the required financing of the external deficit.

As the economy slows, fiscal vulnerabilities may also increase. The consolidated public sector deficit is set to nearly double from 2007, as tax revenue growth softens against ongoing spending pressures. Monetary policy will also be a challenge – after November's unexpected spike, inflation expectations are no longer well-anchored. BanRep may opt to tighten further, despite already contractionary monetary conditions. Yet, while inflation risks appear to the upside, the lagged effect of tighter policy should rein in inflation as the year progresses and keep the CPI to the upper band of the target range by year-end.

The Colombian peso will likely remain stubbornly volatile. A worsening of the current account, reduced liquidity and less global market certainty are expected to conflict with periods of still-significant capital inflows. These conditions should provide opportunities for investors and leave the COP roughly unchanged by year-end from its starting point.

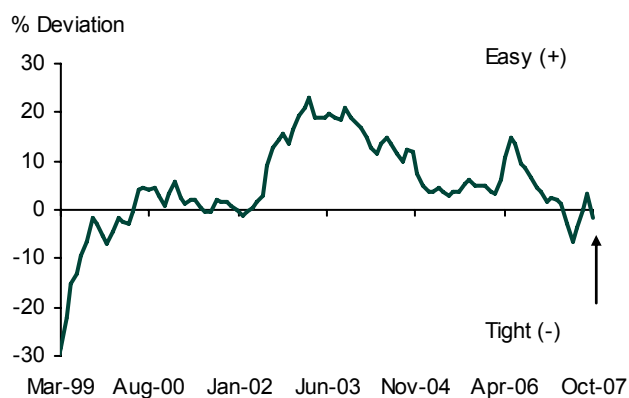
The credit outlook overall remains stable, although less stellar than in 2007. We expect little or no fiscal reforms in 2008, some fiscal slippages and no Free Trade Agreement with the US. Credit spreads may therefore remain wide to similarly rated peers, and no major ratings upgrades should be expected.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|-----------------------------------|------|------|------|
| Real GDP, % y-o-y | 6.4 | 5.0 | 5.0 |
| Consumer prices, % y-o-y | 5.3 | 4.3 | 4.0 |
| Short-term policy rate, end-yr, % | 9.50 | 9.00 | 8.00 |
| Fiscal balance, nominal, % GDP | -0.8 | -1.5 | -1.4 |
| Fiscal balance, primary % GDP | 3.4 | 2.3 | 2.3 |
| Total public sector debt, % GDP | 38.0 | 37.0 | 35.0 |
| COP/US\$, end-yr | 2100 | 2150 | 2300 |
| Current account balance, % GDP | -3.3 | -3.5 | -3.0 |
| International reserves, US\$ bn | 20 | 21 | 20 |
| Total external debt, % GDP | 25 | 25 | 24 |

Table last revised 4 December 2007

Colombia: Monetary Conditions Index



Source: Banco de la Republica, Lehman Brothers' calculations.

Source: LatinSource, BanRep, Ministry of Finance, DANE, Lehman Brothers.

CZECH REPUBLIC: OUTLOOK

Inflation on the rise

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An inflation spike in early 2008, a slowing economy and the strength of CZK pose a policy dilemma. We believe that the CNB is close to a peak in rates, however.

Economic growth to slow moderately in 2008

ECONOMIC OUTLOOK

The Czech economy looks set to post healthy growth of around 6% y-o-y in 2007, driven by domestic demand, which has been supported by relatively loose monetary and fiscal policies, falling unemployment, rising wages and ample credit. We expect growth to slow to around 4.8% in 2008, with tighter fiscal and monetary conditions likely to cool domestic demand. A more significant slowdown in Europe is clearly a risk for growth given the openness of the economy, but domestic demand dynamics should provide some cushion.

External balances remain relatively healthy

Despite the very strong trade position (goods and services surplus at 4% of GDP), the current account gap has been widening on the rising income account deficit. However, given the strong fundamental position and the launch of major new export capacities in 2009, we see no reason for alarm. The gap also remains fully covered by FDI flows. We expect the current account deficit's widening trend to slow in 2008, along with slowing domestic demand.

Inflation to surge in early 2008

A sharp rise in inflation is likely to be the key story for early 2008. We expect inflation to peak at around 6.5% y-o-y in Q1, driven by the hike in VAT and various administered prices and global food price pressures. With inflation on the rise – albeit temporarily, in our view – but growth slowing and the koruna strong, the CNB must perform a fine balancing act.

MARKET OUTLOOK

CZK strength likely to curb the CNB's appetite to hike

Given the relative strength of the Czech economy, its positive macroeconomic fundamentals and the prospect of monetary tightening, we expect the CZK to continue to perform well relative to its peers. We target EUR/CZK at 25 by end-2008. The CNB has been keen to normalise interest rates given buoyant growth and the deteriorating inflation outlook. We expect the strength of the CZK and on-target underlying inflation to curb the CNB's appetite to hike. We forecast the policy rate at 3.75% at the end of 2008.

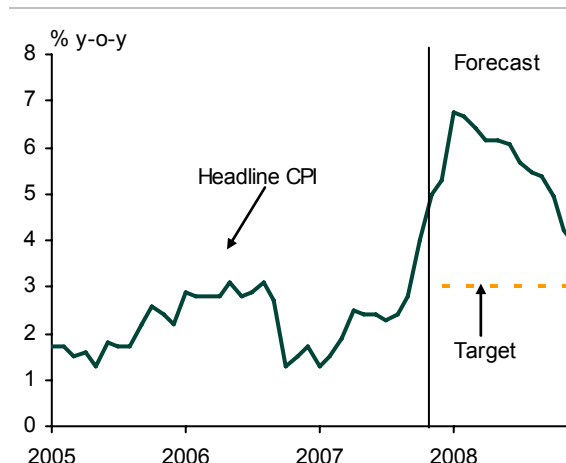
The outlook at a glance

| <i>% y-o-y, unless stated otherwise</i> | 2007 | 2008 | 2009 |
|---|------|------|------|
| Real GDP | 6.1 | 4.8 | 5.5 |
| Current account, % GDP | -3.7 | -3.2 | -2.7 |
| Fiscal deficit, ESA 95, % GDP | -3.2 | -2.9 | -2.5 |
| Unemployment rate (ILO) | 7.0 | 6.5 | 6.0 |
| Real wages, % y-o-y | 4.9 | 2.5 | 4.0 |
| Consumer prices* | 5.3 | 4.0 | 3.0 |
| Industrial output | 10.9 | 7.5 | 9.0 |
| Intervention rate* | 3.5 | 3.75 | 3.50 |
| EUR/CZK* | 26.0 | 25.0 | 25.0 |
| USD/CZK* | 17.9 | 17.9 | 18.5 |

Table last revised 11 December 2007.

** End-of-period.*

CPI inflation and interest rate outlook



Source: KSH, NBH and Lehman Brothers.

Source: Lehman Brothers.

ECUADOR: OUTLOOK

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Pandora's box

Growth in 2008 should remain fairly unremarkable, although we do expect general macroeconomic stability. The risk of policy slippage will likely rise, making fiscal accounts increasingly vulnerable to oil market dips. Politics may provide nasty surprises should the constituent assembly become a Pandora's box of potentially harmful changes.

The good news in Ecuador is clear. The economy is stable after nearly a year of the Correa administration. Although growth remains anemic relative to the region and 2008 is unlikely to be any different, prices are stable and fiscal policy appears responsible.

Government spending has yet to take off, in part because of the government's inability to adopt a more socially sensitive line of policy. On the other hand, the Correa administration appears somewhat more pragmatic than its campaign rhetoric had suggested, and strong oil-derived revenue should reduce stress on fiscal accounts. With the primary balance exceeding 1.5% of GDP in 2008, on our forecasts, financing should remain manageable. New multilateral lending beyond what is expected could also create room for maneuver.

Yet much higher than forecast oil prices and the added output from former Occidental oil fields mask the malaise at Petroecuador, where investment is lacking and output continues to slip. The oil sector is becoming increasingly vulnerable to future dips in oil markets, yet the risks look manageable over 12 months. External accounts should remain in surplus in 2008, perhaps even improving to more than 2.5% of GDP in the current account.

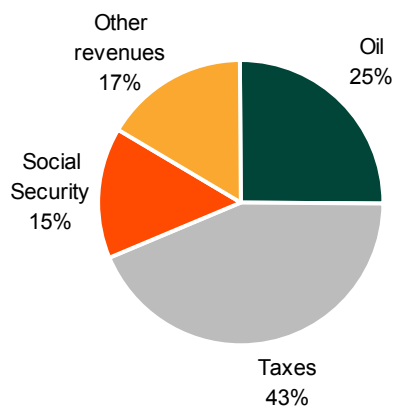
In the meantime, the government has been sending fairly market-friendly signals with regard to the future treatment of external debt. The Finance Ministry notes plans to overhaul global bonds in 2008, utilizing market mechanisms. We see little room for a large operation, however, given continued uncertainty in global capital markets and brewing confusion in the new constituent assembly. After effectively dissolving congress in December and firing the Bank Superintendent, Attorney General and other key officials selected by congress, the assembly is to rewrite the constitution in 2008, raising the risk that President Correa's more left-wing ideas may eventually see the light of day. Headline risk should increase as the assembly reorganizes the government's priorities.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|-----------------------------------|------|------|------|
| Real GDP, % y-o-y | 2.5 | 2.9 | 2.8 |
| Consumer prices, % y-o-y | 2.5 | 2.7 | 2.6 |
| Short-term policy rate, end-yr, % | n.a. | n.a. | n.a. |
| Fiscal balance, nominal, % GDP | -0.3 | -0.5 | -0.8 |
| Fiscal balance, primary % GDP | 1.7 | 1.6 | 1.4 |
| Total public sector debt, % GDP | 31.1 | 30.0 | 30.9 |
| Exchange rate units/US\$, end-yr | 1.0 | 1.0 | 1.0 |
| Current account balance, % GDP | 1.4 | 2.7 | 1.5 |
| International reserves, US\$ bn | 3.7 | 4.0 | 4.1 |
| Total external debt, % GDP | 41 | 40 | 40 |

Table last revised 5 December 2007

Composition of fiscal revenues (previous 12 months up to 2Q 2007)



Source: Lehman Brothers

Source: Latin Source.

HUNGARY: OUTLOOK

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*High inflation and low growth
 pose a policy challenge*

*Fiscal consolidation remains
 on track*

*Growth is set to recover but
 clear downside risks*

*Expect cautious monetary
 easing*

Between a rock and a hard place

The National Bank of Hungary is likely to continue easing cautiously as long as fiscal policy remains restrictive.

ECONOMIC OUTLOOK

In our view, 2008 is unlikely to be an easy one for Hungarian policymakers. The National Bank of Hungary (NBH) faces supply-side inflation pressures and wage concerns, while economic growth has collapsed to its weakest rate in more than 10 years. We expect inflation to fall to 5.2% on average next year from 8% in 2007 but higher and more sustained food price inflation is the key risk to the outlook.

Economic slowdown was an expected side effect of the government's fiscal austerity measures, but growth slowed by far more than generally expected in 2007. Although raising Hungary's competitiveness is likely to be a key government objective in the coming years, it has to be balanced with the country's euro adoption aims. We expect fiscal policy to remain restrictive in 2008, with the budget deficit falling from 6% of GDP in 2007 to 4%, closer to the rest of the region. Continued low popularity of the Socialist party and an opposition-initiated referendum are the key risks to the fiscal outlook.

We think 2007 will prove to have been the low point for growth and that gradually recovering domestic demand should boost growth to around 2.5% in 2008 from 1.6% in 2007. Domestic demand should benefit from rising real incomes after falls in 2007, but the high leverage of households could pose a downside risk amid the global tightening of credit conditions. Given Hungary's openness and reliance on external demand, a sharper-than-expected slowdown in the euro area could also imply a downside risk to our growth forecast. With only moderate recovery of domestic demand and continued fiscal restraints, the current account deficit should fall further, to around 4.2% of GDP, in 2008.

MARKET OUTLOOK

Because of near-term inflation concerns, the NBH has eased by just 50bp in 2007, less than we originally expected. We expect the NBH to cut at a very cautious pace in the first half of 2008 (to 7% in June) but to accelerate once inflation has fallen to a more comfortable rate. We expect the NBH policy rate to reach 6.25% by end-2008 and believe that there is scope for further reduction as long as the fiscal story holds.

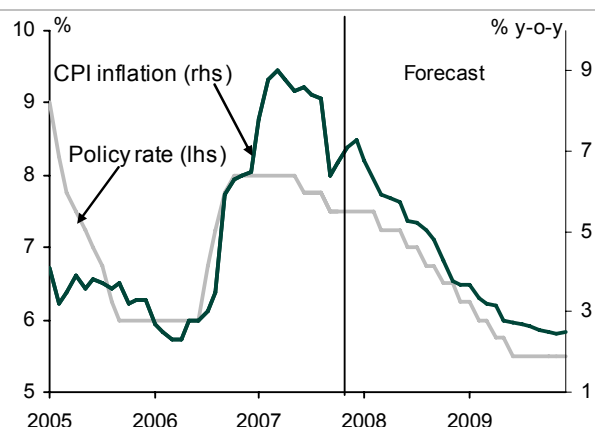
The outlook at a glance

| % y-o-y, unless stated otherwise | 2007 | 2008 | 2009 |
|----------------------------------|-------|------|-------|
| Real GDP | 1.6 | 2.5 | 3.5 |
| Current account, % GDP | -5.2 | -4.2 | -3.7 |
| Fiscal balance, ESA 95, % GDP** | -6.0 | -4.0 | -3.2 |
| Unemployment rate | 7.5 | 7.0 | 6.5 |
| Real gross wages | 0.2 | 2.4 | 3.9 |
| Consumer prices* | 7.3 | 3.7 | 2.5 |
| Industrial output | 8.5 | 8.0 | 8.5 |
| Intervention rate* | 7.50 | 6.25 | 5.50 |
| HUF basket* | -10.9 | -9.7 | -13.2 |
| EUR/HUF* | 252 | 255 | 245 |
| USD/HUF* | 172 | 182 | 181 |

Table last revised 11 December 2007.

* End-of-period. ** Including pension reform costs.

CPI inflation and interest rate outlook



Source: KSH, NBH and Lehman Brothers.

Source: Lehman Brothers.

INDIA: OUTLOOK

Seeing through the soft patch

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With the right reforms, India can achieve a potential economic growth rate of 10%.

In 2007, the central bank hiking rates and allowing rupee appreciation were prudent policy responses to tame inflation and, in the face of very strong net capital inflows, avoid relying too heavily on FX intervention. As a result, GDP growth slowed a little, but this is a small price to pay for reducing what was a threat to the sustainability of high growth. We expect India's GDP growth to slow further to 8.5% in 2008, as the global economy weakens.

The bigger macro story, to us, is India's rising potential growth rate. India is exhibiting many of the characteristics that Japan, Korea and China did during their economic take-offs: real GDP per capita is accelerating; investment and saving rates are surging; and the economy is rapidly opening up. Still ahead for India are the powerful trends of demography and urbanisation: half the population is under 25 years old and 70% still live in the countryside. India needs to strengthen its infrastructure (hard and soft), reduce its stifling bureaucracy, deregulate its labour market and further develop its financial system. If it does, our work suggests these two trends can help lift the economy's potential growth rate to 10% (see *India: Everything to play for*, October 2007). But without reforms, these trends can become a major liability, possibly reducing potential growth to 5-6%.

Pushing through reforms will remain a political challenge in the face of headwinds from coalition politics, but there should be a new window after the next election which must be held no later than May 2009. We expect the government to continue pushing through reforms because the consequences of not doing so, in terms of jeopardising the "faster and more inclusive" growth strategy, are so dire. The development of Special Economic Zones should also serve as a catalyst for reforms and the increasing autonomy of India's states is spurring reform as more reform-minded states outperform economically.

Policymakers also face challenges. The budget deficit looks set to widen due to the political cycle, high oil prices (the government gives generous oil subsidies) and a surge in civil service salaries. India cannot afford this to be the start of major fiscal slippage. The Reserve Bank of India faces the dilemma of strong capital inflows fuelling too rapid appreciation of the rupee and hurting export competitiveness, while too heavy FX intervention could result in some loss of monetary control, fanning inflation or asset price bubbles. Of the two, we judge that some loss of monetary control is the bigger risk.

The outlook at a glance

| % y-o-y growth unless otherwise stated | 1Q07 | 2Q07 | 3Q07 | 4Q07 | 1Q08 | 2Q08 | 3Q08 | 4Q08 | 2007 | 2008 | 2009 |
|--|------|------|------|------|------|------|------|------|------|------|-------|
| Real GDP | 9.1 | 9.3 | 8.9 | 8.5 | 8.6 | 8.4 | 8.7 | 8.4 | 8.9 | 8.5 | 10.0 |
| Agriculture | 3.8 | 3.8 | 3.6 | 3.0 | 3.5 | 3.0 | 3.0 | 3.0 | 3.5 | 3.1 | 4.4 |
| Industry | 11.2 | 10.6 | 9.1 | 10.0 | 9.2 | 9.0 | 9.5 | 9.5 | 10.2 | 9.3 | 10.5 |
| Services | 9.9 | 10.6 | 10.2 | 10.0 | 10.0 | 9.8 | 9.8 | 10.0 | 10.2 | 9.9 | 11.4 |
| Industrial output | 12.5 | 10.3 | 8.2 | 10.4 | 9.5 | 9.3 | 9.8 | 9.8 | 10.4 | 9.6 | 10.8 |
| M3 money supply | 21.4 | 20.4 | 21.2 | 20.8 | 20.0 | 20.0 | 20.5 | 20.5 | 20.9 | 20.3 | 22.0 |
| Non-food credit | 29.5 | 26.7 | 23.3 | 23.0 | 23.0 | 23.0 | 25.0 | 25.0 | 25.4 | 24.0 | 25.0 |
| Wholesale price index | 6.4 | 5.4 | 4.1 | 3.3 | 4.5 | 5.2 | 5.7 | 5.9 | 4.8 | 5.3 | 5.7 |
| Consumer price index (average) | 8.1 | 7.2 | 7.2 | 6.3 | 6.3 | 6.2 | 6.0 | 5.9 | 7.2 | 6.1 | 6.1 |
| Merchandise trade balance (% GDP) | -6.2 | -6.8 | -6.6 | -7.0 | -8.1 | -8.5 | -9.3 | -9.4 | -7.0 | -9.4 | -9.6 |
| Current account balance (% GDP) | -1.1 | -1.0 | -1.3 | -1.8 | -1.4 | -2.1 | -2.3 | -2.5 | -1.8 | -2.5 | -2.8 |
| Fiscal deficit (% GDP) | -3.5 | -4.2 | -3.1 | -3.3 | -3.3 | -3.3 | -3.7 | -3.5 | -3.3 | -3.5 | -3.5 |
| Repo rate (%) | 7.50 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 8.25 |
| Reverse repo rate (%) | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| Cash reserve ratio (%) | 6.00 | 6.50 | 7.00 | 7.50 | 7.50 | 7.50 | 8.00 | 8.50 | 7.50 | 8.50 | 10.00 |
| 10-year bond yield (%) | 7.94 | 8.16 | 7.89 | 7.80 | 7.75 | 7.75 | 7.70 | 7.70 | 7.80 | 7.70 | 8.00 |
| Exchange rate (INR/USD) | 43.6 | 40.8 | 39.7 | 39.0 | 38.8 | 38.6 | 37.9 | 36.9 | 39.0 | 36.9 | 34.1 |

Note: Consumer price index is a simple average of indices for industrial workers, non-manual employees and agricultural labour. Fiscal deficit is for central government. All forecasts are modal (ie, the most likely single outcome). Table last revised on 11 December, 2007.

Source: CEIC and Lehman Brothers.

INDONESIA: OUTLOOK

Maintaining improved fundamentals

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Growth fundamentals should remain intact, but higher oil prices pose a challenge.

Indonesia's economic fundamentals have improved significantly, as highlighted by a marked reduction in external vulnerability, substantial financial sector reform and a much-improved fiscal situation. Although we expect GDP growth in Indonesia to ease from an estimated 6.2% in 2007 to 5.6% in 2008, mainly because of weaker global demand, this is still less than the slowdown pencilled in for Asia ex-Japan from 8.7% in 2007 to 7.6% in 2008. Indonesia is less affected than most other Asian countries because its trade structure is not as open and it is less exposed to the US economy. While Indonesia is vulnerable to a rise in global risk aversion and capital inflows turning to outflows, its hefty FX reserves should provide a cushion. Despite a cyclical economic slowdown in 2008, we are optimistic that Indonesia's structural reforms are moving in the right direction for it to achieve its full economic growth potential of 8-10%.

With CPI inflation creeping higher, to near the top end of the BI's 5-7% target, and rising inflationary risks, we expect the BI to keep rates on hold, especially given that it has a more aggressive inflation target of 4-6% by the end of 2008. Rupiah appreciation in H2 2008 will also likely limit the scope for the BI to raise rates. However, in 2009, we expect a rebound in GDP growth, rising inflation and ample liquidity fuelled by strong capital inflows to impel the BI to raise the policy rate by 50bp to 8.5%.

The key risk factor remains oil prices and how well Indonesia can manage their impact on the fiscal deficit and the overall economy. The government's budget assumes an average oil price of US\$60/bl for 2008, which is substantially below current levels and Lehman Brothers' expectation (average US\$84/bl in 2008). With the recent increase in government oil subsidies (the government estimates that the total fuel and electricity subsidies will rise to IDR130.9tr in 2007 from a budgeted IDR84.4tr), we expect the budget deficit to increase to 2.6% of GDP in 2008, with the risk that it could be higher still. The government plans to implement various measures, including more efficient expenditure management and further revenue enhancement, to offset the higher subsidy burden, but implementation will be key, with investors closely scrutinizing related progress and developments.

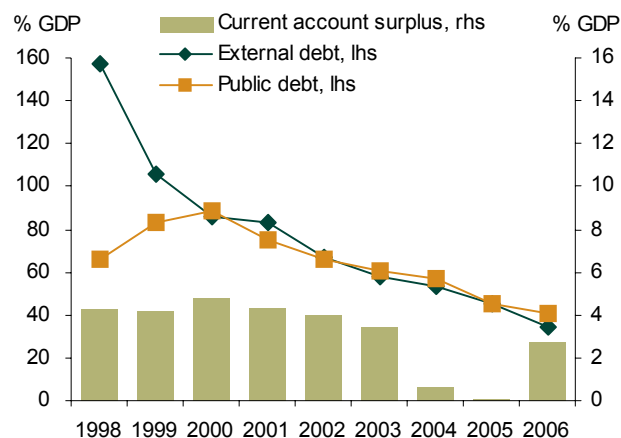
Indonesia outlook at a glance

| | 2005 | 2006 | 2007 (f) | 2008 (f) | 2009 (f) |
|----------------------------|-------|------|----------|----------|----------|
| Real GDP (% y-o-y) | 5.6 | 5.5 | 6.2 | 5.6 | 7.5 |
| CPI (% y-o-y) | 10.4 | 13.1 | 6.4 | 7.0 | 7.5 |
| Current account (% of GDP) | 0.1 | 2.7 | 2.7 | 1.9 | 1.0 |
| Official interest rate (%) | 12.75 | 9.75 | 8.00 | 8.00 | 8.50 |
| Currency (per US\$) | 9831 | 8995 | 9350 | 8900 | 8400 |

Note: Interest rate and currency forecasts are end of period.

Source: CEIC and Lehman Brothers.

Improving debt and external indicators



Source: CEIC and Lehman Brothers.

ISRAEL: OUTLOOK

Sailing strong

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Economic fundamentals are likely to remain supportive of the currency, which should in turn keep inflation pressures in check. We expect the base rate to remain at 4%.

ECONOMIC OUTLOOK

Economic fundamentals are likely to remain strong...

Israel has the strongest economic fundamentals in EMEA and we expect this to remain the case next year. On our estimates, growth is likely to slow to around 4.3% y-o-y in 2008 on the back of weaker global demand, after four consecutive years of around 5% y-o-y growth rates. However, the growing importance of domestic demand as a driver of growth should provide a cushion against sharper fallout.

...with the current account in surplus...

Israel's external position remains very strong, with the current account surplus at above 5% of GDP, combined with FDI inflows that also amount to above 5% of GDP in 2007. The surplus is likely to start diminishing, however, with domestic demand strong and the transfers' surplus having peaked. We are looking for 4% of GDP surplus in 2008.

...and fiscal position strong

Despite the continuing security challenges, public finances have remained healthy, benefiting from stronger-than-expected growth combined with prudent spending, and the 2007 budget looks to be close to balanced. The Ministry of Finance projects the 2008 budget deficit at 1.6% of GDP, but we expect it to be undershot again. Public debt – at around 81% of GDP in 2007 – is high but on a declining trend.

Inflation should remain within the BoI's target range

Inflation outlook remains very dependent on USD/ILS performance because of the high dollarisation of the economy. The linkage is weakening, however, with new rental contracts increasingly denominated in shekels. We expect CPI inflation to peak at just under 3% y-o-y in Q2 of 2008 and to fall back to the middle of the BoI's 1-3% target range by year-end.

MARKET OUTLOOK

Expect the shekel to perform strongly and rates on hold

Positive economic fundamentals, structural undervaluation of the shekel (according to our FEER framework) and the more accommodative Fed suggest continued shekel strength. We target USD/ILS at 3.75 by end-2008 but admit that a sharper turnaround in the EUR/USD trend is the key risk to our view. As we expect the shekel to remain strong, we are looking for stable base rate at 4%. However, should the shekel weaken unexpectedly we believe that the BoI will respond with monetary tightening.

The outlook at a glance

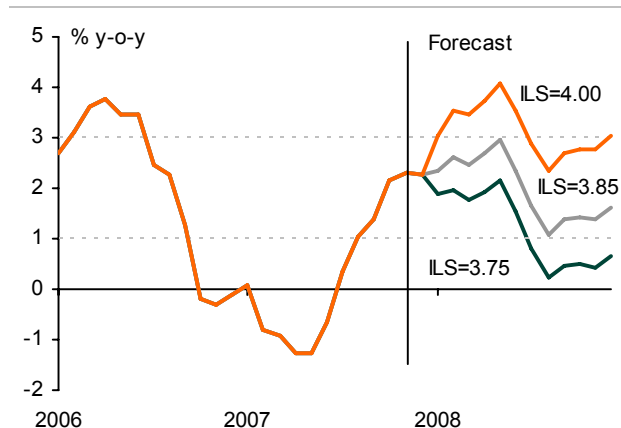
| % y-o-y, unless stated otherwise | 2007 | 2008 | 2009 |
|----------------------------------|------|------|------|
| Real GDP | 5.4 | 4.3 | 4.3 |
| Current account, % GDP | 5.0 | 4.0 | 3.0 |
| Budget deficit, % GDP | -0.5 | -0.9 | -1.3 |
| Consumer prices* | 2.3 | 1.9 | 1.5 |
| Intervention rate* | 4.0 | 4.0 | 3.5 |
| USD/ILS* | 3.88 | 3.75 | 3.75 |

Table last revised 11 December 2007.

Note: CPI forecast based on a constant ILS/US\$ at 3.85

* End-of-period.

Inflation profile



Source: BoI, CBS and Lehman Brothers.

Source: Lehman Brothers.

MEXICO: OUTLOOK

Slowing down *ma non troppo*

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Mexican GDP growth looks set to slow but not as much as in the US

Banxico will keep money tight until growth slows

Stronger growth in Mexico compared to the US will keep the USD/MXN strong

Mexican growth should slow in 2008 but not by as much as in the US. Food prices are putting more pressure on inflation and tax reform in 2008 will likely provide another price shock. Banxico is trying to cut inflation without further disrupting the economy.

Although Mexican economic growth has not slowed sharply in 2007 – in fact it picked up in H2 – the projected slowing of the US economy will ultimately affect Mexico. But unlike many observers, we do not think Mexico’s economy will slow as much as that of the US. Lehman Brothers expects US GDP to slow to 1.8% in 2008 after 2.2% in 2007, but we expect Mexican growth to slow to 2.8% in 2008 from 3% in 2007. We estimate that a slowdown in exports will contribute most to the GDP slowdown while domestic demand will likely slow because of tight money but remain reasonably strong.

Banxico has raised its target rate to 7.5% in anticipation of more pressure on food prices in 2007 and of price increases from tax reforms that come into effect in 2008. Agricultural prices are again putting upward pressure on inflation. Although inflation is in line with its expected trajectory, the Bank has said it needs to hike to keep inflation on a path towards 3%. Banxico now sees inflation converging to the 3% target at the end of 2009 instead of at the end of 2008. With upside inflation risks outweighing downside risks, Monetary policy is tightening in the face of future economic weakness. We expect Banxico to keep the fondeo at 7.5% until February 2008 and then to cut by 25bp in the face of a serious economic slowdown. We see two cuts of 25bp to 7.0 % at the end of 2008. We still expect 2008 inflation to come in at 3.7%, the same level that we expect for 2007.

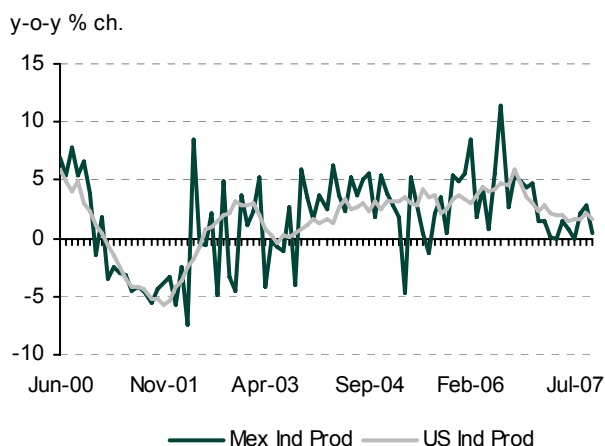
Given that we expect Mexican growth to outstrip US growth and our FX team expects USD to stop depreciating against EUR, USD/MXN should remain strong, ending 2008 at 11.09. Slower export growth should keep the trade deficit just under the USD 11.7bn deficit we expect in 2007 and, combined with flat worker remittances, increase the current account deficit to more than 1% of GDP in 2008. The expansion of the current account deficit should be sustainable because it represents about two-thirds of one month’s imports. With monetary policy tight, the fiscal stance improving in the wake of fiscal reform and external solvency indicators strong, Mexico’s assets should continue to outperform.

The outlook at a glance

| | 2006 | 2007 | 2008 |
|-----------------------------------|-------|-------|-------|
| Real GDP, % y-o-y | 4.8 | 3.0 | 2.8 |
| Consumer prices, % y-o-y | 4.1 | 3.7 | 3.7 |
| Short-term policy rate, end-yr, % | 7.0 | 7.50 | 7.0 |
| Fiscal balance, nominal, % GDP | 0.26 | -1.2 | -0.9 |
| Total public sector debt, % GDP | 38 | 35 | 32 |
| MXN/US\$, end-yr | 10.82 | 10.85 | 11.09 |
| Current account balance % GDP | -0.4 | -1.0 | -1.1 |
| International reserves, US\$ bn | 69.1 | 78 | 74.9 |
| Trade balance, US\$ bn | -6.5 | -11.7 | -11.4 |
| Total trade, %GDP | 64.4 | 64.9 | 60.3 |
| Total external debt, % GDP | 3.0 | 2.7 | 2.4 |

Source: Lehman Brothers.

Mexican and US industrial production growth



Source: Banxico and Lehman Brothers.

PERU: OUTLOOK

Auto-pilot

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The economy has become increasingly resilient to external shocks. Fiscal performance exceeds expectations, debt dynamics improve and external accounts remain buoyant. The Free Trade Agreement with the US will provide yet another important boost.

Economic growth in Peru will likely lead the region in 2008, although some deceleration from the frenetic clip observed in the last three years is anticipated. Demand should remain strong next year with business confidence high, fiscal policy prudent and the export sector further boosted through the new Free Trade Agreement (FTA) with the US.

The FTA should not only support greater export growth in 2008, but it will also improve the transfer of technology and efficiency to the export sector and lead to major new investment in Peru over the medium run. These effects add to ongoing support external accounts will receive from still-high metals and mineral prices. The current account should close 2008 still in surplus, while reserves expand by at least \$2bn.

Prudent fiscal policy, which has underpinned private sector confidence since President Garcia arrived in office, should continue even when and if Luis Carranza leaves the finance ministry. Falling levels of public support for the government and the general deceleration in the global economy do create risks for some slippage, however. Yet, the primary surplus should remain above 2.5% of GDP at year-end, rendering borrowing requirements easily handled through the domestic market. Foreign issuance is not expected in 2008, except in the form of liability management or to pre-finance 2009.

Monetary authorities should remain vigilant, as well, anchoring inflation expectations at home. As inflationary pressure linked to food and energy prices dissipates and core readings continue to show stability, the central bank should even have room to loosen policy by year-end. Having appreciated roughly 7% in 2007, the sol will more likely reverse its trajectory and close 2008 near where it began in 2007.

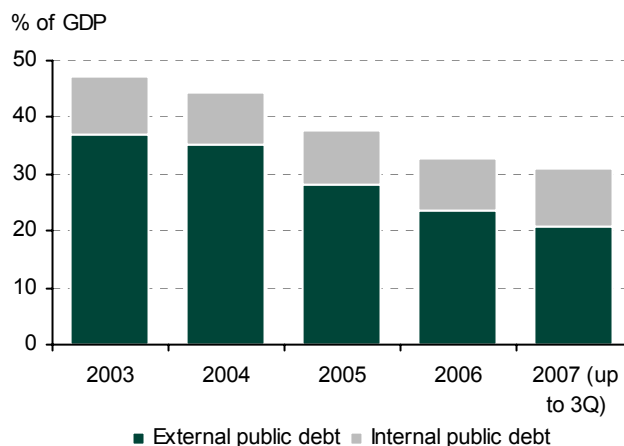
In a general sense, therefore, the economy should remain on auto-pilot, still somewhat caught in the virtuous economic cycle for most of 2008. Given the improvements, we believe the ratings agencies may take Peru to investment grade by year-end, leaving credit spreads converging on those observed for Brazil.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|-----------------------------------|------|------|------|
| Real GDP, % y-o-y | 7.2 | 5.5 | 5.0 |
| Consumer prices, % y-o-y | 3.5 | 2.5 | 2.1 |
| Short-term policy rate, end-yr, % | 5.00 | 4.25 | 4.00 |
| Fiscal balance, nominal, % GDP | 2.0 | 0.9 | 0.1 |
| Fiscal balance, primary % GDP | 3.7 | 2.6 | 1.8 |
| Total public sector debt, % GDP | 29.0 | 27.0 | 26.1 |
| PEN/US\$, end-yr | 3.05 | 3.20 | 3.22 |
| Current account balance, % GDP | 1.5 | 0.5 | -1.0 |
| International reserves, US\$ bn | 25 | 27 | 28 |
| Total external debt, % GDP | 28 | 25 | 24 |

Table last revised 4 December 2007

Public debt (% of GDP)



Source: Banco Central de Reserva del Peru.

Source: Banco Central de Reserva del Peru, Lehman estimate.

PHILIPPINES: OUTLOOK

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Philippines: Key challenges ahead

Fundamentals have improved, but higher investment is the key to growth sustainability.

Philippine GDP rose to 7.1% y-o-y over the first three quarters of 2007 from 5.4% in 2006 supported by buoyancy in consumption from overseas remittances and development expenditure by the government, with an eye on elections in 2010. We expect growth to moderate to 5.5% in 2008 due principally to a weaker global economy and high oil prices.

Economic fundamentals have improved greatly in recent years. The current account surplus has swelled to 5.4% of GDP in 2007, buoyed by overseas worker remittances, which increased to US\$10.5bn in the first nine months of 2007. Strong capital inflows have led to peso appreciation which has helped to push the external debt-to-GDP ratio below 40%. Fiscal policy has also improved significantly, with the consolidated (including state-owned enterprises) public sector balance turning to a surplus in H1 2007 and public sector debt set to fall to about 66% in 2007. Despite this, investment has remained lacklustre, at 15% of GDP, among the lowest in Asia. A revival in investment is crucial to sustain the high rates of growth and avoid the economy overheating. We judge that conditions are ripe for it, including low interest rates, a very low loan-to-deposit ratio and much improved fiscal finances.

With high commodity prices, we expect CPI inflation to rise from 2.7% in 2007 to 4.0% in 2008, but currency appreciation is likely to limit the pace of rate hikes in 2008. However, we expect the central bank to tighten its grip and hike rates from 5.5% in 2008 to 6.5% by end 2009 as we expect GDP to re-accelerate to 7.5% in 2009, as real rates are kept too low and as capacity constraints push inflation even higher to 6.0% in 2009.

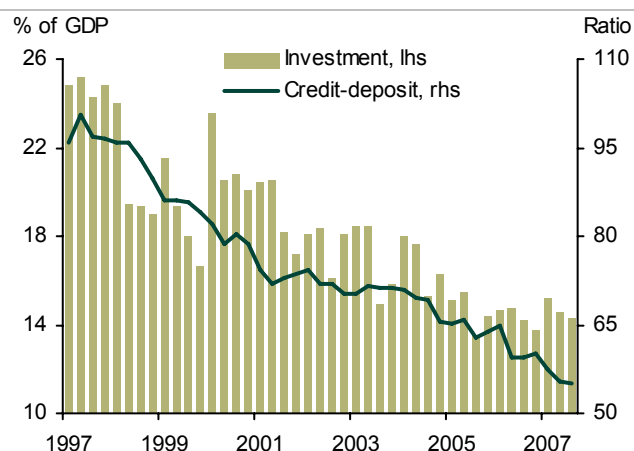
We see two key risks: sustainability of robust remittance inflows and fiscal slippage. Remittance inflows could slow due to increased global risk aversion and a weaker economic environment in the host country, notably the US and Middle East. Further appreciation of the peso against the US dollar, which decreases the value of remittances in local currency terms, could also retard remittances. Fiscal slippage is also a risk, as tax revenues have continued to disappoint and the decline in the fiscal deficit has been aided recently by an increase in one-off sales of state assets, which is unsustainable. In our view, improvement in tax collection is critical to sustain the fiscal consolidation trend.

Philippines outlook at a glance

| | 2005 | 2006 | 2007 (f) | 2008 (f) | 2009 (f) |
|----------------------------|-------|------|----------|----------|----------|
| Real GDP (% y-o-y) | 5.0 | 5.4 | 6.7 | 5.5 | 7.5 |
| CPI (% y-o-y) | 6.7 | 6.2 | 2.7 | 4.0 | 6.0 |
| Current account (% of GDP) | 2.4 | 5.0 | 5.4 | 3.5 | 2.5 |
| Official interest rate (%) | 6.75 | 7.50 | 5.50 | 5.50 | 6.50 |
| Currency (per US\$) | 53.61 | 49.0 | 42.7 | 40.5 | 38.0 |
| Credit rating : Moody's | B1 | B1 | B1 | | |
| : S&P | BB- | BB- | BB- | | |

Note: Interest rate and currency forecasts are end of period.

Philippine investment and credit-deposit ratio



Source: CEIC and Lehman Brothers.

Source: CEIC and Lehman Brothers.

POLAND: OUTLOOK

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*Medium-term economic outlook
has improved*

*Domestic demand likely to
remain strong...*

...while inflation is on the rise

*Expect the zloty to do well and
at least two more hikes from the
NBP*

Improved medium-term outlook

Economic growth is likely to remain relatively resilient while inflation pressures mount.

ECONOMIC OUTLOOK

Civic Platform's (PO) election victory looks positive for Poland's medium-term macro outlook. The new government has promised to reform public finances, continue with privatisations that were halted under the previous government and move ahead with euro adoption. That said, 2008 is unlikely to bring a major change on the fiscal front in our view as the PO-led government had little time to revise the pro-cyclical budget draft submitted by the Law and Justice. As in 2007, growth is likely to be primarily driven by domestic demand rather than net exports. The 100bp of rate hikes delivered in 2007 and higher inflation in 2008 should slow the consumer but this is likely to be offset by further fiscal stimulus. Furthermore, the labour market is likely to remain tight, keeping wage growth and domestic demand strong. We expect 5.5% growth in 2008 vs 6.5% in 2007.

The strength of domestic demand has so far not led to a rise in underlying inflation but has resulted in a wider external deficit. We expect this trend to continue in 2008, expecting the current account deficit to reach at least 4.5% of GDP. That said, it remains comfortably covered by FDI flows that should also keep up the pace next year.

While core inflation has remained low (averaging 1.4% y-o-y), the headline rate rose sharply on the back of higher food and energy prices and looks set to breach the upper end of the NBP's 2.5%+/-1% target already in late 2008. A more persistent supply shock is one of the key risks to our inflation outlook. Additionally, the breakdown of the relationship between unit labour costs and core inflation is puzzling and poses an upside risk in our view.

MARKET OUTLOOK

The NBP has hiked rates three times so far in 2007 and we expect just two more, to 5.5%, in early 2008, given the split and, at times, backward-looking views of the board. Should net inflation start to adjust to wage pressures or the food price shock prove to be more permanent, more hikes could be delivered. Given the relative resilience of Polish growth, further monetary tightening and improved medium-term outlook, we expect the zloty to outperform its regional peers in 2008.

The outlook at a glance

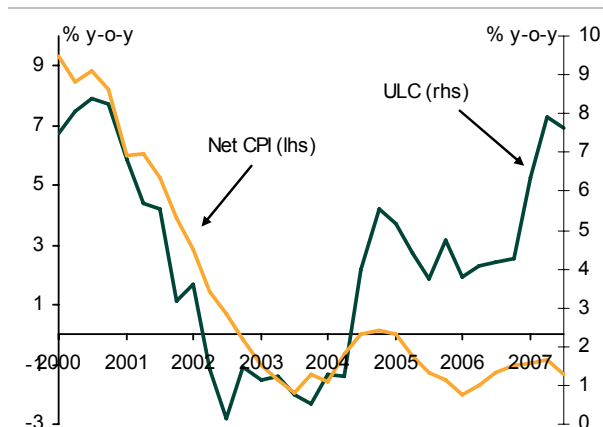
| <i>% y-o-y, unless stated otherwise</i> | 2007 | 2008 | 2009 |
|---|------|------|------|
| Real GDP | 6.5 | 5.5 | 5.0 |
| Current account, % of GDP | -4.0 | -4.5 | -4.5 |
| Budget deficit (ESA 95), % of GDP** | -2.7 | -3.2 | -3.0 |
| Unemployment rate* | 11.3 | 9.0 | 8.0 |
| Wages | 9.0 | 8.0 | 7.5 |
| Consumer prices* | 3.7 | 3.3 | 2.5 |
| Industrial output | 10.0 | 8.0 | 7.0 |
| Intervention rate* | 5.00 | 5.50 | 5.50 |
| EUR/PLN* | 3.58 | 3.50 | 3.50 |
| USD/PLN* | 2.45 | 2.50 | 2.59 |

Table last revised 10 December 2007.

** End-of-period. ** Excluding allowable pension reform deductions.*

Source: Lehman Brothers.

CPI inflation and unit labour costs



Source: NBP, GUS and Lehman Brothers.

SOUTH AFRICA: OUTLOOK

Mercury rising

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Inflation is the biggest risk especially with second-round effects appearing

Growth should remain robust, but will diversify away from consumption

Don't ignore the politics

Rates should be on hold for most of the year

Politics and monetary policy will concentrate attention in 2008

ECONOMIC OUTLOOK

Inflation remains a pressing concern and second-round effects should become evident through 2008. We expect inflation to peak in February at 8.5% y-o-y, falling to 5.9% by year end as food price inflation falls from 14.7% to 7.1%. CPIX should then remain at the upper end of the inflation band through 2009. Rising inflation expectations (which now stand at a record 5.8% for 2008, according to the latest BER survey) and unit wage costs in key industries should dampen the fall of inflation via second-round effects. The most direct impact of these effects will likely be on core CPIX, and we expect our “super-core” measure (excluding oil- and food-related components) to move from 3.8% currently to 5% in Q3. We think the South Africa Reserve Bank (SARB) is likely to be quite concerned about this.

We look for growth to moderate through 2008 as consumption slows in the wake of recent rate hikes. Growth should pick up in the fourth quarter of next year, and through 2009, as investment, both public and private, pick up pace. That said, our projected slowdown in consumption is not sharp; given that real rates should remain low and credit growth strong. Overall, growth should remain above the level we consider to be potential (3.7%).

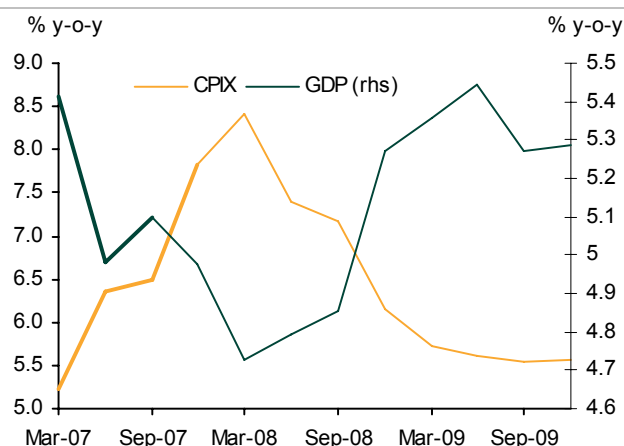
Politics should not be ignored. It is a key risk that Jacob Zuma becomes leader of the African National Congress (ANC), which would make him the favourite to win the 2009 presidential election. This could spur tension with the government, given Mr Zuma’s supporters’ belief that the government should reflect ANC power structures. An early presidential election, while unlikely, cannot be ruled out. Markets will be interested in the fate of Finance Minister Manuel, a fiscal stability stalwart. All in all, market-unfriendly noise risks equity and bond outflows, weakening the currency and driving inflation higher.

With high inflation, second-round effects, growth in excess of potential and a weakening rand, we cannot rule out the prospect of a January rate hike if real-economy data do not deteriorate. However, we think the SARB will be mindful that the peak in inflation is near. Rates should thus remain on hold for the rest of 2008 to combat rising core inflation pressures. However, we think the market will aggressively price in rate cuts, so the rand will likely depreciate through the latter half of the year in our forecast.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|------------------------------|-------|-------|-------|
| Real GDP % y-o-y | 5.1 | 4.9 | 5.3 |
| Current account % GDP | -7.5 | -8.5 | -8.3 |
| PSCE % y-o-y* | 22.00 | 21.00 | 20.00 |
| Fiscal balance % GDP | 0.58 | 0.77 | 0.67 |
| FX reserves, gross USD bn* | 33.0 | 42.1 | 53.7 |
| CPIX % y-o-y * | 8.3 | 5.9 | 5.6 |
| Manufacturing output % y-o-y | 3.2 | 2.0 | 3.8 |
| SARB policy rate %* | 11.00 | 11.00 | 9.50 |
| EURZAR* | 10.00 | 10.85 | 11.07 |
| USDZAR* | 6.80 | 7.75 | 8.20 |

Growth and inflation forecast



Source: Lehman Brothers. *End of period

Source: Lehman Brothers. CPIX is quarterly average

TURKEY: OUTLOOK

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Risky easing policy

The central bank looks set to ease policy, even though inflation is unlikely to hit target next year. We think this is risky.

The Turkish economy has so far remained resilient to global credit market turbulence. There has been no liquidity crunch in the domestic money markets and local banks have not found it difficult to gain access to new funding. This is good news, but the continuation of such a benign scenario cannot be counted on forever. That said, Turkey's capital account has improved on significantly higher FDI flows, helping to finance Turkey's still-large current account deficit. In addition, Turkey's *Damocles* score of external vulnerability has remained reasonably benign. But on a negative note, the trade deficit has continued to expand, even though domestic demand has been subdued. Moreover, recent data on the current account suggest we are right to expect a further expansion of the deficit to well above 8% of GDP next year. Unless FDI flows can keep pace, Turkey's vulnerability to external shocks could rise.

The central bank is likely to miss its inflation target again next year ...

The inflation outlook is uncertain. Because of significant supply-side pressures, inflation overshoot the central bank's target by a lot this year. But the Central Bank of Turkey's (TCMB) monetary policy committee (MPC) has begun to ease policy already, stating its belief that core inflation is a much more benign. Disinflation is on track, allowing the borrowing rate to be reduced by 125bp in the past three months. The central bank has clearly been encouraged by the resilience of the Turkish economy and of the lira, as well as by signs of falling service price inflation.

We think the TCMB is taking a risk. Although we expect 2007's supply-side shock to prices to unwind gradually in 2008, we see inflation remaining above target for most of 2008. But given its view on inflation, we expect the the MPC to cut the overnight borrowing rate to 14-14.5% from the current 16.25%.

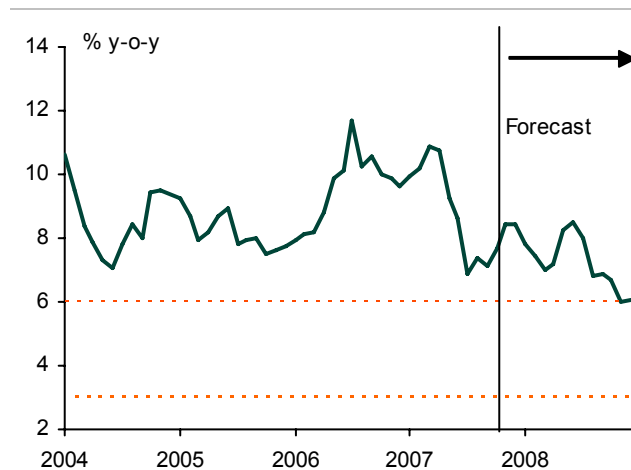
...but is still likely to ease policy further

Politics could be less of an issue in 2008. With the general election out of the way, the government should be free to concentrate on the next generation of reforms, which the economy badly needs. But so far the government has been bogged down by, first, discussions on a new constitution and, second, by cross-border operations against PKK terrorists in Northern Iraq. The key political risk, in our view, is that the government tries to push through a reform of the constitution without gaining consensus support.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|----------------------------------|-------|------|------|
| Real GDP, % y-o-y | 4.5 | 5.5 | 6.2 |
| <i>Contributions to GDP (pp)</i> | | | |
| Domestic demand | 4.5 | 5.7 | 6.5 |
| Stockbuilding | 0.1 | 0.8 | 0.8 |
| Net trade | -0.1 | -1.0 | -1.1 |
| Consumer prices*, y-o-y | 8.4 | 6.1 | 5.7 |
| Producer prices*, yoy | 6.0 | 5.5 | 5.5 |
| Primary budget ** | 4.0 | 5.5 | 5.5 |
| Current account** | -8.2 | -8.5 | -8.7 |
| Repo rate* | 15.75 | 14.0 | 13.0 |
| Benchmark T-Bill comp yield* | 16.5 | 14.0 | 13.5 |
| \$/TL rate* | 1.20 | 1.27 | 1.38 |

Inflation outlook



Source: TUIK, Lehman Brothers.

* end of period ** % of GNP
 Source: Lehman Brothers.

VENEZUELA: OUTLOOK

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Damage control

As will likely be the case elsewhere, Venezuela's remarkable growth looks set to subside in 2008. But unlike elsewhere, government spending may mushroom to bolster popular support. Oil prices should continue to provide a cushion, although most economic data reveal deteriorating trends.

Following its defeat in a referendum on constitutional reform in December, the government will likely look to regain lost support, particularly ahead of regional elections in 2008. It will reckon with numerous economic ills that have left voters dissatisfied.

The government has recently lifted price controls on milk, of which there were severe shortages in 2007 because of distorted incentives. A full repeal of controls is unlikely, in our view, but more fine-tuning should be expected, adding inflationary pressure. With liquidity still expanding, we think inflation could accelerate to near 40% by end-2008. Therefore, a devaluation of the VEB seems unlikely in 2008, although the new "strong bolivar" in January might have provided a good opportunity. The removal of three zeros from the official rate may anchor expectations, but only marginally.

Fiscal policy should expand considerably, via higher government outlays and off-balance sheet spending by PDVSA, in an effort to shore up electoral support. We estimate that the public sector deficit may double from 2007, raising concerns over the sustainability of policy. Yet liability management should become more proactive as new local issues address foreign exchange imbalances and help mop up excess liquidity related to fiscal expansion and loose monetary conditions. An improved liability profile should result.

We also expect a somewhat more lenient, although not explicit, policy to ease local market access to US dollars. This may benefit the productive sector and also aid in managing the parallel market, thereby further reducing local frictions. Moreover, although the government may maintain its "revolutionary" rhetoric, in practice it could soften its tone with the private sector, temporarily reducing headline risks.

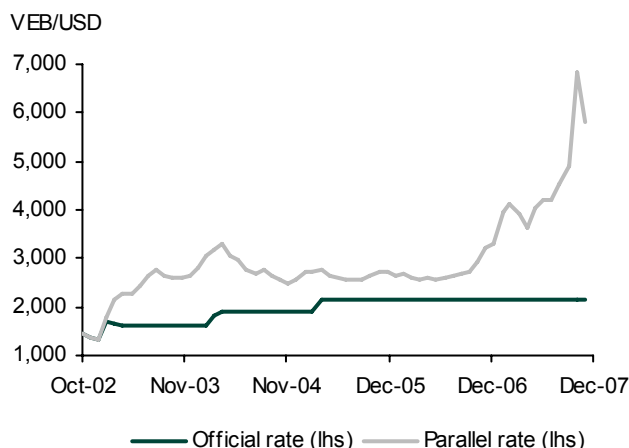
The current account surplus will also likely deteriorate, in part on lower oil output. Yet foreign reserves should accumulate further, along with a war chest of liquid government assets. Overall economic data may show deterioration in 2008, but the risks look manageable.

The outlook at a glance

| | 2007 | 2008 | 2009 |
|-----------------------------------|------|------|------|
| Real GDP, % y-o-y | 8.5 | 5.5 | 4.5 |
| Consumer prices, % y-o-y | 24.0 | 40.0 | 35.0 |
| Short-term policy rate, end-yr, % | n.a. | n.a. | n.a. |
| Fiscal balance, nominal, % GDP | -4.5 | -8.0 | -9.0 |
| Fiscal balance, primary % GDP | -3.1 | -6.7 | -7.5 |
| Total public sector debt, % GDP | 23.3 | 21.2 | 18.4 |
| VEB/US\$, end-yr | 2150 | 2500 | 3000 |
| Current account balance, % GDP | 14.0 | 9.7 | 6.6 |
| International reserves, US\$ bn | 29 | 22 | 21 |
| Total external debt, % GDP | 27 | 27 | 23 |

Table last revised 4 December 2007

Official vs parallel exchange rate



Source: Central Bank of Venezuela, Lehman estimates.

Source: LatinSource, Bloomberg.

MACROECONOMIC FORECAST

| | 2007E | 2008F | 2009F | 2007E | 2008F | 2009F |
|----------------|-------------------------------------|-------|-------|--------------------------------------|-------|-------|
| | Real GDP Growth (%) | | | Public Sector Balance (% GDP) | | |
| LATAM | | | | | | |
| Argentina | 8.3 | 5.5 | 3.7 | 0.6 | 2.0 | 1.6 |
| Brazil | 5.3 | 4.4 | 3.2 | -2.0 | -1.1 | -1.6 |
| Chile | 5.1 | 4.6 | 4.1 | 7.9 | 7.0 | 6.7 |
| Colombia | 6.4 | 5.0 | 4.9 | -0.8 | -1.5 | -1.4 |
| Ecuador | 2.5 | 2.9 | 2.8 | -0.3 | -0.5 | -0.8 |
| Mexico | 3.0 | 2.8 | 3.6 | -1.2 | -0.9 | -0.5 |
| Peru | 7.2 | 5.5 | 5.0 | 2.0 | 0.9 | 0.1 |
| Venezuela | 8.5 | 5.5 | 4.5 | -4.5 | -8.0 | -9.0 |
| EMEA | | | | | | |
| Czech Republic | 6.1 | 4.8 | 5.5 | -3.2 | -2.9 | -2.5 |
| Hungary | 1.6 | 2.5 | 3.5 | -6.0 | -4.0 | -3.2 |
| Poland | 6.5 | 5.5 | 5.0 | -2.7 | -3.2 | -3.0 |
| Russia | 8.0 | 7.0 | 5.0 | 4.0 | 0.8 | 0.7 |
| South Africa | 5.1 | 4.9 | 5.3 | 0.3 | 0.8 | 1.1 |
| Turkey | 4.5 | 5.5 | 6.2 | -2.0 | -1.5 | -2.5 |
| ASIA | | | | | | |
| China | 11.3 | 9.8 | 8.8 | n/a | n/a | n/a |
| Indonesia | 6.2 | 5.6 | 7.5 | n/a | n/a | n/a |
| Philippines | 6.7 | 5.5 | 7.5 | n/a | n/a | n/a |
| South Korea | 4.8 | 4.6 | 5.3 | n/a | n/a | n/a |
| | Consumer Price Inflation (%) | | | Public Sector Debt (%) | | |
| LATAM | | | | | | |
| Argentina | 8.5 | 12.0 | 15.0 | 57.1 | 51.5 | 47.3 |
| Brazil | 4.2 | 4.3 | 4.2 | 44.0 | 41.2 | 38.2 |
| Chile | 7.8 | 3.4 | 3.0 | 29.0 | 27.7 | 26.2 |
| Colombia | 5.3 | 4.3 | 4.0 | 38.0 | 37.0 | 36.0 |
| Ecuador | 2.5 | 2.7 | 2.6 | 31.1 | 30.0 | 30.9 |
| Mexico | 3.8 | 3.7 | 2.9 | 35.0 | 32.4 | 30.1 |
| Peru | 3.5 | 2.5 | 2.1 | 29.0 | 27.0 | 26.1 |
| Venezuela | 24.0 | 40.0 | 35.0 | 23.3 | 21.2 | 18.4 |
| EMEA | | | | | | |
| Czech Republic | 5.3 | 4.0 | 3.0 | 30.2 | 30.3 | 30.5 |
| Hungary | 7.3 | 3.7 | 2.5 | 66.1 | 66.3 | 65.9 |
| Poland | 3.7 | 3.3 | 2.5 | 46.8 | 47.1 | 47.1 |
| Russia | 10.3 | 8.7 | 8.0 | 8.0 | 7.6 | 7.4 |
| South Africa | 8.3 | 5.9 | 5.6 | 28.1 | 26.0 | 23.0 |
| Turkey | 8.4 | 6.1 | 5.7 | 52.0 | 47.0 | 45.0 |
| ASIA | | | | | | |
| China | 4.7 | 3.8 | 3.0 | n/a | n/a | n/a |
| Indonesia | 6.4 | 7.0 | 7.5 | n/a | n/a | n/a |
| Philippines | 2.7 | 4.0 | 6.0 | n/a | n/a | n/a |
| South Korea | 2.5 | 3.3 | 3.4 | n/a | n/a | n/a |
| | Current Account (% GDP) | | | Policy Rates (%) | | |
| LATAM | | | | | | |
| Argentina | 2.2 | 1.0 | -0.1 | 12.00 | 15.00 | 18.00 |
| Brazil | 0.6 | -0.1 | -0.6 | 11.25 | 10.75 | 10.00 |
| Chile | 4.1 | 2.3 | 1.0 | 5.75 | 5.50 | 5.25 |
| Colombia | -3.3 | -3.5 | -3.0 | 9.50 | 9.00 | 8.00 |
| Ecuador | 1.4 | 2.7 | 1.5 | n/a | n/a | n/a |
| Mexico | -1.0 | -1.1 | -1.5 | 7.50 | 7.00 | 6.50 |
| Peru | 1.5 | 0.5 | -1.0 | 5.00 | 4.25 | 4.00 |
| Venezuela | 14.0 | 9.7 | 6.6 | n/a | n/a | n/a |
| EMEA | | | | | | |
| Czech Republic | -3.7 | -3.2 | -2.7 | 3.50 | 3.75 | 3.50 |
| Hungary | -5.2 | -4.2 | -3.7 | 7.50 | 6.25 | 5.50 |
| Poland | -4.0 | -4.5 | -4.5 | 5.00 | 5.50 | 5.50 |
| Russia | 7.4 | 5.9 | 4.0 | n/a | n/a | n/a |
| South Africa | -7.5 | -8.5 | -8.3 | 11.00 | 11.00 | 9.50 |
| Turkey | -8.2 | -8.5 | -8.7 | 15.75 | 14.00 | 13.00 |
| ASIA | | | | | | |
| China | 11.0 | 9.8 | 8.8 | 7.56 | 7.56 | 7.56 |
| Indonesia | 2.7 | 1.9 | 1.0 | 8.00 | 8.00 | 8.50 |
| Philippines | 5.7 | 3.5 | 2.5 | 5.25 | 5.25 | 6.25 |
| South Korea | 0.6 | -0.1 | -0.3 | 5.00 | 5.00 | 5.50 |

Source: Lehman Brothers

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