

# **Emerging Market Risks**

## **An assessment of the balance of emerging market risks and the sources of crises**

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### **Introduction**

2003 may be the first year for a long time not so see an emerging market economy (EME) crisis. The Asian crisis of 1997 was followed by Russia (1998), Brazil (1999), Turkey (2000), Argentina (2001) and Brazil again (2002). Measures taken since 1997 seem to have reduced the severity and degree of financial contagion of subsequent crises; most emerging market economies moved away from fixed exchange rate regimes; short-term capital flows were much reduced and less volatile, with the continued use of capital controls by some and their slower removal by others; leverage was lower; significant changes took place in the investor base, with a sharp fall in the participation of hedge funds and portfolio flows and a rise in local securities markets (even in local derivatives markets for the management of financial risks in periods of high volatility); investors, till recently, seemed to have become more discriminatory and less herd-like, helped in part by greater transparency in data policies and strengthened domestic financial institutions including prudential supervision. Emerging markets are now more stable on account of the lessons learned since 1997.

But we have also learned the primary role of financial linkages in contagion (trade linkages play a role but it is secondary), and the central importance of balance sheet mismatches in generating the conditions for triggering crisis. Apparently-solvent balance sheets can hide potentially serious liquidity problems. Since 1997 there have been great changes in the levels and flows of capital to emerging economies. It is starting to look as though, underneath the apparently calm surface, some potentially dangerous new imbalances have developed.

### **Public Debt**

The average ratio of EME public-sector debt to GDP has risen heavily since the mid 1990s, reaching 70% today, raising concerns of debt sustainability. Over the past 30 years, 55% of defaults occurred in countries with public debt below 60% of GDP in the year before default (ignoring those that “defaulted” by inflating the problem away). Evidence indicates there is much lower ability to resist crises for any given level of public debt. Argentina, Ecuador, Pakistan, Russia, Ukraine and Uruguay have recently either defaulted or engaged in costly debt restructuring, and Turkey has faced severe fiscal difficulties related to sovereign debt.

There are difficult issues of interpretation however. Recent aggregate rises in public debt are largely the result of increases in domestic public debt since external public debt has fallen from about two-thirds to about one-half of the total (though this is still twice that in developed economies, and about 60% of total debt is effectively in

foreign currency since some of the domestic debt is linked to foreign currencies). In turn, increased issuance of domestic debt has been spurred by domestic financial liberalisation, the decline of inflation (particularly in Latin America), and the recapitalisation of banking systems (particularly in Asia), and the recognition, at last, of off-balance-sheet and contingent liabilities. A few EMEs – mostly in Asia – are running primary budget surpluses consistent with what is needed to stabilise or reduce their debt ratios. Therefore, it is not weak primary fiscal revenues that have brought about some of these debt levels. This would tend to favour a less cataclysmic interpretation.

However, the pattern is uneven. Recent sovereign debt increases are concentrated in Latin America and Asia, with the Middle East and Africa largely unchanged (though still very high), and the ratio much reduced in transition economies. Latin America is relatively more vulnerable than Asia. Argentina in 2001 had a foretaste. A deteriorating growth outlook precipitated worries by external creditors about the ability to finance a large budget deficit and rollover public debt (the ratio to GDP was 150% at end 2002 compared to 30% in the early 1990): interest rates rose heavily; there was flight of capital, and only an IMF loan prevented something worse. The response to the problems in Argentina increased the risk of a “sudden stops” in capital flows to the whole of Latin America. Argentina now runs large trade surpluses and has falling inflation, yet spreads are still very high and progress on the structural reform of banks has been slow. Argentina is still thrashing out a bargain with private creditors owed \$80bn, recently winning a 90-day reprieve. The IMF helped, in a sense, by setting terms of its \$15bn rollover so as to require a low fiscal surplus – on which the private creditors now build. In Brazil, hedging activities of multinational enterprises contributed to the turbulence in foreign exchange markets in the run up to the Brazilian presidential election in 2002. Post-election, asset prices increased sharply (real equity prices rose about 17%), spreads fell, the real appreciated by 25%. These cases indicate the continuing problem of financial market “herding”, when investors find information costly to acquire and tend to follow others in their choice of portfolio allocation (or, indeed just chase an index blindly).

Turkey still faces significant roll-over risk: the average maturity of domestically issued debt has fallen heavily, from 44 months start of 2002, to 29 months by mid 2003.

Increased public sector vulnerabilities are compounded by vulnerabilities in private sector balance sheets in a number of EMEs. In Latin America many firms are heavily dependent on foreign-currency borrowing. In Mexico, two-thirds of the debt of firms listed on the stock exchange is denominated in foreign currency, and is largely unhedged. In East Asia, there has been a sharp rise in bank exposure to household indebtedness, offset, perhaps by a decrease in exposure to corporate indebtedness. In South Korea, household debt as a share of commercial bank lending has more than doubled since 1996. The huge implicit liabilities to the South should the North collapse would interact powerfully to destabilise the South Korean economy and the region, but would also impinge on the US via large Korean reserve holdings in US instruments.

These problems have been taking place against the backdrop of historically low mature market nominal interest rates. One can't entirely rule out a repeat of 1982,

when a sharp rise in US interest rates (see below) triggered the Mexico default, and then, at least in part via herding, many other highly indebted countries followed.

## **Increases in Reserves**

Strikingly, emerging markets as a whole have become net capital exporters since 1999, with global foreign exchange reserves more than doubling between end 1995 and end 2002, reaching over \$2.5trillion. The ratio to nominal GDP is the highest since 1990.

These reserves have positive and negative impacts on the chances of emerging market crises. On the positive side, they are a form of “self-insurance” against possible lack of access to capital markets and consequent roll-over difficulties; reserves (coupled with much lower holdings of short-term debt) in most Non-Japan Asia countries now cover all external-debt liabilities falling due within one year. They also help exchange rate stability, with countries able to move away from pegged-but-adjustable to either flexible or hard pegs, whilst acting as a “shock absorber” against variable export earnings.

However, there are dangers. Firstly, the pattern is highly uneven. Reserve levels have increased most in those countries that previously experienced “sudden stops” (Korea, Taiwan, and Mexico stand out); increased risk-aversion has amplified this effect. In Non-Japan Asia, a small number of economies (mainly Taiwan, China and Korea) now account for 40% of world reserves. Meanwhile, Latin America has remained a capital-importer (though inflows to Latin America were stable during the Asian and Russia crises, they declined heavily following the Argentine debacle).

Secondly, there is almost certainly a “bubble” element driving reserves to levels that are unsustainable in the long term. The IMF World Economic Outlook study into reserves concludes that levels are way beyond what is strictly needed for insurance and exchange rate stability needs.

Thirdly, a large proportion of the new reserves is invested in US dollar-denominated assets, especially US Treasury bonds and US government-sponsored agency bonds (the latter have gone from zero in 1998 to over \$200bn in 2003). The net flows from Non-Japan Asia to the USA were \$110bn in 2002 alone, about 20% of the US current account deficit. Such low-yielding ‘safe’ assets have high opportunity cost given the investment opportunities available in the home countries. This ‘quasi-fiscal deficit’ adds up to a loss of about 1% of GDP according to IMF figures, and itself adds to the risks of an investor run during a crisis. These countries would be heavily exposed if there were a sudden downward correction in US bond prices or a large depreciation of the US dollar. The exact impact is difficult to judge since the reserves are actively managed.

Fourthly, many central banks have sterilised their accumulation of foreign exchange reserves so as not to impact domestic money supply. But this gets increasingly difficult to do, and the risk is that a rise in the money supply is simply being delayed to a point when it is less timely and more inflationary.

Fifthly, the counterpart to external reserve accumulation is internal imbalance in favour of the tradeable sector to the detriment of the non-tradeable sector, as exchange rates are held much lower than would otherwise have been the case. This is particularly so in China. If the needed future adjustment to a more stable world balance sheet is too rapid or disorganised, the risk is that these countries will be too dependent on tradeables and unable to switch smoothly and rapidly enough to domestically generated demand.

Lastly, the counterparts to such reserves are the twin deficits of the US and the need for capital import (usefully, the increase in reserves has also served to help prop up the dollar). Some would argue that it is either a clever ruse (or a very fortuitous overreaction) to have so many EMEs worried about their access to capital markets, and hence willing to provide relatively cheap capital to the US, at a time when the US – in the aftermath of its own self-inflicted bubble, and engaging in budgetary expansion even as it is making heavy tax cuts – is so much in need of inflows. But it has created another route for instability. The last time there was such a huge recirculation of surpluses – following the OPEC price hikes of the 1970s – major instabilities ensued within a decade from the imbalances generated.

More striking, once reserve accumulation is removed, there were just \$100bn of EME net inflows since 1990, or only about 1% of emerging market GDP. This is sobering given the emphasis put on financial liberalisation in explaining EME growth.

## **Bonds, Equity and Banks**

### ***Bonds***

2003 saw particularly large movements into emerging market bonds, driven in part by falling yields in mature economies. The average spread over American Treasuries has fallen from about 1,000 to around 480 basis points – a historical low. In some respects this is good; it lowers borrowing costs for emerging market governments and companies. But it has dangers. The rapid compression of spreads across markets indicates that investors, in their “rush for yield”, are becoming less discriminatory. If sentiment collapses, investors may leave the asset class uniformly regardless of underlying country characteristics. The Russia spread is 300 basis points, half that of a year ago, and Russia attracted over 15% of world bond flows in the past year. Yet one would hardly regard Russia as having recently made great strides in economic-policy reform.

It could be that the shunning of EME equities and the collapse in mature equity markets in late 2002 and early 2003, combined with extremely low bond yields, has led to a “bubble” in EME bond markets (an alternative is that investors had been irrationally holding out of EME bond markets previously). Survival of such a “bubble” would hinge on a sustained pick up in global demand (especially of US economic recovery) with continued low world interest rates, such that investors were even more willing to invest in emerging markets. As yields on mature market bonds rise, net flows to emerging market mutual funds would otherwise dry up.

When US treasury yields spiked in mid-2003 there was a sharp increase in the correlations of US treasuries and emerging markets, suggesting a risk of a sell off if

yields in mature market rose much further. The impact was greatest on high-rated emerging market bonds (which are perceived as more substitutable with mature market bonds). The spike was exaggerated by the unwind of carry trades; today's highly compressed emerging market bond spreads are particularly vulnerable to this.

Even if mature market bond yields do not move much higher (though they undoubtedly will), the steeper yield curve leads to a shift to more short-dated emerging markets instruments – which increases dangers of crises. There is also extra vulnerability on account of the concentration of crossover allocations to Brazilian bonds, which account for about 20% of world bond flows in 2003. Unlike “dedicated” investors, crossover investors are not measured against any emerging market benchmark, and move in and out of an asset class, increasing the volatility within the class, even as they increase the diversity of investor base which might strengthen the asset class. If sentiment about Brazilian fundamentals shifts, it could trigger large adjustment for the whole class.

### ***Equity***

Emerging market equity issuance in 2003 was heading for its lowest level in a decade – half of that in 2002 – with Asia accounting for about 70%, China alone 25%. This is in part a reflection of low valuations and issuance in mature markets. To a degree discrimination by quality was better than for bonds. But then emerging market equity issuance bounced back in late 2003, with hints of herding; assessments of discrimination are now less easy to make. Equity markets however look less of a risk than bond markets. Profits are rising. The price-to-earnings ratios of 11 in Asia and 9 in Latin America, are less than the average of 16 and 11 respectively since the end of the 1980s.

### ***Banks***

Strained bank balance sheets continue to mask wide variation. Many countries have faced the huge costs of recapitalising and restructuring their banks. On the whole, central Europe has achieved this most, Asia has made slow but steady improvement, and, in Latin America, Mexico and Chile have improved the most, while Argentina and Uruguay have deteriorated.

Net international bank lending is now negative, loans having fallen by about 5.5% per year since the Asian crisis. At the same time international banks have significantly increased their lending via subsidiaries in local currencies, something made possible both by falls in exchange rates and also by the erosion of the net worth of many EME banks during recent crises. This has the advantage for international banks of avoiding currency mismatch and exchange rate risk. Meanwhile, the new exchange rate regimes have reduced the incentive for domestic banks to borrow abroad (a large part of the emerging market problem in the late 1990s). This augers suppression of bank-based volatility for some years to come.

However, there is also a continued long-term trend of banks using similar market-sensitive risk management tools, like Value-at-Risk (VaR) – often encouraged by regulators. This has made them behave more like portfolio investors, herding, increasing liquidity in markets that are already liquid while decreasing liquidity in already relatively less liquid markets (a recent complaint of Chile and South Africa),

and increasing volatility. This is not offset by long-term investors buying in markets where there has been “forced” bank selling. This augers increased volatility.

## **FDI**

FDI flows, particularly to major emerging markets, have been surprisingly resilient over the 1990s. FDI is now the *only* significant source of private capital to emerging markets. However, having peaked at \$183bn in 2002 (for comparison, the 1990 level was \$19bn), FDI fell by 25% in 2002, raising concerns of its sustainability.

Half of the overall level of FDI for the period 1990-2002 was accounted for by just a few countries (Brazil, China, India, Mexico, and the Czech Republic). China’s reliance on FDI is stirring particular concern. However, this worry is, to a degree, a statistical anomaly. FDI to Asia has remained essentially flat in recent years, while flows of FDI to low-income developing countries have just about halved. 70% of the recent fall is accounted for by Latin America alone. These falls are more disturbing than the level or proportion of flows to China.

FDI also has more complicated impacts than raw data alone suggest. There is often an “easy initial phase” of FDI involving the purchase of companies that are privatised or are large profitable companies already in the private sector. FDI then either declines in the less dynamic economies or sectors, or expands to take advantage of profitable opportunities. Should the Chinese allow the yuan to strengthen this might well weaken the incentive for FDI to engage in this second-phase activity.

Furthermore, many multinational companies – especially those producing for the domestic market – hedge their foreign exchange risk by purchasing \$US or \$US-denominated government paper in the country or offshore, up to the level of their capital. This reduces the positive net foreign exchange impact of FDI, but may also entail risks. If the hedging of exchange rate risk dramatically increases at times when devaluation is a worry, then while the intent may not be to speculate the effect on the exchange rate is the same. Again Latin America (in particular Brazil and Mexico) is relatively more a worry than China in this respect.

## **China**

Nevertheless, China faces severe challenges and risks. Rapid growth of trade within Asia is being driven by growth in domestic demand, particularly that of China, where annual growth hit 9% (and rising) in the twelve months to September 2003. Asian exports to China have doubled in many cases since the start of 2000. Taiwan and Korea export more to China than they do to the US, and the Chinese buy more mobile phones than the US. This makes the Asian countries less dependent on the US, Japan, and Europe and less prone to picking up trade-related contagion from mature economies and EMEs elsewhere. But it comes at a price – dependence on China. In turn, China is dependent on the US for its exports (5 times what it imports from the US), and investment flows.

Some elements of Chinese growth show “bubble” traits, with overinvestment in several sectors (particularly property, iron and steel, and automobiles), rapid credit growth (the money supply has been rising at over 20% per year, though the

government is trying to control it), energy shortages, and rising stockpiles of goods. At the same time there are few signs of inflation, and rural unemployment is even rising. Just as an overvalued exchange rate runs the risk of capital flight out, taking the one-way bet that the exchange rate can only fall, so an undervalued exchange rate runs the risk of “capital flight” in taking the one-way bet that the exchange rate can only rise.

China is coming under pressure from the US, Japan, and the EU, to free its exchange rate. However, China’s banking system is very weak. Standard and Poor’s estimate problem loans comprise 45% of all loans (even more amongst public enterprise loans). The volatility of an unstable currency, coupled with capital flight, would crystallise bank insolvency. Debt ratings would plummet. There would be risk of competitive devaluation in the region. Already high rural unemployment would get worse, itself adding to instability. China’s risk control systems are ill-prepared for rapid liberalisation. China would be well advised, if it gives up its fixed peg, to tie the [yuan](#) to a basket of currencies (like many other Asian countries since the 1997 crisis) rather than to allow it to float against the dollar. And it desperately needs to tidy up its banking system – the problems of which are being masked by a combination of high savings and the funds flowing from the (in part herd-driven) investments of foreign firms.

This too is in part a ripple effect of the 1997 crisis. Many Asian EMEs realised that they could not depend entirely on exports to the mature economies and would need to generate domestic demand and regional imports. China is this principle writ large. And the need for reserves (held in the US) also feeds the US-Asia imbalance. This is often overlooked in all the emphasis on the effects of China’s exports on mature economies. Most of the job losses in the States, and problems with its competitiveness, have little to do with the pegging of the [yuan](#); it is politically expedient for both the current administration and those lining up for next year’s presidential elections to shift the blame away from domestically driven causes. Besides if the Chinese are keeping their exchange rate artificially low, then the US is getting goods and services very cheaply at a time when US domestic balance sheets are already heavily overstretched, and the Chinese are just getting overpriced bits of paper in exchange (US treasury bonds will almost certainly be repaid in dollars much reduced in value from today). A forced early float of the [yuan](#) against the dollar should be seen as a sign of increased risk – both for China and for the US. Increased US protectionism would add to the risk.

Nevertheless the fundamental problem is that China is dependent on the US even as it has difficulty in moving its exchange rate regime to something more sustainable long term.

## **The US**

This brings us to probably the biggest risk of all – in the sense that it has the power to crystallise other risks. There is strong evidence that market closures in emerging markets became increasingly linked to problems in mature markets over the 1990s, especially to volatility in US equity markets and rising interest spreads on US high-yield bonds. This suggests that many current imbalances are less at risk of precipitating liquidity crises if US growth is sustained and if interest rates remain low.

However, the US has made at least three potentially inconsistent promises, with attendant implicit balance-sheet liabilities of its own.

Firstly, repayments to those who buy its debt. The huge capital inflows into the US have allowed the private sector and government to run large deficits, have helped keep US interest rates low, and supported stock prices. A fiscal surplus pre-Bush of 2.4% of GDP has been turned into a fiscal deficit of 3.5% of GDP for 2003. As Kenneth Rogoff put in his farewell speech to the IMF, “The US has the best recovery that money can buy.” One would have expected some economic reaction with so much money thrown at the problem. However, since US investment has actually fallen by 3% relative to GDP during the period of reversal from surplus to deficit, this clearly indicates that the debt is being used to finance growth in private and public consumption (non-military discretionary public spending has risen by 21% under the current administration) and not investment. Consumption-based growth – what might even be called a consumption-bubble – can only be sustained if the economy can keep sucking the finance in. In part, the flows are a further ripple from earlier crises, the surge in desired world reserves engendered, and the perception that the US is the ‘safest’ place to invest.

Secondly, Social Security and Medicare benefits (including, shortly, a new prescription-drug benefit) to retirees whose numbers are set to rise dramatically in the next five to ten years creating tens of billions of dollars of liabilities. These costs already dominate the Federal budget, with the administration eating into the Social Security and Medicare reserves. The move away from defined benefit to defined contribution schemes is creating huge extra transition liabilities.

Thirdly, the tax cuts, formulated in the boom days of 1999 and not directed at those with high marginal propensities to consume, were not designed principally to stimulate the economy. Worries, by people like Alan Greenspan, about the surplus at the end of the 1990s, were a significant stimulus to the tax cuts; political momentum carried the idea forward to the 2000’s. Most of the recent tax cut has yet to go through (though consumers have responded to it), so the impact on the deficit has only started to become apparent. Most official estimates of the impact are seriously flawed, since, to keep within Congress’s budget rules, they are presumed to be reversed at various points by 2013 (highly unlikely in reality).

The risk is that, without sufficient sustained growth (and given all the emphasis on consumption instead of growth-enhancing investment, this a distinct likelihood), at some point financial market fears that the US will be unable to resolve the inconsistency of these three promises without inflating it away, will precipitate higher real interest rates and generate a self-fulfilling fiscal crisis that will spread along the lines of EME weakness outlined above.

For a small debtor creditors wield power, and continuously discipline. By being a truly huge debtor, the US reasons it gains power over its creditors; there is no disciplining device. To a point. A crisis can be thought of as a discontinuity in the application of discipline, the leap from an ultra-soft to an ultra-tough regime. A peaceful, but nonetheless devastating, “regime change”.



This would almost certainly be accompanied by a decline in the dollar since this would be an obvious way to reduce the size of the liabilities (in effect a form of default); at some critical point, fears that this is what will happen will itself drive it to happen. Memories are short; not so long ago – from 1984 to 1987 – the dollar suffered such a crisis of confidence.

Matters are complicated further by a fourth potential liability. Any significant rise in bond yields weakens the US re-mortgage market and property prices, hence household wealth and consumer spending – the main support for the US economy post-stockmarket bubble. In turn, the bounce back in mid 2003 of yields on US government bonds – much more than justified by fundamentals – is being amplified by the mortgage industry. As rates rise and refinance deals fall, the duration of outstanding mortgages and mortgage-backed securities lengthens, which – given the wafer-thin safety margins of capitalisation – requires continuous hedging by the mortgage banks and holders of mortgage-backed securities. This collective behaviour amplifies the initial rise in rates. In a crisis, markets may not be deep enough to absorb such continuous hedging, putting severe pressure on lenders (and borrowers too). At the very least, market volatility would increase and mortgage bank profit margins would be severely reduced. If property prices fall, this effect will be even more exaggerated.

In a worst case scenario, it is not clear that the fourth implicit liability – the promise to bail out the US mortgage industry – could be met. The “too big to fail” argument only works if the government is able to take further liabilities onto its balance sheet. The knowledge that this may not be the case would itself help feed an incipient crisis.

To these liabilities one might add the increasing liabilities of the individual States that are legally obliged to balance their books (and might yet require Federal bail-outs), and the uncertain and possibly large liabilities related to Iraq.

Matters are further complicated by the lacklustre US job situation – that might finally undermine the optimism of American consumers – and by the fact that the US stock market is still expensive by historical standards; the recent equity market rebound is simply not justified by rises in earnings. Worse, like so many other aspects of the US economy at the moment, share prices are in a “bootstrap” equilibrium, pulled up by the debt-induced growth. In a fiscal crisis, share prices would not have their own fundamentals to hold themselves up.

Strong US growth was a major factor in getting over the Mexican peso and South-East Asian crises. A US-generated crisis would be worse given the backdrop of a poorly-performing US economy (and continued weaknesses in Europe and Japan). EME currency appreciation would further slow economic growth in emerging markets, risk deflation in a number of OECD economies, and intensify pressure on China. This would be compounded if Congress were to successfully push through protectionist measures.

In the medium-term the combined savings rate of US household and corporations will have to rise to close the external deficit. The US will have to become a net acquirer of world assets, indeed an investor in Asian growth and emerging markets generally. But this will entail a rebalancing of world reserves, with the drawing down of Asia

reserves in particular. The shrinking of reserves will cause a decline in the dollar and the end of their recirculation to the US Treasury markets will cause a shift upwards in long-term US interest rates. This is all inevitable. The question is whether it will be sooner and smoother, or later and unstable.

The US debt has serious strategic implications in an unstable world. US military spending has risen by 27% in real terms under the current administration, according to the Cato Institute, and expenditure plans already on the table will add at least a further 20% in real terms by 2020, according to the CBO. With an administration intent on militarily shaping the world to its tastes, a sudden fiscal crisis might force an inopportune rethink of military strategy, just at the moment when the strategy is getting more demanding and costly before it is due to get less demanding (the administration might be hoping). The picture of fiscal crises painted above involves illiquidity on several balance-sheets at once. Think of this as adding a “liquidity crisis” in global security. Military adventure at a time of fiscal imbalance is not without economic and global security risk.

### **A long-Term Threat**

One factor, often overlooked, but set to impact heavily on some emerging economies, but particularly Russia, India and China (in that order), is HIV/AIDS. This destroys human capital and output per worker, increases health burdens, curtails investment and technology transfer, and destroys growth.

Russia’s HIV/AIDS epidemic is already a truly nationwide phenomenon. Under worst-case scenarios, the rate of infection in 2010 will be similar to sub-Saharan Africa today (11%). There may already be five to eight million with HIV in India, and up to six million in China (with numbers growing at 20-30% per year). On conservative assumptions, by 2025, cumulative new infections are estimated between 4 and 19 million in Russia, 32 and 100 million in China, and 30 and 140 million in India with the cumulative death toll estimated between 3 and 12 million, 19 and 58 million, and 21 and 85 million respectively.

Russia will suffer worst economically. Even a mild epidemic, it is predicted, would cause Russian GNP to be completely stagnant between today and 2025. More severe epidemics don’t bear talking about. On balance the economic impact on India will be greater than on China.

In all three cases, in spite of the huge economic impact, the figures are swathed in secrecy, and political leadership is in denial (in China AIDS activists are even being jailed). This will only make things worse. Any emerging market crises in the next ten years will be played out against this backdrop.

### **Conclusions**

It is somewhat ironic that the balance-sheet situation of many EMEs has deteriorated in part due to the correct inclusion at last of off-balance-sheet and contingent liabilities, while in the largest economy of all – the US – these items have risen heavily but been largely ignored. The under-reporting on government balance sheets runs to at least \$5 trillion over the next decade. And this deals only with spending and

taxes, and ignores some of the other, less quantifiable, liabilities. It is further ironic that the risks from contingent and implicit liabilities that are so often associated with developing country problems should be so much at the heart of a potential US-led crisis.

Analysts and think-tank experts are running around Washington trying to guess what the true balance sheet liabilities are, because the figures are not part of the “official” accounting process. It’s ironic that this is happening at a time when policy makers are supposed to have learned lessons from the poor accounting practices of private corporations in the 1990s.

Imbalances may also be a function of interest rate illusion, of a world overreacting to historically low nominal interest rates. Perhaps symptomatic of this, real long-term interest rates have risen recently on account of three, self-fulfilling, inefficiencies detailed above: the unwinding of carry trades; herd behaviour; and the hedging practices of mortgage banks – all three compounding each other. The lesson is that interest rates for borrowers can be higher at least in part for reasons not strictly related to inflation, and that central bank interest rates can lose some of their power to bail out consumers in times of crisis.

A debateable proportion of the imbalances of levels and flows (the lopsided pattern of reserves, the dependence of the US on debt, the swings between debt, equity, and banking, etc.) is itself a fall-out from earlier crises, especially that of Asia 1997 and the collapse of the US stock market. Several past bubbles have burst, and as they have rippled out new bubbles have washed back and forth.

Predictions of a US fiscal crisis are not likely to come true until after the next US presidential election. There will be ways to push the reckoning off – a “temporary fix”. Excess capacity will help to keep interest rates low for a while. Eventually a fall in the current account deficit will have to materialise and with it a fall in the capital account surplus. And this will require higher interest rates. In a system overly-dependent on low interest rates, with consumers balance sheets positively modified to live off permanently lower interest rates, and the corporate sector overly-indebted, this will not be easy to stomach. It’s a good reason to put it off politically, even if it means even higher interest rates after the next presidential elections.

Experience and theory teach us that we never have to wait till the conditions of crisis are actually met in real time; markets always work (by backwards induction on the crisis) to bring a crisis forward to the first moment in time at which it is realised that there will be a crisis at some moment in time. Conversely, given the “bubble” nature of a number of the elements of the story, this allows matters to deteriorate until the conditions for crisis are met. In highly open capital markets, soft landings are difficult to pilot. Adjustments are hardly ever smooth.

It is hard to “predict” crises; the system is not exogenous to the prediction. To the degree a prediction is believed and acted upon, the prediction is proven false. We can only suggest tendencies and potential weaknesses. The best, and happiest, result is always to be proven wrong.