Global Imbalances: Implications for Emerging Asia and Latin America[1]

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The longer the current pattern of global imbalances persists, the less agreement there is about how it ultimately will be resolved. The growth of the U.S. current account deficit after the turn of the century was first met with warnings that such large deficits were unsustainable, that foreign finance would not be provided indefinitely, and that the situation could culminate in an abrupt interruption to capital inflows, sharp compression of the U.S. current account, and a global slowdown or worse (Obstfeld and Rogoff 2000, 2004, Roubini and Setser 2004, Mann 2004, Mussa 2004). As equity inflows gave way to debt inflows and as private purchases of U.S. assets gave way to foreign central bank purchases, these early warnings were echoed and amplified. But the longer the deficit persisted and the further it expanded without obvious adverse consequences, the larger swelled the ranks of the doubters. It was argued that foreigners would continue to direct substantial amounts of capital toward the United States, thereby financing the country's deficit, because the flexibility of the American economy had delivered a permanent increase in the productivity and profitability of investment (Cooper 2004). It was argued that the U.S. could run large deficits and finance carry a large external debt relatively easily because U.S. foreign investments earn a significantly higher return than foreign investments in the United States (Kitchen 2006). The apotheosis of this view was the assertion that statistics are misleading and the U.S. deficit is not, in fact, a deficit at all. That as late as 2005 America was officially receiving net interest income from abroad meant that the country still had more foreign assets

[1] University of California, Berkeley and Seoul National University. This paper is an elaboration of an earlier analysis of global imbalances and emerging markets written for a conference sponsored by Fondad in the

than liabilities, implying the existence of significant un- or under-recorded U.S. exports of goods and services (Hausmann and Sturzenegger 2005).

Truth in advertising requires acknowledging that no one knows for sure how the current situation will play out. While the authors are not without views on this subject, we do not attempt to elaborate or defend them in this paper.[2] Rather, we assume the worst – a disorderly correction of the U.S. current account – and analyze the impact on the emerging markets of Asia and Latin America. This is the kind of "scenario planning" in which policy makers should regularly engage, though instances where they do so are rare. Indeed, we are not aware of other places where officials and others have gone through the exercise undertaken here.

We first ask how a disorderly correction of the U.S. current account deficit would look. We then analyze the channels through which East Asia and Latin America will be affected and how economies in the two regions will respond. This leads us to two important conclusions.

Our first conclusion is that the channels through which East Asia and Latin America will be affected by a disorderly correction are very different. In Asia, the impact of a disorderly correction is likely to flow through trade rather than financial channels. Prior to recent decades, large-scale international capital flows, trade multipliers and terms of trade effects were the principal avenues through which events in the advanced countries affected the developing world. The same is likely to again be the case today. In particular, the most open Asian economies that depend most on exports to the United States will feel the most powerful negative effects.

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Most Latin American economies, with the notable exception of Mexico, are less dependent on exports to the United States. They will continue to feel negative effects mainly through the operation of financial channels. Interest rates will rise if there is a flight to quality, making it more difficult to roll over maturing debts and to service interest-rate linked obligations, and this will disproportionately impact Latin America's financially fragile economies. But the effects are likely to be more selective than in previous crises. Several Latin American governments have retired dollar-denominated debts, freeing them from the risk that a negative shock that causes their exchange rates to weaken will produce a sharp increase the local-currency cost of interest and amortization payments. Countries like Mexico have lengthened the maturity of their debts and locked in debt-servicing costs. Other Latin American governments have pre-funded their borrowing for several years. In this scenario the main impact will be felt by countries like Ecuador with substantial external financing needs and those like Brazil with considerable amounts of maturing short-term debt to roll over.

Our second conclusion is that the emerging economies of East Asia are in a stronger position to implement offsetting domestic policies. Fiscal positions are stronger. (We refer here not just to the primary surplus or deficit but the overall surplus or deficit and the inherited level of debt.) This means that they can use fiscal policy to boost domestic demand in the event that export demand tails off. In Latin America, in contrast, there is less room for expansionary fiscal policy to stimulate demand in the event that the stimulus derived from strong commodity prices and rapidly growing export markets dries up. Countries like Mexico where the debt is denominated in domestic currency and locked in at fixed rates can let the currency decline to crowd in imports, but countries like Brazil with short-term debt to

[2] For our views see Eichengreen and Park (2004).

roll over, where a weaker currency may be taken as augering higher interest rates, will be reluctant to contemplate even this.[3] Thus, even if it is argued that East Asia will feel stronger negative effects from a disorderly correction of the U.S. current account (in other words, even if one believes, with the authors, that overall the trade channel may operate more powerfully than the financial channel this time around), it is not clear, given the absence of scope for a policy response, that the outcome will be more pleasant for Latin America.

The remainder of the paper is organized as follows. Section 1 imagines how a disorderly correction would look. Section 2 then examines how East Asia and Latin America will be affected. Section 3 analyzes the scope for policy responses in the two regions. Section 4 concludes.

1. How a Disorderly Correction Would Look

Imagine that the U.S. current account deficit is allowed to continue widening, from 6½ per cent of U.S. GDP today to 10 per cent of U.S. GDP in 2010. (This is the implication of the assumption that the real effective exchange rate of the dollar remains unchanged along with the stance of fiscal policy. See Roubini and Setser 2004.) With a deficit ratio of 10 per cent of GDP and a rate of nominal GDP growth of 5 per cent, the U.S. ratio of external debt to GDP would only begin to level off when it approaches 200 per cent. This is a dramatically higher level of external indebtedness than we have every seen for a large country. It is

[3] Note that, given its dependence on exports to the United States and dominance of long-maturity fixed-interest-rate debt, Mexico begins to look more and more like an Asian country. If only its growth rate looked more like that of an Asian country.

implausible that foreign investors would willingly absorb such massive quantities of U.S. debt.[4]

If this conclusion is accepted, it follows that at some point purchases by foreign investors of U.S. assets will decline. As capital inflows tail off, the current account deficit will narrow, and U.S. external indebtedness will converge to a lower steady-state ratio to GDP. The key question (aside from what an acceptable steady-state ratio is) is whether that correction begins now so that adjustment can proceed smoothly, or whether the correction is delayed until the acceptable upper limit on the net external debt is approached, at which point foreign finance would dry up abruptly and the U.S. current account deficit would be eliminated at a stroke.

In this latter scenario, the unavoidable consequence would be sharp compression of U.S. and global demand. If capital inflows into the United States decline by 6 ½ per cent of GDP (their current level) because foreign finance dries up completely, then the current account must move immediately to balance by the definition of the balance of payments. The result on impact would be for U.S. demand and specifically U.S. net demand for imports to decline by 6 ½ per cent. With apologies for the repetition, a 6 ½ per cent decline in U.S. demand is a recipe for a decline in global output in the amount of 6 ½ per cent of U.S. GDP, other things equal. Assuming a world economy growing at 4 per cent and a U.S. economy that accounts for a quarter of the world, this eliminates a substantial fraction of the normal growth in global demand. And, of course, the second-round effects following on this fall in

[4] In this scenario foreigners end up owning well more than half the U.S. capital stock. Even if one believes that foreigners would be prepared to devote such a large portion of their portfolios to claims on the U.S. economy, this raises the specter of a political backlash in the United States. (If you think the Unical and Dubai Ports World affairs were unfortunate, you ain't seen nothin' yet.) This is another reason for thinking that current account deficits and their equivalent, foreign finance and purchases of U.S. assets, at these levels would be unsustainable, politically if not also economically. In this paper we are concerned about debt sustainability in this broad political sense, not merely in the narrow economic sense in which the issue is often posed.

production could then amplify the impact on output and employment. For the world as a whole, this could be a major recessionary event.[5]

How would changes in relative prices work to bring about this result? A decline in net foreign purchases of claims on the United States would causes the prices of dollar assets to fall, including but not limited to the price of the dollar itself – that is, the exchange rate. The flip side of this downward pressure on the prices of dollar-denominated assets is a rise in their yields; thus, this event would eliminate the Greenspan Conundrum of low long-term interest rates. Another way of thinking about this is in terms of interest parity; here again a declining dollar and higher U.S. interest rates are two sides of the same coin.

Insofar as a falling dollar augurs imported inflation, the Fed would then be forced to raise policy rates faster than expected. Higher interest rates across the term structure would then damp down household spending by raising the cost of consumer credit. They would reducing housing affordability, reinforcing the fall in housing prices presumably associated with the aforementioned asset disinflation. They would limit the increase in perceived wealth that has worked to sustain household consumption and borrowing. They would discourage investment by raising the cost of capital.[6]

To be sure, U.S. output and employment can be sustained if net imports are reduced – that is, if exported are boosted. This is consistent with the observation that the dollar will fall because of the curtailment of capital inflows. But the scenario in question is unrealistically rosy; the empirical literature generally suggests that significant time is required for changes in the relative price of exports produce changes in export volumes. And even under this

[5] Readers for whom the plausible counterfactual is that the U.S. current account falls by "only" say half can scale down the numbers correspondingly without vitiating our point.
[6] The fact that U.S. interest rates have recently risen relative to foreign interest rates is at least superficially consistent with the notion that the market attaches a rising probability to this scenario.

optimistic scenario, the compression of U.S. demand does not disappear; it is simply shifted to the rest of the world. For countries other than the United States, this would not be a happy outcome. It would mean a shift in demand away from their products. The result would be some redistribution of the recessionary impulse from the U.S. to other countries but no mitigation of the recessionary effects overall.

A frequently-voiced objection to this scenario is that foreign central banks would never allow financing for the U.S. deficit to be curtailed so abruptly. Foreign monetary authorities are aware that they have an interest in maintaining the flow of external finance for the U.S. current account deficit in order to avoid precipitating a recession. They would step in with further purchases of U.S. assets if private investors pulled the plug.

But foreign central banks also have an interest in avoiding capital losses on their dollar reserves. Selling U.S. Treasury and agency securities for, inter alia, German bunds represents a gross capital outflow that would offset the ongoing flow of incremental finance. In addition, central banks worry about the impact on domestic monetary conditions and inflation of running large ongoing surpluses. They worry about the resource misallocation that results from keeping interest rates artificially low.[7] They worry about the present or prospective future costs of sterilizing the financial effects of reserve accumulation. For all these reasons, they have an incentive to let their currencies rise if they think they can limit the effects, which means that they will not indefinitely continue to support the dollar as purchasers of last resort of U.S. Treasury bills. Of particular importance here, they have an incentive to diversify out of dollars if they think they can do so without prompting reserve

[7] Effects that are most clearly evident in China in the form of investment rates that are surely too high to be consistent with allocative efficiency.

diversification by other central banks and precipitating a significant deprecation of the dollar.[8]

To be clear, we are not arguing that the U.S. deficit will necessarily be compressed this sharply. But neither can this possibility be ruled out. In any case, focusing on the worst-case scenario is useful for gauging the implications for emerging markets.

2. The Impact on Emerging Markets

World Bank (2005a) provides a catalog of channels through which a sharp depreciation of the dollar and sudden compression of the U.S. current account deficit will impact emerging markets. To start with positive effects, a declining dollar will reduce the cost of servicing dollar-denominated debt. To some extent this effect is already evident: between 2002 and 2004 the decline in the dollar reduced ratios of debt to GNP and debt service to exports by one percentage point, reflecting the dominance of dollar-denominated debt.[9] This effect favors relatively heavily indebted countries, where the reduction of debt burdens is particularly valuable, and dollar borrowers, where the exchange rate change works in their favor. In practice, this means mainly Latin American countries like Brazil, Chile and Columbia, where the Bank estimates that the fall in the dollar from 2002 to 2004 reduced the ratio of debt to exports by 4 to 10 per cent.[10]

On the negative side, rising U.S. interest rates and declining U.S. Treasury prices could precipitate a flight to quality that heightens volatility in emerging financial markets,

[8] The language here is designed to emphasize that central banks intervening to support the dollar face a collective action problem – that their collective interest may be different than their individual interest. And problems of collective action are notoriously difficult to sustain when they involve the central banks of heterogeneous countries operating in a very imperfect information environment (Eichengreen 2004).
[9] World Bank (2005), p.52.
[10] To a lesser extent positive effects are also felt by South Africa and Turkey.

with adverse implications for the level and price of capital flows. The curtailment of capital flows toward the United States would make for higher U.S. Treasury benchmarks and wider emerging-market bond spreads, especially for borrowers with high ratios of debt to GDP. The assumption here is that U.S. policy rates are important for the evolution of global financial conditions, and emerging market spreads and capital flows co-vary with global financial conditions. Emerging markets also will feel a negative wealth effect from capital losses on their foreign reserves.

This emphasis on the impact on financial markets of a fall in the dollar reflects an effort to shoe-horn this discussion into the financial-crisis paradigm of the 1990s, where sudden stops in capital flows in periods when there occurred a flight to quality by investors in advanced countries were the immediate way in which emerging markets were affected. This time around, in contrast, the financial consequences are likely to be more ambiguous and less obviously damaging to emerging markets. In general, the positive correlation between U.S. interest rates and emerging market spreads is less pronounced and less stable than suggested in the World Bank's analysis; for a number of countries and periods this correlation has been essentially nonexistent (Eichengreen and Mody 1998). The response depends on the reason for the rise in U.S. rates and on the reaction of the other advanced countries. If monetary tightening simply reflects the desire to normalize U.S. policy rates, as the Fed seeks to back out the lingering impact of the sharp interest rate reductions taken at the beginning of the decade, then it is plausible that rates in other countries should also rise, as gross financial flows from the U.S. to foreign markets are deterred by rising yields at home. The saving grace here is that interest rates in the financial centers should rise only gradually, as the Fed and other advanced-country central banks weigh the advantages of higher rates for the

maintenance of price stability against any negative implications for their economies. And gradual increases in rates should be relatively easy for emerging markets to absorb.

If, on the other hand, the impetus for higher in the U.S. rates stems from sudden evaporation of the willingness of foreign investors to finance the country's current account deficit and from the inflationary effects of the consequent fall in the dollar, then higher interest rates in the U.S. will be accompanied by lower interest rates in the rest of the world. With less liquidity flowing to the U.S., more liquidity will remain in other financial centers. Again, this is an implication of the interest parity condition. In other words, in this scenario in which the dollar falls, foreign interest rates must be lower than U.S. rates by the amount of expected foreign currency appreciation in order to satisfy the no-arbitrage condition. And if higher interest rates in the U.S. are accompanied by lower rates in Europe, then it is not obvious that emerging markets will be adversely affected.

For emerging markets to feel the pinch, one must add another element that produces a significant drop in global liquidity. One possibility is a sharp adjustment of U.S. asset prices that produces distress, or at least fears of distress, among financial institutions, as happened in the bond market correction of 1994 and the LTCM crisis of 1998. Such fears could result in deleveraging by foreign as well as U.S. financial institutions, reducing global liquidity. They could produce the aforementioned flight to quality and reduce the appetite for emerging market debt.[11]

But a problem for narrators of this story is that emerging markets have greatly reduced their dependence on new foreign borrowing. As a group they are running current account surpluses, which means that they have no need for additional foreign debt. In fact, they are reducing net external debt by accumulating reserves and in some cases (those of the

major Latin American countries) using some of those reserves to retire dollar-denominated obligations.[12] To be sure, if the U.S. current account abruptly moves to balance, current accounts in Asia and Latin America will have to move to balance as well, assuming that Europe's current account remains where it is. And where debt is maturing it will have to be rolled over. But many Latin American and Eastern European countries in this position have pre-funded their re-financing needs while the going is good. Venezuela was already pre-financing debt for 2006 in the middle of 2005; by mid-2005 Mexico had already covered its financing requirements through the end of 2007. Excluding Ecuador, whose external financing needs are considerable, Latin American net financing needs in 2006 are less than 3 per cent of exports, down from more than 30 per cent in 1996-98.[13] Excluding Turkey, which has a large current account deficit, only half of which is financed by FDI, and large amounts of debt to roll over, Emerging Europe's net financial needs will be less than 7 per cent of exports, down from nearly 24 per cent in 1996-98.[14] If funding suddenly becomes unavailable, Latin American countries still could retire their maturing obligations and meet their other external financial needs by liquidating just 10 per cent of their reserves. The comparable figure for Emerging Europe is 11 per cent. Alternatively, closing this gap by increasing net exports would require only a 1 per cent depreciation of Latin American currencies (5 per cent including Ecuador) and a 3 per cent depreciation of Emerging European currencies (5 per cent including Turkey), by Deutsche Bank estimates.[15]

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[11] As happened in these earlier periods.
[12] This is most obvious in the case of Brady bonds, but the trend is more general (viz. Brazil).
[13] Ecuador's net financing need is more than 70 per cent of exports in 2006, driving up the regional average. Note that all these calculations make assumptions about the continuing flow of FDI and official finance, mainly from the IMF. The assume away the danger of large-scale capital flight.
[14] Including Turkey they will average about 10 per cent.
[15] See Deutsche Bank (2005).

Given this, many emerging markets would be largely insulated from the financial impact of higher interest rates. The main exceptions would be countries like Ecuador with substantial external financing needs and countries like Brazil where the average duration of the debt less than a year and over half is still linked to the overnight interest rate. For countries in this position, a rise in global interest rates could have serious consequences.[16]

Curiously, the World Bank's analysis neglects what we regard as potentially the most important negative channel through which emerging markets will be affected, namely the impact on their trade. The abrupt elimination of foreign financing for the U.S. current account would force the country's net imports to decline by 7 per cent of U.S. GDP. This could have serious consequences for emerging markets, even more serious than the impact of higher interest rates.

Since it would take time for dollar depreciation to crowd in additional U.S. exports, we assume that the entire swing comes in the form of U.S. imports. As a first cut we also assume that the dollar falls by the same amount against all foreign currencies, reducing U.S. imports across the board. The impact on other regions then depends on the importance of exports to the United States as a share of regional GDP. In data for 2004 this share varies from a high of 25 per cent in the small highly-open East Asian economies (Hong Kong, Singapore and Taiwan) to a low of 3 per cent in the euro area and Japan.[17] (See Tables 1 and 2.) In between one finds the Anglo Saxon economies (Australia, Canada, New Zealand and the United Kingdom), the larger East Asian economies (Indonesia, Malaysia, the Philippines,

[16] But recall our earlier skepticism that global rebalancing would mean higher *global* rates.
[17] We should probably discount the very high figures for these three countries at least to some extent because of the low domestic content of many of their exports.

South Korea and Thailand) and China toward the high end, at 8-9 per cent and Latin America at the low end at 4 per cent.[18]

It flows from this focus on trade that a disorderly correction of the U.S. current account imbalance will have the largest impact on emerging markets most dependent on exports to the United States, which means above all the small entrepot economies of Asia. Looking at the issue comparatively, East Asia is more vulnerable than Latin America mainly because the Asian region is more open and not inconsiderably linked to the United States. A more nuanced analysis would distinguish the impact on different countries in the two regions. For example, it would observe that Mexico is much more vulnerable to the operation of the trade channel than many other Latin American countries.

A more nuanced analysis would also allow a significant slowdown in the U.S. (and perhaps also a more modest slowdown in China induced by the appreciation of the renminbi and the deceleration in the growth of U.S. import demand) to differentially impact commodity exporting countries. The rapid rate of increase in commodity prices in recent years has reflected strong demand emanating disproportionately from these two countries. If demand growth in the U.S. and China and therefore demand growth globally now slow, the terms of trade of commodity exporters like Chile and Indonesia will be hit. Conversely, developing countries that depend on commodity imports, which means mainly the resource-poor East Asian countries and, to a lesser degree, Latin American countries like Brazil, will experience weaker commodity prices as a partial cushion against slower global growth.[19] Here petroleum prices, whose procyclical movement is especially strong, given capacity constraints, and their impact on countries like Mexico and Venezuela (along with their

[18] Oil exporters also rely heavily on the United States for their final market, but they are a special case.

countervailing impact on the low-income oil-importing countries of Africa) are simply a particularly pronounced case in point.

In sum, the principal risk to global stability and thus to stability in emerging markets from the current pattern of global imbalances lies in the possibility of a disorderly correction that would precipitate a major slowdown in U.S. growth and a significant rise in U.S. interest rates. But emerging markets in Asia and Latin America are likely to feel different effects, transmitted through different channels. In East Asia it is the compression of U.S. net imports and hence the operation of the trade channel that will be felt most powerfully. Those East Asian economies that are especially open and dependent on exports to the United States are in the most vulnerable position. In Latin America, in contrast, lower levels of trade openness and less dependence on exports to the United States make for less susceptibility to the operation of this channel. There, however, the financial channel will matter more. In particular, Latin American countries with substantial external financing needs (Ecuador) and large amounts of short-term and interest-rate-linked debt (Brazil) will feel strong negative effects.

To be sure, generalizing about regions is dangerous; there are exceptions here as always. Mexico looks like an Asian country in terms of its exposures, while the Philippines (not for the first time) looks more than a little Latin.

In addition, the impact will tend to vary with the policy response, not just with the extent to which currencies are allowed to move but with macroeconomic policy generally. It is to this issue that we now turn.

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[19] Contrary to popular perception, Brazil with its large and varied manufacturing sector is not a net commodity exporter.

3. What Emerging Markets Can Do

We now ask what emerging markets can do to minimize these risks, discussing Asia and Latin America in turn. We are conscious that we do not also discuss policy in the United States. This is not because U.S. policy is unimportant or that it is not urgent that it be improved but only that it is not our subject in this paper on emerging markets. A proper analysis of this aspect of the problem requires a paper of its own.[20]

Asia. In Asia, China is the big dog.[21] The debate over the country's role in the global adjustment process will be familiar. Since China's growth strategy is export led, a substantial appreciation of the renminbi that damages export competitiveness could jeopardize growth and produce a politically destabilizing rise in unemployment. The Chinese authorities are understandably reluctant to mess with success. But it is also hard to imagine that global rebalancing could go smoothly without a contribution from China. If the U.S. current account moves toward smaller deficit, other countries' current accounts must move to smaller surplus. China's surplus is roughly a third the size of the U.S. deficit. It is hard to imagine that the entire burden of adjustment could be borne by the countries accounting for the other two thirds (Japan, the Asian NICs, Latin America, and the oil producers).

With Chinese investment rates running at nearly 50 per cent of GDP, it is absurd to think that current account adjustment could be effected through still higher investment. Already there are reasons for questioning the efficiency with which investment capital is

[20] For a start see Eichengreen (2006). That said, we are not confidence that the U.S. will take steps to raise the likelihood of a smooth readjustment of its external accounts. Again, for prudent planners engaged in scenario planning the assumption of no U.S. policy adjustments is, for better or worse, the place to start.

[21] Hopefully this American slang is excusable in the year of the dog. There is also a role for Asia, which we discuss in Eichengreen and Park (2005), but again this country is not our subject in this paper on emerging markets.

being allocated.[22] While not disputing that China needs more industrial capacity, modern housing, and urban infrastructure, there are reasons for doubting that these can be deployed even more rapidly than is currently the case. This means that current account adjustment will have to occur through reductions in saving.

Some of this adjustment will occur naturally over a period of years through changes in the private sector.[23] But in the short run – which is the time horizon relevant here – the main agent for reducing national saving must be the government. The authorities should begin now to gradually increase spending on education, health care, social security, urban infrastructure, modern housing, and rural modernization generally, since in China it will take considerable time to implement the requisite fiscal adjustments. A limited increase in public dissaving would move Chinese savings rates in a direction compatible with global rebalancing.

The case for fiscal stimulus in China has been made by Blanchard and Giavazzi (2005). They observe that the country has considerable fiscal room for maneuver even accounting for the implicit fiscal liabilities created by problems in the banking sector, public debt levels remain low. Others such as Genberg et al. (2005) are more cautious. China can only build so many dams, housing projects, and power generating plants in the short run. Moreover, a further increase in publicly-funded construction projects would open the door to

[22] The favorite statistic we have heard is that China is building enough office space every 120 days to match all the office space on the island of Manhattan. Driving around a major Chinese city late in the day and looking to see how many office windows are illuminated makes one wonder where the demand will come for all this capacity.

[23] As structural change becomes more predictable, households will engage in less precautionary saving. The need to accumulate a financial nest egg will become less pressing as workers worry less about losing jobs in state owned enterprises, as the state builds pension and health care systems to provide for the elderly, and as the development of credit markets enables households to borrow to defray the costs of tuition, home purchases, and consumer durables. After 2015 the ageing of the population will reduce personal savings, as per the predictions of the life-cycle model. But time will be required for these effects to be felt. None of them will operate on the horizon relevant to global rebalancing.

the diversion of public funds and bureaucratic inefficiency. To increase social spending, the central government must secure the cooperation of local governments. It is not clear that systematic cooperation to ensure the efficient allocation of public funds can be arranged in short order. And simply throwing money at provincial governments may create additional scope for politically-connected lending to state enterprises and others.

Wouldn't further stimulus to domestic demand create risks of inflation and overheating? Here is where there is an argument for currency appreciation. Expansionary fiscal policy in a context where fiscal solvency is not at issue will strengthen the exchange rate. Real appreciation will then slow the growth of exports and prevent overheating and inflation. With the decline in national savings rates, demand will rotate from exports to domestic markets, and orderly appreciation of the exchange rate will work to facilitate this reallocation.

There is a considerable literature debating precisely how much renminbi appreciation is required. Framing the issue as we do here – starting with the need for a reduction in national saving, moving from there to the need for fiscal action, and viewing the adjustment of the exchange rate as an equilibrium response – suggests a pragmatic approach to the question. How much nominal and real exchange rate adjustment is required will depend on the magnitude of the fiscal initiative and how national saving is affected.[24] It will depend on the evolution of America's growth and current account. A large reduction in Chinese savings that creates significant risks of inflation and overheating will have to be met with a substantial appreciation. A smaller reduction in Chinese savings, which we see as the more likely case, will warrant a smaller real appreciation to avoid precipitating a significant growth

[24] In other words, do Chinese households raise their savings in a Ricardian response to expected future taxes, or do they reduce their savings as they observe the development of a social safety net?

slowdown. Similarly, continuing strong demand for imports by the United States will help to reconcile a larger renminbi appreciation with the maintenance of Chinese export growth. All this suggests a wait-and-see attitude toward currency appreciation and, in particular, letting market forces influence the response.[25]

But since China is only a fraction the size of the United States, this means that, from the point of view of global demand, demand expansion in China can only offset a fraction of demand contraction in the United States. Even together, in other words, the U.S. and China only comprise part of the adjustment story.

This points to the need for a contribution from other East Asian countries, many of which also have scope for expansionary fiscal policies. To be sure, East Asian countries value fiscal prudence. Reflecting this tradition of fiscal conservatism, government debt as a share of GDP has been low in East Asia except for Japan and the Philippines (Table 2). Many young democracies in East Asia find it difficult to adjust fiscal policy as a result of a slow and complicated political process of determining the size and distribution of government expenditure between projects, sectors, and regions. Fiscal policy can even be procyclical insofar as decision and implementation lags are very long. East Asian policymakers are also anxious to avoid replicating Japan's experience with a pump-priming policy that has resulted mostly in a massive increase in national debt.

[25] This wait-and-see attitude is consistent with the rhetoric of the PBOC and the Chinese government. It is also consistent with the idea that China will want to deploy a range of policy instruments to protect itself against the disorderly correction of global imbalances. If other investors, public and private, grow reluctant to finance the U.S. deficit, China will not be able to support the dollar by itself. If the dollar falls sharply against other currencies, then the renminbi/dollar rate will have to appreciate in order to contain inflation and avoid overheating. To put it another way, keeping the renminbi pegged to a falling dollar would imply faster monetary expansion in China, which is undesirable. Sharp compression of the U.S. current account deficit, which is what is implied by this scenario, would imply a sharp slowdown in the growth of Chinese exports. In turn this would render the case for fiscal expansion all the more compelling.

Among the ASEAN states, Indonesia and the Philippines are in no position to contemplate further increases in government spending or significant tax cuts. The Indonesian government is committed to further fiscal consolidation to reduce vulnerability arising from the high level of public debt. Its objective is to achieve broad budgetary balance by 2006-2007 consistent with lowering public debt to no more than 50 percent of GDP. The Indonesian government has also been engaged in fiscal reform that envisages more efficient tax administration and improvement in budget preparation and execution. In the Philipppines, public debt as a share of GDP is upward of 80 per cent. The government has committed itself to balancing the budget by 2009 by tax increases and streamlining fiscal expenditure.

Thailand and Malaysia have been more successful at bringing their budget deficits down to manageable levels. As a result, Thailand now has a room for additional fiscal stimulus, and its authorities already see the need to run a budgetary deficit to boost domestic demand.[26] South Korea, Singapore, and Taiwan could apply additional doses of fiscal stimulus. Of these countries, South Korea has been most active in implementing an expenditure switching policy by combining an increase in government spending with an exchange rate appreciation. The other two countries have not been as active as export earnings have been large enough to sustain relatively high rates of growth and they have been more reluctant to diversify away from an export-led growth strategy. But all of them will have to take additional fiscal action in the event of a disorderly correction. In turn, allowing other East Asian currencies to appreciate along with the renminbi rather than following the dollar down would avoid fanning inflation and support the rotation of demand away from exports and toward domestic absorption. It would also address the collective action problem

where no Asian country wants to be first in allowing its currency to appreciate relative to the dollar because it fears it will suffer a loss of competitiveness in neighboring Asian markets.[27]

Latin America. Compared to East Asia, Latin American countries are in an easier position insofar as they are less open and therefore export less to the United States (as a share of GDP), Mexico and parts of Central America notwithstanding to the contrary. But they are more vulnerable to the negative financial effects of a flight to quality if a hard landing in the United States disturbs financial markets, in turn reducing investors' appetite for emerging market debt. Levels of gross and net indebtedness are higher (Latin American countries have both more debt and fewer reserves relative to GDP). Importantly, the share of short-term debt that has to be regularly rolled over is higher, as is the share of interest-rate-linked debt that would be immediately affected by any flight to quality (see Figure 1). Not all countries are susceptible to this problem: Mexican and Chilean debt is long-term and locked in at fixed interest rates. But the same is not the case of other important Latin American countries, first and foremost Brazil. A number of other countries in the region have pre-funded their 2006 borrowing, as noted above. But they too will have to come back to the market to refund their maturing short-term debt in subsequent years, exposing them to rollover risk.

Recent debt-management policies designed to limit such vulnerabilities may actually have inadvertently been heightening exposure to the risks associated with the scenario contemplated here. Historically, foreign-currency-denominated debt has been the bane of Latin American governments' existence; in the typical crisis, an external shock in the form of a sudden stop of capital flows would lead to currency depreciation against the dollar and

[26] Or at least they find doing so expedient for the pursuit of other political objectives.
[27] And therefore, in the case of countries that rely on inward foreign investment, be regarded as a less attractive destination for such funds.

hence a sharp rise in the local currency cost of interest and amortization.[28] Now that Latin American countries are able to interest investors (domestic and to some extent foreign) in local-currency debt, they have been taking advantage of circumstances to exchange dollar bonds for local currency issues in order to reduce this source of vulnerability. But the still limited willingness of investors to hold long-term fixed-rate domestic-currency debt securities, aside from those of Mexico and Chile, means that the authorities are trading currency exposure for interest rate exposure. This is most obviously the strategy in Brazil, but that country is not alone.

But in the scenario considered here it is the United States, not the Latin American countries, that initially experiences the sudden stop. With the dollar falling rather than rising, it is not dollar-denominated debt that becomes more burdensome. The problem instead lies in the flight to quality that flows from the associated financial dislocations and investors' reduced appetite for emerging market debt. As the prices of emerging market debt securities fall and interest rates rise, governments will find it more costly to service floating rate obligations. They will find it more costly and difficult to re-fund maturing short-term debts. The Brazilian strategy of retiring dollar debt can thus be seen as a bet against the disorderly-correction scenario whose implications are developed in this paper. The strategy in place is heightening the economy's vulnerability in the event that the bet goes wrong.

In addition to the adverse impact on consumer and investor confidence, this also means that governments will have less scope, relative to their counterparts in East Asia, for offsetting the decline in U.S. and local demand with expansionary fiscal policy. The fiscal position will deteriorate because of the slowdown in economic growth and hence in tax revenues, as in Asia; this reflects the operation of automatic stabilizers. But will then

[28] See Cespedes, Chang and Velasco (2002).

deteriorate further because of higher debt servicing costs in the scenario considered here. In Latin America, histories of fiscal excess, which show up as higher public debt ratios than in East Asia, encourage the markets to extrapolate future deficits from current deficits – to interpret even well-timed fiscal initiatives as indications of a loss of fiscal discipline. If confidence in fiscal discipline is undermined, increased public spending and reductions in the tax take may only give rise to sharply higher interest rates and capital flight that vitiate the normal Keynesian effects of fiscal policy.

Latin American countries have made considerable progress in terms of fiscal consolidation in recent years. But public debt ratios remain uncomfortably high at more than 50 per cent of GDP continent wide, which is ten percentage points higher than even in 1997. Gross public debt (as distinct from external debt) in Argentina remains extremely high in the wake of the recent restructuring. Bolivia, Uruguay, Columbia and a number of smaller Latin American countries all have public debt/GDP ratios well in excess of the 40 per cent regarded as the ceiling on prudent levels by the IMF (see e.g. Krueger 2006). One must be careful here to distinguish gross and net debt (netting our reserves) and to take into account cross holdings of public debt by public agencies and public pension assets (see Table 3). But none of this changes the essential point. (Again, Table 4 makes clear that the contrast with Asia is stark.)

Between 2002 and 2005 the primary surplus in Latin America swung from 2.0 to nearly 3.5 of GDP on the back of respectable growth and strong commodity prices. But against a backdrop where investors worry that public debts are too high, it is arguably the headline fiscal balance, which determines whether debts continue to rise or fall, and not the primary balance to which investors pay attention. There has been progress here as well, but

the headline balance is still in deficit in the amount of some 1 ½ per cent of GDP. Again the implication is relatively limited fiscal room for maneuver. To be sure, there is variation across the region: Chile has more room for maneuver than Brazil because it is running a headline surplus rather than deficit, has a lower debt/GDP ratio, and has less short-term external debt. (The rest of Latin America lies between these extremes.) The bottom line is that Latin American countries have less scope than their East Asian counterparts to use fiscal policy to sustain demand if demand support from the United States tails off.

A further reduction in real interest rates, particularly in Brazil, would provide useful economic stimulus. If the U.S. and world economies slow down, this would become all the more desirable against the backdrop of the region's chronically disappointing growth. But this is tantamount to assuming a solution to the problem. It effectively assumes a reduction in political noise, the maintenance of fiscal discipline, and further steps at strengthening institutions of contract enforcement precisely when a less favorable global economic environment would make ongoing reforms more difficult to sustain.[29]

The macroeconomic impact of a reduction in real interest rates would presumably be felt in the form of higher rates of investment; in Latin America, where savings and investment rates are less than half of Chinese levels, there is a case for adjusting current accounts by raising investment rather than reducing saving. The region's relatively low levels of investment reflect a long history of policy instability, income inequality, and weak

[29] Latin American governments have also sought to encourage savings and investment by transforming pensions from pay-as-you-go systems to privately capitalized individual retirement accounts where this has not already occurred, as in Brazil, authors like Dayal-Gulati and Thimann (1997) having shown that such reforms have a significant impact on savings rates. But it takes time for these reforms to show up in changes in national savings rates – too much time for the measure to be relevant to the resolution of global imbalances.
[31] In addition, insofar high savings and growth rates go together (Gavin, Hausmann, and Talvi 1997, Eichengreen 2006), Latin America may be in a low saving, low growth equilibrium from which it is difficult to break out quickly.

creditor rights.[30] Although progress in solving these problems is underway, profound changes in the social and economic fabric are not knit overnight. That is to say, they are unlikely to be completed on the time frame relevant to offsetting the impact on the region of a disorderly correction of global imbalances.

4. Conclusion

Observers from emerging markets have long complained that discussions of the crisis problem have exaggerated weaknesses in policies and institutions in the developing world while neglecting the contributions of advanced countries and international financial markets to global instability. This may or may not be a valid critique of accounts of crises past, but there is no question that the U.S. current account deficit and its implications for global adjustment now constitute the main risk to financial stability going forward. As a group, emerging markets have gone a long way in reducing their vulnerability, shifting from current account deficit to surplus, pre-funding their external financing needs, building up reserves, strengthening their fiscal positions, and buttressing price stability. U.S. policy makers have meanwhile moved in the opposite direction by allowing an unsustainable external imbalance to emerge.

Although emerging markets have done much to strengthen their financial position, they now face the urgent task of preparing themselves for the possibility of a sharp correction of the U.S. current account deficit and the associated adjustments in asset and commodity prices.[31] Sharp changes in asset prices and financial distress may give rise to a flight to

[31] To repeat what we said in the introduction, for this policy implication to follow it is not necessary to be certain that a disorderly correction is inevitable in order to be obliged to plan for the contingency that the worst occurs.

quality; this means that policy makers, in Latin America in particular, should take further steps, as quickly as possible, to further bullet-proof their finances.

Here Latin America is in both a stronger and weaker position than East Asia. It is in a stronger position in that its export exposure to the United States is less, mainly because it exports less as a share of GDP – Mexico and the countries of Central America notwithstanding to the contrary. But it has less scope for taking offsetting fiscal action. Neutralizing the impact of slower demand growth in the United States requires stimulating demand growth at home. In this respect most East Asian countries have more room for maneuver.

To be sure, there is considerable heterogeneity within both regions in the capacity of countries to undertake offsetting policy action. Some countries have more limited fiscal room for maneuver than others. Some are more jittery about letting their currencies move against the dollar. But initiating these policy changes while global economic and financial conditions are still good will ease the adjustment. It would be nice if the United States could participate in this process of cooperative policy adjustment by addressing the domestic roots of its twin deficits. But emerging markets cannot afford to wait for evidence that American policy makers appreciate the importance of this, much less on U.S. willingness to act.

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Table 1: Trade by Region, 2004
(*Percentage of GDP of Exporting Region/Country*)

	United States	Japan	Anglo Saxon	Other Industrial	Large Euro	Small Euro
United States	…	0.5	2.1	0.1	0.5	0.5
Japan	2.8	…	0.8	0.1	0.7	0.7
Anglo Saxon	8.6	0.8	…	0.5	2.4	2.4
Other Industrial	3.2	1.0	3.1	…	9.2	5.9
Large Euro	2.2	0.4	2.6	1.8	…	6.5
Small Euro	2.6	0.5	4.2	1.9	15.1	…
East Asia:						
Indonesia	3.4	6.2	1.5	0.1	1.3	1.5
Korea	6.3	3.2	1.9	0.3	2.1	1.8
Malaysia	20.2	10.8	6.9	0.5	4.6	5.4
Philippines	8.3	9.2	1.6	0.1	2.0	4.8
Thailand	9.5	8.3	4.2	0.8	2.7	3.6
Hong Kong	27.0	8.5	9.3	1.7	8.9	6.2
Singapore	21.8	10.8	13.5	0.9	8.6	8.2
China	7.6	4.5	2.0	0.3	2.6	2.3
Other Emerging Markets	2.7	0.5	1.4	0.3	2.6	1.9
Latin America:						
Argentina	2.4	0.3	0.5	0.3	1.7	2.3
Brazil	3.4	0.5	0.6	0.2	1.5	1.6
Chile	4.9	3.9	1.9	0.4	3.7	3.2
Colombia	7.2	0.3	0.5	0.2	0.9	1.1
Mexico	24.3	0.2	0.7	0.0	0.3	0.4
Peru	5.4	0.8	2.2	0.5	1.1	1.3
Oil-Producers	14.9	1.8	2.2	0.7	2.5	2.2

	East Asia 1	East Asia 2	China	Other Emerging Markets	Latin America	Oil-Producers
United States	0.5	0.3	0.3	0.2	1.2	0.1
Japan	2.1	1.2	1.6	0.2	0.2	0.1
Anglo Saxon	0.7	0.4	0.5	0.6	0.2	0.3
Other Industrial	0.6	0.7	0.6	0.9	0.5	2.0
Large Euro	0.5	0.3	0.6	1.0	0.4	0.4
Small Euro	0.4	0.4	0.4	1.3	0.5	0.5
East Asia:						
Indonesia	…	2.9	1.8	1.3	0.3	0.3
Korea	…	3.5	7.3	1.3	0.9	0.6
Malaysia	…	22.5	7.2	4.2	1.0	0.8
Philippines	…	6.7	3.1	0.2	0.2	0.1
Thailand	…	7.3	4.3	1.9	0.7	0.7
Hong Kong	8.7	…	70.0	2.8	1.5	0.5
Singapore	43.4	…	14.4	5.6	1.3	1.0
China	3.2	6.9	…	1.1	0.7	0.4
Other Emerging Markets	0.5	0.7	0.5	…	0.3	0.4
Latin America:						
Argentina	1.1	0.1	2.0	1.5	…	0.4

Brazil	0.5	0.2	0.9	0.6	…	0.6
Chile	2.4	0.2	3.4	0.7	…	0.5
Colombia	0.1	0.0	0.1	0.2	…	1.7
Mexico	0.1	0.1	0.1	0.1	…	0.1
Peru	0.4	0.1	1.8	0.2	2.2	0.3
Oil-Producers	1.5	0.5	0.9	1.0	0.3	0.0

Notes: The 12 regions defined here are the United States, Japan, Anglo Saxon (Australia, Canada, New Zealand, and the United Kingdom), Other Industrial (Denmark, Sweden, and Switzerland), Large Euro (Italy, France, and Germany), Small Euro (Austria, Belgium, Finland, Greece, Ireland, the Netherlands, Portugal, and Spain), East Asia 1 (Indonesia, Korea, Malasia, the Philippines, and Thailand), East Asia 2 (Hong Kong, and Singapore), China, Other Emerging Markets (Egypt, India, Israel, Morocco, Pakistan, South Africa, and Turkey), Latin America (Argentina, Brazil, Chile, Colombia, Mexico, and Peru), and Oil-Producers (Iran, Norway, Saudi Arabia, and Venezuela).

Source: IMF, Direction of Trade Statistics and, World Bank, World Development Indicators.

Table 2. Selected Fiscal Indicators (percent of GDP)

	General Government Gross Debt						Central Government Fiscal Balance					
	2000	2001	2002	2003	2004 Est.	2005 Proj.	2000	2001	2002	2003	2004 Est.	2005 Proj.
China	16.9	18.7	20.6	21.3	20	19.1	-3.6	-3.1	-3.3	-2.8	-1.7	-1.7
Hong Kong							-0.6	-5	-4.9	-3.2	-0.8	-0.7
South Korea	29.2	33.8	32.4	32.6	33.6	32.9	1.1	0.6	2.3	2.7	2.3	2.2
Singapore							7.9	4.8	4	5.8	3.9	4.5
Taiwan	24.4	31.5	35.1	37.6	39.6	41.5	-0.5	-2.8	-4.3	-4.0	-3.3	-3.0
Indonesia	91.3	78.2	69.2	60.2	57.9	53.3	-3.4	-3.2	-1.5	-1.9	-1.4	-1.6
Malaysia	36.7	43.6	45.6	47.1	46	44.8	-5.7	-5.5	-5.6	-5.3	-4.3	-3.5
Philippines	89.1	88.4	93.8	101.3	99.6	97.0	-4.6	-4.6	-5.6	-5.0	-4.2	-3.9
Thailand	23	24.8	31.3	28.5	28.6	26.2	-2	-2.1	-2.3	0.4	0.3	0.5

Source: Regional Outlook September 2005, Asia and Pacific Department, IMF.

Table 3: Gross and Net Debt, Latin America 2003

Debt as a share of GDP

Country	Gross	Net of Cross Holdings	Net of Cross Holdings and Reserves
Argentina	1.41	1.35	1.25
Belize	0.89	0.87	0.78
Bolivia	0.79	0.79	0.71
Brazil	0.89	0.87	0.78
Chile	0.54	0.38	0.16
Colombia	0.65	0.65	0.52
Costa Rica	0.54	0.54	0.44
Dominican Republic	0.58	0.58	0.56
Ecuador	0.53	0.53	0.51
El Salvador	0.46	0.46	0.34
Guatemala	0.20	0.20	0.08
Honduras	0.83	0.83	0.64
Jamaica	1.39	1.23	1.09
Mexico	0.27	0.27	0.18
Nicaragua	2.15	2.15	2.03
Panama	0.67	0.63	0.56
Paraguay	0.50	0.50	0.35
Peru	0.48	0.48	0.33
Trinidad & Tobago	0.31	0.31	0.09
Uruguay	1.17	1.13	0.95
Venezuela	0.47	0.46	0.28
Average Sample	0.75	0.72	0.60
Average Sample (weighted)	0.61	0.59	0.49
Canada	0.62	0.62	0.58
United States	0.62	0.36	0.35

Source: Cowen et al. (2005).

Table 3 : Gross and Net Debt, Asia 2003-4

Country	Gross Debt		Net of Cross Holdings		Net of Cross Holdings and Reserves	
	2003	2004	2003	2004	2003	2004
China [1)]	0.21	0.22	0.19	0.18	-0.09	-0.10
Japan [2)]	1.41	1.56	1.23	1.35	1.06	1.17
South Korea [3)]	0.23	0.26	0.22	0.25	-0.03	-0.04
HongKong [4)]	-	0.02	-	-0.19	-	-0.94
Singapore	1.05	1.03	1.01	0.99	-0.01	-0.05
Indonesia	0.29	0.27	0.16	0.16	0.02	0.02
Malaysia [5)]	0.48	0.48	0.48	0.48	0.06	-0.07
Philippines [6)]	0.78	0.79	0.75	0.77	0.58	0.62
Thailand	0.28	0.27	0.25	0.25	-0.03	-0.04
Taiwan [7)]	0.30	0.32	0.30	0.32	-0.39	-0.43

Sources :

International Financial Statistics and :

1) China : Regional Outlook September 2005, Asia and Pacific Department, IMF

2) Statistical Year Book 2006, Japan

3) Ministry of Planning and Budget, Korea

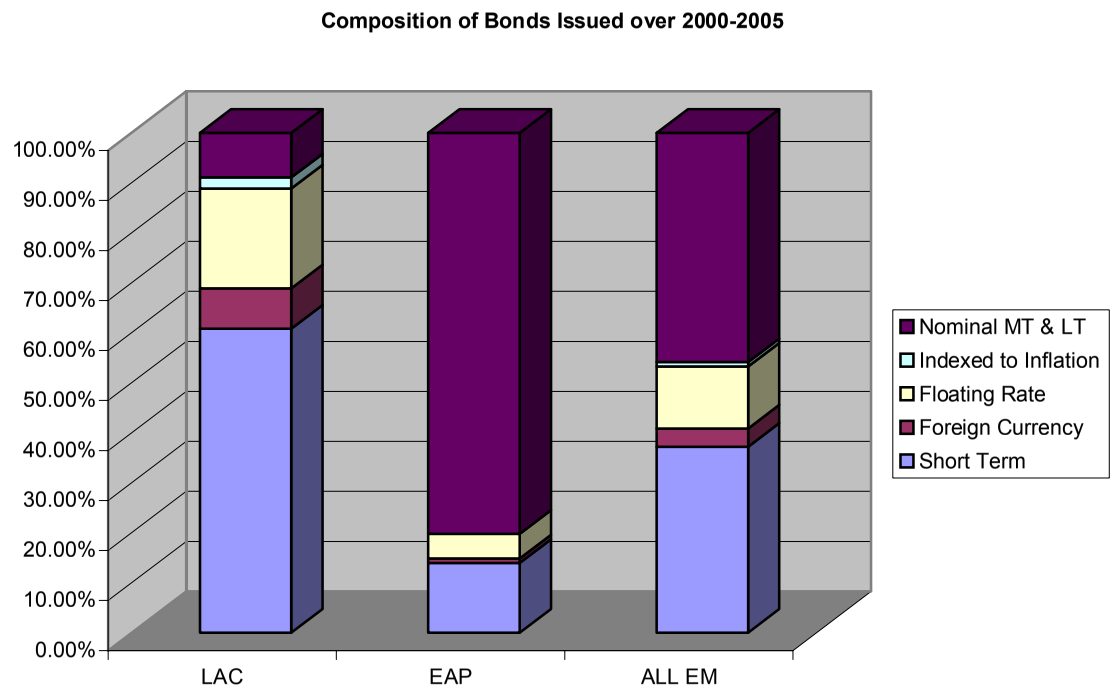
4) The Treasury - The Hong Kong Special Administrative Region, Hong Kong

5) Central bank of Malaysia

6) Bureau of the Treasury, Philippines

7) Central Bank of China, Taiwan

Figure 1


Composition of Bonds Issued over 2000-2005
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
LAC
EAP
ALL EM
Nominal MT & LT
Indexed to Inflation
Floating Rate
Foreign Currency
Short Term