

# Global Imbalances and the Asian Economies: Implications for Regional Cooperation

by Barry Eichengreen

August 2006

Office of Regional Economic Integration

Asian Development Bank

The ADB Working Paper Series on Regional Economic Integration focuses on topics relating to regional cooperation and integration in the areas of infrastructure and software, trade and investment, money and finance, and regional public goods. The Series is a quick-disseminating, informal publication that seeks to provide information, generate discussion, and elicit comments. Working papers published under this Series may subsequently be published elsewhere.
Key words: Asia economies, global imbalances, international economics, economic integration, regional cooperation.  JEL Classifications: F0, F4.
Disclaimer: The views expressed in this paper are those of the author and do not necessarily reflect the views and policies of the Asian Development Bank or its Board of Governors or the governments they represent.
The Asian Development Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use.
Use of the term "country" does not imply any judgment by the authors or the Asian Development Bank as to the legal or other status of any territorial entity.

# Global Imbalances and the Asian Economies: Implications for Regional Cooperation

Barry Eichengreen University of California, Berkeley Revised, May 2006

#### Abstract:

This paper asks how Asia should prepare for the disorderly correction of global imbalances. It recommends tightening monetary policy and allowing Asian currencies to appreciate as a way of achieving a better balance between internal and external demand. Leaving the overall level of demand unchanged requires that this monetary tightening be complemented by some relaxation of fiscal policy. But because the scope for fiscal support of domestic demand differs across countries, so too does the optimal degree of monetary tightening and exchange rate adjustment. This observation makes clear that an attempt to suppress intra-Asian exchange rate movements would be counterproductive in this context. Other policy measures that produce effects over longer horizons that can further contribute to the rotation of demand away from exports to the US include the development of Asian financial markets and the completion of an Asian free trade area. These policy adjustments will occur most easily if they are coordinated within Asia.

Prepared for the Asian Development Bank on behalf of the ASEAN+3 Research Group. The analysis draws on some work the author has done previously with Yung Chul Park of Seoul National University, whose collaboration is acknowledged with thanks. The author thanks Cindy Houser and an anonymous referee for helpful comments.

# Global Imbalances and the Asian Economies: Implications for Regional Cooperation

#### I. Introduction

Global imbalances and the trans-Pacific imbalance between the United States (US) and Asia in particular loom over all discussions of the need for international policy coordination. The paradox is that the influence of these imbalances has been benign to date. And, in turn, the fact that the influence of the trans-Pacific imbalance has been benign has limited the perceived urgency of policy responses designed to ensure a smooth global adjustment. The US, by running a large and persistent current account deficit, has helped sustain the growth of global demand. The People's Republic of China (PRC), by running a large and growing current account surplus, has helped sustain the growth of global supply. By providing a buoyant market for the exports of other countries, the US has facilitated the pursuit of export-led growth. It has enabled emerging markets in East Asia and elsewhere to accumulate unprecedented stocks of international reserves. By providing an elastic supply of consumer goods, the PRC, for its part, has moderated global inflationary pressures and allowed the US Federal Reserve System (Fed) and other central banks to maintain a relatively accommodating monetary stance. To be sure, these insights are not new: the idea that global imbalances have benefits not just for the US, but also for the surplus countries is at the heart of the "global co-dependence" and "New Bretton Woods" views of the current global conjuncture (Mann, 2004, and Dooley, Folkerts-Landau, and Garber, 2003).

Of course, all this could change at a stroke. If questions arise about the sustainability of the US current account deficit and the willingness of America to take steps needed to readjust its position, foreign finance for the US deficit could dry up abruptly. If the US capital account moves toward balance, the US current account will have to move toward balance as well. The curtailment of financial inflows will mean a reduced demand for US dollar (dollar) assets. As Treasury bond prices fall, US interest rates will rise. As the demand for dollar-denominated assets is curtailed, the dollar exchange rate will depreciate, and higher import prices will fan imported inflation and, perhaps ultimately, force the Fed to raise policy rates further than currently anticipated.

None of this bodes particularly well for continued economic expansion in the US. To be sure, the more quickly a weaker dollar boosts American exports, the more moderate will be any US slowdown. But even this scenario, while relatively favorable for the US, will still not be good news for the rest of the world, as it implies a significant shift in demand away from the products of other countries.

This paper poses the question of how policy, in Asia in particular, should be adapted in light of these risks. More precisely, it distinguishes two questions:

- What policy adjustments should be implemented now, while the trans-Pacific imbalance persists? Are
  there constructive policy adjustments that would minimize the danger of a disorderly correction of the
  current position and help facilitate the adjustment of current accounts to sustainable levels?
- If a disorderly adjustment nonetheless takes place, what policies should governments and central banks then implement to minimize damaging consequences? In particular, how should Asian countries respond to a sharp fall in the level of the dollar, if and when it occurs?

In each context I consider the case for international policy coordination across the Pacific and within Asia. I ask whether coordinated responses are likely to be more efficient than responses taken individually at the national level, both ex ante and ex post.

The remainder of the paper is organized as follows: Section 2 provides a capsule description of the current situation. Section 3 considers the risk of a disorderly correction, while Section 4 scrutinizes the channels through which Asian economies may be affected. Sections 5–7 consider possible policy responses at the national, regional, and global levels, respectively. Section 8 summarizes the discussion.

While there is no single definitive interpretation of the trans-Pacific imbalance, a number of influential accounts raise doubts about the risk of a disorderly correction. But the absence of a consensus is not a justification for inaction on the part of policy makers. Similarly, there may be no consensus about the likelihood of another Asian tsunami, but this does not relieve policy makers of the need to prepare—and to buy insurance against the possibility. There is an analogous argument for preparing for the possibility of a disorderly correction of the US current account.

Doing so requires clearly identifying how Asian economies will feel the effects of a disorderly correction and moving from there to identifying the optimal policy response. The argument of this paper is that, in contrast to earlier periods characterized by rising US interest rates and sudden stops in capital flows to emerging markets, this time it is unlikely to be financial channels through which emerging Asian countries are primarily affected. Emerging markets are running current account surpluses instead of deficits and minimizing borrowing. Stronger policies have reduced the danger of capital flight. Prudent debt management has prompted governments to prefund their external financing needs. This is not to suggest that the exceptionally low level of emerging market spreads will persist indefinitely. But ample international reserves will help countries compensate for any flight to quality and adverse shifts in the price and direction of international capital flows, if and when an adjustment occurs.

Rather, the principal risk to the emerging Asian economies lies in the possibility that a disorderly correction could precipitate a major slowdown in US growth and, in particular, the growth of US net import demand. Exposure to the danger of a disorderly correction is thus greatest for countries that are highly open and export heavily to the US.

How should Asian policy makers respond to these risks? I argue in this paper that the appropriate policy package has six components:

- (i) Asian currencies should be allowed to begin appreciating against the dollar now in order to narrow current account surpluses with the US—thereby reducing the region's exposure to a sudden compression in the US deficit. Movement toward greater exchange rate flexibility now, before re-balancing pressures mount further, would minimize confidence problems and give authorities greater monetary flexibility, which is precisely what the need.<sup>1</sup>
- (ii) Regional trade liberalization initiatives can help in this context. They will limit the need to radically restructure production away from exports and allow Asian economies to continue exploiting their comparative advantage.
- (iii) But because trade liberalization initiatives will not affect the overall level of demand, offsetting the contractionary impact on demand of currency-appreciation-cum-monetary-tightening will require in addition domestic policies of fiscal stimulus. Fiscal loosening should be carefully considered on a case-by-case basis, of course, in the context of well-defined expenditure programs that address priority areas, sound public expenditure management practices, and appropriate recognition of contingent liability and debt sustainability issues. But, that said, maintaining an appropriate level of demand in the face of currency appreciation and monetary tightening will require some expansionary thrust from fiscal policy.
- (iv) Measures promoting financial market development can also help by relaxing credit constraints and reducing the incentive for high levels of precautionary savings. But these work over a longer horizon

A strategy of tightening monetary policy in a series of steps, in anticipation of gradual, progressive appreciation of the currency, runs the risk that investors will anticipate what is coming, buy the currency aggressively, and cause an excessive appreciation. This is less of a problem for countries like the PRC with restrictions on capital account transactions than it is for other, more open, Asian countries. The other countries still have some scope for managing their currencies so as to smooth their movement in this transition, notably by engaging in sterilized and unsterilized intervention. Thus, the recommendation that currencies be allowed to appreciate against the dollar should not be confused with calls, made elsewhere, for floating exchange rates free of all central bank management.

and are thus less helpful for offsetting a disorderly correction of the trans-Pacific imbalance that occurs relatively soon. Indeed, focusing on such long-term measures alone may increase the risk of disruptive effects when the adjustment occurs.<sup>2</sup>

- (v) Since the scope for complementary policies differs across countries, so too does the scope for currency appreciation. The argument that Asian currencies will have to appreciate as a group against the dollar is not an argument for suppressing intraregional currency movements. Attempting to lock diverse Asian countries into a single exchange rate straitjacket is a recipe for suppressing adjustment.
- (vi) That said, adjustments can be undertaken more easily and will be more effective if they are coordinated across countries. Within Asia this means reaching agreement on the desirability of stronger currencies against the dollar and of fiscal stimulus. It means redoubling efforts to complete an Asian free trade area and cooperating on financial development. It means negotiating an agreement on reserve transparency to facilitate the orderly diversification of foreign reserves and minimize the risk of destabilizing portfolio shifts. It means building stronger and more independent regional surveillance institutions to facilitate collective assessment of economic conditions, risks, and vulnerabilities. All of these steps are considered below.<sup>3</sup>

# II. The Current Position and its Interpretation

The basic facts about the trans-Pacific imbalance are well known even if their interpretation is contentious. The US current account deficit reached some 6.5% of GDP in 2005 and has continued expanding. The US is now a net foreign debtor to the tune of nearly 25% of US GDP, or 7.5% of world GDP. US deficits have their counterpart surpluses in virtually all other regions, with the exceptions of only Eastern Europe and Central Asia. The largest surpluses in absolute terms are those of Japan, emerging Asia, the oil producers of the Middle East and North Africa, and the euro area, in descending order of importance. While final figures for 2005 are not yet in, every indication is that these imbalances will have widened to at least 6.5% of US GDP. The strength of the dollar has continued to encourage US imports and to restrain the growth of its exports. Slow growth in Europe and Japan has limited the expansion of these regions' consumption and investment demand.

Where the US current account deficit is approaching 2% of global GDP, Asia's current account surplus is "only" on the order of 1% of global GDP (3% of Asian GDP). Thus, Asia is the counterparty for only a fraction of the US external deficit.<sup>4</sup> The expansion of Asia's current account surplus in recent years has been driven mainly by the behavior of the PRC and Japan (with surpluses of 4.25% and 3.75% of GDP, respectively). Forecasts suggest that the PRC current account surplus will have widened further in 2005, to perhaps 5.5–6.0% of the country's GDP.<sup>5</sup> The current account balances of Japan and emerging Asia ex PRC will probably have declined marginally in 2005, reflecting high oil-import bills.

Note that the rise in Asia's foreign exchange reserves has exceeded its current account surplus, reflecting capital inflows. Those inflows slowed in 2005 due to the strengthening of the dollar and renewed flows toward

<sup>&</sup>lt;sup>2</sup> This present perspective on financial development and integration is also quite different from the conventional Asian emphasis on the desirability of deepening regional financial markets in order to better "recycle Asian savings within the region." The perspective here does not suggest that attempting diverting high Asian savings from the U.S. to the region itself will, by itself, have an impact on global imbalances or the risk of a disorderly correction. For more on this, see below.

<sup>&</sup>lt;sup>3</sup> In addition, there is a global coordination scenario, also discussed below, in which this shift in the monetary-fiscal mix in Asia was complemented by a mirror-image shift in the policy mix in the US – specifically, by steps to narrow the U.S. budget deficit, which in turn would permit the Federal Reserve to complete the process of raising its discount rate sooner rather than later. In practice, significant obstacles stand in the way of a trans-Pacific agreement. Realism requires acknowledging that global coordination is unlikely to be in the cards

<sup>&</sup>lt;sup>4</sup> That said, Asia is America's single most important regional counterparty.

<sup>&</sup>lt;sup>5</sup> Although restatements of the denominator with the release of revised data on PRC GDP toward the end of 2005 work to put downward pressure on the ratio.

the US. International Monetary Fund (IMF) estimates show Asia's capital account surplus as falling by two-thirds between the second half of 2004 and the first half of 2005.<sup>6</sup> Asian central banks, again led by but not limited to those of the PRC and Japan, have accumulated a large volume of foreign exchange reserves. In total, regional reserves more than doubled between the end-2001 and end-2005.

These patterns are open to different interpretations.<sup>7</sup> Given that a country's current account balance is necessarily the difference between its savings (S) and investment (I), and given the further fact that the US deficit (S–I) equals the surplus of the rest of the world (I\*–S\*)—that is to say, that global savings and global investment are necessarily equal to one another—the simplest way of distinguishing explanations for global imbalances is to separate them into four categories, emphasizing S, S\*, I and I\*, respectively.

A first set of views focuses on events in the US. This emphasis derives from the observation that no other single country or region has a current account surplus as a share of global GDP that begins to approach that of the US. As already noted, the US deficit is closing in on 2% of global GDP. Emerging Asia's surplus, in contrast, is still "a mere" 0.5% of global GDP. Japan's surplus is on the order of 0.4% of global GDP. The oil exporting countries, for their part, account for a further 0.5% of global GDP, while the euro area and miscellaneous emerging markets account for the remainder. None of this is to argue that policy outside the US is irrelevant. But from this point of view it does appear that the US is the most important source of impulses affecting the evolution of global imbalances.

#### **Deficient US saving**

A first interpretation thus focuses on the decline in national saving in the US. This view observes that a negative shock to national savings will result, other things equal, in a matching deterioration in the current account. US gross national saving has fallen to 13.6% of GDP on the IMF's measure, down by 3.3 percentage points from the 1983–2000 average and barely half the level prevailing in the rest of the world.<sup>8</sup> Household saving as conventionally measured has fallen essentially to zero. Public saving, meanwhile, has swung from a positive 2.5% of GDP in 2001 to a negative 3.5% of GDP today. Only a relatively high level of corporate saving has kept overall US savings rates in positive territory.<sup>9</sup>

US personal saving rates peaked in the early 1980s at 11% of GDP and have been trending downward since. No doubt one important factor has been high level of asset prices (equity prices before 2000, housing prices thereafter). If this rise in asset prices is permanent, reflecting the fundamental strengths of the US economy, then there is less reason to worry about the behavior of household saving. Households seeing themselves with permanently higher levels of wealth can afford to draw down their assets toward target levels by increasing current consumption on the basis of, say, home equity loans. As wealth is restored to target levels, household savings will begin to rise toward positive territory again, and the current account deficit will move relatively smoothly toward more obviously sustainable levels.

But an alternative interpretation of the high level of asset prices is that these reflect not the strong underlying state of the US economy but low real interest rates resulting from monetary policy, a situation that is unlikely to persist. By this interpretation the high level of asset prices reflects the loose monetary policy implemented by the Fed in the early parts of the decade in response to fears of deflation. This has reduced the cost of borrowing to finance purchases of real estate, to undertake home construction, and to speculate in financial markets. The resulting demand for assets has fueled the boom in real estate prices that has increased households' perceived wealth.

<sup>&</sup>lt;sup>6</sup> See IMF (2005a). For further discussion of the sources of dollar strength see below.

<sup>&</sup>lt;sup>7</sup> The remainder of this section is an elaboration of the analysis in Eichengreen (2005a).

<sup>&</sup>lt;sup>8</sup> See Roach (2005), p.2.

<sup>&</sup>lt;sup>9</sup> Note, however, that the fact that US savings have fallen by bit little more than 3 percentage points cannot account by itself for the widening of the US current account deficit, which has moved from slightly more 2% of US GDP in the 1983–2000 period to nearly 7% of US GDP today. By this metric, declining US savings account for half of the increase, while rising US investment accounts for the other half. I consider the behavior of investment below.

But now that this monetary stimulus is being withdrawn and policy rates are returning to more conventional levels, asset prices—real estate prices in particular—could take a tumble. The implication, as before, is that US households, seeing their wealth decline, will boost their savings. But in this scenario it is harder to imagine a smooth adjustment. Housing prices have been known to adjust downward abruptly. Were this to happen, US households might be led to curtail their spending equally abruptly. If lower prices lead households to walk away from their mortgage obligations, there also could be problems for financial institutions holding mortgage loans and for banks and funds holding mortgage-backed securities.

Other observers focus on fiscal rather than monetary policy and on public rather than private savings. Roubini and Setser (2004) blame the decline in US savings rates on American budgetary policy. They observe that a decline in public saving like that which occurred in the US since 2001 will lead to a matching decline in national saving and a matching deterioration in the country's current account balance, other things equal. They observe the coincidence of the decline in gross saving and the rise in the US current account deficit, the implication being that the "other-things-equal" assumption is not a bad approximation to reality. They observe that the magnitudes are right: that the 6%-of-GDP swing in the fiscal balance more or less matches the swing in the US current account.

Critics object that over the longer run there is only weak evidence of strong positive co-movements in the budget and current account balances. Thus Bernanke (2005) points to the second half of the 1990s when the US current account deteriorated by \$300 billion despite the fact that the fiscal position was improving.<sup>10</sup>

Others more sympathetic to the twin-deficits view (e.g. Truman 2004) respond that the current account balance is also affected by other shocks. While a decline in public saving will tend to increase foreign saving, other things equal, the two variables need not move in lockstep; their bivariate relationship will also be affected by third variables. More troubling is the fact that econometric studies of the impact of budget deficits on current account deficits still find only a weak correlation between these variables even after controlling for other factors. Thus, Erceg, Guerrieri, and Gust (2005) find that a \$1 billion decline in the US budget deficit produces only a \$200 million improvement in the current account.

The channel responsible for the offset is presumably the reduction in private saving that accompanies the increase in public saving—in other words, Ricardian equivalence. In the present context the mechanism would be that lower deficits mean lower interest rates, which encourage household borrowing. This appears to be what lies behind US Fed Chairman Ben S. Bernanke's view that tightening fiscal policy might reduce the current account deficit only at the cost of further inflating the housing bubble. At the same time, the evidence for Ricardian equivalence is weak. It implies that personal savings rates should have risen since 2001 in response to the fall in public saving, where the opposite was the case. And it strains credulity that US household saving would have been even lower in this counterfactual where public saving was higher.

The most telling objection to the twin-deficits/low-US-savings view is that US long-term real interest rates should be high if savings are deficient, where in fact long-term real interest rates have been low.<sup>13</sup> The implication at a minimum is that low US saving is not all that is going on.

# Rising rest-of-world saving

One additional thing that could be going on is rising saving in the rest of the world. According to the global-savings-glut interpretation of the US deficit, other countries have boosted their saving since the second half of

<sup>&</sup>lt;sup>10</sup> The explanation for this disconnect was, of course, the Internet bubble of 1995–1999, which both strengthened the budget by stimulating capital-gains-related revenues and encouraged investment in information and communications technology. This points us to the "new economy" view of US current account deficits to be discussed momentarily.

<sup>&</sup>lt;sup>11</sup> As just noted

<sup>&</sup>lt;sup>12</sup> Using panel data for a group of industrial countries, Chinn and Ito (2005) obtain almost an identical estimate. In contrast, Gruber and Kamin (2005) obtain a smaller and less significant coefficient.

<sup>&</sup>lt;sup>13</sup> A phenomenon known as "the Greenspan conundrum."

the 1990s. They have to put their savings somewhere, and the US is a natural destination. In emerging Asia, savings have been supported by a heightened awareness of precautionary motives since the crises of 1997–98. In the PRC, rapid growth has combined with the underdevelopment of financial markets and the absence of a social safety net to stimulate the development of enormously high savings rates.<sup>14</sup> In Japan, slow growth and associated deflation have depressed private consumption (although the rise in national saving has been limited by the sharp fall in public saving and the ongoing process of population ageing).

These interpretations have direct implications for the sustainability of global imbalances. In the PRC, consumption will adjust sooner or later to higher living standards. The development of financial markets, the creation of a social safety net, and rapid population ageing after 2015 will boost household consumption. It is implausible that the PRC will continue to save 50% of its national income indefinitely. Similar arguments implying similar adjustments can be made about other emerging Asian economies. Japanese consumers for their part will have less incentive to defer spending when deflation finally gives way to inflation. Data for 2003–04 are consistent with this view: they show consumption as the most important component of aggregate demand in these years in Asia ex PRC. The implication is that as Asia's savings rates fall, the region's current account surplus will narrow, requiring the US deficit to shrink.

This perspective emphasizing high savings in Asia would predict that the US current account deficit should be fully matched by the Asian current account surplus, where in fact, as we saw earlier, this is only partially the case. The More generally, quantitative support for the hypothesis of a rise in global savings is weak. The exception is the PRC, where global savings is up by nearly 10% of GDP between 1991 and 2004, and to a lesser extent the rest of developing Asia. Savings rates in both the euro area and Japan actually fell significantly over this period. This does not mean that the behavior of global savings is irrelevant to the emergence of global imbalances, but it does suggest that it is not all that is going on.

#### **Declining rest-of-world investment**

The other part of the story, necessarily, is the decline in investment rates in Japan (where investment is down by 9% of GDP since 1991), the euro area (where it is down by 3% of GDP over the same period), and emerging Asia ex PRC (where it is down by some 5% of GDP since prior to the onset of the crisis in 1997 for the Newly Industrializing Economies [NIEs] and by nearly 10% of GDP for the big four ASEAN economies). Explanations can be offered for the behavior of investment in each of these countries and regions. In Japan, the fall in investment is the direct consequence of a decade of deflation and stagnation. In the euro area, it reflects slow growth resulting from the combined effects of fiscal consolidation and difficult structural reform. In emerging Asia ex PRC, it is the result of a disruptive financial crisis and then of a conscious decision to run economies under lower pressure of demand and thereby to accumulate international reserves.

As in the case of savings, these explanations shed light on future prospects. If Japan is now exiting from its extended bout of deflation, then there is reason to expect that investment there will rise. Sooner or later structural reform will begin boosting growth and investment rates in the euro area. There is already some sign of investment

<sup>&</sup>lt;sup>14</sup> To be sure, the positive effect of growth rates on savings rates is paradoxical from the point of view of the life-cycle model (which would predict that higher incomes in the future should encourage higher consumption now and therefore lower savings, other things equal), but the evidentiary basis of this correlation is overwhelming. See, among others, IMF (2005b). It would appear to reflect inertia in consumption (that is, lags in the adjustment of consumption levels to higher incomes).

<sup>&</sup>lt;sup>15</sup> As already noted, Japanese savings rates have been falling despite the depressing impact on consumption of expected future price declines, reflecting the dominant influence of other factors, such as ageing of the population. For more on this, see below.

<sup>16</sup> BIS (2005), p.43.

<sup>&</sup>lt;sup>17</sup>And there is no comparable story for why savings should be so high in, inter alia, Europe.

<sup>&</sup>lt;sup>18</sup> Data in this paragraph are from BIS (2005).

<sup>&</sup>lt;sup>19</sup> Rajan (2005), Figure 4. In an accounting sense, changes in investment and savings behavior combine to produce changes in current account balances. In an economic sense, the generality and magnitude of this investment swing indicate that investment behavior is an important part of the explanation for the emergence of global imbalances.

rates recovering part way toward precrisis levels in ASEAN and the NIEs.<sup>20</sup> And, absent changes in savings rates in these parts of the world, increases in investment will move their current accounts toward balance, necessarily implying a decline in the US deficit.

# **Buoyant US investment**

This discussion of US saving, foreign saving, and foreign investment has covered three of the four elements contributing to global imbalances. Inevitably there is a fourth school of thought focusing on the attractiveness of investment in the US.<sup>21</sup> This is consistent with the concentration of deficits—with the view that because the US deficit is so much larger than the surplus of any other single region, the imbalance must stem first and foremost from developments in the US. It is consistent with the literature on the US emphasizing accelerating productivity growth, owing to US development and application of new information and communications technologies. It is consistent with high imputed rates of return on capital and relatively high level of asset valuations, presumably reflecting buoyant expectations of future US corporate profits. It is consistent with evidence of rapid productivity growth in the US nonfarm sector, which had already accelerated in the second half of the 1990s but has grown still more pronounced since.<sup>22</sup>

The problem is that these trends have not translated into a visible rise in US investment, which in fact fell by 2% as a share of US GDP between the 1990s and 2004.<sup>23</sup> High corporate earnings have stimulated not so much corporate investment as corporate saving, which is currently high.<sup>24</sup>

Moreover, both foreign direct investment (FDI) in the US and net purchases of equities by nonresidents declined after 2000. Since 2001, US investment in foreign equity markets has consistently exceeded foreign investment in the US equities. Rather, it has flowed into US government debt. It is hard to imagine that nonresidents have rushed into US government debt because they are impressed by rapid productivity growth in the US nonfarm business sector. Moreover, since 2001, the main source of capital inflows into the US has been foreign central banks, not private investors. It is hard to imagine that foreign central banks, which are not typical profit-maximizing investors, are motivated by high expected returns on investment in the US. None of these observations is easy to square with the view of global imbalances emphasizing the singular attractiveness of investment in the US.

#### Not a problem

How do the "New Bretton Woods," "Global Co-Dependency," and "Dark Matter" views, according to which the US current account deficit is not a problem, fit into these paradigms? According to the first two of these theories, both the US and Asia are happy to see the current constellation of imbalances persist. Asian countries continue to intervene to prevent their currencies from rising against the dollar because the stimulus to exports is socially beneficial. Countries like the PRC have unlimited supplies of labor that can be made available to the modern sector at prevailing wages; this distortion warrants using the exchange rate to boost profitability in the modern sector where rural workers can be productively employed. Or it is argued that the export sector is the locus of

<sup>&</sup>lt;sup>20</sup> Eichengreen (2005a) uses panel data for a sample of countries to estimate the determinants of investment rates. An Asia crisis dummy is significant in explaining the downward shift in investment in Asia after 1996. But an additional variable measuring the number of years since the onset of the crisis is also significant in explaining the recovery of investment in Asia in subsequent years.

<sup>&</sup>lt;sup>21</sup> See for example Cooper (2004), Clarida (2005), and Backus and Lambert (2005).

<sup>&</sup>lt;sup>22</sup> The latest figures show productivity growth having accelerated from less than 3% per annum before 2000 to more than 4% per annum after 2001. A good summary of these productivity trends is Timmer et al. (2004).

<sup>&</sup>lt;sup>23</sup> Again, on the calculations of BIS (2005).

<sup>&</sup>lt;sup>24</sup> As noted above.

<sup>&</sup>lt;sup>25</sup>The strength of the dollar in the final quarter of 2005 is, at one level, hard to reconcile with this view. The greenback appears to have been pushed up by private capital flows toward the US. But those flows presumably reflected the asymmetric tightening of the Fed and foreign central banks. Higher interest rates in the US made it attractive to borrow in other, lower-interest-rate markets and invest in US deposits and debt securities. Presumably this is a transitory phenomenon, however, that will come to an end once other central banks move in the same direction as the Fed.

learning by doing and productivity growth. Here again, the theory of the second best suggests that imposing another distortion on the firms in question—undervaluing the exchange rate to encourage them to engage in additional export-oriented activity—is beneficial from a social point of view. Or it is argued that the inefficiency of Asian financial markets provides a rationale for routing financial resources through the US. Asian countries use their savings to invest in US debt securities, and American managers use FDI to invest in PRC manufacturing. The US, for its part, is equally happy to be the importer of last resort on the basis of an overvalued dollar, since America is the ultimate consumer society.

Each of these variants of the so-called Global Co-Dependency view contains an element of truth.<sup>26</sup> But stories about unlimited supplies of rural labor willing to work at near-subsistence wages are limited to the PRC and a few other Asian economies. Together this accounts for only a minority of Asia's surplus and are counterparties for an even smaller fraction of the US deficit. Stories about the PRC circumventing the inefficiency of domestic financial markets—by routing its savings through the US—founder on the fact that only a relatively small fraction of PRC inward FDI comes from the US. Stories about the export sector being disproportionately the locus of learning-by-doing are largely undocumented and in any case cannot explain why Asian countries seek to prevent their currencies from rising against the dollar as opposed to other currencies, when they in fact export to a wide range of financial markets.

More generally, Global Co-Dependency stories are hard to square with the observation that current accounts reflect savings-investment imbalances. Even if the PRC prefers to route a significant fraction of its saving through foreign financial markets and to re-import it subsequently in the form of inward FDI, this does not explain why its saving should exceed its investment (that is, why its current account should be in surplus). Even if the US is acting as banker to the world, importing short-term capital and exporting long-term capital, this does not imply that its current account should be in deficit; in the 1960s, when the US was similarly characterized as banker to the world, it in fact ran persistent current account surpluses.<sup>27</sup> Even if Asian economies seek to encourage the export sector as the locus of learning externalities, it does not follow that they need to export more than they import.

Thus, the argument that the trans-Pacific imbalance persists because the US and Asian countries see it as mutually advantageous is less than convincing. This means that it is also less than reassuring about future prospects.

A related story, due to Hausmann and Sturzenegger (2005), is that the current situation is sustainable because the current account statistics are misleading. If the US is really saving significantly less than it is investing year after year, one should expect net foreign indebtedness and net interest payments to nonresidents to rise with time. In fact this has not been the case. Although the US ran cumulative current account deficits of some \$4,500 billion between 1980 and 2004, the country's net foreign assets should have fallen by the same amount, and the annual return on its foreign financial position should have fallen by, say, 5% of that amount (\$210 billion, assuming a required rate of return of 5%). But, in fact, the return on the US net foreign financial position remained essentially unchanged between 1980 and 2004. In effect, US foreign assets appreciated in value relative to US foreign liabilities, allowing the country to continue earning a positive return on its net foreign financial position.

For Hausmann and Sturzenegger, the explanation for this anomaly is that unrecorded US exports of managerial, organizational, and technological expertise ("dark matter") show up in increases in the market value of US foreign investments relative to their official recorded value. The failure of the balance-of-payments statistics to capture the value of this exported know-how creates a gap between official valuations at the time the foreign investment occurs and the subsequent market valuation of US foreign investments that seems to persist over a period of decades. In this view, the US current account deficit is not a problem because the recorded deficit is systematically understates the value of US production and savings.

<sup>&</sup>lt;sup>26</sup> Which is why they are appealing.

<sup>&</sup>lt;sup>27</sup> For the literature on this, see Despres, Kindleberger, and Salant (1966).

It is hard to dispute the authors' basic premise, since payments on the US net foreign financial position have not moved deep into negative territory. On Hausmann and Sturzenegger's assumption—that US companies are more sophisticated investors in Asia and can expect a higher return than their Asian counterparts—their conclusions are consistent: chronic US deficits will not then translate into proportionate increases in US foreign indebtedness. In effect, the factor services associated with that financial sophistication and managerial expertise are underreported in the statistics on the current account.

In fact, the observation that US foreign assets earn higher returns than US foreign liabilities, and that this has been true of FDI in particular, is not unfamiliar. Gourinchas and Rey (2005) find that US assets have consistently earned higher returns than US liabilities; indeed, this differential is not limited to FDI. The authors observe that, if anything, this differential has grown over time (the rate of return differential is now larger than it was prior to the collapse of Bretton Woods). They observe that the overall differential may have been increased by compositional effects in recent years as US foreign investment has been skewed more dramatically in the direction of high-yielding equity and FDI.

The 2% premium earned by US foreign assets over US foreign liabilities estimated by Gourinchas and Rey as the average for 1952–2005 suggests that the US does not have to make net interest payments to foreigners until the ratio of external debt to GDP reaches 30%.<sup>28</sup> Perhaps coincidentally, the country should breach this threshold in 2006 or 2007. Thus, the fact that the US has earned premia on its foreign investments helps the country sustain larger current account deficits than would be possible otherwise. But it does not permit it to print foreign liabilities without limit.

A still more fundamental question is whether one can be confident that this differential will persist. Just because Japanese investors in the past mistakenly bought golf courses in California and skyscrapers in Manhattan does not mean that Asia's foreign direct investments will earn equally low returns in the future. Those responsible for PRC foreign investment appear to have more appetite for US oil companies and laptop computer producers than they do for golf courses. Within the general category of FDI, it is no longer clear that US foreign investments should be more productive than their foreign counterparts. As Setser (2005) puts it, "It is sort of hard to believe that Toyota's US operations are massively less profitable than GM's European operations." And even where this has been the case in the past, it is hard to believe that it will remain the case in the future.

In addition, the more foreign investors grow worried about the sustainability of the US international financial position, the higher the risk premium they will demand in order to hold claims on the US. The rates of return considered by Hausmann and Sturzenegger will then behave not like immutable conditions but as endogenous variables. A shift toward rate-of-return parity has already occurred within the subcategory of debt securities, where US interest rates have risen relative to foreign interest rates. As Setser notes, the US income balance already moved into deficit in the second quarter of 2005. This renders Hausmann and Sturzenegger's regularity—that the US continues to receive net interest income abroad, in the range of \$30 billion a year, regardless of whatever changes in the net foreign asset data may be recorded—no more than an historical curiosum. While currency strategists have been wrong before, those of Bank of America (2005) forecast that the US income balance—the balance between income earned on foreign investments by US entities minus income paid by US entities to the foreign sector—will shift from a surplus of \$30 billion in 2004 to a deficit of \$75–85 billion in 2006.

Finally, those who insist that global imbalances are not a problem can point to the fact that there was only limited depreciation of the dollar in 2003–05. In standard economics, when market participants expect that an event will occur later, they have an incentive to start taking appropriate positions now. Thus, arguments that the dollar will have to decline significantly in the future imply that a significant weakening of the dollar should have already taken place in earlier years. That the dollar was relatively stable in 2003–04 and actually strengthened

<sup>&</sup>lt;sup>28</sup> Data for recent years suggest a higher threshold because the rate-of-return differential is larger, which reflects the aforementioned shift in US foreign investment further in the direction of equity and FDI.

in 2005 is a problem from this point of view. A number of explanations can be offered for this anomaly. Most significantly, the Fed tightened significantly in 2005, and it tightened faster than foreign central banks, enhancing yields that attracted capital flows toward the US.<sup>29</sup> In addition, 2005 and early 2006 was a period of high oil prices, creating surpluses for petroleum-exporting countries, which traditionally park their foreign balances in dollars. But standard arguments suggest that these should be only transient effects. Higher interest rates in the US only aggravate debt-sustainability concerns unless they translate into less absorption and a smaller current account deficit. Even if high oil prices persist, petroleum-producing countries will presumably learn to diversify their reserves. In any case, the sharp fall in the dollar in the second quarter of 2006 (when this draft was being finalized) suggests that this anomaly may be dissolving.

#### What an orderly correction would look like

The implications of the preceding discussion for exchange rate dynamics depend in part on which story or combination of stories one believes. But, as Giavazzi (2006) explains, regardless of whether one believes that the US current account mainly reflects a shift in demand toward foreign goods (the deficient US saving view) or an increase in the foreign demand for US assets (the excessive foreign saving view), the common implication is that the dollar will have to fall against foreign currencies. In the first scenario, the increase in US imports and net foreign debt causes the exchange rate to begin falling immediately. In the second scenario, in contrast, the increase in the foreign demand for US assets leads to some strengthening of the dollar on impact—compatible with actual exchange rate behavior—but similarly implies depreciation subsequently as foreign demands for additional US assets come to be satisfied and US exports must rise in order to service the additional net foreign debt. A range of models based on alternative assumptions (see for example Obstfeld and Rogoff, 2005, Caballero, Farhi, and Gourinchas, 2005, Blanchard, Giavazzi, and Sa, 2005) all point to a dollar depreciation of about 30% relative to the levels prevailing at the end of 2004. All of these models suggest that, in a well-behaved perfect foresight equilibrium, this adjustment can be spread out over a number of years.

# III. The Danger of a Disorderly Correction

These models, which assume well-behaved perfect foresight equilibria, have in common the premise that investors understand the need for the dollar to fall in the future and act accordingly, causing the dollar to begin falling now. The rate of change of the exchange rate validates expectations and is precisely the amount needed to propel the exchange rate and US net foreign debt to their long-run equilibrium levels.

Among other things, these models of equilibrium dynamics assume the absence of self-fulfilling bubbles. In a bubbly model, many different expectation-consistent paths are possible. If, for whatever reason, investors expect that the dollar will appreciate, then they will bid up its value now, producing an outcome that validates their expectations. Insofar as this affects interest rates and relative prices, the US current account deficit will be larger and the rate of growth of US net foreign debt will be faster than on the saddle-point stable equilibrium path. Bubbles cannot grow without limit, and at some point the dollar bubble described in the previous paragraph would have to pop. With the US net foreign debt having grown, the dollar would then have to fall more sharply than in the equilibrium scenario, in order to crowd in the additional net exports needed to service the debt.

What would this correction look like? Imagine that the US current account deficit is allowed to continue widening, from 6% of US GDP in 2004 to 10% of US GDP in 2010. With a deficit ratio of 10% of GDP and a rate of nominal GDP growth of 5%, the US ratio of external debt to GDP would only begin to level off when it approaches 200%. This is a dramatically higher level of external indebtedness than we have ever seen for a large country. It is simply implausible that foreign investors would willingly absorb such massive quantities of US debt.

-

<sup>&</sup>lt;sup>29</sup> Eventually, one would expect this tightening to slow the rate of growth of US absorption, either smoothly in the context of a growth slowdown or abruptly in the context of a recession. That no slowdown was evident in 2005 is presumably attributable to the fact that monetary policy works with long and variable lags. By the spring of 2006, cooling of the US housing market suggested that such a slowdown was in train, although its impact on absorption was still not apparent.

If this conclusion is accepted, it follows that at some point purchases by foreign investors of US assets will decline below 10% of US GDP. As capital inflows tail off, the current account deficit will narrow by definition, and US 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 equilibrium debt ratio is approached, at which point foreign finance would dry up abruptly and the US current account deficit would have to be eliminated at a stroke.

In this latter scenario, the consequence unavoidably would be very sharp compression of US and global demand. If capital inflows into the US decline by 6.5% of GDP (their current level) because foreign finance dries up completely, then the current account must move immediately to balance, by definition of the balance of payments. The result on impact would be for US demand and specifically US net demand for imports to decline by 6.5%. To repeat, a 6 5% decline in US demand is a recipe for a decline in global output in the amount of 6.5% of US GDP, other things equal. The second-round effects following this fall in production could then aggravate the impact on output and employment.

How would changes in relative prices work to bring about this result? A decline in net foreign purchases of dollar assets would cause the dollar to fall. It would put downward pressure on the prices of dollar-denominated assets—equivalently, their yields would rise, eliminating the Greenspan Conundrum of low long-term interest rates. Note that these two effects are two sides of the same coin: a declining dollar and higher US interest rates accompany one another as a result of interest parity. 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 and limiting the rise in housing prices that have worked to sustain household net wealth in the absence of positive personal saving. They would discourage investment by raising the cost of capital. The fact that US 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.

To be sure, US output and employment can be sustained if net imports are reduced by boosting US exports. This is consistent with the observation that the dollar will fall because of the curtailment of capital inflows. But the scenario in question is highly optimistic; the empirical literature generally suggests that significant lengths of time have to pass before changes in the relative price of exports produce changes in export volumes. And even under this optimistic scenario, the compression of US demand does not disappear; it is simply shifted to the rest of the world. For countries other than the US, 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 US to other countries but no mitigation of the overall recessionary effects.

A frequently-heard objection to this story is that foreign central banks would never allow financing for the US 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 US current account deficit precisely in order to avoid precipitating a recession. They would step in with further purchases of US assets if private investors pulled the plug.

But foreign central banks also have an interest in avoiding capital losses on their dollar reserves. Selling US Treasury and agency securities for, say, 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 by running large ongoing surpluses. They worry about the resource misallocation that results from keeping interest rates artificially low.<sup>30</sup> They worry about the present or prospective future costs of sterilizing the financial effects. There is thus an incentive to diversify out of dollars if they think they can do so without prompting reserve diversification by other central banks and precipitating a significant deprecation of the dollar. There is also an incentive to let their currencies rise if they think they can limit the effects.

11

<sup>&</sup>lt;sup>30</sup> Effects that are most clearly evident in the PRC in the form of investment rates that are surely too high to be consistent with efficient allocation of resources.

To be clear, nothing guarantees that the US deficit will be compressed abruptly and that recessionary tendencies will follow. But neither can this possibility be ruled out. In any case, focusing on this worst-case scenario is useful for contemplating the implications for emerging markets.

# IV. Channels through which Asia's Emerging Markets may be Affected

World Bank (2005) enumerates the channels through which the curtailment of capital flows toward the US—leading to a sharp depreciation of the dollar and sudden compression of the country's current account—may impact emerging markets in Asia and the rest of the world.

#### **Financial Effects**

On the positive side, a declining US exchange rate would reduce the cost to emerging markets of servicing dollar-denominated debt. This would amplify an effect already evident between 2002 and 2004, when a declining dollar reduced ratios of debt to GNP and debt service to exports by one percentage point in emerging markets.<sup>3</sup> This effect favors heavily-indebted countries where the reduction of debt burdens is particularly valuable, as well as dollar borrowers. In practice this means mainly Latin American countries like Brazil, Chile, and Columbia, where the World Bank estimates that the fall in the dollar between 2002 and 2004 reduced the ratio of debt to exports by 4–10%.<sup>32</sup> In comparison, these benefits will be minor in emerging Asia (according to World Bank staff estimates, only India and Thailand experienced modest benefits in 2002–04).

On the negative side, rising US interest rates and declining US Treasury prices could precipitate a flight to quality that heightens volatility in emerging financial markets. The curtailment of capital flows toward the US would make for higher US Treasury benchmarks and wider emerging-market bond spreads for borrowers with high ratios of debt to GDP. The assumption here is that US policy rates are important for the evolution of global interest rates and that both emerging market spreads and capital flows co-vary with the level of global rates. World Bank estimates suggest that a one percentage point increase in US interest rates raises debt service as a share of exports of goods and services by 3% in both South and East Asia. This compares with 7% in emerging Europe and Central Asia and 13% in Latin America and the Caribbean.

Finally, emerging markets will feel negative wealth effects from capital losses on foreign reserves. Figure 1 highlights this by documenting the massive accumulation of reserves by developing countries since 1999. According to the most recent IMF data (for the third quarter of 2005), about 60% of the reserves of developing countries for which currency composition is known, or \$850 billion, are in US dollars.<sup>33</sup> A 20% depreciation of the dollar would thus translate into a \$170 billion capital loss for this group of countries.

It is important to recall, however, that depreciation of the dollar implies the appreciation of other currencies. Imagine for example that the dollar depreciates against the euro and the yen while emerging-market currencies do not move on an effective basis—that they appreciate by 10% against the dollar while depreciating by 10% against the euro and the yen.<sup>34</sup> This takes as a starting point the back-of-the-envelope assumption that trade with the dollar bloc and trade with the euro area and Japan together are of roughly equal importance for this group of countries. Now capital losses on dollar reserves are largely offset by capital gains on reserves in other currencies. Exposure is limited to the 30% of developing country reserves held in dollars that are not hedged in this way.<sup>35</sup> Assuming a 10% depreciation of the dollar against emerging Asian currencies, this now implies a

<sup>31</sup> World Bank (2005), p.52.

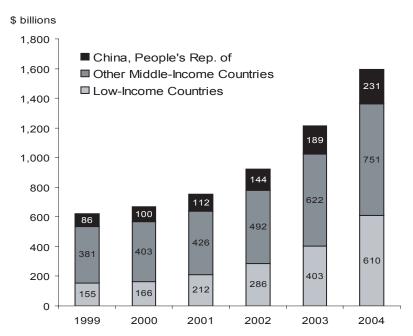
<sup>&</sup>lt;sup>32</sup> And to a lesser extent South Africa and Turkey.

<sup>&</sup>lt;sup>33</sup> 30%, or some \$425 billion, is held in euros and the bulk of the remainder in Japanese yen.

<sup>&</sup>lt;sup>34</sup> This is only one of a range of assumptions that might be plausible about the reaction of emerging market currencies to a sharp drop in the dollar. Alternatives are considered below.

<sup>&</sup>lt;sup>35</sup> Note that these calculations ignore the 10% of developing-country reserves held in other currencies. In practice these tend to be Swiss francs, pounds sterling etc. Assuming, as seems plausible, that these currencies react in the same fashion as the euro would only reinforce the conclusions about to follow.

Figure 1: Foreign Exchange Reserves in Developing Countries, 1999–2004



Source: World Bank (2005).

capital loss of \$45 billion, a much smaller if still not inconsequential number. If, on the other hand, the currencies of the PRC and the other emerging Asian countries are allowed to rise more sharply against the dollar, capital losses would be larger.

This emphasis on the financial market implications of a fall in the dollar reflects the intellectual sway of the financial-crisis paradigm of the 1990s, when sudden stops in capital coincident with a flight to quality in the advanced countries were the immediate way in which emerging markets were affected (see Calvo, 1998). This time around, the financial consequences may be more ambiguous and less obviously damaging to emerging markets. For one thing, the positive correlation between US interest rates and emerging market spreads may be 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). In particular, as credit ratings improve across emerging Asia, the sensitivity of spreads to US interest rates should diminish.

Beyond this, the response of emerging market spreads will depend on the reason for the rise in US interest rates and on the reaction of the other advanced countries. If monetary tightening in America simply reflects the desire to normalize US policy rates as the Fed works to back out the lingering impact of the anti-recessionary and anti-deflationary interest rate reductions at the beginning of the decade, then it is plausible that rates in other countries should also rise as gross financial flows from the US to foreign markets are deterred by rising yields at home. The saving grace is that the increase in interest rates in the financial centers will be gradual, as the Fed and other central banks weigh the advantages of higher rates for the maintenance of price stability against any negative implications for economic growth. And a gradual increase in rates should be relatively easy for emerging markets to absorb.

If, on the other hand, the impetus for higher US interest rates stems from a sudden evaporation of the willingness of foreign investors to finance America's current account deficit and from the inflationary effects of the consequent fall in the dollar, then higher interest rates in the US will be accompanied by lower interest rates in the rest of the world. With less liquidity flowing to the US, more liquidity will remain in other markets. The interest differential described here is also a straightforward implication of the interest parity condition, given the assumption of a sharp fall in the dollar. In other words, foreign interest rates must be lower than US rates by the amount of expected foreign currency appreciation in order to satisfy the no-arbitrage condition. And if higher interest

rates in the US are accompanied by lower rates in Europe, then it is not obvious that emerging markets will be adversely affected.

For emerging markets to feel strongly negative effects, one must append another mechanism that produces a sharp drop in global liquidity. A candidate would be a sharp adjustment in US asset prices that produces distress, or even fears of distress, among financial institutions, as happened in the bond market correction of 1994 and the Long Term Capital Management (LTCM) crisis of 1998. Such fears could prompt de-leveraging by both foreign and US financial institutions, reducing global liquidity. They could produce a global flight to quality and a sharp reduction in the appetite for emerging market debt, as happened in these earlier periods.<sup>36</sup>

A problem for this storyline is that emerging markets have greatly reduced their dependence on new foreign borrowing since the bond market crisis of 1994 and LTCM-Russia crisis of 1998. The fact that they are running current account surpluses means that they have little need for additional foreign borrowing. In many cases they are reducing net external debt by accumulating reserves. To be sure, if the US current account shifts from deficit to balance, current accounts in Asia and Latin America will have to move toward balance as well (assuming that Europe's current account balance remains where it is, at approximately zero). This will still mean no need for additional borrowing.

Where debt is maturing, of course, it will have to be rolled over. But few emerging Asian countries are in this position. Those few Asian economies with such needs took advantage of favorable financial conditions to prefund the renewal of maturing issues in the first half of 2004. (The Philippines is an exception, as it avoided prefunding future borrowing because of budgetary costs.)<sup>37</sup>

Given all this, emerging markets should be largely insulated from the financial consequences of higher interest rates. The main exceptions are Ecuador and Turkey and countries with large amounts of interest-rate-indexed debt such as Brazil. (In Brazil, domestic debt has an average duration of less than a year and over half is still linked to the overnight interest rate.) But few Asian countries are in this position. And, in any case, recall our earlier skepticism that global rebalancing would mean higher *global* rates.

#### **Real Effects**

Compared to this emphasis on financial effects, the World Bank's analysis neglects what is potentially the most important negative channel through which Asian markets will be affected, namely the impact on trade. The abrupt elimination of foreign financing for the US current account would force the net imports of the US to decline by

<sup>&</sup>lt;sup>36</sup> A variation on this theme is how the story was told in the heyday of the Bretton Woods System, when global liquidity was measured as the sum of the US monetary base plus dollar reserves held by foreign central banks. In this model, a reduction in the rate of growth of the US monetary base reduced not just US liquidity but also global liquidity, as it meant that foreign central banks were accumulating reserves less quickly. On reflection, it will be evident that this variant of the story requires exchange rates to be pegged to the dollar, for otherwise the monetary base and liquidity in the rest of the world could move independently of dollar reserves. To put it another way, only if currencies are pegged will foreign policies and conditions mimic US policies, as was the case under Bretton Woods; only then will the US be able to act as Stackelberg leader in the global liquidity game. While there is some evidence of this mechanism working in the recent past (see for example Jensen, 2005), if foreigners abruptly grow unwilling to finance the US deficit and allow their exchange rates to move, this assumption will be violated.

<sup>&</sup>lt;sup>37</sup> For their part, many Latin American and Eastern European countries with maturing debts 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% of exports, down from more than 30% in 1996–98. Ecuador's net financing need is more than 70% 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. They assume away the danger of large-scale capital flight. Excluding Turkey, which also 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% of exports, down from nearly 24% in 1996–98. Including Turkey they will average about 10%. 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% of their reserves. The comparable figure for emerging Europe is 11%. Alternatively, closing this gap by increasing net exports would require only a 1% depreciation of Latin American currencies (5% including Ecuador) and a 3% depreciation of emerging European currencies (5% including Turkey), by Deutsche Bank estimates. See Deutsche Bank (2005).

6.5% of US GDP. This could have serious consequences for emerging markets, more serious than the impact of higher interest rates.

Since it will take time for dollar depreciation to crowd in US exports, assume that the entire swing comes in the form of US imports. Assume also that the dollar falls by the same amount against all foreign currencies (this restrictive assumption will relaxed momentarily). The impact on other regions will then depend on the importance of exports to the US as a share of regional GDP.<sup>38</sup> In data for 2004 this share varies from a high of 23% in the small highly-open East Asian economies (Hong Kong, China; Singapore; and Taipei,China) to a low of 4% in the euro area and Japan (Table 1). In between, one finds the Anglo Saxon economies (Australia, Canada, New Zealand, and the United Kingdom), the larger East Asian economies (Indonesia, Malaysia, Philippines, Republic of Korea, and Thailand) and the PRC at the high end, at 15%, 13%, and 15% respectively, and Latin America at the low end, at 7%.<sup>39</sup>

It flows from this focus on trade that a disorderly correction of the US current account will have the largest impact on emerging markets most dependent on exports to the US, which means above all the small entrepot economies of Asia.<sup>40</sup> 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 US.

A more nuanced analysis would allow different currencies to appreciate against the dollar to different extents. One can imagine, for example, that Asian countries continue to peg their currencies to the dollar at current levels while European countries allow the euro to float upward against it, and Latin American countries split the difference (they allow their currencies to appreciate against the dollar by half as much as do European countries). In this scenario Asian currencies depreciate on an effective basis, since they remain unchanged against the dollar but depreciate against the euro and Latin American currencies. Whether individual Latin currencies appreciate or depreciate on an effective basis then depends on whether the country issuing them exports mainly to the US and Asia or to Europe. Looking across emerging-market regions, this scenario would be relatively happy for Asia, since the deterioration in its export competitiveness will be minimal. By comparison it would not be a happy one for Latin America, since it will have to bear more of the global adjustment burden given the absence of an Asian contribution.

Alternatively, one can imagine a scenario in which Asian countries are more inclined than countries in other parts of the world to allow their currencies to appreciate against the dollar, reflecting the relatively robust health of the Asian economies. While Asian currencies then appreciate unambiguously, the magnitude of their effective appreciation will depend on the share of the exports of the issuing country destined for the US.

Truman (2005a) has elaborated several such scenarios. In his first, the euro rises by 40% against the dollar, Asian currencies by 20%, and Latin American currencies by 15%. Asia's effective nominal exchange rates then remain essentially unchanged, because its currencies appreciate relative to the dollar but depreciate relative to the euro; this is true for each individual Asian country as well as for the regional aggregate. In Latin America, in contrast, the effective regional exchange rate appreciates by 6% despite the fact that revaluation against the dollar is smaller. This reflects the fact that more of the region's trade is directed toward the US. This effect is driven by Mexico and Venezuela, which see their effective rates rise by 9% and 7%, respectively. (We may want to disregard the second effect as reflecting mainly the fact that oil is priced in dollars, something that will not remain the case indefinitely.) Brazil, in contrast, continues to enjoy a 3% effective depreciation.

<sup>&</sup>lt;sup>38</sup> And, as well, on the relevant relative price elasticity of import demand.

<sup>&</sup>lt;sup>39</sup> Oil exporters also rely heavily on the US for their final market, but they are a special case.

<sup>&</sup>lt;sup>40</sup> We may wish to place less stress on the very high ratios of exports to the US to GDP for these small Asian countries on the ground that the domestic content of those exports is relatively low. A proper input-output model with a role for imports and exports would then be needed to analyze the impact.

Table 1: Trade by Region, 2004 (% of regional GDP)

	US	Japan	Anglo Saxon	Other Industrial	Large Euro	Small Euro
		4.0	4.0	2.4	4.0	4.0
US	•••	1.6	4.9	0.4	1.9	1.2
Japan	4.1	•••	1.6	0.3	1.5	1.0
Anglo Saxon	14.5	1.9		1.2	7.0	5.7
Other Industrial	4.6	1.5	4.9		21.5	11.5
Large Euro	3.2	1.0	3.7	3.1	•••	13.3
Small Euro	4.7	1.5	6.9	3.8	27.0	
East Asia 1	13.0	13.2	5.3	8.0	5.1	3.5
East Asia 2	22.5	22.7	14.8	3.4	12.5	7.9
PRC	14.9	10.2	4.6	0.8	6.5	3.6
Other Emerging Markets	4.9	1.3	3.4	0.9	7.2	4.7
Latin America	7.0	1.3	1.4	0.5	3.8	2.8
Oil-Producers	23.2	2.9	3.7	2.3	5.7	3.7
				Other		
	East Asia 1	East Asia 2	PRC	Emerging Markets	Latin America	Oil- Producers
	East Asia 1	East Asia 2	PRC	Emerging		
US	East Asia 1	East Asia 2 0.9	PRC	Emerging		
US Japan				Emerging Markets	America	Producers
	1.4	0.9	1.5	Emerging Markets	America 0.6	Producers 3.0
Japan	1.4 3.7	0.9 1.7	1.5 3.6	Emerging Markets  0.6  0.4	0.6 0.3	3.0 1.0
Japan Anglo Saxon	1.4 3.7 1.6	0.9 1.7 1.1	1.5 3.6 1.5	Emerging Markets  0.6  0.4  1.2	0.6 0.3 0.3	3.0 1.0 1.3
Japan Anglo Saxon Other Industrial	1.4 3.7 1.6 1.2	0.9 1.7 1.1 1.2	1.5 3.6 1.5 1.4	0.6 0.4 1.2 2.4	0.6 0.3 0.3 0.7	3.0 1.0 1.3 2.9
Japan Anglo Saxon Other Industrial Large Euro	1.4 3.7 1.6 1.2 0.9	0.9 1.7 1.1 1.2 0.7	1.5 3.6 1.5 1.4	0.6 0.4 1.2 2.4 1.6	0.6 0.3 0.3 0.7 0.5	3.0 1.0 1.3 2.9 1.2
Japan Anglo Saxon Other Industrial Large Euro Small Euro	1.4 3.7 1.6 1.2 0.9 1.5	0.9 1.7 1.1 1.2 0.7 1.0	1.5 3.6 1.5 1.4 1.4	0.6 0.4 1.2 2.4 1.6 2.2	0.6 0.3 0.3 0.7 0.5 0.9	3.0 1.0 1.3 2.9 1.2 1.7
Japan Anglo Saxon Other Industrial Large Euro Small Euro East Asia 1	1.4 3.7 1.6 1.2 0.9 1.5	0.9 1.7 1.1 1.2 0.7 1.0	1.5 3.6 1.5 1.4 1.4 1.7	0.6 0.4 1.2 2.4 1.6 2.2 2.3	0.6 0.3 0.3 0.7 0.5 0.9	3.0 1.0 1.3 2.9 1.2 1.7 3.2
Japan Anglo Saxon Other Industrial Large Euro Small Euro East Asia 1 East Asia 2	1.4 3.7 1.6 1.2 0.9 1.5 	0.9 1.7 1.1 1.2 0.7 1.0 10.3	1.5 3.6 1.5 1.4 1.7 12.3 51.7	0.6 0.4 1.2 2.4 1.6 2.2 2.3 7.0	0.6 0.3 0.3 0.7 0.5 0.9 1.0	3.0 1.0 1.3 2.9 1.2 1.7 3.2 4.2
Japan Anglo Saxon Other Industrial Large Euro Small Euro East Asia 1 East Asia 2 PRC	1.4 3.7 1.6 1.2 0.9 1.5  42.5 7.7	0.9 1.7 1.1 1.2 0.7 1.0 10.3 	1.5 3.6 1.5 1.4 1.7 12.3 51.7	0.6 0.4 1.2 2.4 1.6 2.2 2.3 7.0 1.6	0.6 0.3 0.3 0.7 0.5 0.9 1.0 1.3	3.0 1.0 1.3 2.9 1.2 1.7 3.2 4.2 2.3
Japan Anglo Saxon Other Industrial Large Euro Small Euro East Asia 1 East Asia 2 PRC Other Emerging Markets	1.4 3.7 1.6 1.2 0.9 1.5  42.5 7.7 2.0	0.9 1.7 1.1 1.2 0.7 1.0 10.3  16.0 1.4	1.5 3.6 1.5 1.4 1.7 12.3 51.7 	0.6 0.4 1.2 2.4 1.6 2.2 2.3 7.0 1.6	0.6 0.3 0.3 0.7 0.5 0.9 1.0 1.3 1.3	3.0 1.0 1.3 2.9 1.2 1.7 3.2 4.2 2.3 1.5

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

Source: IMF, Direction of Trade Statistics and International Financial Statistics.

The contrasting scenario is one in which the rise in the euro against the dollar is limited to 20%, while the Asian currencies are allowed to appreciate against the dollar by 40% and the Latin American currencies continue to rise against the greenback by 15%. In this case, export growth slows across virtually all of Asia and other policy adjustments are needed to compensate for the demand shortfall. In Latin America, in contrast, the impact varies. Relative to the first scenario, the impact on Mexico is unchanged; the country trades disproportionately with the US, appreciation of the peso against the dollar is all that matters, and by assumption this remains unchanged. Now, however, Brazil no longer enjoys a nominal depreciation, given the importance of its commodity exports to Asia and the fact that Asian currencies are appreciating.<sup>41</sup>

A still more nuanced analysis would allow the effects to vary as a function of the commodity composition of countries' exports. For example, a significant slowdown in the US and a more modest slowdown in the PRC induced by the appreciation of the renminbi would have a particularly pronounced impact on commodity-exporting countries. The rapid rate of increase in commodity prices in recent years has reflected strong demand emanating from these two countries, together with the rest of emerging Asia.<sup>42</sup> If demand growth in the US and PRC—and hence demand growth globally—were to slow significantly, the terms of trade of commodity exporters like Indonesia and Chile would be hit.

Table 2: Measures of Vulnerability to Oil Shocks, Selected Countries and Regions

	N	let oil imports	S <sup>1</sup>	Oi	l consumptio	n²
	1995	2000	2003	1995	2000	2003
Asia	1.1	2.2	2.2	0.15	0.15	0.14 <sup>3</sup>
China, People's Rep. of	0.2	1.3	1.5	0.18	0.17	0.15
India	1.9	3.1	2.8	0.16	0.16	0.15³
Korea, Rep. of	2.4	4.2	3.8	0.14	0.12	0.11
Other	0.6	1.5	1.9	0.14	0.15	0.15³
Latin America⁵	-1.2	-2.1	-2.4	0.12	0.12	0.12³
Central Europe <sup>6</sup>	1.5	2.0	1.4	0.10	0.09	0.08³
Memo: G7 countries	0.5	0.9	0.9	0.06	0.05	0.05

<sup>&</sup>lt;sup>1</sup> Petroleum, petroleum products and related materials (SITC Rev. 3), as a percentage of nominal GDP. Negative values indicate that exports exceed imports.

<sup>&</sup>lt;sup>2</sup> Barrels per unit of GDP at 1995 prices and US dollar exchange rates.

<sup>&</sup>lt;sup>3</sup> 2002.

<sup>&</sup>lt;sup>4</sup> Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore, and Thailand.

<sup>&</sup>lt;sup>5</sup> Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

<sup>&</sup>lt;sup>6</sup> Czech Republic, Hungary, and Poland.

<sup>&</sup>lt;sup>41</sup> Another attempt to work through this arithmetic is Cline (2005). He first identifies the target foreign trade-weighted appreciation against the dollar needed to accomplish the requisite US current account adjustment. He then identifies a target set of changes in current account balances of other countries, in effect distributing the requisite US adjustment among the country's trading partners in a manner designed to maintain proportionality. The "optimal" realignment is taken as the one that exactly meets the overall target for foreign trade-weighted appreciation of the dollar while minimizing the difference of the resulting set of country current account balances from the target set of current account balances. Within Asia, the resulting effective appreciation of currencies varies enormously, from a high of 46% for Singapore; 17% for Japan; 13% for Malaysia; and 11% for Hong Kong, China; to a low of 5% for Thailand, 6% for the Republic of Korea, and, surprisingly, 8% for PRC. These figures provide an indication of the magnitude of the impact of global rebalancing on the respective economies, contingent on his assumptions.

<sup>&</sup>lt;sup>42</sup> By BIS (2005) estimates, the PRC accounted for about a third of incremental oil demand in 2004–5, while other emerging economies accounted for an additional 17%.

Conversely, developing countries dependent on commodity imports, which means resource-poor East Asian countries and, to a lesser degree, Latin American countries like Brazil, would experience weaker commodity prices as a cushion against slower global growth.<sup>43</sup> Here petroleum prices, whose procyclical movement is especially strong because of constraints on refining capacity and their impact on countries like Mexico and Venezuela (along with their countervailing impact on the low-income oil-importing countries of Africa) are a case in point. In Asia the differential effects would be broadly negative while varying across countries. Table 2 shows that oil imports as a share of GDP are even more important in India, Republic of Korea, and Asia-ex PRC than they are for the PRC economy itself.

Thus, a very sharp fall in the dollar that curtailed US demand for the exports of other regions would depress growth rates in emerging markets and conceivably precipitate even more serious disruptions. Of course, it would not be correct to infer from this that currency appreciation is necessarily a bad thing. The appreciation of Asian currencies, if it began early and proceeded gradually, would reduce the dependence of the region on exports to the US—which is precisely what one would want in a scenario where US import demand could implode. Stronger currencies mean lower import prices and higher living standards. They cut the cost of imported capital goods. The key question is therefore how the appreciation comes about—whether it begins early and proceeds gradually, so that the favorable effects dominate, or whether it is delayed and then occurs abruptly and discontinuously. And, in turn, which scenario obtains depends on how national governments prepare and respond to the event.

# V. National Responses

A growing literature considers how Asian countries might respond to the risks posed by the current constellation of global imbalances. Unfortunately, much of that literature discusses exchange rate issues in isolation from other domestic and international economic policies. And it fails to distinguish the two questions identified in the introduction to this study. First, what policy adjustments should be implemented now while the trans-Pacific imbalance persists? Are there policy initiatives that would minimize the danger of a disorderly correction and help to facilitate the adjustment of current accounts to sustainable levels? And second, if a disorderly correction nevertheless occurs, what policies should be implemented to minimize the danger of damaging consequences? In particular, how should Asian countries respond to a sharp fall in the level of the dollar if and when this occurs?

Both scenarios will unfold more smoothly if Asian governments begin now in implementing a comprehensive set of policy adjustments. Domestically, this means using macroeconomic policies to stimulate consumption and implementing structural reforms designed to further reduce dependence on exports. A tighter exchange-rate-cummonetary policy will create pressure for Asian currencies to appreciate against the dollar and foreign currencies in general. Demand will then begin to rotate away from exports in favor of domestically-produced goods, narrowing the region's current account surplus. But to avoid precipitating a significant slowdown in economic growth, this monetary tightening should be combined with some loosening of other macroeconomic policies, fiscal policies in particular, in order to maintain the overall level of demand.<sup>44</sup>

#### **Fiscal expansion**

Although there is an argument for monetary tightening and currency appreciation across a range of Asian countries, the form and extent of compensatory fiscal expansion will differ as a function of national circumstances and capacities. As noted in the introduction, fiscal loosening should be carefully considered on a case-by-case basis, of course, in the context of well-defined expenditure programs that address priority areas, sound public expenditure management practices, and appropriate recognition of contingent liability and debt sustainability issues. Subject to these qualifications, there is a clear case for expansionary fiscal policy to support demand in the face of currency appreciation and monetary tightening.

<sup>&</sup>lt;sup>43</sup> Contrary to popular perception, Brazil with its large and varied manufacturing sector is not a net commodity exporter.

<sup>&</sup>lt;sup>44</sup> On the case for fiscal expansion see Blanchard and Giavazzi (2005) and Prasad and Rajan (2006).

The PRC is in a good position to adapt its policy mix in this direction. The country has a relatively low net debt, on the order of 15% of GDP given recent upward revisions of GDP statistics (Table 3).<sup>45</sup> Given strong demand for public services in areas like health care, education, and social security, as well as demands for public goods like transportation infrastructure and pollution abatement, there are obvious opportunities for additional spending. Already as a supplement to the 11<sup>th</sup> Five Year Plan, PRC officials have proposed a program of "Building New Rural Communities" designed to promote investment in rural infrastructure, including roads, water supply, gas distribution, and power supply. Government would provide construction materials while requiring rural residents to supply the labor. This program is designed to remove barriers to rural residents purchasing more consumer goods—the idea being that the demand for motorcycles will rise when there exist roads on which to drive them and that the demand for washing machines will increase when more households have running water.<sup>46</sup>

But it is not clear how much additional public spending can be undertaken efficiently in the short run. Additional transfers to local governments to fund public services may simply be diverted into the pockets of functionaries, while additional spending on infrastructure and housing may mainly benefit the owners of cement factories and construction companies. These are arguments for ramping up public spending programs slowly and for closely monitoring the efficiency of the additional spending. Spending on social insurance should be similarly constrained by the government's capacity to efficiently administer social programs and avoid fraudulent claims.<sup>47</sup>

In turn, these limits on the rate of growth of public spending imply a relatively limited tightening of monetary policy and appreciation of the currency, since doing otherwise could destabilize aggregate demand. Given the danger of a disorderly correction of global imbalances, this reinforces the argument for a set of carefully calibrated, progressive increases in spending.

At the other end of the spectrum is Japan with its high public debt and bleak demographic prospects. In the fiscal year ending March 2005, the Japanese government deficit was narrowed by 0.5% of GDP to 7%. The authorities are understandably committed to continuing to narrow the deficit, since even under a relatively favorable adjustment scenario the net general government debt to GDP ratio will rise significantly from its current 80%.<sup>48</sup> Batini and N'Diaye (2005) forecast that even if the primary deficit excluding social security is eliminated between now and 2010, the net-debt-to-GDP ratio will still stabilize in the neighborhood of 150% of GDP. Limited scope for fiscal support thus implies limited scope for Japan to participate in the realignment appreciation of Asian currencies.<sup>49</sup> Indonesia and the Philippines fall into this category as well, given their relatively high debt ratios and budget deficits.<sup>50</sup>

Between these extremes lies the Republic of Korea, which is running a broadly neutral fiscal policy. The government continues to run modest surpluses and has resisted pressure from the IMF to adopt a supplementary budget; given the economy's expansion, the resulting net fiscal impulse has been negative. This leaves room for significant fiscal expansion in the event that the Korean won appreciates further on an effective basis. There would also appear to be room for fiscal expansion in Thailand, although one hesitates to give further encouragement to the Thai authorities' existing tendency toward fiscal activism.

<sup>&</sup>lt;sup>45</sup>To this should be added the government's contingent liabilities in the banking system. One might also wish to subtract central bank reserves as a way of moving from gross to net debt, as reserves have been used for recent bank recapitalization operations. <sup>46</sup> See Ma and Elledge (2005).

<sup>&</sup>lt;sup>47</sup>There is a role here for the ADB in identifying forms of fiscal spending that can be initiated and implemented quickly, upon need.

<sup>&</sup>lt;sup>48</sup> Note that Table 3 reports gross rather than net general government debt.

<sup>&</sup>lt;sup>49</sup> This does not mean that there should be no strengthening of the yen against the dollar; absent any contribution from Japan, it is hard to see how the trans-Pacific imbalance could be corrected. But the desirable extent of yen appreciation is probably less than the desirable extent of, say, renminbi appreciation for the reasons described in the text. And the precise extent to which the yen should appreciate is also a function of the strength of the Japanese economy and on whether deflation finally gives way to inflation, which is yet to be seen.

<sup>&</sup>lt;sup>50</sup> India as well, if one wishes to include South Asia.

(in percent of GDP) Table 3: Selected Fiscal Indicators

				Genera	al Govern	ment Gr	General Government Gross Debt	_						Central	Central Government Fiscal Balance	ent Fisc	al Balanc	Ö		
	1996	1997	1998	1999	2000	2001	2002	2003	2004 Est	2005 Proi	1996	1997	1998	1999	2000	2001	2002	2003		2004 Est
									Est.	Proj.										Est.
Industrial Asia	90.1	95.1	104.2	114.6	121.1	128.5	135.6	140.4	144.2	148.2	-3.9	-3.4	-3.1	-6.9	-5.8	-5.4	-5.7	-5.8	ŀ	-5.7
Japan	99.3	105.8	117.8	131.1	139.3	148.8	158.4	164.7	169.2	174.4	-4.4	-4.0	-3.8	-8.5	-6.9	-6.3	-6.9	-7.1		-7.0
Australia <sup>1</sup>	29.1	23.8	20.1	16.0	12.9	10.6	8.2	5.9	5.2	3.9	-1.0	0.2	0.7	2.1	0.9	-0.1	1.0	1.0		<u>-</u>
New Zealand <sup>2</sup>	38.3	38.5	36.5	34.7	33.4	30.9	29.0	27.2	24.3	22.3	2.0	2.6	1.8	1.4	1.3	2.0	1.6	5.7		4.2
Emerging Asia	25.8	30.7	32.2	36.4	38.9	40.6	42.2	42.2	41.0	40.2	-1.3	-1.9	-3.2	4.0	-3.8	-3.6	-3.5	-2.9		2.1
Hong Kong, China		ı	1	ŀ	ı	ı	ı	ı	1	1	2.1	6.5	-1.8	0.8	-0.6	-5.0	-4.9	-3.2		-0.8
Korea <sup>3</sup>	8.2	11.7	22.7	28.9	29.2	33.8	32.4	32.6	33.6	32.9	0.0	-1.5	-3.9	-3.0	<u>-1</u>	0.6	2.3	2.7		2.3
Singapore	:	:	:	:	:	:	:	:	:		9.3	9.2	3.6	4.6	7.9	4.8	4.0	5.8		3.9
Taipei,China	13.0	12.5	15.0	20.5	24.4	31.5	35.1	37.6	39.6	41.5	0.3	0.6	2.1	0.1	-0.5	-2.8	4.3	-4.0		ယ်
PRC	7.1	8.4	11.0	14.5	16.9	18.7	20.6	21.3	20.0	19.1	-1.6	-1.9	-3.0	-4.0	-3.6	-3.1	-3.3	-2.8		-1.7
India <sup>4</sup>	66.0	66.6	66.9	69.1	71.7	76.6	81.1	81.9	81.2	81.5	-4.2	-4.7	-5.3	-6.6	-7.2	-6.6	-6.1	-5.3		4.5
Indonesia <sup>2</sup>	23.5	72.3	65.9	82.9	91.3	78.2	69.2	60.2	57.9	53.3	<u>-1</u>	<u>'-</u>	-2.2	-1.4	-3.4	-3.2	-1.5	-1.9		4
Malaysia	35.7	32.3	36.6	37.4	36.7	43.6	45.6	47.1	46.0	44.8	0.7	2.4	-1.8	-3.2	-5.7	-5.5	-5.6	-5.3		4.3
Philippines <sup>5</sup>	79.3	87.9	86.3	84.3	89.1	88.4	93.8	101.3	99.6	97.0	-0.3	-0.7	-2.7	-4.4	-4.6	-4.6	-5.6	-5.0		4.2
Thailand	3.8	5.1	10.7	20.8	23.0	24.8	31.3	28.5	28.6	26.2	2.3	-2.1	-2.2	-2.3	-2.0	-2.1	-2.3	0.4		0.3
Asia	45.7	50.1	53.4	58.5	61.5	64.1	66.0	66.4	65.9	65.4	-2.1	-2.4	-3.2	-4.8	-4.3	-4.1	-4.1	-3.6		-2.9

Korea = Republic of Korea; PRC = People's Republic of China

Sources: IMF, APDWEO database; and staff estimates.

1 Fiscal year ending June. Fiscal balance includes net surplus from state-owned enterprises.

2 Central government only.

3 Consolidated central government debt including government guaranteed debt for financial sector restructuring.

4 Fiscal year ending March; excludes privatization receipts from revenues.

5 Non-financial public sector debt.

6 Fiscal year ending September.

#### Financial development

A second set of policies said to be useful for offsetting the impact of monetary tightening seeks to foster the development of financial markets. High household savings rates in countries like the PRC reflect the underdevelopment of financial markets and the difficulty households face in borrowing for home purchases, education of their children, health care for elderly family members, and putting food on the table when the household head is out of work. High corporate savings rates similarly reflect the difficulty enterprises face in obtaining external finance for capacity expansion, given the reluctance of banks to lend in the wake of the 1997–98 crisis and the underdevelopment of markets in debt securities. Restructuring financial institutions and developing financial markets so that households can access mortgage and consumer credit and that firms with profitable investment projects have freer access to external finance can obviate the need for such high levels of anticipatory saving.

The problem is the time frame on which financial development occurs: it is unlikely to deliver significant results by the time the current constellation of global imbalances unravels. It takes time to build financial markets and to construct a full-fledged welfare system. Progress is measured in decades, not in months or years. The consumer-credit crisis in the Republic of Korea—when at the beginning of the decade financial intermediaries rushed into marketing credit cards and consumer lines of credit before building the requisite credit evaluation capacity—illustrates the costs of short-circuiting this process.<sup>51</sup> In light of this experience, and assuming the accuracy of the majority view that the trans-Pacific imbalance does not have long to run, these structural initiatives, while helpful for the longer run, are unlikely to provide significant demand support over the relevant time frame.

This perspective on the role of financial development and integration is also quite different from the conventional emphasis on the desirability of deepening regional financial markets in order to better "recycle Asian savings within the region." The perspective here does not suggest that attempting to divert high Asian savings from the US to the region itself will have an impact on global imbalances or the risk of a disorderly correction. Asia's current account surplus is the difference between the region's savings and investment. Moving toward current account balance requires boosting investment and reducing savings. Financial development that enhances the efficiency of intermediation and relaxes credit constraints can facilitate adjustment by both blades of the scissors, but not over the time horizon relevant to the risk of a disorderly correction.

#### Trade liberalization

Assuming these policies are implemented and that Asian demand rotates away from exports in favor of domestic markets, there remains the danger that the accompanying shift supply could lag. Shifting resources from production for export to production for domestic markets entails adjustment costs for producers. Compared to American consumers, PRC consumers devote a larger share of their budgets to basics like food, clothing, and household appliances (refrigerators and stoves) and a smaller share to recreational activities, including eating out. Enterprises in PRC cannot shift overnight from producing textile exports to producing restaurant meals and from producing DVD players for export to producing refrigerators for the domestic market. It takes time to retool assembly lines and for workers to acquire new skills. Ideally, policies seeking to shift demand toward home goods should be phased in gradually in order to avoid a mismatch with the composition of supply. This is yet another argument for initiating these policies sooner rather than later, in this case so that producers can begin to adapt.

Another implication is that Asian countries should redouble their pursuit of trade liberalization. If governments liberalize both imports and exports, it will be possible for individual Asian economies to remain specialized in a limited, narrow range of exports in which they have a comparative advantage while at the same time increasing the importance of domestic demand. If the PRC continues specializing in the production and export of textiles, apparel, and electronics while importing a greater volume of other consumer goods from its Asian neighbors, for example, then it will become easier to reconcile export orientation with current account balance.

<sup>&</sup>lt;sup>51</sup> By 2003, 8% the Korean population had fallen into delinquency on credit card payments, and 34% of the assets of credit card companies (some 3% of GNP) was impaired. LG Card, the largest issuer, had to be rescued with a \$4 billion bailout from the government, which then set up a "bad bank" to take remaining nonperforming assets off the books of the credit card companies. See Vanderrama (2004).

Since the current account is a macro variable—it is determined by the balance of savings and investment—trade liberalization is unlikely to have any particular impact on the current account balance in the long run, assuming a stable exchange rate or a central bank that targets inflation.<sup>52</sup> What trade liberalization can do is make it easier for the economy to digest the impact of policies that would otherwise shift demand away from the country's export industries, which would be disruptive given the time required to engineer the matching shift in supply.<sup>53</sup>

# Greater exchange rate flexibility

Debate on the optimal exchange rate regime for Asian countries is ongoing: authors like McKinnon and Schnabl (2004) argue that relatively open, export-dependent Asian economies have good reasons to prefer pegging their currencies, while others like Eichengreen (2003) counter that managed flexibility is no impediment to exports and that Asian countries will appreciate the policy autonomy conferred by greater exchange rate flexibility. This long-standing debate cannot be resolved here. The point is that in an uncertain global environment, where there is the possibility of a sharp shift in the level of the dollar and a significant change in the level of global demand, Asian countries have special reason to value monetary autonomy. A central lesson of the literature on exit strategies (see, for example, Eichengreen and Masson et al., 1998) is that shifting to a regime of greater exchange rate flexibility can disturb confidence if that shift is taken under duress. It is better to move to greater flexibility as a form of insurance before conditions grow turbulent.<sup>54</sup> Malaysia has shown how it is possible to exit a currency peg without precipitating a crisis. The PRC has shown how it is possible to move in the direction of greater exchange rate flexibility in a series of small steps while economic and financial conditions remain favorable. The question remains, however, of whether it is moving fast enough.

## The hard-landing scenario

The preceding has focused on the case where Asian countries implement these policy adjustments while the trans-Pacific imbalance persists and their efforts, together with those of the US, succeed in narrowing the gap smoothly and gradually.<sup>55</sup> How should the response differ in the scenario where foreign finance for the US current account deficit dries up abruptly, the dollar falls sharply and US demand declines dramatically before there has been time to put in place significant adjustments in Asian policies?

In this case the same overall set of policy responses is appropriate, but adjustment on each front needs to be more pronounced, since depreciation of the dollar and the fall in US import demand are more pronounced. With the dollar falling sharply, allowing Asian currencies to fall along with it would raise the danger of imported inflation. Hence the need for Asian currencies to appreciate against the dollar would be even stronger than in the scenario where imbalances are corrected smoothly. If Asian countries have already moved to regimes of greater currency flexibility—if they have adopted a basket of currencies rather than the dollar as their reference rate and allowed their currencies to exhibit greater flexibility relative to reference levels—it should be possible to accomplish this without disturbing confidence. Similarly, with US demand growth slowing significantly, the need to boost domestic demand would be even greater. There would thus be a rationale for even more fiscal stimulus.<sup>56</sup> Finally, the urgency of trade liberalization to sustain the demand for the products of the region's export industries would be greater, given the sharp decline in US demand.

<sup>&</sup>lt;sup>52</sup> My own analysis of the impact of trade liberalization (actually, its converse, the imposition of a tariff) on the current account in the short run and the long run is Eichengreen (1981).

<sup>&</sup>lt;sup>53</sup> For trade liberalization to help in this way, it is necessary for the entire group of Asian countries to liberalize. For more on the role of regional cooperation in this process, see below.

<sup>&</sup>lt;sup>54</sup> Note that discussions of how Asian countries should modify their policies to support smooth rebalancing of the global economy do not always clearly distinguish the argument for revaluation of Asian currencies (which rests on the need to permanently alter the composition of aggregate demand) from the argument for a more flexible exchange rate regime (which rests on the need for greater policy flexibility forwarding the future). Both are relevant in the present context, although they need to be clearly distinguished.

<sup>&</sup>lt;sup>55</sup> The role of the US in facilitating this adjustment is discussed below.

<sup>&</sup>lt;sup>56</sup> This can be seen as an argument for holding some potential fiscal stimulus in reserve so that it can be deployed in the event that this scenario in fact unfolds.

# VI. Regional Responses

In both scenarios adjustment can be smoothed by coordinating policy initiatives within the region. I discuss this in the context of exchange rate adjustment, fiscal adjustment, trade liberalization, financial market development, and reserve diversification.

# **Exchange rate adjustment**

Individual countries may be reluctant to allow their currencies to appreciate if this damages their competitiveness in other Asian markets. They may similarly fear that unilateral appreciation will damage their competitiveness in markets outside the region.<sup>57</sup> These facts create a free-rider problem, where willingness to allow Asian currencies to appreciate may be inadequate in the absence of an agreement on concerted action.

Additionally, even those who argue that a limited increase in exchange rate flexibility achieved by moving to a managed float will have broadly beneficial effects recognize that high levels of exchange rate volatility, which could result from competitive changes in exchange rates on the part of a number of countries, can be disruptive to trade. What matters for planning by exporters, after all, is not the dollar exchange rate but the effective (trade-weighted) exchange rate. In Asia, where intraregional trade is a large and growing share of total trade, governments can limit the volatility of effective rates by coordinating the appreciation of their currencies.

In principle, surety that Asian countries will allow their currencies to appreciate together—and therefore surety that they will appreciate at all—can be bolstered by the adoption of an exchange rate framework for the region: a common basket peg, for example, or a common basket, bank and crawl (BBC) regime.<sup>58</sup> Verifying that Asian countries are complying with the terms of their agreement to cooperate would then require monitoring only the behavior of exchange rates themselves, as opposed to ascertaining the consistency of the entire range of national policies. Free riding would be easier to detect.

In practice, such an arrangement would have costs as well as benefits. Asian economies differ in their dependence on the US market.<sup>59</sup> It follows that a fall in US demand would have different effects on different countries and warrant different degrees of currency adjustment. An agreement requiring all Asian countries to adjust their exchange rates by the same amount against the dollar (or against a common multicurrency basket) would not permit these differences to be accommodated. Asian countries also differ in the scope they possess for undertaking compensatory fiscal action, as noted above; countries with little scope for doing so will understandably prefer to limit appreciation of their currencies.<sup>60</sup> Again, it would not be easy to accommodate these differences in the presence of a regional agreement to maintain a common basket peg.

Beyond this, there is also the traditional argument against pegged exchange rates, whether implemented unilaterally or in the context of a multilateral agreement, namely that these expose Asian economies to the same vulnerabilities that led to the 1997–98 crisis. These arguments carry more force than otherwise when financial markets may be subject to sharp shocks emanating from outside the region.

#### Fiscal adjustment

Arguments can also be made for the coordination of fiscal policies. A complication is that the sign of the effect of the cross-border spillovers of expansionary fiscal policies are ambiguous. Some portion of the increase in

<sup>&</sup>lt;sup>57</sup> Both to the US, in which case their appreciation will do little to help resolve the problem of global imbalances, and to Europe, in which case Asian countries that refuse to participate in the general realignment of currencies will gain export share at the expense of their neighbors.

<sup>&</sup>lt;sup>58</sup> On the BBC proposal, see Williamson (2001).

<sup>&</sup>lt;sup>59</sup> As noted in Section IV above.

<sup>60</sup> Assuming, as is the case in much of the region, that the level of aggregate demand is broadly appropriate.

domestic demand will spill out into increased import demand, which neighboring countries will experience as a positive externality. At the same time, an increase in deficit spending will tend to drive up interest rates on foreign as well as domestic financial markets, which neighboring countries will experience as a negative demand externality. In the Asian context it is plausible that the first effect dominates. Intraregional trade is growing rapidly; hence, the import demand channel should operate relatively powerfully. On the other hand, Asian countries tend to be more deeply integrated with global capital markets than with each others. This means that an expansionary fiscal initiative by any one Asian country will have only limited interest rate effects within the region, since Asia as a whole and, even more so, any one Asian economy is small relative to global capital markets on which it borrows.

There will thus be a tendency to underutilize fiscal policy in the absence of coordination. Individual economies will not take into account the positive impact on demand in neighboring economies when they consider fiscal expansion to counteract the effects of monetary tightening and currency appreciation. Each will rely excessively on its neighbors for demand stimulus in the absence of an agreement to proceed jointly.

# On the framework for macroeconomic policy coordination

This raises the question of whether Asian countries have adequate institutional arrangements in place for coordinating monetary and fiscal adjustments. ASEAN+3 already possess a variety of mechanisms for consultation, information sharing, and financial assistance. Since 2000 they have negotiated a network of regional swap lines and credits, the Chiang Mai Initiative (CMI), to provide external assistance to countries whose financial markets and exchange rates are perturbed. At the time of writing some \$40 billion of bilateral swaps have been arranged under the CMI aegis. While this arrangement has yet to be activated, its existence will be comforting to countries contemplating an increase in exchange rate flexibility but concerned that their more flexible rates may exhibit undue volatility.

In addition, Asian governments have put in place surveillance mechanisms for pooling information and encouraging concerted action. The Asian Surveillance Process (ASP) agreed to at the second ASEAN finance ministers meeting in Jakarta in February 1998 became operational in early 1999. A unit within the ASEAN Secretariat, the ASEAN Surveillance Coordinating Unit, has been established to coordinate the work of the ASP and provide semiannual surveillance reports with technical support from the ADB. Peer reviews based on these reports are undertaken at meetings of the ASEAN finance ministers every six months. These regular meetings should make it easier for policy makers to recognize the argument for coordinated policy initiatives.

Unfortunately, the three big Asian economies—PRC, Japan, and Republic of Korea—do not participate in the ASP. Recognition of this led in the late 1990s to the formation of an ASEAN+3 Study Group to explore arrangements for information exchange and policy dialogue. Its efforts culminated in establishment of the ASEAN+3 Economic Review and Policy Dialogue Process (ERPDP). Formed in 1999, the ERPDP provides an umbrella for annual meetings of finance ministers and semiannual meetings of deputies. More recently, ADB has created an Office of Regional Economic Integration (OREI) to provide technical assistance for this process. Information sharing through ASEAN+3 should make it easier to verify that countries are adhering to their commitment to sharing the burden of adjustment and thereby reduce scope for free riding.

The Asian way is to avoid overt criticism of anothers' policies (Manzano 2001). Some would say that policy coordination cannot succeed because Asian norms preclude overt criticism of one's neighbors and thus are not conducive to credible regional commitments. It is particularly unclear whether a low-key approach will be consistent with effective coordination when dramatic changes in policies in a large number of Asian countries are needed in short order.

The problem of global imbalances thus points up the urgency of measures to more effectively coordinate exchange rate, monetary, and fiscal policies, and in particular to enhance the frankness of regional surveillance. One way of doing so would be to create an autonomous ASEAN+3 surveillance unit independent of governments—one

<sup>61</sup> For evidence see Eichengreen and Luegnarimitchai (2004), McCauley and Park (2004) and Eichengreen and Park (2005).

that had secure long-term funding, whose head and key staff had job security, and that was required by statute to publish its reports. Obviously this would be a radical departure from Asia's relatively permissive approach to surveillance.

#### Trade liberalization

For many years Asian countries signed fewer regional and bilateral agreements than western countries, preferring to pursue multilateral liberalization. This may be changing, however. ASEAN continues to make progress in constructing its free trade area, currently scheduled for completion by 2010.<sup>62</sup> It has concluded a framework agreement with the PRC on trade in goods; negotiations on trade in services and investment rules are ongoing. At the time of writing it is pursuing a trade-in-goods agreement with the Republic of Korea and FTAs with Hong Kong, China and New Zealand. The negotiation of bilateral agreements between ASEAN and India and Japan is proceeding more slowly. On an alternative track, Japan is pursuing bilateral agreements with a number of individual Asian countries (Malaysia, Philippines, and Thailand). Given the desirability of bolstering intraregional trade, a more comprehensive approach would be desirable. To put it another way, if Asian countries are going to export less to the US, it becomes all the more important that they be able to export freely to one another.

#### Financial development

Cooperation in fostering the development of financial markets occurs in the context of the Asian Bond Fund (ABF) and the Asian Bond Markets Initiative (ABMI). Having surveyed these policies in an earlier background paper for ADB (Eichengreen 2005b), my discussion here will focus on the relevance of these initiatives to the orderly resolution of the global-imbalances problem.

The AMBI, endorsed by ASEAN+3 finance ministers at their meeting in Manila in August 2003, is designed to foster an active and liquid secondary market in local-currency bonds and to develop the infrastructure needed for the growth of local bond markets. Six aspects of that infrastructure have been identified for further consideration: (i) the provision of credit guarantees; (ii) the provision of credit ratings to a wider range of potential issuers; (iii) the creation of mechanisms for more efficiently disseminating information on issuers and rating agency decisions; (iv) the establishment of more efficient mechanisms for cross-border settlement and currency conversion; (v) encouraging the participating countries to share information on initiatives to develop the human resources and policies needed for the growth of local financial markets; and (vi) strengthening the legal framework for bond market development. Governments have sought to prioritize by establishing working groups and creating a focal group to coordinate their activities. The working groups are concerned with the creation of securitized debt instruments, the creation of credit guarantee mechanisms, foreign exchange and settlement issues, the issuance of bonds denominated in local currencies by nonresidents (multilateral development banks, foreign government agencies, and multinational corporations), rating agencies and information dissemination, and the coordination of technical assistance. Results include the issuance of local currency bonds by ADB in a number of Asian countries in the effort to enhance the liquidity of local markets; agreement on the desirability of exempting nonresidents from domestic withholding taxes; and the provision of credit guarantees by the Japanese Bank for International Cooperation and Nippon Export and Investment Insurance for bonds issued by select Asian multinational corporations.

The ABF launched by the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) in June 2003 is designed to catalyze the growth of Asian bond markets by allocating a portion of the reserves of regional central banks to purchases of government and quasi-government securities. The initial \$1 billion of investments, known as ABF-I, was devoted exclusively to Asian sovereign and quasi-sovereign issues of dollar-denominated bonds. ABF-II is twice as large and includes bonds denominated in regional currencies. It has two components: a \$1 billion central bank reserve pool to be overseen by professional managers for local bond allocation, and a \$1 billion index unit designed to list on eight stock exchanges beginning with Hong Kong, China in 2005. The latter is designed to facilitate one-stop entry for retail and institutional buyers as well as providing a benchmark structure for tracking pan-Asian performance.

<sup>62 2015</sup> in the case of full compliance on the part of the four newest ASEAN members.

The question is whether one-stop entry and a benchmark structure will attract private participation in the absence of an increase in underlying liquidity. Turnover rates are stagnant in most Asian markets, with those for corporate bonds only a fraction of turnover in government bonds. More positively, the Republic of Korea and Malaysian governments have succeeded in placing longer-dated securities as a way of extending their benchmark yield curves. According to ADB, the stock of Asian local currency bonds rose by 6%, to \$1.5 trillion, in the first half of 2005. This additional issuance was dominated by bond issues by financial institutions in the PRC and Republic of Korea and corporate issuance in Hong Kong, China (the latter reflecting in part financing investments in the PRC). While government issuance of local currency bonds declined in the year ending June 2005, corporate issuance rose slightly, which is promising from the standpoint of market development.

From the perspective of global imbalances, the question is when these initiatives will influence saving and investment behavior. The growth of corporate issuance bodes well for the moderation of corporate savings rates; if enterprises are able to borrow on local bond markets, they will become less reliant on retained earnings. With the expansion of private-sector issuance, it will become more economical for originators to securitize loans to small and medium-sized enterprises, consumer credit and mortgage credit, enhancing the financial market access of households and reducing the need for high levels of household savings rates. Over a five-to-ten year interval, significant progress may be possible on these fronts. At the time of writing, however, there is as yet little sign that these developments have significantly altered household or corporate behavior.

#### Reserve diversification

A final context for policy coordination is reserve diversification. As has been noted, Asian countries seeking to diversify out of dollars (or even to curtail the further accumulation of dollar-denominated debt securities) face a collective-action problem. From the standpoint of an individual central bank, selling dollars for euros, sterling, Swiss francs, or other reserve currencies will apply only limited pressure for the greenback to depreciate against regional currencies. But if Asian central banks as a group sell dollars for other reserve currencies, there will be strong pressure for the dollar to fall. This creates a familiar prisoner's dilemma. Central banks as a group may wish to prevent the dollar from falling sharply, insofar as they seek to support and maintain the national model of export-led growth; they may thus wish to limit their collective diversification out of dollars. At the same time, each central bank has an incentive to undertake sales of dollars if it thinks that other central banks will be tempted to do so. A rumor to the effect that other central banks are selling dollars may ignite a generalized scramble into other currencies in order to avoid taking losses as a result of being late, precipitating the very dollar collapse that central banks seek to avoid.

In principle, this suggests the desirability of an international agreement on the pace of reserve diversification. Truman (2005b) proposes that countries negotiate an international reserve standard—that reserve managers could agree to aim for portfolios that were composed of, say, one third dollars, one third euros, and one third yen. <sup>66</sup> There would then be a schedule for moving gradually from present portfolios to portfolios consistent with the standard. <sup>67</sup>

But it is hard to believe that, in practice, central banks would agree to tie their hands in this way. Like other investors, central bankers value their autonomy to make investment decisions. It seems unlikely that they would allow their portfolio allocation decisions to be dictated by an international agreement.

 $<sup>^{\</sup>rm 63}$  Data on annualized bond market turnover are from asianbondsonline.adb.org .

<sup>&</sup>lt;sup>64</sup> The first statement to this effect may have been Eichengreen (2004).

<sup>&</sup>lt;sup>65</sup> Moreover, to the extent that other Asian central banks remain committed to preventing the dollar from depreciating against their currencies, they will have an incentive to purchase the dollars than the renegade central bank is selling—which will only work to increase the incentive to defect from the implicit agreement to provide collective support.

<sup>&</sup>lt;sup>66</sup> Countries could then be permitted leeway in the form of a 10 percentage point band around the norm for each currency share (43% to 23%).

<sup>&</sup>lt;sup>67</sup> In addition, the European Central Bank and the Bank of Japan, which sold the euros and yen that other central banks sought to add to their portfolios would commit to feeding the additional dollars they acquired in return to the market at a measured pace.

A more realistic way of reducing the incentive to chisel on a collective commitment to limit reserve diversification might be for central banks to simply agree to provide more information on the composition of their reserves. If they commit to publishing more information on their reserve transactions, it will become correspondingly more difficult for central banks to diversify out of dollars without being noticed, and the incentive to renege on an implicit agreement to cooperate will be correspondingly less.

Truman has in fact suggested how this might be done. Countries would agree on a supplement to the reserve template of the IMF's Special Data Dissemination Standard (SDDS), committing themselves to provide information on the currency composition of their on- and off-balance-sheet foreign currency positions on a quarterly basis with at most a one-month lag. Already upwards of 20 economies subscribing to the SDDS voluntarily provide data, typically annually, on the composition of their reserves. At the time of writing, however, the only Asian economies that have committed to doing so are Hong Kong, China and the Philippines. If Asian central banks are going to rely on increased transparency to foster collective action in this sphere, a larger number will have to follow this path-breaking pair.

# VII. Global Responses

We have argued that it is in Asia's own interest to begin now implementing policy measures to facilitate the orderly correction of the trans-Pacific imbalance—effectively, to buy insurance against the risk of a disorderly adjustment. Those policy adjustments will be more comfortable and more effective if they are coordinated within the region. But they will be even more appetizing if the US agrees to share the adjustment burden.

Standard macroeconomic models where increased public saving lead to increased national saving suggest that the trans-Pacific savings-investment imbalance can be ameliorated by both increases in deficit spending in Asia and reductions in deficit spending in America. If changes in policy have convex costs (that increase with the magnitude of the adjustment), then governments are more likely to accomplish the optimal adjustment with contributions from both sides of the Pacific—with currency appreciation and fiscal expansion in Asia together with currency depreciation and fiscal consolidation in the US.

Cline (2005) argues on this basis for a new Plaza Agreement. His Plaza II would involve intervention by G-20 central banks to drive the dollar down against other currencies. The IMF would provide an estimate of equilibrium rates for three tiers of countries: those whose currencies should rise by 40% or more against the dollar over 3 years, those whose currencies should rise by 15–40%, and those for which there would be no specific initiative unless the currency began falling against the dollar. There would be 13 economies in the first tier, including PRC; Hong Kong, China; Indonesia; Japan; Malaysia; Philippines; Singapore; Taipei, China; and Thailand. Six countries would be in the second tier, including the Republic of Korea and India. As its contribution, the US would set forth credible plans for eliminating its fiscal deficit over 5 years. As the author puts it, "a US commitment to eliminate its fiscal deficit would counter other countries' otherwise understandable reaction against being asked to take action to solve a problem rooted in flawed US economic policies."

Coordinated policy adjustments are difficult to arrange. Negotiating a Plaza II Agreement would be even more difficult than negotiating the original Plaza Agreement because more countries and economies would be involved; today an effective agreement would have to involve the G-20 countries rather than just the G-7. As described in Section II, there exist a number of alternative interpretations of the US current account deficit, not all of which have the same welfare and policy implications. Theoretical and empirical work alike points to the difficulty of agreeing on mutually-beneficial coordinated adjustments in national policies in the absence of agreement on the conceptual model.<sup>70</sup>

<sup>&</sup>lt;sup>68</sup> Effective appreciation would be considerably smaller than 15% or 40%, as the economies in question trade heavily with one another and would be moving together.

<sup>69</sup> Cline (2005), p.7.

<sup>&</sup>lt;sup>70</sup> See Frankel and Rockett (1988) and Eichengreen and Uzan (1993).

More fundamentally, there is reluctance in the US to acknowledge what Cline politely refers to as flaws in US policy. The prospects for adjustments in US policy are the subject of another paper. Suffice it to say that there is no consensus among policy makers in the US about how to address the fiscal situation, or even that the fiscal situation constitutes a problem. To make a difference, the Congress, the Treasury, and the President would have to reach an agreement on this issue. Asian governments, ASEAN+3, and the IMF can make the case, but doing so will be to no avail so long as the US refuses to hear.

#### VIII. Conclusion

Policies toward the trans-Pacific imbalance are not easy to recommend because there is little agreement on the causes of the phenomenon and therefore no consensus regarding its consequences. One school regards the imbalance as benign. Others, in contrast, see it as a source of serious danger. One way of formulating recommendations for policy despite the absence of agreement is to think in terms of the risk-management approach to policy articulated by Greenspan (2004). This approach takes risk as the defining feature of the global policy environment and urges that policy be adapted accordingly. Although it may not be possible to attach a precise point estimate to the risk of a disorderly correction of the US current account, this does not relieve policy makers of the need to adapt their strategies to the possibility.

In the present context, this means tightening monetary policy and allowing Asian currencies to appreciate relative to current levels as a way of achieving a better balance between internal and external demand, thereby reducing the Asian economies' dependence on a source of export demand that could collapse abruptly. Leaving the overall level of demand unchanged requires that this monetary tightening be complemented by some relaxation of fiscal policy. Of course, the fiscal context differs across economies, and the scope for expansionary policy should be considered on a case-by-case basis. Precisely because the scope for fiscal support of domestic demand differs, so too does the optimal degree of monetary tightening and exchange rate adjustment required. This observation makes clear that an attempt to suppress intra-Asian exchange rate movements would be counterproductive in this context; it would be a recipe for no action to minimize the risk of a disorderly correction.

Other policy measures that produce effects over longer horizons can further contribute to the rotation of demand away from exports to the US in favor of regional sources. These include the development of Asian financial markets and the completion of an Asian free trade area. These initiatives will be most beneficial if implementation begins now, in the case of monetary and fiscal policies because they are most easily absorbed in small doses, and in the case of structural measures because time is required for their effects to be felt.

These policy adjustments will go down most easily if they are coordinated within Asia.<sup>71</sup> The US current account deficit has as its counterpart current account surpluses in a number of different Asian countries.<sup>72</sup> Painful steps to limit the risks associated with this imbalance are less attractive to individual countries if the burden is not shared by others. In the absence of agreement to cooperate, this means that policy adjustments taken in the name of risk management will be undersupplied. This creates well-known arguments for collective policy adjustments. It points to the need for discussions of exchange rate and budgetary adjustments, so as to internalize the intraregional spillovers associated with monetary and fiscal action.<sup>73</sup> It points to the importance of stronger and more independent regional economic surveillance to facilitate the collective assessment of economic conditions and vulnerabilities and to facilitate collective action. More specifically, it also points to the need for agreement on rules for reserve composition disclosure to facilitate the coordination of reserve diversification and avoid destabilizing policy shifts.

The obstacles in the way of collective policy adjustments are well known. Still, the fact that the task is hard and success is uncertain is no justification for inaction.

<sup>&</sup>lt;sup>71</sup>And across the Pacific, although realism requires acknowledging that the prospects for this are dim.

<sup>&</sup>lt;sup>72</sup> And, to a lesser extent, non-Asian countries.

<sup>&</sup>quot;And, to a lesser extent, non-Asian countries

<sup>&</sup>lt;sup>73</sup>The fact that exchange rates within the region should continue to vary, as emphasized in the preceding paragraph, does nothing to undermine this argument for coordination.

#### References:

Backus, David, and Frederic Lambert. 2005. *Current Account Fact and Fiction*. Unpublished manuscript. Stern School of Business, New York University.

Bank of America. 2005. Country Alert: Growing US Income Deficit Raises Concerns over External Imbalances. 14 December.

Bank for International Settlements. 2005. Annual Report. Basel: BIS.

Batini, Nicoletta, and Papa N'Diaye. 2005. *The Domestic and International Impact of Japans Policies For Growth*. IMF Working Paper WP 05/09.

Bernanke, Ben. 2005. *The Global Savings Glut and the US Current Account Deficit*. Washington, DC: Board of Governors of the Federal Reserve System.

Blanchard, Olivier, Francesco Giavazzi, and Filipa Sa. 2005. *International Investors, the Current Account, and the Dollar*. Brookings Papers on Economic Activity 1.

Caballero, Ricardo, Emmanuel Farhi, and Pierre-Olivier Gourinchas. 2005. *An Equilibrium Model of 'Global Imbalances' and Low Interest Rates*. Unpublished manuscript. MIT and UC Berkeley.

Calvo, Guillermo A. 1998. Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops. *Journal of Applied Economics* 1: 35–54.

Chamon, Marcos, and Eswar Prasad. 2006. *The Determinants of Household Saving in PRC*. Unpublished manuscript. IMF.

Chinn, Menzie, and Hiro Ito. 2005. *Current Account Balances, Financial Development and Institutions: Assaying the World 'Savings Glut'*. NBER Working Paper no. 11761 (November).

Clarida, Richard H. 2005. Japan, PRC, and the US Current Account Deficit. CATO Journal 25: 111–114.

Cline, William R. 2005. *The Case for a New Plaza Agreement*. Policy Briefs in International Economics no. 05- 4. Washington, DC: Institute for International Economics.

Cooper, Richard. 2004. US Deficit: It is not Only Sustainable, It is Logical. Financial Times (31 October).

Despres, Emile, Charles Kindleberger, and Walter Salant. 1966. "The Dollar and World Liquidity: A Minority View," *The Economist* 218 (5 February): 526–529.

Deutsche Bank. 2005. Special Report: LA and EMEA: Improved External and Public Financing in Retrospect. *Emerging Markets Monthly* 98 (September): 40–44.

Dooley, Michael, David Folkerts-Landau, and Peter Garber. 2003. *An Essay on the Revived Bretton Woods System*. NBER Working Paper no. 9971 (September).

Eichengreen, Barry. 1981. A Dynamic Model of Tariffs, Output and Employment under Flexible Exchange Rates. *Journal of International Economics* 11: 341–359.

Eichengreen, Barry. 2003. The Case for Floating Exchange Rates in Asia. In *Monetary and Financial Integration in East Asia: The Way Forward.* ADB. London: Palgrave: 49–90.

Eichengreen, Barry. 2004. *Global Imbalances and the Lessons of Bretton Woods*. NBER Working Paper no. 10497 (May).

Eichengreen, Barry. 2005a. The Blind Men and the Elephant. Brookings Policy Brief 1 (January).

——. 2005b. *Financial Cooperation in Asia: Initiatives, Dilemmas, and Next Steps.* Unpublished manuscript. University of California, Berkeley.

Eichengreen, Barry, and Pipat Luengnarimitchai. 2004. Why Doesn't Asia Have Bigger Bond Markets? NBER Working Paper no. 10576 (June).

Eichengreen, Barry, and Ashoka Mody. 1998. Interest Rates in the North and Capital Flows to the South: Is There a Missing Link? *International Finance* 1: 35–58.

Eichengreen, Barry, and Paul Masson et al. 1998. Exit Strategies: Policy Options for Countries Seeking Greater Exchange Rate Flexibility. IMF Occasional Paper (April).

Eichengreen, Barry, and Yung Chul Park. 2005. Financial Liberalization and Capital Market Integration in East Asia. In *A New Financial Market Structure for Asia*, edited by Takatoshi Ito, Yung Chul Park, and Yunjong Wang. Cheltenham: Edward Elgar: 46–83.

——. 2006. *Global Imbalances and Emerging Markets*. Unpublished manuscript. University of California, Berkeley, and Seoul National University.

Eichengreen, Barry, and Marc Uzan. 1993. The 1933 World Economic Conference as an Instance of Failed International Cooperation. In *Double-Edged Diplomacy: International Bargaining and Domestic Politics*, edited by Peter Evans, Harold K. Jacobson and Robert D. Putnam. Berkeley: University of California Press: 171–206.

Erceg, Christopher, Luca Guerrieri, and Christopher Gust. 2005. *Expansionary Fiscal Shocks and the Trade Deficit*. International Finance Discussion paper2005-825. Washington, DC: Board of Governors of the Federal Reserve System (January).

Frankel, Jeffrey, and Katherine Rockett. 1988. International Macroeconomic Policy Coordination When Policymakers Do Not Agree on the True Model. *American Economic Review* 78: 318–340.

Giavazzi, Francesco. 2006. *The Resolution of Global Imbalances*. Unpublished manuscript. Bucconi and MIT (January).

Gourinchas, Pierre-Olivier, and Helene Rey. 2005. From World Banker to World Venture Capitalist: US External Adjustment and the Exorbitant Privilege. Unpublished manuscript. University of California, Berkeley, and Princeton University.

Greenspan, Alan. 2004. *Risk and Uncertainty in Monetary Policy*. Remarks to the Meeting of the American Economic Association. San Diego, 3 January.

Gruber, Joseph, and Steven Kamin. 2005. *Explaining the Global Pattern of Current Account Imbalances*. International Finance Discussion Paper no. 846 (November).

Hausmann, Ricardo, and Federico Sturzenegger. 2005. Dark Matter Makes the US Deficit Disappear. *Financial Times* (8 December): A15.

International Monetary Fund (2005a), Asia-Pacific Regional Outlook, Washington, DC: IMF (September).

——. 2005b. World Economic Outlook. Washington, DC: IMF (October).

Jensen, Niels C. 2005. Deteriorating Global Liquidity. *Investors Insight* (21 November). Available: http://www.investorsinsight.com.

Ma, Jun, and Richenda Elledge. 2005. *PRC: Policies in the Making*. Deutsche Bank Global Markets Research (22 December).

Mann, Catherine. 2004. *Managing Exchange Rates: Achievement of Global Re-Balancing or Evidence of Global Co-Dependence?* Unpublished manuscript, Institute for International Economics (July).

Manzano, George. 2001. Is There Any Value-Added in the ASEAN Surveillance Process? *ASEAN Economic Bulletin* 18: 94–102.

McCauley, Robert, and Yung Chul Park. 2004. *Developing Bond Markets in East Asia: Global, Regional or National?* Unpublished manuscript. Bank for International Settlements, and Seoul National University.

McKinnon, Ronald, and Gunther Schnabl. 2004. *The East Asian Dollar Standard, Fear of Floating, and Original Sin.* Unpublished manuscript. Stanford University.

Obstfeld, Maurice, and Kenneth Rogoff. 2005. Global Exchange Rate Adjustments and Global Current Account Balances. *Brookings Papers on Economic Activity* 1.

Prasad, Eswar, and Ragu Rajan. 2006. *Modernizing PRC's Growth Paradigm*. Unpublished manuscript. IMF (January).

Rajan, Raghuram. 2005. Global Imbalances: An Assessment. Available: http://www.imf.org (25 October).

Remolona, Eli. 2005. Securitization in Asia and Recent Breakthroughs in Credit Markets: A Commentary. Unpublished manuscript. Bank for International Settlements.

Roach, Steven. 2005. What Global Savings Glut? Global Economic Forum. New York: Morgan Stanley (5 July).

Roubini, Nouriel, and Brad Setser. 2004. *The US as a Net Debtor: The Sustainability of the US External Imbalances*. Unpublished manuscript. Stern School of Business, New York University.

——. 2005. Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005-2006. Unpublished manuscript. Stern School of Business, New York University.

Setser, Brad. 2005. Emerging Market Bubble Watch, and a Word or Two on Dark Matter. RGE Monitor (8 December).

Timmer, Marcel P., Gerard Ypma, and Bart van Ark. 2003. *IT in the European Union: Driving Productivity Divergence?* GGDC Research memorandum GD-67. University of Groningen (October).

Truman, Edwin. 2004. *Budget and External Deficits: Not Twins but the Same Family*. Unpublished manuscript. Federal Reserve Bank of Boston (June).

——. 2005a. *Postponing Global Adjustment: An Analysis of the Pending Adjustment of Global Imbalances*. Working Paper no. WP05-6. Washington, DC: Institute for International Economics (July).

——. 2005b. Comment on the Future of Central Bank Cooperation. Unpublished manuscript. Institute for International Economics (June).

Vanderrama, Diego. 2004. After the Asian Financial Crisis: Can Rapid Credit Expansion Sustain Economic Growth? *Economic Letter*. San Francisco: Federal Reserve Bank of San Francisco (24 December).

Williamson, John. 2001. The Case for a Basket, Band and Crawl (BBC) Regime for East Asia. In *Future Directions for Monetary Policy in East Asia*. Sydney: Reserve Bank of Australia: 97–111.

World Bank. 2005. Global Imbalances and Emerging Market Economies. In *Global Development Finance*. Washington, DC: The World Bank: 51–64.