# Asia and the Decoupling Myth Barry Eichengreen and Yung Chul Park<sup>1</sup> May 2008

For the last five years, the United States and East Asia have been the two regions at the center of the problem known as "global imbalances." The U.S. accounted for the majority of global current account deficits, while Asia accounted for the majority of global surpluses.<sup>2</sup> The United States depended on Asia to finance its external deficit, while Asia depended on the United States to provide the major increment to its foreign reserves. This situation was given a number of labels, some more flattering than others: Bretton Woods II, global co-dependence, and the balance of financial terror.

There were two competing view of how this situation would develop. One was that it would persist all but indefinitely.<sup>3</sup> Asian countries preferred to maintain undervalued exchange rates against the dollar, export their way to higher incomes, save more than they invested, and accumulate foreign reserves. This would remain their preference, if not forever, then at least for a very long time. The United States for its part was happy to consume more than it produced and to finance the difference through sales of financial assets to the rest of the world. There was no reason for any of this to change.

The other view was that global imbalances were prone to unwind, sooner rather than later, as Asian countries concluded that sterilizing balance-of-payments surpluses was costly, reserve accumulation had gone far enough, and absorption should be raised to levels commensurate with incomes.<sup>4</sup> As Asian investors, both private and official, sated their appetite for U.S. assets and halted their further accumulation, the dollar would fall. Imported

<sup>&</sup>lt;sup>1</sup> University of California, Berkeley and Korea University, respectively.

<sup>&</sup>lt;sup>2</sup> In what follows, Asia should be understood to denote East Asia, and in particular the ten principal East Asian economies. For analytic purposes, these ten economies can be divided into Japan, China, NIE 4 (Hong Kong, Singapore, South Korea and Taiwan), and ASEAN 4 (Indonesia, Malaysia, Philippines and Thailand). EA 9 excluding Japan is emerging Asia.

<sup>&</sup>lt;sup>3</sup> This is the Bretton Woods II view made famous by Dooley, Folkerts-Landau and Garber (2003).

<sup>&</sup>lt;sup>4</sup> This was the view of Blanchard and Giavazzi (2005) and our own view in Eichengreen and Park (2006).

inflation would force the Federal Reserve to raise interest rates, damping down consumption and investment. Asian governments, seeing their currencies rise and export growth rates fall, would then hopefully implement a variety of measures to boost domestic absorption, forcing state-owned enterprises to pay out dividends, liberalizing access to financial markets, cutting taxes, and boosting spending on infrastructure, health care and education. With absorption falling relative to production in the U.S. and rising in Asia, global imbalances would narrow. There were two variants of this scenario: one in which these adjustments were initiated early and proceeded gradually without precipitating a recession in the United States, and one in which adjustment was delayed and ultimately proved more disruptive.

The reality of course was that neither of these scenarios obtained. Instead, the unwinding of global imbalances was precipitated by a financial crisis in the United States. A declining housing market superimposed on higher Federal Reserve interest rates led to hedge fund failures in the summer of 2007, exciting expectations of more losses of unknown magnitude and causing U.S. credit markets to seize up. Falling home prices and the credit crisis weakened consumer confidence and put upward pressure on unemployment, dampening consumption demand. The weaker economy and greater difficulty of accessing credit discouraged investment. Foreign investors and not a few Americans hesitated to purchase U.S. financial assets in the face of credit-market difficulties and uncertainties, opting for safer foreign claims.<sup>5</sup> The result was a weaker dollar, which at least had the stabilizing effect from the U.S. point of view of boosting net exports.<sup>6</sup> Thus, whether

<sup>&</sup>lt;sup>5</sup> The model of global imbalances that best explained this correction was Caballero, Gourinchas and Farhi (2006). They understood global imbalances in terms of the comparative advantage of the United States in financial innovation – that is, in producing secure and liquid financial assets – versus the comparative advantage of other countries in producing merchandise. They thus understood the imbalances as trade grounded in comparative advantage – with the U.S. exporting financial assets in return for merchandise imports. Like many others, they were a bit quick to associate financial innovation with security and liquidity. But their model did a good job of accounting for the fallout from the subprime crisis: it predicted that, as the U.S. comparative advantage in producing safe and liquid financial assets became less pronounced, the interregional balance on merchandise trade would shrink. As the production of financial assets fell off and new ones became scarcer, the price of existing stocks would rise . In other words, bond prices would rise (equivalently, interest rates would fall). All of this seemed to fit the facts.

<sup>&</sup>lt;sup>6</sup> As emphasized by Feldstein (2008).

approached from the perspective of expenditure switching (cheaper U.S. exports) or expenditure changing (less U.S. consumption and investment growth), the result was a narrowing of the U.S. deficit, which declined from 6.2 percent of US GDP in 2006 to 5.3 percent in 2007 and was universally forecast to move lower in 2008-9 (Faruqee 2008).

While the U.S. side of the equation has received close attention, the Asian side is less studied. The questions here include both how the Asian economies will be impacted and how they should respond. There has been talk that Asia can "decouple" from the United States – that its growth will remain robust in the face of a U.S. slump – but there is also skepticism. And on the appropriate Asian policy response to the U.S. crisis and the unwinding of global imbalances, there is no consensus.

## 1. Global Imbalances and East Asia

Since 2000 East Asia has been running substantial current account surpluses, reflecting a combination of continued high saving and (China and Vietnam notwithstanding) a modest decline relative to pre-crisis levels of domestic investment rates. As a proportion of the GDP, the total surplus of the EA10 rose from less than 3 percent in 2000 to almost 7 percent in 2007. The largest part of these surpluses has gone into reserve accumulation. At the end of 2007 the total reserves of the EA10 stood at \$3.4 trillion, up from a little over \$1 trillion five years earlier (see Figure 1). This was more than 56 percent of global reserves. Since the Asian crisis of 1997-98 these economies have all been running sizable surpluses on their current accounts, the bulk of which have been sterilized and added to their reserves (see Figure 2). Over the 2000-2007 period, the ten economies piled up \$2.5 trillion of reserves compared to a cumulative total current account surplus of \$2.8 trillion.

Much of East Asia's surplus has been associated with its trade with the United States. Between 2000 and 2007 the EA10 amassed a total surplus of \$2.3 trillion in their bilateral trade with the U.S., nearly matching their reserve increase over the period and accounting for

more that 48 percent of the U.S. total trade deficit (see Figure 3). There is little doubt that East Asia's, in particular Japan and China's, surplus on its trade with the United States has been the major source of global imbalances.<sup>7</sup>

This sterilization of surpluses has kept emerging East Asian currencies from appreciating more rapidly, although there has still been some real appreciation, the complete and total sterilization of inflows proving impossible even where officials regarded it as desirable. The currencies of the four ASEAN4 – Malaysia, the Philippines, Singapore, and Thailand – all began appreciating in real effective terms in mid-2005, reflecting a combination of domestic inflation and nominal appreciation, and have continued to do so following the outbreak of the subprime crisis. From when China officially modified its exchange rate regime in July 2005 through July 2007, the renminbi similarly appreciated by about 6 per cent in real effective terms. The Indonesian rupiah rose in real terms through the first quarter of 2007, reflecting a relatively high rate of domestic inflation. Since then it has depreciated, although it remains well above mid-2005 levels. (See Figure 4 for real exchange rates in the region.)

Six of EA10's currencies – the yen, renminbi, Malaysian ringgit, Philippine peso, Singapore dollar, and Thai baht – have appreciated in real terms since the eruption of the subprime crisis in August 2007. The Taiwan dollar has remained relatively stable, whereas the currencies of Hong Kong, Indonesia, and Korea have depreciated in real terms. Hong Kong is of course rigidly pegged to the dollar, and inflation has been limited.<sup>8</sup> The

<sup>&</sup>lt;sup>7</sup> Of the EA10's total surplus in 2007, the combined share of China and Japan was almost 87 percent. In 2005 EA10's reserve increase fell to \$241 billion, less than a half of that in 2004. To the IMF (2005) this was a dramatic development which signaled unwinding of global imbalances. But this optimistic outlook was rather premature. Since then East Asia's aggregate reserve has been growing again. Despite the increase in the prices of raw materials including oil and a slowdown in its exports to its major trading partner, the US, the ten economies managed to register a surplus of \$1.2 trillion on their combined current account over the 2006-07 period. Except for China the nine other East Asian economies also saw a rise in their surpluses as a proportion of the GDP. Excluding Japan and Hong Kong much of the combined surplus of the other eight economies has again been sterilized and added to their reserve holdings. As a result, during the 2006-07 period, EA10 accumulated an additional reserve of \$904 billion.

<sup>&</sup>lt;sup>8</sup> According to Yam (2007) there was a gap between the officially published headline inflation rate and the underlying inflation rate in Hong Kong. The gap reflects the special government tax relief measures, in

Indonesian rupiah has appreciated against the dollar in nominal terms, but with Indonesian inflation coming down the country has experienced a modest real depreciation. The Korean won has fallen sharply since the summer of 2007; this is sometimes explained by observing that the earlier real appreciation had gone too far (the Bank of Korea having moved at a relatively early date to limit its intervention in the foreign exchange market). The large current account deficit recorded in the first quarter of 2008 is not inconsistent with this view. Another possibility is that investors seeking to limit their exposure to Asian countries linked economically to the United States chose Korea because its financial markets are relatively deep, liquid and easy to access.<sup>9</sup>

Sterilization that prevented East Asian currencies from appreciating faster has enabled the region's economies to maintain their market shares, but it has also had costs. Sterilizing surpluses means issuing domestic government securities and accumulating foreign securities as reserves. Traditionally, interest rates are higher in fast-growing emerging markets than in reserve-center countries like the United States. This interest differential is therefore a source of fiscal costs. Following Rodrik (2005) rough estimates of this cost can be obtained by multiplying total reserves net of short term foreign liabilities by the sovereign spread. For http://econweb.tamu.edu/kaea/newsletter/0801.htm#item\_2bChina, the fiscal cost in 2007 amounted to about 0.5 % of GDP.<sup>10</sup> Similar figures for other countries for which data are available are 0.3 of GDP for Korea and 1.3 percent of GDP for Indonesia. Although spreads have risen sharply since August 2007, on average they are still lower than what they were immediately after the

particular the rebate of property rates. In September 2007 while the annual headline inflation rate was 1.6%, the underlying inflation rate, after adjusting for the tax relief measures, rose to 2.7%. When seasonally adjusted, the annualized rate of inflation over the three months to September in 2007 reached 3.4%. The rate of increase of real estate prices has been accelerating in recent periods. When real estate inflation spills over into the markets for goods and services, while import prices of food and oil are rising, Hong Kong will be faced with growing inflationary pressure.

<sup>&</sup>lt;sup>9</sup> In addition, it is reported that foreign investors hedged anywhere from 70 to 80 percent of their investments in Korean securities denominated in won. With the depreciation of the won, the probability of margin calls increased, which in turn built up more pressure on the won to depreciate in the first quarter of 2008.

<sup>&</sup>lt;sup>10</sup> So long as China, with its ample savings and repressed financial system, was a low interest rate country, it did not incur this burden, but with the decline in U.S. treasury yields to low levels following the onset of the crisis and China's effort to use of interest rates, among other variables, to prevent overheating and contain inflationary pressures, it too is experiencing these costs.

1997-98 Asian financial crisis. This fall in the spread is the reason for a relatively small fiscal cost. In addition, there are the capital losses on existing reserves as local currencies rise against the dollar; in practice this is even a larger number. Finally, to the extent that sterilization signals that East Asian governments and central banks are still reluctant to see their currencies fluctuate, they encourage unhedged borrowing and lending. They may also raise questions in the mind of observers about the prospects for financial stability, as we now go on to explain.

#### 2. Financial Risks

Since the sub-prime crisis erupted, financial distress has spread to other markets from the United States. Estimates of the losses stemming from the crisis have been growing by the day. Greenlaw, Hatsius, Kashyap and Shin (2008), in a paper dating from February 2008, put the losses at \$800 billion, half of which will be incurred by investors outside the United States. The IMF in its April 2008 *Global Financial Stability Report* estimated those losses as almost \$1 trillion. At the upper end of the spectrum of forecasts, Roubini (2008) estimated that total losses could grow to \$2.7 trillion.

Contrary to much popular discussion, East Asia has not been immune. A number of financial institutions in the region have acknowledged losses on subprime-related investments (see below). Stock prices plummeted (Figure 5), and Emerging East Asia's sovereign spreads widened (Table 1). In the Philippines, the spread jumped by 200 basis points (bp) between August 2007 and February 2008. During the same period, the spread went up by 131 bp in Indonesia, 93 bp in Korea, and 70 bp in China. These moves can be seen as a greater tendency on the part of investors to discriminate among higher- and lower-quality credits. If so, a surprise was that Hong Kong, not an economy with heavy debts or any evident lack of fiscal discipline, saw its spread shoot up from 63 in December 2007 to 178 in February 2008. Since the rescue of Bear Stearns in March 2008, the spreads of all of these countries have

declined, reflecting the perception (or at least hope) that the worst of the credit crisis is over. Between February 8 and April 8 of 2008, the Philippines saw a drop of 89 basis points, Indonesia 57, Malaysia 38 in Malaysia, Hong Kong 30, and South Korea16. China is the only country where the spread rose in the same period.

Policymakers have not shown alarm or even particular concern. Central bank governors meeting for the annual SEACEN meeting in Jakarta on March 2008 were bullish.<sup>11</sup> Although they agreed that a U.S. recession and a weakening dollar created downside risk, they concluded that there would likely be limited impact on the Asian economies. Forecasts by the World Bank (2008) and ADB (2008) both predict that growth in East Asia will be robust with the regional GDP expanding almost 8.1 percent in 2008 and faster thereafter on the back of strong consumption spending despite the deepening of the crisis.<sup>12</sup>

One oft-cited justification for this confidence is that the exposure of East Asian financial institutions to the toxic securities at the center of the subprime crisis is relatively small. According to Fitch (2008a), the gross exposure of Asian banks' ex Japan to subprime residential-mortgage-backed securities and CDOs comes to 2.1 per cent of their equity; adding in non-subprime RMBS and CDOs, and the exposures of SIVs and conduits brings total exposure to 5.6 per cent of regional bank equity. Fitch puts cumulative losses associated with those exposures at a quarter of this, with more coming. China is far and away the largest investor in subprime and other structured products, with total exposures approaching 5 per cent of bank capital. While 5 per cent is not an inconsequential number, it pales in comparison with the well-known problem of nonperforming domestic loans to state-owned enterprises and others, which is a multiple of bank equity, notwithstanding recent recapitalization. (Still, one might argue that, with nonperforming loans so large, another 3 per

<sup>&</sup>lt;sup>11</sup> See SEACEN (2008). The members of South East Asian Central Banks(SEACEN) are Indonesia, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, and Thailand, Brunei Darussalam; Fiji; Republic of Korea; Mongolia; Papua New Guinea; and Taipei, China.

<sup>&</sup>lt;sup>12</sup> IMF (2008) predicts a similar trend, although the growth forecasts for East Asia's emerging economies are somewhat lower: 9.3 for China, 5.8 for ASEAN5 (ASEAN4 plus Vietnam) and 4.0 for the group of Hong Kong, Korea, Singapore, and Taiwan in 2008.

cent may be the straw that breaks the camel's back.<sup>13</sup>) In terms of shares of bank capital, the total exposures (subprime, other RMBS and CDOs, SIVs and other) of Taiwan and Hong Kong are largest, at 21 and 14 per cent. These countries have considerably stronger banking systems than China, of course, although cumulative losses have already reached 4 to 5 per cent of bank capital, a tolerable but not insignificant number.

Sub-prime mortgage backed securities held by all Japanese banks, which include major banks, regional banks and cooperative financial institutions, as estimated by Japan's Financial Services Agency were relatively small – around \$14 billion – and the total loss associated with these holdings was estimated to be less than \$3 billion at the end of September 2007.<sup>14</sup> According to the Bank of Japan (2008), however, over the next three months the losses of the major banks rose to \$6 billion, still a small fraction of tier one capital of these banks which stood at \$253 billion at the end of September 2007.<sup>15</sup>

With East Asian banks having already booked the bulk of losses from their exposures to subprime and structured products, it seems unlikely that they will be significantly impaired. To be sure, financial problems could develop independently of the subprime exposures of East Asian financial institutions. Investors outside the region, taking losses on subprime-related positions, may seek to rebuild their capital and rebalance their portfolios by liquidating other positions, including those in Asian markets.<sup>16</sup> According to the IMF (2007a), spillovers of financial turmoil such as the sub-prime crisis can be significantly larger into countries that are more deeply integrated with U.S. financial markets. IMF (2007a) also shows that that cross-country asset price correlations rise further during bear markets and recessions. Figure 6 confirms that historically Asian stock prices have tracked U.S. stock prices closely. As shown by a large number of empirical studies, East Asia's financial

<sup>&</sup>lt;sup>13</sup> Some commentators derive reassurance from the fact that many of these holdings are guaranteed by Fannie Mae and Freddie Mac, which means that they presumably carry the implicit guarantee of the U.S. government.

<sup>&</sup>lt;sup>14</sup> See Financial Service Agency of Japan (2007).

<sup>&</sup>lt;sup>15</sup> Japan has 12 major and 109 regional banks.

<sup>&</sup>lt;sup>16</sup> See Greenlaw, Hatsius, Kashyap and Shin (2008).

markets are more integrated with global financial markets, in particular with U.S. stock markets, than with one another.<sup>17</sup> A market correction in the United States could thus provoke sharp declines in Asian equities, in turn creating problems for Asian investment banks with leveraged positions in local markets and for commercial banks that had accepted those assets as collateral. News of mismanagement leading to fears for the solvency of a large financial institution could lead to runs on other East Asian financial institutions, paralleling the way Bear Stearns' problems in early 2008 led investors to reduce their exposures to other U.S. investment banks. A sharp decline in property prices or equity valuations, reflecting a sudden shift in investor sentiment, disappointing economic growth, or geopolitical tensions emanating from North Korea or the Straits of Taiwan could similarly destabilize large financial institutions whose loans are collateralized by the property and equity in question. A number of studies (e.g. Ghosh 2006) document the considerable strides made by East Asian financial institutions in improving their risk management, asset quality, capital adequacy, and profitability. IMF (2007b) concurs: it concludes that East Asia's financial institutions are much better placed than before to deal with the global market turbulence or the losses sustained by their exposure to the sub-prime crisis. Still, it is worth recalling that similar statements evincing confidence about the soundness and safety of the U.S. financial system were common before August 2007. It is only when the tide goes out that one learns who is bathing naked. Fitch's (2008b) indicator of the health of national banking systems as of April 2008 gives ratings of "weak" or very weak (D or E on an A-E scale) to China, Indonesia, Philippines, Taiwan and Vietnam.

But, it is said, even if problems develop East Asian governments are in a stronger position to address them than ten years ago. Short-term foreign debt as a share of reserves has been reduced. The short-term foreign debt of the financial sector as a share of reserves is

<sup>&</sup>lt;sup>17</sup> Kim, Lee, and Shin (2008) find evidence that EA10 are relatively more linked with the global financial markets than integrated with one another. Park and Bae (2002), Eichengreen and Park (2006), and Shin and Shon (2006) all present similar evidence.

smaller still. Since 2000, short term foreign debt relative to foreign reserves has fallen throughout the EA9, with the sole exception of Korea. If problems diminishing confidence among foreign investors similar to those of late 1997 unexpectedly reappear, governments will thus be better positioned to handle them. Moreover, if an individual country needs even more reserves than it has on hand, it can in principle obtain them from its neighbors by activating the Chiang Mai system of swaps and credits.

And insofar as the problems of financial institutions do not revolve around foreigncurrency-denominated obligations, central banks do not need foreign reserves in order to rescue and recapitalize their banking systems. Governments can pay for this out of their fiscal surpluses where these exist and by issuing bonds where they do not. There is the potential for inflationary consequences, but the fact that most EA10 countries have relatively strong budgetary positions and low debts makes these less alarming than otherwise.

Not everyone would be as sanguine about the prospects. While East Asian governments talk the talk of flexible exchange rates, they are reluctant to walk the walk. If governments and central banks are reluctant to let their exchange rates move, they may be hamstrung when it becomes necessary to reliquify and recapitalize their banking systems. Insofar as growth and prosperity continue to be associated with the stability of the exchange rate, a response to financial distress that caused the exchange rate to depreciate might do more to undermine confidence than restore it. If pumping liquidity into the financial system was seen as destabilizing the exchange rate, that liquidity might leak back out as fast as it was injected.

If this is right, then the availability of foreign reserves is still key. While reserves have risen enormously relative to short-term debt, they have not risen relative to domestic financial assets and liabilities (see the foreign reserve/M2 ratio in Figure 7). By this metric, they are up in China, Korea and Malaysia but flat since 1996 across the region as a whole, where they average only 40 per cent. Such is the mixed blessing of financial deepening and

development. If doubts arise about the solvency and stability of Asian banks, it is not short short-term foreign debt but all of M2 that can potentially flee.<sup>18</sup> If emergency liquidity injections then cause the exchange rate to weaken, which in turn undermines confidence further, the region's economies may turn out to be less bullet proof than popularly thought.

### 3. Commercial Risks

In its November 2007 update for East Asia, the World Bank argued that East Asia had managed to decouple from the global business cycle and from the U.S. cycle in particular, making the impact of any unfolding U.S. slowdown smaller than those of its predecessors. It concluded that, in contrast to the situation in 1997-8, foreign investors were therefore likely to stay with the region even if global conditions grew more uncertain. Despite the deterioration of credit conditions and heightened uncertainty, The Bank's "April Update" (2008) remained optimistic, concluding that East Asia "is reasonably well positioned to navigate this crisis without incurring significant damage to its prospects (Executive Summary, p.1)." While the Bank's sister institution (IMF2008) placed more weight on the negative effects of spillovers of the subprime crisis to East Asia, it was similarly reassuring on balance.

This argument for decoupling is founded on the observation that the share of intraregional trade in East Asia's total trade has risen significantly since the crisis and that the share of extra-regional trade has fallen accordingly, together with the belief that businesscycle comovements are a function of trade linkages. Representative of this view are statements by Anderson (2007) about China, to the effect that "There's no reason to argue over whether the mainland is 'decoupling' from the global cycle – as far as macro growth is concerned the economy is and always has been effectively 'decoupled,' and China has little to fear from a global demand slowdown." There is some analytical support for this conclusion. Frankel and Rose (1998) demonstrated that business cycle correlations increase

<sup>&</sup>lt;sup>18</sup> This point is emphasized by Wyplosz (2008) in his discussion of risks to financial stability in East Asia.

as trade integration deepens. Shin and Wang (2004) showed that this point applies to Asia in particular. Imbs (2004) and Calderon, Chong and Stein (2007) documented that business-cycle transmission is especially powerful when trade is intra-industry – which is increasingly the fact in Asia.

As shown in Table 2, EA10's trade with the US declined to 18 percent in 2005-06 from 24 percent in 1999-2000. This decrease was balanced by an increase in intra-EA10 trade as a share of total trade by 4 percentage points and in the group's trade with countries outside the region other than the US and EU25. Much of the increase in intra-regional trade has come from the increase in vertical type of intra-industry trade in the region (Urata 2006). It is to trends like these to which analyses like IMF (2008) point when suggesting that East Asia has at least partially decoupled from the global business cycle.

There are reasons for skepticism. In fact, much of East Asia's intra-industry trade is in parts and components used to assemble final products that are then sold outside the region. The United States ships parts and components for the assembly of refrigerators to Mexico and then imports the assembled refrigerators from Mexico; it is not surprising that the more extensive such trade the greater is the tendency for the U.S. and Mexican economies to fluctuate together. But in Asia, South Korea exports disk drives and semiconductors to China are assembled into consumer electronics that are ultimately sold to U.S. (and other extraregional) consumers, not merely to consumers back in South Korea. Insofar as a significant portion of the growth of intra-Asian trade reflects these processing and assembly operations of products ultimately destined for extra-regional markets, it may provide less insulation from extra-regional demand fluctuations.

Closely related to the argument that intra-regional trade insulates Asia from negative demand shocks in the rest of the world is the fact that the region has seen strong consumption growth, in China in particular. Thus, accelerating demand growth within the region, and in China in particular, can substitute for slowing demand growth outside. The first half of 2007,

when growth in the region accelerated despite the fact that the growth of exports to the U.S. slowed, is invoked as evidence of the fact. That is, East Asian governments have moved to offset the decline in the external demand by expanding domestic demand and are likely to do continue doing so in the future. China, increasingly, is singled out as an independent growth pole. Thus, Dees and Vansteenkiste (2007) find that the business cycle in emerging Asia (EA9 excluding Japan) has increasingly moved independently of that in the United States, largely because of the increasing contribution of China, whose economic growth has mostly remained independent of the economic cycles of its main trading partners. World Bank (2007) concludes, likewise, that zero growth in the U.S. in 2008 would shave just one percentage point off from East Asia's median economic growth, leaving the median country growth rate at a still respectable five percent. Dees and Vansteenkiste offer a smaller estimate: for emerging Asia a one percentage point of GDP negative U.S. demand shock would decrease the region's GDP by 0.23 from the base line. Thus, if U.S. demand growth fell from two per cent to zero, emerging East Asia's growth rate would decline by just half a percentage point.

Again, however, there are grounds for skepticism. China is only about 17.5 percent the size of the U.S. and 46 percent that of Japan at market exchange rates, which is the appropriate metric when one considers the impact on other Asian economies operating through the demand for traded goods. It is true that China is a growing export market for the other nine East Asian economies. Total exports of the nine East Asian economies to China amounted to \$417 billion in 2006, where regional exports to the United States was "only" \$365 billion. But, to repeat, the bulk of these exports to China consist of parts and components and hence represent a derived demand for China's exports to the US and EU. Thus, Haltmaier et al. (2007) report that the share of parts and components in exports to China ranged from about 60 percent for Japan, Thailand, and Indonesia to over 80 percent for India and the Philippines in 2005. ADB (2008) similarly questions whether China now

constitutes an independent growth pole sufficiently important to insulate East Asia from a U.S. and European slowdown. It shows that emerging Asia is closely tied to global goods markets and that demand shocks emanate more from the U.S., EU, and Japan than from China. Haltmaier et al. (2007) similarly challenge the role of China as a regional engine of growth. They show that external demand continues to be the most important source of demand shocks, particularly for East Asia's more advanced economies. Ahearne et al.(2006) also show that China and a group of other emerging economies in East Asia maintain a complementary relationship in which their export expansion is driven by, among other factors, global growth.

Together, these studies suggest that China may not be able to provide enough demand for imports from other emerging economies in East Asia to help them skate through, without significant impact, a significant slowdown in the U.S. economy.

#### 4. East Asia's Response

How will East Asian policy makers respond to a weakening dollar and the compression of U.S. imports, and what will be the effects? This section lays out four conceivable scenarios.

**Currency Adjustment Coupled with Fiscal Expansion.** Starting with Blanchard and Giavazzi (2006), various authors have observed that the optimal Asian response to the unwinding of global imbalances is a combination of currency appreciation and domestic demand expansion. As exports to the United States slow, maintaining balance in Asia between aggregate supply and demand will require stimulating domestic demand through some combination of tax cuts and public spending increases. In China, there is likely to be a high return on additional infrastructure investment, especially in the relatively underdeveloped west, where producers still find it difficult to get goods to the market. In addition, increased public expenditure on health care, education and pensions will encourage

consumption spending by reassuring households of the adequacy of the social safety net. Encouraging state-owned enterprises to pay out dividends will put downward pressure on the country's extraordinarily high corporate savings rates. And developing markets for mortgage loans and consumer credit will encourage families to turn to financial markets, in addition to building up their financial nest eggs, when contemplating home purchases and education expenses. A gross national savings rate that approaches 50 per cent suggests that significantly boosting Chinese consumption will require implementing these structural reforms in addition to simply cutting taxes and raising government outlays. But the fact that the public sector is running a current surplus of 4 to 6 percent of GDP, depending on who is doing the estimating, points to room on the narrowly fiscal front as well.<sup>19</sup>

Elsewhere in the region, tax cuts and public spending increases should be calibrated to the U.S. and global slowdown – in contrast to the case of China, they should be explicitly temporary. Korea, Malaysia, Singapore, and Taiwan all have some room for expansion of government spending, not so much for tax cuts – since taxes constitute a relatively small fraction of GDP – as for spending increases. However, their fiscal policy their actions will not matter much in the aggregate because their combined GDP is only 14 percent of the EA10 total compared to 24 percent for China (2007). Japan is much larger – it accounts for 53 per cent of EA10 GDP at market exchange rates – but it has high debts and demographic problems. At the end of 2007 Japan's public debt was 194 percent of GDP, the highest among the developed countries. There may be some room for temporary fiscal expansion, but not much.

Ideally, fiscal expansion would be coupled with currency appreciation in order to prevent demand stimulus from aggravating inflation. Inflationary pressures in East Asia already are intense, reflecting strong growth in conjunction with the region's dependence on

<sup>&</sup>lt;sup>19</sup> This 4-6 per cent number refers to the balance of government saving and investment in the national income accounts.

imports of energy, raw materials and, in some cases, staple foodstuffs. (The share of agricultural, fuel and mineral products in total imports is 47 per cent in Japan, 42 per cent in Korea, 31 per cent in Taiwan, and 30 percent in Thailand.<sup>20</sup>) Again this backdrop, currency appreciation will have the salutary impact of slowing the rise in import prices. Insofar as it raises unit labor costs denominated in foreign currency, it will slow the growth of exports and allow productive resources to be redeployed from the export industries to sectors producing for the home market. Not incidentally, it will contribute to the long-overdue process of global rebalancing.

One sometimes hears skepticism that currency appreciation will have its normal expenditure-switching effects in China. It is said that China's export-oriented firms are more inclined to preserve market share rather than to maximize profits and are willing to absorb profit losses at least in the short-run caused by the RMB appreciation. But a number of recent studies show that real appreciation of the RMB will be effective in curtailing China's current account surplus.<sup>21</sup> According to Marquez and Schneider (2006), for example, a 10 per cent renminbi appreciation lowers China's share in global exports by a half percentage point.

**Currency Adjustment without Fiscal Expansion.** In this second scenario, East Asian countries will fail to apply significant fiscal stimulus. Japan used fiscal policy repeatedly, if sporadically, in the 1990s in failed attempts to engineer an escape from its decade-long slump (Kuttner and Posen 2002). Memories of those failures, in conjunction with a high net debt/GDP ratio and ageing population, may render it reluctant to repeat the unsuccessful experiment. The Japanese government now spends 24 billion yen (approximately \$24 million) a dayon interest on government bonds. During the 1990s it implemented no fewer than 10 fiscal stimulus packages that totalled over 100 trillion yen.

<sup>&</sup>lt;sup>20</sup> Data for 2006.

<sup>&</sup>lt;sup>21</sup> See Goldstein and Lardy (2007) for a survey on China's foreign exchange rate policy.

These packages did little to pull Japan out of recession but instead left the nation with an enormous debt.

While China has more room for maneuver, the government may find it difficult to ramp up public spending quickly. How many more dams can the country build in the short run, one might ask? China's fiscal system has one of the highest degrees of decentralization in the world. Sub-national governments at the provincial, prefecture, country, township, and village levels are responsible for undertaking the bulk of public expenditures. Central government spending is therefore subject to a long lag and a substantial proportion of the expenditure on physical infrastructure projects has gone to waste as a result of inefficiencies in administration by sub-national governments (OECD 2006).

Few would disagree that China needs to increase public spending on education, health, and social welfare programs. But here too it is local governments that bear the main responsibility for the delivery of services, and they often have limited ability to mobilize the resources needed to do so. Because of uneven distribution of resources available at the provincial level for public spending, local governments receive substantial amounts of central government transfers. But these transfers are linked to tax revenues sub national governments can generate. This constraint has limited central government spending on key social needs (OECD 2006). Finally, many Chinese peasants and working class households still pay little in the way of taxes, limiting the effectiveness of the tax-cut side of the equation. And other reforms designed to encourage household spending – developing financial markets and getting state-owned enterprises to pay out dividends – while desirable on structural grounds work too slowly to have much impact on a slowdown that is already underway.<sup>22</sup>

In South Korea, the government has proposed cutting both personal and corporate income taxes, but the proposal remains a controversial. Questions have been raised about positive effects of the proposed cut in corporate income tax rate to 20 from 25 percent on

<sup>&</sup>lt;sup>22</sup> See Kuijis (2006).

investment, on the grounds that the cost of capital has been relatively low and corporations, in particular large ones, have piled up large amounts of retained earnings. There is not much evidence suggesting that a temporary personal income tax cut would help stimulate consumption spending, whereas tax rebates, which are claimed to exert stronger effects, would not reach the target groups of tax payers-most of low income households who do not file tax returns. There is resistance to raising public spending on infrastructure projects in particular, given the historical association of such spending with inefficiency and corruption.

Many of the other economies in the region are more open, and in small open economies much of the stimulus from tax cuts and public spending increases spills out to the rest of the world as a result of increased imports (and reduced exports). This implies that the smaller, more open economies of East Asia will be reluctant to proceed with fiscal expansion, especially if the three big countries, Japan, China and South Korea, fail to do likewise.

Even in this alternative scenario, there will still be pressure for Asian currencies to appreciate. The Bank of Japan does not intervene in the foreign exchange market, leaving the yen to be market determined. The impact of the subprime crisis has been to push the yen up against the dollar. In part this simply reflects the fact that there has not been much of a downward revision of expectations of growth in Japan compared to the United States and not much impact of subprime-related exposures on Japanese financial institutions, as explained above. In addition the strength of the yen may reflect the unwinding of the carry trade, as investors stop borrowing (shorting the) yen in order to invest in higher yielding ("higher carry") currencies abroad.<sup>23</sup>

China, for its part, continues to feel foreign pressure to allow its currency to appreciate. Since July 2005, the renminbi has been allowed to appreciate against the dollar at an annual average rate of approximately 7 per cent, a pace that shows signs of accelerating in

<sup>&</sup>lt;sup>23</sup> Explanations for the unwinding of the carry trade include increased exchange rate volatility, the move to less leveraged trading strategies, and the emergence of other more attractive "funding currencies" including, notably, the dollar. On the carry trade, see Frankel (2008).

2008 – appropriately so given the weakness of the U.S. economy and the need for a cheaper dollar to crowd in U.S. exports (see Figure 5). But on an effective (trade-weighted) basis, the renminbi has actually depreciated since the outbreak of the subprime crisis. That is to say, the euro (and certain other currencies) have been rising against the dollar even faster than the renminbi. Europe has therefore taken the brunt of the adjustment of the dollar so far, creating fears of slowdown or even outright recession there. The predictable change in the political economy is that, in addition to pressure from the U.S., China is now under mounting pressure from Europe to allow its currency to adjust more quickly.<sup>24</sup>

China is most likely to move if it has at least informal reassurance that its East Asian neighbors will follow so that serious dislocations in intra-regional exchange rates are avoided. Thus, one can imagine a second scenario in which East Asian currencies are allowed to appreciate but this adjustment is not accompanied by fiscal expansion. Relative to our first scenario, the result would be less desirable for East Asia, insofar as there would be a slowdown in export growth and possibly also an increase in imports insofar as their domestic currency cost was now less, but no increase in domestic demand. It would also be less desirable for the world as a whole. With Asia's currencies now somewhat stronger relative to Europe's, the impact of the subprime crisis would effectively be shifted from Europe to Asia with no change in the pace of global growth overall.

**Fiscal Expansion without Currency Adjustment.** A third conceivable scenario is fiscal expansion without currency appreciation – or at leas, without adequate appreciation. Asian governments may ultimately heed the call for coordinated fiscal stimulus, that call having been sounded in the spring of 2008 by none other than the International Monetary Fund. But domestic politics may restrain governments from permitting further appreciation of their currencies. Strategies of export-led growth have enlarged and empowered export industries in many of the region's economies, and those same export industries are loath to

<sup>&</sup>lt;sup>24</sup> As, for example, when French President Nicolas Sarkozy visited China in November 2007 (Lague 2007).

see currencies rise. Individual East Asian countries are understandably reluctant to see their currencies appreciate faster unless the currencies of their neighbors do likewise, insofar as these compete with one another in third markets. Yet the heterogeneity of exchange rate regimes and arrangements, together with the absence of a formal mechanism for coordinating exchange rate policies, makes it difficult to agree on a cooperative response.

In the short run – that is, before inflation rates begin to adjust – the result, compared to the first scenario above, will be faster growth in Asia but, at least potentially, slower growth in the rest of the world. The demand for Asian exports will strengthen even more dramatically (again, in comparison with our first scenario) if domestic demand stimulus is not offset, at least in part, by appreciation against extra-regional currencies. Other regions will feel positive effects if Asian demand is stronger and, in the absence of appreciation, the Asian economies suck in more imports from the rest of the world. But they will also be negatively affected insofar as Asia's wider fiscal deficits put incipient upward pressure on its interest rates and attract capital from other credit-strapped regions. The net result is ambiguous (this in any case is the prediction of the textbook Mundell-Fleming model of the cross-border effects of fiscal policy under pegged exchange rates).

In the longer run there will be upward pressure on prices in Asia (relative to the first scenario above), what with larger budget deficits, more public spending, or some combination of the two but no further compression of export demand due to currency appreciation. This can be thought of as adjustment through inflation. Asia would achieve the same combination of expenditure-increasing (fiscal) and expenditure-switching (real exchange rate) outcomes, but the change in the real exchange rate is brought about inflation instead of currency appreciation.

It is hard to see how this is a desirable course for a region already experiencing mounting inflationary pressure. In China, CPI inflation has already been running at an annual rate of more than 8 percent for the first four months of 2008. If prices of foodstuffs do not

stabilize, some forecast that CPI inflation could climb to 10 percent in 2008 (Yu 2007). There are similar pressures across East Asia.<sup>25</sup>

No Fiscal Expansion or Currency Adjustment Either. A final possibility is that Asia responds to the financial crisis and the slowdown in the U.S. and Europe with neither fiscal expansion nor faster currency appreciation. In this case the region would be affected by the subprime crisis radiating outward from New York City in much the same manner as New Jersey.<sup>26</sup> Where the pre-crisis baseline was one where policy makers were grappling with risk of overheating, the resulting slowdown may be a good thing on balance. But where the pre-crisis baseline was one where growth was sustainable, simply sitting back and letting the global slowdown infect the region is not desirable.

Some observers will argue that the first view, that there remains risk of overheating, is a fair characterization of China, while the second view, that growth is already subpar, is a reasonable characterization of Korea. If so, this passive response to the crisis will be more in the interest of the former than the latter. Insofar as China increasingly sets the tone for policies region wide, this raises the likelihood of this outcome. Korea's saving grace is that it has a more flexible exchange rate than China and is willing to see its currency fall when growth slows. During the first quarter of 2008, the won depreciated against the RMB by more than 9 percent; this is evidence of markets and policy makers responding in the anticipated way.

The drawback compared to our first scenario is, of course, that East Asia contributes less to global rebalancing than otherwise. As the dollar falls, crowding in U.S. exports, it falls mainly against the euro and other non-Asian currencies. The burden of adjustment is thus

<sup>&</sup>lt;sup>25</sup> ADB (2008) cautions that inflation pressures are mounting throughout the region as a result of surges in food, fuel, and raw material prices. In particular food prices make up a significant part of the weights used in calculating the CPI. For instance, food accounts for 59% of the CPI weights in Philippines 40% in China. The ADB estimates (2008) show a strong positive correlation food price with the CPI indexes across East Asia.

<sup>&</sup>lt;sup>26</sup> New Jersey similarly having no exchange rate policy independent of New York's and its state government having little scope for independent fiscal action, given balanced-budget rules and the high mobility of the tax base.

borne unevenly across regions, something that could raise political as well as economic tensions. And if, China notwithstanding, the balance of risks in the region incline increasingly toward subpar growth rather than overheating, then standing back idly and letting the global slowdown infect the region is not in the collective interest.

## 5. Conclusion

We have suggested in this paper that the possibility that Asia can decouple from the U.S. subprime crisis and economic slowdown is highly unlikely. Asia's direct exposure to subprime-related structured financial products may to be limited, and its financial institutions and markets may be better regulated than before, but the region is not without financial vulnerabilities. If the subprime crisis teaches us one thing, it is that the regulators always tend to lag the regulated.<sup>27</sup> If Asia does in fact experience a decline in asset valuations and a growth slowdown, financial problems could yet surface. While the notion that China has emerged as an independent growth pole and that the expansion of intra-regional trade better insulates the region from business-cycle influences emanating from the United States may contain a kernel of truth, the reality is that the Asian economies are still tightly linked to the U.S., both by trade in final products and by financial-market co-movements.

If decoupling is a myth, how should and will Asian policy makers respond? The "should" part of the question is easier: the optimal response, from the points of view of both the region and the globe, is a combination of fiscal stimulus and currency adjustment. This response is most likely to maintain the momentum of growth in East Asia, minimize the global impact of the U.S. slowdown, and contribute to a sustained reduction of global imbalances. The "will" part is harder. Asian governments have been reluctant both to make active use of discretionary fiscal policy and to allow their currencies to adjust either

<sup>&</sup>lt;sup>27</sup> A situation sometimes referred to as "the bloodhounds versus greyhounds problem."

fiscal or monetary policy but not the other. Either partial adjustment would, however, be less desirable than the two in combination. One can also imagine a scenario in which governments undertake neither policy adjustment. This would be the least desirable of all conceivable worlds.

# References

Asian Development Bank (2008), "Outlook 2008: Highlights," Manila: ADB.

Anderson, Jonathan (2007a) "Is China Export Led?" UBS Investment Research Asian Focus (27 September).

Anderson, Jonathan (2007b), "China Should Speed Up the Yuan's Rise,", *Far Eastern Economic Review* 170 (July/August), pp 14-20.

Ahearne, Alan, John Fernald, Prakash Loungani, and John Scneider (2006) "Flying Geese or Sitting Ducks: China's Impact on the Trading Fortunes of Other Asian Countries," International Finance Discussion Paper 886, Board of Governors of Federal Reserve System, Washington, DC.

Bank of Japan (2008)," Financial System Report" BOJ Reports and Research Papers, March

Blanchard, Olivier and Francesco Giavazzi (2005), "Rebalancing Growth in China: A Three-Handed Approach," unpublished manuscript, MIT (December).

Caballero, Ricardo, Emmanuel Farhi and Pierre-Olivier Gourinchas (2006), "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates," NBER Working Paper no. 11996 (February).

Calderon, Cesar, Aberto Chong and Ernesto Stein (2007), "Trade Intensity and Business Cycle Synchronization: Are Developing Countries Any Different?" Journal of International Economics, Vol. 71, March, pp 2-21.

Calvo, Sara and Carmen Reinhart (1996), "Capital Flows to Latin America: Is There Evidence of Contagion Effects?" in Guillermo Calvo, Morris Goldstein and Edi Hochreiter (eds), *Private Capital Flows to Emerging Markets After the Mexican Crisis* Washington, D.C.: Institute for International Economics, pp.151-171.

Cashin, P., M, Kumar and J. McDermott (1995), "International Integration of Equity Markets and Contagion Effects," IMF Working Paper 95/110 (November).

Claessen, S., R. Dornbusch and Y. C. Park (2001), "Contagion: Why Crises Spread and How

They Can Be Stopped," in S. Claessens and K. Forbes (eds.), *International Financial Contagion*, Norwell, Mass.: Kluwer Academic Publishers, pp.19-42.

Dees, Stephane and Isabel Vansteenkiste (2007), "The Transmission of US Cyclical Developments to the Rest of the World," European Central Bank Working Paper No. 798 (August).

Dooley, Michael, David Folkerts-Landau and Peter Garber (2003), "An Essay on the Revived Bretton Woods System," NBER Working Paper 9971 (September).

Eichengreen, Barry (2007), "Why Now is a Good Time to Sell the Dollar," *Financial Times* (3 September).

Eichengreen, Barry and Yung Chul Park (2005), "Why Has There Been Less Financial Integration in Asia than in Europe?" New York: Ford Foundation.

Eichengreen, Barry and Yung Chul Park (2006), "Global Imbalances and Emerging Markets," in Jan Joost Teunissen and Age Akerman (eds), *Global Imbalances and the U.S. Debt Problem*, The Hague: Fondad, pp.14-44.

Faruquee, Hamid (2008), "IMF sees Global Imbalances Narrowing, But More to Be Done," *IMF Survey*, Washington, D.C.: IMF (February).

Feldstein, Martin (2006), "A More Competitive Dollar is Good for America," *Financial Times*, (14 October)

Financial Service Agency of Japan (2007), "Exposures of Japanese Deposit-taking Institutions to Subprime-related Products," Tokyo: FSA (30 November).

Fitch Ratings (2008a), "Banks in Asia Excluding Japan: Update on Exposure to Subprime and Structured Credit Products," Asia Special Report (21 April), <u>www.fitchratings.com</u>.

Fitch Ratings (2008b), "Bank Systemic Risk Report," Fitch Ratings Special Report, Sovereigns (21 April), <u>www.fitchratings.com</u>.

Frankel, Jeffrey (2008), "Carried Away: Everything You Always Wanted to Know About the Carry Trade," *Milken Institute Review* (January).

Frankel, Jeffrey A., and Andrew K. Rose (1998), "The Endogeneity of the Optimum Currency Area Criteria," *Economic Journal* 108, pp. 1009-25.

Ghosh, Swati (2006), *East Asian Finance: The Road to a Robust Market*, Washington, D.C.: World Bank.

Greenlaw, David, Jan Hatzius, Anil Kashyap and Hyun Song Shin (2008), "Leveraged Losses: Lessons from the Subprime Mortgage Meltdown," paper presented to the U.S. Monetary Policy Forum Conference, Chicago (February).

Haltmaier, Jane, Shaghil Ahmed, Brahima Coulibaly, Ross Knippenberg, Sylvain Leduc, Mario Marazzi, and Beth Anne Wilson (2007), "The Role of China in Asia: Engine, Conduit, or Steamroller?" International Finance Discussion Papers No. 904, Board of Governors of Federal Reserve System, Washington, D.C. (September).

Holz, Carsten A. (2006), "Measuring Chinese Productivity Growth, 1952-2005," unpublished manuscript, Hong Kong University of Science & Technology (July).

Imbs, Jean (2004), "Trade, Finance, Specialization, and Synchronization," *Review of Economics and Statistics* 86, pp.723-34.

Imbs, Jean (2006), "The Real Effects of Financial Integration," *Journal of International Economics* 68, pp.296-324.

International Monetary Fund (2005), "Asia-Pacific Regional Outlook," Asia and Pacific Department, International Monetary Fund (September).

International Monetary Fund (2007a), "Spillovers and Cycles in the Global Economy," *World Economic Outlook* (April).

International Monetary Fund (2007b), "Regional Economic Outlook: Asia and Pacific," Washington, D.C.: IMF (October).

Kim, Soyoung, Yong-Wha Lee, and Kwanho Shin (2008), "Regional and Global Financial Integration in East Asia," in Barry Eichengreen, Charles Wyplosz and Yung Chul Park (eds), *China, Asia, and the New World Economy*, New York: Oxford University Press, pp.168-200.

Kuijs, Louis (2006), "How Will China's Saving-Investment Balance Evolve?" World Bank

Policy Research Paper, 958 July.

Kuttner, Kenneth and Adam Posen (2002), "Fiscal Policy Effectiveness in Japan," Working Paper no.02-2, Washington, D.C.: Institute of International Economics (August).

Lague, David (2007), "China Rejects Europe's Call for Currency to Rise Faster," <u>www.nytimes.com</u> (28 November).

Levy-Yetai, Eduardo (2008), "Three Varieties of Decoupling," Emerging Markets Research, Barclays Capital (14 February).

Moneta, Fabio and Rasmus Rüffer (2006), "Business Cycle Synchronisation in East Asia," European Central Bank Working Paper Series No. 671 (August).

OECD (2006), "Challenges for China's Public Spending::Toward Greater Effectiveness and Equity," in *China in the Global Economy*, OECD Transition Economies No. 7, pp. 1-147

Park Yung Chul and K.-H. Bae (2002), "Financial Liberalization and Economic Integration in East Asia," Unpublished Manuscript (Korea University).

Park, Yung Chul (2007), "China's Exchanging Rate Policy," prepared for Peterson Institute for International Economics conference on China's Exchange Rate Policy (October.

Rodrik, Dani (2006), "The Social Cost of Foreign Exchange Reserves," *International Economic Journal* (forthcoming).

Roubini, Nouriel (2008), "Martin Wolf on My Estimates of Financial Losses: \$1 Trillion is the New Size 6!," Nouriel Roubini's Global EconoMonitor (11 March).

SEACEN (2008), "Financial Deepening to Support Monetary Stability and Sustainable Economic Growth," press communiqué, 43<sup>rd</sup> SEACEN Governors' Conference and 27<sup>th</sup> Meeting of the SEACEN Board of Directors (20-23 March).

Shin, Kwanho and Yungjong Wang (2004), "Trade Integration and Business Cycle Synchronization in East Asia," Asian Economic Papers, Vol. 2, fall, pp.1-20.

Shin, Kwanho and Sohn Chan-Hyun (2006), "Trade and Financial Integration in East Asian: Effects on Co-movements."

Urata, Shujiro (2006), "A Shift from Market-driven to Institution-driven Regionalization in East Asia," paper presented to Conference on Economic Policy Reform in Asia, Stanford University (June).

World Bank (2007), "Will Resilience Overcome Risk?" East Asia and Pacific Update, Washington, D.C.: The World Bank (November).

World Bank (2008) "Testing Time Ahead," East Asia and Pacific Update, Washington, D.C.: The World Bank (April).

Wyplosz, Charles (2008), "Is East Asia Safe from Financial Crises?" in Barry Eichengreen, Charles Wyplosz and Yung Chul Park (eds), China, Asia and the New World Economy, New York: Oxford University Press, pp.233-253.

Yam, Joseph (2007), "Factors Affecting Inflation in Hong Kong," unpublished manuscript, Hong Kong Monetary Authority, 15 November.

Yu, Yongding (2007), "New Challenges China is Facing," paper presented to Asian Economic Panel Meeting, Tokyo (December).

























	EMBI Global							Hong	
Trade Date	Diversified	China	South Korea	Malaysia	Philippines	Vietnam	Indonesia	Kong	
Dec-06	181	51	64	66	128		138	42	
Jan-07	182	50	66	71	136	110	128	45	
Feb-07	195	50	64	69	155	139	136	50	
Mar-07	180	53	62	73	142	116	131	51	
Apr-07	178	50	60	69	132	109	125	50	
May-07	166	49	57	69	114	104	101	50	
Jun-07	190	54	63	75	139		122		
Jul-07	236	74	95	100	203	160	166	54	
Aug-07	248	80	85	100	214	205	211	65	
Sep-07	225	88	74	108	144	152	155	55	
Oct-07	210	87	73	99	140	150	148	60	
Nov-07	270	114	102	111	202	215	224	72	
Dec-07	264	119	98	115	164	191	204	63	
Jan-08	297	128	173	138	267	247	327	128	
Feb-08	315	150	194	174	312	218	342	160	
Mar-08	333	154	206	154	279	250	326	178	
Apr-08	293	154	178	136	223	210	285	148	

Table 1. Emerging Asia Sovereign Spreads

Source : Korea Center For International Finance

Report														
Country/Region	Region CHINA		JAPAN		EA8 <sup>3)</sup>		EA10 <sup>4)</sup>		US		EU-25		Others	
CHINA	-	-	16.7	10.2	30.9	29.7	47.5	39.8	21.2	21.2	16.4	18.8	14.9	20.1
JAPAN	6.0 <sup>1)</sup>	13.9 <sup>2)</sup>	-	-	32.4	32.7	38.4	46.6	30.5	22.8	17.5	14.5	13.6	16.0
EA8	11.2	20.7	10.6	8.6	26.4	26.4	48.1	55.7	21.7	14.5	15.5	13.4	14.6	16.4
EA10	8.1	13.2	8.3	7.2	28.8	28.7	45.2	49.1	24.2	18.2	16.2	15.2	14.4	17.4
US	2.0	5.0	8.4	5.9	14.3	12.5	24.6	23.4	-	-	22.1	20.6	53.3	56.0
EU-25	0.9	1.7	1.7	1.3	3.4	3.0	6.1	6.0	8.8	7.7	-	-	85.1	86.4
Others	1.0	2.7	3.0	3.3	4.0	4.9	8.0	11.0	19.2	16.7	72.8	72.3	-	-
WORLD	2.6	8.4	4.2	6.4	10.0	17.5	16.8	32.3	15.0	22.2	32.3	56.0	35.9	61.7

Table 2. Trade Shares by Region (%)

Source : Direction of Trade Statistic, IMF, Bureau of Foreign Trade, Taiwan

Note 1) 1999-2000 average

- 2) 2005-2006 average
- 3) EA8 : ASEAN 4 (Indonesia, Malaysia, Philippines, and Thailand), Korea, Taiwan, and Singapore

4) EA10 : Japan, China, and EA8