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.¹⁹

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

¹⁹ 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.²⁰) 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.²¹ 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.

Data for 2006.
 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.²²

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

²² 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.²³

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

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.²⁴

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

²⁴ 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.²⁵

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. 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

²⁵ 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.

²⁶ 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

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.²⁷ 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. One can construct scenarios in which they give in to domestic or foreign pressures to adjust either

²⁷ 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), www.fitchratings.com.

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

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," www.nytimes.com (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, 43rd SEACEN Governors' Conference and 27th 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).