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Capital flows in East Asia since the 1997 crisis[1]

Since the crisis hit East Asia six years ago, flows of capital between the region and the rest of the world have changed in significant ways. These changes have responded to altered economic conditions within the region and outside it. However, certain features of the new pattern of flows raise some important policy questions.

First, East Asia is exporting capital on a net basis to the rest of the world in very substantial amounts. The external demand that has generated an export surplus has undoubtedly facilitated recovery from the Asian crisis. Moreover, the United States has also benefited from the related capital inflows to finance its current account deficit. Nonetheless, it is hard to believe that the region should be such a large exporter of savings in the long term, or that the US deficit can be sustained indefinitely.

Second, East Asia is engaged in an international exchange of risk that is restoring and strengthening national and corporate balance sheets in the region and rendering the region's economies more resilient. The region is doing so by exporting relatively safe capital while importing risky capital. That is, East Asia is buying high-quality US, European and Japanese government and agency securities, while selling real assets, equities, and medium- and low-quality bonds. This pattern has drawn the criticism that it has impeded the development of East Asia's own bond markets.

This special feature first reviews the *net* flows of capital from East Asia to the rest of the world. It then turns to the *gross* flows of capital, highlighting the region's import of higher-risk capital and export of safer capital. In a third section, the criticisms that have been levelled against these patterns of capital flows are considered. The role of gross capital flows in some of the recent rapid increases in official foreign exchange reserves is emphasised. Finally, this special feature discusses policies to address the possible shortcomings in the current pattern of capital flows. These include East Asia's finishing the restructuring of its banking and corporate sectors, developing both long-term investing institutions and bond markets, and relying less on exports to lead economic growth. A constructive response to these challenges would permit

[1] The views expressed in this article are those of the author and do not necessarily reflect those of the BIS.

the global economy to move towards a more sustainable pattern of current account surpluses and deficits and associated capital flows.

Trends in net capital flows

East Asia's current account swings by over $100 billion …

In retrospect, the East Asian crisis can be seen as the result of an abrupt withdrawal of funds by the rest of the world in the face of mounting evidence of falling asset prices and strained finances of firms and banks. This forced an end to the current account deficits and a start to the repayment of the stock of debt of East Asia. In 1995–96, before the crisis, East Asia excluding China and Japan ran a collective current account deficit of $28.5 billion, ranging from the wide deficits of Malaysia and Thailand, through the moderate ones of Hong Kong SAR, Indonesia, Korea and the Philippines, to the surpluses of Singapore and Taiwan, China (hereafter referred to as Taiwan). By 1999–2000, the current account had swung to a surplus of $88 billion. In 2001–02, it remained at about the same level. Adding the surpluses of China and Japan, the region is running a current account surplus of over $200 billion (Table 1). In several East Asian countries, current account surpluses in 2002 remained quite large in relation to domestic product (Graph 1). As a result of the cumulating current account surpluses, some economies in the region have graduated from net international debtors to net international creditors. The rapidity of this turnaround underscores the fact that the region did not suffer from excessive external debt before the crisis.

… as business investment declines

In general, the decline of business investment, set against the backdrop of high household saving rates, accounted for East Asia's shift from external deficits to external surpluses. Changes in fiscal balances generally only served

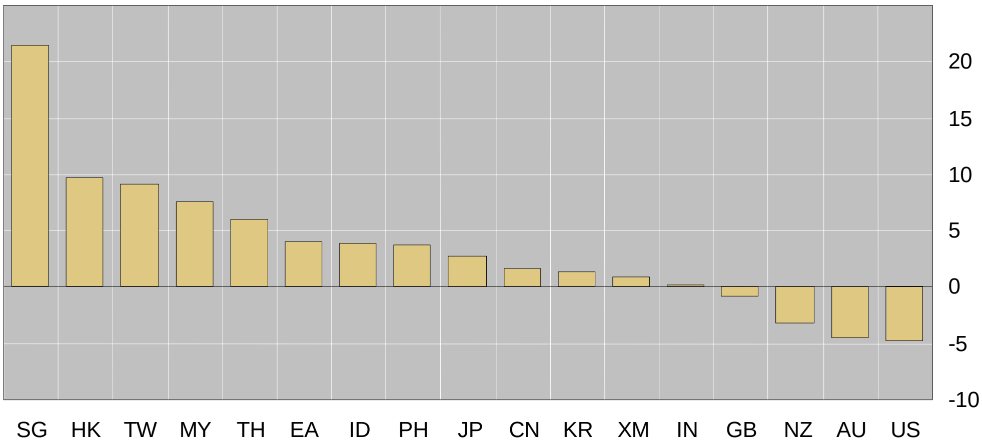
Current account balances

	1995–96	1999–2000	2001–02
	In billions of US dollars		
Japan	87.7	117.4	100.6
East Asia (excluding Japan)	–24.1	108.8	111.4
Euro area	50.5	–52.4	21.3
China	4.4	20.8	26.4
Taiwan, China	8.3	8.6	21.8
Singapore	13.7	16.2	18.3
Hong Kong SAR	–4.1	8.2	12.1
Korea	–15.8	18.4	7.2
Malaysia	–6.6	10.5	7.3
Indonesia	–7.0	6.9	7.1
Thailand	–14.1	10.9	6.9
Philippines	–3.0	8.2	4.4
India	–5.8	–3.7	2.5
New Zealand	–3.5	–3.1	–1.6
Australia	–17.5	–18.7	–13.2
United Kingdom	–13.9	–30.4	–18.0
United States	–111.8	–351.6	–448.4

Sources: © Consensus Economics; JP Morgan; national data. Table 1

Current account balances in 2002

As a percentage of GDP



AU = Australia; CN = China; EA = East Asia (excl Japan); GB = United Kingdom; HK = Hong Kong SAR; ID = Indonesia; IN = India; JP = Japan; KR = Korea; MY = Malaysia; NZ = New Zealand; PH = Philippines; SG = Singapore; TH = Thailand; TW = Taiwan, China; US = United States; XM = euro area.

Source: National data. Graph 1

to moderate these swings. In the first instance, corporate investment was cut back as East Asian firms coped with a sharp decline in the availability of external funds. As time passed, the continuing financial surpluses of the corporate sector tended to reflect weak demand for investment in the face of an overhang of capacity and the efforts by firms to rebuild their balance sheets.

A deterioration in the US deficit accommodates East Asia's current account swing ...

The regional current account surplus has as its counterpart a net flow of capital out of East Asia. The main user of this capital is the United States. Of course, the United States was already running a substantial current account deficit before the crisis, at a time when East Asia was running an aggregate deficit. Between 1995–96 and 1999–2000, however, the US current account deficit widened by $240 billion, accommodating the $116 billion increase in the net exports of East Asia excluding China and Japan.[2]

From the regional perspective, the export-led growth that improved the current account surplus provided a welcome stimulus, offsetting to varying extents the headwinds from financial and corporate restructuring. Likewise, the widening of the current account deficit in the late 1990s was not on balance an unwelcome development for the United States. It coincided with rapid domestic growth that was putting pressure on US price stability by late 1996. Thus, increased net imports from East Asia coincided with strong US growth and incipient price pressures, and limited the degree of monetary tightening required.

... leaving the US economy with a large external imbalance

Today, the US economy finds itself in quite a different position. Although the recession of 2001 was neither long nor deep, questions remain about the sustainability of household demand and the conditions for a recovery of

[2] Some regional analysts contend that China also absorbed some of the increase in East Asia's exports, with uncounted imports narrowing China's current account surplus despite the contrary indication of the official statistics.

business fixed investment. Inflation has receded as an issue. Perhaps of lesser significance, but not to be entirely overlooked, is the sheer size of the US current account deficit. This has now reached some 5% of GDP, almost 10% of the rest of the world's gross savings. The US net international debt position has risen to almost $2 trillion, over a fifth of output and almost twice exports at end-2001. While higher returns on US foreign assets than on US liabilities (as in part discussed below) have thus far limited the impact on debt servicing requirements, the US economy began in 2002 to experience a net servicing drain on income. Under these circumstances, East Asian policymakers cannot safely assume that the trade developments that were welcomed by the United States in the late 1990s can continue indefinitely.

Trends in gross capital flows

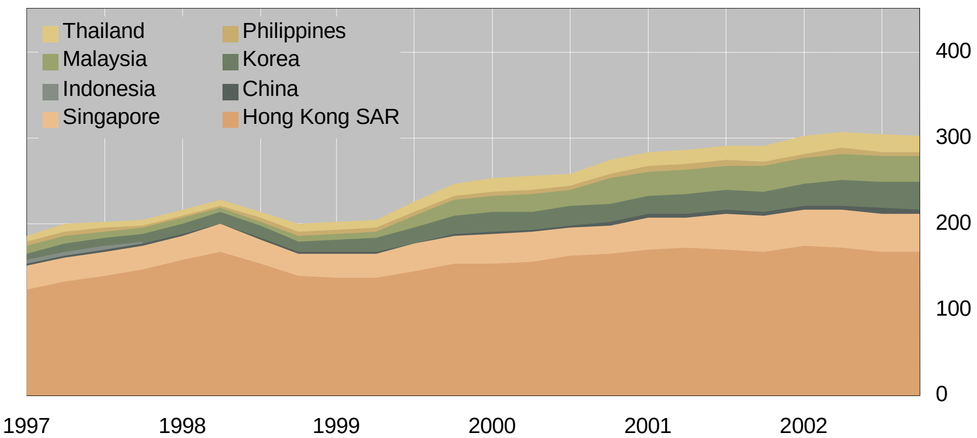
Underlying East Asia's export of capital on a net basis has been an international trade in risk through substantial two-way capital flows. In particular, East Asia has been importing riskier capital while exporting safer capital. In the process, East Asian economies have, in aggregate, been strengthening their balance sheets. In particular, in attracting equity and subordinated debt flows, while paying back debts and accumulating liquid assets, East Asia has used global financial markets to deleverage and to improve liquidity.

Inflows of risk capital help recapitalise failed banks ...

Foreign direct investment into East Asia has been the largest of the inflows of risk capital. While there has been much discussion of whether direct investment in China was coming at the expense of direct investment elsewhere, Korea experienced a sharp increase in flows after the Asian crisis. Private equity has flowed into recapitalising failed banks and at times into purchases of portfolios of bad loans. An infusion of risk capital that is often

Foreign banks' domestic currency claims[1, 2]

In billions of US dollars

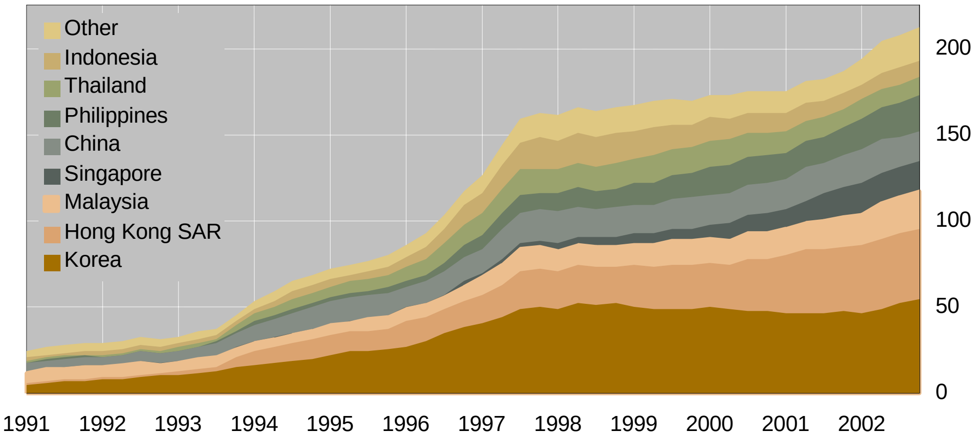


[1] Locally booked claims of BIS reporting banks' foreign offices denominated in local currency. US-based banks include dollar-denominated claims funded locally. [2] For 1997–99, quarterly data are linear interpolations of semiannual data.

Source: BIS. Graph 2

Outstanding international bonds of Asian issuers

In billions of US dollars



Note: Includes convertible and floating rate notes.

Source: *BIS Quarterly Review*, Table 15B. Graph 3

overlooked has been implied by the substantial increase in domestic currency intermediation by foreign-based banks (Graph 2). While the measured contribution to foreign direct investment may depend on whether this intermediation takes place in the legal form of local subsidiaries or branches, in effect foreign banks have in either case injected capital to support expanded local currency lending (McCauley, Ruud and Wooldridge (2002)).

… and add to portfolio equity flows …

Portfolio equity, another form of risk capital, has on balance also flowed into the region since the crisis, although it has waxed and waned with equity market performance in the major international centres. Despite these fluctuations, the medium-term trend may well be upwards. Since the crisis, the correlation of local equity markets (other than China's) with the major international equity markets has tended to increase. This has been ascribed to the tighter linkage to the major markets of regional exports, regional industrial production and overall economic growth in East Asia.

… and portfolio debt flows

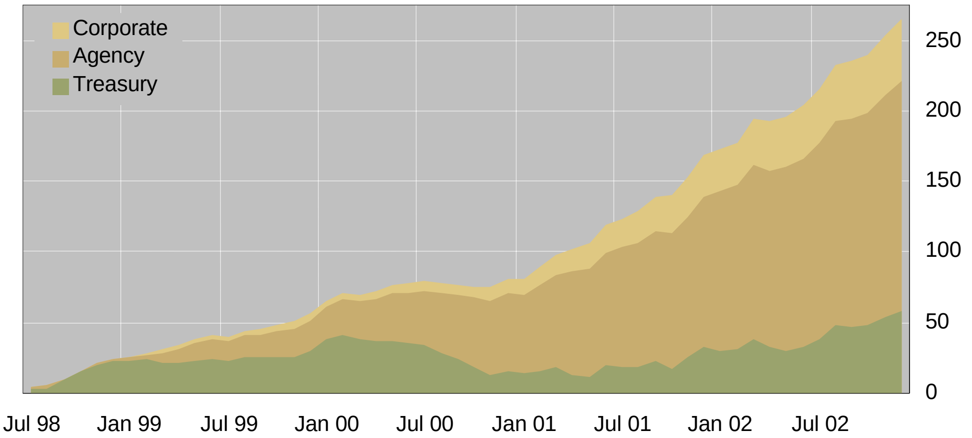
Other forms of risk capital have also flowed into East Asia since the crisis. East Asian banks have also sold subordinated debts to investors in New York. Both sub-investment grade and investment grade bonds, issued by sovereign and corporate borrowers, have been marketed internationally (Graph 3).

Capital outflows favour low-risk instruments

In the other direction, capital has flowed out of East Asia into low-risk securities and through interbank channels. Prominent among the securities acquired have been US Treasuries, US agencies, European sovereign debt and Japanese government debt. Judging by the composition of net purchases of US bonds by East Asia, the average spread over Treasury securities is unlikely to have much exceeded 20 basis points (Graph 4). Banks and central banks have also built up deposits in major international banks. The very substantial paydown by regional corporations of their debts in dollars has led to a flow that combines risk capital and low-risk funds. That is, the repayment of some $300 billion since the crisis has freed up bank capital of about a tenth of

Net purchases of long-term US debt securities by East Asia

Cumulative, in billions of US dollars



Source: US Treasury. Graph 4

that amount, while the funds actually repaid have flowed into global banking markets in the form of low-risk interbank funds (Graph 5). In this sense, East Asia has been providing the rest of the world with safe capital.

East Asia's capital inflows and outflows not only differ in risk profile but also involve different counterparties. Capital inflows into East Asia have generally featured private parties buying private (sometimes privatised) assets. In contrast, the outflow side features public sector officials investing the proceeds of foreign exchange market intervention in official or quasi-official instruments, such as US agency securities.[3] While in 1999–2001 the Chinese banking system exported more funds than did Chinese official reserve managers, the instrument choice seems to have been quite similar (Ma and McCauley (2002)).

East Asia pays a risk premium ...

The beneficial effects of these gross flows of capital in strengthening financial structures in East Asia have not come without cost. This cost can be conceived of as a credit spread or as some version of the equity premium. For instance, dollar-denominated subordinated bonds issued by Indonesian or Korean banks have yielded at issue 3 to 4 percentage points over the safer yields earned by the investment of reserves. Taking 234 dollar or euro bonds issued by East Asian borrowers between 1997 and 2002 (aggregating to $84 billion), the average spread paid over the yield on US Treasury or other government benchmark bonds amounted to 233 basis points (Graph 6).

... which may be understandable in view of the risks to which the region is exposed

How good a bargain this is for East Asia is not easy to say. The asymmetry of the risk exchange between East Asia and the rest of the world runs counter to the conventional wisdom about global capital markets. In this view, investors are expected to use global markets to diversify their holdings of risky claims. In contrast, East Asian economies are grossing up their balance sheets systematically to transfer risk to the rest of the world and to build up

[3] Of course, this generalisation does not hold across all countries and at all times. In Thailand, companies' repayment of their dollar-denominated debt (a private-private transaction) has generally exceeded the Bank of Thailand's investment of new official reserves.

liquidity. This may make sense to some extent if East Asian economies are highly geared to global demand ("high beta" economies), in part because of heavy exposure to technology production. Not only may the benefits of diversification be limited (as evidenced by fairly strong equity market correlations), but also the value of liquidity protection against sharp downswings in the technology business may be high.

The US economy benefits from its absorption of East Asian risk and liquidity

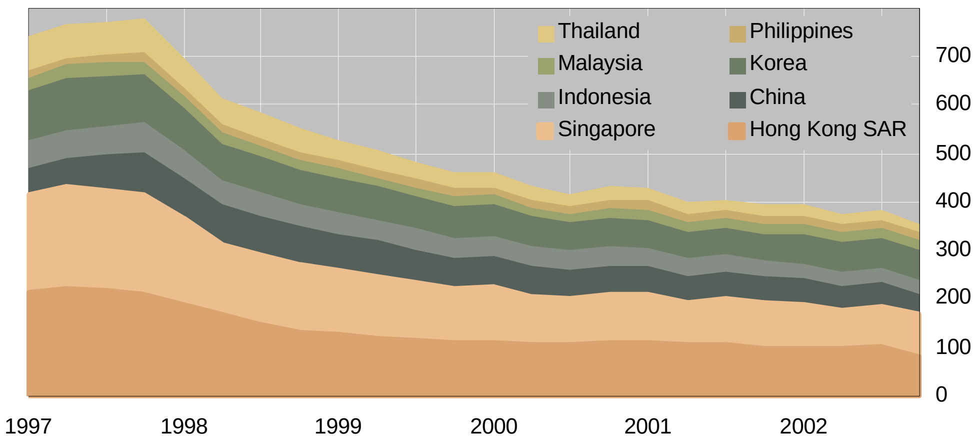
Looked at from the perspective of the United States, its provision of risk capital to East Asia adds to the gross flows that are needed to finance its current account deficit. Over time, of course, such risk intermediation vis-à-vis East Asia and other regions provides income to the US economy (the other side of the equity risk premium), which shows up as the excess in the long-term average rate of return on its assets over the corresponding rate of return on its liabilities.[4]

Such global intermediation requires a healthy balance sheet

Thus, by financing risky East Asian assets with safer liabilities, the US economy has been serving the region as an international financial intermediary or bank. Over the long run, however, a bank cannot expand on the basis of a shrinking capital base. In the case of a country providing international risk absorption and maturity transformation, the capital base can be interpreted as the net international investment position.[5] The decline of the US net international investment position means a reduction in the international net worth available to sustain losses on the higher-risk, less liquid assets without

Consolidated international bank claims[1, 2]

In billions of US dollars



[1] Cross-border claims of BIS reporting banks in all currencies plus local claims of their foreign offices denominated in foreign currencies. US-based banks exclude dollar-denominated claims funded locally. [2] For 1997–99, quarterly data are linear interpolations of semiannual data.

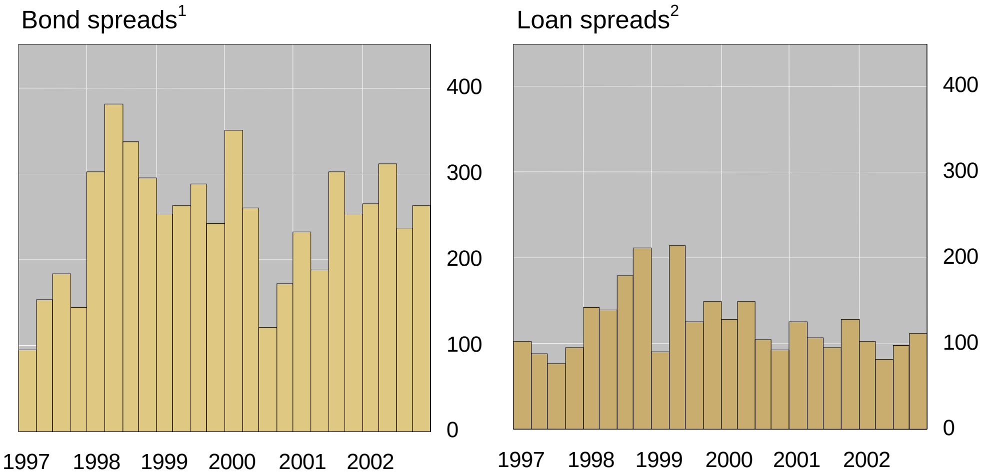
Source: BIS. Graph 5

[4] The exchange of risk between the United States and the euro area in the late 1990s, by contrast, showed the euro area absorbing risk, issuing relatively short and low-risk liabilities in order to buy risky equities and whole companies.

[5] A broader, and more benign, interpretation of the capital base is the underlying capital stock of the entire economy, although this interpretation assumes a very strong capacity to transform production of non-tradables into production of tradables.

Credit spreads on bonds and loans of East Asian borrowers

In basis points



[1] Over benchmark government yields. [2] Over Libor.

Sources: *Asiamoney*; Dealogic Bondware; Dealogic Loanware; *FinanceAsia*; *International Financing Review*. Graph 6

disturbance to the low-risk liquid liabilities. The similar concern of Robert Triffin (1969) over 30 years ago, when the US current account was still in balance, was debatable; but the chronic US current account deficit now makes the debate moot. There is indeed a latent, if currently far from pressing, conflict between the deteriorating net international investment position of the United States and the role it plays in international financial risk intermediation.

Criticisms of the patterns of capital flows

Should a fast-growing region export capital to a mature economy?

Two criticisms have been levelled at the patterns of capital flows just described. First, some observers have questioned, on welfare and even moral grounds, a flow of capital *from* East Asia *to* the United States. After all, this means that funds are generally flowing *from* relatively poor economies catching up in productivity, with relatively young populations and capable of growth in the range of 5–10%, *to* a mature economy, albeit one enjoying a recent increase in productivity growth. From a different perspective, the same current account surpluses are criticised as suggesting an unhealthy dependence on external demand by economies in the region. Moreover, there is a concern that the longer the US deficits continue, the greater the chance of an eventual disorderly adjustment of exchange rates.

Should East Asia depend on the rest of the world for risk intermediation?

Second, there is concern that the gross flows from Asia to major financial centres and back to East Asia represent a missed opportunity for greater financial intermediation within Asia. That is, flows from East Asia are said to be helping simply to deepen the US bond market, rather than contributing to the development of East Asian bond markets. There is some truth in both criticisms, but each can be overstated. What follows takes up each criticism in turn.

Net flows

Official foreign exchange reserves have risen sharply ...

Criticism of the net capital flows from East Asia to the rest of the world often focuses on the build-up of official foreign exchange reserves in the region. East Asia's accumulation of official foreign exchange reserves has indeed been remarkable and has raised the region's share of global reserves to over 50% (Table 2). Particular gains in 2002 were recorded by China, India, Japan, Korea and Taiwan (Graph 7).[6] As noted, criticism of the net capital flows comes from two perspectives. From a perspective that assumes continuous full employment, the view is taken that current account surpluses are being run in order to build reserves, and that this represents a wasteful investment of real resources. From a more Keynesian perspective, the current account surpluses represent a means to maintain demand, which is in effect redistributed from the rest of the world.

... leading to criticisms from two perspectives

One perspective sees the build-up of reserves as a wasteful deployment of real resources ...

From the first perspective, the authorities seek to raise official foreign exchange reserves, and intervene in the market to absorb and to maintain current account surpluses. The perceived cost, and potential wastefulness, of this policy arises from the gap between the benefits of retaining the resources, namely the marginal productivity of capital in the economy, and the yield on the reserves, namely the international risk-free rate. In other words, the claim is that real resources are being absorbed, through the balance of payments, to acquire financial assets in mature economies abroad that yield less than alternative investments at home. This echoes criticisms that were made of colonial currency board systems, that they forced colonies to run current account surpluses to back their money. In this interpretation, reserve growth is less than fully rational. Some critical observers even go so far as to see the reserve build-up as a competitive activity, less dangerous but no less costly than an arms race, wherein the use of real resources is forgone trying to top neighbours' holdings.

Official foreign exchange reserve holdings

	1998		2002	
	In billions of US dollars	In percentages	In billions of US dollars	In percentages
East Asia excl Japan[1]	562.9	34.6	908.8	40.0
Japan	203.2	12.5	443.1	19.5
Pacific[2]	17.2	1.1	19.9	0.9
World total	1,627.8	100.0	2,274.2	100.0

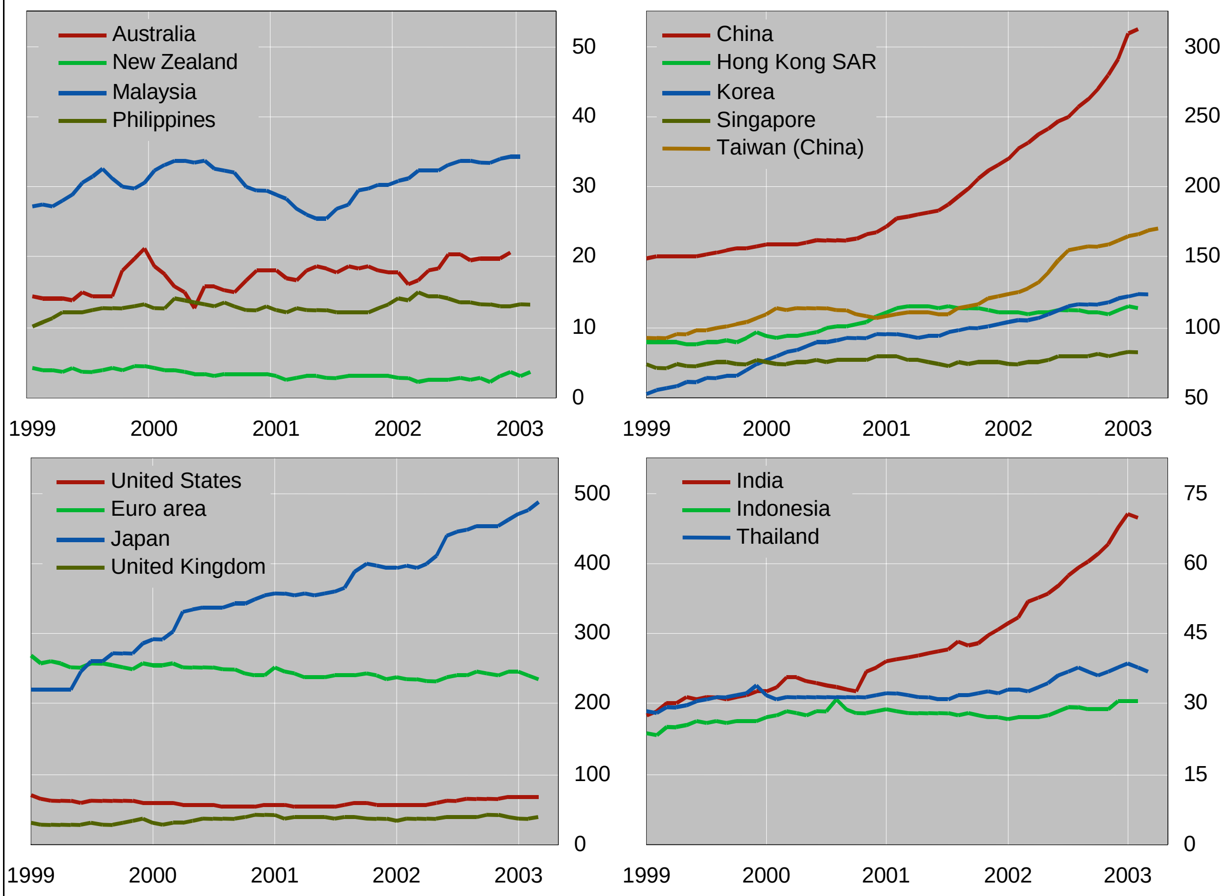
[1] China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan (China) and Thailand. [2] Australia and New Zealand.

Sources: IMF, *International Financial Statistics*; national data. Table 2

[6] This abundance of reserves no doubt made it easier for central banks in the region to agree to make some of their reserves available to each other under the Chiang Mai initiative. See Park and Wang (2003).

Foreign exchange reserves

In billions of US dollars



Sources: IMF, *International Financial Statistics*; national data. Graph 7

... although the link between exchange reserves and current accounts is weak

Much of the variation in foreign exchange reserves in the region, however, must be ascribed to capital flows rather than current accounts. Indeed, in the years since the crisis, the relationship between the growth of reserves and current account surpluses in the region has become looser. Admittedly, the relationship seems well founded in aggregate: the Asian economies excluding Japan ran current account surpluses of $440 billion in 1999–2002 (Table 1) and their reserves rose by $346 billion (Table 2). Nevertheless, while reserve growth approximated the current account surplus in 1999–2000 in Taiwan, Korea and Hong Kong SAR, China's reserves grew by only half of the current account during that period, while those of Singapore hardly budged (Graph 8).[7] In 2001–02, however, with US dollar yields falling in relation to local currency yields, reserve growth outpaced the current account in China, Taiwan and Korea.[8] China's $72 billion rise in foreign exchange reserves in

[7] In China, shifts into dollar bank accounts drawn by higher US dollar yields resulted in private capital outflows and limited reserve growth; see Ma and McCauley (2003).

[8] In Hong Kong SAR, fiscal deficits were funded by the drawdown of fiscal reserves held in foreign currency, so that current account surpluses were not associated with much of a rise in reserves. The depreciation of the euro against the dollar in the earlier period and its appreciation in the latter period held down the growth of reserves as measured in dollars in

2002 can hardly be reduced to its $35 billion current account surplus. For that matter, India's $40 billion rise in foreign exchange reserves over the last four years owes little to a current account surplus that only appeared in late 2001. Thus, what was true in aggregate held far from uniformly across economies and time.

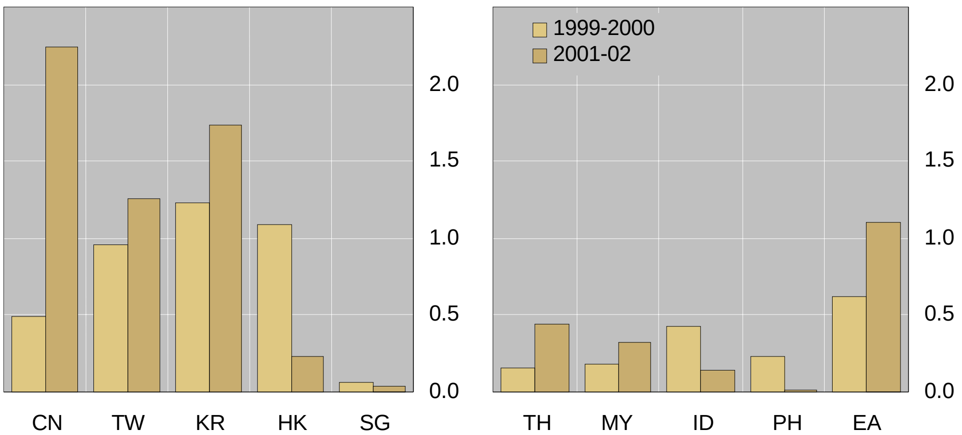
The long-standing critique of the colonial currency board arrangements cited above was partial in that it overlooked international borrowing, or more generally capital flows, as the source of the foreign assets needed to back the currency.[9] So, too, the identification of the growth of foreign exchange reserves in East Asia with current account surpluses is at best partial.

The criticism has limitations other than factual. It overlooks that, within limits, there have been in-country externalities from reserve holding, via the impact on a country's perceived international credit standing. If reserves make less likely a crisis that could cost 5% of GDP, their running cost may be justified. Nor can it be readily assumed that less reserve accumulation would have been balanced by more domestic investment yielding relatively high rates of return.

Reserve growth is also criticised as pointing to over-reliance on external demand

From this, more Keynesian, perspective, the growth of reserves is seen as a by-product of foreign exchange market intervention intended to prevent currency appreciation and the consequent loss of foreign demand. The aim is the maintenance of overall demand, rather than higher reserves per se. On this view, the current account surpluses and foreign exchange reserve build-up in East Asia point not to strength but rather to some extent to domestic economic

Ratio of foreign exchange reserve growth to current account surplus



Note: For an explanation of the country abbreviations, see Graph 1; East Asia is defined as the countries shown and India.

Sources: IMF, *International Financial Statistics*; national data; BIS calculations. Graph 8

the earlier period and boosted it in the second period. The magnitude of this effect, however, cannot account for the difference between the two two-year periods.

[9] The possibility that long-term foreign borrowing, rather than current account surpluses, provides the foreign assets to back a currency board, however, leaves open the spread between the borrowing rate and the deposit rate that is earned on placements of the foreign assets in international financial centres. See De Cecco (1974).

weakness. In particular, weak domestic demand may reflect an investment overhang or firms' diversion of cash flow to debt repayment. At the same time, where banking systems are burdened with bad loans, domestic firms serving the home market may have difficulty obtaining credit. Were domestic private spending, either consumption or investment, to strengthen, regional authorities could reduce intervention, accept some currency appreciation and experience a narrowing of their current account surplus. Some of the possible policies described below, including the strengthening of banks' ability to extend credit, could also raise investment relative to saving.

This perspective, too, suffers from its identification of foreign exchange reserve growth with the current account surplus. But those who recognise the two-way flow of capital between the region and the rest of the world have levelled criticisms as well.

Gross flows

Gross flows could be usefully short-circuited ...

The pattern of gross flows between East Asia and the rest of the world has come in for the criticism that it represents a missed opportunity for financial integration within East Asia. Wearing their policy hats, central bankers in the region discuss how to develop bond markets in the region (APEC (1999)). Wearing their reserve manager hats, they have helped develop the market for US agency securities (McCauley and Fung (2003)).

... although dollar credit markets already show substantial regional integration

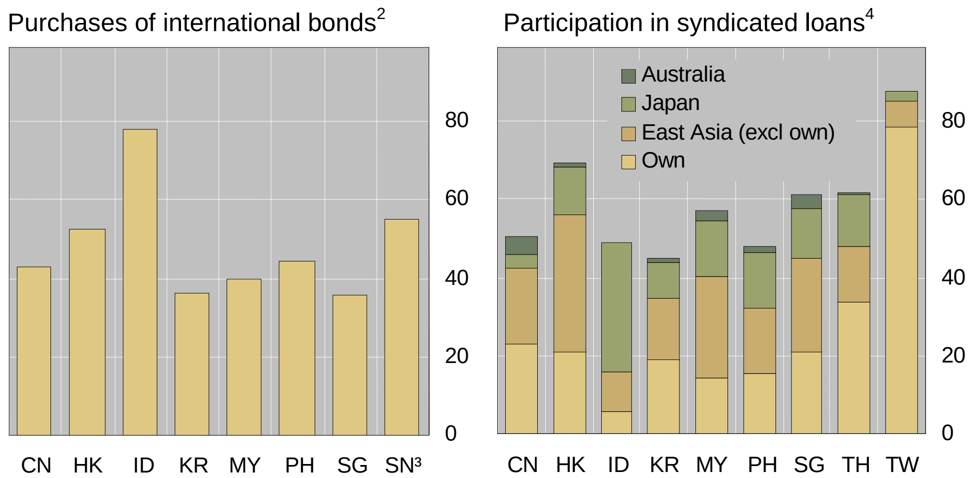
In the mostly dollar-denominated markets for international bonds and internationally syndicated loans arranged on behalf of East Asian and Pacific borrowers, there is more integration in East Asia than is generally recognised.[10] It is easy to conclude that there is little integration from an examination of the topmost firms among bond underwriters (so-called bookrunners). For international bonds issued by East Asian borrowers between April 1999 and August 2002, for instance, shares of bookrunners headquartered in North America and Europe were respectively 54% and 29%, while the share from Asia was 17%.[11] The picture is different, however, if one looks at the initial providers of funds, whether primary-market buyers of bonds or lower-ranking members of loan syndicates. When it is recalled that underwriting spreads represent only a very small fraction of total proceeds of any international bond or internationally syndicated loan, the providers of funds serve as a more telling measure of integration. Among the buyers of international bonds issued by East Asian borrowers, East Asian accounts take almost half of the issues, and absorb an even higher share of issues of the shorter maturity suitable for the portfolios of commercial and central banks (Graph 9). Subsequent trading in bonds issued by East Asian names almost surely moves more of the paper back into East Asian portfolios. In the primary market for loans, including a significant fraction denominated in local

[10] See McCauley, Fung and Gadanecz (2002).

[11] These figures include HSBC and Standard Chartered as Hong Kong banks. Between 1999 and 2002, these two groups' combined share as bookrunners was 10% of the bonds issued.

Regional distribution of bonds and loans of East Asian borrowers

Borrower residence along x-axes[1]



[1] For an explanation of the country abbreviations, see Graph 1. [2] Regional purchases of international bonds issued by East Asian borrowers, April 1999 to August 2002; percentage of amounts issued by residence of issuer. [3] Supranational (eg Asian Development Bank). [4] Supply of funds by nationality of banks. Nationality breakdown by ultimate ownership of banks. HSBC and Standard Chartered were considered Hong Kong groups for this exercise. Deals where banks of only one nationality provided funds were excluded from the sample.

Sources: Dealogic Bondware; Dealogic Loanware. Graph 9

currencies, East Asian banks represent a substantial share of syndicate lenders to East Asian borrowers.

This degree of integration in the international bond and loan markets, however, by no means characterises the domestic bond markets. Discussions with market participants suggest that there is little investment by investors from one East Asian economy in the bonds of other economies in the region. Indeed, domestic bond markets, unlike the equity markets of East Asia, remain generally insular, with limited international investment other than occasionally from speculative accounts.

Local currency markets for risky debt can be developed

East Asia would no doubt benefit from more financial integration and, in particular, from more development of its domestic bond markets. Thus, the region shares an interest in short-circuiting some of the gross flows of capital just described. The finances of the region would be significantly improved if local borrowers could issue local currency bonds rather than dollar or euro bonds, either to secure longer-duration liabilities or to tap the risk appetite of potential investors. Equally, institutional investors with long-duration liabilities would benefit from being able to buy longer-duration bonds in their home currencies. As an example of what can be done, Australian banks, which formerly depended on US pension funds and insurance companies for hybrid (so-called upper Tier 1) equity, now sell such paper denominated in Australian dollars to local investors, including retail clients keen to earn higher yields in a low-inflation environment. Singaporean banks have also recently marketed capital instruments in Singapore dollars to their domestic customer base. In general, given the advantages to both borrowers and lenders, and given Asia's

broadly favourable history of price stability, the potential for bond market development is strong.

Central banks are interested in broader, deeper and more liquid bond markets for operational as well as other reasons. Increasingly, there is a recognition of the opportunity afforded by prudent but strategic management of foreign exchange reserves to further the goal of developing regional bond markets. Reserve managers in the region see potential in investing in the securities of East Asian borrowers.[12] This would presumably start with issues denominated in major currencies but, in the longer term, investment vehicles involving local currency paper cannot be excluded.

The policy challenges

Three policy objectives could complement each other to bring better balance to both capital flows and economic structures in East Asia. 1) Lessening reliance on exports as the leading sector in economic development, thus reducing exposure to export cycles. Along with healthier domestic balance sheets, this should attenuate the risks of exchange rate fluctuations. 2) Strengthening the banking systems to help support domestic demand in the face of any export weakness. Financial strengthening may need to be complemented with restructuring of overindebted and loss-making firms. 3) Developing long-term investing institutions and markets for bonds denominated in domestic currency. This would enhance the borrowing capacity of firms producing for the domestic market without introducing the financial fragility that comes with currency mismatches.

An economy weans itself off exports ...

Korea's recent experience gives some idea of the potential impact of this policy orientation. Measures to recapitalise its banks, to reorient them to making profits, and to improve their governance have been noteworthy. Admittedly, with the government still a major shareholder of most of the banks, the process remains to be completed. Reforming corporate governance in Korea is a work in progress. For its part, the Korean bond market has, with interruptions, developed away from dependence on bank guarantees. These financial improvements have played a role in two significant and related macroeconomic developments. First, in 2001, despite a sharp drop in exports, the strength of domestic demand enabled the Korean economy to grow at a rate well above that of other economies with similar exposure to the technology cycle. Second, since the crisis, Korea's household saving rate and the current account surplus have both decreased substantially.

Significant developments elsewhere point to the same conclusions. How robust would domestic demand have been in China had not the Chinese banks promoted the rapid growth of mortgage and personal lending over the past few years? And how deep a recession would Malaysia have experienced had banks not competed vigorously to make home mortgage loans?

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[12] Of course, to the extent that a central bank invests in an investment pool that is in turn invested in the bonds of the same central bank's government, then a fraction of the investment would be excluded from reported reserves.

... but there are risks to wider access to credit

Of course, the risks of financial restructuring that increases access to credit should not be ignored. The Korean authorities took strong measures to check the rate of growth of household borrowing and the rise of asset prices. Elsewhere, both in industrial countries and in emerging market economies, we have witnessed the potential for a "stock adjustment" of household debt levels to get out of hand. It is important, therefore, that policymakers remain vigilant to the risk that financial restructuring could lead to excesses of credit. Nonetheless, the conclusion is already inescapable that financial reform can serve the greater purpose of better balancing international capital flows and domestic economic growth alike.

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