

Global imbalances and the emergence of Asia

Palle S Andersen and Karen Johnson¹

Introduction

Several interrelated factors appear to explain the significant build-up of global current account imbalances seen over the past four to five years. Faster GDP growth in the United States than in its trading partners – more recently sustained by a marked deterioration in the US fiscal position – along with an appreciating US dollar, contributed to much more rapid growth of US imports than of exports. Those external imbalances are generally expected to remain large. According to IMF projections, even if all countries were to grow at their potential and current exchange rates were maintained, US net foreign liabilities would increase from around 25% of GDP today to above 40% in 2008.

The world has also witnessed rapid export-led growth in emerging Asia and the increased integration of these countries (notably China and India) into the global economy. At present, both China and India have small current account surpluses. Any future change is hard to predict. Continued rapid expansion of their exports could result in growth paths with large external surpluses; alternatively, high growth facilitated by continuing capital inflows could give rise to sizeable current account deficits in China and India. Whatever the outcome, the increased supply of low-cost goods and services from China and India will surely entail significant changes in global patterns of production, trade and relative prices.

The combined challenge of adjusting external imbalances and integrating emerging Asia into the global economy is the principal subject of this paper. Two adjustment processes are at play. The first concerns the correction of global imbalances; the second involves the pressures that would arise even if trade were perfectly balanced. Given the potentially very large impact of China and India, their further integration into the global economy and the policies they choose will raise some additional challenges for adjusting global imbalances smoothly. Likewise, the need for deficit countries to shift resources into the production of tradables could complicate a successful integration of China and India into the global economy.

This paper attempts to analyse these processes by first examining the widening of the US current account deficit from complementary analytical perspectives and documenting changes in the financing of the deficit in terms of financial instruments, investor type and investor residence. It also notes the implications of these changes for international investment positions.

The paper then reviews elements of the growth strategy pursued by most Asian countries, including their exchange rate regimes and reserve management. To a large extent, that strategy resembles the dollar-oriented, export-led strategy adopted by western Europe and Japan in the 1950s and 1960s and later by the Asian newly industrialised economies (NIEs – Hong Kong SAR, Korea, Singapore and Taiwan (China)). Yet the export-led growth model does not adequately describe the growth strategies of China and India because strong import demand has kept their current account surpluses small. Nevertheless, the sheer size of China and India means that the global economy is facing a potential adjustment challenge of an entirely different order of magnitude. In addition, because the adjustment process is likely to be uneven, it may be accompanied by economic and political tensions among those countries' trading partners.

¹ This paper was written for the BIS in May 2004. It benefited from comments and suggestions from Bruno Tissot and Bill White as well as former colleagues in several central banks, in particular Shuji Kobayakawa, Gilles Möec, John Murray and Christian Thimann.

Next, the paper addresses key aspects of adjustment to these two challenges. First is the need for real economic adjustment over the medium term posed by the emergence of Asia. Next are issues related to the adjustment of external imbalances and global financial positions, including policies with respect to exchange rate and reserve management. Moreover, meeting the two global challenges more or less simultaneously presents special complexities that might make it more difficult to frame and implement sound policies.

Last, the paper addresses possible policies to facilitate adjustment. These approaches, on which views differ widely across countries, include fiscal, monetary and exchange rate policies as well as structural policies.

1. Global imbalances: how did we get to the present situation?

Current account imbalances have widened considerably over the past several years and are likely to persist over the medium term. Between the mid-1990s and 2003, the US current account deficit as a percentage of GDP more than tripled to about 5% (Table 1). Led by the NIEs, emerging Asian economies have witnessed a sizeable increase in their surplus positions, and Latin America and Russia have moved from deficit to surplus over this period. Most of these current account positions are projected to remain broadly unchanged or to widen further over the medium term.

Table 1
Current account balances
 In billions of US dollars, except as noted

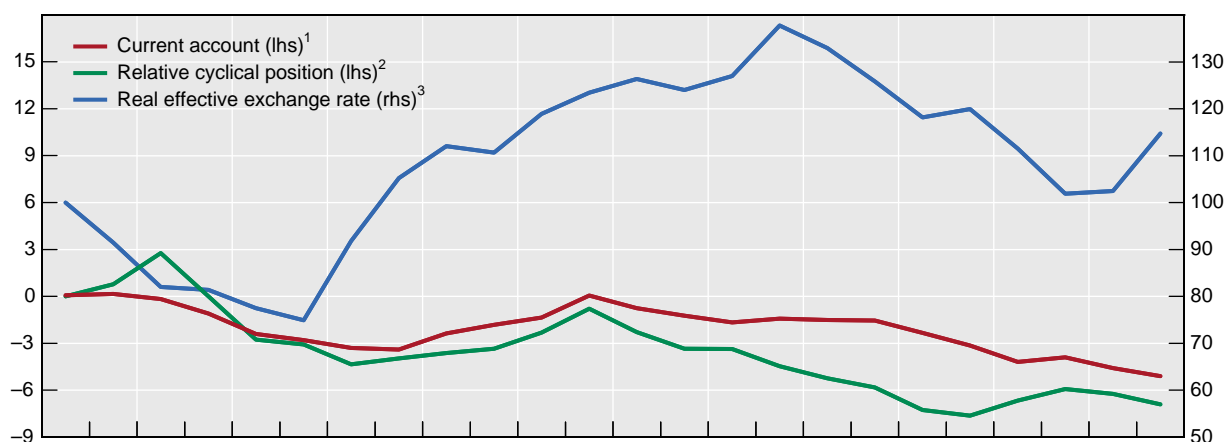
	1997	1998	1999	2000	2001	2002	2003		Change 1997–2003	
							USD billions	Per cent of GDP	USD billions	USD billions
United States	-136	-210	-297	-413	-386	-474	-531	-4.8	-395	-3.2
Euro area	96	66	27	-30	10	58	29	0.4	-66	-1.1
Japan	97	119	115	119	88	113	135	3.1	38	0.9
Other industrialised countries	15	-2	-13	34	33	32	24	0.6	9	0.4
Emerging Asia	25	117	119	91	88	130	165	0.9	140	1.5
China	37	31	21	21	17	35	46	3.3	9	-0.8
Hong Kong SAR	-6	2	9	6	6	12	14	8.7	20	12.1
India	-3	-7	-3	-4	0	5	4	0.8	7	1.5
Korea	-8	40	24	12	8	6	12	2.4	20	4.1
Singapore	15	18	22	16	16	19	28	30.8	13	15.2
Taiwan, China	7	3	8	9	18	26	29	10.2	22	7.7
Other Asia	-17	29	38	32	22	26	32	5.9	48	9.0
Latin America	-67	-91	-57	-47	-55	-16	4	0.2	71	3.5
Transition economies	-25	-30	-2	25	13	10	10	0.9	35	3.7
Rest of the world	-4	-52	-19	59	48	44	54	3.6	58	3.5
Total ¹	1	-82	-126	-161	-161	-103	-110	-0.3	-111	-0.4

¹ Includes errors, omissions and asymmetries in balance of payments statistics as well as data for international organisations and a few smaller countries.

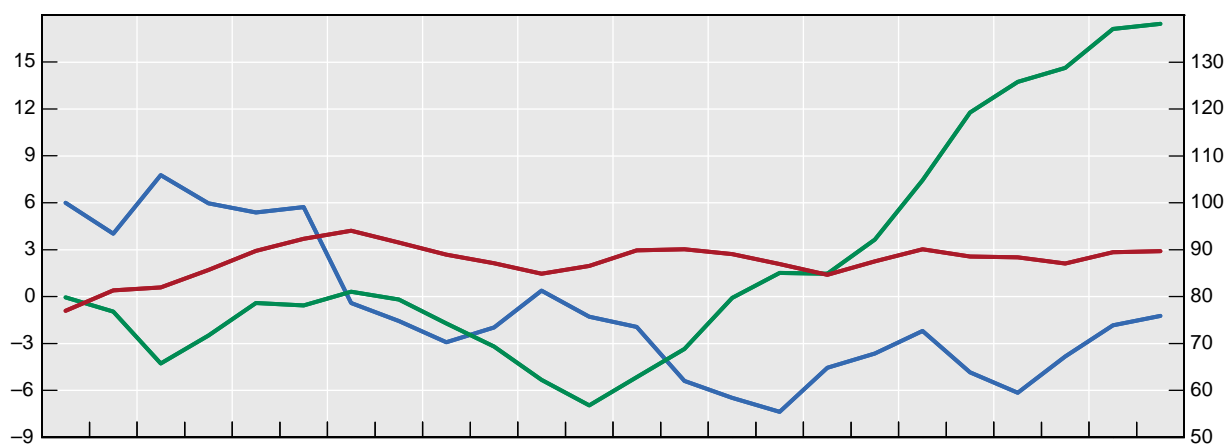
Sources: IMF, *World Economic Outlook*; OECD, *Economic Outlook*; national data; BIS estimates.

Graph 1
Trade-flow determinants in the G3 economies
Annual averages

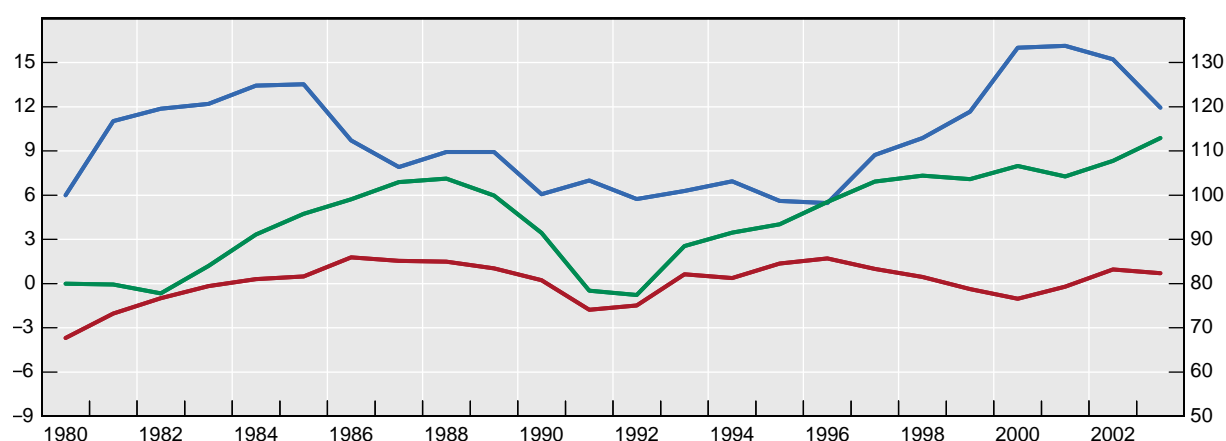
A. United States



B. Japan



C. Euro area



¹ As a percentage of GDP. ² Defined as the weighted average of real GDP in the 10 largest trading partners relative to the domestic economy's GDP; an increase represents a (relatively) slower rate of growth in the domestic economy which should lead to an improvement in its current account balance. ³ IMF index using relative unit labour costs; an increase represents a real depreciation of the currency.

Sources: IMF; OECD.

Meanwhile, the balances of the major advanced economies other than the United States have remained in relatively stable surplus. Japan's surplus has remained sizeable while that of the euro area has been small. Nonetheless, because the US deficit has expanded so much, the combined surplus of the other major advanced economies is now equivalent to less than half the US deficit – in contrast to the mid-1990s, when it exceeded the US deficit. One reason for this discrepancy is that 30% of the deterioration in the US current account balance since 1997 is not matched by higher measured surpluses in other countries because of widening (but unknown) measurement errors.

The discussion below presents factors underlying the evolution of these imbalances from complementary analytical perspectives.

A trade flow perspective

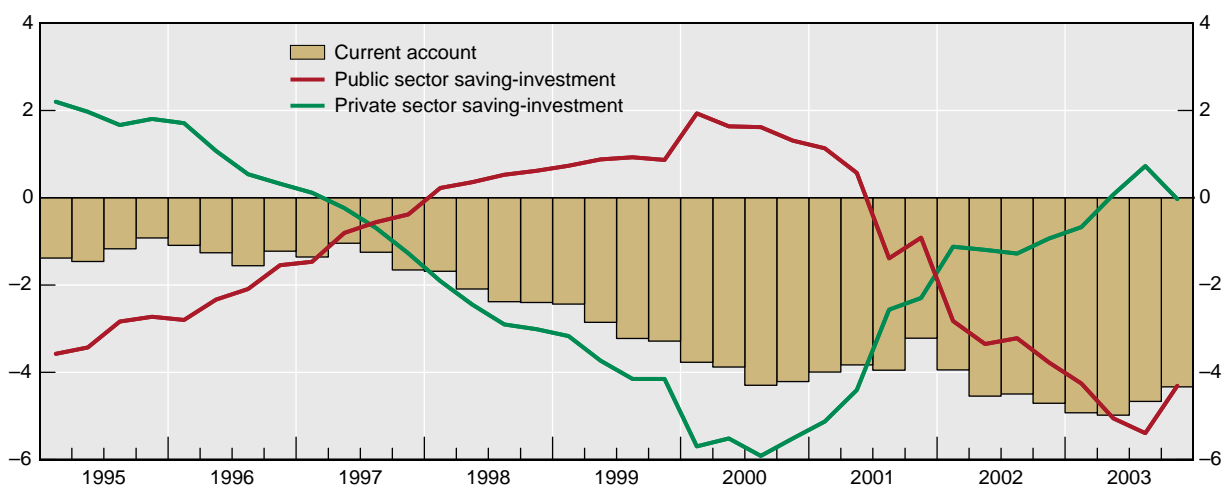
Graph 1 shows that most of the marked widening in the US current account deficit since 1991 can be attributed to three factors: faster GDP growth in the United States than in other advanced economies; asymmetric income elasticities for US exports and imports; and the lagged impact of the sharp real appreciation of the dollar (by about 50% in real effective terms between April 1995 and February 2002). The considerably slower growth in both Japan and the euro area relative to the United States during the 1990s tended to improve their current account balances. Indeed, even if the US economy had been growing at the same rate as the rest of the world, its current account would still have tended to deteriorate because the income elasticity associated with US imports is apparently much larger than that associated with US exports.² In the euro area, the rise in the current account surplus due to weak relative growth was reinforced by the depreciation of the euro against the dollar (about 30% between February 1999 and October 2000).

A savings-investment perspective

The marked rise in the external borrowing needs of the United States (the financial counterpart of the current account deficit) can be divided into two periods: 1997–2000 and 2001–03. Over the 1997–2000 period, the rise in borrowing reflected mainly a substantial increase of investment that was accompanied by a significant, sustained rise in productivity and improved longer-term growth prospects for the US economy. This phase also saw a significant fiscal consolidation and a marked increase in US public saving (Graph 2), both of which were helped by stronger real growth and higher asset prices. However, domestic absorption rose as saving by households and corporations fell. The decline in saving reflected the sharp increase in net wealth as well as increased consumption in anticipation of higher longer-term income growth. Although the stock of overall savings rose, it was not sufficient to finance the increase in investment.

² Estimates of income elasticities for US imports have typically been between 1.5 and 2.5, while those for exports have been closer to 1.

Graph 2
US current account and domestic saving-investment balances
 As a percentage of GDP



Source: US Bureau of Economic Analysis.

During the second period, 2001–03, US investment fell sharply. At the same time, tax reductions and increased government expenditure led to a significant decline in public saving that was only partly offset by higher private saving.³ The latter apparently reflected, in part, a rise in business sector saving and some unwinding of the earlier wealth effect, as the decline in equity prices led to a reassessment of households' future income expectations. Nonetheless, the overall decline in US saving was sufficiently large that US net foreign borrowing increased further.

Conversely, the gap between saving and investment in many Asian countries is large and positive (Graph 3), a manifestation of their export-led growth strategies and their high propensity to save. In Japan, the ratio of private investment to GDP declined following the bursting of the “bubble” in the early 1990s as firms attempted to improve their balance sheets. However, the saving/GDP ratio also declined owing to growing fiscal deficits and a sharp fall in household saving. In the NIEs and ASEAN, investment/GDP ratios dropped after the currency crisis in 1997. They have remained at levels below those of recent decades, while saving ratios have posted smaller declines due to credit-induced and temporary increases in consumption. In contrast, the saving ratio in China (the highest in the region, partly because of rising job insecurity and reform of the social welfare system) has generated a relatively modest current account surplus, since investment has been a main engine of economic growth.

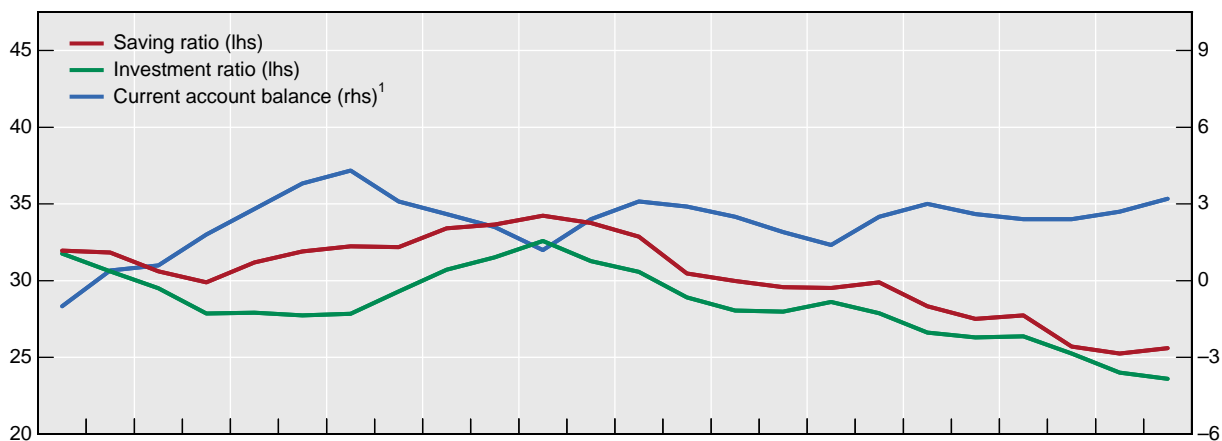
A capital flow perspective

Striking changes in the pattern of capital inflows have accompanied the widening of the US current account deficit. The changes have appeared in the instruments involved as well as in the geographical and investor composition of the flows.

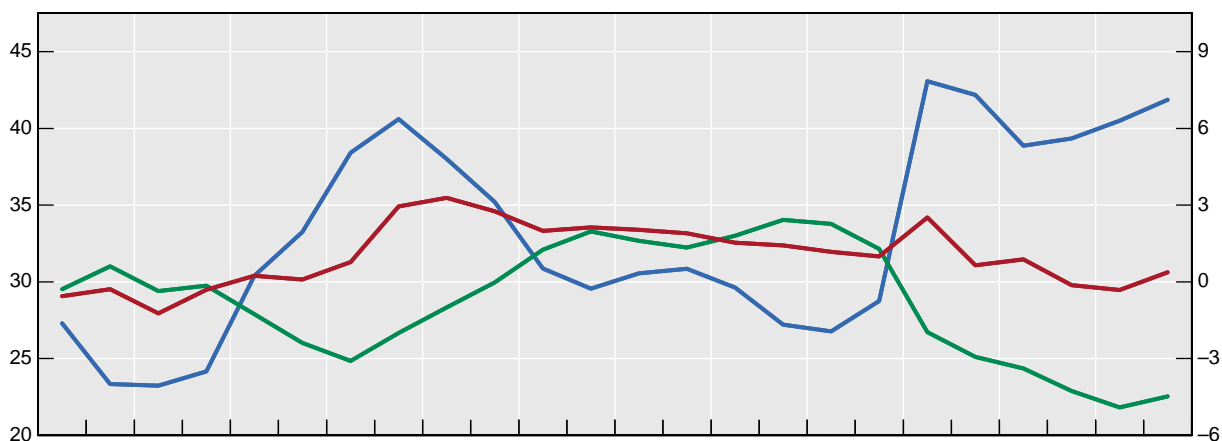
³ Following a pattern seen in the mid-1980s, the simultaneous occurrence of large fiscal and current account deficits is often referred to as a “twin deficit” problem. Fiscal imbalances have frequently been observed in past experiences of widening current account deficits. However, somewhat surprisingly, fiscal consolidation has rarely played a major direct role in subsequent current account corrections.

Graph 3
Saving and investment balances in east Asian economies
 As a percentage of GDP

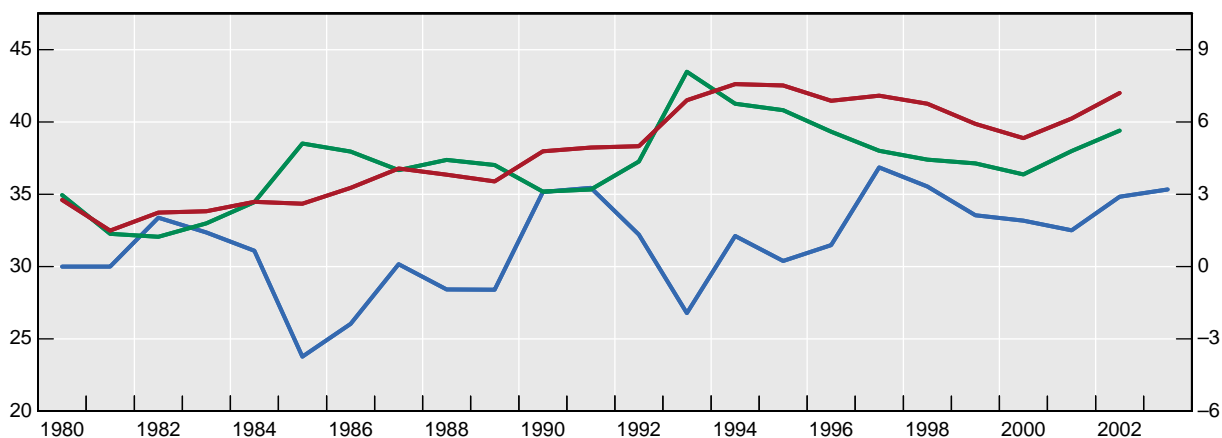
A. Japan



B. NIEs and ASEAN



C. China



¹ For Hong Kong SAR prior to 1998, based on the saving-investment balance. For some economies in 2003, estimated from consensus forecasts (May 2004).

Source: National data.

Net foreign capital inflows into the United States in the form of direct and portfolio equity investment increased from a negligible amount in 1997 to the equivalent of about 2.5% of nominal GDP in 2000 (Table 2). These inflows were attracted by positive productivity developments and contributed to the large real effective appreciation of the dollar. After 2000, a retrenchment in direct and portfolio equity inflows suggests that investors reassessed the longer-term profitability of US firms relative to earlier expectations. At the same time, US capital outflows diminished, and capital inflows associated with purchases of US government and corporate debt securities increased substantially (Graph 4). But whether these developments are problematic should be assessed in the light of the central, international role of the dollar and the low servicing burden, to date, of the external debt.

Table 2
United States: financial and capital accounts¹
 As a percentage of nominal GDP

	Financial account					Capital account plus errors and omissions
	Total	Direct investment	Portfolio stock investment	Bonds and other investment	Official reserves	
1997	2.7	0.0	0.1	2.3	0.2	-1.0
1998	0.9	0.4	-0.6	1.4	-0.3	1.5
1999	2.6	0.7	0.0	1.3	0.6	0.7
2000	4.9	1.7	0.9	1.9	0.4	-0.6
2001	4.1	0.2	0.1	3.5	0.2	-0.3
2002	5.4	-0.6	0.4	4.6	1.1	-0.9
2003	5.0	-1.2	-0.6	4.5	2.3	-0.1

¹ A positive (negative) sign represents an inflow (outflow) of capital.

Source: National data.

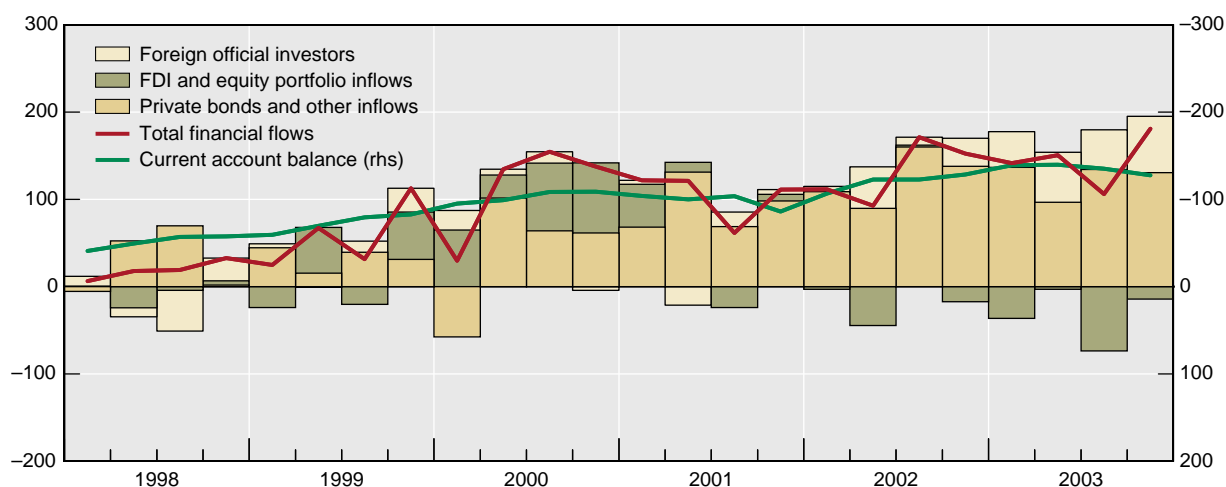
In terms of investor type, official reserve flows from foreign authorities (notably in Asia) have become an increasingly important source of financing for the US current account deficit over the past three years. Negligible in 2000–01, foreign official reserve flows (as identified in the US balance of payments statistics) accounted for almost 20% of net US capital inflows in 2002. In 2003, their share rose to just below 45% of net inflows.

Regarding geographical source, the share of euro area investors in net long-term portfolio flows to the United States shrank to just 1% in 2002, with a slight rebound in 2003 (Table 3). Combining official and private flows, the share of net long-term portfolio flows to the United States originating from Asia increased to 40% in 2003. That share might actually understate the relative importance of Asian investors, as it refers only to the direct source from which the investment is made. Alternative estimates suggest that the share of the US current account deficit financed by Asia might be around 60%.

Graph 4

Net capital flows to and from the United States: composition by financial instrument

In billions of US dollars



Note: The difference between the current account balance (shown on an inverted scale) and total financial flows equals the capital account balance plus the errors and omissions.

Source: US Bureau of Economic Analysis.

Table 3

Net foreign long-term portfolio flows to the United States: breakdown by instrument and region or country of purchase

In per cent

	1998	1999	2000	2001	2002	2003
Total inflows						
Asia	11.0	22.0	23.0	32.0	37.0	40.0
<i>Japan</i>	7.0	12.0	11.0	11.0	17.0	24.0
Euro area	24.0	15.0	23.0	8.0	1.0	5.0
United Kingdom	50.0	37.0	36.0	35.0	34.0	22.0
Caribbean centres	-1.4	5.9	-0.3	10.9	13.6	10.3
Others	16.4	20.1	18.3	14.1	14.4	22.7
US government bonds						
Asia	40.0	77.0	61.0	64.0	49.0	60.0
<i>Japan</i>	25.0	53.0	59.0	39.0	34.0	43.0
Euro area	16.0	-5.0	10.0	-7.0	-4.0	2.0
United Kingdom	44.0	-8.0	-4.0	20.0	30.0	13.0
Caribbean Centres	-12.1	10.7	6.4	7.7	17.8	7.0
Others	12.1	25.3	26.6	15.3	7.2	18.0

Source: US Treasury.

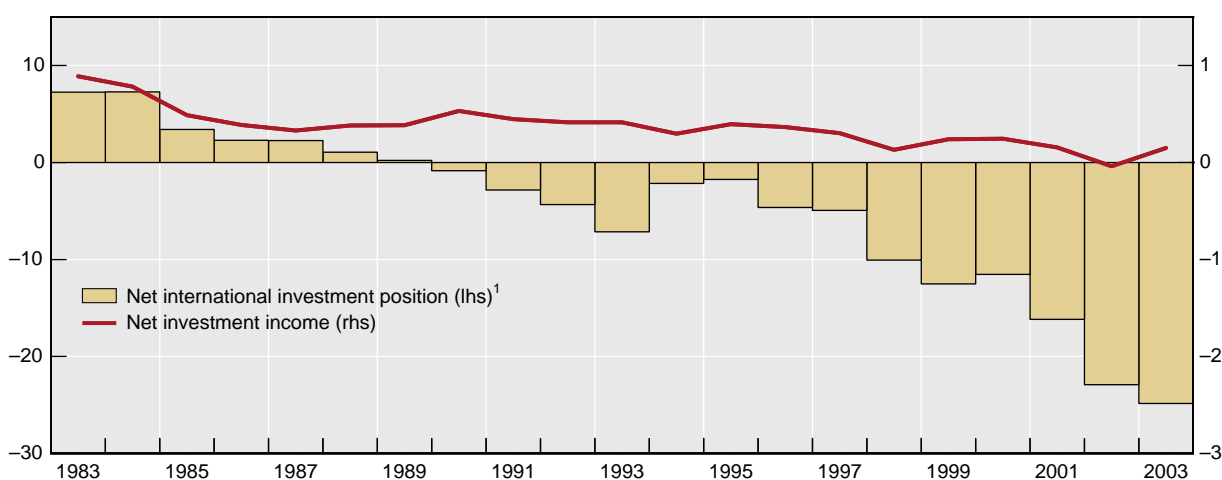
International investment positions

The capital inflows that are the counterparts of the persistent US current account deficits have cumulated to a net international liability position which, at 25% of GDP at the end of 2002, is large by historical standards (Graph 5).⁴ The rise in US foreign debt has occurred during a period when financial sectors around the globe have been liberalised and international ownership of capital stocks has increased. Given the large amount of US assets now owned by foreigners (approximately \$9 trillion), changes in the dollar's value could have far-reaching implications for balance sheets and economic performance.

Graph 5

US net international investment position and net investment income

As a percentage of annual average GDP



¹ Year-end data, at market value; shown for the following year.

Source: US Bureau of Economic Analysis.

2. The emergence of Asia: new challenges

Growth trends and strategy

Led by exports, the growth rates of Asia's emerging market economies have been exceptionally high in recent years (Table 4). In China and India, for instance, the growth of real GDP has averaged 9.2% and 5.5%, respectively, since the early 1990s. The integration of emerging Asia's trade with the global economy has also proceeded at a rapid pace: its share of global exports increased from 13.5% in 1990 to 20% in 2002 despite an approximate doubling in total world export volumes. The increasing penetration in global

⁴ At the end of the 19th century, when the United States was "an emerging economic giant", its net international liability position never exceeded 26% of GDP. See M Obstfeld and K Rogoff, "Perspectives on OECD economic integration: implications for US current account adjustment", paper presented at the economic symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, 2000. Net international investment positions also reflect changes in exchange rates. Some 30% of the deterioration in the US net investment position between 1999 and 2002 is attributable to changes in the US dollar value of foreign assets as the dollar appreciated. See C Tille, "The impact of exchange rate movements on US foreign debt", *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, January 2003.

goods markets has been particularly pronounced in the case of China, which more than doubled its share in global merchandise exports to nearly 8% in 2003, thereby becoming the world's fourth largest exporting nation. In addition, China is an important source of global demand, having become the world's second largest consumer of oil and fourth largest importer of steel.

Table 4

Economic performance

Average annual growth rate of selected variables (in per cent)

	Real GDP		Per capita real GDP		Real exports		Total employment	
	1990–2003	1998–2003	1990–2003	1998–2003	1990–2003	1998–2003	1990–2003	1998–2003
China	9.2	7.6	8.1	6.9	16.7	15.7	2.2	1.2
Hong Kong SAR	3.8	3.6	2.5	2.6	8.0	6.5	1.8	1.5
India	5.5	5.3	3.5	3.5	10.7	12.8	0.7	0.7
Korea	6.0	6.4	5.0	5.5	13.4	12.4	1.8	2.5
Malaysia	6.4	4.7	3.7	2.2	9.8	5.6	3.1	2.7
Singapore	6.2	2.5	3.4	0.4	10.7	5.0	2.8	1.9
Taiwan, China	5.3	3.1	4.3	2.2	7.2	7.4	1.1	0.6
Thailand	5.0	4.3	3.9	3.3	9.6	7.8	1.1	2.3
United States	2.8	2.6	1.6	1.5	5.2	1.3	1.2	1.1
Euro area	1.9	1.8	1.5	1.5	5.6	4.1	1.0	1.1
Japan	1.6	1.1	1.3	0.9	4.4	4.7	0.2	–0.6
World	3.2	3.4	2.1	2.5	5.9	4.7	N/A	N/A

Sources: IMF; national data.

Intraregional trade has also become more important in Asia (Table 5). In 2002, it accounted for more than 40% of the region's total trade and was one of the main sources of export growth. Between 1990 and 2002, exports to China accounted for about 90% of export growth in Taiwan (China), 70% in Japan and 40% in Korea. The rapid increase in regional exports to China is partly explained by its expanding role as an intermediary for regional exports destined for the United States and other developed countries. But it is also due to the strong growth of domestic investment among some of China's regional trade partners. To cut costs, the more industrialised countries in the region are increasingly shifting the low-skilled and labour-intensive stages of their production processes to China while concentrating their own output on the more skilled and capital-intensive parts. That shift is causing China to run rapidly growing trade deficits with those countries and an expanding trade surplus with the United States. Regarding India, the English speaking world has found that it can outsource services to that country at significant cost savings, and India's share of global services trade could soon rise substantially.

Table 5
Indicators of trade integration in Asia
 In per cent

	Asian exports/global exports			Intraregional exports/total exports		
	1990	1998	2002	1990	1998	2002
Japan	8.5	7.2	6.5	31.3	34.9	43.2
China	1.9	3.4	5.1	53.5	34.5	34.0
Hong Kong SAR	2.4	3.2	3.1	40.7	45.4	51.4
India	0.5	0.6	0.8	12.1	19.6	23.3
Korea	2.0	2.5	2.5	16.8	34.0	38.4
Malaysia	0.9	1.4	1.5	44.6	42.3	47.5
Thailand	0.7	1.0	1.1	22.1	33.3	36.8
Total region ¹	22.0	25.5	26.7	32.4	36.8	41.7

¹ IMF definition of Asia plus Japan (includes countries not mentioned above).

Sources: IMF, *Direction of Trade*; BIS calculations.

Table 6
Structure of the balance of payments

Accumulated figures for 1998–2003, in billions of US dollars

	Current account ¹	Net capital and financial account				Errors and omissions ¹	Reserve assets ^{1,2}
		Total ¹	FDI	Portfolio	Other investments		
China	108.5	144.1	211.6	-53.0	-14.3	-10.8	-241.9
Hong Kong SAR	73.0	-62.8	9.8	-44.6	-19.2	4.3	-14.4
India	-1.1	53.8	17.5	10.3	25.5	-0.9	-51.9
Korea	59.2	24.5	4.1	24.8	-1.6	2.7	-86.4
Malaysia	43.9	-22.4	7.0	-5.6	-23.9	-7.2	-14.3
Taiwan, China	85.4	6.5	-8.9	-4.7	21.6	2.0	-93.9
Thailand	42.6	-32.7	14.2	-4.4	-45.5	-0.3	-9.5
Japan	555.8	-359.7	-121.4	-259.3	63.9	23.5	-234.6

¹ The four capital and financial account categories may not sum to zero because of deviations and rounding.

² A negative sign indicates an increase in reserves.

Sources: IMF, *World Economic Outlook* database; authors' calculations.

Asian economies have also become increasingly integrated with global financial markets, but the development and integration of their local financial markets has been more limited. Some of the Asian economies receive relatively large net financial inflows (Table 6). Moreover, these net inflows mask important gross capital movements, as a significant share of domestic

saving is channelled into domestic investment via the foreign sector (“round-tripping”). In China, for example, significant portfolio and banking outflows are offset by large foreign direct investment (FDI) inflows. Particularly in China and India, that pattern of international capital flows seems to reflect the relatively fragile state of their domestic financial systems, which cannot efficiently allocate saving to domestic investment. While more than 60% of FDI flows in recent years have come from within the region, most of the non-FDI financial flows have reflected transactions with industrial economies outside the region.⁵

A number of factors underlie the trends described above:

- In most emerging Asian economies, labour is relatively cheap, abundant and well qualified. With the exception of Singapore and Hong Kong SAR, real wages are far below those in industrial countries. Moreover, most of these economies have large unexploited supplies of labour, or rapidly growing populations, or both. Such conditions have resulted in rapid growth in employment as well as in levels of human capital.
- Japan has been an important source of export-linked FDI capital and technological transfer for the region since the 1970s. Japan’s FDI outflows went first to Korea and Taiwan (China), then to the ASEAN-4 economies (Indonesia, Malaysia, the Philippines and Thailand), and more recently to China. Each round of sustained, effective appreciation of the yen since the 1970s was followed by a wave of outsourcing from Japanese firms to the region.
- Growth is supported by relatively accommodative macroeconomic and exchange rate policies. Only a few economies (Korea and Thailand) have consolidated their fiscal position since the Asian crisis (Table 7). Most others have either run persistently large deficits (India) or significantly eased their fiscal policy stance over the past few years (Hong Kong SAR and Taiwan (China)). Because most countries also aim at maintaining a high degree of exchange rate stability vis-à-vis the dollar (and thus against the Chinese renminbi), the recent depreciation of the dollar against the euro and the yen has boosted their international competitiveness in terms of both prices and costs.

Table 7
Fiscal policy

General government balance as a percentage of GDP

	1998	1999	2000	2001	2002	2003
China	-3.0	-4.0	-3.6	-3.2	-3.3	-3.2
Hong Kong SAR	-1.8	0.8	-0.6	-5.0	-4.9	-6.3
India	-8.4	-9.7	-9.8	-10.4	-10.2	-10.3
Korea	-4.3	-3.3	1.3	0.6	2.7	0.8
Malaysia	-0.8	-2.9	-5.6	-5.0	-5.5	-5.3
Singapore	0.7	3.8	3.6	1.7	1.3	-1.2
Taiwan, China	-3.7	0.8	-4.5	-6.4	-6.0	-6.5
Thailand	-2.5	-3.5	-2.8	-2.9	-2.8	-0.8

Source: IMF, *World Economic Outlook* database.

⁵ In 2003, China experienced a marked rise in net short-term capital inflows, apparently because of an expected appreciation of the renminbi.

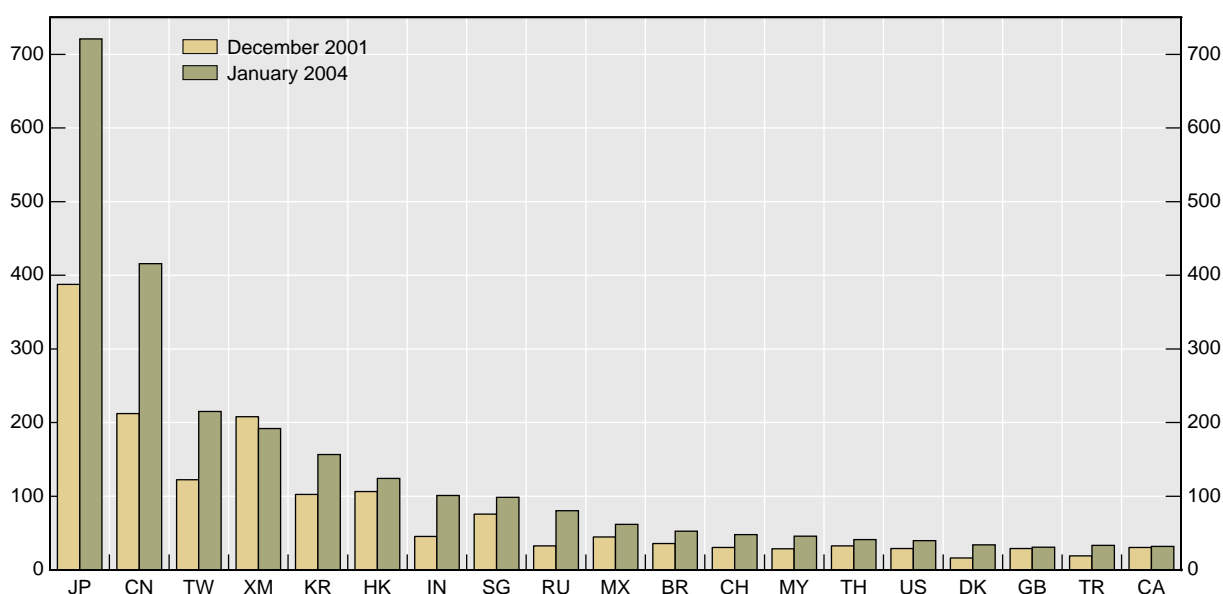
Exchange rate policies and reserve accumulation

In keeping with their export-led development strategy, the Asian authorities have conducted intervention purchases of foreign exchange to combat the appreciation of their currencies;⁶ as a consequence, they have accumulated quantities of reserves (Graph 6) that appear large relative to traditional benchmarks. The accumulation reflects several interrelated phenomena. First, the 1997–98 financial crisis convinced the Asian authorities to build up reserves large enough to deter speculation against their currencies. They also chose to hold such reserves in dollars, given the dollar’s status as the world’s anchor, reserve and intervention currency (see box). Second, while exchange rate regimes in the region became somewhat more flexible after the crisis, the export-led growth strategy has meant that the authorities continue to orient their exchange rate policies towards the dollar.⁷ The form of the policies varies from hard pegs (Hong Kong SAR) to conventional fixed peg arrangements (China and Malaysia) to tightly managed floats (Korea and India). The large scale of intervention conducted by the Japanese authorities would seem to bring their exchange rate regime, in practice, close to a managed float. Third, in addition to maintaining competitiveness in their export sectors, the Asian authorities have been motivated to intervene by domestic concerns about deflationary pressures, weak financial sectors and limited market liquidity.

Graph 6

Main holders of foreign exchange reserves

In billions of US dollars



BR = Brazil; CA = Canada; CH = Switzerland; CN = China; DK = Denmark; GB = United Kingdom; HK = Hong Kong SAR; IN = India; JP = Japan; KR = Korea; MX = Mexico; MY = Malaysia; RU = Russia; SG = Singapore; TH = Thailand; TR = Turkey; TW = Taiwan, China; US = United States; XM = Euro area.

Sources: IMF; national data.

⁶ It should be noted that China successfully resisted a depreciation of its currency after the 1997–98 crisis in Asia.

⁷ During the first half of 2003, the United States accounted for about 26% of total exports from both Japan and China. Stable exchange rates against the dollar are thus seen as important in maintaining high growth.

3. Adjustment challenges

Real economic adjustment in the medium term

General considerations: changes in trade and relative prices

Real adjustment to the combined challenges will entail changes at many levels. This section concerns the necessary changes in trade, production, and relative prices associated with the emergence of the Asian economies. It also discusses the shifts of real resources between tradable and non-tradable sectors that are part of the adjustment needed to resolve external imbalances.

Box: The Asian reserve build-up, the dollar and the euro

The sheer size of dollar-denominated foreign exchange reserves held by Asian countries has raised the question of whether those countries might shift a substantial part of their reserves from dollar- to euro-denominated assets. The question has become more pressing in the wake of the recent appreciation of the euro against the dollar. Widening interest rate differentials or a shift in the slope of yield curves might also induce reserve holders to diversify their reserve asset portfolio, with implications for bond prices.

Available information suggests, however, that any shift in reserve holdings from the dollar to the euro has been small so far, especially for emerging market economies. From 2000 to 2002 (ie a period of gradual euro appreciation) the reserve build-up was largely in dollar-denominated assets. For example, in quantitative terms dollar-denominated reserve assets increased by SDR 102 billion in 2002, while euro-denominated reserve assets rose by only SDR 34 billion (see table below). Moreover, Japanese interventions in the foreign exchange market almost exclusively involved the purchase of dollars. Preliminary data suggest that this trend continued into 2003.

Changes in official foreign exchange reserves of US dollars and euros

In billions of SDR

	2000	2001	2002	2003
<i>US dollar</i>				
Stocks outstanding	936.5	1,021.0	1,043.9	1,202.2
Change in holdings	106.6	84.5	23.0	158.3
Quantity change ¹	60.4	54.3	102.0	262.7
Price change ²	46.3	30.2	-79.1	-104.4
<i>Euro</i>				
Stocks outstanding	229.1	255.1	316.6	371.2
Change in holdings	74.8	26.0	61.5	54.6
Quantity change ¹	76.1	31.1	33.6	22.0
Price change ²	-1.3	-5.1	27.9	32.6

¹ Figures excluding the effect of FX valuations have been estimated by converting stock data at end-period rates into euros and converting back into dollars at average-period exchange rates. ² Obtained by subtracting the quantity change from the total change in holdings.

Sources: IMF; BIS calculations.

The integration of China and India into the global economy is increasing the global capacity to manufacture goods and deliver services and will continue to do so in the foreseeable

future. If resources in China and India are directed by market forces to industries in which they have a comparative advantage, global efficiency will increase. The rest of the world (as well as the populations in China and India) will therefore benefit from a large and positive supply shock. However, there is a short-term challenge: the rest of the world also needs to absorb part of the additional output and to adjust to the growth of exports of these countries. Such adjustment will probably entail changes in exchange rates, prices, wages, domestic production patterns, returns to capital and trade balances. The distribution of this adjustment across (and even within) countries might be uneven and cause short-term problems.

Export-led growth strategies have been used before by countries recovering or in the early stages of development: western Europe and Japan in the 1950s and 1960s and, more recently, some of the economies of emerging Asia. Relative to those cases, however, the scale of the labour forces in China and India is the obvious difference, underlining concerns that, this time, the size of the global adjustment could be significantly greater. China and India have a combined population of well over 2 billion, representing more than a third of the world's population. By contrast, when Japan was starting to emerge as an economic force in 1960, it had only 3% of the world population; and in 1980, when the NIEs were in the early stages of their growth "miracle", they had about 1.5% of the global population.

In the long run, the positive supply shock associated with the integration of China and India into world markets means that the global economy should move to a higher and arguably more sustainable growth path. Over the short and medium term, however, the rest of the world must be prepared for the burden of adjustment. This may mean that countries should shift to producing more goods for the domestic market, or goods and services for which they have specific competitive advantages. In the short run, the adjustment may well entail significant economic costs as uncompetitive businesses in affected industries shut down and workers formerly employed by them search for new jobs. Spells of unemployment could last for considerable periods, particularly if job seekers must consider different types of employment or require significant retraining. In addition, because the emergence of China and India implies a sizeable increase in the world's effective labour force and a consequent decrease in the world's capital/labour ratio, some workers in the industrial countries may see their wages grow more slowly or even decline, while returns to capital are likely to increase.

The shift in production to China and India will also have effects on prices of raw materials, manufactured goods and services. Given relatively fixed supplies of raw materials (at least in the short term), an expansion of output and demand as new supplies of labour are drawn into the international economy will put upward pressure on commodity prices.⁸ The build-up of infrastructure in China and India that is associated with the shift in production to those countries would accentuate such pressure. That effect has already been seen in China, where rapid investment in infrastructure and certain industries has contributed to increases in prices of iron ore, copper and oil. Similarly, the increased shipment of raw materials to China has contributed to higher shipping rates. In the longer run, however, as infrastructure improves and bottlenecks are eliminated, some of the pressure on raw materials prices should recede.

The story is different for output prices. Precisely because the shifting of production and resources will improve efficiency, the relative prices of output in sectors affected by the better allocation will fall. In general, the declines should benefit consumers. There is, however, a concern that manufacturing capacity might be added too quickly in China and create undue downward pressure on prices. More broadly, additional demand – for example from increasingly wealthy Chinese and Indian consumers or from consumers in the rest of the

⁸ Even if only temporary, the rise in commodity prices might lead to overinvestment in commodity-producing sectors, and the resulting glut could be disruptive.

world who see lower prices – might not match increases in supply. In that event, downward pressure on the prices of certain goods and services would signal problems, which market forces and, if necessary, appropriate policies would have to correct.

Given the diversity of the world's economies and their varied characteristics (trade surpluses versus deficits, large manufacturing sectors versus large raw materials or intermediate goods sectors, etc), it is impossible to know how adjustment will proceed everywhere. However, it must be stressed that temporary fluctuations in the income either of the United States or of its trading partners cannot be a source of lasting correction to external imbalances. Accordingly, any discussion of the adjustment of these imbalances needs to be couched in terms of growth at potential. To maintain full utilisation of resources throughout the global economy, domestic demand in individual countries (and regions more generally) would need to increase where external demand diminishes. Maintaining domestic demand at near full employment would ease the costly, but necessary, shifting of real resources from the production of tradables to non-tradables as well as help increase demand for goods and services produced abroad.

Adjustments in the United States

The US current account deficit has developed because total domestic demand has exceeded aggregate production over an extended period of time. For the deficit to narrow, US domestic absorption must fall relative to domestic production. In addition, to increase exports relative to imports, the composition of production at full capacity within the US economy must shift towards traded goods and services and away from home goods. That transition will not necessarily be accomplished entirely smoothly. On the demand side, both in the United States and in its trading partners, consumption must correspondingly shift towards goods and services produced in the United States relative to those produced in foreign countries. For all those shifts to occur and be sustained, relative prices must change to send the appropriate signals to consumers and producers in the United States as well as abroad.

Adjustments in Asia

The integration of China and India into the world economy also poses short-term challenges for other economies in Asia, many of which have followed (or are still following) export-led growth strategies. Some regional economies are already taking steps to adapt and take advantage of China's growing economic presence. For example, manufacturing in Singapore has diversified away from electronics production and now includes a rapidly growing pharmaceuticals industry, and the high-tech sector in Taiwan (China) is increasingly shifting its focus from manufacturing to research and development. In the case of Japan, the adjustment would imply a continuation of the policies pursued by Japanese firms in response to the emergence of the NIEs. These changes will generally entail a decrease in the labour intensity of output in these economies, and the extent to which such shifts meet with difficulties can have noticeable macroeconomic consequences.

It is not clear whether the adjustments discussed above would mean larger trade deficits or smaller trade surpluses in China and India. Standard economic theory suggests that economies in the early stages of development should finance investment by importing capital from the rest of the world. In fact, both China and India are receiving large capital inflows (Table 6). If countries have sufficient domestic saving, however, capital formation can occur without running a trade deficit. The high rate of domestic saving in China (more than 40% of GDP) could perhaps finance a rapid pace of investment growth without a trade deficit. That scenario would imply that imports in China and, to a lesser extent, India will rise along with their exports, leaving global imbalances unchanged.

Alternatively, the trade patterns observed to date might continue, whereby China widens its trade surplus with the United States while running increasingly large trade deficits with neighbouring Asian countries. In that case, the aggregate trade balance of China would

remain largely unchanged, but the United States would see a widening of its already large current account deficit matched by higher surpluses in Asia outside China.

China and India need to strengthen their institutional and policy frameworks regardless of their impact on global imbalances. The challenges in this respect are particularly profound in China, where state-owned enterprises (SOEs) still play an important role and fundamental market mechanisms are not in place. Capital account liberalisation is a principal condition for moving towards the more flexible exchange rate regime announced by the authorities in China for the medium term. But to prevent capital account liberalisation from leading to massive capital outflows and downward pressure on the currency, two major issues need to be addressed. First, the state-owned banks need to strengthen their capital base as well as improve their corporate governance and their ability to intermediate capital. They might also have to reduce their vulnerability to exchange rate movements and the risk of Chinese residents shifting their deposits elsewhere.

Second, lifting controls on capital outflows might prompt residents to substantially increase their holdings of foreign assets to obtain higher yields. Preventing such capital outflows would require deeper and politically much more difficult measures. In particular, one reason for the low rate of return on Chinese financial assets is the poor performance of large SOEs. Imposing a harder budget constraint on the SOEs would undoubtedly improve their profitability and reduce the misallocation of resources. But it would also create social tensions by increasing the already high rates of unemployment and underemployment. Recent measures (such as upgrading the status of private enterprises, making private property rights constitutionally inviolable, expanding investment in infrastructure and increasing fiscal support for the rural sector) are likely to widen the range of domestic investment opportunities and enhance the welfare of the rural population. Hence, they might help to slow the migration of rural workers until other sectors of the economy are able to absorb them.

Financial market adjustment

US net indebtedness has increased substantially in the past several years, raising questions about the capacity and willingness of investors to continue to absorb claims against the United States. At some point, the ratio of US net foreign debt to GDP must stabilise. The precise magnitude of the net foreign debt at which stabilisation would occur is not known, and it may be quite large in absolute value. As a consequence, the timing and pace of adjustment cannot be predicted with any confidence. However, the long-run limit to the growth of the US net debt position is likely to depend on two factors that might change over time: investors' sentiment and their willingness to continue to absorb large quantities of US assets.

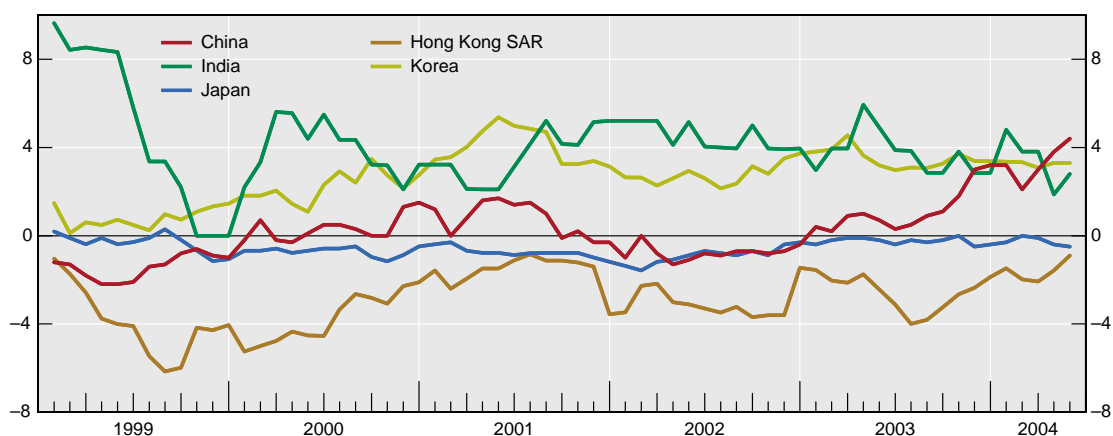
The prominent international role of the dollar facilitates US access to financing in a way unmatched by any other country or region. To some extent, it also prevents dollar fluctuations from affecting the financing situation of the US public and private sectors. As long as the dollar continues to play its international role, the ongoing demand for international liquidity may also mean that many US liabilities to the rest of the world will not have to be redeemed. In practice, however, the demand for dollar assets could at some point be compromised if, for example, the creditworthiness of the US economy is seen as weakening or US inflation picks up or growth differentials vis-à-vis trading partners narrow or disappear.

As noted earlier, Asian central banks (and other investors) continue to purchase US debt on a large scale, accepting the risk of (mostly non-realised) financial losses in case of further

dollar depreciation.⁹ In global capital markets, continued official purchases of US debt could contribute to low US bond yields and thus indirectly also stimulate equity prices and support household spending. The reserve build-up by Asian monetary authorities could continue, at least in the short to medium run, on the basis of a number of factors:

- With the possible exception of China, inflationary pressures are still weak, and labour markets are exhibiting a good deal of slack. Japan, Hong Kong SAR, China and Taiwan (China) have recently experienced (or are still experiencing) deflation (Graph 7). It is also uncertain whether some export sectors are competitive enough to cope with the deflationary shock that would result from exchange rate appreciation. At this stage, the massive accumulation of foreign reserves, external stability and price stability could thus be regarded as mutually consistent.

Graph 7
Inflation developments in major reserve economies
Annual percentage changes



Source: National data.

- Asia authorities still practise risk-averse behaviours (ie to reduce the risk of disruptive financial market and exchange rate developments and shield weak financial institutions from such events).¹⁰ Since internally based growth strategies have sometimes been associated with monetary or financial instability and, ultimately, a currency crisis, combining export-led growth with the accumulation of reserves can also be seen as contributing to reducing or averting risks.
- Because it has been a successful catch-up strategy, export-led growth remains an overriding policy goal. As such, it seems to dwarf considerations related to portfolio diversification and the financial risk-return aspects of reserve accumulation. Neither dollar/euro exchange rate fluctuations nor interest rate and productivity differentials

⁹ As of March 2004, foreign central banks held about 25% of US marketable Treasury debt. In the event of a sharp fall in the dollar, some central banks might need an injection of public money to restore their capital.

¹⁰ In its *Report on Currency and Finance, 2002–03*, the Reserve Bank of India characterised the build-up of reserves as a policy of “self-insurance” (p 188). The report also noted that “sharp exchange rate movements [of the rupee] can be highly disequilibrating and costly for the economy during periods of uncertainty or adverse expectations [...]. If the level of reserves is considered to be in the high comfort zone, it may be possible to attach larger weight to return on foreign exchange assets rather than on liquidity, thereby reducing net costs of holding reserves” (p 187).

seem to have much influence on the currency composition of reserve portfolios held by Asian countries.

- The increased integration of trade within Asia suggests an additional “lock-in” effect in favour of the dollar, as it has been the common monetary standard on which the integration has been built. An exchange rate appreciation for a single Asian country vis-à-vis the dollar would alter that country’s competitive position relative not only to the United States but also to its Asian partners. That multilateral effect suggests that any single country will be reluctant to allow its currency to appreciate unilaterally against the dollar.

In the longer run, however, several factors suggest that purchases of US securities by Asian central banks will encounter limits.¹¹

- A strong rise in domestic inflation or a credit boom associated with unsustainable debt positions might make Asian countries reconsider the appropriateness of their current exchange rate orientation. Indeed, that orientation would generate the real appreciation that the countries are currently attempting to avoid. Complete sterilisation of interventions by some of these countries is hampered by the underdeveloped condition of their financial markets. As a result, domestic interest rates will be lower and interest-sensitive spending higher than they otherwise would have been, leading to upward pressure on prices.
- To the extent that monetary policy is devoted to nominal exchange rate objectives, there is less scope to counter shocks to aggregate demand more generally. Indeed, if monetary policy were needed to counter other shocks, the costs of maintaining a nominal exchange rate objective might become very large.
- The buffer stock model for foreign reserves shows that they have reached an optimal size when the sum of the opportunity cost of holding reserves and the adjustment cost in case of depletion is minimised. Research based on that model suggests that some Asian economies have accumulated reserves beyond optimal levels. Reserves also seem high relative to traditional measures, such as months of imports and the quantity of debt to mature within one year. Although those models and measures might not take sufficient account of central banks’ high degree of risk aversion, the marginal benefits from accumulating additional reserves do seem to be diminishing.
- Financial costs related to the reserve build-up might also be rising due to increased foreign exchange exposures and risks of unfavourable interest rate differentials. First, massive sterilised intervention could worsen the consolidated financial position of central banks and governments. Second, the accumulation of huge foreign reserves combined with rigid exchange rate management might lead local firms into unhedged foreign currency exposures and thereby increase their financial vulnerabilities. Third, the accumulation of foreign exchange reserves is made at the expense of alternative investment opportunities. Indeed, central banks are currently considering alternative uses for parts of their large reserve holdings.¹²

¹¹ Large-scale intervention in one direction might also conflict with IMF Article IV.

¹² Korea is planning to hand over between \$10 billion and \$20 billion of its foreign exchange reserves to private fund managers. Taiwan (China) is considering the financing of local corporations’ purchases of machinery and the licensing of intellectual property rights. Thailand might use \$7 billion to repay foreign debt accumulated by government agencies and state enterprises. And China has invested \$45 billion to shore up the balance sheets of two state-owned banks.

- Continued intervention might eventually lead to a need for a greater, and potentially more abrupt, adjustment of exchange rates. In that event, the authorities intervening in pursuit of short-term stability might foster instability in the long run.
- If monetary policy is used inadvertently to restrain domestic currency appreciation, resource allocations could become distorted, particularly in the allocation of capital between tradable and non-tradable sectors. If the exchange rate target proves to be non-viable, drastic changes in the exchange rate could require difficult reallocations of resources.

Complexities posed by the coincidence of adjustment problems

Integrating China and India into the global economy is made more complex by the presence of large external imbalances around the world. Conversely, adjustment of such external imbalances is influenced by policy choices and developments in China, India and elsewhere in Asia.

The adjustment of the US external balance requires that the rest of the world (in the aggregate) import relatively more from the United States, or export relatively less to it, or both. Although the current account implications of globally integrating China and India are unclear at this point, the resulting shifts over time in the trade of manufactured goods and tradable services will surely require adjustment across sectors within many countries. The need to adjust simultaneously may alter the distribution of the needed changes around the world. The magnitude of the combined forces driving adjustment may create even larger burdens.

Exchange rate policies in Asia and the accompanying reserve accumulation have important potential consequences for the adjustment process in Asia and in other regions. One question is whether the capital outflow resulting from intervention restrains domestic investment in the Asian region and whether that capital could and should be put to productive use in the domestic economies.¹³ The counterpart capital inflow to the United States permits increased investment or lower saving and provides financing for a widening of the US current account deficit; the inflow thus delays and perhaps exacerbates the ultimate adjustment of external imbalances. The consequences of delayed adjustment are unclear: it permits the imbalances to widen further but may also promote a more gradual adjustment that avoids overshooting and financial sector disruption and turmoil.

Another question is whether the capital outflow from Asia inhibits the development of domestic capital markets while helping to deepen the US bond market. If capital markets are efficient, then funds should respond to relative (risk-adjusted) interest rate differentials. However, the desire of Asian investors to invest in low-risk alternatives may create a bias in favour of US assets that, in turn, inhibits the development of their own capital markets.

If, instead, purchases of US debt by Asian central banks are reduced, the dollar would weaken and US long-term interest rates would increase, reducing US absorption and contributing to some adjustment of the US current account. The size and speed of such adjustment would hinge on the relative size of income elasticities and growth rates in the United States and its major trading partners, exchange rate elasticities of exports and imports, and private investors' perception of the current account deficit that can be sustainably financed by private flows to the United States. As for equity markets, Asian investors could reposition their portfolios in favour of domestic assets to reduce their direct

¹³ If an important counterpart to the reserve accumulation consists of FDI inflows (as in China), this argument does not hold.

exposure to exchange rate risk. Whether they would move into fixed rate assets or equities is more uncertain, as a large share of earnings obtained by Asian firms quoted in the Asian markets is derived from exports to the United States.

4. Policy involvement

The ultimate outcome of the external adjustment process will be some rebalancing of domestic absorption accompanied by changes in real exchange rates. Similarly, the ultimate outcome of the integration of China and India into the global economy will require a shifting of resources within economies according to comparative advantage. The role for public policy is to facilitate those processes.

The authorities in major economic regions disagree significantly about the role public policy should play. The official position in the United States inclines towards allowing the market to resolve the issues, including determining the pace at which the dollar might depreciate. Many Asian countries are actively using official foreign exchange intervention (and subsequent investment of reserve assets) to prevent the dollar from depreciating against their own currencies. A third approach can be identified among the continental Europeans, who fear that an adjustment relying mainly on a lower real effective exchange rate for the dollar might prove disorderly, might require unrealistically large exchange rate movements and would spread the burden of adjustment unevenly. They feel most strongly that fiscal policies in deficit countries can be used to good effect. Without prejudice to any of these positions, the rest of this note reviews the role for policy.

The sequencing of the desired policy actions is also open to debate. In some regions, policy actions should arguably be implemented as soon as possible, as delay may allow a bigger build-up of imbalances and an increased risk of outcomes that are harder to control. In other regions, the high costs of adjustment (perhaps because of weak financial systems) suggest the need for some trade-off in timing. There are also policy differences among authorities of the major regions concerning timing. Many Asian governments have indicated a willingness to embrace market-driven exchange rates in the medium term, even if they are resisting market pressures at present. A major policy issue, therefore, concerns their proposed strategy for exit from present policy choices, including scaling back exchange market intervention, modifying exchange rate regimes and liberalising capital accounts.

Before considering the advantages and disadvantages of individual policies, it should be noted that a *combination* of developments might yield a favourable outcome. In particular, a fiscal tightening in the United States would generate an initial contraction in US domestic demand. Combined with a depreciation of the dollar against currencies that, to date, have not yet adjusted against the dollar, lower US demand could lead to a large and durable reduction in the US trade and current account deficits. The cost to output growth in individual countries would vary, depending on monetary and other policy responses. In such a scenario, unwanted adjustments in US and global long-term interest rates stemming from lower purchases of US securities by foreign central banks might be offset by a reduced supply of US government bonds.

The approach taken below begins by identifying fiscal, monetary and exchange rate policies in the United States, Europe and Asia that would seem to contribute best to facilitating the adjustments. For each policy, certain constraints are identified, the most common being conflicts with the pursuit of domestic objectives such as price stability and full employment. The discussion concludes by looking at the potential role for structural policies. Such policies are perhaps the most important in facilitating the integration of China and India into the global economy, but they are also those farthest removed from the principal areas of responsibility of central banks.

Fiscal, monetary and exchange rate policies

The United States can achieve the necessary reduction in the ratio of domestic absorption to output through several channels, including a tightening of fiscal policy and an exogenous increase in private saving rates. Either of those channels would increase national saving. External adjustment in the United States that maintains output close to potential entails both reductions in absorption and market-induced shifts in expenditure from foreign goods to domestic goods. In addition, the composition of production at full capacity within the US economy must shift towards traded goods and services and away from home goods.

An essential ingredient in the US adjustment process is a change in real exchange rates. As part of the adjustment, Japan and other Asian countries could moderate their intervention policies and purchases of US securities, remove restrictions on capital flows and allow greater nominal exchange rate flexibility. Their current actions are preventing exchange rate signals from coming through. In addition, lower longer-term interest rates in the United States are preventing a contraction of US absorption. However, the risks of an abrupt modification of exchange rate policies for countries with appreciating currencies suggest that “intermediate” regimes, such as adoption of a basket, a wider band or a crawling peg, could be considered.

To date, many authorities outside Asia have let their currencies float. Generally speaking, there has been no intervention and no overt response from monetary policy. In the light of the Asian interventions, this has been associated with only a moderate decline in the effective value of the dollar to date but some quite sharp movements in a number of bilateral rates. One possibility is that countries with strengthening currencies, feeling themselves unfairly discomfited, might be tempted to act like their Asian counterparts. This would in itself further impede the adjustment process.

Other things equal, countries with unsustainable external deficits ought to take steps to raise national saving, and those with unsustainable surpluses should increase domestic absorption. One effective way to pursue those goals is through fiscal policy. In principle, countries with twin deficits, like the United States, should practise fiscal restraint. Countries with external surpluses (notably the NIEs and Japan) might consider fiscal expansion. Unfortunately, fiscal policy initiatives currently face some practical constraints. In Japan, the fiscal deficit and public debt ratios are already very high. In the rest of Asia, calls for fiscal stimulus to increase domestic absorption would be more welcome in some countries than in others. In the United States, there is a growing recognition that the current fiscal policy is unsustainable, but the timing of the required consolidation remains uncertain.

In the euro area, the need and scope for fiscal or monetary policy measures is particularly difficult to judge. The current account position is close to balance and, given its mandate, the ECB cannot give precedence to external objectives. The use of fiscal policy in increasing domestic absorption in the euro area is impeded by the fact that the fiscal positions of several member countries are already in conflict with the provisions of the Stability and Growth Pact – they exceed either the flow constraint (level of deficit) or the stock constraint (ratio of debt to GDP) and, in some important cases, both. Moreover, the fiscal multiplier is likely to be low in the smaller European countries owing to a high propensity to import. The main contribution of the euro area may thus lie in the sphere of structural reforms that raise private demand or potential growth (see below).

Another means of rebalancing domestic absorption would be through the use of policies to raise private sector saving rates in deficit countries and to lower them in surplus countries. In the United States, the household saving rate has drifted downwards. Unfortunately, what policy might do about this is not obvious; for example, tax incentives to save just tend to reallocate existing savings. In surplus countries, particularly in Asia, the goal would be to lower private saving. In Japan, the household saving rate has already fallen sharply, but the effect to date has been offset by the increase in corporate saving. Elsewhere in Asia, there already seems to be a growing recognition that household saving rates should decline. One

means to this end has been government encouragement to the banking sector to provide loans for household consumption and housing. However, to date, such schemes have not met with much success. In the euro area, structural policies could raise business confidence and, via higher investment levels, lower corporate net saving. What is less clear is the impact on consumer saving propensities, since job losses and concerns about social programmes and state pensions could potentially undermine household confidence.

The role of monetary policy during the external adjustment is to contribute to the overall achievement of macroeconomic stability in accordance with the objectives embedded in the statutes governing many central banks. The United States has a large external deficit and only moderate inflation. Given current levels of excess capacity as well as the low rate of expected inflation and the orderly pace of the dollar's decline, monetary policy has remained accommodating. However, regardless of how the adjustment process unfolds, US monetary policy would play a key role. For example, monetary policy should be used to restrain domestic demand if an adjustment of external imbalances initiated by a change in exchange rates boosted demand for US goods above potential output and triggered inflationary pressures. Alternatively, if US fiscal policy or an exogenous change in the saving rate reduced domestic absorption, the appropriate response of monetary policy would be to ease (thereby lowering US interest rates and the exchange value of the dollar) to increase the demand for US-produced goods.

In the euro area, monetary easing might be justified if reduced external demand results in lower inflation. In contrast, monetary policy in the surplus countries in Asia seems, at least for the time being, much less likely to be constrained by prospective inflation. In Japan, price changes are still negative, and nominal policy interest rates have hit the zero lower bound. Efforts at quantitative easing, while welcome, have thus far failed to be reflected in either broader monetary or credit aggregates. Elsewhere in Asia, particularly in China, concerns are beginning to mount that further easing of monetary and credit conditions could result in bubble-like symptoms: excessive credit growth, asset price increases and overinvestment. Using massive intervention to hold down the exchange rate in the face of market pressures does, in the first instance, provide increases in base money that would raise the risk of such an outcome. While sterilisation has thus far been the normal practice, and successful, the associated decline of longer-term rates globally could have encouraged speculative excesses in a number of jurisdictions.

Structural policies

Recognising that changes in the real exchange rate can also develop from wage and price adjustments raises the broader issue of structural policies. The first point to note is that countries confronted with the need for structural adjustments, whether in response to external imbalances or because of competition from newly emerging countries, may be tempted to find a protectionist solution. Protectionist policies, wherever they occur and whatever their form, are counterproductive, and should be strongly resisted.

A number of other structural policies could facilitate domestic price and wage adjustments (which provide the incentives for sectoral reallocations) and the reallocations themselves. The United States is likely to face a considerable adjustment challenge; fortunately, it also has the most flexible economy. In Japan, the principal requirements would be to free service industries from stifling regulation that squeezes profits and to be more prepared to close insolvent companies in the tradable sectors. A major structural challenge will be in Europe. Better structural policies could address issues of labour market inflexibility, lack of competition in product markets and excessive government regulation.

In the NIEs and ASEAN, the strengthening of banking systems and the restructuring (or closing) of overindebted and loss-making firms are beneficial in themselves and would also facilitate the necessary reallocations. In addition, the development of domestic bond markets could enhance the borrowing capacity of local firms without introducing maturity and currency

mismatches. In China, reform of the corporate governance practices of state-owned enterprises and commercial banks could improve economic efficiency and potential growth. China's plans to liberalise private capital outflows, in tandem with ongoing structural reforms and financial liberalisation, should help strengthen the financial system and facilitate the eventual adoption of a more flexible exchange rate regime.

Looking further ahead, the emphasis on exports as a driver for growth and a catalyst for economic development in emerging Asia might need to be reconsidered. Although Asian policymakers might adopt export-oriented growth strategies for a number of reasons, such strategies could distort resource allocation if left in place too long, leading to overinvestment in preferentially treated sectors and underinvestment in others. In fact, questions have already been raised about the sustainability of investment in some sectors in China, where the growth of fixed investment exceeded 40% last year. On the other hand, the experience with growth strategies driven by domestic demand has, to date, not been encouraging. One reason for the lack of success appears to be the limited ability of immature financial markets to handle risks. That problem underlines the need for financial reforms stressed above.