V. Foreign exchange markets

Highlights

The broad weakening of the US dollar over much of 2004 was the salient feature of foreign exchange markets during the period under review. As in the preceding two years, the dollar depreciated markedly against the euro, the yen and a number of other floating currencies. In contrast to that period, however, the dollar also lost ground against several Asian emerging market currencies. Between January and mid-April 2005, however, the currency's downward trend was partly reversed.

Three main factors appeared to underpin exchange rate movements, pulling the dollar in different directions. First, market participants' focus on the widening US current account deficit and the perceived overhang of dollars in Asian central banks' portfolios seemed to weigh on the currency. Second, in the early months of 2005, shifting expectations for relative output growth and interest rate changes tended to support the dollar. The popularity of carry trade strategies was one manifestation of this factor. Finally, official foreign exchange reserve accumulation in Asia limited the dollar's depreciation against a number of emerging market currencies in that region. However, compared to previous years, a broader range of currencies showed significant increases against the dollar.

Conditions in foreign exchange markets were characterised by low shortterm volatility and high turnover. Turnover seemed to be driven by very active trading on the part of both institutional investors and leveraged players.

A question discussed later in the chapter is whether one or both of two related but different phenomena pose a problem to the international monetary system: the pattern of current account imbalances and the pattern of currency shares in global portfolios. While the former is undeniably unsustainable over time, the build-up may be at an earlier stage than is often recognised, and political constraints may bind before economic ones. With regard to potential portfolio imbalances, they are less self-evident than is often asserted. A substantial further shrinkage of the broad dollar zone in the global economy, however, might eventually produce a currency imbalance in global portfolios.

Exchange rate movements: the facts

Broad depreciation of the dollar in 2004 ... The period under review can be divided into two main phases. During the first, from mid-May to end-December 2004, the dollar continued the broad depreciation which had started in early 2002. The currency's decline was particularly pronounced in the last quarter of 2004. As a result, at year-end it



was trading some 22% below its January 2002 peak in real effective terms (Graph V.1). The euro, on the other hand, ended the year 23% above its trough of January 2002, while the yen was roughly at levels observed three years earlier.

The appreciation of currencies against the dollar in 2004 was not uniform. Between May and December, the dollar declined by 13% against the euro,





which on 30 December reached \$1.36, the highest value since its inception (Graph V.2). The dollar also fell against the yen, albeit to a lesser extent (7%). Marking a difference from previous years, the Japanese Ministry of Finance has not intervened to limit the yen's appreciation since mid-March 2004. Other currencies that appreciated significantly against the dollar included the New Zealand and Canadian dollars (14% and 13% respectively), the pound sterling (8%) and the Australian dollar (7%) (Graph V.3). The dollar also lost ground against most European currencies outside the euro area.

During this period, the euro appreciated by 6% against the yen. The yen thus traded in between the euro and the dollar as before. The euro also gained relative to the Australian dollar (5%) and sterling (4%), while it remained broadly stable against the Swiss franc, the Swedish krona, the Norwegian krone and the Canadian and New Zealand dollars.

As in the past few years, a number of emerging market currencies also appreciated substantially against the dollar (Graph V.4). One difference was that the list included several Asian currencies – most notably the won and to a lesser extent the baht, the rupee and the New Taiwan dollar. With the exception of the won, emerging market currencies in Asia generally depreciated against the yen. In Latin America, the appreciation of the Brazilian real and the Chilean peso against the dollar between mid-May 2004 and early 2005 was noteworthy. The rand continued its strong appreciating trend against the dollar, while currencies in several eastern European countries – especially the Czech koruna, the zloty and the forint – posted visible gains against both the dollar and the appreciating euro.

... partially reversed in early 2005 In the second phase, from early January to mid-April 2005, the dollar regained some ground against most currencies. The rebound coincided with the publication of stronger macroeconomic data in the United States. During



this period, the dollar appreciated by around 6% against the euro and the yen, and by 3–4% against sterling and the Canadian, Australian and New Zealand dollars. The main exceptions to this pattern were the emerging market currencies in Asia, which continued to appreciate against both the dollar and the yen.

These developments were accompanied by a change in market sentiment, as indicated by option prices. For most of 2004, markets' assessment of the balance of risks between a much stronger and a much weaker dollar, described by risk reversals, was weighted noticeably towards weakness (Graph V.2). This pattern was particularly pronounced in the yen/dollar market. However, conditions started to change in early 2005, as option prices pointed to a more sanguine attitude towards the currency. The earlier skewness largely disappeared, with the market assigning approximately equal likelihood to a substantial strengthening or weakening of the dollar.

The broad exchange rate movements took place against the background of two salient developments in foreign exchange market conditions. First, as suggested by the results of the 2004 *Triennial Central Bank Survey* and market commentary, there was a broad-based expansion in trading activity between 2001 and 2004 (Table V.1). Average daily turnover amounted to \$1.9 trillion in April 2004, a rise of 36% at constant exchange rates compared to April 2001, more than reversing the fall in global trading volumes between 1998 and 2001. The growth was particularly pronounced for trading between banks and financial customers, pushing its share in total turnover up from 28% to 33%. Shift in market sentiment ...

... in conditions of high trading activity ...

Reported foreign exchange market turnover, by counterparty ¹ Daily averages in April, in billions of US dollars					
	1992	1995	1998	2001	2004
With reporting dealers With other financial institutions With non-financial customers Estimated gaps in reporting Total "traditional" turnover	540 97 137 44 818	729 230 178 53 1,190	908 279 242 60 1,490	689 329 156 26 1,200	936 585 252 107 1,880
¹ Adjusted for local and cross-border double-counting. Source: BIS, <i>Triennial Central Bank Survey</i> , March 2005.					

This was reportedly driven to a large extent by the greater activity of institutional investors, the leveraged investor community and corporate treasurers. Second, mirroring developments in other financial markets (see Chapter VI), both historical and implied volatility tended to decline or remain at relatively low levels. On balance, therefore, foreign exchange markets continued to be characterised by orderly conditions and high market liquidity.

... and low volatility

Dollar decline less than in the mid-1980s

In gauging the magnitude of the changes in the main exchange rates, two points are worth noting. First, the movements in the G3 currencies between January 2002 and December 2004 were still smaller than the major correction in the mid-1980s, when the dollar lost around 50% of its value against the other major currencies, following a period of overshooting in the first half of the decade (Graph V.1). Second, the main currencies are at present not far from their post-Bretton Woods averages in real effective terms (Graph V.5). In April 2005, the dollar was only 6% below its average real effective level since 1973, while the euro and yen were close to their long-term average levels. The New Zealand dollar, sterling, the New Taiwan dollar, the Swedish krona and the Singapore dollar were the only currencies that were more than 15% off their respective averages.



Exchange rate movements: determinants

Three main factors appeared to influence the broad exchange rate movements during the period under review. First, the markets' focus on the external imbalance of the United States and the role of the dollar in international portfolios seemed to have a significant impact on the US currency. Second, domestic growth prospects and interest rate differentials also helped explain the exchange rate movements of the main currencies in early 2004 and again in the first few months of 2005. In part they also influenced emerging market currencies. Finally, exchange rate policies and intervention practices in emerging market countries, particularly in Asia, shaped the behaviour of their currencies.

The US current account deficit and the perceived potential dollar overhang

As in the previous two years, market participants' focus on the growing external imbalance of the United States, and on what some perceived as a potential overhang of dollars in portfolios, was the main factor behind the dollar's broad depreciation in the course of 2004. The fact that the current account deficit reached 5.7% of GDP (Graph V.6) and US net international liabilities exceeded 25% of GDP attracted much attention. Market participants appeared to pay less regard to the fact that, in spite of its net external debt, the United States continued to be a net receiver of investment income from abroad.

During most of 2004, market participants' expectations of a further depreciation of the dollar seemed to be reflected in an apparently reduced willingness on the part of the private sector to finance the US current account deficit. This was suggested by a further shift in the composition of financial flows into the United States away from private flows – particularly equity and foreign direct investment – and towards official flows (Graph V.6). As a result, in the course of last year, the attitude towards dollar assets of central banks



Markets focused on the US current account deficit and the potential dollar overhang

News and the dollar/euro exchange rate ¹							
	Coefficient	t-statistic	p-value				
Non-farm payrolls ²	-0.0011	-2.95	0.00				
Trade balance ²	-0.0005	-2.62	0.00				
TIC data: ³ Total	-0.0000	-2.84	0.00				
Official	0.0000	8.30	0.00				
Positive news about reserves ⁴	-0.0009	-0.50	0.61				
Negative news about reserves ⁵	0.0038	2.50	0.01				
¹ Results of a regression, estimated over the period January 2002–April 2005, explaining daily							

changes, in per cent, in the dollar/euro rate following news about macroeconomic data, capital flows into the United States and central banks considering changes in the currency composition of reserves. ² Difference between actual values and the market's survey values of each indicator, divided by their standard deviation. ³ Month-on-month changes, in per cent, in net foreign purchases of US securities. ⁴ News, even if unsubstantiated, suggesting no currency diversification away from the dollar. ⁵ News, even if unsubstantiated, suggesting some currency diversification away from the dollar. Sources: Bloomberg; Treasury International Capital System (TIC); BIS estimates. Table V.2

that had accumulated unprecedented foreign exchange reserves moved increasingly into the spotlight. Losses on dollar reserves came under public scrutiny in several countries, and markets became very sensitive to signs that central banks might be inclined to diversify away from the dollar.

Regression analysis provides several indications that both the US external imbalance and the perception of a potential official dollar overhang may have mattered for the dollar. First, on average, the dollar fell against the euro following news of an unexpectedly wide US trade deficit, suggesting that the US current account deficit played some role (Table V.2). Second, the dollar on average also reacted to data releases recording foreign purchases of US Treasuries. It tended to appreciate following a month-on-month increase in total purchases and to depreciate following an increase in official purchases. This is consistent with the view that markets regarded shifts in the composition of the financing of the US deficit from the private to the public sector as a sign that the deficit is unsustainable. Third, the currency tended to weaken following news - even if unsubstantiated - about central banks considering diversifying their foreign exchange reserves. The effect of such news was asymmetric: the impact was greater when the news pointed to dollar weakness. The impact of news about the US trade balance or official foreign exchange reserves started to be statistically significant around August 2004, when the dollar's decline was particularly pronounced.

Interest rate differentials

Interest differentials at times played a role The second main factor determining exchange rate movements was changing expectations of growth and interest rate differentials. A robust correlation between exchange rate movements and prevailing or expected interest rate differentials is notoriously difficult to identify. In recent years, though, there has been evidence of a positive correlation for certain economies during specific subperiods (Graph V.7). In particular, a number of currencies – most notably sterling and the Canadian, Australian and New Zealand dollars – rose against the dollar between January 2002 and February 2004, as yield-driven capital



sought higher interest rates than those in the United States. This factor compounded the influence of commodity prices and favourable terms of trade. Similarly, the dollar's appreciation against these currencies between February and May 2004, and again between January and mid-April 2005, reflected a narrowing, and in some cases a reversal, of interest rate differentials with the United States.

Against the background of a continuing global search for yield, interest rate differentials also remained important for a number of emerging market currencies. Until 2004, in a context of cheap funding (as suggested by low interest rates) and a high tolerance for risk (which contributed to narrow credit spreads), the currencies of emerging market countries with higher yields – in particular the Chilean peso, the rand and the real – tended to appreciate against the dollar. Conversely, as funding became more expensive and investors became less risk-tolerant, the currencies of emerging market countries with a positive but narrowing interest rate differential tended to depreciate against the dollar. Examples include, again, the Chilean peso and the rand, which fell by around 5% and 10% respectively in the first few months of 2005.

One mechanism through which current and prospective interest differentials influenced exchange rates was carry trades, a vehicle that international investors use in their search for yield. These trades involve borrowing in a low-yielding currency and investing in a high-yielding one on the assumption that the higher-yielding currency will not depreciate enough to offset the interest rate differential. Strategies of this kind were used by a variety of investor types over much of 2004. Hedge funds and commodity trading advisers were reported to have been particularly active in following carry trade strategies. Since 2002, institutional investors have increasingly taken on carry trade positions, often as part of currency overlay strategies, whereby foreign exchange positions are managed actively and independently of the underlying investment, with a view to picking up additional returns.

In addition to market commentary, the relevance of carry trades is supported by two further pieces of evidence. First, the *Triennial Central Bank Survey* shows that foreign exchange trading rose most strongly between banks Carry trades a popular investment strategy



and financial customers (Table V.1). It also reveals unusually strong turnover growth in two main target currencies – the Australian (98%) and New Zealand dollars (152%) – between April 2001 and April 2004. Higher-frequency data for Australia confirm that as the interest rate differential widened, the Australian dollar appreciated and turnover rose steeply (Graph V.8). Second, regression analysis on a group of US-based hedge funds shows that in 2003 and 2004 their returns were correlated in a statistically significant way with a variable capturing interest rate differentials and exchange rate changes of the Canadian and New Zealand dollars.

Based on this evidence, carry trades appear to have underpinned the appreciation of a number of currencies against the US dollar and the yen in the course of 2004. Similarly, the unwinding of such trades in reaction to changes in current and expected US policy rates in early 2005 may have contributed to the broad rebound of the dollar.

Exchange rate policies in Asia

A third factor that continued to influence exchange rates during the period under review was the intervention activity of a number of central banks, particularly in Asia, in response to upward pressure on their currencies. While this factor had also played a major role in previous years, two differences stood out.

First, the Japanese Ministry of Finance stopped intervening in foreign exchange markets in March 2004. Attention thus turned mostly to China, where the monetary authorities continued to accumulate sizeable amounts of dollar reserves in their attempt to preserve the fixed exchange rate vis-à-vis the US currency (Table V.3). With the spot rate fixed, waves of speculative pressure could be traced in the non-deliverable forwards (NDF) market in the third quarter of 2004 and have been observed again since December 2004 (Graph V.9). The behaviour of the NDF rate reflected shifts in market participants' views about the likelihood of a change in the central bank's current exchange rate peg. Speculative pressure on the renminbi also affected the Hong Kong dollar, whose forward rate often tracked the renminbi NDF rate quite closely.

Intervention activity in Asia remained important ...

... although the Japanese authorities did not intervene ...

Annual changes in official foreign exchange reserves

In billions of LIS dollars

	1999	2000	2001	2002	2003	2004	Memo: Amounts outstanding
	At current exchange rates						(Feb 2005)
Total	139.8	157.9	110.7	355.4	619.9	709.0	3,812.2
Industrial countries	55.0	58.8	3.3	111.6	218.6	193.6	1,306.4
United States	-3.8	-0.9	-2.3	4.8	5.9	3.0	42.1
Euro area	-39.2	-9.4	-10.7	7.9	-27.8	-8.7	176.8
Japan	74.5	69.5	40.5	63.7	201.3	171.5	820.5
Asia	79.0	52.5	76.0	173.9	263.9	363.4	1,624.4
China	9.7	10.9	46.6	74.2	116.8	206.7	642.6
Hong Kong SAR	6.6	11.3	3.6	0.7	6.7	5.0	123.9
India	5.0	5.3	8.0	21.7	30.6	27.5	130.1
Indonesia	3.8	2.0	-1.2	3.7	4.0	-0.0	34.9
Korea	21.7	22.2	6.6	18.3	33.7	43.7	201.3
Malaysia	4.9	-1.0	1.0	3.7	10.2	21.9	70.6
Philippines	4.0	-0.2	0.4	-0.2	0.3	-0.5	13.5
Singapore	1.9	3.4	-4.8	6.5	13.6	16.5	112.6
Taiwan, China	15.9	0.5	15.5	39.4	45.0	35.1	246.6
Thailand	5.4	-1.9	0.4	5.7	2.9	7.5	48.4
Latin America ¹	-8.8	2.1	-0.3	4.2	30.6	21.1	198.5
Argentina	1.6	-1.7	-9.9	-4.1	2.7	4.9	17.5
Brazil	-7.8	-2.3	3.2	1.7	11.7	3.6	58.8
Chile	-1.1	0.5	-0.6	0.8	0.4	0.3	15.0
Mexico	-0.5	4.2	9.2	5.5	7.8	5.0	62.6
CEE ²	0.5	18.8	12.6	36.6	51.1	69.0	283.8

¹ Countries shown plus Colombia, Peru and Venezuela. ² Central and eastern Europe: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia and Slovenia. Table V.3

Sources: IMF; national data; BIS estimates.

Second, even though several Asian economies - most notably Korea, Taiwan (China) and Thailand - accumulated foreign exchange reserves at a faster pace in 2004 than in previous years, their currencies tracked the dollar less closely (Graph V.10). In the second half of 2004, the won shared more than half of the movements of the yen against the dollar, much more than in previous years. In particular, for every 1% week-on-week appreciation of the yen against the dollar, the won on average appreciated by 0.6% against the US currency. One factor underpinning this development could be a further orientation of exchange rate policies in Asia towards effective rates, a process that appeared to start around 2001. Indirect evidence is provided by the fact that in Korea, Singapore, Taiwan (China) and Thailand the volatility of nominal effective exchange rates has tended to rise less or decline more than that of bilateral dollar exchange rates (Table V.4). Hence, while the dollar's role in Asia remains important, policy emphasis may have shifted from bilateral to effective exchange rates. One aspect of this reorientation is the role that evolving expectations about the renminbi seem to play in Asian foreign exchange markets. While movements in the

... and some Asian currencies appreciated more substantially



yen/dollar rate have a major influence on Asian currencies, the role of the renminbi NDF seems to be increasing. One possible interpretation is that market participants may have traded emerging market currencies in Asia that are not pegged to the dollar as proxies for the renminbi. Speculative pressures on the latter may therefore have contributed to an appreciation of the former.

A similar pattern of changing correlations with the G3 currencies was observed for those currencies that had co-moved closely with the dollar in the past even in the absence of foreign exchange market intervention. As the US dollar followed a declining trend in the course of 2004, the exchange rates of the Australian, Canadian and New Zealand dollars against the US currency were correlated unusually highly with that of the euro.

Exchange rate volatility and changes in reserves							
	January 1999–December 2001			January 2002–April 2005			
	Exchange ra	ate volatility ¹	Change in	Exchange ra	Chan ra in		
	Bilateral	Nominal effective	reserves ²	Bilateral	Nominal effective	reserves ^{2, 3}	
China	0.0	3.3	57.5	0.0	3.8	372.7	
Hong Kong SAR	0.1	2.6	14.9	0.4	2.9	10.5	
India	1.7	4.2	13.3	2.6	4.3	68.6	
Indonesia	20.5	20.1	0.8	6.6	6.3	3.6	
Korea	6.5	6.3	28.8	5.7	4.7	83.8	
Malaysia	0.0	3.0	-0.1	0.0	3.4	37.9	
Philippines	7.7	7.6	0.2	3.2	4.1	0.5	
Singapore	3.7	3.1	–1.5	3.5	2.0	30.2	
Taiwan, China	3.5	3.7	16.0	3.0	2.7	89.5	
Thailand	5.4	5.2	-1.4	4.2	3.1	9.3	
¹ Calculated as the standard deviation of annualised weekly changes, in per cent, in the exchange rate over the period. ² Cumulative change over the period, in billions of US dollars. ³ Until March 2005.							
Sources: IMF, International Financial Statistics; national data; BIS.						Table V.4	



Whether these are only short-lived developments or rather an indication of a more lasting change in the dollar's role as an anchor in foreign exchange markets remains an open question.

The impact of global current account and portfolio imbalances

Over the last few years, two major trends affecting the international monetary system have drawn critical attention. The first has to do with widening external imbalances. The second, related but not identical, trend has been the sizeable growth in net dollar liabilities of the United States, which have financed both the current account deficit and the acquisition of foreign currency assets. As a

counterpart to this, the nationals of other countries now hold a large and growing long dollar position, a third of which is accounted for by official holdings of foreign exchange reserves.

These developments pose the risk that imbalances may be corrected in a disorderly way, or lead to protectionism. Either outcome could damage economic growth and trade or generate financial strains. In addition, disorderly currency movements could alter the roles of the US dollar and euro as reserve currencies, with further unpredictable outcomes.

Are current account imbalances ...

... or portfolio imbalances more of a problem?

Do chronic imbalances have systemic roots? Two schools of thought regarding the source of the problem and possible solutions have emerged. One has focused on current account deficits as the source of trouble. These increase debt and debt service, and threaten over time to violate the long-term solvency constraint. Eventually the overspending by one generation must be paid for with underspending by a later generation, which in turn would lead to a reduction in the real value of the currency. This approach raises the question: does the pattern of current account imbalances pose a problem for the international monetary system?

A second school of thought is based on the premise that assets held in different currencies are imperfect substitutes. Thus, as the proportion of assets denominated in a given currency rises, so does the corresponding risk premium, and the value of the currency must fall to set up higher future returns. This approach provides the motivation for the second question: does the pattern of currency shares in global portfolios pose a problem for the international monetary system?

Those who answer these questions in the affirmative also suggest that the international monetary system itself may have contributed to the current state of affairs. In the past, they argue, there was a degree of discipline to force adjustment before deficits or any currency overhang got dangerously large. Under the gold standard, there was an element of automaticity, even though countries could, and did, alter this process through borrowing or lending abroad. Under Bretton Woods, the IMF played a policing role, constraining debtor countries in particular. Today, there seem to be neither rule-based nor discretionary means of forcing either creditors or debtors to react as imbalances and net positions grow. Those who conclude that a problem does exist are led in turn to propose changes to the system itself, either to address a current problem or to prevent future ones from arising.

In contrast, those who answer in the negative do not see the need for systemic reform. Indeed, some suggest that we already have a new system, which they refer to as the "new Bretton Woods": Asian countries are said to stabilise their currencies against the dollar in order to sell goods to the United States, and simultaneously lend the funds to pay for them. These analysts argue that this arrangement of mutual advantage could continue for decades.

The following sections consider whether or not there is a problem and, if so, whether it is more a "current account imbalance" or a "portfolio imbalance" problem. The distinction matters because the solution proposed depends on the diagnosis. For example, a portfolio imbalance problem might be eased by US residents issuing bonds denominated in euros, yen or gold (like the US Treasury "Carter bonds" denominated in Deutsche marks, Swiss francs and yen in the late 1970s). This, however, could aggravate a deficit and debt problem, since dollar depreciation would then worsen the US debt position.

For clarity's sake, the current account imbalance and portfolio imbalance questions are examined separately, at the risk of understating the relationship between them. In fact, the two are related in several ways. If the US current account and net international liabilities are seen to be on an unsustainable path, this might lead to a re-examination of portfolio allocations. Similarly, heavy US issuance of dollar liabilities, which the dollar's role may have eased, to finance profitable external assets has sharply reduced debt service charges. This has lessened the current perception that there might be a deficit problem. In effect, an expansion of the rest of the world's dollar holdings has helped to limit the compounding through debt service of US net international liabilities resulting from trade deficits.

A current account imbalance problem?

The arguments here relate to national intertemporal budget constraints and hence to external debt accumulation, not money. As such, they could equally apply to a regional current account imbalance in a single currency area like the euro area. In this case, the sole difference would be that only divergent price trends, not nominal exchange rate changes, could alter the real exchange rate (the relative price of traded and non-traded goods). Does this kind of imbalance pose a problem globally? This review of the arguments recognises the economic unsustainability of the US external accounts, but suggests that the build-up of debt is at an earlier stage than most analysts suppose. Political constraints could bind sooner than strictly economic ones.

The first point of contention is how unsustainable the US current account deficits are, in economic or political terms. The second is the set of reasons given for how the US external accounts got onto such a path. Differing views here lead on to differing views on the role of the international monetary system.

Yes

The mainstream critical view is that the US external accounts are unsustainable in the sense that debt is rising without obvious limit relative to underlying output. The current account deficit, at about 6% of US GDP or 1% of world GDP, already represents two thirds of the rest of the world's current account surpluses and nearly 8% of its total savings. Moreover, assuming that US imports continue to be particularly responsive to income, faster growth in the United States than in its major trading partners would mean that the US deficit will widen along this path. Several studies forecast a rapid deterioration: one puts the deficit at 7.8% of GDP by 2008, others at 8.5% or even 13% by 2010.

These widening deficits imply net international liabilities doubling from a quarter to half of US GDP in just a few years. To narrow such deficits through lower absorption while maintaining employment in the US non-traded goods sector would require a large real exchange rate adjustment.

Another sense in which this current account development might be unsustainable is political. It may be that the first limit reached is that of the US deficits: economically unsustainable ...

... or politically unsustainable?

political willingness in the United States to run such deficits, or in Europe to accept the domestic consequences of any narrowing. From this standpoint, the risk is not so much a debt crisis as a shift towards protectionism.

Do US deficits reflect excessive global savings ... How did such a large imbalance come into being? One view is that unsustainable US current account deficits result from the rest of the world's reliance on export-led growth and corresponding current account surpluses. Thus, the world's largest economy merely provides passive consistency, given that there can only be n-1 independent current accounts. For example, the US current account deteriorated in the wake of the Asian financial crisis of 1997–98, when the region swung into current account surplus. On this view, the US external debt at 25% of GDP and deficit at 6% of GDP enable international wealth to accumulate and surpluses to persist elsewhere. Listed in order of the dollar amount of their net international investment position, we have: Japan (net assets of 38% of GDP and a surplus of 3% of GDP in 2003); Switzerland (149%, 14%); Hong Kong SAR (252%, 11%); Taiwan, China (108%, 11%); Germany (7%, 2%); Belgium (42%, 4%); Singapore (83%, 31%); and Norway (28%, 13%).

... or excessive US consumption?

Another view is that the US economy is prone to overconsumption. The US private saving rate has dipped to an all-time low and there is a large peacetime fiscal deficit. Private net investment declined even as the current account deficit widened. Moreover, investment that is directed to the nontraded goods sector does not create the wherewithal for servicing the external debt and will make the eventual adjustment more difficult.

Some observers, especially from countries with appreciating flexible exchange rates, look beyond these proximate causes of the persistence of deficits and surpluses to flaws in the international monetary system. In particular, they contrast the lack of pressure on today's surplus countries to cease resisting their currencies' appreciation through sterilised intervention with the norm under the gold standard. Then, it is argued, reserve inflows expanded domestic money and raised prices, thereby pushing up the real



exchange rate. In addition, the widespread view among market participants that the investment of Asian official foreign exchange reserves has held down US long-term rates suggests that recent US monetary tightening has restrained US absorption less than it might otherwise have done. Thus, according to this view, by intervening and sterilising at home, and by investing abroad in US bonds, Asian economies spare themselves and the United States the pressure to adjust. Any adjustment burden shifts onto more flexible currencies. It is noted in this connection that, were the real exchange rate of "other important trading partners" at its level of 1995–96, then the dollar's overall index would already have reached 1980 or 1995 lows at the end of 2004 (Graph V.11).

No

Those who consider the US current account deficit a less imminent problem make two points. A first line of argument maintains that any US debt problem is at a very early stage and that the dynamics of the US external accounts remain very favourable. According to the US Department of Commerce, the US economy ran down its net international assets in the 1980s and went into a net international liability position only in 1989. Moreover, even in 2003, the United States still collected net international investment income of \$38 billion (and \$30 billion in 2004). This discrepancy reflected a higher return on US assets abroad (4%) than that on US liabilities (2.6%), more than offsetting the gap between gross assets (71% of GDP) and the higher level of gross liabilities (96% of GDP). This difference in the overall rate of return reflects two regularities: that the United States issues more short-term, low-risk liabilities to the rest of the world than it buys, and that its multinationals earn a higher rate of return abroad than do foreign multinationals in the United States. Whatever the source, if a country enjoys a rate of return on its liabilities lower than its nominal growth rate, its external liabilities can be stabilised even with a trade deficit. Many projections of the US external accounts ignore this.

A further, albeit lesser, factor limiting US external debt accumulation is that the rest of the world bears the exchange rate risk. When the home currency depreciates, emerging economies that borrow in dollars suffer exchange rate losses. In contrast, when the dollar depreciates, US external assets benefit from exchange rate gains (see below). This effect, which some have characterised as "debt relief" from dollar depreciation, helps to restrain the rise in the ratio of US net international liabilities to GDP.

A second line of argument accepts the characterisation that the US current account deficit reflects a passive, n-1 position but sees this as appropriate and, over some horizon at least, sustainable. If the capital account is seen as the driver, it is thought that free capital movements seek higher or safer returns in the United States. Thus, the world's largest economy's dissaving has done nothing more than accommodate a glut of savings abroad (or perhaps a dearth of investment). If instead the current account is the driver, then the argument is akin to the "new Bretton Woods" interpretation of the relationship between the United States and Asia. According to this view, the need for jobs in Asia is met with export-led growth. Consumer goods flow to

US current account deficits could persist for some time ... the United States and low-risk dollar securities flow to Asia. This is taken to be a stable bargain whatever the resulting imbalances.

... judging by the Australian example

Some have drawn a parallel with Australia, which has been running current account deficits for a very long time. As a result, the country's net international liability position, at 70% of GDP, is almost three times the relative size of that of the United States. The world is seen as seeking higher or safer returns in Australian corporate assets, equities and bonds, and as remaining prepared to accept the risk of debt denominated in domestic currency. Going by this precedent, the US current account might not be sustainable, but this would be a problem for a later generation.

Those who hold the view that there is no pressing current account imbalance might also tend to deny that the current international monetary system imposes less discipline on surplus countries than its predecessors. They would cite the risk of using a reconstructed ideal of an earlier regime rather than how it operated in practice. Sterilisation was common under both the classical gold standard and the gold exchange standard of the interwar years. If gold flow and money base growth more often than not had opposite signs during the earlier periods, then there is nothing new about the current lack of pressure on the surplus countries to adjust. Moreover, current account imbalances are no larger and no more persistent now than under the gold standard. National investment and saving behaviour are, if anything, more tightly linked now, indicating no greater net capital mobility.

In sum, there is no doubt that the US external accounts are on an unsustainable trajectory. While the absence of substantial debt service might cast doubt on the urgency with which this problem needs to be addressed, the continuing absence of a policy response increases the chances of a disorderly market adjustment. Furthermore, regardless of one's judgment on sustainability, protectionist policies and the public pillorying of trading partners give cause for concern, the latter also because it could unsettle financial markets. Finally, it is an open question whether the current international monetary system or combination of systems makes such a problem any more likely than did its predecessors.

A portfolio imbalance problem?

The question here is whether, at more than half of US GDP and growing, the net US liability position *denominated in dollars* represents in some sense an overhang of dollars in world portfolios. It is worth noting that, historically, the assertion of a dollar overhang came before the emergence of a chronic US current account deficit. Europeans worried as far back as 40 years ago about US firms buying European firms with dollars borrowed abroad, when the US current account was in surplus. Then, as now, low-risk dollar liabilities were already financing higher-risk foreign currency assets. In fact, this concern has since reappeared in the down phase of every dollar cycle under floating rates. As in the past, the most prominent question today is whether official portfolios are overweight the dollar. However, the broader question may be whether private portfolios are. The issue has recently gained additional force, in part

A dollar overhang ... because this is the first down phase of the dollar's cycle since the euro's inception. The depth, breadth and liquidity of the euro's financial markets make it a stronger alternative to the dollar than existed before.

Yes

The argument that the world has a portfolio imbalance problem starts with the US international position broken down by currency. It is estimated that the United States had a net liability position denominated in dollars of \$7.2 trillion, or 66% of GDP, in 2003. This is defined as dollar-denominated liabilities to the rest of the world less dollar-denominated claims on it. This far exceeded the overall net external liability position (25% of GDP), that is all external liabilities less all external assets, with the difference accounted for by US net holdings of foreign currency assets. The US short position in the dollar corresponds to a very large net long position for the rest of the world, indeed over a fifth of global GDP, less that of the United States, at current exchange rates.

The fact that creditors to the United States bear the market risk associated with dollar depreciation raises the possibility that they could try to cover their positions in times of stress. Moreover, a sense of moral hazard might also make for unstable portfolio allocations across major currencies. Since such depreciation produces exchange rate gains in US portfolios, it leads to wealth gains that support consumption (although it makes foreign goods pricier). As a result, US policymakers could feel less pressure to resist dollar depreciation and the rest of the world might fear their benign neglect.

Europe and Asia differ in the incidence of losses from dollar depreciation, but in each case some observers discern destabilising elements. In Europe, foreign exchange losses in the corporate sector drain firms' capital and prolong deleveraging, leading to caution in investment and hiring. This hinders any increase in European absorption in relation to output. In turn, this impedes current account adjustment, encouraging a belief that the dollar might have to depreciate further. In Asia, the fact that the public sector holds much of the long dollar position attenuates any behavioural response. However, when opposition lawmakers have questioned the authorities about official exchange rate losses, the latter have sometimes responded with statements of intention regarding reserve diversification that have threatened to destabilise markets.

To many observers, the concentration of the long dollar position in official portfolios (about a third of the total), and in just a handful of Asian economies, makes maintenance of the status quo particularly problematic. Official holdings mean relatively few portfolio managers. These observers note that other reserve managers and private investors, including leveraged investors, are extremely sensitive to signs – sometimes more reported than real – of reallocations away from the dollar.

Some argue that there is already an overhang of dollars in official portfolios. The 64% of foreign exchange reserves invested in the dollar seems out of line with other measures of the dollar's share, such as the 45% share of international notes and bonds (other than those issued in home currency) that are denominated in dollars. Others argue that, even if there is no overhang now, there could be one soon, especially if currencies become more oriented

... in private portfolios ...

... and official portfolios?

towards their effective exchange rates, as suggested by recent experience (see above).

Admittedly, in principle there need be no one-to-one mapping between the way a currency trades and the composition of the official foreign exchange investment portfolio. Those holding the overhang view, however, would point out that (known) currency shares in reserves do seem broadly to reflect currency orientations. Issuers of euro-oriented European currencies have fairly low known dollar shares: Slovakia and Croatia, 29–30%; Switzerland and the United Kingdom, 36%; and Latvia, 45%. With currencies less tied to the euro, Australia has 45% of its reserves in dollars, and Canada 53%. Hong Kong SAR, with its dollar peg, has 75–80% of its reserves in dollars.

According to this view, there would be the risk of a disorderly shift from dollars towards euros were there to be a shift in currency orientation. In the past, the switch from silver and bimetallism to gold by the new German empire, the United States and the Latin Monetary Union (Belgium, France, Greece, Italy and Switzerland) strained the gold supply and contributed to the deflation of the late 19th century. The difference today is that increases in supply are possible both for euro securities (through debt management and sterilised intervention) and for euro base money (lower interest rates). In principle, these possibilities give more scope to offset any disorderly shift towards the euro.

No

Private portfolios are diversifying ...

Others argue that there is no overhang of dollars. They hold that the world is not really as long dollars as some suggest. Home bias in portfolio management is receding, even as economies' international balance sheets are growing



faster than output. The natural first stop for a portfolio diversifying away from the home currency remains, in many cases, dollar assets.

In particular, the notion can be disputed that official reserves are overweight in dollars. Excluding Japan, the dollar share of foreign exchange reserves may have been no more than 57% in mid-2004. (Unreported forward sales of dollars against euros could lower this figure further.) Such a share is high in relation to the share of the US economy in the world economy, but not necessarily in relation to the share of the dollar zone in the world economy. If one allocates economies, measured at purchasing power parity, to the dollar, euro or yen zones according to the behaviour of their currencies (as in Graph V.10), the dollar zone produces an estimated 59% of global output (Graph V.12). This is almost identical to the current dollar share of reserves outside Japan.

If there were official (or private) shifts from the dollar to the euro, moreover, they could prove to have less of an impact on the foreign exchange market than is often projected. Analytically, portfolio diversification from the dollar to the euro is akin to sterilised intervention in its effects on private balance sheets. However, many observers hold the view that the substitutability between government securities denominated in these two currencies is so high that it would take very large portfolio reallocations to materially affect the exchange rate. And if such official reallocations were to be considered, the fact that the bulk of official dollar holdings are concentrated in relatively few hands might actually have an advantage. Cooperation might make it possible to avoid a "prisoner's dilemma" outcome of disorderly disinvestment.

In sum, the case for a portfolio imbalance, including in official portfolios, seems weaker than much commentary would suggest. There remains, however, a pending problem. The dollar zone has been shrinking, and any acceleration of this could eventually give rise to a portfolio imbalance in both the private and official sectors.

... and the dollar share of official portfolios is not obviously excessive