

## 2. The international banking market

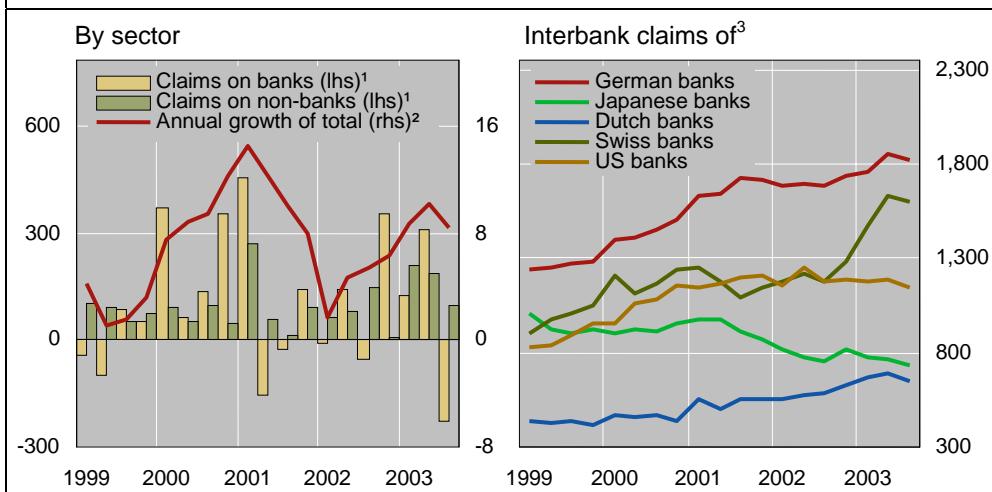
The interbank market contracted considerably in the third quarter of 2003, with nearly one third of the funds built up during the expansion of the previous three quarters disappearing from bank balance sheets. Much of this reflected reduced lending by European and US banks in the interbank market via their offices in the United Kingdom and offshore centres. At the same time, loans to non-bank borrowers rose noticeably. While possibly indicative of a pickup in corporate loan demand, the rise was partially the result of lending to this sector in offshore centres, which is more suggestive of increased hedge fund activity.

Banks in the reporting area continued to move their exposures to emerging markets into safer assets. This shift took the form of a rise in the share of claims on the public sector, a shift out of Latin America into credits perceived to be less risky, and a further improvement in the average rating of the overall emerging market portfolio. In addition, growth in net risk transfers from some regions suggests that banks may increasingly be seeking third-party guarantees for their loans to emerging markets. In the third quarter, an expansion in deposits placed with BIS reporting banks outpaced a rise in lending, resulting in an overall net outflow from emerging market economies. Growth in claims on emerging Europe led to a net inflow to the region, while increased deposits with reporting area banks contributed to net outflows from Asia-Pacific and Latin America.

### Interbank market unwinds as loans flow to end users

Following a build-up in interbank claims in the previous three quarters, banks reduced lending to other banks in the third quarter of 2003, signalling a possible beginning of the periodic contractionary phase in interbank loan flows. Roughly one third of the funds which had accumulated in the interbank market disappeared from bank balance sheets in the third quarter, as US and European banks withdrew. At the same time, some banking systems increased lending to non-bank borrowers, particularly in the United States and Germany. In seasonally unadjusted terms, a reduction in interbank claims led to a fall in the outstanding stock of total cross-border claims, the first decline in a year. This pushed the year-over-year growth in claims down to 8% from 10% in the previous quarter (Graph 2.1, left-hand panel).

## Cross-border claims by sector and nationality of banks



<sup>1</sup> Exchange rate adjusted changes in amounts outstanding, in billions of US dollars. <sup>2</sup> Calculated as the sum of exchange rate adjusted changes in amounts outstanding between periods  $t-3$  and  $t$ , divided by the amount outstanding in period  $t-4$ , in percentages. <sup>3</sup> Exchange rate adjusted outstanding amounts, base period 2003 Q3, in billions of US dollars. Includes inter-office claims.

Graph 2.1

### Interbank lending contracts by record amount

Claims on banks, typically the main component of quarterly loan flows, declined substantially in the third quarter of 2003 (Graph 2.1, left-hand panel). A \$259 billion decrease in loans to other banks (including to own offices) led to the largest contraction in the interbank market in the BIS coverage period. Interbank claims had swelled by \$788 billion in the previous three quarters as banks parked funds with other banks, possibly because of muted demand for corporate loans and uncertainty over future interest rate movements (Table 2.1). However, roughly one third of these funds disappeared from bank balance sheets in the third quarter, largely as a result of reduced inter-office activity. Despite the build-up of funds earlier in the year, this decline in the third quarter seems to have pushed the stock of interbank claims farther from its long-term equilibrium level vis-à-vis liabilities to non-bank borrowers (see the box on page 15).

While the contraction in the interbank market was widespread, it primarily took the form of reduced business with banks in the United Kingdom and the United States, and to a lesser extent with those in Japan and the euro area. Loans to banks in the United States fell by \$59 billion, a decline of 5% from the previous quarter, largely explained by reduced loans from banks in the United Kingdom, the euro area, Switzerland and offshore centres. Similarly, claims on banks in the United Kingdom also dropped substantially, by \$71 billion, as banks in the euro area cut a combined \$31 billion in loans and banks in offshore centres an additional \$18 billion. In the euro area as a whole, \$24 billion in interbank loans disappeared, while claims on banks in Japan fell

Following a build-up  
in the three  
previous quarters ...

... a third of funds  
disappears in the  
third quarter

## Long-run equilibrium in the interbank market

Large expansions and contractions in the interbank market occur frequently. What drives these movements? Aggregate data on cross-border bank claims suggest that a portion of increases in deposits is initially recycled in the interbank market, possibly because of short-term misalignments in the demand for and supply of funds to end-use borrowers. As these funds are passed from one bank to the next, each leg of the transaction is reflected in the aggregate claims figure, and generates swellings in interbank loan flows. All else equal, a permanent increase in deposits should (ultimately) result in a corresponding permanent rise in claims on non-bank borrowers.<sup>①</sup> However, in the short term, the stock of claims on banks may only gradually return to its equilibrium level vis-à-vis the stock of liabilities as funds are passed out of the interbank market.

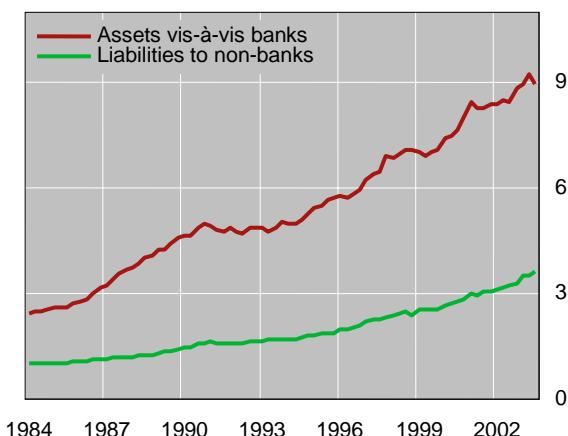
With this function of the interbank market in mind, this box touches on the long-term relationship between the size of the interbank market and the stock of banks' liabilities to providers of funds. Such an analysis may be useful in determining whether a large contraction in interbank lending, such as that which occurred in the third quarter, is a move towards a long-term equilibrium or a new shock to the system. More broadly, we address questions related to the relative size of the interbank market; for each dollar of bank funding, how many dollars appear in the interbank market as this dollar is passed around? Has this relationship changed over time as banks have become more globalised?

The simple framework described above suggests a statistical relationship called cointegration. Our model includes bank liabilities vis-à-vis non-banks (primarily deposits from governments and the private sector) and the stock of claims on other banks (a measure of the size of the interbank market), and assumes that these variables will tend to gravitate towards an equilibrium relationship following shocks to the system. Taking time trends into account, estimates of the parameters governing this long-term relationship can shed light on whether large movements in claim flows represent a return to equilibrium.

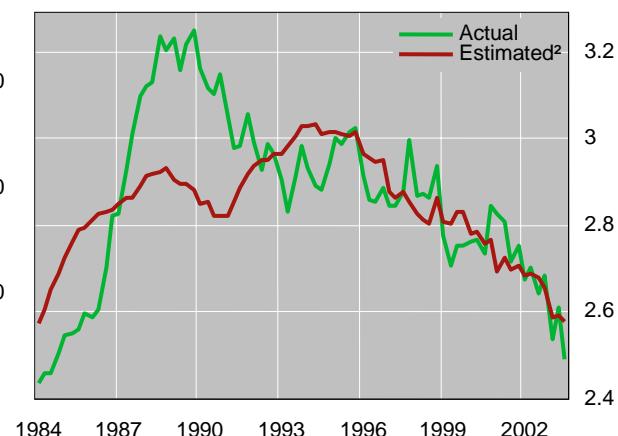
The broad characteristics of the size of the interbank market are summarised in the graph below. As shown in the left-hand panel, both the stock of claims on banks and liabilities vis-à-vis non-banks rose consistently over the last two decades.<sup>②</sup> The size of the interbank market has been, on average, twice the size of the stock of liabilities to non-banks, although this ratio has been

## Long-term relationship between interbank assets and liabilities to non-banks

Stocks of claims and liabilities<sup>1</sup>



Ratio of claims and liabilities



<sup>1</sup> In billions of US dollars. <sup>2</sup> Based on a cointegration model which includes a constant and a time trend.

<sup>①</sup> Since the international banking market is not a closed system, movements in domestic lending markets will also affect international loan flows. <sup>②</sup> This analysis relies on data from 24 reporting countries which have continuously reported since the fourth quarter of 1983. The stock of claims/liabilities is calculated as the sum of the outstanding exchange rate adjusted stock of claims/liabilities of these 24 reporting countries vis-à-vis the world. Thus the stocks displayed in the graph will not correspond exactly to those reported elsewhere due to the exclusion of certain reporting countries.

declining since the early 1990s (as shown in the right-hand panel). While this probably reflects to some extent the retrenchment of Japanese banks over the last decade, it may also be due to other, more structural factors. For example, globalisation and consolidation (and possibly the rise in offshore centre activity) in the international banking market over the 1990s may have led to increased economies in funds placement as the global reach of commercial banks expanded. Consistent with this hypothesis, the share of inter-office claims in total interbank claims has risen over this same period.

The longer-term relationship between claims on banks and liabilities to non-banks implied by the data suggests that the large contraction in the third quarter of 2003 may have been a movement away from equilibrium rather than a shedding of the build-up in interbank claims in recent quarters. While the evidence is tentative at best, the estimates of the long-term ratio of these stocks are graphed alongside the actual ratio in the right-hand panel of the graph.<sup>⑤</sup> The decline in the actual ratio reflects the large fall in interbank lending in the third quarter. While the estimated equilibrium ratio does decrease in the third quarter of 2003, the actual decline is much larger and implies the system moved farther from equilibrium relative to the previous three quarters.

<sup>⑤</sup> The estimates are based on a simple error correction model which includes a constant and time trend, and uses data up to 2002 Q3. Other, more sophisticated models which include the stock of claims on non-banks as an endogenous variable in the system also indicate that the actual ratio and the implied equilibrium ratio of claims on banks and liabilities to non-banks diverged in the third quarter of 2003.

by \$49.5 billion, reflecting reduced business with banks in the United Kingdom.<sup>1</sup>

#### *Contraction resonates in major financial centres*

Which national banking systems figured prominently in reducing interbank activity? Overall, much of the decrease in interbank lending was initiated by banks *located* in major financial centres or in offshore centres, as is typical of large contractions in the interbank market. However, very little of the overall movement was explained by banks *headquartered* in these financial centres. Roughly one quarter of the total reduction in claims on banks was accounted for by banks located in the United Kingdom, and an additional 17% by banks in offshore centres.<sup>2</sup> Yet the activity of UK banks themselves was hardly a contributing factor. As shown in Table 2.2, Dutch banks actually cut interbank claims the most, and did so largely through their domestic offices and their offices in the United Kingdom. Similarly, US, German, Japanese and Swiss banks also experienced large declines in interbank claims, a significant portion being recorded at their offices in the United Kingdom or offshore centres.<sup>3</sup>

Banks reduce  
interbank loans  
from UK offices ...

<sup>1</sup> Intra-euro area interbank lending actually rose by \$9 billion, a small rise relative to those in recent quarters.

<sup>2</sup> Overall, roughly 90% of the decrease in interbank lending was accounted for by inter-office activity. UK banks located in the United Kingdom increased interbank lending by \$5 billion, contributing to a \$14 billion increase for UK banks globally.

<sup>3</sup> The breakdown of national banking systems also suggests that those banks that did not book their activity through offices in the United Kingdom tended to use offshore centres more intensively (Swedish, German, Canadian and US banks). The scale of activity recorded through offices in United Kingdom in the third quarter of 2003 was roughly similar to previous quarters in which there were large contractions in the interbank market. Furthermore, as might

Cross-border claims of BIS reporting banks								
Exchange rate adjusted changes in amounts outstanding, in billions of US dollars <sup>1</sup>								
	2001	2002			2003			Stocks at end-Sep 2003
	Year	Year	Q3	Q4	Q1	Q2	Q3	
Total cross-border claims	859.2	742.0	92.9	366.9	335.8	494.4	-132.8	14,929.9
on banks	417.1	438.9	-54.6	356.0	123.3	308.4	-229.6	9,572.2
on non-banks	442.1	303.1	147.5	10.8	212.5	186.0	96.8	5,357.7
Loans: banks	362.8	408.1	-65.3	433.4	98.1	322.7	-259.1	8,202.6
non-banks	249.2	93.1	67.1	-16.2	167.1	14.7	64.9	2,887.1
Securities: banks	27.3	36.3	8.4	-51.9	18.7	-4.7	18.1	958.1
non-banks	201.4	202.2	98.8	27.9	55.2	133.0	12.5	2,217.0
Total claims by currency								
US dollar	422.7	320.8	-114.4	201.9	93.8	251.9	-90.0	6,008.7
Euro	439.6	463.0	201.1	119.1	226.8	206.1	-3.0	5,408.6
Yen	-65.5	-40.0	16.6	19.4	-16.2	-25.6	-0.3	751.6
Other currencies <sup>2</sup>	62.3	-1.8	-10.4	26.5	31.4	63.0	-39.5	2,761.0
By residency of non-bank borrower								
Advanced economies	384.8	303.1	134.2	64.2	158.8	160.2	80.2	4,166.3
Euro area	139.0	118.4	49.7	7.2	55.4	67.6	52.1	1,891.3
Japan	-3.7	4.1	-0.4	0.5	21.5	15.6	6.5	179.8
United States	183.4	153.1	59.1	59.1	25.8	60.0	17.0	1,407.4
Offshore centres	55.0	18.9	16.7	-28.2	80.8	18.9	10.3	613.8
Emerging economies	2.5	-16.5	2.4	-23.8	-6.4	3.3	5.6	527.7
Unallocated <sup>3</sup>	-0.1	-3.5	-5.8	-1.3	-20.8	3.6	0.6	49.9
<i>Memo: Local claims<sup>4</sup></i>	<i>84.1</i>	<i>52.4</i>	<i>-26.8</i>	<i>36.9</i>	<i>184.1</i>	<i>83.0</i>	<i>49.4</i>	<i>2,073.6</i>

<sup>1</sup> Not adjusted for seasonal effects. <sup>2</sup> Including unallocated currencies. <sup>3</sup> Including claims on international organisations.

<sup>4</sup> Foreign currency claims on residents of the country in which the reporting bank is domiciled.

Table 2.1

Not all national banking systems that had participated in the expansionary phase of the interbank market experienced an unwinding of positions in the third quarter, or at least not to an extent that reflected the previous build-up. French and UK banks, which were amongst the top 10 lenders during the swelling phase, have yet to unwind their interbank positions, while more than 50% of the funds placed in the market by Swiss, German, Italian, Danish and Dutch banks are still in search of end-use borrowers.

#### *Loans directed to private borrowers*

... and channel funds to non-bank borrowers

Concurrent with the contraction in interbank lending, loans to non-bank borrowers picked up in the third quarter of 2003. Total claims on non-banks rose by \$97 billion, not a large amount by the standard of recent quarters, but noteworthy nonetheless, particularly because this increase was largely driven

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be expected, roughly the same share of overall activity during the swelling of the interbank market in the previous three quarters was booked through offices in the United Kingdom.

Contractions in interbank claims by office location						
	Claims on banks <sup>1</sup>	Percentage share <sup>2</sup> for offices in				
		Home offices	Germany	United States	United Kingdom	Offshore centres
Most recent:						
2003 Q3 grand total	-194.6	66.7	13.7	12.8	26.2	16.9
Banks headquartered in:						
Netherlands	-48.1	52.2	-2.0	13.6	34.8	25.5
United States	-46.7	63.5	5.1	63.5	10.2	31.7
Germany	-38.8	44.0	44.0	14.2	20.9	67.3
Japan	-34.4	46.9	14.1	13.3	38.8	-17.6
Switzerland	-30.7	77.4	-7.4	-18.8	61.0	-11.5
Sweden	-21.5	50.0	4.6	12.6	-1.6	26.3
Finland	-15.6	51.2	0.0	0.0	37.4	11.4
Canada	-12.7	18.7	-2.0	47.9	-21.2	50.5
Italy	-12.1	13.5	18.7	-4.3	4.8	9.0
Denmark	-8.9	98.3	-4.1	0.0	-17.6	18.9
Total of above	-269.5	53.2	8.8	18.1	23.6	22.3
Previous contractions:						
1999 Q2 grand total	-88.3	56.5	-13.9	-53.6	34.4	-17.0
2001 Q2 grand total	-153.0	43.5	-8.9	-3.2	38.5	28.3
Recent expansion:						
2002 Q4 to 2003 Q2 grand total	1,073.5	44.8	16.1	14.3	39.0	5.2

<sup>1</sup> Exchange rate adjusted changes in claims on banks, including inter-office activity. Billions of US dollars. <sup>2</sup> Negative numbers indicate an increase in claims (except during the recent expansion). Table 2.2

by increased loan flows rather than repo activity and investment in government and other debt securities. Roughly one third of the \$65 billion increase in loans flowed to non-bank borrowers in the United States, followed by those in Germany and the United Kingdom.

While greater loan flows to non-banks can be indicative of a pickup in corporate loan demand, particularly if directed towards non-bank *private sector* borrowers, definitive evidence of renewed corporate lending remained absent (see also the Overview on page 1). The BIS consolidated data (which net out inter-office positions) suggest that several banking systems did shift their claim portfolios away from public sector and interbank lending and towards claims on the non-bank private sector, a key element that was not evident in the first quarter of 2003, when the increase in claims on non-bank borrowers had been unusually large. However, the latest portfolio shift was concentrated in only a few banking systems and partially reflected a rise in lending to the non-bank private sector in offshore centres, which could be more indicative of increased hedge fund activity.<sup>4</sup>

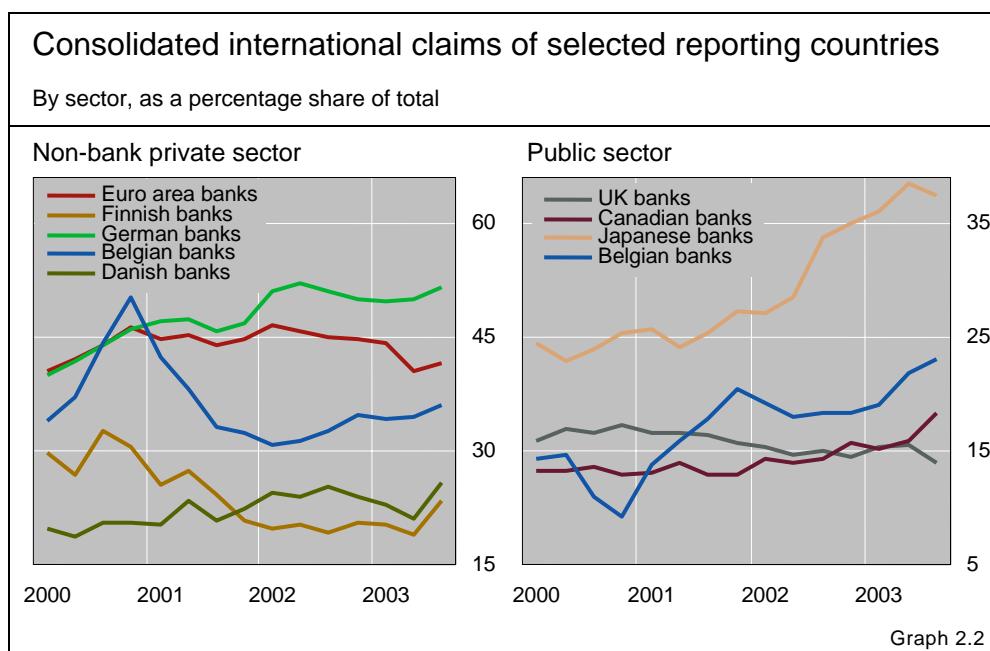
Lending to the non-bank private sector ...

<sup>4</sup> Total loans to non-banks in offshore centres rose \$6 billion. However, excluding a relatively large cutback in loans by a single reporting country on one offshore centre, loans to these

... partially reflects activity in offshore centres

The portfolio shift towards non-bank private sector borrowers seems to have been most pronounced among European banks (Graph 2.2, left-hand panel). Overall, claims of banks in the euro area on the non-bank private sector rose to 39% of their total international claims (from 38% in the previous quarter), with a corresponding fall in the share of their claims on other banks. Particularly noteworthy was the shift in the portfolio of German banks; they channelled funds to such borrowers in Japan and the euro area, primarily in the Netherlands, France and Italy. This, combined with growth in claims on this sector in developing countries and offshore centres, pushed total international claims of German banks on the non-bank private sector to \$993 billion, or 51.5% of their total international claims (up from 50% in the previous three quarters).<sup>5</sup>

Elsewhere, Japanese banks reduced their holdings of securities issued by foreign governments, possibly a reaction to the sudden rise in interest rates during the quarter.<sup>6</sup> The BIS consolidated data indicate that Japanese banks' international claims on the public sector fell to \$387 billion after they cut their holdings of euro area and US government securities. Their claims on the US public sector totalled \$179.5 billion, or 47% of their total international claims on



borrowers rose by \$15.2 billion. The BIS consolidated data indicate that international claims on offshore centres reached \$799 billion in the third quarter; 72% of these claims were on non-bank private sector borrowers (up from 71% in the previous quarter and 69% a year earlier). Moreover, claims on the non-bank private sector in offshore centres continued to trend upwards, surpassing 14% of total claims on this sector in the third quarter.

<sup>5</sup> Over the longer term, German banks make up an increasingly larger share of claims on this sector; they accounted for 27% of total international claims on the non-bank private sector in the third quarter of 2003, up from 25% a year earlier and 22% in the third quarter of 2000.

<sup>6</sup> This was the first decline in claims on this sector for Japanese banks since the first quarter of 2002.

the United States (down from 47.5% in the previous quarter), while their share of claims on the public sector in the euro area fell to 54% of their total international claims on that region, from 57% in the previous quarter.

### Emerging markets increase deposits, driving net outflow

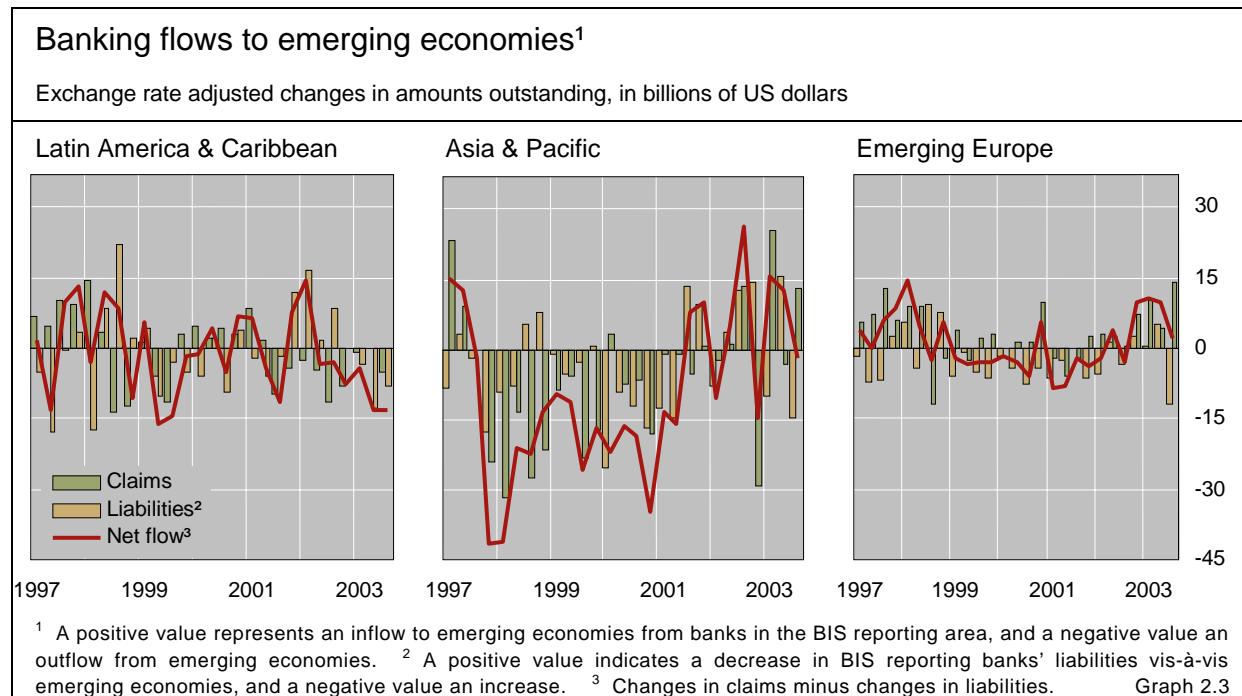
Following two consecutive quarters of net inflows into emerging markets, increased deposits placed with BIS reporting banks overshadowed a substantial rise in lending to emerging markets. This yielded a net outflow of \$9.8 billion in the third quarter (Graph 2.3). Greater lending contributed to net inflows of funds to emerging Europe, while growth in deposits with reporting area banks contributed to net outflows from Asia-Pacific and Latin America. Total gross claims on emerging markets rose by \$20.5 billion, the second largest quarterly expansion since the third quarter of 1997 (Table 2.3). At the same time, the liabilities of reporting area banks vis-à-vis emerging markets grew by \$30.4 billion as banks in Brazil, Russia, India and Taiwan, China increased deposits with BIS reporting banks.

#### *Claims on emerging markets shift into safer credits*

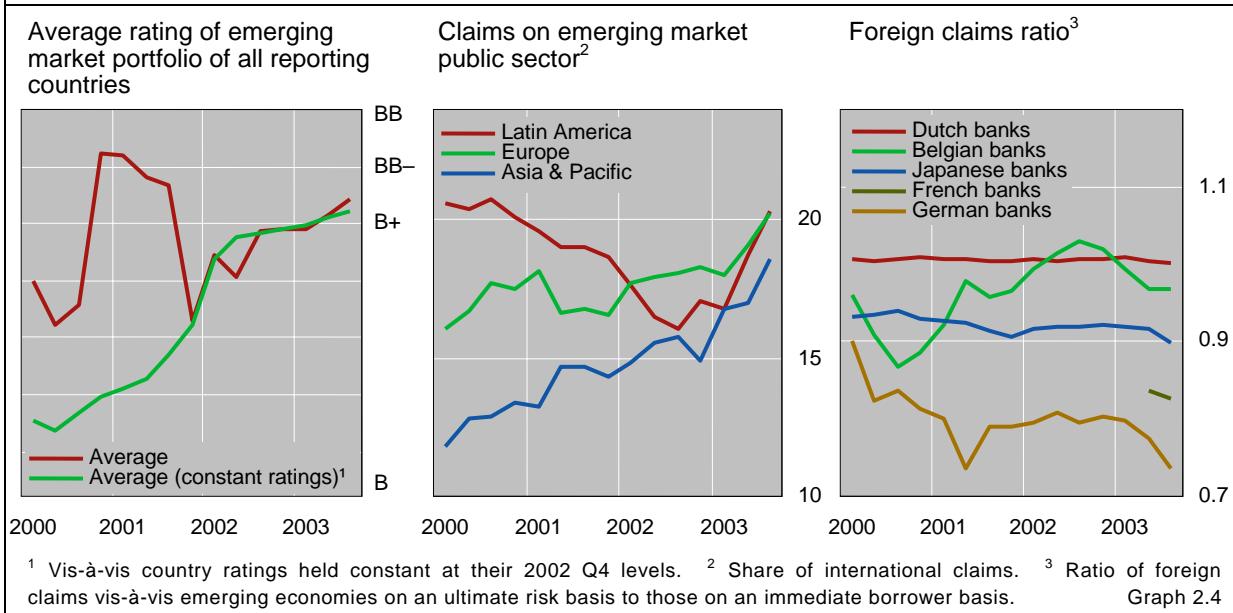
While increasing the overall size of claims on emerging markets, banks continued to move their emerging market portfolios out of riskier credits. This was evidenced by the persistence in the third quarter of three broad trends that had been observable over the previous year: a shift away from claims on Latin America, a portfolio shift towards public sector claims, and a fall in reporting banks' ultimate risk claims as a share of contractual claims on emerging markets (a measure of exposure).

The shift in claims on emerging markets towards regions with higher average credit ratings occurred even as the share of total claims flowing to

A discernible shift to safer emerging market credits ...



## Emerging market asset portfolios of BIS reporting banks



... shows up in improved average ratings ...

... and more lending to the public sector

emerging market borrowers remained stable. Claims on Latin America, which have an estimated (claim-weighted) average rating near Standard & Poor's B rating, fell to 28% of total claims on emerging markets, from 30% in the previous quarter and 31% in late 2002.<sup>7</sup> Over this same period, the share for Asia-Pacific (with close to a BB estimated rating) rose to 32% from 31% last quarter and that for emerging Europe (with between a BB and BB+ estimated rating) to 22% from 21% in the previous quarter. Overall, this shift to better-quality credits, both within and across emerging market regions, went hand in hand with a continued improvement in the average rating of reporting area banks' total emerging market portfolio. With the Standard & Poor's sovereign ratings of the emerging market vis-à-vis countries held constant at their 2002 Q4 levels, the average rating of the emerging market portfolio for all reporting countries has edged above B+ (Graph 2.4, left-hand panel).

Further indicating a move towards safer assets, banks in the reporting area continued to adjust their emerging market claim portfolios away from non-bank private sector borrowers and towards the public sector (Graph 2.4, centre panel). This shift took place against a backdrop of robust debt issuance by emerging market governments and falling spreads on emerging market debt. The BIS consolidated statistics, which net out inter-office claims, show that the share of claims on the non-bank private sector in emerging markets fell to 52% of total international claims on emerging markets in the third quarter of 2003, the third consecutive quarterly decline. At the same time, the share of claims

<sup>7</sup> The average rating of the emerging market portfolio is calculated as the weighted average of the Standard & Poor's sovereign ratings of all vis-à-vis countries to which banks in the reporting area lend. The weights are the share of ultimate risk claims on each vis-à-vis country in total ultimate risk claims. See the September 2003 issue of the *BIS Quarterly Review* for details of the calculation.

Cross-border bank flows to emerging economies									
Exchange rate adjusted changes in amounts outstanding, in billions of US dollars									
	Banks' positions <sup>1</sup>	2001		2002			2003		
		Year	Year	Q3	Q4	Q1	Q2	Q3	Stocks at end-Sep 2003
Total <sup>2</sup>	Claims	-27.0	-36.9	-0.3	-37.0	32.9	-3.5	20.5	963.1
	Liabilities	20.3	-45.9	-18.2	-11.0	10.9	-10.3	30.4	1,157.9
Argentina	Claims	-5.8	-11.8	-4.5	-2.3	-1.9	0.9	-5.3	25.5
	Liabilities	-16.7	0.0	0.3	0.2	0.6	0.1	-2.2	24.0
Brazil	Claims	0.9	-11.2	-3.5	-6.3	2.2	-1.7	1.0	90.7
	Liabilities	0.4	-8.0	-1.4	-4.3	3.3	6.6	7.7	59.4
China	Claims	-3.5	-12.4	4.1	-10.2	16.0	-6.4	4.9	60.5
	Liabilities	-6.5	-3.6	-1.0	-1.9	1.4	-11.3	1.6	86.6
Czech Rep	Claims	0.9	2.3	0.5	0.3	0.7	0.5	0.8	16.7
	Liabilities	3.4	-3.7	-1.3	-2.7	-1.8	0.1	0.2	10.5
India	Claims	-1.4	-0.1	0.1	-0.2	2.1	2.4	3.4	28.5
	Liabilities	0.7	-1.1	-0.4	-0.9	-1.7	3.4	6.8	33.9
Indonesia	Claims	-5.4	-6.0	-1.3	-1.2	-1.1	-1.0	-1.9	28.6
	Liabilities	1.1	-2.4	-0.2	-0.5	0.4	-0.1	-0.5	12.0
Korea	Claims	-0.2	8.2	6.5	-6.4	2.3	-2.0	-1.7	74.8
	Liabilities	1.7	0.5	-0.4	-4.8	-0.8	-6.1	1.8	26.9
Mexico	Claims	2.0	3.1	-1.9	0.0	-0.5	-0.1	0.8	65.4
	Liabilities	8.8	-11.4	-0.3	1.7	4.5	2.2	0.2	62.0
Poland	Claims	2.3	2.9	1.1	-0.4	0.9	0.9	1.1	30.9
	Liabilities	2.8	-3.1	-0.8	-2.5	0.8	-1.1	-1.2	16.5
Russia	Claims	1.3	3.6	-1.1	2.4	1.8	1.7	3.3	42.9
	Liabilities	5.2	9.6	4.0	2.0	5.6	-4.4	6.9	48.3
Thailand	Claims	-3.5	-5.0	-0.5	-1.8	-0.3	0.3	0.0	19.8
	Liabilities	1.3	-4.6	-1.4	-1.2	2.5	-0.9	0.9	14.2
Turkey	Claims	-12.0	-2.8	-2.1	-0.1	2.4	-0.5	3.5	43.1
	Liabilities	-2.1	0.0	-0.2	0.5	-3.9	1.5	1.0	18.9
<i>Memo:</i>									
EU accession countries <sup>3</sup>	Claims	6.3	10.1	3.4	3.3	5.7	1.4	5.8	110.9
	Liabilities	9.9	-6.4	-1.3	-5.4	-2.1	-1.2	1.9	63.2
OPEC members	Claims	-13.7	-9.8	-4.4	-8.2	-0.3	-6.4	-1.5	124.6
	Liabilities	-2.9	-8.8	-1.1	1.5	-5.2	-11.8	-9.1	233.8

<sup>1</sup> External on-balance sheet positions of banks in the BIS reporting area. Liabilities mainly comprise deposits. An increase in claims represents an inflow to emerging economies; an increase in liabilities represents an outflow from emerging economies. <sup>2</sup> All emerging economies. For details on additional countries, see Tables 6 and 7 in the Statistical Annex.

<sup>3</sup> Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

Table 2.3

on the public sector increased in all emerging market regions (except Africa and the Middle East), pushing the overall share to 19% from 18% in the second quarter and 16% a year earlier.

A final trend consistent with banks' heightened sensitivity to risk is the increase in the share of claims on emerging markets backed by third-party guarantees. The BIS consolidated data indicate that relatively large outward risk transfers led to a third consecutive quarterly decline in the ratio of ultimate risk claims to claims on an immediate borrower basis, from 92% in the second

quarter of 2003 to 91% in the third (Graph 2.4, right-hand panel). In particular, net risk transfers out of emerging Europe and the Middle East and Africa over the last year have been noteworthy. Reflecting activity vis-à-vis Russia, Poland, Turkey and Hungary, net risk transfers out of emerging Europe rose from \$25 billion in the second quarter of 2002 to \$37 billion in the third quarter of 2003.<sup>8</sup> Over this same time period, the ratio of ultimate risk to immediate borrower claims of German banks, the largest creditor banking system to emerging Europe, fell from 79% to 72%. Similarly, euro area banks were largely responsible for the change in the ratio of ultimate risk to immediate borrower claims on Africa and the Middle East; it declined from 98% in the first quarter of 2003 to 91.5% in the third, partially as a result of an increase in net risk transfers (from \$0.9 billion to \$4.2 billion).

#### *Net outflow from Latin America for the sixth quarter in a row*

Latin America experienced its sixth consecutive net outflow in the third quarter of 2003, due both to reduced lending to non-bank borrowers in the region and to increased deposits placed with banks in the reporting area. Despite a relatively steep fall in claims on the region (the ninth consecutive quarterly decline), the year-over-year rate of contraction in claims continued to fall, reaching 5.2% (from 7.2% in the previous quarter). At the same time, liabilities vis-à-vis Latin America rose by \$8.2 billion as both banks and non-banks in the region built up deposits with reporting area banks. Reduced claims on Argentine residents and increased deposits by Brazilian residents were noteworthy, while activity in most other countries was subdued.

Following a pickup in lending in the previous quarter, claims on Argentina fell by \$5.3 billion amidst the restructuring of several of the largest banks in the country. This was the largest quarterly decline in the BIS coverage period. Banks in offshore centres cut loans to the Argentine banking sector by \$2.9 billion, a partial reversal of increased credit in the previous quarter, while banks in the United States reduced loans to Argentine non-bank borrowers. Combined, this pushed claims on Argentina down to 9% of claims on the region, from 11% in the previous three quarters. Banks in Argentina also repatriated \$1.8 billion in deposits, primarily from banks in offshore centres, partially offsetting the reduction in claims.

As in the second quarter of 2003, banks in Brazil built up deposits in reporting area banks in the third quarter. Coinciding with a substantial expansion in issuance in capital markets by Brazilian residents, banks in Brazil deposited a total of \$5.1 billion with banks in the United States, the United Kingdom, offshore centres and the euro area, the third consecutive quarterly rise. Similarly, growth in the deposits of the Brazilian non-bank sector with banks in the United States and offshore centres led to a net outflow of \$6.7 billion, the second largest since the third quarter of 1999.

Restructuring  
reduces claims on  
Argentina ...

.. while banks in  
Brazil place  
deposits abroad ...

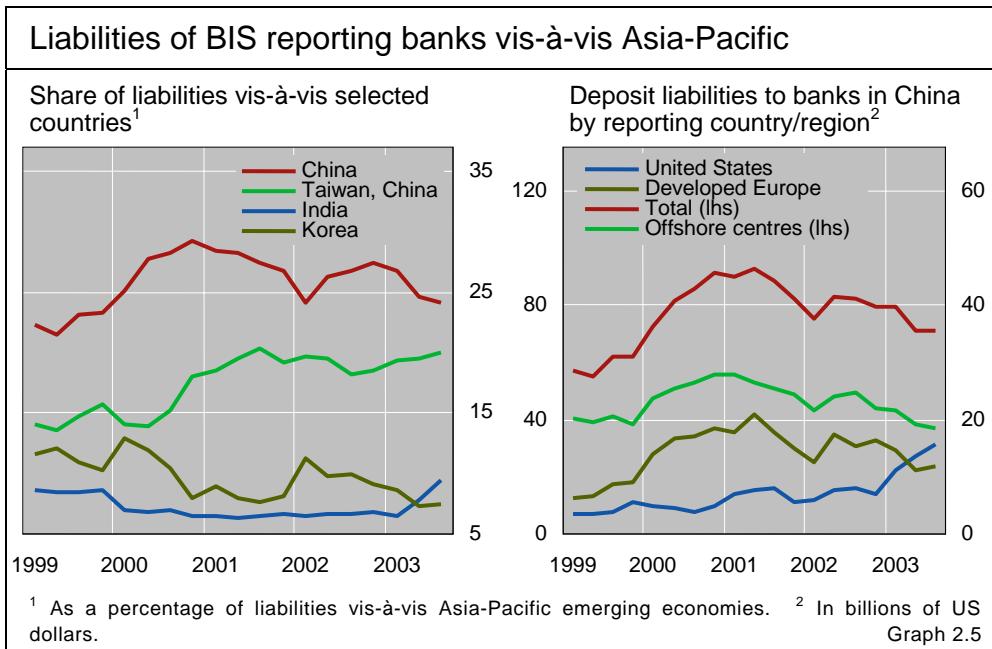
<sup>8</sup> These figures, and those for the Middle East and Africa which follow, exclude France as a reporting country because of recent reporting changes.

### *Increased deposits by banks in India drives net outflow from Asia-Pacific*

Increased deposits placed with reporting area banks slightly outpaced new lending to Asia-Pacific in the third quarter, yielding a modest net outflow of \$2.0 billion. Funds flowed out of Korea and India as banks in these countries boosted deposits abroad, and into Taiwan and China as lending to banks in these countries expanded. Overall, claims on non-bank borrowers in the region remained stable from the previous quarter. However, total claims on the region's banking sector grew by \$12.8 billion, the second largest increase since the first quarter of 1997.

Robust lending to banks in India was insufficient to counter a substantial rise in deposits placed with reporting area banks. As a result, India saw its largest net outflow in the BIS coverage period, at \$3.5 billion. Banks in India deposited a total of \$6.7 billion, mostly with banks in the United States, and pushed the liabilities vis-à-vis the country to \$33.9 billion.<sup>9</sup> At 9% of total liabilities vis-à-vis the region in the third quarter, liabilities to India surpassed those vis-à-vis Korean residents, placing India in third position behind China and Taiwan (Graph 2.5, left-hand panel). At the same time, claims on the Indian banking sector increased for the fourth consecutive quarter, by \$2.9 billion, as banks in offshore centres, the United Kingdom and the euro area extended new loans. Reflecting relatively robust lending to this sector over the past year, India accounted for 9% of all claims on the region in the third quarter, up from 8% in the previous quarter and 7% a year earlier. As a result, India overtook Malaysia, and is now tied with Indonesia as the fourth largest borrowing nation in the region.

... as do banks in India ...



<sup>9</sup> A portion of this probably reflected deposits of foreign currency reserves with banks abroad. Data from the Reserve Bank of India indicate that the approximate market value of official reserve assets and other foreign currency assets placed abroad increased from \$50 billion at end-June 2003 to \$55.5 billion by end-September.

Funds flowed into Taiwan for the second consecutive quarter, as increased claims on Taiwanese borrowers compensated for greater deposits placed with banks in the reporting area. Banks in the United States, the United Kingdom and offshore centres channelled a combined \$5 billion in new loans to banks in Taiwan, while banks in the United Kingdom also invested in equity and securities issued by Taiwanese non-bank borrowers. Combined, this pushed total claims on Taiwan to \$36.1 billion, or 12% of all claims on the region, from 10% in the previous quarter and 9% a year earlier.

The stock of net claims vis-à-vis the Chinese banking sector continued to move towards positive territory in the third quarter, reflecting the longer-term trend described in the December 2003 *Quarterly Review*. Increased lending to as well as deposit repatriations by banks in China contributed to the country's third consecutive net inflow, of \$3.3 billion. Banks in the United States and the United Kingdom channelled a combined \$3.7 billion in loans to banks in China, much of it denominated in US dollars. This pushed the share of claims on the Chinese banking sector to 24% of total claims on this sector in the region, from 23% in the previous quarter.

Contributing to the rise in the stock of net claims on China, deposits placed by the Chinese banking sector in the international banking system declined for the fifth consecutive quarter. The \$634 million net repatriation in the third quarter, although smaller than that in previous quarters, brought the net repatriation of deposits by the Chinese banking sector since the first quarter of 2001 to \$23 billion (see box on page 26). Much of this reflected an \$8 billion drop in US dollar deposits placed with banks in Europe, a \$6 billion decline in US dollar deposits with banks in Japan, and an \$11 billion contraction in Hong Kong dollar deposits placed with banks in Hong Kong SAR over this period. By contrast, deposits placed with banks located in the United States by the Chinese banking sector rose further; deposits totalled \$16 billion in the third quarter of 2003, up from \$13.5 billion in the previous quarter and \$7 billion in the first quarter of 2001 (Graph 2.5, right-hand panel).

#### *Record claims on emerging Europe drive fourth consecutive net inflow*

Increased claims overshadowed a rise in deposits placed abroad to produce a fourth consecutive net inflow into emerging Europe in the third quarter of 2003. While Russia continued to be a net contributor of funds to the international banking community, positive loan flows over the past year to the EU accession countries drove up the net stock of claims on the region (Graph 2.6, left-hand panel). Claims on the region rose by \$13.9 billion, the largest increase in the period covered by the BIS statistics, reflecting greater lending to all sectors from virtually every major banking system. Six billion dollars of this increase flowed to EU accession countries, with new claim flows to Turkey and Russia accounting for much of the rest. As a result, claims on emerging Europe reached 22% of total claims on emerging markets, up from 21% in the previous two quarters. Liabilities vis-à-vis the region also experienced a marked rise, of \$11.7 billion, again the largest in the BIS coverage period. This was mainly the result of increased deposits by banks in Russia with banks in the reporting area.

... while banks in China continue to repatriate

Robust lending to emerging Europe ...

## Tracing China's foreign exchange liquidity

Guonan Ma and Robert N McCauley

The underlying growth of China's official foreign exchange reserves accelerated in 2003, expanding by over \$100 billion or some 10% of the country's GDP. To some extent, this more rapid growth reflected China's shift from building up claims on the international banking system to drawing them down. The renewed inflow of international bank funds into China came in response to an increased demand there for foreign currency loans and to a reduced supply of foreign currency deposits as US dollar interest rates fell below their renminbi counterparts. This inflow in turn fuelled sales of dollars by the private sector to the authorities, helping to accelerate official foreign exchange growth. This box updates our earlier analysis of the sources of foreign currency liquidity in the official and banking sectors in China and traces its use in overseas securities markets.<sup>①</sup>

Transactions of Chinese residents with Chinese banks in foreign currency have shifted from building up net long dollar positions to reducing them since 2001, when US short-term interest rates began their fall to current low levels. Before 2001, households and firms were increasing their foreign currency deposits in banks in China, while firms were retiring foreign currency loans. Thereafter, households and firms slowed their accumulation of foreign currency deposits and in 2003 even reduced them. In 2002, firms in China again started rapidly to step up their borrowing in

### Changes in China's foreign currency liquidity flows

In billions of US dollars

	1999	2000	2001	2002	2003 <sup>1</sup>	1999–2003 <sup>1</sup>
Sources <sup>2</sup>	38.0	45.7	58.8	67.9	71.3	281.7
Foreign exchange reserves	9.7	10.9	46.6	74.3	97.5	239.0
Deposits in onshore banks <sup>3</sup>	15.4	26.4	7.9	15.8	–2.6	62.9
Less loans of onshore banks <sup>3</sup>	12.9	8.4	4.3	–22.2	–23.6	–20.2
Uses <sup>2</sup>	25.7	55.0	45.4	71.6	33.2	230.9
Net claims on BIS reporting banks	10.7	33.6	–4.2	5.8	–22.8	23.1
of which: on banks in Hong Kong SAR	3.8	14.4	–4.2	2.2	–7.2	9.0
Net purchases of US debt securities <sup>4</sup>	15.0	20.4	44.1	65.3	56.0	200.8
Treasury bonds and notes	8.2	–4.0	19.1	24.1	19.1	66.5
Agency bonds	8.3	18.8	26.0	29.3	24.3	106.7
Corporate bonds	0.5	0.8	6.7	6.0	3.5	17.5
Money market instruments	–2.0	4.8	–7.7	5.9	9.1	10.1
Net purchases of German securities	1.4	2.0	1.8	0.9	.	6.1
Net purchases of Japanese securities	–1.4	–1.0	3.7	–0.4	.	0.9

<sup>1</sup> To September 2003. <sup>2</sup> Sources do not include the corporate and non-deposit finance sectors; uses are also incomplete.

<sup>3</sup> At both domestic and foreign banks. A decline of onshore loans adds to sources, while an increase, as in 2002–03, subtracts from sources. <sup>4</sup> Latest US Treasury data suggest that for the full year 2003, Chinese official and banking sectors continued their net purchases of US Treasury (\$30.5 billion), agency (\$29.6 billion) and corporate (\$4.6 billion) debt securities.

Sources: The People's Bank of China; Deutsche Bundesbank; Hong Kong Monetary Authority; Bank of Japan; US Treasury; BIS; authors' estimates.

<sup>①</sup> See our articles "Following Chinese banks' foreign currency liquidity", *BIS Quarterly Review*, June 2002, pp 18–19, and "Opening China's capital account amid ample dollar liquidity", in *China's capital account liberalisation: international perspectives*, *BIS Papers*, no 15, April 2003, pp 25–34.

foreign currency. These shifts came in response to the decline of US short-term interest rates to levels below their Chinese equivalents.<sup>2</sup> Any consideration of possible revaluation gains on long renminbi/short dollar positions only added to the interest rate incentives to acquire renminbi deposits or borrow dollars.

Accommodating this shift, BIS area banks went from acting as an outlet for surplus dollars in China to serving as a source of dollars needed to fund foreign currency loan growth in the country, against the background of reduced domestic deposits of foreign currency by Chinese residents. In particular, China swung from providing \$6 billion to the international banking system in 2002 to withdrawing \$23 billion in the first three quarters of 2003 (both figures are adjusted for exchange rate changes). Such dollar borrowing can increase official reserves either as a result of direct dollar sales against the renminbi by the Chinese non-bank sector or, more indirectly, by financing their delayed payments for imports and accelerated receipts from exports.

Where did China's foreign currency liquidity go? Publicly available data pertain to the sum of investments by China's private sector, largely its banking system, and its official sector. On this basis, it is evident that much of China's surplus foreign currency liquidity flowed into US debt securities in the first three quarters of 2003. In particular, the US Treasury reports that Chinese residents balanced their purchases of US Treasury and agency securities. Purchases of corporate bonds in the United States continued, and purchases of money market instruments also increased.

For the first three quarters of 2003, a wider gap than usual opened up between the sources and uses of China's foreign currency. To some extent, sources are overstated by the effect of the stronger euro and yen on the change in official reserves. In addition, the flow of Chinese funds into German and Japanese securities in 2003 remains to be reported, and even then these uses capture only a limited range of non-dollar investments.

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<sup>2</sup> See our article "Rising foreign currency liquidity of banks in China", *BIS Quarterly Review*, September 2002, pp 67–73, for evidence of the sensitivity of foreign currency deposits in China to interest rate differentials.

The expansion in claims on non-bank borrowers was sizeable. Total claims on this sector rose by \$8.3 billion, as banks in the reporting area, primarily in the United Kingdom, Germany, Austria and offshore centres, channelled \$4.7 billion in new loans to non-bank borrowers, mainly in Turkey, Russia and, to a lesser extent, Poland. This constituted the sixth consecutive quarterly increase in loans to these borrowers in Russia, and the second largest rise in loans to Turkish non-bank borrowers in the BIS coverage period (\$1.8 billion).

... is partly  
investment in public  
sector debt

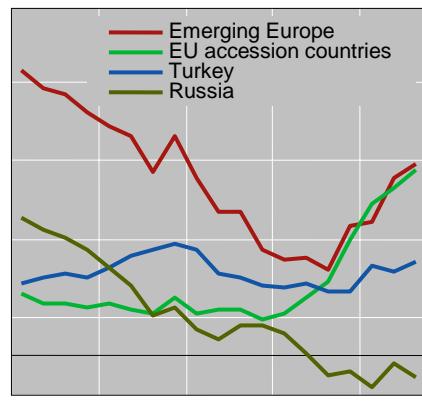
This expansion in claims was partially the result of investment in public sector debt securities. Investment in international debt securities rose by \$3.2 billion, driven by increased claims on the non-bank sector in Hungary, Russia and Poland. The BIS consolidated statistics, which net out inter-office positions, indicate that US banks channelled funds to the Russian public sector, while German banks stepped up their lending to this sector in Hungary and Poland. As a result, international claims on the region's public sector rose to 20% of total international claims, from 19% in the previous quarter and 18% in the preceding four quarters.

Following three consecutive quarterly contractions, liabilities vis-à-vis the region rose dramatically in the third quarter, fuelled primarily by an expansion in deposits placed with reporting area banks. Banks in the region deposited an

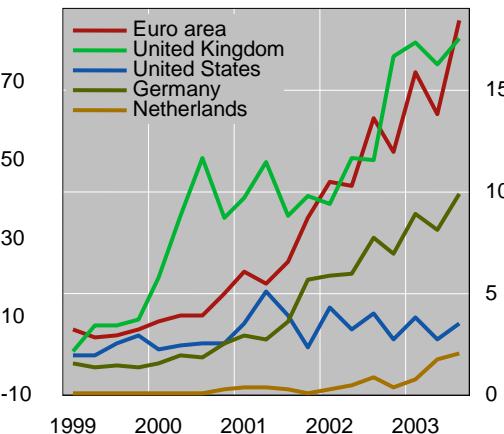
## Cross-border positions vis-à-vis European emerging economies

In billions of US dollars

Net claims vis-à-vis selected countries<sup>1</sup>



Deposit liabilities to Russia



<sup>1</sup> Changes in claims minus changes in liabilities.

Graph 2.6

additional \$10.3 billion abroad, with a \$7.3 billion increase by banks in Russia the driving factor. These banks increased euro-denominated deposits in Germany by \$1.3 billion, and US dollar deposits in France and other euro area countries by \$2.4 billion. Deposits placed abroad by banks in Russia have risen in every quarter (except three) since end-1998 (Graph 2.6, right-hand panel), pushing total liabilities of reporting area banks vis-à-vis banks in Russia to \$41 billion (third behind the Chinese and Taiwanese banking sectors).<sup>10</sup>

<sup>10</sup> Total liabilities vis-à-vis all sectors in Russia increased to \$48 billion in the third quarter and now rank fifth among emerging markets, behind China, Taiwan (China), Mexico and Brazil.

## International syndicated credits in the fourth quarter of 2003

*Blaise Gadanez*

Activity on the market for international syndicated loans rebounded in the last quarter of 2003. Signings of new facilities totalled \$347 billion, which represented a 17% rise from the previous quarter on a seasonally adjusted basis. The year ended on an unusually strong note for borrowers from both industrialised countries and emerging markets. After a long period of stagnation, deals arranged to finance management and leveraged buyouts picked up in the second half of 2003.

In the United States, as the economic outlook improved, lending recovered from the historical low of the previous quarter. At \$167 billion, activity was stronger than a year earlier, mainly directed to the energy sector. The investment grade segment accounted for a sizeable 47% of lending. Spreads became narrower on loans priced off the US prime rate.

Refinancing and M&A-related funding for western European borrowers was buoyant. European borrowers, in particular Italian ones, were most active on the LBO market: some of the largest amounts were obtained by Seat Pagine Gialle SpA, a business directory publisher (€4.4 billion) and FiatAvio SpA, the aerospace division of Fiat (€1.3 billion). Activity was further boosted by large-scale refinancings among vehicle manufacturers such as BMW (\$7 billion) and electricity firms (Germany's E.ON AG and RWE and Italy's Enel rolled over a combined total of €12.5 billion). The auto and energy industries helped bring syndicated lending to German, Italian, Finnish and Spanish entities to record highs for 2003 as a whole.

Japanese activity was consistent with historical levels, as international deals totalled \$5 billion. However, it should be noted that large Japanese firms – such as Mitsubishi Corp and Fujitsu Ltd, which raised the largest amounts in the fourth quarter – still commonly rely on purely domestic syndicates, which are not captured in the international data compiled by the BIS.

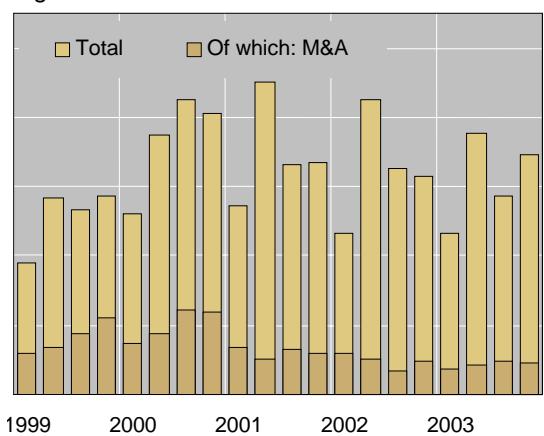
Lending to emerging markets was only slightly above the previous quarter's high volume, but rose by 53% from one year earlier. Spreads on emerging country loans narrowed in the second half of 2003. In the fourth quarter, a slight year-on-year reduction in Asian volumes was more than offset by strong year-on-year growth in the three other main regions. For 2003 as a whole, this brought international syndicated lending to emerging market borrowers to its highest level since 2000, albeit still far from the pre-Asian crisis peak observed in 1997.

Business was strongest in eastern Europe but Latin American borrowers were also active. Borrowing by a Czech telecoms firm and by Polish, Hungarian and Russian oil companies, as well as refinancing by Turkish banks, boosted eastern European business to a three-year high of \$9 billion. Pemex, the Mexican oil corporation, arranged a \$2.3 billion multicurrency facility. This included the largest international syndicated loan tranche to date denominated in Mexican pesos. The company also raised funds on international securities markets (see "The international debt securities market" on page 31).

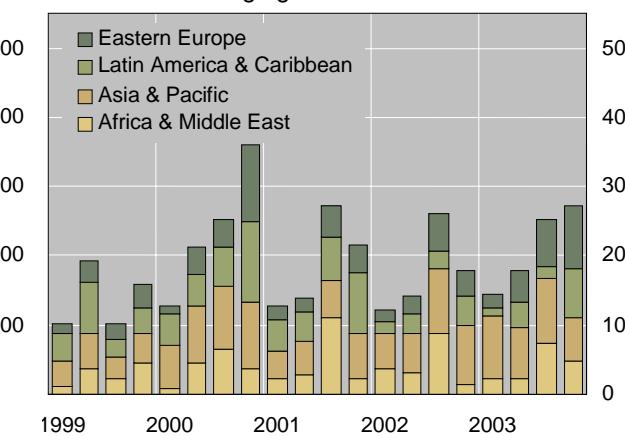
### Activity in the international syndicated credit market

In billions of US dollars

#### Signed facilities



#### Facilities for emerging economies



Sources: Dealogic Loanware; BIS.

