Patrick McGuire

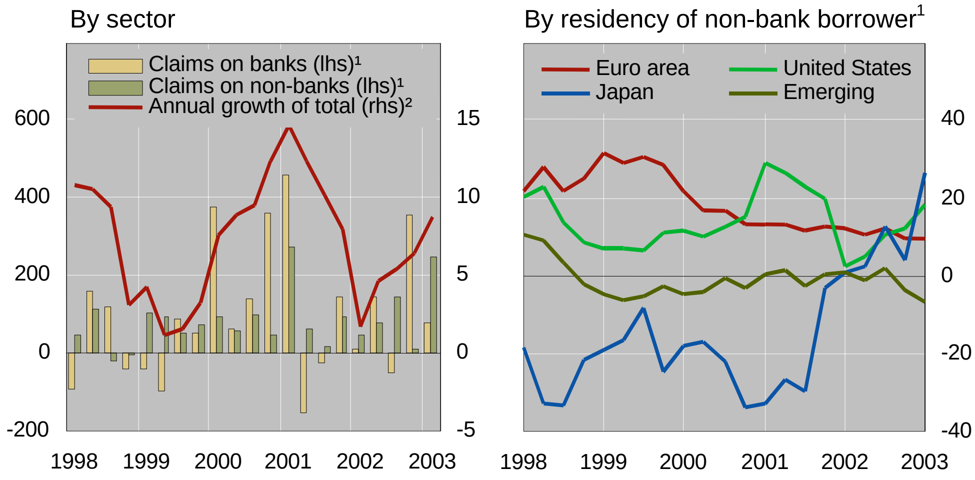
*+41 61 280 8921*
*patrick.mcguire@bis.org*

# 2. The international banking market

Lending to non-bank borrowers drove claim flows in the international banking market in the first quarter of 2003, largely in the form of repo activity, intragroup lending and lending to governments. Extending a trend evident since mid-2002, and reflecting subdued economic growth, banks in many developed countries shifted their consolidated loan portfolios away from non-bank private sector borrowers. In addition, many banking systems continued to reduce claims on borrowers in the lower-rated developing countries, as evidenced by gradual improvements in the average credit ratings of their consolidated emerging market portfolios.

Emerging markets saw an inflow of funds driven by robust lending to banks, although regional differences remained apparent. The net outflow from Latin America continued, reflecting deposit movements and contractions in claims on non-banks in Mexico, Brazil and Argentina. This was more than offset by net inflows to the Asia-Pacific region, mainly the result of increased claims on the Chinese banking sector. Countries in emerging Europe, particularly those in accession negotiations with the European Union, were again recipients of additional bank lending.

**Cross-border claims by sector and residency**




[1] Exchange rate adjusted changes in amounts outstanding, in billions of US dollars. [2] 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. Graph 2.1

## Non-bank claims reflect repo activity and lending to governments

Lending to non-bank borrowers dominated movements in the first quarter of 2003, accounting for two thirds of the growth in claims of BIS reporting banks. Much of this resulted from increases in repo activity and claims on the public sector. In seasonally unadjusted terms, the outstanding stock of total cross-border claims rose by $341.4 billion, to $14 trillion (Table 2.1), boosting the year-over-year growth in claims to 9% from 6% in the last quarter of 2002 (Graph 2.1).

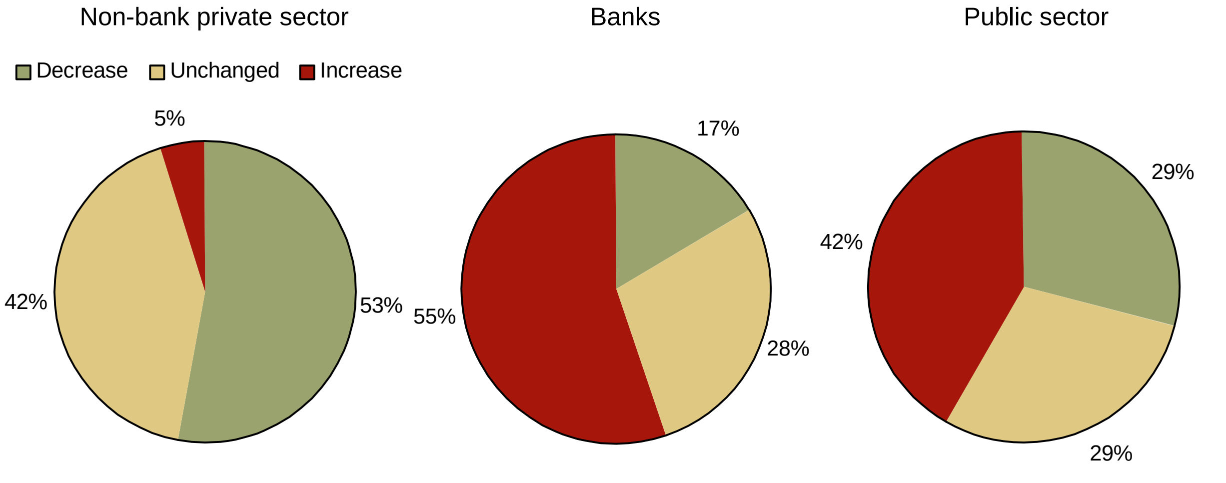
Parked funds flow out of the interbank market ...

Following a large expansion in interbank lending in the previous quarter, lending to other sectors picked up in the first quarter of 2003. For every dollar that had passed between banks in the fourth quarter of 2002, 66 cents flowed to non-bank customers in the first quarter of 2003. Such patterns of alternating growth have been characteristic of the sectoral distribution of claim flows throughout the period covered by the BIS statistics; a periodic swelling in the interbank market often leads to increases in lending to corporate and other borrowers in later periods. As shown in Table 2.1, this pattern was evident on a quarterly basis throughout 2002.

While growth in claims on the non-bank private sector can indicate a pickup in corporate lending, the rise in the first quarter of 2003 was largely explained by greater repo activity, as banks financed securities firms, and lending to governments. Roughly 43% of the total growth in claims on corporate and other non-bank borrowers was accounted for by banks in the United Kingdom, whose claims on this sector rose by $99 billion, their largest increase in the period covered by the BIS statistics. Sixty per cent of these claims, or $59 billion, flowed to non-bank borrowers in the United States, largely the result of increased loans to affiliated securities houses and the realisation of short positions. An additional $18 billion reflected intragroup lending with counterparties in Japan and purchases of Japanese government securities.

### Consolidated international claims of BIS reporting banks

Share of developed reporting countries with sectoral portfolio shifts




Note: The charts show the percentage of developed reporting countries with quarterly changes in the sectoral share of international claims greater than or equal to 1 percentage point. Calculations are based on banks headquartered in the reporting country.

Graph 2.2

## Cross-border claims of BIS reporting banks

Exchange rate adjusted changes in amounts outstanding, in billions of US dollars[1]

| | 2001 | 2002 | 2002 | | | | 2003 | Stocks at end-March 2003 |
|---|---|---|---|---|---|---|---|---|
| | Year | Year | Q1 | Q2 | Q3 | Q4 | Q1 | |
| Total claims | 859.4 | 740.8 | 57.3 | 225.9 | 94.3 | 363.4 | 341.4 | 13,991.6 |
| By instrument | | | | | | | | |
| Loans and deposits | 612.2 | 500.3 | –0.6 | 83.6 | 3.0 | 414.3 | 259.0 | 10,505.2 |
| Securities[2] | 247.2 | 240.5 | 57.9 | 142.3 | 91.3 | –50.9 | 82.4 | 3,486.4 |
| By currency | | | | | | | | |
| US dollar | 422.7 | 320.9 | 49.5 | 183.7 | –114.4 | 201.9 | 93.5 | 5,771.7 |
| Euro | 439.6 | 463.0 | 44.3 | 98.5 | 201.1 | 119.1 | 231.7 | 4,867.2 |
| Yen | –65.5 | –40.0 | –81.4 | 5.4 | 14.0 | 22.0 | –16.7 | 720.7 |
| Other currencies[3] | 62.5 | –2.9 | 44.8 | –61.7 | –6.4 | 20.4 | 32.9 | 2,632.0 |
| By sector of borrower | | | | | | | | |
| Banks | 417.3 | 459.9 | 9.5 | 146.4 | –49.3 | 353.4 | 108.2 | 9,108.9 |
| Non-banks | 442.1 | 280.9 | 47.8 | 79.5 | 143.6 | 10.0 | 233.3 | 4,882.6 |
| By residency of non-bank borrower | | | | | | | | |
| Advanced economies | 384.8 | 283.9 | 44.6 | 46.6 | 129.5 | 63.3 | 164.4 | 3,746.1 |
| Euro area | 139.0 | 115.9 | 51.5 | 8.4 | 48.6 | 7.4 | 52.2 | 1,655.9 |
| Japan | –3.7 | 4.1 | –2.3 | 6.3 | –0.4 | 0.5 | 21.8 | 145.8 |
| United States | 183.4 | 136.0 | –17.3 | 40.1 | 55.5 | 57.6 | 32.2 | 1,307.6 |
| Offshore centres | 55.0 | 17.9 | –7.7 | 36.9 | 16.8 | –28.1 | 78.4 | 564.7 |
| Emerging economies | 2.5 | –17.4 | 9.3 | –4.9 | 2.4 | –24.3 | –7.7 | 508.7 |
| Unallocated[4] | –0.1 | –3.5 | 1.5 | 0.8 | –5.0 | –0.9 | –2.3 | 63.1 |
| *Memo: Local claims*[5] | *76.4* | *38.6* | *69.8* | *–40.3* | *–26.5* | *35.6* | *184.8* | *1,941.9* |

[1] Not adjusted for seasonal effects. [2] Mainly debt securities. Other assets account for less than 5% of total claims outstanding. [3] Including unallocated currencies. [4] Including claims on international organisations. [5] Foreign currency claims on residents of the country in which the reporting bank is domiciled. Table 2.1

... reflecting increased repo and intragroup activity

Banks in the United States were also active in the first quarter of 2003. Overall, their claims rose by $65.6 billion, the largest expansion since the fourth quarter of 2001. Growth in claims on the non-bank private sector drove the increase, and largely stemmed from a rise in repo activity with broker-dealers in offshore centres and in the United Kingdom. Excluding these claims, lending to corporate and other non-bank borrowers by banks in the United States actually declined for the second consecutive quarter, this time by $14.3 billion. This was partially the result of a $5 billion reduction in credit to euro area borrowers, particularly in Germany and Spain.

More restrained lending to corporations seems to have mirrored the depressed global economic conditions and rallying bond markets in the first quarter of 2003.[1] Excluding loans granted by banks in the United States and the United Kingdom, loans to non-bank borrowers rose by $7.2 billion, less than the $25 billion and $46 billion increases in the third and fourth quarters of 2002 respectively. In addition, the BIS consolidated statistics, which net out

[1] See the Overview in the June 2003 issue of the *BIS Quarterly Review*.

inter-office positions, indicate that reporting area banks shifted away from corporate lending in the first quarter of 2003. Reporting area banks' consolidated international claims on the non-bank private sector stood at $3.8 trillion, or 40% of total consolidated international claims. Ten out of the 19 developed reporting countries experienced portfolio shifts away from claims on corporate and other non-bank private sector borrowers in the first quarter, while only Italian banks channelled assets towards these borrowers (Graph 2.2).

European banks channel funds to the banking and public sectors

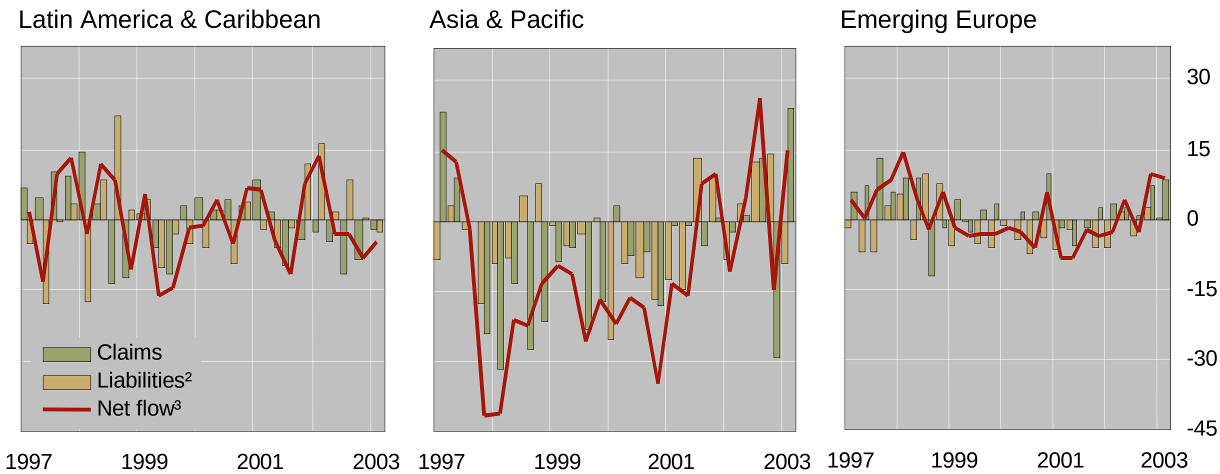
The shift away from lending to the corporate sector was most pronounced among European banks. Their contractual claims on the non-bank private sector totalled $2.8 trillion, or 47% of their total consolidated international claims (down from 48% the previous quarter). The claims of Belgian and Portuguese banks on non-bank corporate borrowers in developed Europe fell, as did Swedish banks' claims on this sector in the United States. In other European countries, increases in claims on corporate borrowers were overshadowed by even larger increases in claims on the banking and public sectors: Austrian, Danish, Finnish, UK and Swiss banks all reduced their share of loans to the non-bank private sector. German banks' claims on this sector remained relatively stable, at 50% of their total consolidated international claims, while those of French banks fell to 54%, down from 56% a year earlier.

## Net inflow into emerging markets masks regional differences

The net flow of funds into emerging markets from banks in the BIS reporting area was positive in the first quarter of 2003, although regional differences were apparent (Graph 2.3). Total claims on emerging markets rose by $29 billion, the largest expansion since the first quarter of 1997. However, this reflected unusually large increases in claims on the Chinese banking sector.

### Net bank flows to emerging economies[1]

Exchange rate adjusted changes in amounts outstanding, in billions of US dollars




[1] A positive value represents an inflow to emerging economies from banks in the BIS reporting area, and a negative value an outflow from emerging economies. [2] A positive value indicates a decrease in BIS reporting banks' liabilities vis-à-vis emerging economies, and a negative value an increase. [3] Changes in claims minus changes in liabilities. Graph 2.3

Claims on emerging Europe rose for the sixth consecutive quarter, while claims on Latin America continued to fall. As discussed in the next section, the riskiness of reporting area banks' asset portfolios has fallen in recent years as they have shifted out of claims on emerging markets. These claims remained below 7% of total claims for a second consecutive quarter, down from an average of 8% in 2001 and 9% in 2000.

*Outflow from Latin America continues*

Rate of contraction in claims on Latin America stabilises ...

While the rate of contraction in claims on borrowers in Latin America appeared to stabilise in the first quarter of 2003, claims on the region sank below 30% of total claims on emerging markets for the first time since 1999. Total claims fell to $272 billion, leaving the year-over-year rate of contraction in claims at 9.5%, unchanged from the preceding quarter. This contributed to a net outflow of funds for the fourth consecutive quarter, this time by $4.6 billion. Following two quarters of decline, claims on banks rose by $1.9 billion, the largest increase for this sector since the first quarter of 2001. However, claims on corporations and other non-bank entities fell by $3.9 billion, pushing the year-over-year rate of contraction in claims on this sector to 8% from 5% in the previous two quarters. In addition, syndicated loan signings by borrowers in Latin America shrank to a historical low of $2.5 billion in the first quarter of 2003, or 15% of total signings by borrowers in emerging markets (down from an average of 33% since 1999).

... despite net outflows from Mexico, Brazil and Argentina

The net outflow from Mexico was the largest in the region, at nearly $4 billion, and was driven by increased deposits in reporting area banks. Banks in Mexico deposited $2.3 billion in funds, primarily in banks in offshore centres. At the same time, a $1.2 billion reduction in claims on Mexican non-bank borrowers was partially offset by an expansion in claims on banks in Mexico, leaving total claims on Mexican borrowers down slightly from the previous quarter.

The $2.2 billion net outflow from Brazil also resulted from a relatively large increase in deposits abroad. Banks in Brazil deposited $3.6 billion with reporting area banks, mainly in the United States and United Kingdom. Following three consecutive contractions, claims on Brazil rose by $1.4 billion, as new credit to the Brazilian banking sector more than offset a reduction in claims on non-banks.

Unlike in Mexico and Brazil, the fifth consecutive quarter of net outflows from Argentina resulted from reduced lending to both bank and non-bank borrowers. Claims on banks and non-banks contracted by $0.7 billion and $1.1 billion respectively, pushing total claims on Argentina down to $29.6 billion, or 64% of their second quarter 2001 level. Banks in many reporting countries cut back their short-term claims on Argentina, with banks in the United States again reducing exposure the most.

In the midst of economic turmoil in the first quarter of 2003, Venezuela experienced its largest net inflow since the third quarter of 2001. Venezuelan banks repatriated deposits, primarily from banks in the United States, driving a $2 billion net inflow. A relatively large $0.9 billion contraction in claims on the

## Cross-border bank flows to emerging economies

Exchange rate adjusted changes in amounts outstanding, in billions of US dollars

| | Banks' position[1] | 2001 | 2002 | 2002 | | | | 2003 | Stocks at end-March 2003 |
|---|---|---|---|---|---|---|---|---|---|
| | | Year | Year | Q1 | Q2 | Q3 | Q4 | Q1 | |
| Total[2] | Claims | –27.0 | –37.6 | –0.8 | 1.1 | –0.3 | –37.6 | 28.7 | 930.9 |
| | Liabilities | 20.3 | –46.4 | –10.4 | –6.4 | –18.4 | –11.2 | 8.6 | 1,122.6 |
| Argentina | Claims | –5.8 | –11.8 | –4.3 | –0.8 | –4.5 | –2.3 | –1.9 | 29.6 |
| | Liabilities | –16.7 | –0.1 | –1.0 | 0.5 | 0.3 | 0.2 | 0.5 | 25.9 |
| Brazil | Claims | 0.9 | –11.3 | 1.0 | –2.4 | –3.5 | –6.4 | 1.4 | 89.4 |
| | Liabilities | 0.4 | –8.0 | 1.4 | –3.8 | –1.4 | –4.2 | 3.6 | 44.6 |
| Chile | Claims | 0.2 | 0.5 | –0.3 | –0.5 | –0.1 | 1.3 | –0.1 | 19.9 |
| | Liabilities | –1.0 | –1.1 | 0.2 | –0.8 | –0.8 | 0.3 | –1.2 | 15.2 |
| China | Claims | –3.5 | –12.4 | –7.3 | 1.0 | 4.1 | –10.2 | 15.9 | 60.4 |
| | Liabilities | –6.5 | –3.6 | –7.1 | 6.4 | –1.0 | –1.9 | 1.2 | 94.5 |
| Indonesia | Claims | –5.4 | –6.0 | –1.3 | –2.1 | –1.3 | –1.2 | –1.1 | 30.4 |
| | Liabilities | 1.1 | –2.4 | –1.4 | –0.3 | –0.2 | –0.5 | 0.4 | 12.4 |
| Korea | Claims | –0.2 | 8.2 | 6.4 | 1.8 | 6.5 | –6.4 | 2.1 | 76.6 |
| | Liabilities | 1.7 | 0.5 | 11.4 | –5.6 | –0.4 | –4.8 | –0.9 | 30.4 |
| Mexico | Claims | 2.0 | 3.1 | 3.3 | 1.7 | –1.9 | –0.1 | –0.6 | 64.2 |
| | Liabilities | 8.8 | –11.4 | –14.1 | 1.3 | –0.3 | 1.7 | 3.4 | 58.1 |
| Russia | Claims | 1.3 | 3.6 | 1.4 | 0.8 | –1.1 | 2.4 | 1.2 | 36.6 |
| | Liabilities | 5.2 | 9.6 | 3.6 | 0.0 | 4.0 | 2.0 | 5.7 | 45.1 |
| Saudi Arabia | Claims | –2.4 | –5.4 | 0.0 | 0.5 | –1.8 | –4.2 | 1.0 | 20.5 |
| | Liabilities | –9.7 | –2.1 | –5.4 | –0.1 | 1.4 | 2.0 | 5.8 | 57.2 |
| South Africa | Claims | –0.4 | –0.4 | –1.5 | 0.2 | –0.6 | 1.5 | –0.3 | 18.3 |
| | Liabilities | 2.1 | 2.7 | 0.3 | 1.3 | –0.4 | 1.4 | 0.6 | 21.7 |
| Thailand | Claims | –3.5 | –5.0 | –2.2 | –0.5 | –0.5 | –1.8 | –0.4 | 18.7 |
| | Liabilities | 1.3 | –4.6 | –0.7 | –1.3 | –1.4 | –1.2 | 2.5 | 13.9 |
| Turkey | Claims | –12.0 | –2.8 | 0.9 | –1.5 | –2.1 | –0.1 | 1.5 | 38.2 |
| | Liabilities | –2.1 | 0.0 | 1.6 | –1.9 | –0.2 | 0.5 | –4.0 | 15.9 |
| *Memo:* | | | | | | | | | |
| *EU accession countries*[3] | *Claims* | *6.3* | *10.1* | *1.4* | *1.9* | *3.4* | *3.3* | *5.3* | *98.8* |
| | *Liabilities* | *9.9* | *–6.4* | *–0.2* | *0.5* | *–1.3* | *–5.4* | *–2.2* | *60.6* |
| *OPEC members* | *Claims* | *–13.7* | *–10.1* | *3.4* | *–0.6* | *–4.4* | *–8.5* | *–0.2* | *126.2* |
| | *Liabilities* | *–2.9* | *–9.2* | *–6.2* | *–3.1* | *–1.2* | *1.3* | *–5.1* | *245.3* |

[1] External on-balance sheet positions of banks in the BIS reporting area. Liabilities mainly comprise deposits. An increase in claims represents an inflow into emerging economies; an increase in liabilities represents an outflow from emerging economies. [2] All emerging economies. For details on additional countries, see Tables 6 and 7 in the Statistical Annex. [3] Countries in accession negotiations with the European Union (excluding Turkey), ie Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. Table 2.2

Venezuelan non-bank sector was largely offset by increased lending to the country's banking sector. As a result, total claims on Venezuelan borrowers stood at $15 billion, or 6% of total claims on the region (up from 5% a year earlier).

*Net flows to Asia-Pacific region through repos with the US*

Flows into the Asia-Pacific region returned to positive territory in the first quarter of 2003, despite contractions in claims on corporate and other non-bank borrowers. Relatively large increases in claims on a few countries led to a

$15 billion net inflow, the second largest since the first quarter of 1997. This largely reflected a $27 billion expansion in claims on the region's banking sectors, primarily in China, Taiwan (China) and Korea. As a result, the share of claims on the Asia-Pacific region in total claims on emerging markets rose to 31% in the first quarter, closer to the 32.5% average share since early 1999, and surpassed claims on Latin America as the largest emerging market exposure of reporting area banks.

Repo activity with banks in China drives claims

The net inflow to the region was primarily attributable to activity vis-à-vis China. Claims on China rose by $16 billion, three quarters of which flowed to the Chinese banking sector from banks in the United States and United Kingdom. Much of this stemmed from a resumption of repo activity with banks in the United States after a slowdown in the fourth quarter of 2002, partially the result of banks in China funding an increase in foreign currency lending in the first quarter of 2003 through the repo market rather than through the interbank market.

Claims on Taiwanese banks also increased in the first quarter, although this was largely offset by reductions in claims on corporate and other borrowers and by growth in residents' deposits with reporting area banks. Total claims on the Taiwanese banking sector rose by $6.5 billion, the largest increase in the period covered by the BIS statistics. This was mainly the result of a resumption of inter-office activity and repo agreements by banks in the United States, which had waned in the fourth quarter of 2002. In addition, a reclassification of loans from banks in the United States contributed to the rise in claims on the Taiwanese banking sector, and to the $1.9 billion drop in claims on non-bank borrowers.

Banks in the United States were mainly responsible for the net inflow into banks in Korea. Claims on the Korean banking sector rose by $5.6 billion, while credit to non-bank borrowers contracted by $3.6 billion, both partially reflecting a reclassification of loans by banks in the United States. Excluding claims from these banks, credit to corporate and other non-bank customers remained stable from the previous quarter, while $1.4 billion in additional funds flowed into the banking sector.

### *Net inflow to emerging European economies continues*

The emerging European economies experienced a second consecutive net inflow in the first quarter of 2003, nearly as large as in the previous quarter. This resulted from an increase in claims, two thirds of which flowed to countries in EU accession negotiations, although movements in deposits by certain countries played a role as well. Claims on the region rose by $8.4 billion, as reporting area banks extended credit to both the banking ($5.2 billion) and non-bank sectors ($3.3 billion).

Banks send funds into virtually all EU accession countries

Claims on all but one of the EU accession countries (Latvia) rose in the first quarter of 2003, with claims on Hungary, Poland and Cyprus expanding the most. Reflecting increased loans from banks in the Netherlands, Austria and Germany, claims on Hungary rose by $1.4 billion. In addition, banks in Hungary repatriated $1.3 billion in deposits from European banks, contributing to a $2.7 billion net inflow, the largest for Hungary in the BIS reporting period.

Elsewhere in the emerging European region, growth in US dollar and euro deposits led to a large outflow from Russia. Banks in Russia deposited a total of $5.5 billion with banks in the United States, Germany, France and other euro area countries, the largest deposit movement for Russia since the BIS statistics were introduced. Although partially offset by $1.7 billion in loans from banks in Germany to Russian non-bank borrowers, this increase in deposits contributed to a $4.5 billion net outflow from the country.

## Country risk edges lower with reduced emerging market exposure

Consistent with the shift towards safer assets described in recent issues of the *BIS Quarterly Review*, the country risk inherent in the exposures of reporting area banks seems to have declined for many of the major banking systems. This decline is the result of reduced exposure to emerging market borrowers, as well as reduced exposure to riskier countries *within* emerging markets.

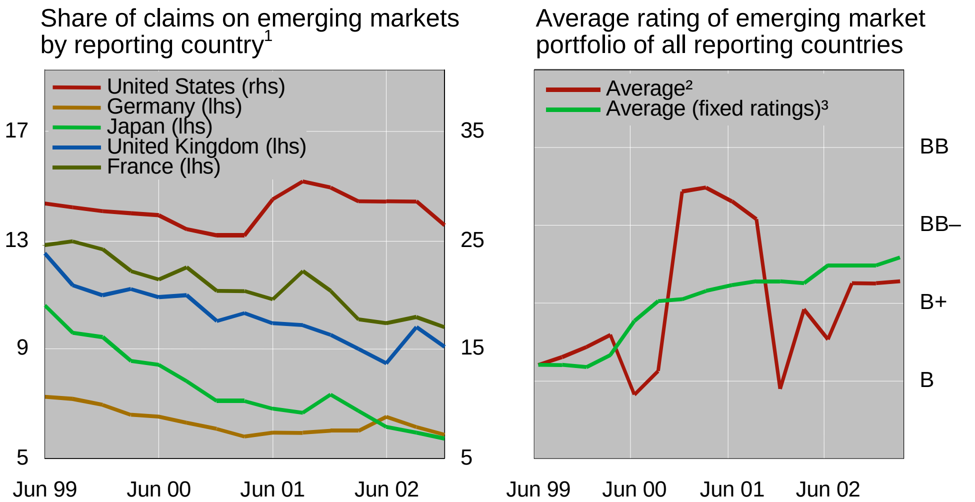
For present purposes, country risk is represented by sovereign ratings, which measure the potential loss on assets held in a foreign country, typically an emerging market, due to a deterioration in political or economic conditions in that country. Since a potential default by an emerging market government is often the source of financial market turbulence, a weighted average of sovereign bond ratings of all emerging market borrowers of a particular reporting country is a rough, but illustrative, statistic for tracking the country risk of a particular banking system (see the box on page 22).

### *Banks shift out of emerging markets*

Country risk falls with reduced exposure to emerging markets

Country risk seems to have fallen consistently in recent years, in part as a consequence of reduced exposure to emerging markets. The share of ultimate risk claims flowing to emerging markets, which typically have higher country

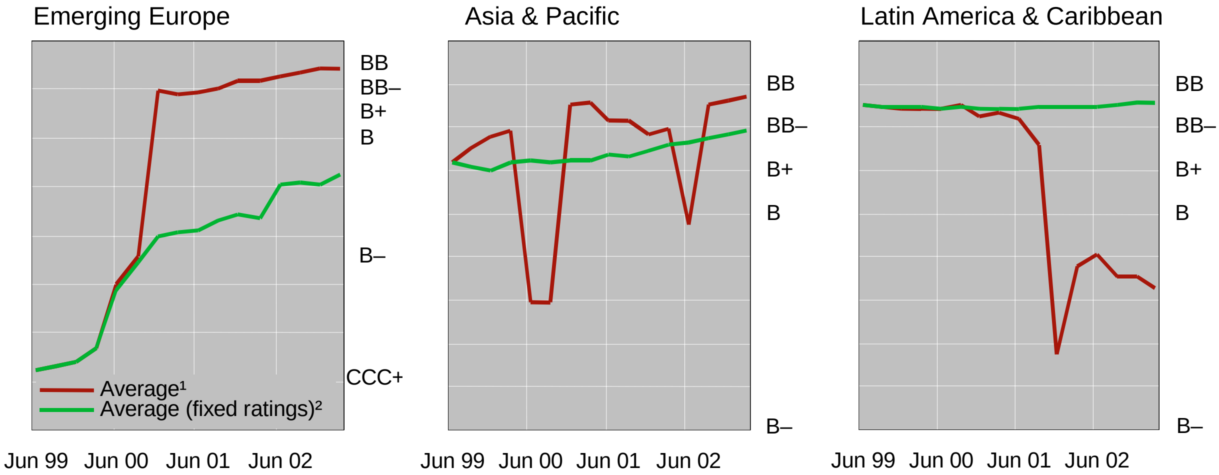
**Asset portfolios of BIS reporting banks**




[1] Claims are on an ultimate risk basis. [2] See the box on page 22 for the calculation of the average rating. [3] Calculated with sovereign ratings of vis-à-vis countries held constant at 1999 Q2 levels.

Graph 2.4

**Average rating of emerging market portfolios of BIS reporting banks**




[1] See the box on page 22 for the calculation of the average rating. [2] Calculated with sovereign ratings of vis-à-vis countries held constant at 1999 Q2 levels.

Graph 2.5

risk than developed countries, declined from 12% in the second quarter of 1999 to 9% in the first quarter of 2003. The share of ultimate risk claims on emerging Europe remained stable over this period, while that of claims on all other emerging market regions fell. Ultimate risk claims on Latin American borrowers rose from 4% of total ultimate risk claims in the second quarter of 1999 to 5% throughout 2001, and subsequently contracted to 3% by the first quarter of 2003. Similarly, the share for Asia-Pacific borrowers fell from 4% to under 3% over the same period.

The movement out of emerging markets, and the corresponding improvement in the average rating of ultimate risk claim portfolios, have been relatively widespread across the major banking systems (Graph 2.4, left-hand panel). US banks' ultimate risk claims declined from 30% of their total ultimate risk claims on emerging markets in late 2001 to 26% in the first quarter of 2003, with claims on Latin American borrowers falling the most. Japanese banks have halved their exposure to emerging markets over the last five years, with the share of ultimate risk claims on emerging market borrowers falling from 12% in 1999 to 6% in the first quarter of 2003. Cutbacks in exposures to emerging markets by UK, German and French banks have contributed to an improvement in the average rating for these banking systems as well.

*Reduced exposure to riskier countries within emerging markets*

In addition to reducing exposure to emerging markets overall, banks have also increasingly channelled funds to less risky countries *within* emerging markets, as evidenced by the improved average rating of their emerging market portfolios. Quarterly movements in the average ratings are largely the result of changes in the sovereign rating of borrowing countries rather than dramatic swings in emerging market exposures (Graph 2.4, right-hand panel). However, holding individual borrowing country ratings constant at their mid-1999 level, shifts in exposures led to an improvement in the average rating of the total

## Average sovereign ratings: calculation and discussion

Regulators and policymakers have become increasingly interested in gauging the vulnerability of a country's banking sector to macroeconomic developments, both domestic and foreign. While this vulnerability encompasses many factors, one important factor is the country risk associated with foreign exposures. Broadly speaking, country risk is a measure of the potential losses on assets held in foreign countries, typically emerging markets, due to a deterioration in political or economic conditions in these countries. As a first approximation, an average measure of the credit quality of borrowing countries in which a reporting country holds assets may be useful in tracking the evolution of country risk for individual banking systems. For present purposes, we take the sovereign rating assigned by a credit rating agency as our measure of country risk for individual borrowing countries.

*Calculation*

Our measure of country risk for each reporting country, or its "average rating", is based on the reporting country's emerging market exposure only, and is a simple weighted average of the sovereign ratings of all emerging market borrowing countries. Since the likelihood of default increases non-linearly as a country's sovereign rating worsens, we use as weights the default probabilities associated with each letter rating to better capture the exponentially increasing probability of loss. Thus, the average rating for reporting country $i$, $AR_i$, is a weighted average of the default probabilities associated with the foreign currency sovereign bond ratings of all emerging market vis-à-vis countries to which the reporting country is exposed.[①] Formally, the $AR_i$ for lending country $i$ in any given period is calculated as:

$$AR_i = \sum_j \omega_{ij} * PD_j$$

$$\omega_{ij} = \frac{c_{ij}}{\sum_j c_{ij}}$$

where $j$ indexes the emerging market vis-à-vis countries of reporting country $i$, $\omega_{ij}$ is the share of claims on vis-à-vis country $j$ in reporting country $i$'s total claims, $PD_j$ is the default probability associated with the sovereign rating for vis-à-vis country $j$, and $c_{ij}$ is the exposure of reporting country $i$ to vis-à-vis country $j$. The exposure of each reporting country is measured as its consolidated foreign claims on an ultimate risk basis on each borrowing country. Foreign claims include both international and local currency claims, and are adjusted for inward and outward risk transfers based on the ultimate guarantor of the claim.

The sovereign rating of each borrowing country is based on that given by Standard & Poor's. For each letter rating, which can vary by country and through time, we assign a default probability, which is assumed constant through time. These default probabilities are based on the empirical experience for corporate defaults, which tend to be more frequent than sovereign defaults (see Packer, "Mind the gap: domestic versus foreign currency sovereign ratings", in this issue of the *BIS Quarterly Review*).[②] In using these probabilities for weighting purposes, we assume that rating agencies impose some consistency in the way they rate different types of borrowers. Once the average probability of default is calculated, we then express it in terms of the closest corresponding rating.

*Uses and pitfalls*

The estimated average rating for a reporting country is most appropriately used to assess changes in credit quality over time. Among other things, differences in the credit quality between claims on the public and private sectors, in the composition of the portfolio and in the overall rate of collateralisation of cross-border claims can cloud the interpretation of the estimated average rating at a point in time. However, to the extent that these evolve slowly over time, the *time series*

[①] The calculation procedure is loosely based on a similar exercise discussed in the June 2000 issue of the *Financial Stability Review*. [②] The default probability is set to unity if the country is in a state of default.

*properties* of the estimated average rating for any single reporting country can still be a useful tool in tracking broad changes in the risk of foreign exposure, the focus in the main text.

Data limitations require that numerous assumptions be made in calculating the average rating. For example, only 13% of the total international claims of domestically owned banks in the BIS reporting countries are on the public sector. Yet, credible indices of the health of the banking and corporate sectors for many vis-à-vis countries are not readily available. While differences in credit quality across sectors are surely relevant, the index calculated here relies solely on sovereign ratings, and may bias the estimated average rating.

Further complicating the calculation, the BIS consolidated data do not track potentially important exposures of reporting country banking systems. While the consolidated ultimate risk claims do take into account the ultimate guarantor of each claim, the scope of this analysis is limited to the on-balance sheet exposures of banks. Off-balance sheet items, an important portion of banks' total assets, are not captured in the BIS statistics. The extent to which these items balance, or are used as a hedge against, known risks in cross-border exposures will further bias the estimated average rating.

Finally, the coverage across countries of sovereign ratings is not complete, making it impossible to assign a default probability to a portion of the claims of reporting area banks. Not all countries have a sovereign rating, either because these countries do not have outstanding government bonds or because the rating agencies have not rated their sovereign debt. That said, the increase over the last decade in the number of countries that have a sovereign rating means this problem is less severe than it once was. In each quarter since mid-1999, an average of only 4% of all claims of all BIS reporting countries have been on countries that do not have a sovereign foreign currency rating provided by Standard & Poor's.

emerging market portfolio of reporting country banks, from near B in the second quarter of 1999 to better than a B+ rating in the first quarter of 2003.

Country risk of emerging Europe portfolio declines ...

While banks channelled funds away from risky countries in all emerging market regions, the improvement in the rating of the emerging Europe portfolio of reporting banks has been the most striking (Graph 2.5). Ultimate risk claims on emerging European economies have increased as a share of total ultimate risk claims on emerging markets, from 17% in mid-1999 to 23% in the first quarter of 2003. But over this same period, the average rating (with country ratings held at their mid-1999 level) improved from CCC+ to near a B rating, reflecting primarily a cutback in claims on Russia and an increase in claims on Poland. Ultimate risk claims on Russia, whose default in 1998 led to an average rating of CCC between mid-1999 and the first quarter of 2003, dropped from 26% of total claims on the region to 11% over this period. At the same time, the share of claims flowing to Poland, which had an average rating near BBB+, increased from 12% of total claims on the region to 24 over this same period.

... as does that of the Asia-Pacific portfolio

Although less dramatic, the average rating of reporting area banks' Asia-Pacific portfolio has improved as well. Holding sovereign ratings constant at their mid-1999 level, the average rating of this portfolio edged closer to a BB– rating, an improvement of roughly one notch. This largely resulted from decreased exposure to Indonesia, which had on average a CCC rating between mid-1999 and the first quarter of 2003, and increased exposure to Malaysia, with an average rating better than BBB.

## International syndicated credits in the second quarter of 2003

*Blaise Gadanecz*

Following three consecutive quarterly declines, activity in the international syndicated loan market picked up in the second quarter of 2003, with signings totalling $371 billion compared with $234 billion in the first quarter. Nevertheless, this in fact represented a slight decrease on a seasonally adjusted basis. Signings in the second quarter of each year have traditionally been strong, averaging $384 billion between 1999 and 2002.

Lending to US borrowers fell year over year, particularly to borrowers in the investment grade market segment. The 32% overall slowdown for all rating types stemmed from favourable financing conditions in corporate bond markets, as well as fewer backup lines being granted for commercial paper issuance purposes than a year ago. Noteworthy was the sharp drop, to 8%, in the share of deals explicitly identified as collateralised in total lending to US borrowers, consistent with the slowdown in US long-term credit downgrades. The ratio of explicit collateralisation was down from an average of 21% in previous quarters since the beginning of 1999 and a peak of 36% in the first quarter of 2003.

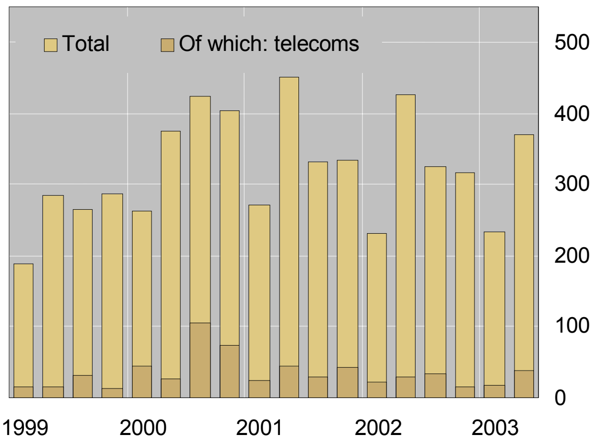
Conversely, signings for European borrowers expanded year on year. The 39% jump resulted from large refinancings by vehicle manufacturers (DaimlerChrysler rolled over $13 billion) and telecoms firms (such as Telecom Italia/Olivetti and Vodafone),[1] suggesting a return of investor confidence to that sector. At nearly $40 billion, the total volume of signings for telecoms firms worldwide was the highest since the end of 2001. This sector was recently revived by increased liquidity in the secondary market, where trading of this type of debt has become popular and indeed dominated activity according to reports from practitioners.

Signings for emerging market borrowers expanded slightly over the year, totalling $18 billion for all regions. Lending to Latin America, which had hit a historical low during the previous quarter, rebounded, supported by a $2 billion sovereign facility granted to the Mexican government to finance a Brady bond buyback programme.[2] In Asia, Korean and Taiwanese borrowers, mainly from the electronics, banking and petrochemical industries, were the most active, with borrowers from each country arranging signings totalling $1.8 billion. The South African Reserve Bank signed a $1 billion facility to retire a previous credit line.

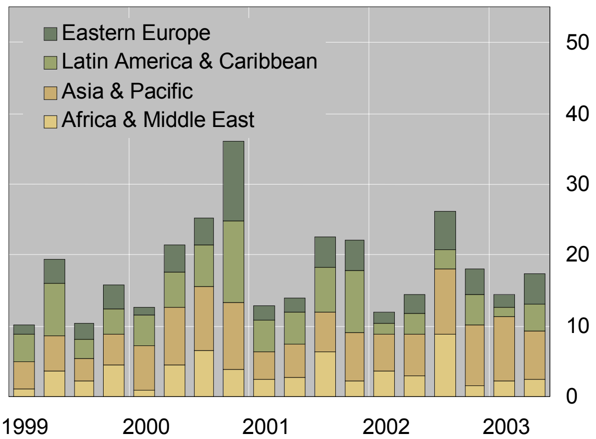
### Activity in the international syndicated credit market

In billions of US dollars

Signed facilities




Facilities for emerging economies




Sources: Dealogic Loanware; BIS.

---

[1] Both firms' facilities, initially worth €15.5 billion and $10.4 billion respectively, were subsequently reduced during the third quarter. [2] See "The international debt securities market" on page 27.

The Argentine default in 2001 drove down the average rating of reporting area banks' Latin American portfolio. However, with country ratings held constant at their mid-1999 level, the average rating of this portfolio changed little over this period, hovering near BB–. This reflects the fact that two of the largest borrowers in the region, Argentina and Mexico, had similar country ratings at the time. The deterioration in the average rating of this portfolio in mid-2001 resulted from the series of downgrades of Argentina which had started in March 2001. The subsequent improvement in the average rating from the first quarter of 2002, as banks reduced exposure to Argentina, was partially offset by a one-notch downgrade of Brazil to B+ in July 2002. While the share of ultimate risk claims on Argentina fell from 21% of total claims on the region in mid-1999 to 8% in the first quarter of 2003, that of claims on Mexico, which had on average a rating of BB+, rose from 20% to 45% over this same period.