

## Highlights of international banking and financial market activity<sup>1</sup>

The BIS, in cooperation with central banks and monetary authorities worldwide, compiles and disseminates several datasets on activity in international banking and financial markets. The latest available data on the international banking market refer to the first quarter of 2007. The discussion of the international debt securities market and exchange-traded derivatives markets draws on data for the second quarter of this year.

### The international banking market

#### *Locational banking statistics*

Exceptional expansion driven by interbank activity ...

Activity in the international banking market surged in the first quarter of 2007. BIS reporting banks' total cross-border claims expanded by \$2.2 trillion (to \$28.5 trillion), considerably more than the previous largest quarterly increase recorded a year earlier. The expansion drove the annual growth rate to over 20% for the first time since 1987. Greater interbank lending accounted for 74% of the rise in activity.<sup>2</sup> Banks in the United Kingdom alone attracted \$565 billion in interbank deposits, while Swiss banks' inter-office transfers contributed over \$500 billion to claims. Brisk interbank activity was accompanied by robust lending to non-bank entities. Claims on non-banks increased by \$552 billion in the first quarter of 2007 (20% year-on-year), following a similar increase in the previous quarter.

... and large net transfers of funds ...

The expansion in gross claims also contributed to an extraordinary volume of *net* flows through the international banking system (Graph 1). A comparison of the panels in the graph shows that interbank flows made up a substantial share of total net flows. Interbank flows dominated in the case of flows to and from Switzerland, and flows from the United States to the euro area. In other cases, net flows involving non-banks were predominant.

---

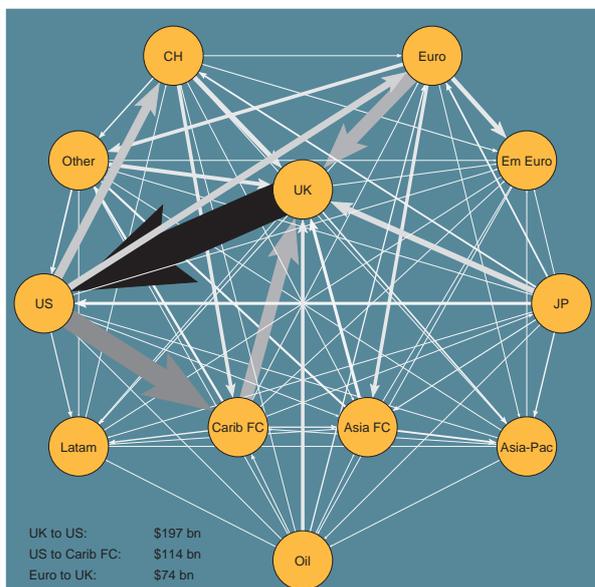
<sup>1</sup> Queries concerning the locational banking statistics should be addressed to Goetz von Peter, concerning the consolidated banking statistics and international debt securities statistics to Ryan Stever, and concerning the derivatives statistics to Christian Upper.

<sup>2</sup> Accordingly, growth in loans outstripped that in securities holdings. The share of securities holdings in total claims fell by 1 percentage point to 21%, in contrast to the long-term trend.

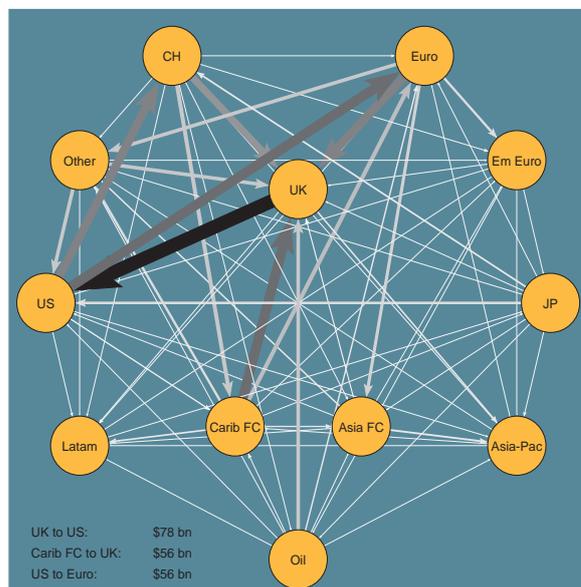
## Net flow of funds through the international banking system<sup>1</sup>

Exchange rate adjusted flows, first quarter of 2007

Total net flows



Interbank net flows



Asia FC = Asian financial centres (Hong Kong SAR, Macao SAR and Singapore); Asia-Pac = China, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Taiwan (China) and Thailand; Carib FC = Caribbean financial centres (Aruba, the Bahamas, Bermuda, the Cayman Islands, the Netherlands Antilles and Panama); CH = Switzerland; Em Euro = emerging Europe (Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, Turkey and Ukraine); Euro = euro area member states excluding Slovenia; JP = Japan; Latam = Argentina, Brazil, Chile, Colombia, Mexico and Peru; Oil = OPEC member states (excluding Indonesia) plus Russia; Other = Australia, Canada, Denmark, New Zealand, Norway and Sweden; UK = the United Kingdom, Guernsey, the Isle of Man and Jersey; US = the United States.

<sup>1</sup> The thickness of an arrow is proportional to the amount of net bank flows between countries/groups, and is comparable across panels. An arrow points from A to B if net flows in this direction are positive, calculated as net interbank claims (assets minus liabilities) of banks in A on banks in B, plus net claims of banks in A on non-banks in B, minus net claims of banks in B on non-banks in A. (This last component is missed if B is not a reporting country.) The graph does not show intraregional flows or reporting banks' lending to domestic residents. See also P McGuire and N Tarashev, "Tracking international bank flows", *BIS Quarterly Review*, December 2006.

Source: BIS locational banking statistics.

Graph 1

The largest net transfer of funds during the quarter (\$197 billion) was from residents of the United Kingdom to those of the United States, primarily in US dollars. This was mostly due to an increase in claims reported by banks in the United Kingdom on non-banks in the United States (interbank flows accounted for \$78 billion). Even so, non-banks in the United States placed more deposits overall than they borrowed from BIS reporting banks.<sup>3</sup> As a result, for the United States the net inflow from the United Kingdom was largely offset by net outflows to Caribbean offshore centres (\$114 billion), Switzerland (\$51 billion) and the euro area (\$38 billion), leaving a relatively small overall net inflow (\$13 billion) to the United States.<sup>4</sup> The net transfer of funds between the United States and Caribbean financial centres was driven mostly by non-banks in the United States sending dollars to banks located in the Caribbean.

<sup>3</sup> This development is broadly in line with evidence of somewhat weaker demand for most loan types in the United States.

<sup>4</sup> The net inflow was less than the quarterly average of \$35 billion since 2000. Total capital inflows into the United States during the quarter were \$176 billion.

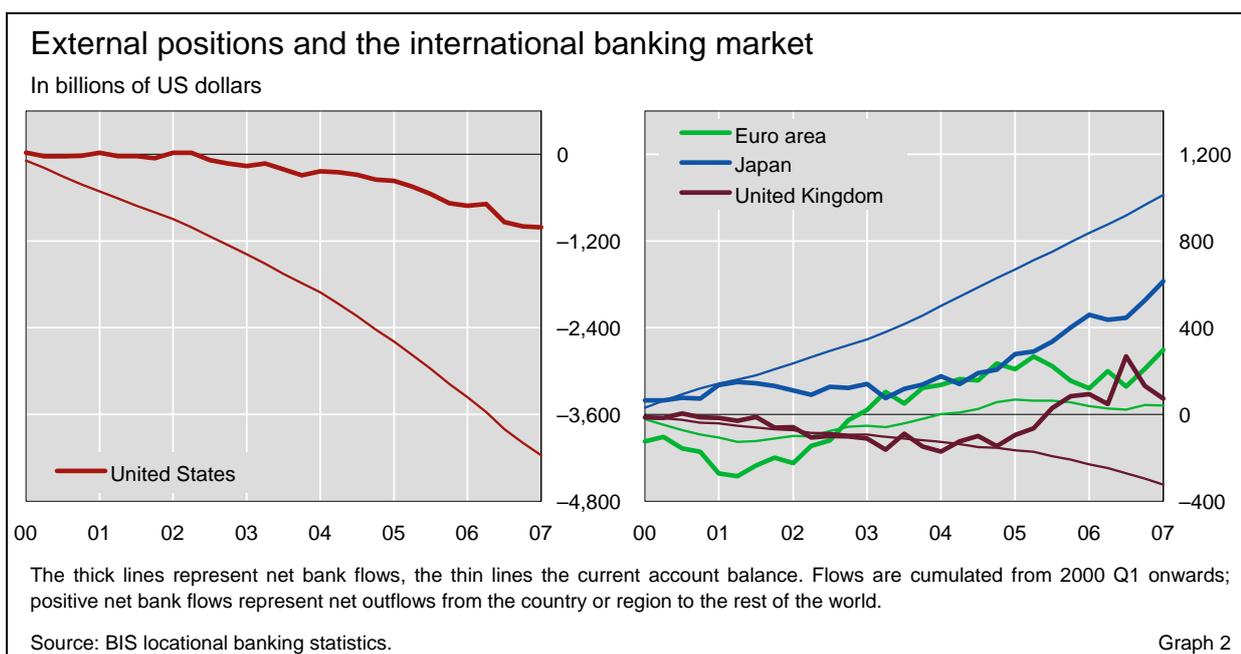
Japanese residents continued to send funds to almost all regions, leading to a net outflow of \$87 billion overall. Non-bank activity accounted for most of the net flow from Japan to the United Kingdom: banks in the United Kingdom reduced their yen claims (including equity claims) on non-banks in Japan, and non-banks in the United Kingdom withdrew part of their dollar deposits in Japan. Flows between the United Kingdom and Switzerland were predominantly in pounds sterling. Indeed, sterling-denominated activity accounted for an unusually large share (18.8%) of the overall expansion. This raised the pound's market share to a historical peak (7.7%), at the expense of the US dollar, whose share in the stock of claims fell by 1 percentage point to 42%.

... finance external imbalances

Transfers of funds through the international banking system can play an important role in the financing of current account imbalances (Graph 2). As of the first quarter of 2007, 24% of the total cumulated funds channelled to US residents since 2000 were routed via the banking system, up from 12% three years earlier. This is mirrored in the external position of Japan, where net bank outflows amounted to 61% of Japan's cumulated current account surpluses, up from 35% three years earlier. Net bank flows need not coincide with current account developments: while they did for the United States, Japan and, to a lesser extent, the euro area, net bank outflows from the United Kingdom since 2005 suggest that current account deficits have been financed by flows via financial markets.

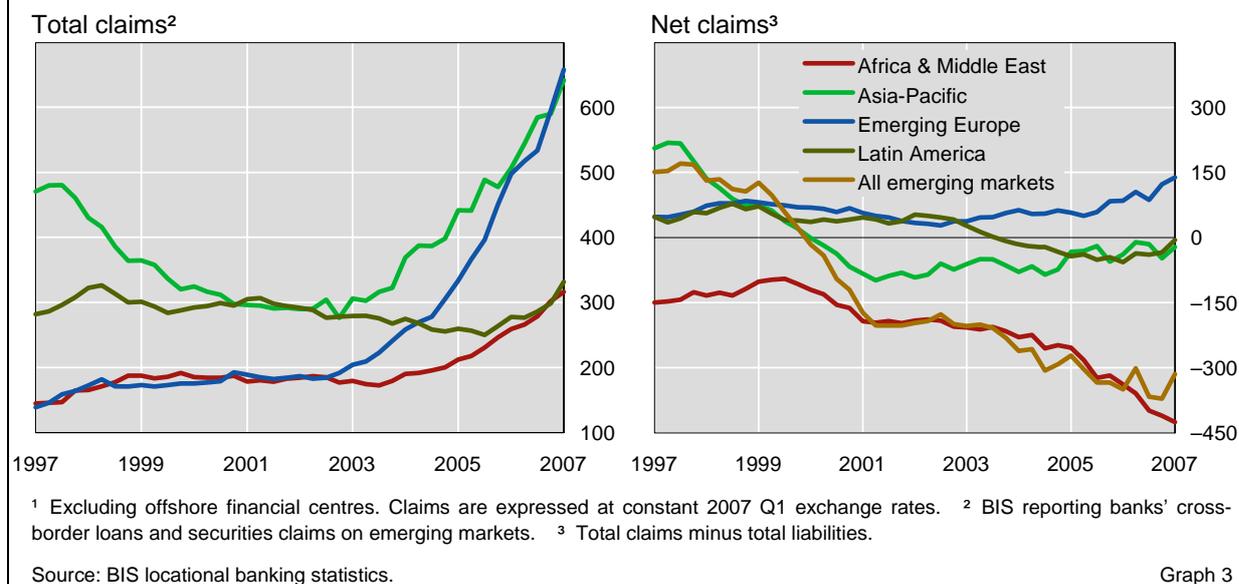
Credit to emerging markets accelerates ...

Claims on emerging markets continued to accelerate. Of the \$156 billion in new claims, emerging Europe again attracted the largest share (37%), followed by Asia-Pacific (33%), Latin America (21%) and Africa and the Middle East (9%). Within a decade, emerging Europe has overtaken the other emerging regions as the one to which BIS reporting banks extend the greatest share of gross credit (Graph 3, left-hand panel).



## Claims on emerging markets by region<sup>1</sup>

In billions of US dollars



The most recent quarter registered considerable *net* inflows to emerging markets for the first time in four years, to the tune of \$51 billion. This is in contrast with the long-term trend, in which new credit to emerging markets has typically fallen short of their deposit placements with BIS reporting banks (Graph 3, right-hand panel). In the most recent quarter, however, there were substantial net inflows into all regions except Africa and the Middle East. While banks' net positions vis-à-vis emerging Europe and Africa and the Middle East have therefore diverged further, their net claims on Latin America and Asia-Pacific have moved close to zero. Indeed, almost the entire stock of deposits by Asia-Pacific residents (\$663 billion) is channelled back into the region, mostly in the form of loans (\$500 billion).

... leading to net inflows overall

The distribution of flows within these regions was in some cases uneven. In emerging Europe, virtually all countries experienced positive net inflows. Among the main recipients were a number of smaller markets, including Croatia, Cyprus and Malta. Total net inflows to the region would have been even larger had it not been for a net outflow of \$30 billion from Russia as a result of \$45 billion in deposit placements with BIS reporting banks.<sup>5</sup> Similarly, deposit placements by residents of Kuwait, Libya and South Africa, in the amount of \$21 billion, materially contributed to net outflows from Africa and the Middle East. Net inflows to Asia-Pacific were driven by greater claims on China, India and Korea, mostly in the form of lending to banks. By drawing down deposits placed with BIS reporting banks, China has become a net borrower for the first time since 1999. In Latin America, over half of net inflows went to Brazil (\$17 billion), while Colombia, Mexico and Peru jointly received another \$10 billion, over half of which was in the form of claims on non-banks.

<sup>5</sup> IMF data indicate that Russia's official reserves placed with banks outside the country increased by \$10 billion during the first quarter of 2007.

### Consolidated banking statistics

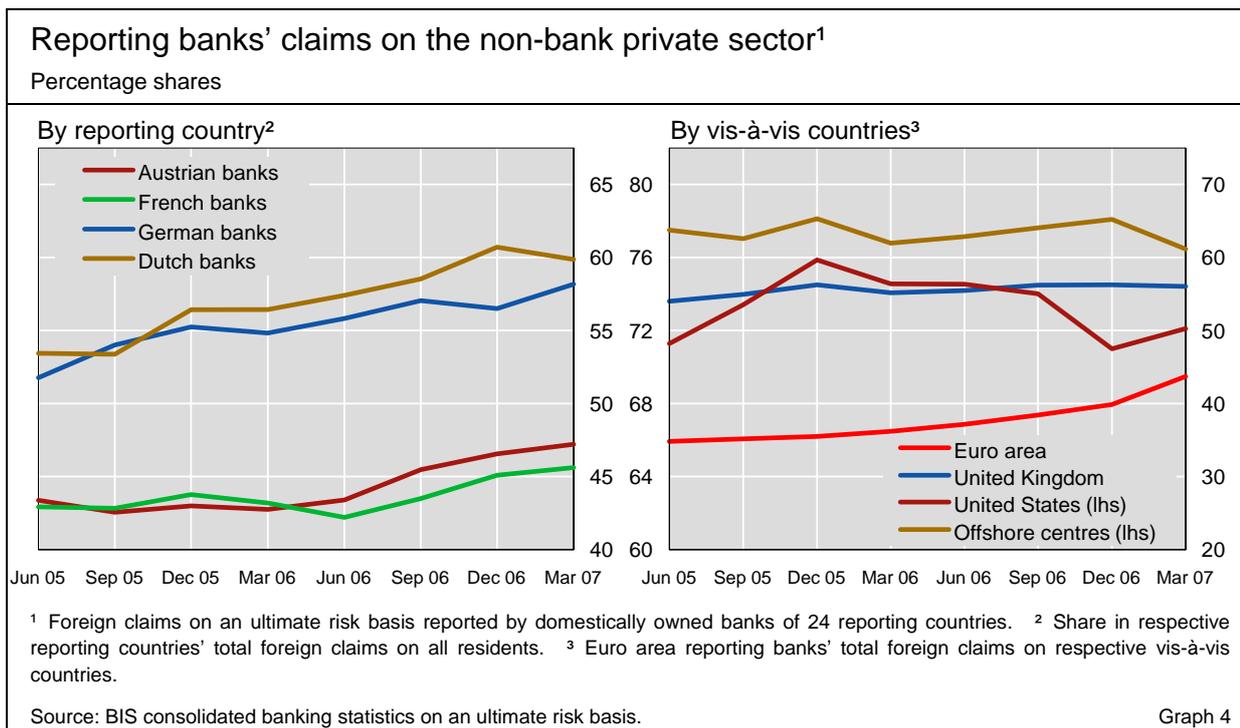
Foreign claims expand to \$25 trillion ...

The surge in claims in the first quarter of 2007 was also evident in the BIS consolidated banking statistics, which track international banking activity from the creditor's perspective.<sup>6</sup> BIS reporting banks' total foreign claims on an ultimate risk (UR) basis reached \$25 trillion in the first quarter, up from \$17 trillion two years ago. A change in reporting led to a notable increase in Italian banks' foreign claims.<sup>7</sup> Elsewhere, French, German and UK banks' claims grew the most, primarily driven by lending to the non-bank private sector.

... due partly to interbank lending ...

Interbank lending accounted for a substantial portion of the increase in claims. Foreign claims (UR basis) on banks grew to \$7 trillion, or 29% of total foreign claims (unchanged from a year ago). Banks around the reporting area, but particularly French, Italian and Dutch banks, channelled funds to banks in the United Kingdom. In turn, UK banks' interbank lending expanded by \$121 billion (primarily to banks in the euro area and the United States), pushing their share of claims on this sector to 28% of their total foreign claims.

Banks in the reporting area continued to direct funds to the non-bank private sector. Overall, reporting banks' claims on these borrowers grew by \$1.5 trillion to \$13.6 trillion, or 54% of their total foreign claims (UR basis).



<sup>6</sup> The BIS consolidated banking statistics are based on the *nationality* of the reporting bank, net out inter-office positions, and are available on an immediate borrower (IB) and an ultimate risk (UR) basis. Foreign claims are cross-border claims plus local claims extended from foreign offices. Unlike foreign claims (IB basis), claims expressed on a UR basis take into account third-party guarantees, and are allocated back to the residence of the ultimate obligor.

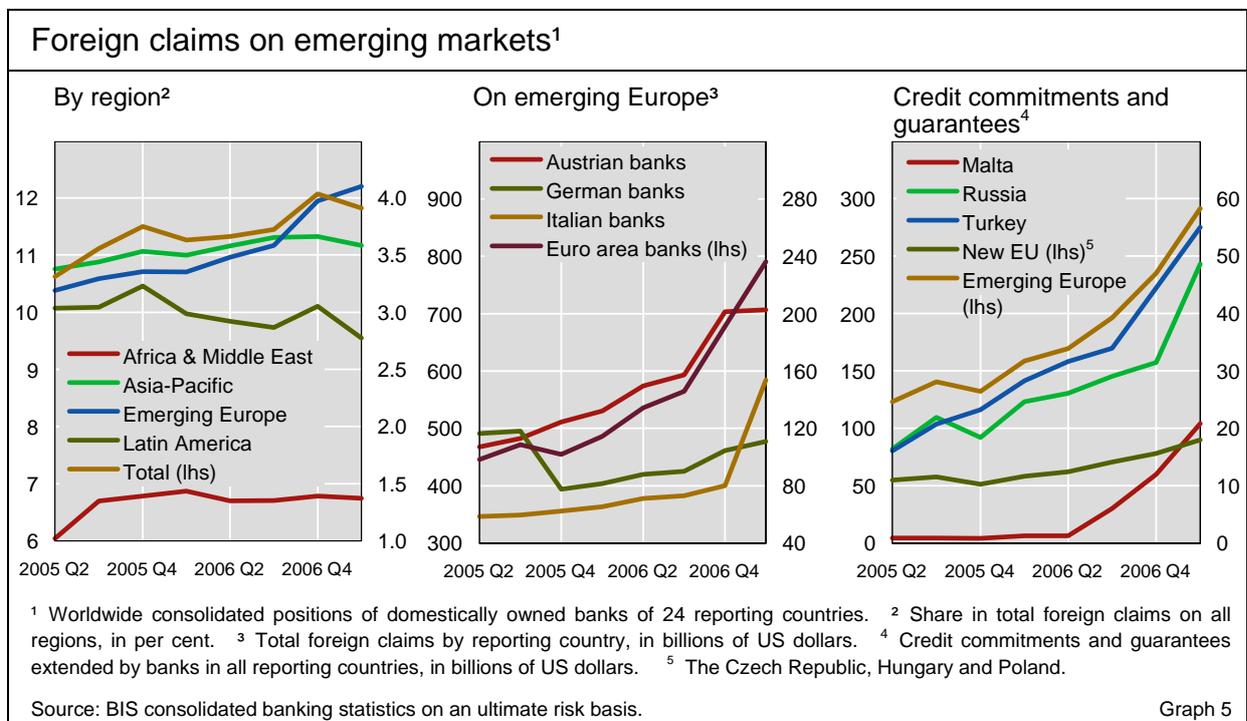
<sup>7</sup> Italian banks' foreign claims (UR basis) rose by \$649 billion, nearly twice the increase in the previous quarter, due to a change in reporting that led to a reclassification of a number of subsidiaries, particularly those located in Germany.

Claims of euro area banks, in particular German and French banks, grew the most, pushing their foreign claims (UR basis) on the non-bank private sector to 53% of their total foreign claims in the most recent quarter, up from 48% in June 2005 (Graph 4, left-hand panel).<sup>8</sup> These banks increased their exposures to non-bank private sector borrowers in Germany, the United Kingdom and the United States the most in the first quarter of 2007, although new claims on such borrowers in emerging economies also grew noticeably (Graph 4, right-hand panel).

... and an increase in claims on the non-bank private sector

This increase in credit to non-bank borrowers has, over the longer term, contributed to a shift in reporting banks' portfolios towards emerging market borrowers. Foreign claims (UR basis) on these borrowers reached \$3 trillion, or 12% of total foreign claims worldwide (up from 10% two years ago). This coincides with the 6% rise in the share of claims on the non-bank private sector over the same period. Much of this shift has been driven by increases in credit granted to borrowers in emerging Europe, primarily from banks headquartered in the euro area (Graph 5, left-hand panel). In the most recent quarter, foreign claims on these borrowers expanded by 15% to just over \$1 trillion. Austrian and Italian banks have the largest exposures to emerging Europe, although German, French and Belgian banks' exposures have been on the rise as well (Graph 5, centre panel).

Along with greater credit, banks have continued to extend guarantees and credit commitments to borrowers in emerging Europe. However, whereas much of banks' direct loan exposures are to borrowers in the newest members of the European Union, guarantees and credit commitments have been extended to



<sup>8</sup> The jump in Italian banks' claims on this sector is primarily the result of the reclassification mentioned above.

Guarantees to emerging Europe expand

borrowers elsewhere in the region (Graph 5, right-hand panel). Total guarantees extended to the region reached \$118 billion, surpassing (in the fourth quarter of 2006) the stock of guarantees extended to borrowers in Asia-Pacific. Borrowers in Turkey and Russia have been the largest recipients. Similarly, credit commitments to the region reached \$174 billion in the first quarter, up from less than \$100 billion a year earlier. These have been extended primarily to borrowers in Poland, Russia and Turkey.

Reporting banks' share of claims on Latin America declines

In contrast to emerging Europe, reporting banks' relative exposure to Latin America has been on the decline. Total claims on the region reached \$692 billion in the first quarter of 2007, up from \$575 billion a year earlier. Yet this rise has been sluggish compared with other emerging markets (only 2% in the most recent quarter), and, as a result, reporting banks' share of total claims on this region has fallen (Graph 5, left-hand panel). Spanish and US banks, the largest creditor banking systems to the region, saw modest declines in their exposures in the most recent quarter. In both cases, a reduction in exposure to the Mexican public sector seemed to play a role.

## The international debt securities market

International bond and note issuance expanded significantly in the second quarter of 2007, as \$1 trillion in net issuance pushed year-on-year growth to 18% from 8% the previous quarter. The amount of bonds and notes outstanding rose to nearly \$20 trillion, double that of just four years ago.

Strong issuance fuelled by dollar- and yen-denominated securities

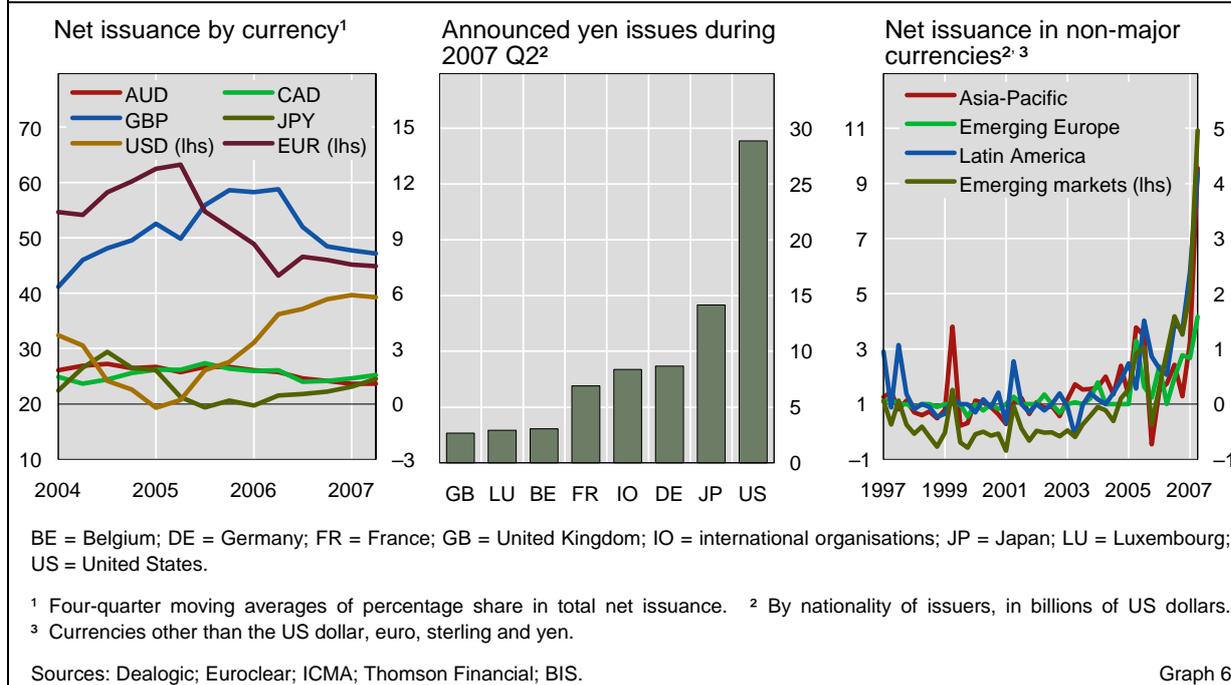
The robust growth in net issuance was fuelled by advances in dollar bonds and notes, and also in yen-denominated securities. Dollar-denominated net issuance rose by 17% year on year (40% growth over the last quarter), and accounted for nearly 40% of total issuance (Graph 6, left-hand panel). Yen-denominated net issuance soared to \$28 billion, nearly twice the previous high over the last 10 years. The yen share has been on an upward trend since the second quarter of 2006 (Graph 6, left-hand panel).

Particularly active yen issuers from the United States, France and Germany

Yen-denominated gross issuance was primarily driven by new bonds and notes from US and euro area private financial institutions. Indeed, the \$7 billion in yen-denominated securities from Japanese firms accounted for only 14% of global yen issuance (Graph 6, centre panel). Private financial institutions from the United States borrowed \$14 billion in yen-denominated bonds and notes, almost twice the previous record high for this sector. French and German financial institutions recorded nearly \$8 billion in yen-denominated announcements.

The surge in net issuance across all currencies was mostly due to the expansion of private non-bank financial institution and corporate borrowing. Private non-bank financial institutions were responsible for a full 48% of global net issuance. The \$200 billion from US firms was more than 25% greater than the previous high of \$156 billion just two quarters earlier. The \$158 billion in net issuance by euro area private non-bank financial institutions was also exceptionally robust. Within the euro area, Spanish borrowing by this sector was the strongest for the third consecutive quarter at \$51 billion.

## International bond and note issuance



Net issuance from the emerging economies of Latin America, Asia and Europe was strong, despite subdued borrowing by emerging market sovereigns. Among all regions, the \$20 billion from emerging Europe was the highest, with over a third of this amount accounted for by Russian private financial institution debt. Latin American non-government net issuance expanded by over 75% year on year, with Venezuelan and Brazilian borrowing almost entirely from non-government entities. Throughout the emerging markets, this shift towards non-government debt has been evident for some time. Over the last three years, the government share of emerging market bonds and notes outstanding has fallen consistently, from 57% in the third quarter of 2004 to 42% in the latest quarter.

Private financial institutions and corporations from emerging Asia helped push net borrowing by the region to \$19 billion, bringing year-on-year growth to 24%. Record dollar-denominated net issuance by Korean borrowers accounted for nearly a third of Asian offerings. The two other major borrowers from Asia, Indian and Chinese firms, had net issuance of \$4 billion and \$3 billion, respectively. As in the rest of Asia, this was mostly from financial institutions and corporate borrowers and included a large yuan-denominated bond issue from the China Development Bank.

Throughout the emerging markets, there was a surge in borrowing denominated in non-major currencies (Graph 6, right-hand panel). The \$11 billion in net issuance (bringing bonds and notes outstanding to \$48 billion) was twice the previous high. In addition to the \$4 billion in Asian borrowing, net issuance was also strong in Latin America (\$4 billion) and emerging Europe (\$2 billion). Unlike borrowing denominated in the major currencies, this growth in emerging Europe and Latin America was fuelled by new government debt.

Surge in non-government borrowing in the emerging markets

## Derivatives markets

Stable turnover on derivatives exchanges

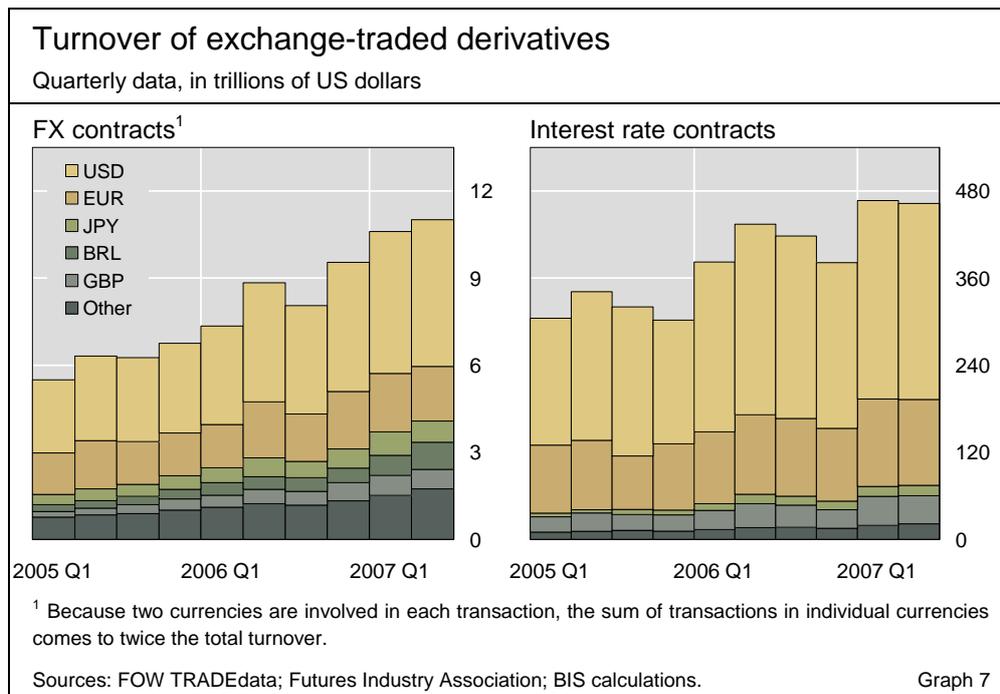
Trading volumes on the international derivatives exchanges remained stable in the *second quarter of 2007*. Combined turnover of interest rate, currency and stock index derivatives stood at \$536 trillion between April and June, only marginally higher than in the previous quarter (\$532 trillion). Rising equity valuations lifted turnover in derivatives on stock indices (13%), while trading in foreign exchange contracts expanded by 3%.<sup>9</sup> However, this barely offset slightly weaker activity in the much larger interest rate segment (-1%). Turnover in commodity derivatives, which are not included in the above totals as notional amounts are not available, increased by 6% when measured in terms of the number of contracts traded.

Valuation effects drive up volume of stock index contracts

Turnover in futures and options on stock indices reached a new high of \$68 trillion in the second quarter of 2007, 13% more than in the first three months of the year, but this reflected mainly valuation effects. Turnover measured in terms of the number of contracts traded rose by only 3%, well below its long-term average. In part, the low growth in activity is due to a basis effect, since volumes in the first quarter had been boosted by hectic trading in the aftermath of the sell-off that shook financial markets in late February.

Low overall growth hides sizeable shifts in FX segment

In the foreign exchange segment of the international derivatives exchanges, a modest expansion (3%) in aggregate turnover masked sizeable shifts between currencies (Graph 7, left-hand panel). Weaker activity in contracts with one leg in the euro (-6%) and yen (-11%) contrasted with a rapid increase in derivatives on the Brazilian real (34%). Derivatives markets in Brazil have grown rapidly in recent years, and turnover in contracts on real-dollar reached \$0.9 trillion in the second quarter, overtaking yen-dollar



<sup>9</sup> All growth rates in this section refer to quarter-on-quarter increases, unless otherwise noted.

(\$0.7 trillion) as the second most actively traded currency pair behind euro-dollar (\$1.7 trillion). A sharp rise in activity was also recorded in contracts on the Canadian dollar (26%).

Activity in interest rate derivatives declined slightly (Graph 7, right-hand panel), as the usual seasonal pickup in trading failed to materialise.<sup>10</sup> At \$463 trillion, turnover in interest rate contracts in the second quarter of 2007 was slightly below the \$467 trillion recorded in the previous three months. A relatively small decline in activity in the three major currencies offset sizeable increases in turnover in many smaller markets. For example, turnover in contracts on Brazilian short-term interest rates increased by 37% in the second quarter, thus mirroring the rapid growth in foreign exchange contracts. Rapid growth was also recorded in money market contracts denominated in Swiss francs (23%), Australian dollars (19%) and Swedish kronor (17%). In the long-term segment, turnover in derivatives on Korean and Japanese bonds increased by 31% and 30%, respectively. However, these increases were not sufficient to offset the relatively small declines in activity in contracts denominated in US dollars (–1%), euros (–2%) and pounds sterling (–4%), since turnover in these currencies dwarfs trading in other markets.

Credit derivatives began to trade on an exchange in March 2007, when Eurex introduced a futures contract on the iTraxx Crossover Index. In June, several Chicago exchanges followed suit and launched credit contracts. In contrast to the Eurex derivative, which works like a futures contract on a credit default swap (CDS) index, the US contracts resemble CDSs with fixed recovery rates. They also have relatively long maturities (up to 10 years), compared to at most one year for the Eurex future. Whether exchange-traded credit derivatives will play an important role in the future remains to be seen. With a turnover of \$148 million in the second quarter, and open interest of \$127 million at the end of June, the market for credit futures is still very small in comparison to the over-the-counter CDS market, whose notional amount outstanding stood at \$29 trillion at end-2006.

Turnover in interest rate contracts stagnates despite positive seasonal factors

First credit derivatives traded on an exchange

---

<sup>10</sup> Estimates of seasonal factors driving turnover in interest rate derivatives are presented in *BIS Quarterly Review*, March 2006, pp 45–6.