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Highlights of international banking and financial market activity[1]

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 third quarter of 2008. The discussion on international debt securities and exchange-traded derivatives draws on data for the fourth quarter of 2008.

The international banking market

International banking activity continued to reflect the tensions on bank balance sheets in the third quarter of 2008. BIS reporting banks' total gross international claims[2] actually grew, by $248 billion to $37.5 trillion, driven largely by greater inter-office activity. Lending to other (unaffiliated) banks fell, however, reflecting the severe market strains following the failure of Lehman Brothers on 15 September. With interbank markets effectively shut down by end-September, banks sought dollar financing elsewhere: their liabilities to official monetary authorities soared in the third quarter, reflecting in part their use of central bank swap lines. Banks also curtailed their lending to emerging markets.

Funding pressures continue

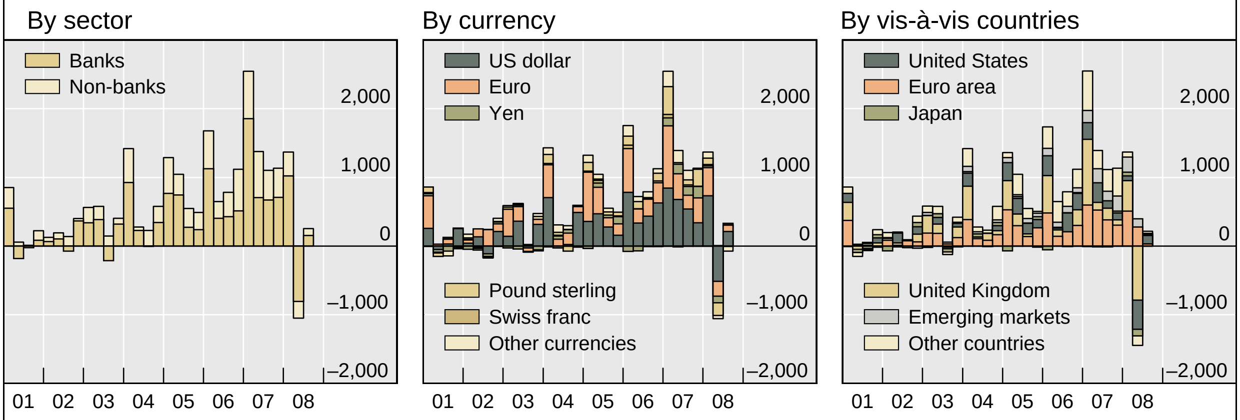
Interbank lending continued to contract in the third quarter of 2008, reflecting the ongoing tensions in interbank credit markets. On a residency basis, total claims on banks (including inter-office claims) grew by $150 billion, following the unprecedented decline of more than $800 billion in the previous quarter (Graph 1). However, net of inter-office activity, lending to other (unaffiliated)

[1] Queries concerning the banking statistics should be addressed to Patrick McGuire and Blaise Gadanecz, and queries concerning international debt securities, exchange-traded derivatives and over-the-counter derivatives statistics to Jacob Gyntelberg.

[2] In the BIS locational banking statistics by residence, international claims (liabilities) are cross-border claims (liabilities) plus locally booked claims (liabilities) in foreign currencies vis-à-vis residents of the reporting country.

Changes in gross international claims[1]

In billions of US dollars



[1] Changes are adjusted for exchange rate effects. International claims are cross-border claims plus locally booked claims in foreign currencies on residents of the reporting country. The data include inter-office activity.

Source: BIS locational banking statistics by residence. Graph 1

banks actually fell in the third quarter as well, this time by $173 billion. The BIS consolidated banking statistics,[3] which track banks' worldwide consolidated positions by *lender nationality*, suggest that reduced interbank lending by French, Belgian and German banks accounted for much of this decline (Graph 2, left-hand panel).[4]

Banks' liabilities to official monetary authorities surge

Amidst these funding pressures, banks received liquidity support from official monetary authorities. Their liabilities to these counterparties soared in the third quarter, by $190 billion, following two consecutive quarterly declines (Graph 3, centre and right-hand panels). The BIS statistics do not include information on which countries' official monetary authorities accounted for these moves. However, the foreign exchange reserve data reported to the IMF by the monetary authorities in 63 countries suggest that many central banks continued to *reduce* their placements of foreign exchange reserves in commercial banks in the third quarter (Graph 3, left-hand panel). Thus, the surge in banks' reported liabilities to official monetary authorities in the BIS banking statistics would seem to reflect, at least in part, borrowing from the US dollar swap lines established between the Federal Reserve and European (and other) central banks.

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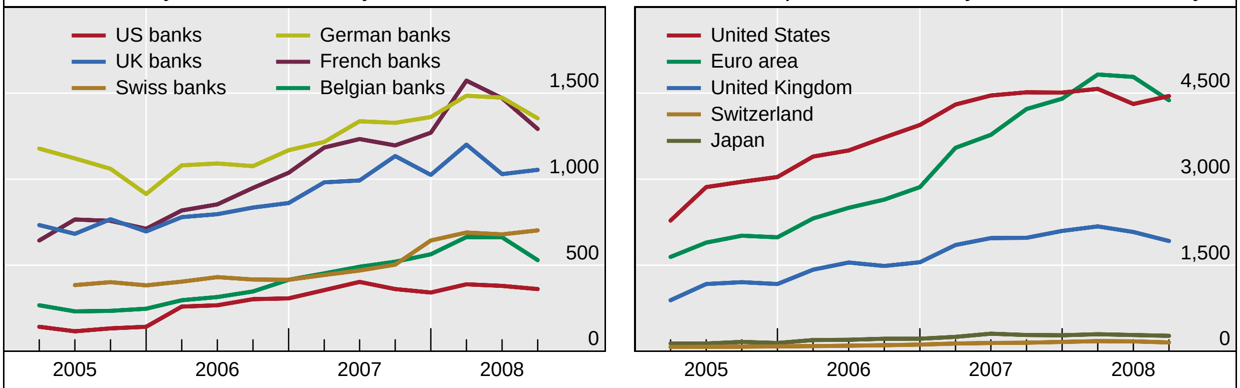
[3] The BIS consolidated banking statistics on an ultimate risk basis track banking systems' consolidated worldwide foreign claims (excluding inter-office positions). Foreign claims include cross-border claims booked by offices worldwide plus local claims booked by banks' foreign offices.

[4] Across all reporting countries, the outstanding stock of foreign claims on other banks declined by $744 billion (9%) in the third quarter of 2008. However, the reduction of $146 billion reported for Dutch banks in part reflected the sale of business units by ABN AMRO. More generally, the depreciation of the euro against the US dollar in the third quarter accounted for an estimated 70% of the overall reduction. For a discussion of currency effects in the consolidated banking statistics, see B Gadanecz and K von Kleist, "Currency effects in consolidated bank claims", *BIS Quarterly Review*, June 2007, p 20.

Consolidated foreign claims

Amounts outstanding, in billions of US dollars

On banks, by lender nationality | On non-bank private sector, by borrower nationality



Source: BIS consolidated banking statistics on an ultimate risk basis. Graph 2

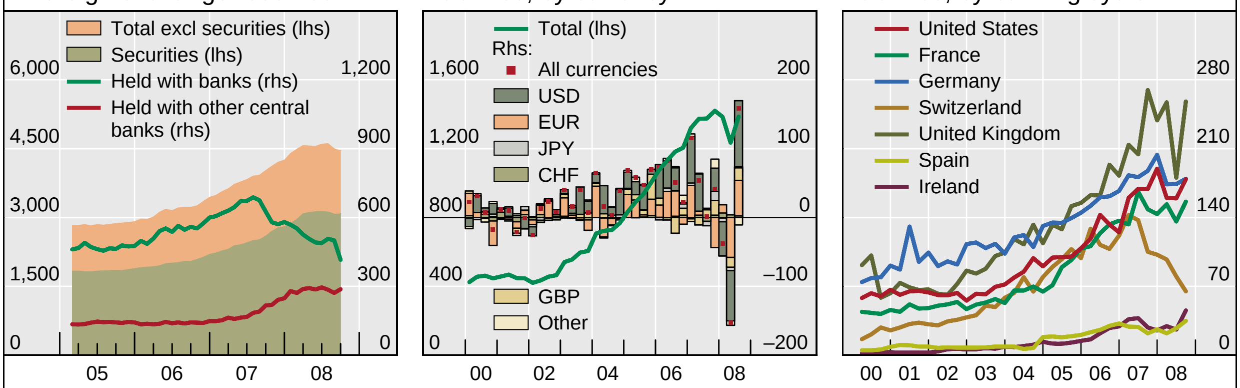
Claims on non-banks change little

Following a sizeable contraction in the second quarter of 2008, international claims on non-banks in major industrial countries remained relatively stable during the third. Total international claims on this sector grew by a modest $99 billion, with claims in all currency segments rising. Claims of banks in the euro area expanded the most ($80 billion), reflecting greater intra-euro area cross-border lending ($75 billion), primarily to borrowers in the Netherlands, Luxembourg, Spain and Belgium. In contrast, claims on non-banks in the United Kingdom declined for a second consecutive quarter, this time by $66 billion. Banks' cross-border claims on non-banks in the United States grew by $44 billion in the third quarter, to $2.9 trillion. Claims booked by banks in the euro area and Japan actually contracted (by $17 billion and $15 billion, respectively), while claims booked by banks in the United Kingdom expanded by a robust $71 billion, the first increase since mid-2007.

Foreign exchange reserves and liabilities to official monetary authorities

In billions of US dollars

Foreign exchange reserves[1] | Liabilities, by currency[2] | Liabilities, by banking system[2]



[1] Holdings of foreign exchange reserves by 63 monetary authorities which report SDDS data to the IMF. [2] Liabilities booked by BIS reporting banks vis-à-vis official monetary authorities; expressed at constant end-Q3 2008 exchange rates.

Sources: IMF SDDS; BIS locational banking statistics by nationality. Graph 3

The BIS consolidated banking statistics, which contain a finer counterparty sector breakdown, shed more light on the degree to which banks have unwound their exposures to US non-bank *private sector* borrowers. Overall, BIS reporting banks' consolidated foreign claims on US non-banks (on an ultimate risk basis) grew by $109 billion in the third quarter of 2008. Claims on the US public sector remained relatively stable (at $639 billion), whereas claims on the US non-bank private sector rose by a modest $137 billion, to $4.4 trillion (Graph 2, right-hand panel).[5] This constitutes a mere $12 billion reduction in reporting banks' total outstanding claims on these borrowers since the start of the crisis in the second quarter of 2007, although differences across bankings systems are apparent. Since then, Canadian, Irish and Japanese banks' claims on the US non-bank private sector have expanded, by a combined $201 billion or 26%, whereas Belgian, French, German and Swiss banks' claims have fallen by a combined $240 billion, or 12% per cent.[6]

International lending to emerging markets slows

The growth in credit to emerging markets continued to slow in the third quarter of 2008. On a nominal basis, the outstanding stock of BIS reporting banks' foreign claims (on an immediate borrower basis) vis-à-vis all emerging regions declined significantly during the quarter, by $286 billion (Graph 4). However, the depreciation of many emerging market currencies (as well as the euro and Swiss franc) against the US dollar during the quarter exaggerates the size of the real contraction when figures are expressed in US dollars. While there are differences across borrower regions, the data suggest that, in real terms, banks' local claims in local currencies remained relatively stable, while their international claims declined.

In nominal terms, banks' consolidated foreign claims on borrowers in Asia-Pacific contracted by $83 billion (Graph 4, top right-hand panel), reflecting reduced local claims in local currencies as well as lower international claims. However, a simple currency adjustment for banks' local claims in local currencies indicates that these positions actually rose slightly during the quarter. Although a precise correction for exchange rate movements is not possible for banks' international claims, the BIS locational statistics, for which a currency adjustment is possible, show that *cross-border* claims on the region contracted for the first time since end-2005 (by $31 billion), driven by reduced claims on China (–$24 billion) and Malaysia (–$12 billion).

Cross-border credit to Asia-Pacific contracts

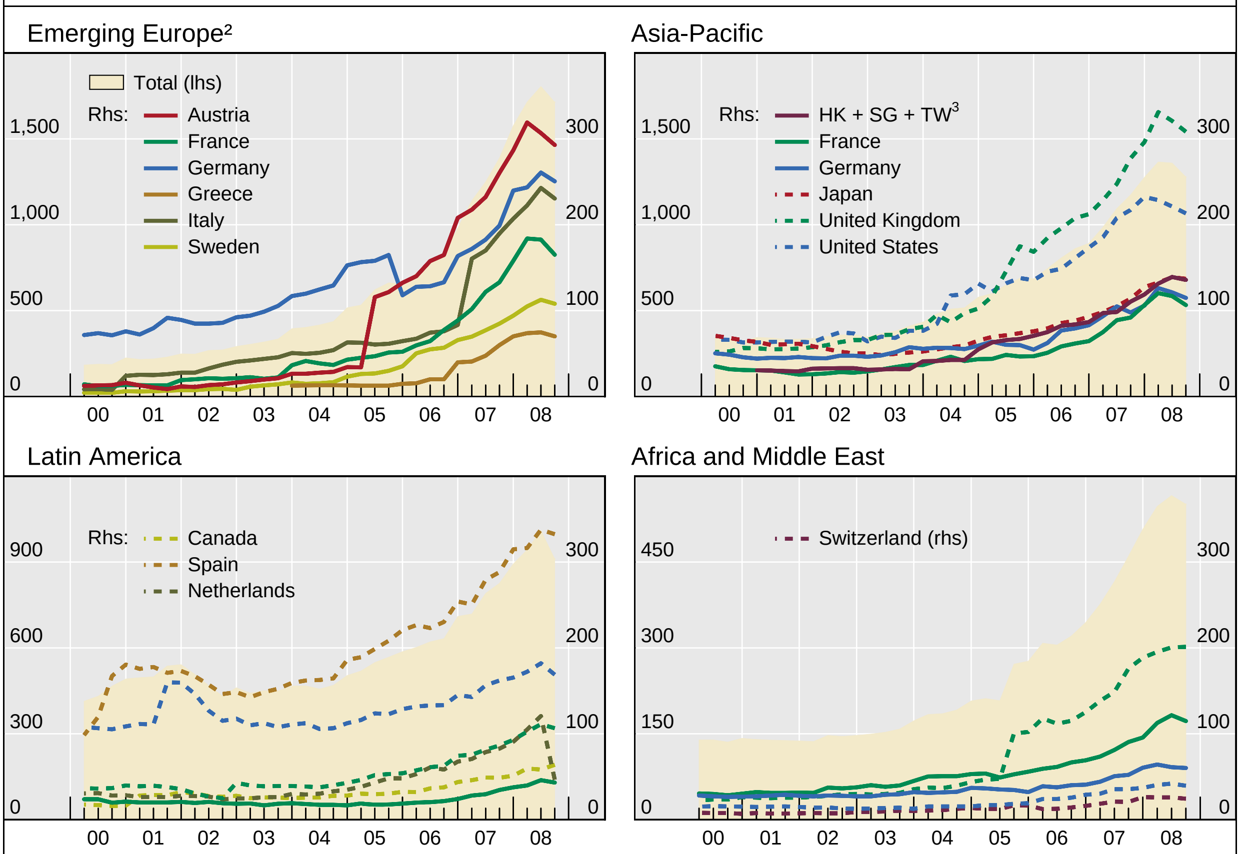
Banks' reported foreign claims on Latin America also declined, by $101 billion (Graph 4, bottom left-hand panel). While exchange rate movements also played a role here, the decline also reflected in part the sale

5 UK-headquartered banks accounted for most of this increase in the third quarter. Part of the large increase in foreign claims on the United States was due to a major acquisition within the population of reporting banks.

6 Data on signings of international syndicated loan facilities suggest a slowdown in credit in the *fourth quarter* of 2008. Signings of such facilities worldwide totalled $294 billion in the fourth quarter, while facilities granted to US non-bank residents amounted to $100 billion, in both cases less than half the volume of one year before.

Foreign claims on emerging markets[1]

In billions of US dollars



[1] Consolidated foreign claims (on an immediate borrower basis) on emerging markets grouped into four regions (panel headings), as reported by banks of the nationalities shown in the legends. Foreign claims consist of cross-border claims and local claims (ie claims booked by local offices of foreign banks). They include loans and securities, but exclude contingent exposures such as credit commitments and guarantees. [2] Includes Cyprus, Malta and Slovenia. [3] Hong Kong SAR, Singapore and Chinese Taipei combined.

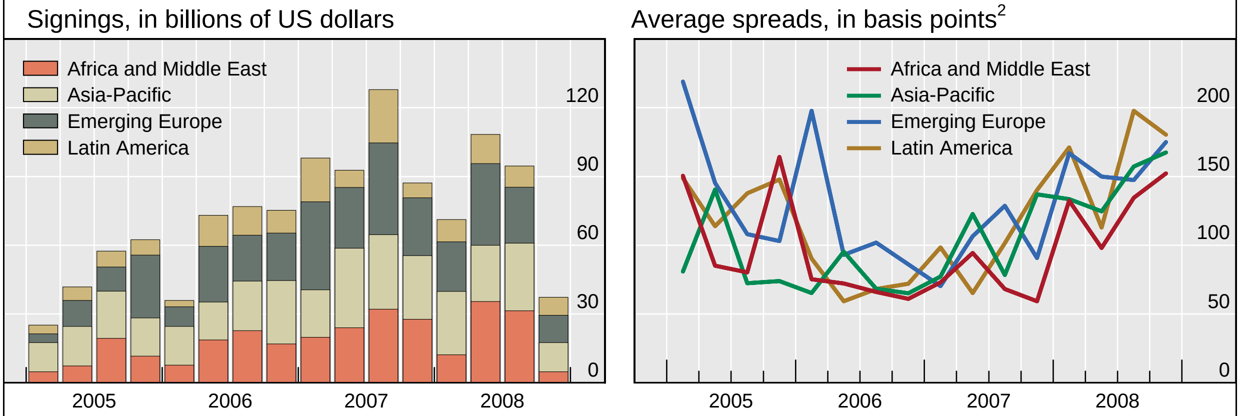
Source: BIS consolidated banking statistics on an immediate borrower basis. Graph 4

of ABN AMRO's business in Latin America, resulting in a large reduction in outstanding claims reported by Dutch banks.

The sources of change in banks' consolidated foreign claims on emerging Europe are less clear (Graph 4, top left-hand panel). On a nominal basis, foreign claims decreased by $89 billion, or 5%, driven by reduced positions reported by Austrian, French, German and Italian banks. Banks' local claims in local currencies, however, changed little once exchange rate movements are taken into account. And though international claims on the region, which are largely euro-denominated,[7] fell $36 billion in nominal terms, the BIS locational statistics show that banks' cross-border positions, adjusted for currency movements, increased during the quarter. Thus, exchange rate movements may have masked a small increase in total foreign claims on the region.

[7] In the third quarter of 2008, the share of euro- and Swiss franc-denominated gross international claims on the region was 41% and 5%, respectively.

International syndicated loans to emerging market borrowers[1]



[1] By residence of the borrower. [2] Spreads over Libor, weighted by facility amounts.

Source: Dealogic. Graph 5

Information on syndicated lending to emerging markets, available up to the *fourth* quarter of 2008, lends some support to the hypothesis that credit to emerging markets has slowed. Total signings of international syndicated loan facilities to borrowers in emerging markets came to $37 billion in the fourth quarter of 2008, less than half the volume signed in the fourth quarter of 2007 (Graph 5, left-hand panel). The average spread (weighted by facility amounts) over Libor on the facilities granted to all the major emerging regions spiked in the fourth quarter, rising above the levels observed in third quarter of 2007 when the period of financial turbulence began (Graph 5, right-hand panel).

Syndicated lending to emerging markets slows in the fourth quarter

The international debt securities market

Borrowing in the international debt securities market rebounded in the fourth quarter of 2008 as the turmoil in financial markets subsided. Net issuance of international bonds and notes increased to $624.3 billion, up substantially from $253.3 billion in the third quarter. The increase was well beyond normal seasonal patterns: the year-on-year rise over the fourth quarter of 2007 was 30.0%. Money market borrowing continued to decline, however, with net issuance falling further into negative territory in the fourth quarter.

Borrowing rebounds …

By sector, financial institutions recorded the largest increase, with net issuance of bonds and notes rising from $252 billion to $570 billion in the fourth quarter. Borrowing by financial institutions was supported by government guarantee schemes for bank bonds in Europe as well as in the United States. Gross issuance of guaranteed bonds by financial institutions exceeded $210 billion in the fourth quarter, corresponding to almost half of total net issuance by financial institutions. Even more important was much greater issuance of mortgage-backed bonds in the United Kingdom as well as in Belgium, Germany, Italy and Spain (see box). The notable increase in issuance coincided with the introduction of government-led policy initiatives which included asset purchase programmes and swap facilities. In contrast to the increase in net issuance by financial institutions, government net issuance was negative and corporate borrowing remained low at $44 billion.

… particularly for financial institutions

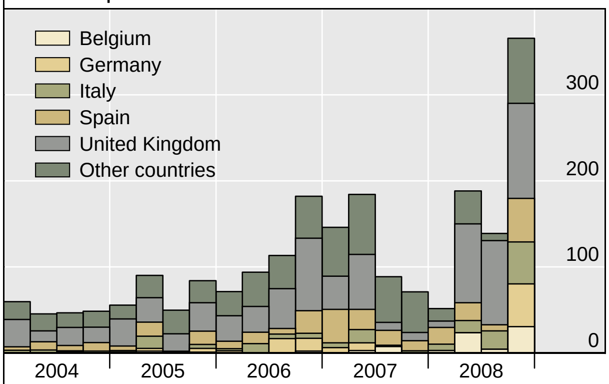
International issuance of mortgage-backed bonds

Naohiko Baba and Denis Pêtre

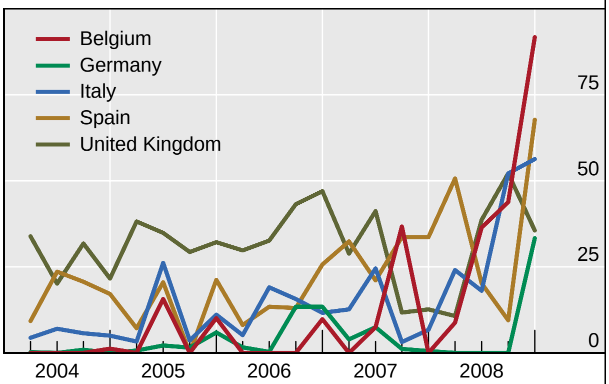
Mortgage-backed international bond issuance by industrial countries has swung dramatically since the onset of the financial turmoil in mid-2007 (Graph A, left-hand panel). By the first quarter of 2008, it had fallen to less than one third of the peak in the second quarter of 2007. But in the second quarter the trend was reversed, chiefly driven by the large rebound in issuance by UK nationals. In the fourth quarter, aggregate issuance of mortgage-backed bonds reached the highest level ever, reflecting increased borrowing by nationals of a wide range of European countries including the United Kingdom, Spain, Germany, Italy and Belgium. Net issuance figures that take account of repayments show changes of similar magnitude.

Gross issuance of mortgage-backed bonds[1]

Developed countries[2]



Share of all bond issues[3]



[1] Asset-backed securities whose cash flows are backed by the principal and interest payments of a set of mortgage loans. Payments are typically made monthly over the lifetime of the underlying loans. [2] In billions of US dollars. [3] In per cent.

Sources: Dealogic; Thomson Reuters; BIS. Graph A

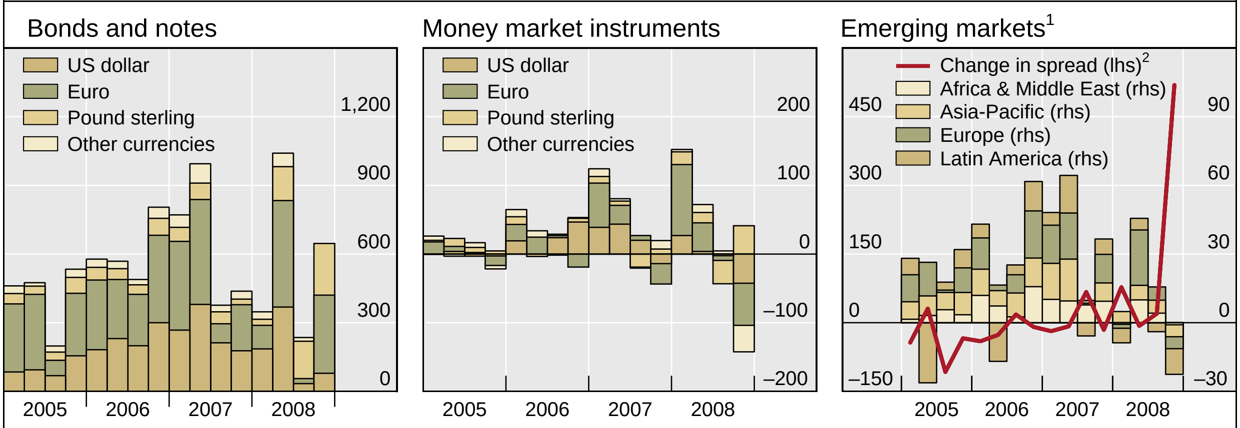
The surge by UK issuers followed the implementation of the Special Liquidity Scheme by the Bank of England in April 2008. This enabled UK banks (and building societies) to swap currently illiquid high-quality assets such as mortgage-backed securities for UK Treasury bills for up to three years. The drawdown period, which was initially scheduled to run until end-October 2008, was subsequently extended to end-January 2009. The usage of this scheme amounted to £185 billion ($263 billion) of Treasury bills.

The later surge in issuance across Europe followed the deepening of the financial crisis after the failure of Lehman Brothers in September 2008. In subsequent months, many European countries announced temporary rescue plans to support banks and unfreeze credit markets.[①] The rapid and substantial increase in mortgage-backed bond issuance in these European countries coincided with the introduction of these government-led policy initiatives. The rescue plans include asset purchase programmes (Germany, Spain), through which governments purchase illiquid and distressed assets on the banks' balance sheets, swap facilities similar to the one introduced in the United Kingdom (Italy, Spain), and government guarantees of new debt issuance (Belgium, Germany, Italy, Spain). Amid the continued slump in the overall credit market, the share of mortgage-backed bonds in the total gross issuance of international bonds has reached all-time peaks in Belgium (92%), Spain (68%), Italy (56%) and Germany (33%) (Graph A, right-hand panel).

[①] See D Domanski and S Ramaswamy, "Government-led bank rescue initiatives", *BIS Quarterly Review*, December 2008, p 10.

International debt securities issuance

Net issuance, in billions of US dollars



[1] Bond and note issuance, by nationality. [2] Quarterly change in spread of JPMorgan EMBI Global Composite index, in basis points.

Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS. Graph 6

Issuance of euro-denominated bonds and notes rises sharply

By currency, the euro-denominated segment experienced the largest increase in borrowing, followed by the sterling segment (Graph 6, left-hand panel). Net issuance in euros spiked to $337 billion in the fourth quarter from $30 billion in the previous one. Borrowing in pounds sterling rose from $155 billion to $233 billion. By contrast, US dollar net issuance, although higher than in the previous quarter, remained subdued at $63 billion. Yen borrowing decreased from $8 billion to a net repayment of $11 billion. The breakdown by nationality of issuer indicates that the largest increase in net issuance came from UK and euro area borrowers, reflecting in large part the rise in mortgage-backed borrowing referred to above.

Money market issuance continues to decline …

Borrowing via international money market instruments, which include euro commercial paper and other short-term instruments such as certificates of deposit, continued to decline. Borrowing decreased from –$30 billion to –$112 billion in the fourth quarter, the lowest level since 1989, when the BIS began collecting these statistics (Graph 6, centre panel). Net issuance by financial institutions was –$147 billion while governments borrowed $29 billion. The rapid decline for financial institutions is consistent with investor withdrawal from more risky money market assets in the United States.[8] In terms of currency, the largest decreases were in the euro-, US dollar- and yen-denominated segments. In contrast, sterling-denominated money market instruments saw a significant rebound from –$35 billion in the third quarter to $40 billion in the fourth, mainly due to an increase in commercial paper issuance.

… and emerging markets repay debt

Reflecting difficulties in global credit markets, emerging economies repaid $23 billion on a net basis in the fourth quarter (Graph 6, right-hand panel), a notable decline in net issuance from the previous quarter, in which they borrowed a net $12 billion. With a $2 billion bond issue in mid-December, Mexico was the first sovereign to borrow since the $5 billion issue by Turkey in

[8] See the special feature by Baba et al in this issue for a detailed discussion.

early September. The contraction in borrowing was most pronounced in Latin America, where $11 billion was repaid, of which $7 billion by Argentina. In Asia and the Pacific there was broad-based repayment of debt totalling $5 billion.

Derivatives markets

Exchange-traded derivatives trading decreases significantly …

The fourth quarter of 2008 saw a continued decline of activity on the international derivatives exchanges to the lowest levels in more than two years (Graph 7). Total turnover based on notional amounts decreased to $408 trillion from $543 trillion in the previous quarter. The decline in trading activity reflects a combination of significantly reduced risk appetite, expectations of stable low interest rates in major markets and lower hedge fund activity.

During the fourth quarter, major central banks lowered policy rates to historical lows and interbank money markets became more stable after having frozen in September and early October. Reflecting these developments, after reaching record highs during the crisis, interest rate derivatives turnover decreased to $345 trillion from $458 trillion in the previous quarter (Graph 7, left-hand panel). In contrast to the overall picture, a few Asia-Pacific currencies including the New Zealand dollar and the Malaysian ringgit saw an increase in the turnover for interest rate derivatives. This may be partly due to portfolio rebalancing as these currencies weakened vis-à-vis the US dollar.

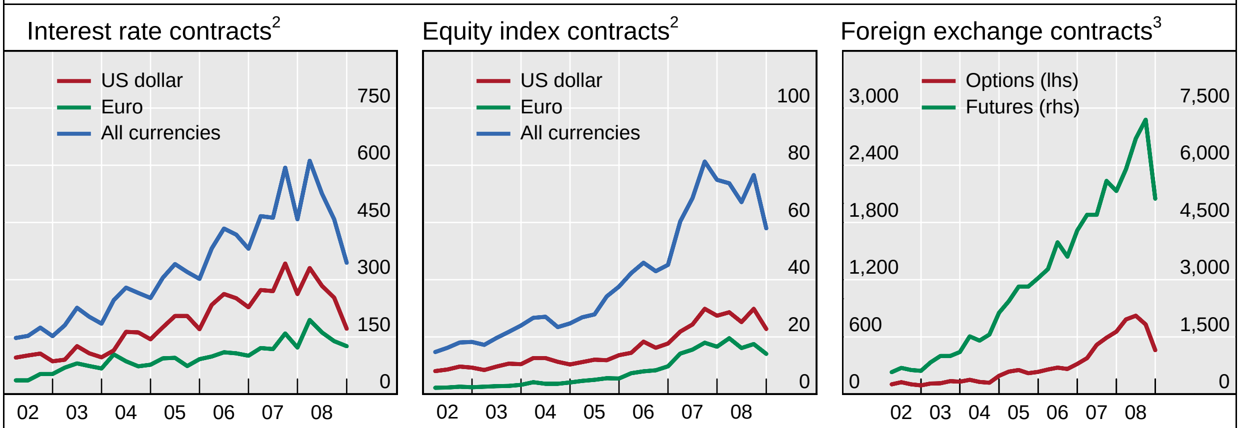
… as markets become less volatile

Activity in equity index derivatives also saw a significant decline in the fourth quarter as markets became less volatile (Graph 7, centre panel). Towards the end of the fourth quarter both options and futures turnover fell sharply to $58 trillion from a historically high level of $77 trillion in the previous quarter. The significant contraction in part reflects lower hedge fund participation in these markets.

After reaching a record of $7.9 trillion in the previous quarter, foreign exchange derivatives turnover in the fourth quarter plunged to $5.6 trillion (Graph 7, right-hand panel). The decrease in activity among the main currencies was most pronounced for the US dollar and sterling, followed by the

Turnover of exchange-traded derivatives[1]

Quarterly data, notional amounts



[1] Futures and options. [2] In trillions of US dollars. [3] In billions of US dollars.

Sources: FOW TRADEdata; Futures Industry Association; BIS calculations. Graph 7 euro and yen segments. The decline was particularly notable for the US dollar segment, which had been characterised by high turnover since the beginning of the market turmoil in the third quarter of 2007.

Trading in commodity derivatives, observable only in terms of the number of contracts, increased from 411 million contracts in the third quarter to 450 million in the fourth, 10.4% higher than the same quarter in 2007. This ended a one-year period of declining turnover. The increase was due in part to higher turnover for non-precious metals such as copper and aluminium, most likely reflecting uncertainty about future demand.