Stefan Avdjiev Christian Upper

stefan.avdjiev@bis.org *christian.upper@bis.org*

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 2009. The discussion on international debt securities and exchange-traded derivatives draws on data for the fourth quarter of 2009.

Banks' international balance sheets continued to contract in the third quarter of 2009, although at a much slower pace than in the preceding three quarters. Total gross international claims of BIS reporting banks decreased by $360 billion. Cross-border claims on borrowers in emerging markets rose slightly for the second quarter in a row, mainly reflecting increases in claims on residents of Asia-Pacific and Latin America and the Caribbean. Exchange rate adjusted local lending in local currencies also expanded in these two regions, while declining in emerging Europe. Reporting banks' international portfolios continued to shift towards claims on the public sector, which increased in both relative and absolute terms during the third quarter.

Activity in the primary market for international debt securities weakened markedly in the final three months of 2009. Announced gross issuance declined by 10% quarter on quarter to $1,778 billion. Net issuance dropped to $303 billion, well below the $485 billion recorded in the third quarter.

Trading activity on the international derivatives exchanges expanded at a modest pace in the fourth quarter. Turnover measured by notional amounts went up by 5% to $444 trillion between October and December, 22% higher than at the trough in the first quarter but still well below its peak ($690 trillion) in early 2008.

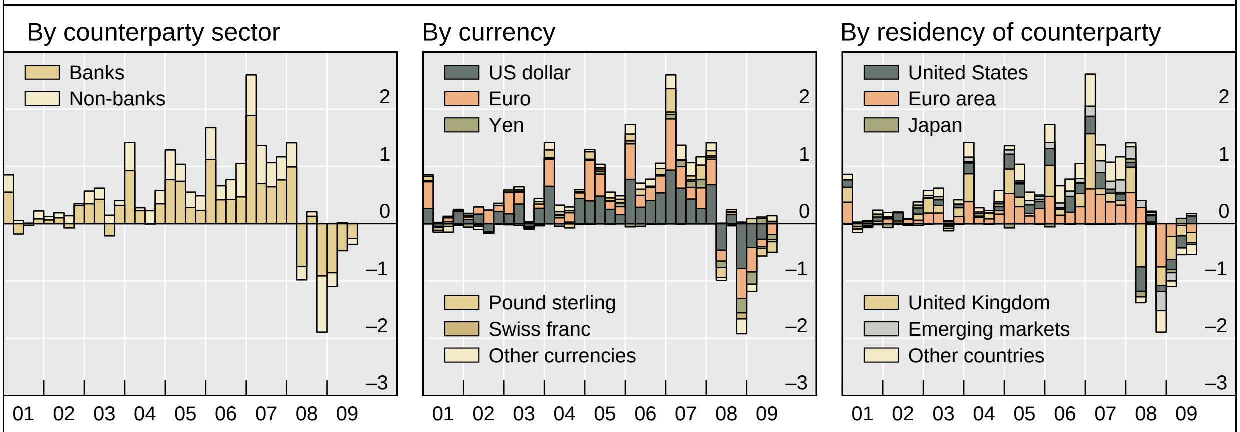
The international banking market

Banks' international balance sheets contracted again in the third quarter of 2009, although the pace of the decline was much slower than in the preceding

1 Queries concerning the banking statistics should be addressed to Stefan Avdjiev, and those relating to the international debt securities and derivatives statistics to Christian Upper.

Changes in gross international claims[1]

In trillions of US dollars



[1] BIS reporting banks' cross-border claims (including inter-office claims) in all currencies plus locally booked foreign currency claims on residents of BIS reporting countries.

Source: BIS locational banking statistics by residence. Graph 1

three quarters. Total gross international claims of BIS reporting banks fell by $360 billion (Graph 1, left-hand panel), the smallest decline since the start of the crisis. The bulk of the contraction (71%) was due to a shrinkage in interbank claims (–$257 billion), while the rest was generated by a fall in claims on non-banks (–$103 billion). Reporting banks' international portfolios continued to shift towards claims on the public sector. Cross-border claims on borrowers in emerging markets increased slightly for the second consecutive quarter, mainly reflecting growth in claims on residents of Asia-Pacific and Latin America and the Caribbean. Exchange rate adjusted local lending in local currencies in these two regions also expanded, but declined in emerging Europe.

US dollar-denominated claims increase for the first time in four quarters

US dollar-denominated claims expand

US dollar-denominated international claims expanded for the first time since the third quarter of 2008, while international claims denominated in all other major currencies fell (Graph 1, centre panel). This is a sharp reversal of the pattern observed during the crisis, when dollar claims contracted much more rapidly than those denominated in other currencies. The $45 billion expansion of reporting banks' US dollar positions was driven by an increase in claims on banks ($121 billion), the first in four quarters and the largest since early 2008. This was partially offset by a decrease in US dollar claims on non-banks ($76 billion). At the same time, claims denominated in sterling recorded their largest contraction in a decade (–$183 billion) and euro-denominated claims shrank for the fourth quarter in a row (–$191 billion).

Claims on residents of the United Kingdom and the euro area contract

The breakdown by counterparty residence largely mirrors that by currency (Graph 1, right-hand panel). A large part of the overall contraction in international claims was driven by declines in claims on residents of the United Kingdom (–$183 billion) and the euro area (–$151 billion). Conversely, international lending to residents of the United States expanded by $134 billion.

The drop in claims on euro area borrowers was almost entirely caused by a decrease in claims on banks (–$138 billion). Interbank lending also accounted for the bulk of the decline in claims on UK residents (–$131 billion). International claims on residents of emerging markets grew by $42 billion, almost entirely driven by a $41 billion expansion in lending to non-banks.

Banks increase exposure to Asia-Pacific and Latin America, but reduce positions in emerging Europe

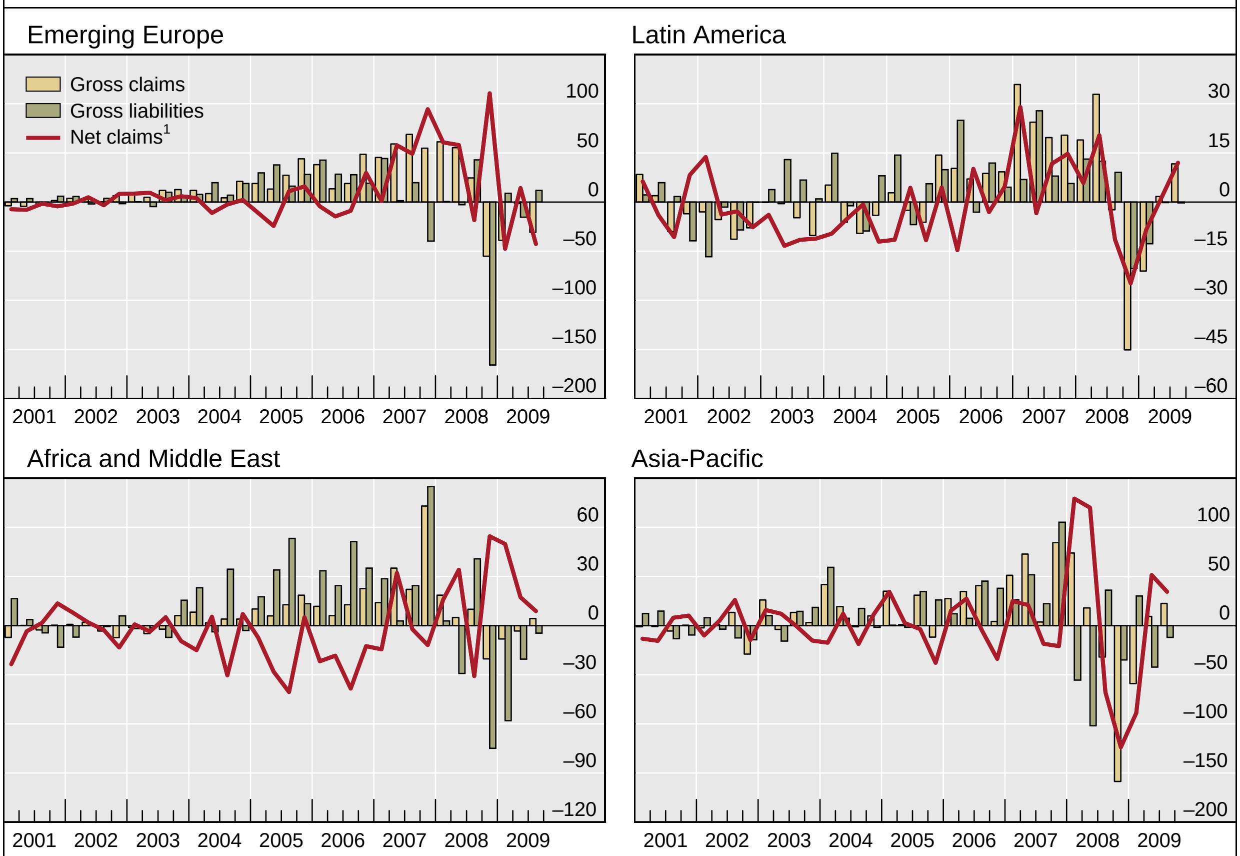
BIS reporting banks increased their net cross-border exposures to emerging markets by $12.6 billion (Graph 2). This rise reflected a combination of higher cross-border claims ($7.8 billion) and lower cross-border liabilities ($4.8 billion). Cross-border claims on non-banks expanded by $35.5 billion, the largest increase since the second quarter of 2008. Conversely, cross-border claims on banks declined by $27.7 billion.

Banks increase net exposures to Asia-Pacific, Latin America and the Caribbean …

Lending patterns diverged significantly across regions. The BIS locational banking statistics reveal that cross-border claims on residents of Asia-Pacific and Latin America and the Caribbean grew during the third quarter of 2009 (by $22.7 billion and $11.7 billion, respectively). Moreover, the BIS consolidated banking statistics on an immediate borrower basis indicate that local lending in local currencies in these two regions, adjusted for exchange rate fluctuations

Changes in cross-border positions vis-à-vis emerging markets

In billions of US dollars



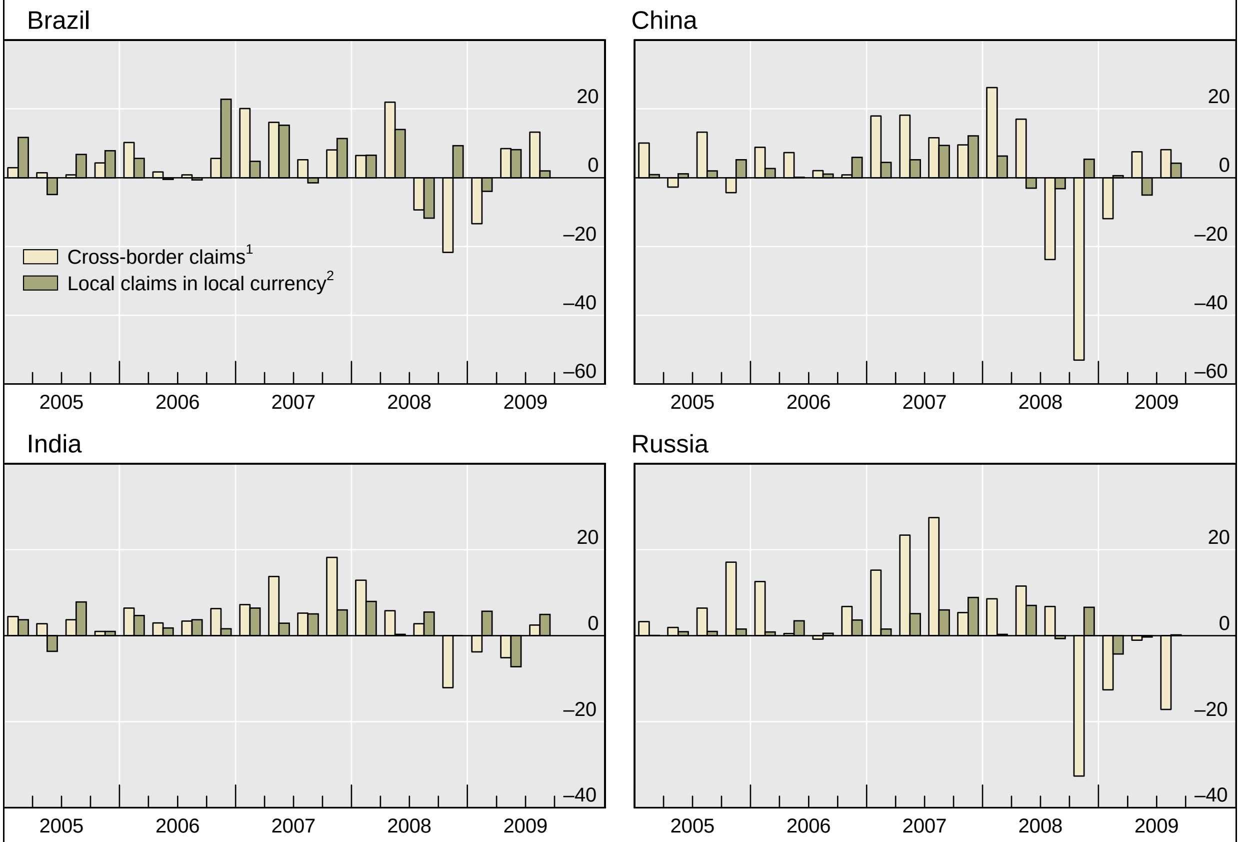
[1] Gross claims minus gross liabilities.

Source: BIS locational banking statistics by residence.

Graph 2

Local claims in local currency and cross-border claims on BRIC residents

In billions of US dollars



[1] Quarterly changes in cross-border claims obtained from the BIS locational banking statistics by residence, not adjusted for exchange rate fluctuations. [2] Quarterly changes in local currency denominated local claims, obtained from the BIS consolidated banking statistics (on an immediate borrower basis), adjusted for exchange rate fluctuations.

Source: BIS locational banking statistics by residence; BIS consolidated banking statistics (immediate borrower basis). Graph 3

and breaks in series, also expanded (by $10.9 billion and $8.2 billion, respectively).[2] Conversely, cross-border claims and local lending in local currencies in emerging Europe both declined during the period (by $30.1 billion and $6.8 billion, respectively).

… but decrease positions in emerging Europe

The decoupling between emerging Europe and the rest of the developing world could reflect both demand and supply factors in international credit markets. Lower overall output growth in emerging Europe during the third quarter of 2009 may have reduced the demand for credit in the region, thus explaining at least part of the contraction in claims on its residents. In addition, the less optimistic outlook for growth in that area could have made banks less willing to extend credit to its residents. Finally, political factors could have also had a contractionary effect on both the demand and supply of credit to the region. Uncertainty regarding the outcomes of the upcoming elections in Romania and Ukraine may have contributed to two of the largest individual

[2] A Spanish bank sold its subsidiary in Venezuela to the local government. This caused exchange rate adjusted local claims in local currency on residents of Venezuela to decline by approximately $12.1 billion. The change in local claims in local currency in Latin America and the Caribbean reported in the text is adjusted for this break in the series.

country declines in cross-border claims during the period (–$6.3 billion and –$2.9 billion, respectively).

The growth in foreign lending to Asia-Pacific and Latin America and the Caribbean during the third quarter was led by expansions in claims on the residents of the larger economies in those regions (ie Brazil, China and India). Cross-border claims on these countries registered their largest increases since the first half of 2008 (Graph 3), expanding by $13.2 billion in Brazil, $8.2 billion in China and $2.5 billion in India. Local claims denominated in local currencies also increased in these three countries (by $4.9 billion in India, $4.2 billion in China and $2.0 billion in Brazil). Meanwhile, reporting banks decreased their cross-border claims on residents of the fourth BRIC economy, Russia, for the fourth quarter in a row (–$17.1 billion).

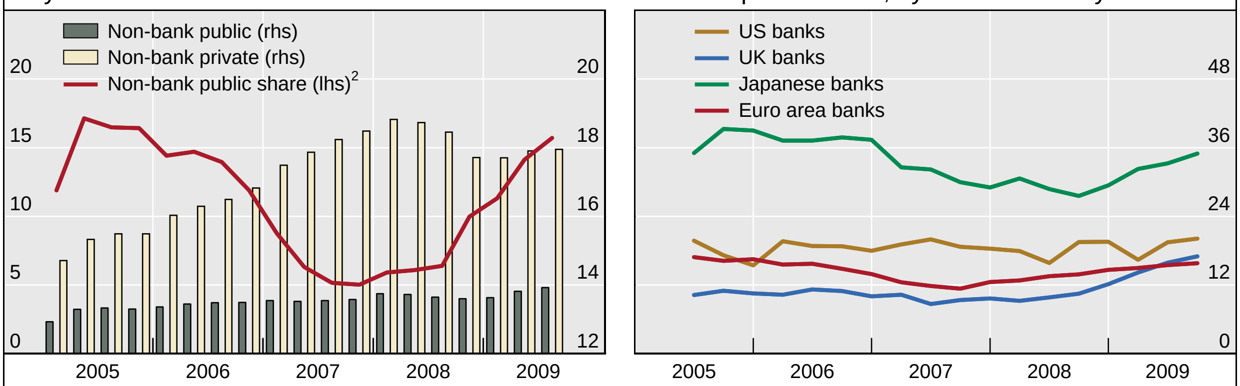
Banks shift their international portfolios towards the public sector

Foreign claims on the public sector expand

The share of BIS reporting banks' foreign claims on the public sector has increased in each of the last seven quarters for which data are available.[3] This follows a steady fall in that category which started in the first half of 2005 and lasted until the end of 2007 (Graph 4, left-hand panel). During most of 2008, foreign claims on the public sector (green bars) fell in absolute terms, but increased on a relative basis, as claims on the non-bank private sector (yellow bars) declined at an even higher rate. However, since the start of 2009, foreign claims on the public sector have increased in both absolute and relative terms. During the first three quarters of last year, they expanded by $806 billion, an

Consolidated foreign claims

By sector[1] | Share on public sector, by bank nationality[3]



[1] Bars indicate BIS reporting banks' combined foreign claims on the respective sector, not adjusted for exchange rate fluctuations; in trillions of US dollars. [2] Combined foreign claims on the public sector as a percentage of combined foreign claims. [3] Foreign claims on the public sector as a percentage of foreign claims.

Source: BIS consolidated banking statistics (ultimate risk basis). Graph 4

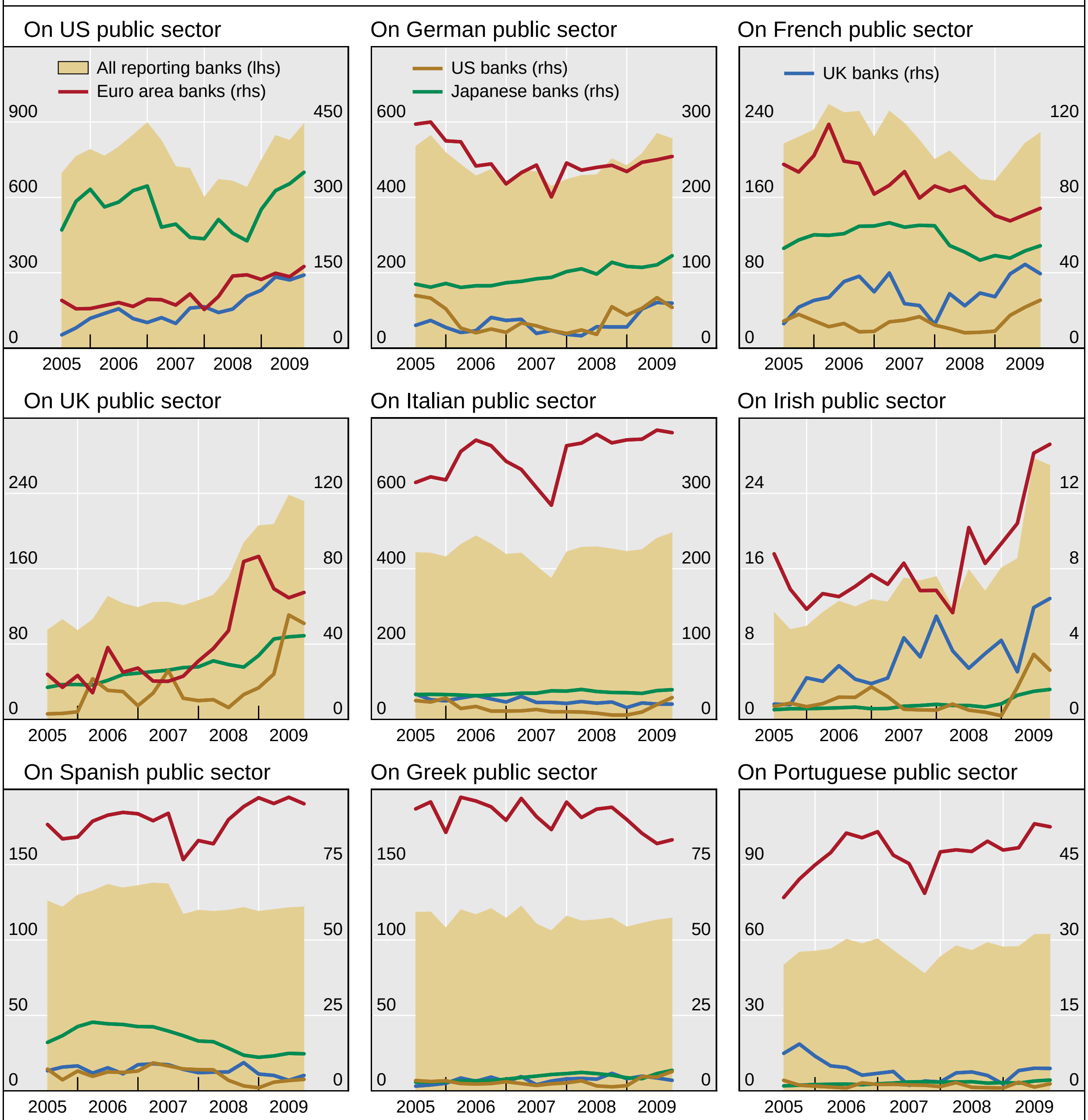
[3] Note that the figures quoted in this subsection are obtained from the BIS consolidated banking statistics on an *ultimate risk* basis. We focus on that statistic, as opposed to the BIS consolidated banking statistics on an *immediate borrower* basis, because the former offers a sectoral breakdown of *foreign* claims, whereas the latter does so for *international* claims, which do not include local claims in local currencies. As a result, foreign claims give a more complete picture of international banking developments than international claims. For example, US dollar-denominated claims on the US public sector held by the New York branch of a German bank would be included in foreign claims, but not in international claims.

upswing of over 20%. As a result, the share of foreign claims on the public sector rose from 16.0% to 18.3%.

The shift towards claims on the public sector observed in recent quarters has been quite widespread (Graph 4, right-hand panel). For example, Japanese banks, which have traditionally allocated larger shares of their international asset holdings to claims on the public sector, have increased their claims on that sector by $166 billion (or 26.4%) since the end of 2007. US and euro area banks, both of which have historically been closer to the global mean in that category, also recorded substantial increases during the same period

Foreign claims on the public sector by nationality of reporting banks[1]

At constant end-Q3 2009 exchange rates, in billions of US dollars



[1] Public sector comprises the general government sector, central banks and multilateral development banks. Claims on the public sector of each country are assumed to be denominated in the currency of the respective country.

Source: BIS consolidated banking statistics (ultimate risk basis).

Graph 5

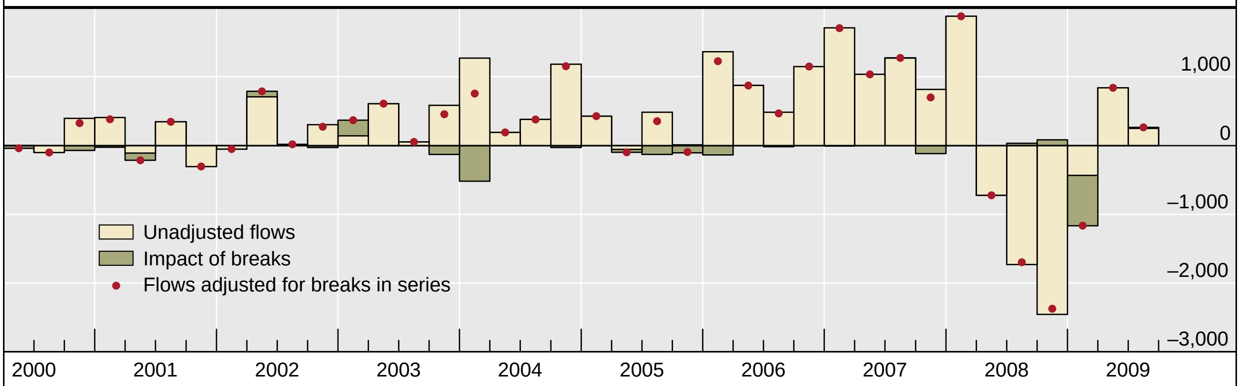
Impact of the reclassification of US investment banks

In September 2008, the remaining US investment banks became bank holding companies. As a result, the figures for the United States in the BIS consolidated banking statistics now include the international positions of these institutions. The expansion in the reporting population took place in the first quarter of 2009, and led to a $696 billion increase in aggregate international claims in the BIS consolidated banking statistics on an immediate borrower basis and a $903 billion increase in aggregate foreign claims in the BIS consolidated banking statistics on an ultimate risk basis.

In addition to that break, several smaller breaks occurred in the first quarter of 2009. In the case of the consolidated banking statistics on an immediate borrower basis, they added up to approximately $36 billion. As a result, even though aggregate consolidated claims on an immediate borrower basis were reported to have declined by $434 billion in the first quarter, the actual decline was approximately $1,166 billion, once correction is made for the changes in the reporting population that took place during that period (Graph A). In the case of the consolidated banking statistics on an ultimate risk basis, the additional breaks added up to $106 billion, resulting in an aggregate break of $1,009 billion.

Impact of breaks in series on consolidated international claims

In billions of US dollars



Source: BIS consolidated international banking statistics (immediate borrower basis). Graph A

The figures in the consolidated banking statistics published by the BIS are not adjusted for breaks in series. However, the BIS communicates all important breaks in the press release that accompanies the publication of the data. In addition, a separate document, which is updated every quarter and is available on the BIS website (www.bis.org/statistics/breakstablescons.pdf), provides details on the period of the change, the reporting country, the reason for the break and the net changes in aggregate assets and liabilities that resulted from it.

($228 billion and $171 billion, respectively).[4] Even UK banks, which have usually had low exposure to the public sector, have significantly expanded the size of their public sector claims (by $250 billion, or 64.6%) since the start of 2008.

Banks increase claims on the US and euro area public sectors

Higher holdings of the debt of the United States and of various European governments account for the lion's share of the recent expansion in reporting banks' foreign claims on the public sector (Graph 5). A large part of the overall increase recorded during the first three quarters of 2009 resulted from a $146 billion (20%) surge in claims on the US public sector. During the same

[4] About $71 billion of the increase in US banks' claims on the public sector during that period was due to the change in the US reporting population in the BIS consolidated banking statistics that occurred in the first quarter of 2009 as a result of the reclassification of the remaining US investment banks as bank holding companies (see box).

period, reporting banks also considerably expanded their claims on the public sectors of Germany ($72 billion, 15%), Italy ($49 billion, 11%), France ($51 billion, 29%), the United Kingdom ($26 billion, 13%) and Ireland ($11 billion, 68%).[5] By contrast, the increases in the levels of reporting banks' claims on the public sectors of Greece ($6 billion, 5%), Portugal ($5 billion, 9%) and Spain ($3 billion, 2%) during the first three quarters of 2009 were relatively small.

Graph 5 highlights the different degrees to which foreign claims on the public sectors of various countries and regions are concentrated in certain banking systems. For example, the largest holders of foreign claims on the public sectors of the euro area countries are banks headquartered in the euro area. As of the end of September 2009, their foreign claims on the public sectors of the area amounted to $1.2 trillion, more than 60% of all outstanding foreign claims on the public sectors of the region. Nevertheless, the strength of their presence in the area's public debt markets is not uniform. They account for 32% of the outstanding foreign claims on the French public sector and for 46% of those on the German public sector. Conversely, euro area banks hold more than 70% of all outstanding foreign claims on the public sectors of Portugal (84%), Spain (78%), Italy (77%) and Greece (73%). By contrast, no individual banking system holds more than 50% of the outstanding foreign claims on the public sectors of the United States, Japan and the United Kingdom.

The international debt securities market

Issuance boom comes to an end

Activity in the primary market for international debt securities weakened markedly in the final three months of 2009. Announced gross issuance declined by 10% quarter on quarter to $1,778 billion (Graph 6, left-hand panel). With repayments up by 4%, net issuance dropped to $303 billion, well below the $485 billion recorded in the third quarter.

Strong relationship between issuance and economic growth in mature economies …

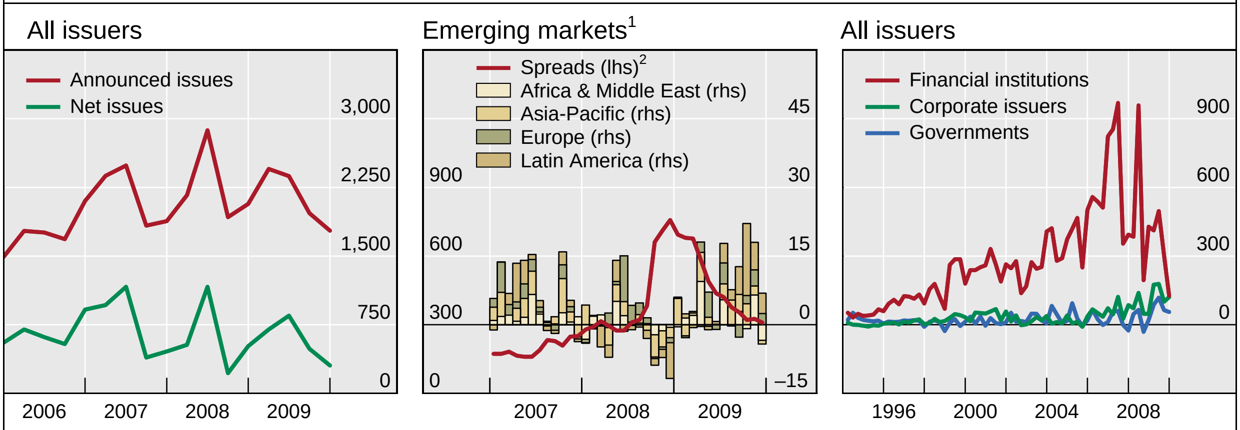
Regional issuance patterns to some extent reflected the uneven nature of the economic recovery. Residents in emerging markets raised 19% more funds in the international market than in the third quarter, whereas borrowers from developed economies reduced their issuance by 38%.

The two-speed recovery was apparent not only in the split between developing and developed economies, but also at the country level, particularly among the larger advanced economies. Residents in countries with sluggish growth generally tapped the market by a smaller amount than in the previous quarter, while borrowers from countries with higher growth raised more funds than before. For instance, issuance by euro area borrowers halved to $111 billion. Borrowers from the United Kingdom, a country that saw a tepid recovery in the fourth quarter, actually reduced their debt outstanding in the international market, with net redemptions amounting to $26 billion. This

[5] These numbers were adjusted for exchange rate fluctuations assuming that all foreign claims on the public sector of a given country were denominated in the official currency of that country.

International debt securities issuance

Net issuance, in billions of US dollars



[1] By residence of issuer. [2] Quarterly JPMorgan EMBI Global Composite index, in basis points.

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

contrasted with much stronger issuance in countries where the recovery had taken a firmer hold. Australian and Canadian borrowers stepped up their issuance to $34 billion and $28 billion, respectively. Net international issuance by US residents more than doubled to $108 billion, although it fell short of the $259 billion seen between April and June.

… but not in emerging markets

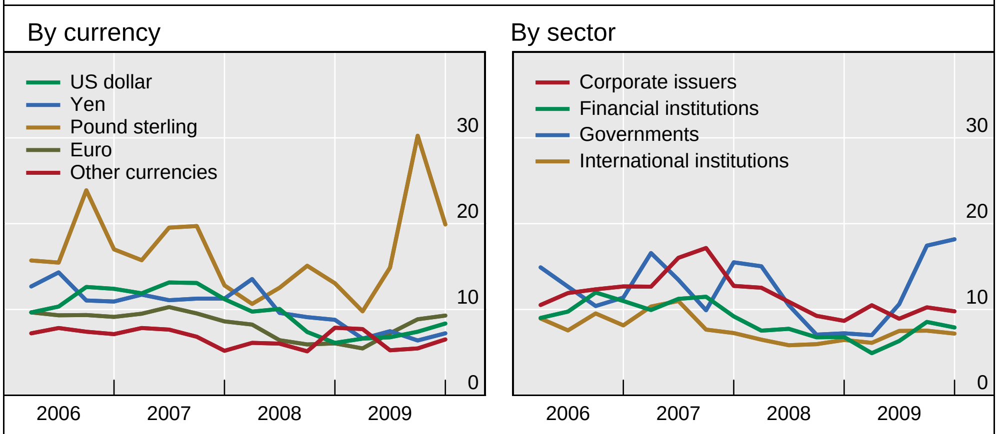
The relationship between issuance and growth was more blurred for borrowers resident in emerging market economies (Graph 6, centre panel). Issuance by Latin American entities soared to the highest level since the 1990s ($26 billion, after $13 billion between July and September), with strong borrowing by Brazil, Mexico and Venezuela. Of these three countries, only Brazil grew rapidly during the period under review. Issuance by borrowers from emerging Europe increased nearly fourfold to $8 billion, despite depressed economic activity in the region. By contrast, residents in the much faster-growing region of developing Asia and the Pacific raised $6 billion, half of the third quarter amount. Finally, borrowers resident in the Middle East and Africa issued international debt securities for $2 billion, down from $8 billion in the third quarter. Net repayments worth $5 billion by financial institutions located in the United Arab Emirates contrasted with net issuance of $7 billion by the government of Qatar, which took advantage of the favourable market conditions to pre-fund its financing requirements.

Possibility of Dubai payment delay weighs on issuance

Market conditions for emerging market borrowers deteriorated sharply in late November, with news that government-owned Dubai World had asked to delay payments on its debt. Admittedly, the impact on issuance is hard to disentangle from seasonal factors. Emerging market issuance tends to soften towards the end of the year. Even so, the decline in late 2009 was much stronger than those seen in previous years. Net issuance fell from $21 billion in October and $18 billion in November to less than $3 billion in December. Issuance decreased in all regions in December, but the drop was particularly strong in the Middle East and Africa.

International bond and note issuance[1]

Weighted average maturity, in years



[1] Announced fixed straight issues.

Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS. Graph 7

Corporate catches up with financial issuance

Issuance by non-financial corporations approached that by financial institutions for the first time since the latter started to surge in the early 1990s (Graph 6, right-hand panel). In the fourth quarter of 2009, non-financial corporations raised $121 billion, 20% more than in the previous three months and just short of the $126 billion placed by financial institutions. Financial issuance was particularly weak in emerging market economies ($0.3 billion, after $10 billion in the third quarter) and the United Kingdom (net redemptions of $37 billion, after net issuance of $78 billion in the third quarter). By contrast, it rose in Australia (up 27% to $31 billion), Canada (up 870% to $12 billion) and the United States (up 885% to $43 billion).

Some banks still rely on government guarantees

Not all financial institutions were able to access the market based solely on their own financial strength. A number continued to depend on government guarantees to issue debt (see the feature by Gerlach in this issue). The share of guaranteed paper in total financial issuance continued to decline, but at 8% of announced gross issuance it appears to be approaching a lower bound.

Shift towards longer maturities as borrowers lock in favourable terms

Borrowers adjusted their debt profile to lock in cheap funding costs. They repaid money market instruments (with maturities of less than one year) and floating rate bonds and notes by $141 billion and $71 billion, respectively. Meanwhile, they issued fixed rate bonds and notes to the tune of $492 billion. The average maturity of fixed rate bonds and notes rose from a low of 6.3 years in the first quarter of 2009 to 9.8 years in the third. It then declined slightly to 9.3 years in the final quarter. This, however, was entirely due to the extraordinarily high average maturity of sterling-denominated bonds issued in the third quarter (Graph 7, left-hand panel), when the UK government and a various special purpose vehicles securitising mortgages issued a number of very large bonds with maturities of up to 57 years. In the fourth quarter, sterling-denominated bonds still had longer maturities on average than those in other currencies, perhaps reflecting the high appetite for such paper by UK pension funds, forced to match their assets and liabilities on a mark to market basis.[6] Governments in particular lengthened the maturities of their debt, to almost 20 years (Graph 7, right-hand panel).

Exchange-traded derivatives

Moderate increase in activity

After pausing in the previous quarter, the recovery in activity on the international derivatives exchanges continued at a modest pace in the final three months of 2009. Turnover measured by notional amounts went up by 5% to $444 trillion between October and December, 22% higher than at the trough in the first quarter but still well below its peak ($690 trillion) in early 2008. This increase was fairly evenly distributed across risk categories. Open interest, also based on notional amounts, rose in line with turnover, by 6% to $73 trillion.

Low growth in interest rate segment

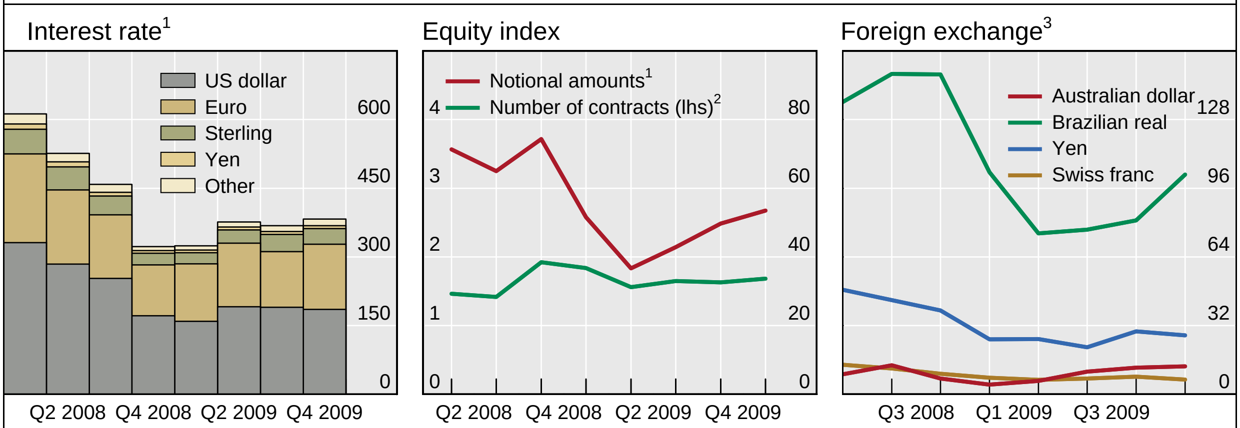
Turnover in interest rate derivatives went up by 4% to $383 trillion (Graph 8, left-hand panel), with considerable variation across currencies. Increasing turnover in contracts denominated in the euro (17%), New Zealand dollar (37%) and Canadian dollar (59%) contrasted with a 10% decline in sterling contracts and stable turnover in futures and options on US and Japanese interest rates.

Stock price increases lift turnover in equity index derivatives

Higher equity valuations drove up turnover measured by notional amounts in derivatives on stock price indices by 8%, while turnover measured by the number of contracts traded rose by only 3% (Graph 8, centre panel). Among the few markets with a genuine increase in activity was the Brazilian market, where trading volume measured by notional amounts surged by 58% to $0.7 trillion, just short of its peak of late 2007. In the first quarter of 2009, turnover in Brazilian stock index contracts stood at a mere $0.2 trillion. Much of the recovery in trading activity was driven by increases in stock prices (the Bovespa index gained 11% in the fourth quarter), but the number of contracts

Exchange-traded derivatives

Futures and options contracts



[1] Turnover, notional amounts in trillions of US dollars. [2] Turnover, number of contracts in billions of contracts. [3] Open interest, in billions of US dollars. Contracts with at least one leg denominated in any of the specified currencies.

Source: BIS. Graph 8

[6] This issue is explored in some detail in the box on page 7 of the March 2006 *BIS Quarterly Review*.

traded also went up by 21% in the last quarter, after stagnating in the first three months of the year.

Stronger activity in currency derivatives

Activity in the market for foreign exchange derivatives strengthened in the final quarter of 2009. Turnover measured by notional amounts rose by 15% to \$8 trillion, the highest on record. Open interest increased by 11% to \$310 billion. Turnover growth was particularly strong in contracts on the Swiss franc (38%). Most of this appears to reflect higher short-term trading rather than longer-term position-taking, as open interest in derivatives on the franc fell by 17%.

FX carry trade activity

The data provide some support for the notion of the (renewed) attractiveness of FX carry trades (see the feature by Kohler in this issue). FX carry trades can be implemented in a number of ways, one of which involves a long position in futures or options on a high-yielding currency and a short position in contracts on a low-yielding one. Admittedly, it is impossible to identify the motivations behind individual positions in the observable data. Even so, it is striking that open interest in two of the most attractive target currencies has increased considerably since the height of the crisis. Open interest in contracts on the Australian dollar (the red line in the right-hand panel of Graph 8) rose from \$4 billion at the end of 2008 to \$13 billion one year later, although much of this increase took place in the first half of the year. Positions in the Brazilian real (green line) also expanded considerably (by 26% in the fourth quarter of 2009 alone). The funding currencies have changed from previous episodes of high carry trade activity. Short-term interest rates are low in a number of large economies, which has expanded the number of possible funding currencies. Open interest in the two traditional funding currencies, the Japanese yen and the Swiss franc, fell in the final quarter of 2009. Unfortunately, it is hard to say on the basis of the available data which other currencies have taken their place.

Higher turnover in derivatives on precious metals offsets decline in other commodity contracts

Activity in futures and options on commodities increased at a moderate pace in the final three months of 2009. Turnover measured by the number of contracts traded (notional amounts are not available for this risk category) rose by 7%, although with considerable variation across types of commodities. Trading volumes in contracts on precious metals increased by almost 50%, driven by near doubling of trading in gold contracts on Chinese exchanges. Turnover in contracts on agricultural commodities and energy contracts increased by 5% and 2%, respectively. By contrast, volumes of derivatives on non-precious metals fell by 31%.