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Highlights of the BIS international statistics

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 2010. The discussion on international debt securities and exchange-traded derivatives draws on data for the fourth quarter of 2010.

The international banking market in the third quarter of 2010[1]

Cross-border lending[2] by BIS reporting banks returned to positive growth in the third quarter of 2010. Claims denominated in all major currencies except the euro increased during the period. Internationally active banks expanded their claims on residents of all four major emerging market regions for the first time since the collapse of Lehman Brothers. The exchange rate-adjusted foreign claims[3] of BIS reporting banks on Greece, Ireland, Portugal and Spain fell slightly during the period. As of September 2010, the exposures of all major national banking systems to the Middle East and North Africa were fairly small relative to their aggregate foreign exposures.

Cross-border lending picks up[4]

The aggregate cross-border claims of BIS reporting banks recorded a sizeable expansion in the third quarter of 2010. The $650 billion (2.3%) rise brought the stock to $31 trillion, approximately $5 trillion below the peak of $36 trillion reached at the end of March 2008. The overall increase was led by a $372 billion (3.6%) rise in lending to non-banks (Graph 1, left-hand panel). At $11 trillion, these claims represent slightly more than a third of the aggregate

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1 Queries concerning the banking statistics should be addressed to Stefan Avdjiev.

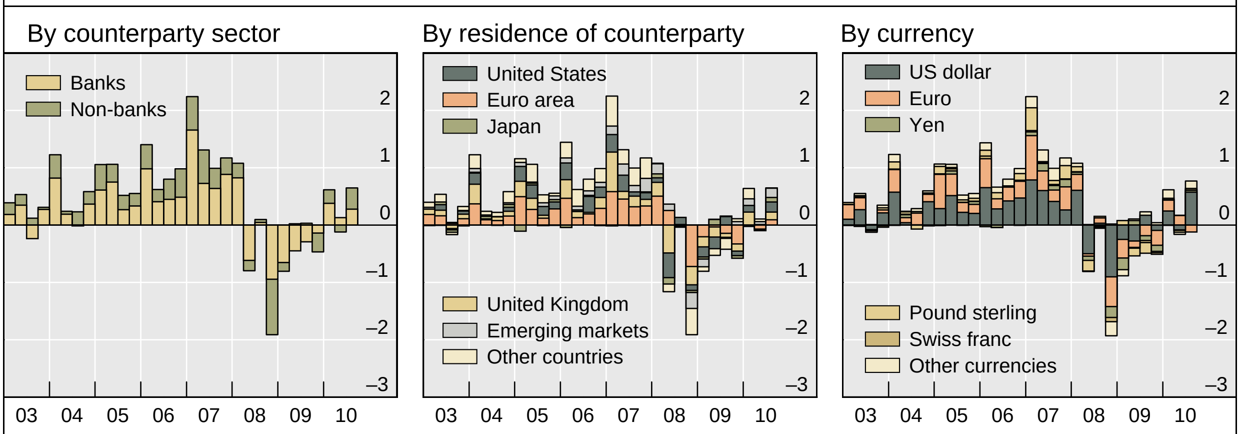
2 Cross-border lending is defined as lending to entities located in a country other than the country of residence of the reporting banking office (balance of payments basis).

3 Foreign claims are defined as the sum of cross-border claims and local claims of foreign affiliates.

4 The analysis in this and the following subsection is based on the BIS locational banking statistics by residence. In this dataset, creditors and debtors are classified according to their residence (as in the balance of payments statistics), not according to their nationality. All reported flows in cross-border claims have been adjusted for exchange rate fluctuation and breaks in series.

Changes in gross cross-border claims[1]

In trillions of US dollars



[1] BIS reporting banks' cross-border claims include inter-office claims.

Source: BIS locational banking statistics by residence. Graph 1

stock of cross-border claims and are normally less volatile than their interbank counterparts, which went up by $278 billion (1.5%) during the third quarter of 2010.

Banks expand cross-border lending to developed economies …

BIS reporting banks simultaneously increased their cross-border claims on all major advanced economies for the first time since the start of 2008 (Graph 1, centre panel). Cross-border claims on residents of the United States recorded their largest rise ($176 billion or 3.4%) since the second quarter of 2007. Most of that growth was due to a $142 billion (5.7%) increase in claims on non-banks in the country. Cross-border claims on the euro area went up for the first time in two years (by $93 billion or 1.0%). More than three quarters of the increase was due to a $73 billion rise in claims booked by banks located outside the euro zone. Claims on residents of the United Kingdom and Japan also rose during the period (by $135 billion or 2.9% and by $80 billion or 11.6%, respectively).

Cross-border claims denominated in all major currencies except the euro increased during the quarter (Graph 1, right-hand panel). Cross-border claims denominated in US dollars surged by $575 billion (4.8%). Claims denominated in yen and sterling also went up (by $35 billion or 3.2% and by $25 billion or 1.6%, respectively). By contrast, euro-denominated claims contracted (by $122 billion or 1.2%) following two consecutive quarterly expansions.

Broad-based expansion in cross-border claims on emerging markets

… and to emerging market economies

The growth rate of BIS reporting banks' cross-border claims on residents of emerging market economies increased during the third quarter of 2010 (Graph 2). The $160 billion (6.3%) rise was the sixth in a row and larger than any of the preceding five. It was also the first since the failure of Lehman Brothers to encompass all four major emerging market regions.

Strong growth in claims on China …

More than half of the overall increase was directed towards the buoyant economies of the Asia-Pacific region (Graph 2, bottom right-hand panel). The $84 billion (9.2%) expansion was the result of a $44 billion (7.6%) rise in interbank claims and a $40 billion (12%) increase in claims on non-banks.

Once again, the emerging market country that saw the largest growth in cross-border lending was China ($37 billion or 15%). This brought the stock of BIS reporting banks' cross-border claims on that country to $285 billion, which accounted for over 10% of all claims on emerging market economies ($2.779 trillion) and more than a quarter of all those on the Asia-Pacific region ($1.015 trillion). Claims on India and Chinese Taipei also recorded solid gains during the quarter, increasing by $13 billion (8.0%) and $11 billion (17%), respectively. By contrast, claims on Korea declined by $2.6 billion (1.2%).

… and Brazil

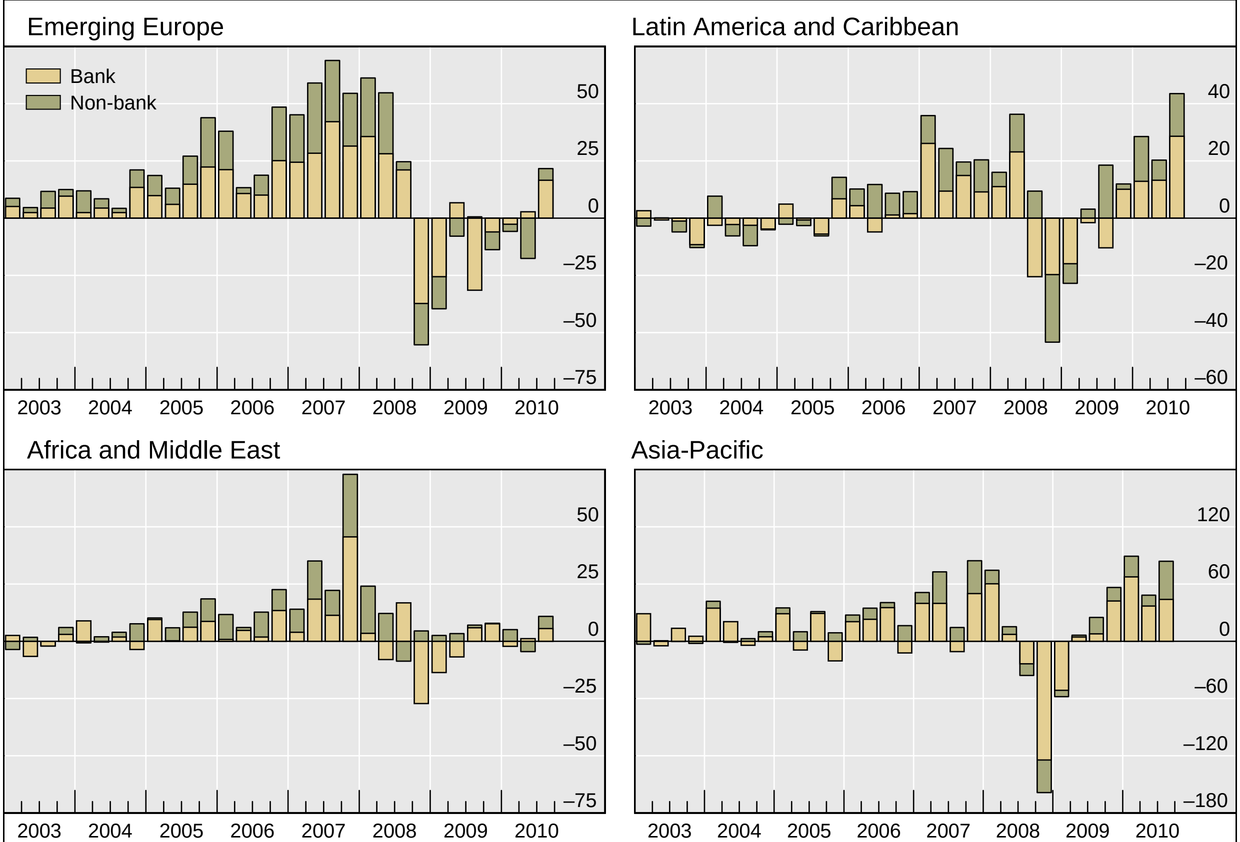
Cross-border claims on residents of the Latin America-Caribbean region grew at an unprecedented pace during the third quarter of 2010 (Graph 2, top right-hand panel). In absolute terms, the $44 billion (9.6%) increase was the largest on record. Approximately two thirds of that amount ($28 billion or 14%) was directed towards Brazil. Ahead of the October 2010 presidential election, claims on banks located in the country soared by $17 billion (21%), while those on non-banks expanded by $11 billion (8.5%). In the meantime, cross-border claims on Peru surged by $4.6 billion (32%) amidst very strong (mainly export-led) economic growth in the country. Reporting banks also increased their claims on Mexico ($4.1 billion or 4.0%) and Chile (by $3.4 billion or 7.5%).

Cross-border lending to emerging Europe grows again

BIS reporting banks expanded their cross-border lending to emerging Europe for the first time in the last eight quarters (Graph 2, top left-hand

Changes in cross-border claims on residents of emerging markets[1]

By counterparty sector, in billions of US dollars



[1] BIS reporting banks' cross-border claims (including inter-office claims) in all currencies.

Source: BIS locational banking statistics by residence. Graph 2 panel). Claims on the region went up by $22 billion (3.1%) during the period. Not surprisingly, internationally active banks chose to direct most of their funds towards the more vibrant economies of the area. Claims on Poland, the only country in the region that did not experience a recession during the financial crisis, rose by $8.7 billion (7.8%). Banks also continued to expand their cross-border lending to Turkey (by $5.0 billion or 3.7%), while the country's economy recorded its sixth quarter of positive growth. In the meantime, cross-border lending to Russia, whose economy had expanded for three consecutive quarters, increased (by $10.1 billion or 8.0%) for the first time after seven consecutive declines. Nevertheless, not all countries in the region experienced inflows. Banks cut their lending to Hungary (by $2.3 billion or 2.7%) as details emerged about some unorthodox features of the government's plan to deal with the country's fiscal situation. Claims on Croatia also fell considerably (by $1.6 billion or 4.3%).

BIS reporting banks increased their cross-border lending to Africa and the Middle East for the fourth time in the last five quarters (Graph 2, bottom left-hand panel). The $10.8 billion (2.4%) increase in claims was the result of a $5.5 billion (3.1%) expansion in interbank lending and a $5.2 billion (1.9%) rise in claims on non-banks. The largest inflows were experienced by Saudi Arabia ($7.1 billion or 9.9%), South Africa ($2.8 billion or 8.5%) and Qatar ($2.4 billion or 4.7%).

BIS reporting banks' foreign exposures to Greece, Ireland, Portugal and Spain[5]

As of the end of the third quarter of 2010, the total *consolidated* foreign exposures[6] (on an *ultimate risk* basis) of BIS reporting banks to Greece, Ireland, Portugal and Spain stood at $2,512 billion (Table 1). At $1,756 billion, foreign claims were equal to approximately 70% of that amount. The remaining $756 billion was accounted for by *other exposures* (ie the positive market value of derivatives contracts, guarantees extended and credit commitments).

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5 The analysis in this and the following subsection is based on the BIS consolidated international banking statistics on an ultimate risk basis. In this dataset, the exposures of reporting banks are classified according to the nationality of banks (ie according to the location of banks' headquarters), not according to the location of the office in which they are booked. In addition, the classification of counterparties takes into account risk transfers between countries and sectors (see box on page 16 for a more detailed discussion and examples of risk transfers).

6 *Total foreign exposures* consist of two main components: *foreign claims* and *other exposures*. In turn, *foreign claims* consist of cross-border claims (ie claims on entities located in a country other than the country of residence of the reporting banking office) and local claims (ie claims on entities located in the country of residence of the reporting banking office) of foreign affiliates (ie branches and subsidiaries located outside the country in which the bank is headquartered); *other exposures* consist of the positive market value of derivatives contracts, guarantees extended and credit commitments.

Foreign exposures to Greece, Ireland, Portugal and Spain, by bank nationality

End-Q3 2010; in billions of US dollars

		Bank nationality									
Exposures to	Type of exposure	DE[1]	ES[2]	FR[3]	IT	OEA[2]	GB	JP	US	ROW	Total
Greece	Public sector	26.3	0.6	19.8	2.6	15.7	3.2	0.5	1.8	1.5	72.0
	+ Banks	3.9	0.0	1.4	0.3	1.3	4.3	0.5	0.5	1.3	13.6
	+ Non-bank private	10.1	0.5	42.1	1.9	13.3	7.5	0.9	4.7	4.2	85.0
	+ Unallocated sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
	= Foreign claims	40.3	1.1	63.3	4.7	30.4	15.1	1.9	6.9	7.1	170.7
	+ Other exposures[4]	29.2	0.4	28.7	1.7	3.1	5.3	0.1	36.2	2.4	107.2
	= Total exposures	69.4	1.5	92.0	6.5	33.5	20.4	2.0	43.1	9.5	277.9
Ireland	Public sector	3.4	0.3	6.6	0.8	3.7	6.6	1.5	1.5	0.7	25.1
	+ Banks	57.8	3.3	16.8	3.3	7.3	37.4	1.8	17.9	10.6	156.3
	+ Non-bank private	92.8	9.4	21.2	10.9	47.4	116.1	17.7	40.3	25.0	381.0
	+ Unallocated sector	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.8	1.3
	= Foreign claims	154.1	13.0	44.7	15.3	58.6	160.2	21.0	59.7	37.1	563.7
	+ Other exposures[4]	54.3	4.5	33.4	9.1	8.6	64.4	1.5	54.2	20.2	250.1
	= Total exposures	208.3	17.5	78.1	24.4	67.2	224.6	22.5	113.9	57.3	813.7
Portugal	Public sector	8.4	8.8	16.1	0.9	7.8	2.6	1.3	1.6	1.5	49.0
	+ Banks	18.1	6.1	6.5	2.3	4.6	6.2	0.3	1.4	0.9	46.2
	+ Non-bank private	13.6	70.3	14.8	1.5	7.5	16.5	0.8	1.5	1.8	128.3
	+ Unallocated sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	= Foreign claims	40.0	85.2	37.4	4.7	19.8	25.3	2.4	4.5	4.2	223.5
	+ Other exposures[4]	8.5	23.4	8.1	3.2	2.1	8.5	0.4	42.6	1.5	98.3
	= Total exposures	48.5	108.6	45.6	7.9	22.0	33.7	2.8	47.1	5.8	321.8
Spain	Public sector	29.4	.	46.0	3.3	16.9	10.0	9.7	4.7	3.0	123.0
	+ Banks	85.8	.	55.8	9.0	49.1	34.0	4.5	20.6	11.0	269.7
	+ Non-bank private	85.7	.	81.3	16.2	98.5	72.4	10.2	26.3	14.7	405.3
	+ Unallocated sector	0.0	.	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.4
	= Foreign claims	200.9	.	183.1	28.7	164.6	116.3	24.4	51.6	28.9	798.5
	+ Other exposures[4]	41.4	.	41.6	13.1	15.0	36.1	4.8	136.0	12.4	300.3
	= Total exposures	242.4	.	224.7	41.8	179.6	152.4	29.2	187.5	41.3	1,098.8

DE = Germany; ES = Spain; FR = France; IT = Italy; OEA = other euro area; GB = United Kingdom; JP = Japan; US = United States; ROW = rest of the world.

[1] Claims of German banks on the four countries are on an immediate borrower basis. [2] Exposures of banks headquartered in the respective country are not included, as these are not foreign exposures. [3] Claims of French banks on the four countries are currently under review and are subject to revisions. [4] Positive market value of derivatives contracts, guarantees extended and credit commitments.

Source: BIS consolidated banking statistics (ultimate risk basis). Table 1

What the BIS banking statistics say (and what they do not) about banking systems' exposures to particular countries and sectors

The BIS consolidated international banking statistics provide a unique perspective on the exposures of national banking systems to particular countries and sectors. The statistics provide information on the total foreign exposures (ie *foreign claims* plus *other exposures*) of banks headquartered in a particular jurisdiction on a worldwide consolidated basis (ie including the exposures of consolidated foreign branches and subsidiaries and netting out inter-office positions). The BIS *consolidated* banking statistics offer a more useful measure of the total risk exposure of a banking system than do the BIS *locational* banking statistics, which are based on the residence (rather than on the nationality of ownership) of the reporting banking unit.

The BIS consolidated banking statistics are reported on both an *ultimate risk* and an *immediate borrower* basis. In the former case, the statistics are adjusted for net risk transfers between countries and sectors, while in the latter they are not. Chart A shows three examples of risk transfers that would generate differences between figures reported, respectively, on an ultimate risk and on an immediate borrower basis.

Several important caveats should be kept in mind when analysing figures obtained from the BIS consolidated banking statistics. The first is that the statistics capture the foreign exposures of reporting banking systems to given countries, not the expected losses that those banking systems would suffer as a result of a large negative shock to their assets in those countries. For example, if the foreign exposures of banks headquartered in country X to country Y amounted to $60 billion and an event inflicted losses of 25% on all foreign-owned assets in country Y, banks from country X would sustain losses of $15 billion (not $60 billion). Furthermore, the BIS consolidated banking statistics focus exclusively on assets and provide no information on liabilities to the same debtor.

Second, in the BIS consolidated banking statistics, the holdings of various banking units are assigned to a given national jurisdiction according to the nationality of the highest-level *banking affiliate* in the chain of ownership, not according to the nationality of the ultimate parent. For example, the claims of a bank that is incorporated in country X and is owned by a non-bank financial company headquartered in country Y would be reported as a part of the claims of the banking sector of X (and not of Y). As a result, the set of banks that report to the BIS consolidated banking statistics as a part of the banking population of country X and the set of banks that are regulated and/or guaranteed by the government of country X do not necessarily overlap.

Third, the BIS consolidated banking statistics do not include a currency breakdown. Furthermore, no information is available on which claims are marked to market and which are held to maturity. As a result, it is difficult to interpret changes in the stocks of foreign claims because it is impossible to know exactly how much of a given change was caused by currency fluctuations, how much of it occurred as a result of adjustments in the mark to market values of claims and how much was due to banks actively changing the quantities of these claims that they own (ie buying and selling claims). The most that can be done in that dimension is to obtain estimates of exchange rate-adjusted changes in foreign claims based on assumptions about their currency composition.

While the BIS consolidated banking statistics are very useful in answering certain questions, they cannot be used to address all issues related to a given topic. For example, the BIS consolidated banking statistics *can* be used to answer a question such as:

> *What are the exposures of banks headquartered in country X to country Y?*

However, they *cannot* be used to answer a question such as:

> *How much would banks headquartered in country X lose in the event of a sovereign restructuring in country Y?*

Similarly, the BIS consolidated banking statistics *can* be used to answer a question such as:

> *What are the overall foreign exposures of banks headquartered in country X?*

However, they *cannot* be used to answer a question such as:

> *What are the overall foreign exposures of banks that have an explicit (or an implicit) guarantee by the government of country X?*

The BIS consolidated banking statistics *can* also be used to answer a question such as:

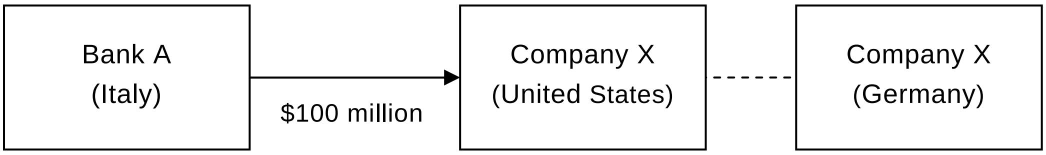
> *What were the foreign claims of banks headquartered in country X on country Y at a given point in time?*

However, they *cannot* be used to answer a question such as:

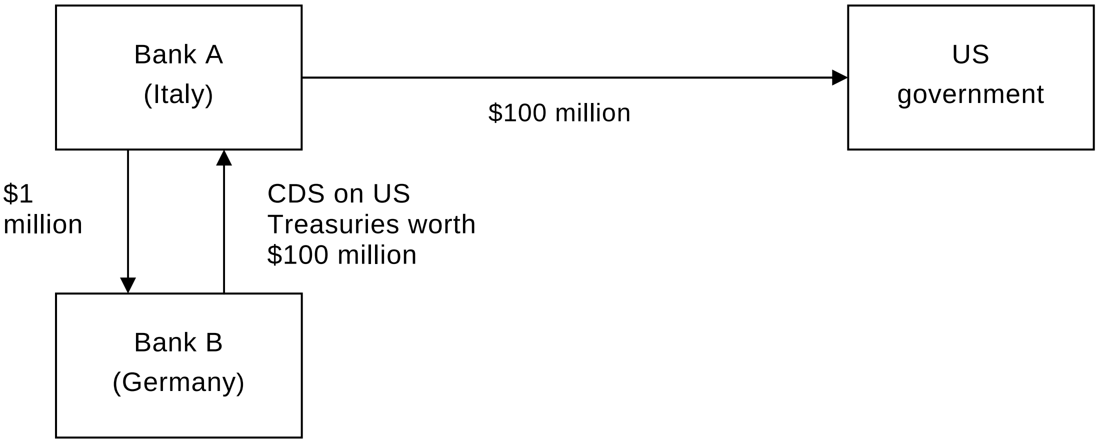
> *How much of the change in foreign claims of banks headquartered in country X on country Y during a given period was due to banks actively changing the quantities of these claims that they own and how much was caused by fluctuations in the market values of the claims?*

Ultimate risk versus immediate borrower (some hypothetical examples)

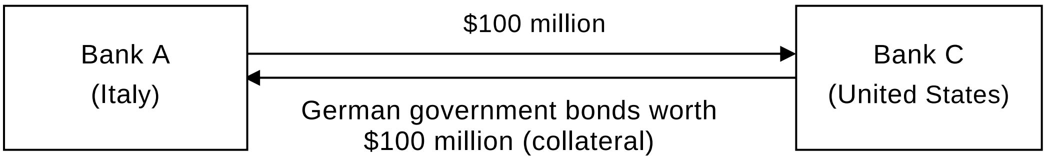
1. Bank A (headquartered in Italy) extends a $100 million loan to the US subsidiary of Company X, which is guaranteed by Company X's headquarters in Germany.



2. Bank A (headquartered in Italy) buys US Treasuries worth $100 million and then pays $1 million to buy a CDS on the whole amount from Bank B (headquartered in Germany).



3. Bank A (headquartered in Italy) extends a $100 million loan to Bank C (headquartered in the United States) and receives German government bonds worth $100 million as collateral.



All three of the hypothetical transactions described above would result in:

1. A $100 million increase in the claims of *Italian banks on the United States* on an *immediate borrower* basis.
2. A $100 million increase in the claims of *Italian banks on Germany* on an *ultimate risk* basis.

Chart A

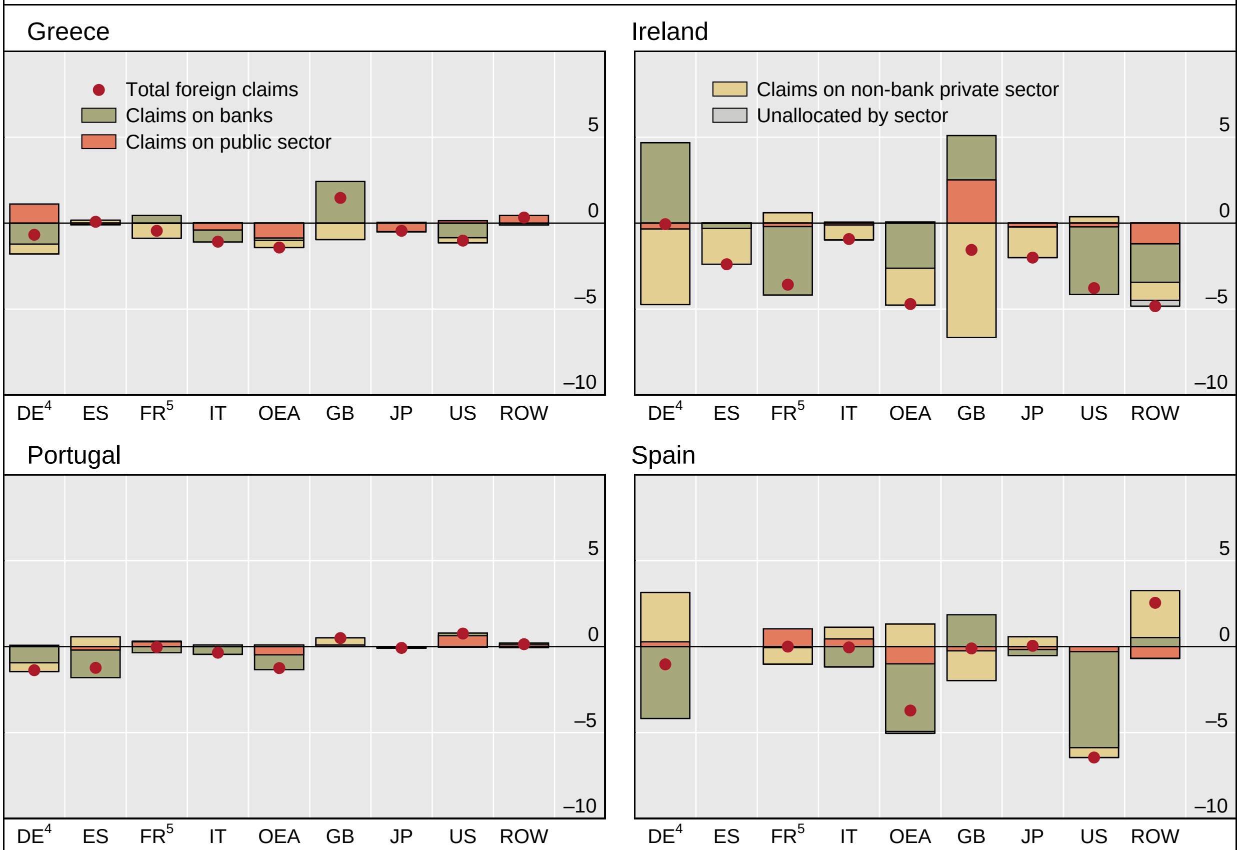
Our rough estimates indicate that, at constant exchange rates,[7] the foreign claims of BIS reporting banks on the above four countries fell slightly during the third quarter of 2010 (Graph 3). Most of the exchange rate-adjusted decline of $39 billion (2.4%) was due to a $23 billion (5.0%) drop in interbank claims. Foreign claims on the non-bank private sector also contracted (by $15 billion or 1.7%). By contrast, foreign claims on the public sector remained virtually unchanged.

Exchange rate-adjusted foreign claims on Greece, Ireland, Portugal and Spain decline slightly

Foreign claims on each of the above countries shrank on an exchange rate-adjusted basis during the third quarter of 2010. Nevertheless, the sectoral composition differed. The $3.2 billion (2.0%) reduction in foreign claims on Greece and the $24 billion (4.5%) decrease in foreign claims on Ireland were primarily caused by falls in BIS reporting banks' claims on the non-bank private

Estimated changes in foreign claims[1] on Greece, Ireland, Portugal and Spain during Q3 2010, by bank nationality[2]

At constant end-Q3 2010 exchange rates,[3] in billions of US dollars



DE = Germany; ES = Spain; FR = France; IT = Italy; OEA = other euro area; GB = United Kingdom; JP = Japan; US = United States; ROW = rest of the world.

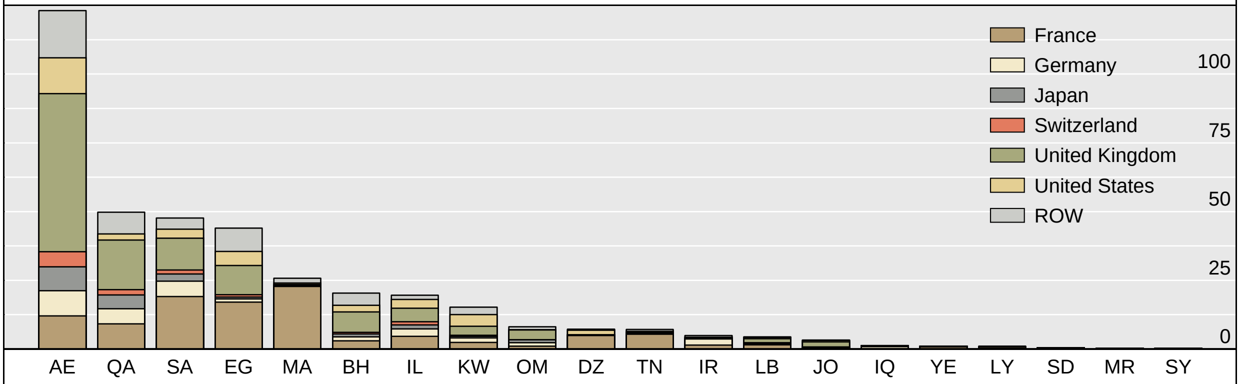
[1] Foreign claims consist of cross-border claims and local claims in all currencies. [2] Claims of banks headquartered in the respective country are not included, as these are not foreign claims. [3] All claims are assumed to be denominated in euros. [4] Claims of German banks on the four countries are on an immediate borrower basis. [5] Claims of French banks on the four countries are currently under review and are subject to revisions.

Source: BIS consolidated banking statistics (ultimate risk basis). Graph 3

[7] The consolidated banking statistics do not include a currency breakdown. That is why, in order to adjust for the currency fluctuations that took place during the period, we make the

Foreign claims on countries in the Middle East and North Africa, by bank nationality

End-Q3 2010, in billions of US dollars



AE = United Arab Emirates; BH = Bahrain; DZ = Algeria; EG = Egypt; IL = Israel; IQ = Iraq; IR = Iran; JO = Jordan; KW = Kuwait; LB = Lebanon; LY = Libya; MA = Morocco; MR = Mauritania; OM = Oman; QA = Qatar; ROW = rest of the world; SA = Saudi Arabia; SD = Sudan; SY = Syria; TN = Tunisia; YE = Yemen.

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

sector. By contrast, the interbank component was the main driver of the declines in foreign claims on Spain ($8.8 billion or 1.2%) and Portugal ($2.9 billion or 1.4%).

Most major banking systems reported small decreases in their exchange rate-adjusted foreign claims on Greece, Ireland, Portugal and Spain. US banks saw their foreign claims on that group of countries fall by more than those of any other major banking system (by $10 billion or 8.7%), mainly as a result of a contraction in their claims on banks located in Spain and Ireland. The exchange rate-adjusted foreign claims of French and German banks on the four countries also declined slightly (by $4.0 billion or 1.4% and by $3.1 billion or 0.8%, respectively).

BIS reporting banks' foreign claims on the Middle East and North Africa

The sociopolitical turmoil experienced by a number of countries in the Middle East and North Africa region in 2011 has generated interest in the size of internationally active banks' exposures to the area. Graph 4 displays a breakdown of the foreign claims of the six national banking systems with the largest presence[8] in the region as of the end of the third quarter of 2010.[9]

Foreign exposures to the Middle East and North Africa are relatively small

According to the BIS consolidated banking statistics on an ultimate risk basis, the exposures of all major BIS reporting national banking systems to the

(admittedly imperfect) assumption that all foreign claims on Greece, Ireland, Portugal and Spain are denominated in euros.

[8] The six national banking systems whose foreign claims on the countries in the Middle East and North Africa are displayed in Graph 4 accounted for approximately 87% of all BIS reporting banks' foreign claims on the region as of the end of September 2010.

[9] The full details of the data on BIS reporting banks' foreign claims on the countries in the Middle East and North Africa can be found in Table 9D of *Detailed tables on provisional locational and consolidated banking statistics at the end-September 2010* (www.bis.org/statistics/consstats.htm).

area are fairly small relative to their aggregate foreign exposures.[10] As of the end of September 2010, the foreign claims of UK and French banks on the region ($122 billion and $107 billion, respectively) amounted to only 3.1% and 3.0%, respectively, of their worldwide foreign claims. All other major national banking systems had less than 2% of their aggregate foreign claims ultimately exposed to the area.

BIS reporting banks had much smaller exposures to the countries that have gone through sociopolitical unrest in 2011. Their combined foreign claims on Egypt ($44 billion) accounted for only 0.17% of their aggregate global foreign claims ($26 trillion). Their foreign claims on Tunisia ($7 billion) and Libya ($1 billion) represented even smaller fractions of their consolidated global foreign portfolio (0.03% and 0.004%, respectively).

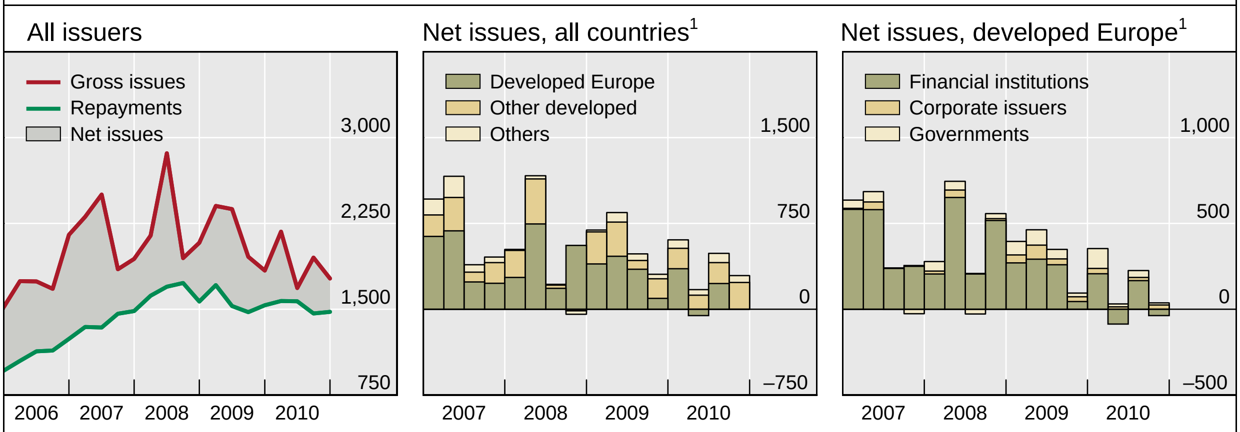
International debt securities issuance in the fourth quarter of 2010[11]

Falling issuance in the international debt securities market …

Activity in the primary market for international debt securities slowed in the fourth quarter of 2010, reverting to the seasonal pattern observed before the financial crisis.[12] Completed gross issuance fell by 9% quarter on quarter to $1,707 billion between October and December (Graph 5, left-hand panel). With stable repayments, net issuance dropped to $293 billion, from $489 billion in the third quarter.

International debt securities issuance

In billions of US dollars



[1] By residence of issuer.

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

Graph 5

[10] Note that the latest available data on BIS reporting banks' foreign claims on the countries in the Middle East and North Africa refer to the end of September 2010, several months before the unrest began.

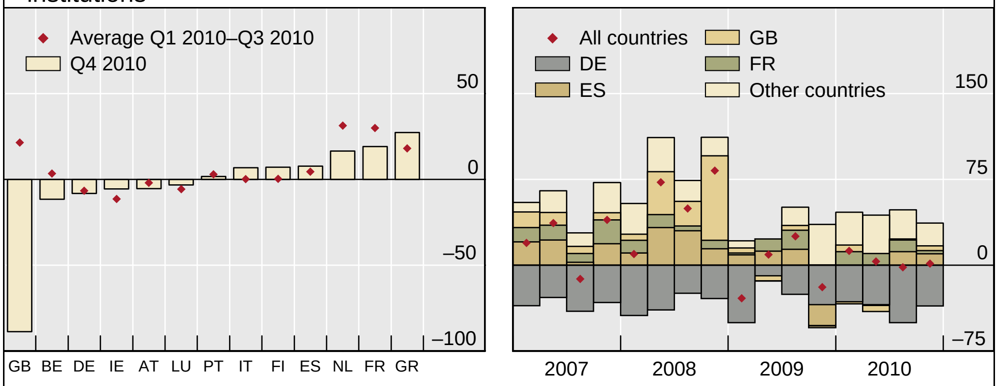
[11] Queries concerning international debt securities should be directed to Christian Upper.

[12] See J Amato and J Sobrun, "Seasonality in international bond and note issuance", *BIS Quarterly Review*, September 2005, pp 36–9 (www.bis.org/publ/qtrpdf/r_qt0509c.pdf).

Debt securities issuance

In billions of US dollars

Net issues, European financial institutions[1] | Covered bonds, estimated net issues[2]



AT = Austria; BE = Belgium; DE = Germany; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; GR = Greece; IE = Ireland; IT = Italy; LU = Luxembourg; NL = Netherlands; PT = Portugal.

[1] International debt securities, by residence of issuer. [2] Syndicated debt securities placed in domestic and international markets, by nationality of issuer.

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

… particularly in developed European economies

The decline in net issuance masks large variations across regions. Very low net issuance by residents in the developed European economies ($0.9 billion, after $225 billion in the third quarter) contrasted with an increase of 28% or $234 billion in the amounts raised by residents in other advanced economies (Graph 5, centre panel). Emerging market borrowers raised $39 billion, unchanged from the previous quarter.

European financial institutions raise less funding …

Financial institutions located in Europe reacted to the renewed concerns about sovereign risk by curtailing their funding programmes. Completed gross issuance by European financial institutions fell by 12% to $928 billion. With somewhat higher redemptions, this resulted in net repayments of $36 billion, after net issuance of $167 billion in the third quarter. That said, the net redemptions of the fourth quarter were much smaller than the net repayments of $86 billion in the second quarter, during the first bout of the European sovereign debt crisis. Institutions resident in the United Kingdom saw particularly large net repayments ($89 billion; Graph 6, left-hand panel). Between July and September, they had raised $69 billion in the international market.

… in response to adverse market conditions

The drop in European financial issuance was less the result of banks' inability to borrow than a response to apparently unfavourable market conditions. Accordingly, banks in the countries most affected by the tensions were able to issue in the international market. Greek financial institutions borrowed $27 billion, well above the $8 billion of the third quarter but short of the $43 billion in the second quarter. Irish financial institutions, including some of the large banks facing severe problems, raised $84 billion through the sale of new securities, but this fell short of the $90 billion of scheduled repayments.

Covered bond issuance (including domestic issues) fell in the final quarter of the year. Gross issuance dropped from $103 billion in the third quarter to $70 billion in the fourth, the lowest amount since late 2009. Net issuance of covered bonds stood at $1.3 billion, after net redemptions of $1.9 billion between July and September (Graph 6, right-hand panel). German banks repaid Pfandbriefe worth $36 billion (net), continuing a trend of several years. By contrast, Spanish, Swedish, Italian and UK banks raised new funding to the tune of $10 billion, $7 billion, $5 billion and $4 billion, respectively.

Strong issuance by European non-financial corporates …

Issuance by non-financial corporations resident in the advanced European economies was much more resilient than that by financial institutions. Non-financial enterprises resident in the advanced European economies increased their borrowings in the international market by 34%, to $25 billion. French firms accounted for the bulk of new issuance ($15 billion). Irish firms borrowed $2.4 billion, the largest amount since late 2008.

… and in developed economies outside Europe

Activity in the primary market for debt securities issued by residents of non-European advanced economies was much less affected by the turbulence. Financial institutions located in the United States placed $62 billion in the international market, 78% more than in the previous three months. International issuance by US non-financial corporates reached a new high at $136 billion (22% higher than in the third quarter). Issuance by Canadian residents rebounded to $28 billion, largely offsetting the drop in the third quarter.

Stable borrowing by emerging market borrowers

Issuance by residents in developing economies was stable at $39 billion. Borrowers from emerging Europe raised $4.4 billion, 60% less than in the third quarter. However, this was offset by a doubling in issuance by residents in Asia-Pacific ($11 billion). Residents in Latin America-Caribbean and Africa-Middle East tapped the market to the tune of $19 billion (+9%) and $5 billion (–11%).

Exchange-traded derivatives in the fourth quarter of 2010[13]

Higher turnover on derivatives exchanges …

The volume of trade on international derivatives exchanges was higher in the fourth quarter of 2010 than in the previous one. Turnover, measured as the notional amount of traded derivatives contracts, rose by 9% in dollar terms. The bulk of this increase (7.8 percentage points) corresponds to a surge in the turnover of short-term dollar interest rate futures. This rose by 29%, reflecting particularly strong trading in November, when the Federal Reserve Board announced its second round of US Treasury bond purchases. A further notable portion of the increase in derivatives turnover (1.4 percentage points) is due to a 38% rise in trading of Korean equity index options. This was partly offset (–1.3 percentage points) by lower trading of short-term euro interest rate options, which declined by 16%.[14]

… but smaller open positions

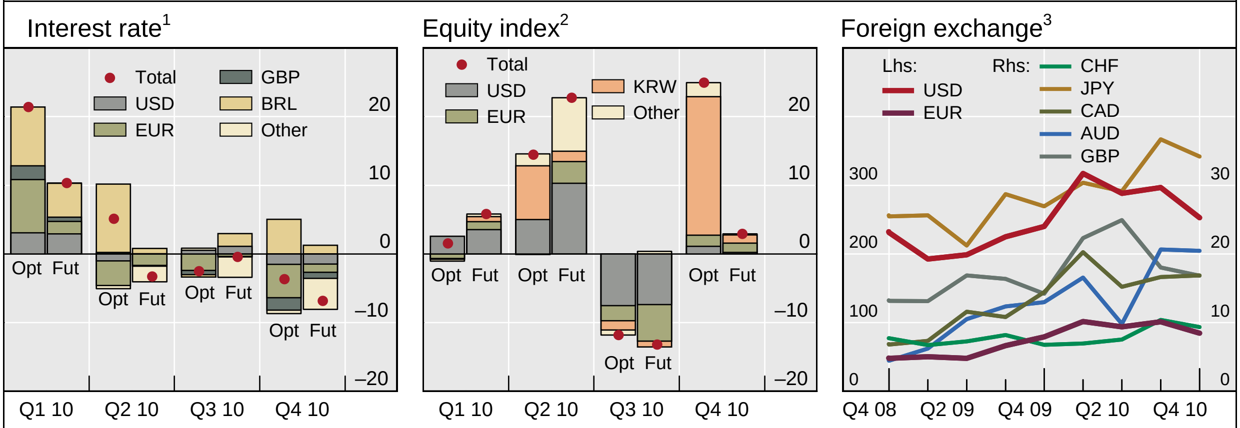
Despite the overall increase in turnover on derivatives exchanges, open interest, measured as the notional amount of outstanding contracts, declined by 13%. More than one third of this reduction is explained by a decline in short-term euro interest rate options, and almost a further one third by declines in short-term interest rate options on both dollar and sterling interest rates

[13] Queries concerning the exchange-traded derivatives statistics should be addressed to Nicholas Vause.

[14] This was despite the euro being 5% weaker against the dollar during the fourth quarter of 2010.

Exchange-traded derivatives

Notional amounts of futures and options contracts



[1] Change in open interest, in per cent. [2] Change in turnover, in per cent. [3] Open interest, in billions of US dollars. Contracts with at least one leg referenced to the respective currency.

Source: BIS. Graph 7

(Graph 7, left-hand panel). This may reflect decisions by some market participants to shed protection against near-term increases in major-currency interest rates, as expectations of such moves were pushed further into the future during the fourth quarter of 2010.

In interest rate derivatives markets, higher turnover in futures (+14%) contrasted with weaker trading in options (–5%). The rise in futures turnover was driven by the large increase in trading of short-term dollar contracts. In contrast, trading of long-term dollar futures was little changed, despite a marked increase in US Treasury bond futures turnover in November. The fall in options turnover reflects declines in trading of euro and sterling short-dated options of 16% and 19%, respectively.

Heavy trading on Asian exchanges boosted turnover of equity index derivatives (up 15%). In addition to the rise in turnover of Korean equity index options (Graph 7, centre panel) to 59% of total equity index options turnover, trading of Hong Kong and Indian equity index options also expanded rapidly, by 45% and 33%, respectively. Trading of equity index futures on the same regions increased by 15%, 26% and 20%, respectively.[15] Open interest in equity index derivatives fell by 11%, mainly reflecting a 23% decline in open interest in euro area stock index options.

Activity in the market for foreign exchange derivatives increased as higher trading in contracts on the euro more than offset weaker trading in the dollar and sterling. Overall turnover increased by 9%. Trading of both euro futures and options increased by around 20%. In contrast, trading of dollar and sterling options declined by 22% and 26%, respectively. Open interest in foreign exchange derivatives declined by 15%, reflecting widespread falls in contracts linked to major currencies (Graph 7, right-hand panel).

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[15] The dollar value of Korean, Hong Kong and Indian equities increased by 11%, 2% and 0%, respectively, during the fourth quarter of 2010, so the growth rates in this paragraph do, in fact, reflect changes principally in trading volumes.

Heavy trading on Chinese exchanges in derivatives on agricultural products contributed strongly to an overall increase of 11% in turnover of commodity derivatives. Turnover in agricultural contracts listed on Chinese exchanges went up by 46%, and that in agricultural contracts worldwide by 33%.[16] The surge in trading of agricultural contracts contrasted with declining volumes in other types of commodities. Turnover in derivatives on energy products and precious metals fell by 2% and 5%, respectively, while trading in contracts on non-precious metals declined by 17%.

[16] Turnover of commodity contracts is measured by the number of contracts traded, since notional amounts are not available. Note that Chinese contracts tend to be significantly smaller in value than those traded on other exchanges. As a result, growth in contract volumes that is led by Chinese exchanges can overstate increases in activity.