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2. The international banking market

Total cross-border claims continued to expand in the third quarter of 2005, although at a somewhat slower pace than in the previous two quarters. Interbank activity accounted for over half the total rise in cross-border claims, with greater claims on non-banks in offshore centres also contributing. Credit to non-bank borrowers in the United States rose noticeably, driving a fifth consecutive quarter of strong growth in total claims on non-banks.

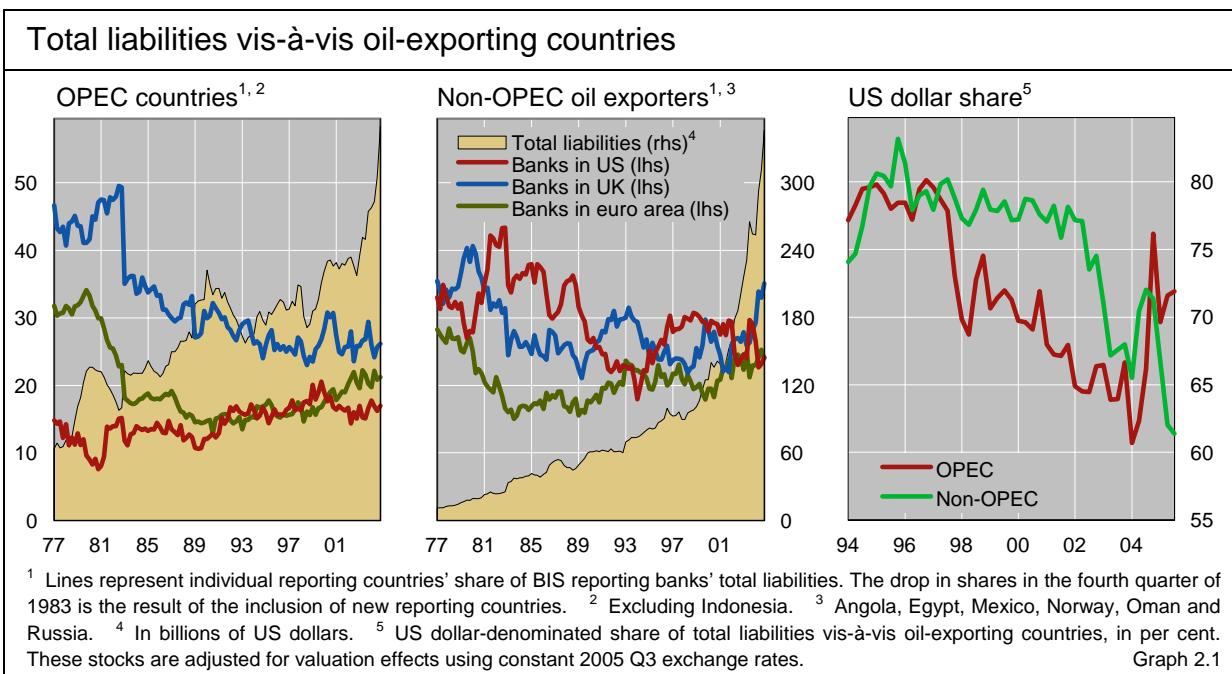
Major oil-exporting countries continued to recycle a portion of their oil revenues through BIS reporting banks. In addition, banks in Asia, including some central banks, deposited funds in banks abroad. Combined, these placements overshadowed greater lending to borrowers in emerging Europe and Asia-Pacific, and were behind an overall net outflow of funds from emerging markets.

The BIS consolidated banking statistics – which quantify the foreign exposures of internationally active commercial banks – have recently been enhanced. They now allow for a finer analysis of reporting banks' country and sectoral exposures, and contain new information on their derivatives and contingent exposures. The new data, reported on an ultimate risk basis, also allow for an estimate of banks' risk-weighted foreign claims.

Oil exporters' recycling of petrodollars continues

Total cross-border claims grew strongly for a third consecutive quarter, although at a slightly lower rate than in the previous two. Interbank activity, mainly in the euro area and Switzerland, accounted for slightly more than half of the \$533 billion rise in BIS reporting banks' total claims in the third quarter of 2005. This pushed the outstanding stock of claims to \$20.7 trillion and the year-on-year growth rate to 18.2%, the highest rate recorded in the BIS statistics since the third quarter of 1987.

Claims on the non-bank sector also grew robustly in the most recent quarter. Total claims rose by \$247 billion, the fifth consecutive quarterly rise of \$200 billion or more. A significant portion of this (\$69 billion) was channelled to non-banks in offshore centres and Luxembourg, areas with considerable non-bank financial activity. New claims on non-banks in the United States also rose noticeably, as banks in Japan and the United Kingdom channelled \$108 billion to these borrowers.



Petrodollars and Asian reserves drive outflow from emerging markets

The continued recycling of oil revenues, and deposit placements by banks in Asia-Pacific, were behind a net outflow of funds from emerging markets in the third quarter of 2005. Combined, these placements in BIS reporting banks more than offset greater lending to borrowers in Asia-Pacific and emerging Europe, leading to a \$40 billion overall net outflow of funds from emerging markets.

A net outflow from emerging markets ...

OPEC member states,¹ plus other, non-OPEC oil exporters,² deposited a combined \$82 billion with BIS reporting banks in the third quarter, the largest quarterly placement by this group of countries recorded in the BIS statistics (Graph 2.1).³ Deposits by residents of OPEC member countries totalled \$46 billion and were primarily US dollar-denominated, leaving the US dollar share of reporting banks' total liabilities vis-à-vis OPEC member states relatively unchanged at 72%. Residents of non-OPEC oil-exporting countries, primarily Norway but also Mexico and Russia, placed an additional \$36 billion in funds with BIS reporting banks. Overall, the US dollar share of total liabilities vis-à-vis non-OPEC oil exporters fell to 61% in the most recent quarter, from 62% in the previous quarter and close to 80% prior to end-2002 (Graph 2.1, right-hand panel).

The distribution of OPEC's petrodollar placements across banks located in individual reporting countries has, overall, remained relatively stable

¹ Excluding Indonesia.

² Angola, Egypt, Mexico, Norway, Oman and Russia.

³ See the December 2005 *BIS Quarterly Review* for a broader discussion of the recycling of petrodollars.

(Graph 2.1). Over the last 15 years, roughly 16% of BIS reporting banks' total liabilities to OPEC member countries have been reported by banks located in the United States. The share of petrodollars being placed in the United Kingdom has drifted down, from close to 35% in 1985 to near 25% in the most recent quarter. By contrast, as their oil revenues and foreign placements have expanded, residents of non-OPEC oil-exporting countries have increasingly channelled their deposits through banks in the United Kingdom. These banks' share of total liabilities to non-OPEC oil-exporting countries rose from 22% in 2002 to over 35% in the most recent quarter.

Residents of Asia-Pacific also increased their deposits in BIS reporting banks, leading to a net outflow of funds from the region. Banks in the United Kingdom and the United States channelled funds to the banking sector in China, Korea and Thailand, driving a \$31 billion rise in claims on Asia-Pacific. However, placements in offshore centres and the United Kingdom, mainly by residents of China, India, Korea and Thailand, were even larger, fuelling the \$3 billion net outflow from the region. This was in part the result of greater placements by Asian central banks, as the central banks of India, Korea and Thailand placed a combined \$14 billion in foreign banks in the third quarter.

Elsewhere, on a net basis, funds continued to flow into emerging Europe and out of Latin America. In emerging Europe, EU member states and Russia accounted for virtually all of the \$8 billion increase in net claims on the region, even as the cross-border deposits of the Russian central bank edged up by \$2.2 billion. The net outflow from Latin America (\$4.7 billion) was primarily the result of deposits placed in BIS reporting banks, mainly in the United Kingdom and the United States, by residents of Mexico. Much of this reflects an increase in Mexico's official reserves as the country's central bank placed \$3.7 billion in foreign-headquartered banks in the third quarter.

An analysis of BIS reporting banks' foreign exposures

The BIS consolidated banking statistics – the most comprehensive source of aggregate data on internationally active banks' portfolio of foreign assets – have been enhanced as of the first quarter of 2005. The enhancements, discussed in detail in the September 2005 issue of the *BIS Quarterly Review*, allow for an improved evaluation of international lenders' exposure to country-specific credit and counterparty risks.⁴

The new statistics closely match banks' risk management practices, and thus throw light upon a wide range of foreign exposures. The statistics now include a sectoral breakdown for total foreign claims, or the sum of cross-border claims and foreign offices' locally extended claims. Moreover, foreign claims on each sector are reported on an ultimate risk basis (UR basis), or

... and placements
by Asian central
banks

Enhancements to
the consolidated
banking statistics ...

⁴ These new consolidated banking statistics are intended to reflect the creditor's perspective. Banks' exposures are consolidated according to the location of their head office, and intragroup positions are netted out. See P McGuire and P Wooldridge, "The BIS consolidated banking statistics: structure, uses and recent enhancements", *BIS Quarterly Review*, September 2005, for a detailed description.

reallocated to the country and sector where the ultimate obligor resides. Previously, the statistics included a sectoral breakdown only for international claims reported on an immediate borrower basis (IB basis), ie allocated to the country and sector of the contractual counterparty.⁵

The new statistics allow for better estimates of banks' total foreign exposure because they now include information on banks' derivatives and contingent exposures. Foreign claims, which refer to items on the assets side of banks' balance sheets (mainly loan and securities claims in the context of the BIS statistics), are a subset of banks' total foreign exposure, which also includes derivatives as well as contingent liabilities, specifically credit commitments and guarantees.⁶ Derivatives are reported at market value, while guarantees and credit commitments are reported at book value. Thus, only if the market value is not significantly different from book value would an aggregation of these items yield a measure of total derivatives and contingent exposures. These exposures totalled \$7.5 trillion in the third quarter of 2005, compared to \$17.7 trillion in loan and securities claims (UR basis).

Overall, foreign exposures are sizeable relative to reporting banks' total assets. Foreign claims (UR basis) accounted for almost 40% of the total assets reported on the balance sheets of internationally active banks headquartered in 10 of the BIS reporting countries.⁷ Outstanding foreign claims amount to less than 20% of US, Australian and Italian banks' total balance sheet assets. By contrast, they amount to roughly 50% for UK banks, and to more than 60% for Belgian and Swiss banks. Across all of the 10 reporting countries, this ratio rises to almost 60% if banks' estimated foreign exposures are considered, ie their derivatives and contingent exposures are added to the numerator.

... shed light on banks' foreign exposures ...

Banks' investment in low-risk government debt

Assets carrying low credit risk play an important role in banks' portfolio management, and are often used as collateral in financial transactions. Thus, banks are naturally expected to absorb a significant share of the supply of low-risk government debt (ie debt issued by governments in industrialised countries), although estimates of their total demand for such debt are difficult to construct. The BIS securities and banking statistics, which provide estimates of

... holdings of government debt ...

⁵ International claims comprise cross-border claims plus foreign offices' locally extended foreign currency claims.

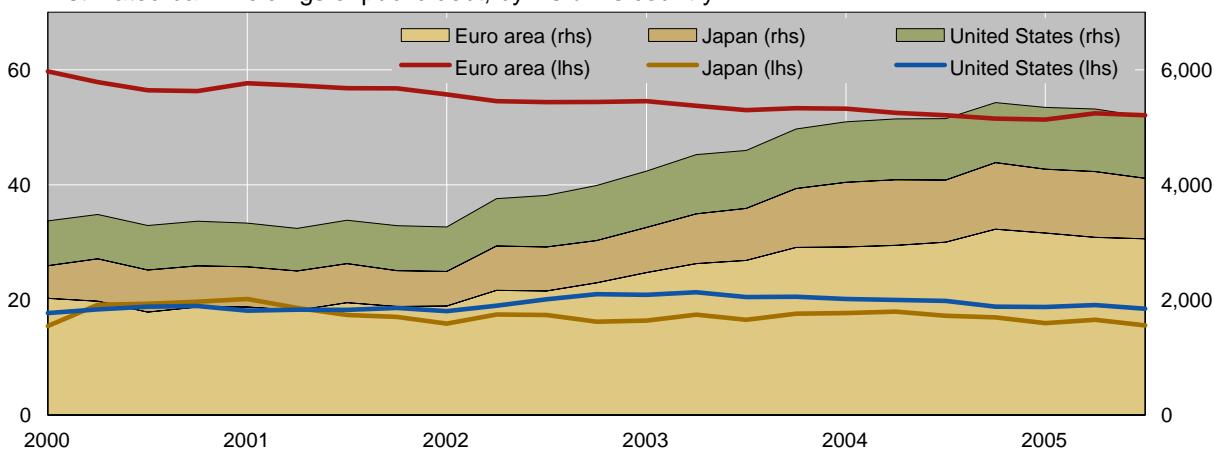
⁶ The contingent positions are reported on an ultimate risk basis. Guarantees are contingent liabilities arising from an obligation to pay to a third party when a client fails to perform some contractual obligation. Credit commitments are irrevocable obligations to extend credit at the request of a borrower. Derivative claims (ie positive market values) include forwards, swaps, options and those credit derivatives held for trading by the reporting bank (independent of whether these are booked as off- or on-balance sheet items). Credit derivatives not held for trading are reported as risk transfers by protection-buying banks, and as guarantees by protection-selling banks.

⁷ This share drops by only about 6 percentage points if intra-euro area exposures are netted out from total foreign exposures. The 10 reporting countries concerned are Australia, Belgium, Canada, Finland, France, Italy, the Netherlands, Switzerland, the United Kingdom and the United States.

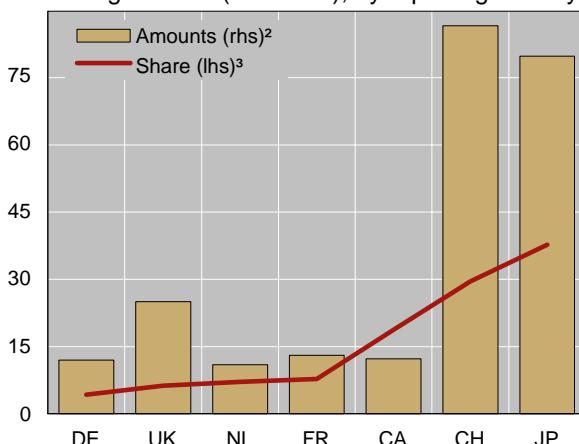
Bank claims on the public sector of industrialised countries

As of 2005 Q3

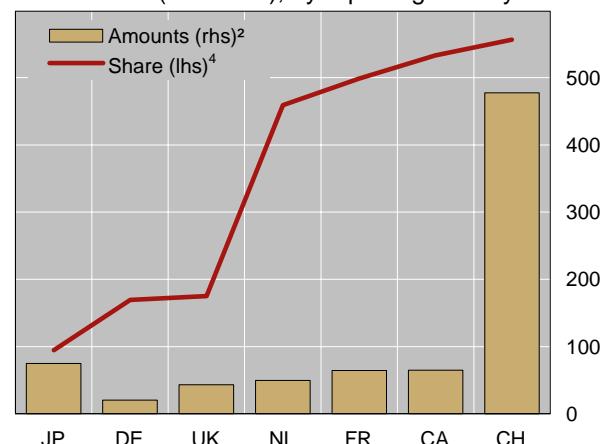
Estimated bank holdings of public debt, by vis-à-vis country¹



Foreign claims (UR basis), by reporting country



Local claims (UR basis), by reporting country



CA = Canada; CH = Switzerland; DE = Germany; FR = France; JP = Japan; NL = Netherlands; UK = United Kingdom.

¹ The lines plot the ratio of domestic and international bank claims on the public sector to total public sector debt of the corresponding country or region; in per cent. The shaded areas stand for the total amount of domestic and international bank claims on the public sector in the corresponding country or region; in billions of US dollars. ² Claims of BIS reporting banks, in billions of US dollars.

³ Claims on the public sector in industrialised countries in total foreign claims, in per cent. ⁴ Estimated local claims in all public sector claims on industrialised countries, in per cent.

Sources: ECB; Bank of Japan; Board of Governors of the Federal Reserve System; BIS.

Graph 2.2

outstanding government debt and reporting banks' international claims on the public sector (IB basis), can be used to shed light on this issue. Combined with national sources of data on domestic banks' claims on the government, they yield a rather imperfect but useful measure of banks' overall holdings of government debt, and help to highlight differences across reporting countries.

Overall, the estimates suggest that banks hold a significant amount of outstanding low-risk government debt (Graph 2.2, top panel). Specifically, banks (both foreign and domestic) have held slightly more than half of outstanding euro area government debt since end-1999, consistent with the prominent role banks play in euro area financial markets. Elsewhere, banks'

holdings of US and Japanese government debt are slightly below 20% of total outstanding stocks.⁸

A significant share of banks' holdings of highly rated government debt is purchased by banks headquartered outside the borrower's jurisdiction.⁹ For instance, BIS reporting banks' foreign claims on the euro area, Japanese, UK and US public sectors stood at \$1.7 trillion in the most recent quarter.¹⁰ This accounted for roughly 30% of the banking sector's (ie foreign plus domestic banks') combined claims on the public sector in the euro area, Japan, the United Kingdom and the United States.

BIS reporting countries exhibit disparate propensities to hold low-risk claims on foreign public sectors (Graph 2.2, bottom left-hand panel). For example, nearly one third of Swiss banks' and almost 40% of Japanese banks' total foreign claims are claims on the public sector in industrialised countries. Combined, these reporting banks account for roughly 60% of the \$1.9 trillion in all reporting banks' foreign claims on the public sector in industrialised countries (excluding intra-euro area). Swiss banks' large foreign claims on these borrowers can in part be explained by the small size of Swiss public debt (roughly \$110 billion) relative to Swiss banks' total foreign claims on all sectors (almost \$2 trillion). The large holdings by Japanese banks may in part reflect efforts to increase their holdings of assets with less credit risk.

The difference between foreign claims on the public sector (UR basis) and international claims (IB basis) on this sector can provide a rough estimate of reporting banks' local holdings of public sector debt, eg purchases of US

⁸ Banks' holdings of a country's government debt are estimated by adding BIS reporting banks' international claims on that country's public sector (central and local governments and publicly owned enterprises) to resident banks' local holdings of government debt. International claims on the public sector include both cross-border claims and local claims in foreign currencies, although the latter claims are likely to be small since the foreign currency component of industrialised countries' sovereign debt is negligible (less than 1%). There are differences across reporting countries in whether international claims on the public sector include claims on foreign official monetary authorities, and in whether they include claims on publicly owned enterprises. Domestic banks' claims on the US public sector, taken from national data sources, include holdings of (i) Treasury and agency securities by all commercial banks in the United States and (ii) loan and securities claims on local governments by large domestically chartered banks in the United States, but exclude holdings of mortgage-backed securities by the latter banks. Domestic banks' claims on the Japanese public sector include holdings of central and local government bonds by domestically licensed banks. Domestic banks' claims on the euro area public sector include loan and securities claims of euro area monetary and financial institutions (excluding the Eurosystem) on the general government sector. Total public sector debt, the denominator of these ratios, includes debt issued by central and other governments and central banks, and is taken from the BIS securities statistics.

⁹ For the purposes of this analysis, highly rated government debt is taken to be debt issued by governments in industrialised countries. The vast majority of this debt is rated AAA by Standard & Poor's, Italy and Japan being the major exceptions with sovereign ratings of AA-. Intra-euro area positions are excluded in all the calculations in this section related to *foreign* claims on the public sector in industrialised countries. This is motivated by the high degree of substitutability across the debt issues of different euro area sovereigns, as virtually all of these issues are denominated in euros and are accepted as collateral by the ECB.

¹⁰ This is probably an underestimate since the United States does not report a complete sectoral breakdown for its foreign claims (UR basis).

Treasury securities from foreign banks' offices in New York.¹¹ Note, however, that government-guaranteed credit and reverse repos, whereby banks accept government securities as collateral against short-term loans, can be sources of noise in these estimates.¹² With this caveat in mind, the estimates suggest that Canadian, Dutch, French and Swiss banks book the majority of their low-risk public sector claims in offices located in the country of the borrower (Graph 2.2, bottom right-hand panel). To the extent that claims are funded locally, the investment decision of these banks is likely to limit the currency mismatch on their balance sheets. Such an argument may apply to Japanese banks as well. Even though these banks hold an estimated 14% of their low-risk public sector claims in the issuer's country, a large share of these claims probably match foreign currency exposures in international financial hubs, eg US Treasury securities purchased in London to match US dollar liabilities of Japanese banks' offices in the United Kingdom.

Exposures to emerging markets

... and exposures to emerging markets

On an immediate borrower basis, BIS reporting banks' foreign claims on emerging markets constitute a sizeable portion of their overall foreign claims, and have fluctuated significantly during periods of market stress. As shown in Graph 2.3, periods of financial turbulence, such as the Asian crisis (1997) or the sovereign debt crises in Russia (1998) and Argentina (2001), were seen to induce dramatic swings in these claims. In the most recent quarter, foreign claims on emerging markets stood at \$2.3 trillion, or 12% of reporting banks' total foreign claims (IB basis). However, expressing these positions on an ultimate risk basis provides a more accurate picture of banks' true exposure to emerging markets.

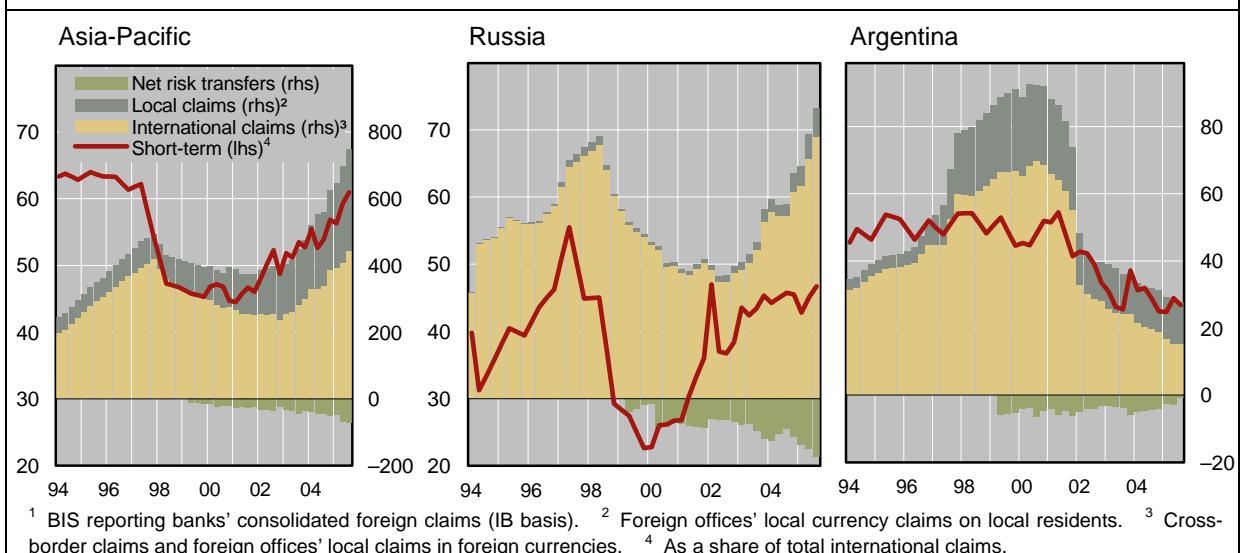
Claims on borrowers in emerging markets sometimes have third-party guarantors, leading to net risk transfers out of the borrowing country. A portion of foreign claims (mainly loan and securities claims, IB basis) on emerging markets is transferred to the major developed countries, as are claims on borrowers in international hubs of financial intermediation (eg London and offshore centres) (Graph 2.5, top panel). Measured on an ultimate risk basis, foreign claims on emerging markets stood at \$2 trillion, or 11% of total foreign claims. Differences across reporting countries are apparent (Graph 2.4). For example, Austrian, Spanish and US banks' foreign claims on emerging markets

¹¹ International claims (IB basis) comprise cross-border claims and foreign offices' locally extended claims in foreign currency, while foreign claims (UR basis) consist of cross-border claims and foreign offices' locally extended claims in *all* currencies. However, the foreign currency component of international claims is probably small since less than 1% of industrialised countries' sovereign debt is issued in a foreign currency.

¹² Reverse repos tend to boost the level of foreign claims on the public sector if these claims are reported on an ultimate risk basis. In contrast, the loan side of the reverse repo transaction is reported vis-à-vis the sector of the counterparty if claims are reported on an immediate borrower basis.

Foreign claims on selected emerging economies, by sector and type¹

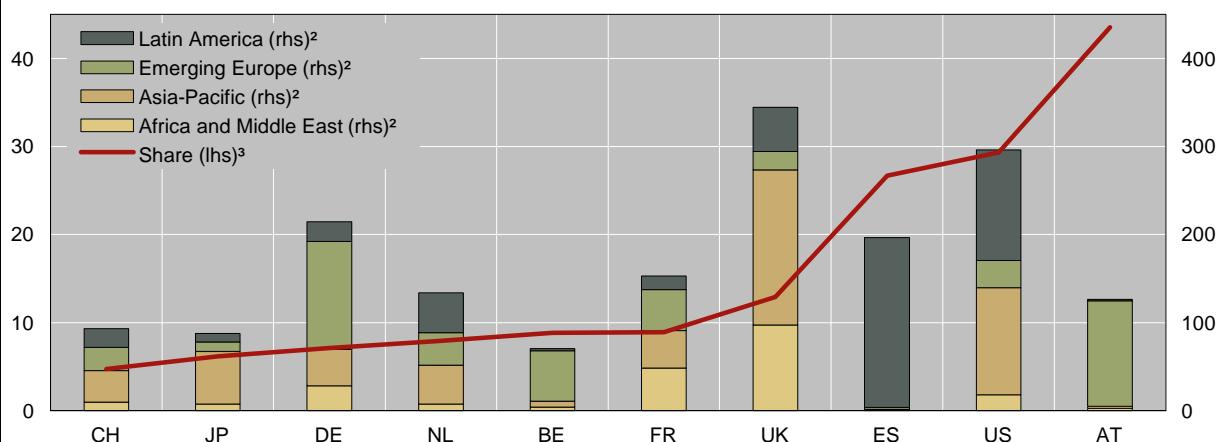
In billions of US dollars



accounted for 43%, 27% and 29%, respectively, of their total foreign claims. By contrast, this share is below 10% for other major reporting countries.¹³

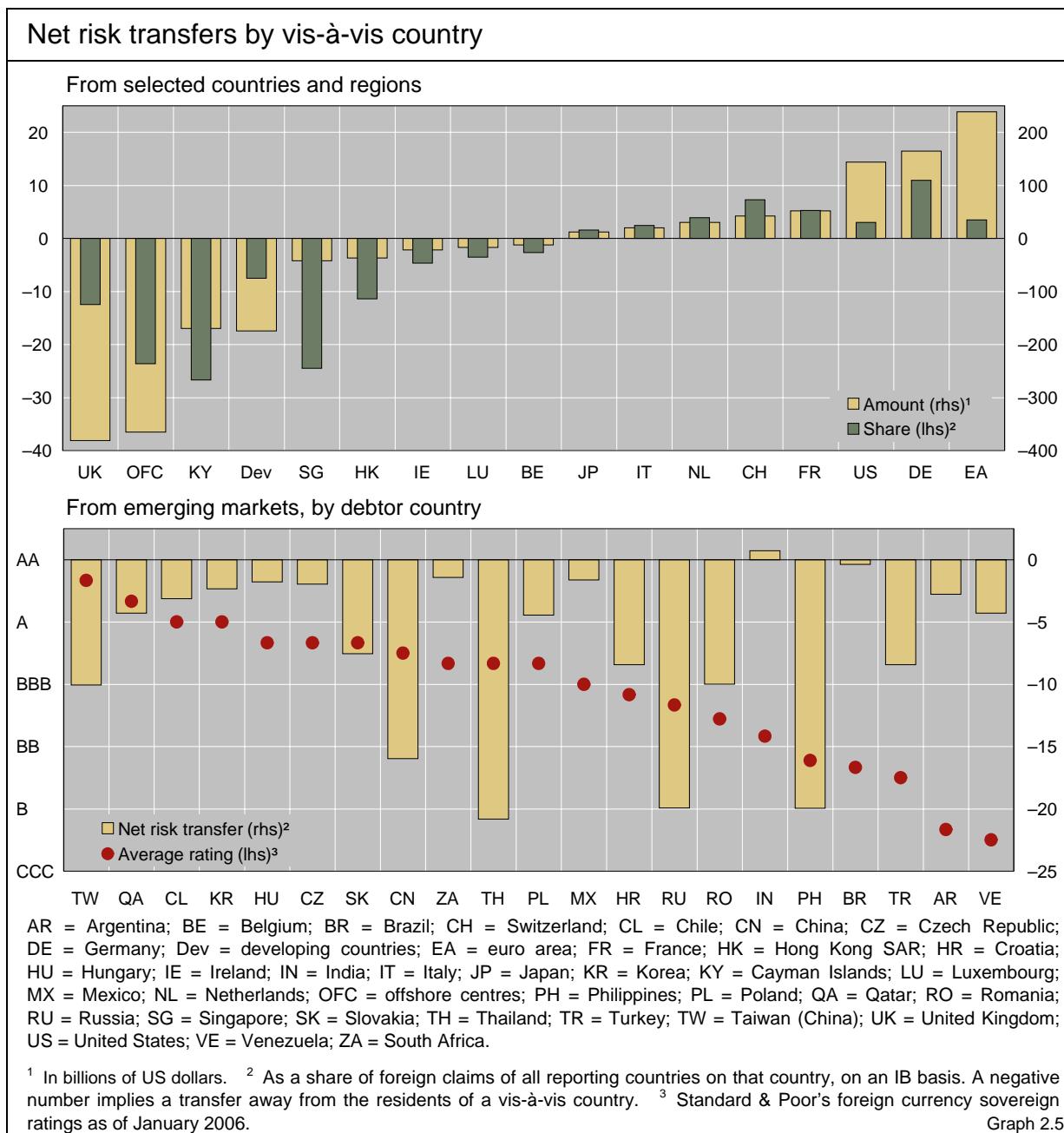
Within the universe of emerging markets, there seems to be only a tenuous relationship between reporting banks' propensity to transfer risk and aggregate measures of credit risk. Graph 2.5 (bottom panel) plots net risk transfers from selected emerging markets together with a rating of the corresponding sovereign. Net risk transfers (as a share of foreign claims) out of

Foreign claims (UR basis) on emerging economies, by region¹



¹ Reporting countries listed on horizontal axis. ² Includes loan and securities claims; in billions of US dollars. ³ Foreign claims on emerging markets in total foreign claims, in per cent.

¹³ Virtually all of Austrian and Spanish banks' foreign claims (loans and securities) on emerging markets are on borrowers in emerging Europe and Latin America, whereas US banks' foreign claims are split roughly equally between borrowers in Latin America and Asia-Pacific.

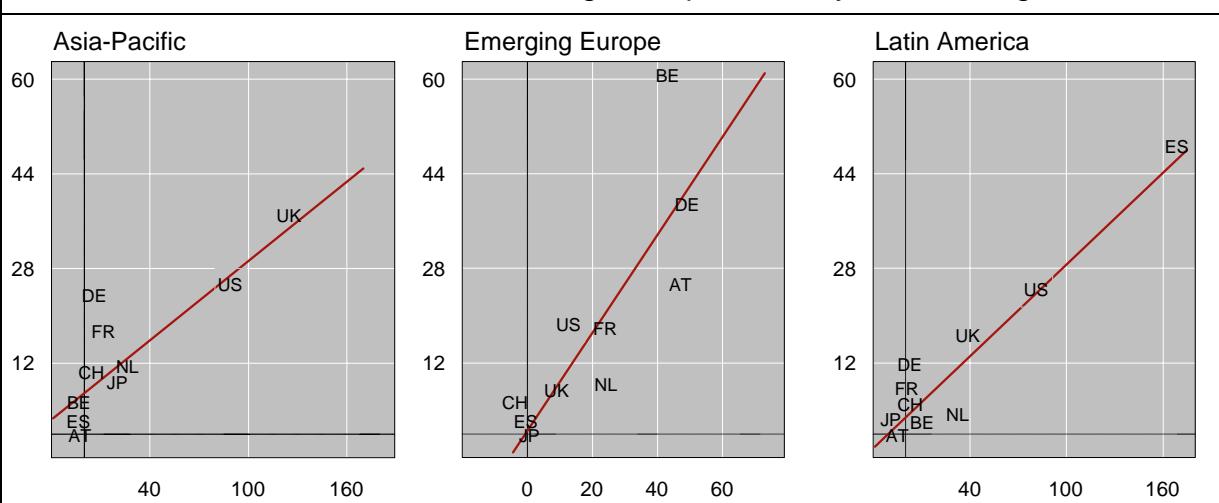


countries in Asia-Pacific tend to be larger than those out of Latin America, even though the latter group of countries tend to have lower sovereign ratings.

By contrast, net risk transfers do tend to be smaller out of emerging markets in which reporting banks have a well established local business.¹⁴ For example, Spanish banks extend 90% of their credit to Latin America via local offices while only 3% of this credit (IB basis) is transferred to a third party residing outside the region. By contrast, only 58% of these banks' credit to

¹⁴ Regression analysis finds a statistically significant negative relationship between net risk transfers and locally extended credit as shares of total foreign claims. The result is based on a regression in which foreign exposures are disaggregated across major lender countries and the four emerging market regions. In addition, larger monetary amounts of net risk transfers and local credit are attributed larger weights in the regression.

Local claims and derivatives and contingent exposures, by vis-à-vis region¹



AT = Austria; BE = Belgium; CH = Switzerland; DE = Germany; ES = Spain; FR = France; JP = Japan; NL = Netherlands; UK = United Kingdom; US = United States. The vertical axis measures derivatives and contingent exposures; the horizontal axis measures local loan and securities claims.

¹ Points represent reporting countries. Lines stand for the best linear fit in each panel.

Graph 2.6

emerging Europe is extended locally and the share transferred out of the region is higher, at 23%. This behaviour is mirrored by Belgian banks.¹⁵ To be sure, there are exceptions to this general pattern, as exemplified by US banks, which have relatively large local positions in Asia-Pacific as well as large risk transfers out of the region.

Reporting banks' derivatives and contingent exposures to emerging markets are large, and seem to be concentrated in countries where banks have an established presence (Graph 2.6). At \$582 billion in the third quarter of 2005, total derivatives and contingent exposures to emerging markets amounted to roughly 30% of reporting banks' total foreign claims (UR basis) on emerging markets. These exposures are larger vis-à-vis emerging markets in which banks have large local positions in loan and securities claims, indicative of banks exploiting economies of scope and providing client-oriented products on the basis of acquired market knowledge. This finding also suggests that derivatives and contingent exposures reinforce the concentration of reporting banks' exposures to particular segments of emerging markets.

Risk-weighted foreign exposures

Are internationally active banks' foreign claims (UR basis) large when measured on a risk-weighted basis? As discussed above, cross-border investment in highly rated government securities, which typically receives a relatively low risk weight, accounts for a significant portion (roughly 15%) of banks' foreign exposures. At the same time, exposures to riskier assets – to

¹⁵ Roughly 76% of their claims on emerging Europe and some 2% of their claims on Latin America are extended from local offices, while 2% and 13% of these claims are transferred to third parties outside the respective regions.

Reporting on an ultimate risk basis ...

some emerging markets, for example – can be large, and tend to increase total risk-weighted assets and thus require higher capital charges.

The refined sectoral breakdown in the new BIS consolidated banking statistics can be used to estimate, albeit imperfectly, how reporting banks' foreign claims (UR basis) might change when measured on a *risk-weighted* basis.¹⁶ This is accomplished by assigning country- and sector-specific risk weights to claim positions on each vis-à-vis country. The standardised approach under Basel II guidelines provides an admittedly rough, but analytically convenient, framework for assigning these risk weights.

Using this framework, the mapping from a borrowing country's sovereign rating to risk weights for claims on its public and banking sectors is relatively straightforward.¹⁷ In contrast, the risk weights applied to BIS reporting banks' exposure to the non-bank private sector in each borrowing country must be estimated. Banks should use external corporate ratings in assigning risk weights on a borrower by borrower basis if they use the standardised approach. However, such fine data are not available at the aggregated level of the BIS consolidated banking statistics. And simply using the sovereign rating of the country where the corporate borrower resides would lead to a downward bias in risk-weighted exposures since, in most countries, the sovereign rating represents an unofficial ceiling on corporate ratings in that country. Thus, the borrower-specific information available in the syndicated loan statistics (see box on page 28) is used to proxy for the average corporate rating in individual countries. That rating is then translated into an average risk weight for the non-bank private sector in each borrowing country using the mapping in the Basel II guidelines.¹⁸

... allows for estimation of risk-weighted assets

Applying these risk weights reduces the overall size of foreign claims on an ultimate risk basis. Reporting banks' largest claims are on highly rated borrowers – banks and sovereigns in the advanced countries – while their exposures to lower-rated borrowers, which can carry a risk weight greater than 100%, are fairly limited. In particular, roughly 80% of BIS reporting banks' total exposures to the public sector (\$3.2 trillion) and to the banking sector

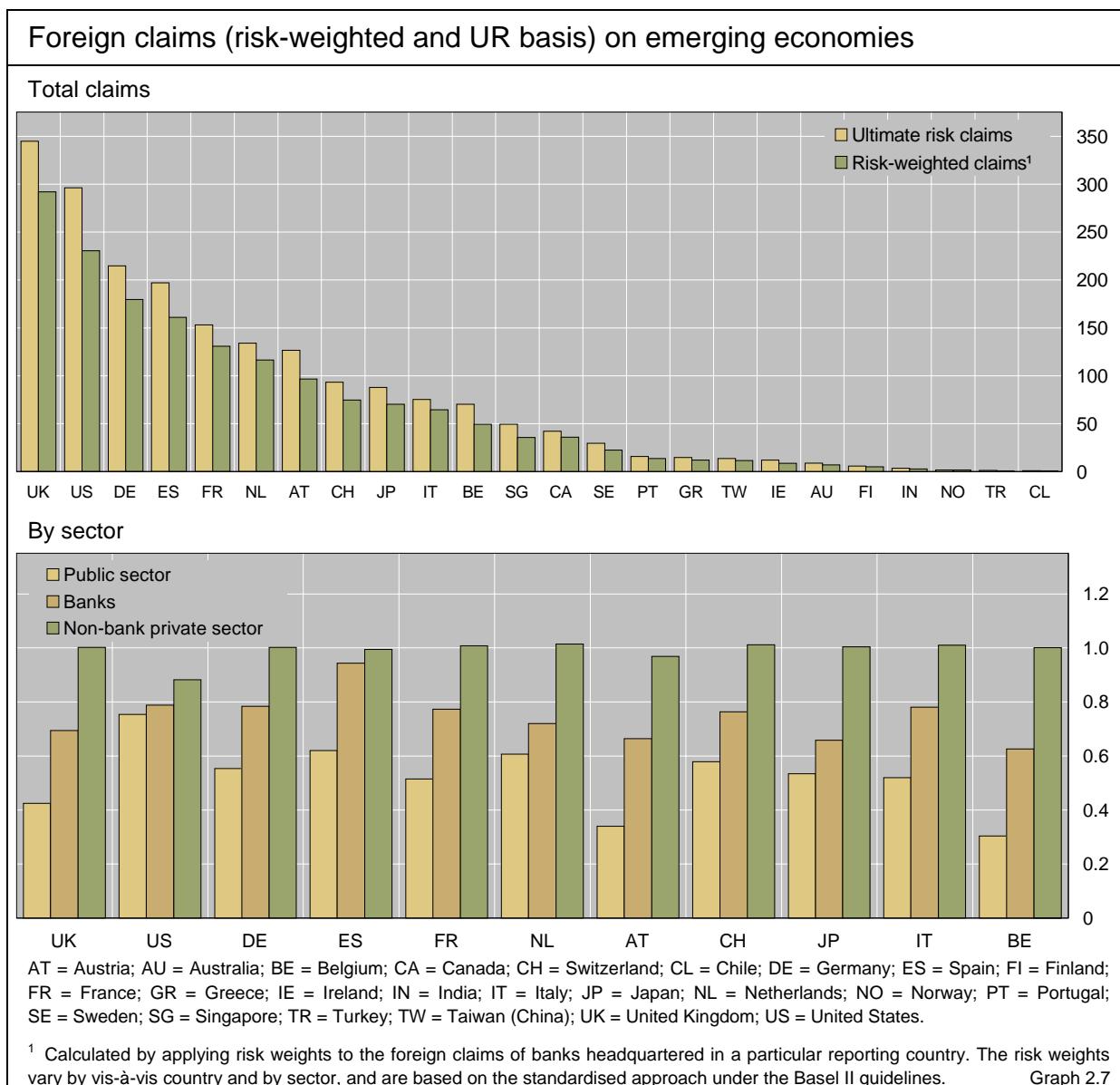
¹⁶ This analysis excludes derivatives and contingent exposures.

¹⁷ This analysis is based on the simplified version of the standardised approach in Basel II and Standard & Poor's sovereign rating for end-September 2005 for over 125 countries. Exposure to these sectors in unrated countries is given a risk weight of 100%. Unrated countries account for only 4% of total foreign claims (UR basis) on all borrowers, and only 6% of total foreign claims (UR basis) on emerging markets.

¹⁸ Specifically, for each borrowing country, the syndicated loan data are first used to estimate the share of borrowers without a corporate credit rating. This share is then applied to each reporting country's exposures to the non-bank sector in the borrowing country, and assigned a risk weight of 100%. The remaining share is given a risk weight which corresponds to the average rating of those corporates in the borrowing country which do have an external rating. Since the information on the borrower's rating is often missing, the risk weight applied to the non-bank private sector in most emerging markets is very close to 100%. This approach will tend to underestimate the risk weight in countries where only highly rated borrowers participate in the syndicated loan market. Conversely, it will tend to overstate the risk weight in countries where mortgage and other collateralised lending is a significant portion of foreign exposures. For these reasons, the analysis below focuses primarily on the public and banking sectors.

(\$5.1 trillion) are concentrated in the euro area, Japan, the United Kingdom and the United States. Most of these claims receive a zero or 20% risk weight under Basel II, and are behind the overall contraction (of 46%) in reporting banks' total foreign claims (UR basis) when measured on a risk-weighted basis.

The same tendency is evident, albeit less strongly, within reporting banks' emerging market portfolios. Overall, banks' foreign claims on emerging economies expressed on a risk-weighted basis are 82% of their total foreign claims (UR basis) on these borrowers. There are differences in the degree of contraction in claims across reporting countries, as well as across sectors and borrowing countries. As shown in Graph 2.7, Australian, Belgian and Irish banks' emerging market portfolio contracts by roughly 30% on a risk-weighted



basis. In contrast, French, German and UK banks see a somewhat smaller contraction.¹⁹

Banks' claims on emerging market public sectors contract the most when expressed on a risk-weighted basis. Foreign claims on the public sector in China, the Czech Republic, Hungary, Korea, Malaysia, Mexico, Poland and Taiwan (China) – all investment grade countries – totalled \$239 billion, more than half of reporting banks' total foreign claims on emerging market public sectors. These claims receive a risk weight of 50% or less, leading to a 46% contraction in exposure to this sector on a risk-weighted basis. In contrast, exposure to the banking sector, which has a higher risk weight than public sector exposures, in emerging markets contracts by roughly one quarter.

¹⁹ The estimate for banks headquartered in the United States is particularly poor because as much as 45% of these banks' foreign claims are not allocated to a particular sector. These unallocated claims were risk-weighted in the same way as claims on the banking sector in the borrowing country.

Developments in the syndicated loan market

Blaise Gadanecz

Stable market conditions in the fourth quarter of 2005

After the slowdown in the third quarter, activity in the international syndicated loan market stabilised at the end of the year. New facilities totalling \$583 billion were signed in the fourth quarter, representing a 15% increase over the previous period, but roughly equivalent to the volume observed a year before. On a seasonally adjusted basis, signings rose by 5%.

In industrialised countries, financing related to mergers and acquisitions was buoyant in the fourth quarter. Such signings totalled \$168 billion, a new high following the exceptional activity in the first three quarters of 2005 (see the Overview section, page 11). In the fourth quarter, Libor spreads on such loans increased, and the telecoms^① sector arranged some of the largest amounts.

There are signs that conditions on loans granted to US borrowers have started to tighten. Although maturities extended slightly, the share of secured loans (based on loan amounts) rose to 13% after staying stable at 9–10% for the first three quarters of 2005. Moreover, US borrowers' average Libor spreads rose in the fourth quarter in most sectors, in most rating categories, and also for unrated borrowers. Conversely, Euribor spreads on loans arranged for western European borrowers remained stable or decreased.

Record borrowing by Russian energy firms

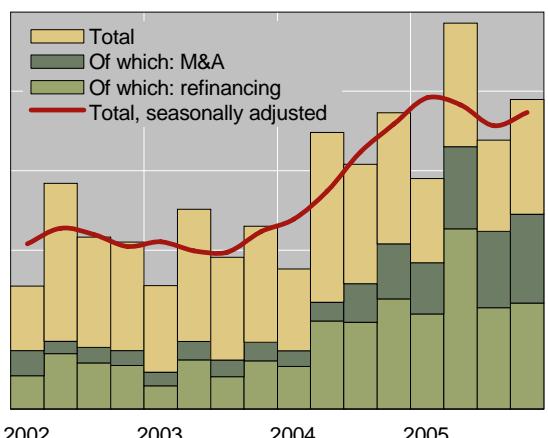
Lending to emerging markets soared to \$75 billion, boosted by exceptionally strong borrowing by Russian energy firms. That included \$20.6 billion in loans to support corporate actions in the industry (purchase of Sibneft by Gazprom, acquisition of a 10.7% stake in Gazprom by Rosneftgaz). The average pricing (spread plus fees) of Russian oil and gas loans remained low by historical standards in the fourth quarter, at 156 basis points. However, average maturities shortened significantly, to 2.3 years, well below their average length (observed since 2002) of approximately four years.

The effect of local bank lending on the pricing of loans to emerging markets

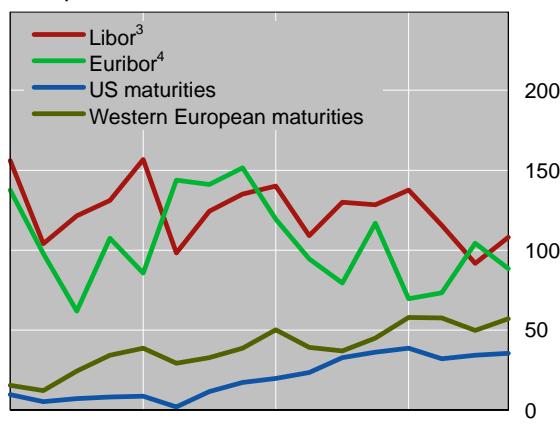
Is the participation of local banks in emerging market country syndicated loans associated with lower loan pricing? Nini (2004) documents that loans granted to emerging market borrowers in

Signings of international syndicated credit facilities

Total signings (USD billions)



Weighted¹ average maturities (years, lhs) and pricing² (bp, rhs), United States and western Europe



¹ By facility sizes. ² Spreads plus fees. ³ US dollar-denominated facilities with Libor pricing granted to US borrowers. ⁴ Euro-denominated facilities with Euribor pricing granted to western European borrowers.

Sources: Dealogic Loanware; BIS.

^① Not included in the syndicated loan statistics compiled by the BIS for the fourth quarter of 2005 is the £18.5 billion facility arranged for Telefónica, the Spanish phone carrier, to finance the acquisition of UK mobile operator O₂. The loan had been funded but not yet signed at the time of writing.

which local banks participate are significantly cheaper – by about 50 basis points – than those without local participation, suggesting that local banks play an important role in reducing information asymmetries.^② This box takes the analysis further by (i) focusing on the actual shares retained by various types of banks, (ii) distinguishing between junior and senior banks and (iii) separately analysing bank residence versus ultimate ownership. We show that, after controlling for risk, higher loan shares retained by senior arranger banks of the same group nationality as the borrower are associated with lower loan pricing. Altogether, the results confirm the role of local banks in influencing the pricing of loans to emerging market countries, and this effect is especially evident through locally owned banks' certification role as senior arrangers.

In a syndicated loan, several banks form a group to lend to the same borrower. The syndicate is typically formed around one or more senior arranger banks – often the borrower's relationship banks – which receive a fee on the entire loan amount to take the responsibility for negotiating the terms, marketing the credit and allocating it to all the participants, including themselves.^③ To determine their participation, junior banks – not involved in negotiating the deal and having less information about the borrower – often rely on the reputation of and due diligence performed by the senior banks during the evaluation of the borrower's creditworthiness. This is especially important in emerging markets, where there is less publicly available information about borrowers (eg in the form of ratings) than in industrialised countries. The share of each loan retained by senior arranger banks can, in some cases, be considered as a proxy for the extent of the certification activities performed by the senior arrangers.^④

The effect of loan share retention on pricing by various types of banks was analysed in a regression framework. The pricing, measured by Libor spreads,^⑤ of a large sample of syndicated loans granted to emerging market borrowers between 1993 and 2005 was regressed on loan share retention, controlling for micro- and macroeconomic factors commonly found in the loan pricing literature.^⑥ The results are reported in the table overleaf.

In the case of senior arrangers of the same *group nationality* as the borrower, there is a significant and negative relationship between loan spreads and retained shares. The coefficient of -40.7 (first column of the table) suggests that each per cent of the loan amount retained by a senior arranger of the same group nationality as the borrower is associated with a discount of 40 basis points, after controlling for risk. Interacting the retained share with the fees charged on the facility (column 2) suggests that some discount is also apparent in the fee structure in relation to share retention by local senior arrangers. Columns 3 and 4 show that there is no significant association between loan pricing and retention by senior arrangers of the same *residence* as the borrower. Other specifications (not reported) show that there is no significant relationship either between local share retention and loan pricing when banks of all seniorities are grouped together. When the model is estimated for the various groups of emerging market countries, the results appear to be driven mainly by the developing Asia-Pacific and eastern European regions. The results are also robust to the estimation of the model for individual years.

To conclude, after controlling for risk, higher loan shares retained by senior arranger banks of the same group nationality as the borrower are associated with lower loan pricing. This could reflect certification by these locally owned banks, possibly thanks to better information that they might have about the borrower. Alternatively, the result may also reflect directed or relationship lending, competition or mispricing. The findings do not hold for banks with the same residence as the borrower, arguably because locally owned banks may have more insider knowledge of the borrower than local subsidiaries of foreign banks.

^② G P Nini, "The role of local banks in promoting external finance: a study of syndicated lending to emerging market borrowers", Board of Governors of the Federal Reserve System, *International Finance Discussion Paper*, no 820, September 2004. ^③ See B Gadanecz, "The syndicated loan market: structure, development and implications", *BIS Quarterly Review*, December 2004. ^④ See, for instance, G B Gorton and G G Pennacchi, "Banks and loan sales: marketing non-marketable assets", *Journal of Monetary Economics*, 35, June 1995, pp 389–411. ^⑤ The results are robust to the inclusion of fees in loan pricing. ^⑥ Microeconomic factors such as loan maturity, size, borrower sector and guarantees were included, along with macroeconomic ones prevailing in the borrower's country at the time of signing – inflation, GDP growth, corruption index, domestic credit expansion, current account balance and sovereign ratings. An indicator of global liquidity – measured as the GDP-weighted average of real interest rates in major industrialised countries at the time of signing – was also used as an independent variable. The results obtained on these controls are standard and not discussed here in detail: the effect of maturity on loan pricing is uncertain because of non-linearity, loan size is negatively associated with spreads, and secured loans and acquisition facilities are more expensive; unfavourable macroeconomic conditions, such as a high level of perceived corruption, or a high sovereign default probability, are associated with higher loan pricing and vice versa.

The effect of fund provision by local banks on loan pricing

Dependent variable: Libor spread	Share retained by senior arranger(s) of matching group nationality		Share retained by senior arranger(s) of matching residence	
[macro and micro controls not reported]				
Share retained	-40.7** (17.6)	-39.0 (31.4)	6.7 (16.2)	22.2 (30.9)
Share retained x fees		-1.7*** (0.6)		-1.7*** (0.6)
Share retained x total number of banks in syndicate		1.7 (2.2)		0.4 (2.1)
Number of arrangers	-1.9* (1.0)	-2.1** (1.1)	-3.0*** (1.1)	-3.2*** (1.2)
Adj R ²	0.51	0.51	0.44	0.44
N	1,076	1,076	1,247	1,247

Note: Standard errors in parentheses. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. The possible endogeneity of loan share retention was not controlled for in this regression.

Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; Dealogic; Transparency International; author's calculations.