



Home, sweet home?

International banking after the crisis

June 9, 2011

Banks' cross-border business – directly, via branches or subsidiaries – took a hit from the financial crisis. The level of activity fell particularly strongly in capital-intensive business areas such as traditional lending to the private sector, although in part this was due to (foreign) public debt replacing private debt. Banks' commitment to foreign markets remained virtually unaffected with respect to intermediary activities such as investment banking or asset management. Significantly higher capital levels may therefore help to cushion similar blows to international banking in future.

Foreign banks' supply of credit has been more volatile before and during the crisis than that of their domestic counterparts – though overall their market presence is much greater than a few years ago. Non-domestic banking activity declined in the course of the crisis, but has stabilised in line with the recovery of financial markets since mid-2009. Despite a partial rebound, pre-crisis levels have not yet been reached in most cases.

The largest European banks have seen their foreign businesses rebound strongly since 2009 and are now more international than ever. The top 20 institutions were already more international than their smaller peers going into the crisis. The share of revenues generated abroad fell sharply in 2008 due to markdowns on securities, booked in London and New York. Since then, however, and despite some large-scale domestic takeovers of troubled rivals, the international operations of Europe's major banks have expanded again with considerable momentum, accounting now for almost 60% of total earnings.

The outlook for international banking post-crisis is positive, in principle, but could be scuppered if regulation went wrong. Integrated financial markets across borders offer many advantages for banks and their customers alike. Hence, driven by better growth prospects in emerging markets and lower existing debt levels, Western banks may continue to invest especially in their Asian and Latin American business. The main risks relate to regulation which could still render activities abroad less attractive, particularly through inconsistent implementation of a host of new measures in different countries.

www.dbresearch.com

Author
Jan Schildbach
+49 69 910-31717
jan.schildbach@db.com

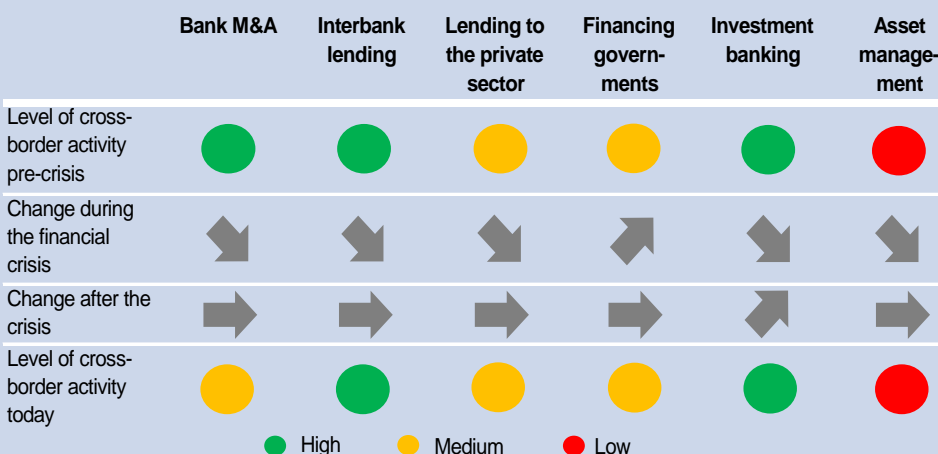
Editor
Bernhard Speyer

Technical Assistant
Sabine Kaiser

Deutsche Bank Research
Frankfurt am Main
Germany
Internet: www.dbresearch.com
E-mail: marketing.dbr@db.com
Fax: +49 69 910-31877

Managing Director
Thomas Mayer

European banks' international activities: stylised level of intensity



Source: DB Research



Introduction

The financial crisis of 2007-09 was a major test for the global financial system as a whole. But it was also a test of its international linkages. Without the enormous web of cross-border claims, cross-border operations and cross-border organisations, the *global* financial crisis would instead have been several *national* banking crises, not necessarily erupting at the same time and with far fewer contagion effects – but probably with (even) greater damage to the nations hurt most. The scale of the misallocation of capital towards less creditworthy mortgage borrowers in the US or the UK would probably have been smaller without incessant demand for securitised products from foreign investors, chiefly among them banks. But international banks also provide substantial benefits to the economies they operate in – during the crisis, e.g., the presence of Western European banks had a stabilising effect on credit flows in Central and Eastern Europe (CEE). The burden of stabilising the financial sector also rested mainly on foreign governments which provided substantial public funds to the parent institutions of CEE-located subsidiaries.

The financial crisis dealt international banking a serious blow. Worldwide, the political and regulatory debate focuses on increasing the – mostly domestic – grip on the banking industry, tightening regulation and supervision. This paper aims to review 1) the extent to which financial markets have become global in recent years as well as the damage inflicted on cross-border linkages by the financial crisis, 2) the reasons for the internationalisation process and 3) prospects for international banking in the “new-normal” environment. The focus will be mostly on Europe but sometimes also extend to a global perspective.¹

1. The globalisation of financial markets: Rise and fall?

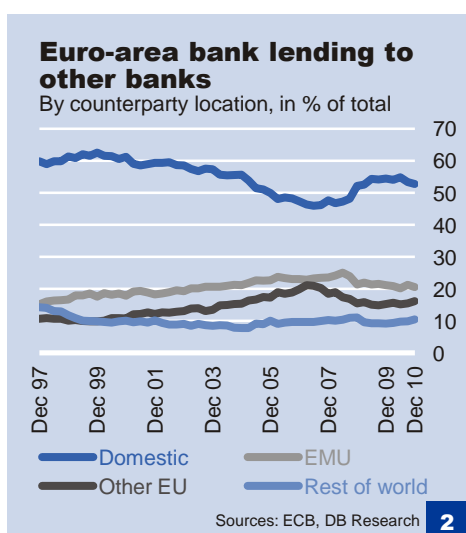
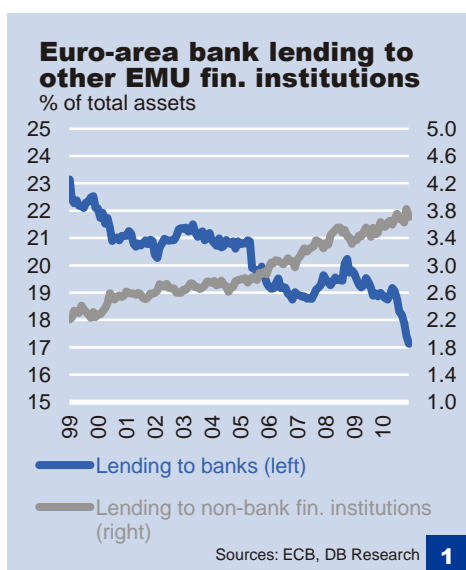
The internationalisation of financial markets and banking in particular mainly focused on two different layers in recent years: a) growing cross-border links between banks in the wholesale market, and b) growing relationships of banks with (non-bank) clients in other countries.

a) Cross-border interbank relations

Business with other banks accounts for a significant proportion of banks’ overall operations, though in the case of euro-area institutions its share in total lending has declined in the years preceding the financial crisis (with the trend accelerating since the euro debt crisis, see chart 1). The importance of non-bank financial institutions such as insurance companies, pension and mutual funds on the other hand has grown, yet starting from a much smaller share.

As a sign of the degree of international integration of wholesale banking markets especially in Europe, a substantial part of **interbank lending** takes place **across borders**. Banks in the euro area traditionally grant the largest share of their interbank loans to peers in their own home country (see chart 2). This proportion, however, shrank significantly in the decade prior to the financial crisis, from 60% at end-1997 to 46% in summer 2007, thanks to the

¹ Milesi-Ferretti and Tille (2011) provide a broader overview about global capital flows in general, finding that during the crisis cross-border banking activity contracted particularly strongly (compared with, e.g., foreign direct investments) and more so in developed than in emerging economies.



formation of EMU and successful efforts to further strengthen market integration in European wholesale markets. Consequently, the share of lending directed at euro-area banks outside the national market rose by more than half to 23% and that of other EU banks even faster, to 21%. At that time, interbank lending in Europe was by and large split into two equal parts, domestic and non-domestic. With the financial crisis diminishing risk appetite, banks' foreign exposures declined, though the pre-crisis developments were only halfway reversed. Currently, for euro-area financial institutions, banks in other EU countries account for nearly 37% of total lending to banks – still a considerable share.

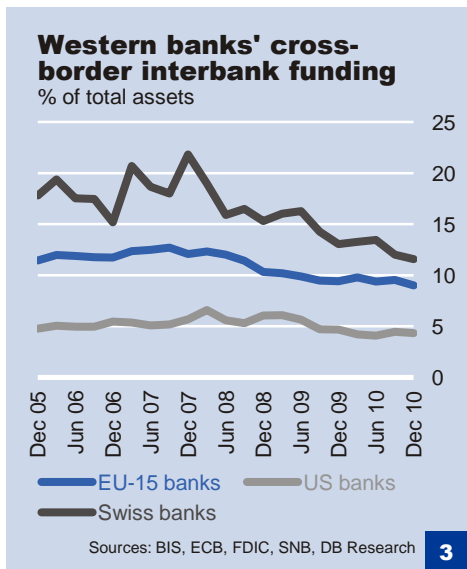
Looking at the other side of the balance sheet, total **liabilities to foreign banks** (i.e. loans as well as securities) make up almost 12% of Swiss banks' and about 9% of EU-15 banks' total assets, whereas this share is only 4% for US banks (see chart 3) – much greater exposure of individual banks notwithstanding. In line with the development of total interbank lending both short- and long-term, the importance of cross-border interbank funding has decreased considerably since peaking in spring 2008.² At that time, the combined average for Western European and American banks had reached 11.7%, compared with 8.3% today.

In (short-term) **euro money markets**, the picture is less clear. While for unsecured transactions, the share of transactions conducted with domestic partners increased during the financial crisis (rising from 25% in 2006 to more than 33% in 2009), last year it fell back to broadly its average in the past decade (see chart 4). More striking is the ongoing advance of non-EMU counterparties whose share has increased by half since the outbreak of the crisis. In the repo market, too, there is hardly any evidence for a significant and permanent shift in market share from or to foreign counterparties, although collateral used in bilateral repo deals is increasingly of non-domestic origin (see charts 4 and 5).

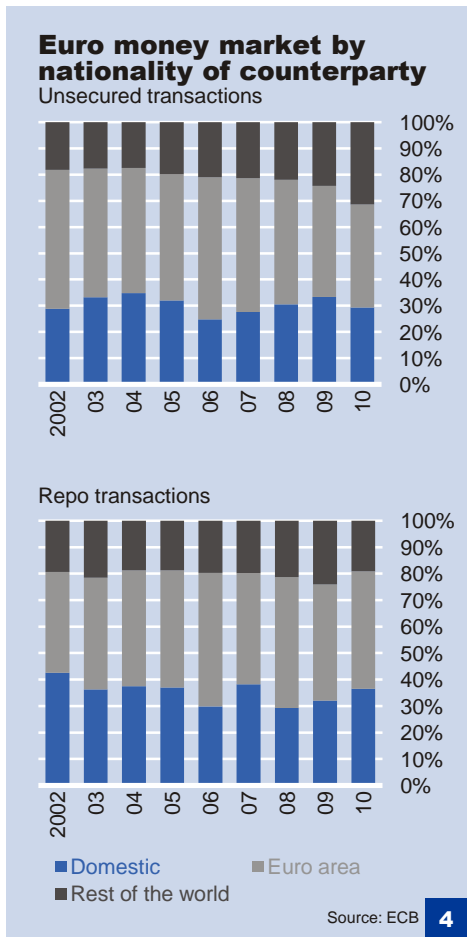
The two developments in overall interbank relations and euro money markets together suggest a tentative conclusion: while a large-scale decrease in cross-border banking business is not evident in short-term financial markets, it may indeed have taken place to some extent in longer maturities. At the same time, this would not be much of a surprise. Given heightened risk awareness and risk aversion, money market lending may look rather secure compared with greater uncertainty inherent in longer-term commitments. In addition, the higher share of foreign counterparts in money market transactions suggests relatively well-established, long-term relationships that may prove more stable and resilient even during periods of stress.

Finally, further evidence of a moderate reorientation of banks towards the domestic market comes from the **ECB's open market operations**. The trend is similar to the one observed for interbank relations as a whole: the share of domestic collateral used in banks' refinancing operations with the central bank fell from nearly three quarters in 2002 to less than half before the financial crisis, as banks increasingly turned towards supplying international assets in exchange for ECB funding (see chart 6). The crisis stopped this development and reversed it partly. Further pressure on the usage of cross-border collateral in monetary policy operations came in 2010 with the onset of the euro sovereign debt crisis, as higher haircuts on "peripheral" sovereign debt following rating downgrades

² Unfortunately, there is no comparable data history available before 2005.



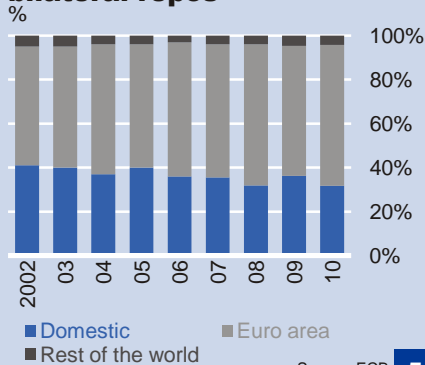
3



4

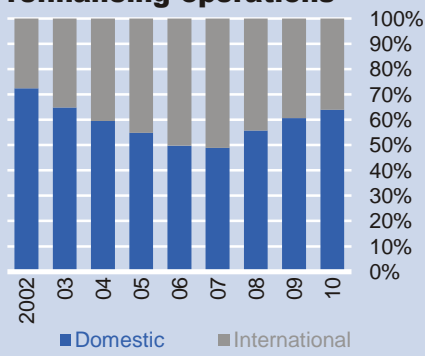


Euro money market: collateral breakdown for bilateral repos



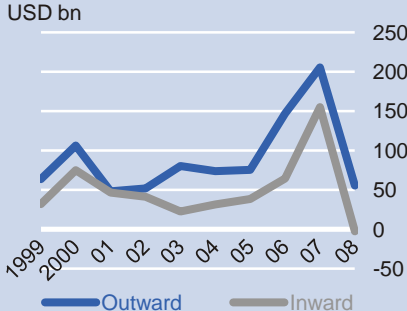
5

Collateral used in ECB refinancing operations



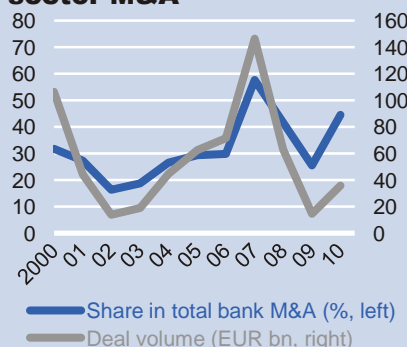
6

Banking sector FDI flows in the EU-15*



7

Global cross-border banking sector M&A



8

made those bonds less attractive for banks especially from the “core” countries (which account for a high proportion of the euro-area banking sector overall).

b) Cross-border banking with non-bank clients

Entering foreign markets via investments in local entities

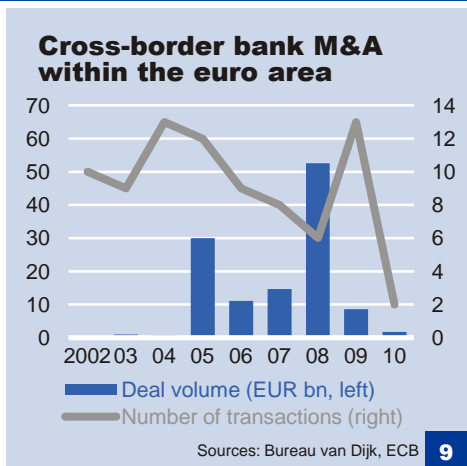
There are three ways for banks to approach customers located in another country: they can distribute their products and services directly cross-border, build up local capacities from scratch (“greenfield investments”) or invest in banks that have already established client relationships in the target market.

With respect to the latter, cross-border activity had intensified strongly before the financial crisis. **Foreign direct investments** (FDI) in EU-15 banks reached record volumes in 2007, having risen for several years in a row (see chart 7). Outward flows continuously outweighed inward transactions, in part due to Western European banks’ drive to build up a sizeable presence in fast-growing emerging markets (often in Central and Eastern Europe). With the financial crisis striking in 2008, FDI volumes dropped sharply and EU-15 countries even saw a small net outflow of foreigners’ investments.

A large part of this investment usually takes place in the form of outright **mergers and acquisitions** (M&A) (FDI data also includes purchases of minority stakes). On a global basis, not only did the volume of cross-border deals surge in the years up to 2007 but the share of transactions involving institutions from different countries relative to purely national combinations also rose substantially (see chart 8). As a result of the crisis, this increased international activity has been diminished. The majority of bank M&A transactions – of which there were only rather few in 2009 – involved just domestic partners, while the volume of cross-border mergers fell to no more than a trickle. Since then, the latter’s share has recovered even though absolute volumes remain very modest.

Developments within Europe were broadly similar, except that cross-border activity in 2010 disappeared even further instead of picking up (see chart 9). A mere two transactions were recorded, the lowest number in the past decade, with equally minuscule volumes. This may change again going forward, as the sector is regaining strength and the current comprehensive regulatory shakeup is causing banks to rethink their business models and strategies. In addition, non-European markets will most probably remain attractive targets for EU banks.

The **market share of foreign-owned banks** rose in the years preceding the crisis – in the EU-25 by 6 pp to 29% from 2003 to 2007 (see chart 10). With the general re-orientation towards domestic markets that followed, it declined moderately to 27% in 2009. The fact that foreign banks’ expansion was entirely due to increasing market shares of institutions from other EU countries highlights the success of efforts to strengthen European market integration by abolishing formal and informal barriers to the Single Market in financial services. The share of non-European banks, on the other hand, virtually stagnated – in fact, post-crisis it is now at its lowest level in the past decade.



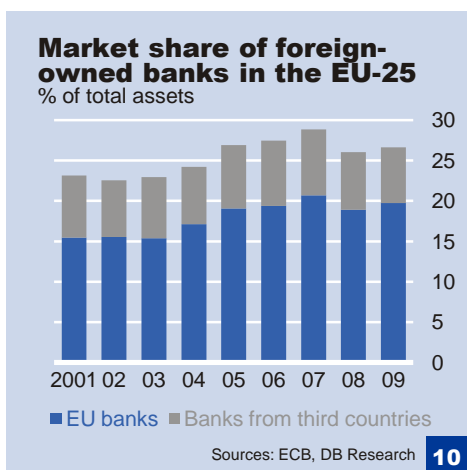
9

Yet the aggregate figure masks **huge differences across national markets** (see chart 11). Whereas in several mature Western countries foreign banks together comprise about a tenth of the entire market, in other cases their share is much higher, at or above 50%. In addition, in most new member states (NMS) in CEE foreign banks dominate the domestic market, sometimes accounting for more than 90% of total sector assets. There are a number of reasons for these large differences across individual markets:

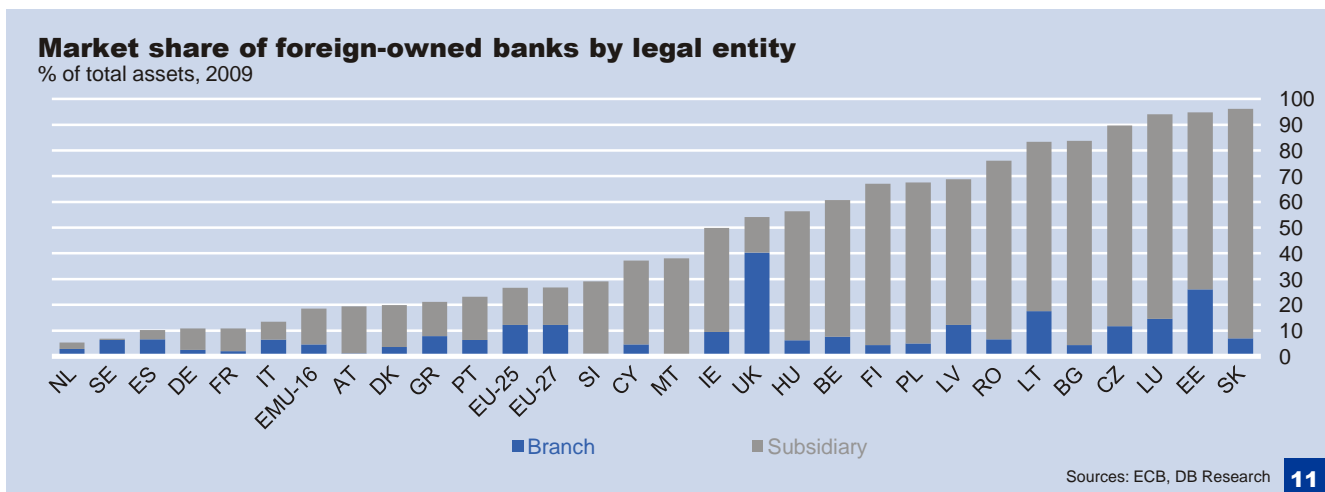
1) Size is an important factor. It is, of course, much easier to acquire a substantial stake in the banking industry of a small country than in a large economy. A 10% market share in Germany is equivalent to nearly 3/4 of the Belgian market and almost equals the total assets of all the EU's ten NMS in CEE combined.

2) Some countries are more open to investments from outside (and in particular foreigners taking control of domestic institutions) than others. Resistance from policymakers, bank stakeholders and a high level of (in)formal barriers may convince foreign banks that some markets are less receptive to increased competition from abroad.

3) Related to the previous point, it needs to be stressed that Western banks owe their prominent position in CEE mainly to local governments' strategy of searching for strong partners from "sophisticated" banking systems to modernise CEE banks in the post-socialist era. Banks were privatised and majority stakes in former state-owned banks sold primarily to EU-15 banks that were eager to find new engines of growth.³



10



11

Overall, a tight cross-border industry network has evolved.⁴ As the mirror image of the market share analysis above, it is also possible to work out the extent of **foreign (and European) exposure of individual countries' banks**. As table 12 shows, on-balance-sheet claims on other European countries play an important role in many European banking markets. For instance, apart from domestic assets, Austrian banks and their local subsidiaries have a further USD 434 bn in claims against other European countries – a third of their balance sheet total (in addition to some claims on non-Europeans). Among these European countries, Austria is most

³ Most transactions took place already in the 1990s.

⁴ See also Weistroffer and Möbert (2010).



exposed to borrowers in the Czech Republic, Germany and Romania which represent roughly one tenth of total Austrian banks' assets. The claims consist of loans and debt and equity securities holdings as well as deposits – e.g. mortgages granted to Czech clients, investments into covered bonds issued by a German bank, investments into the share capital of a German car company or funds deposited in a Romanian bank account.

Strong intra-European network of bank exposures

	Share of non-domestic European claims in % of total assets	Largest European debtor countries	Share of top 3 European countries in % of total assets
Sweden	45.8	Denmark, Norway, Finland	29.0
Austria	33.2	Czech Republic, Germany, Romania	11.4
Netherlands	26.8	Germany, UK, Belgium	13.8
Belgium	21.4	Czech Republic, Ireland, France	8.4
Greece	20.0	Romania, UK, Bulgaria	7.6
France	18.7	Italy, UK, Germany	8.9

Sources: BIS, ECB, DB Research

12

As diverse as the strong cross-country linkages between the national banking sectors, as sizeable are the differences in the concentration of these (foreign) European claims. For instance, while almost 30% of Swedish banks' assets relate to the country's three Nordic neighbours Denmark, Norway and Finland, French banks' claims on their three most important international partners (Italy, the UK and Germany) amount to less than a tenth of their total balance sheet – hence, French banks in general seem to be more diversified. Comparing the institutional perspective of table 12 with the market perspective of chart 11, however, it also becomes clear that the degree of internationalisation of individual European banks in fact varies less than that of national banking systems as a whole.⁵

Financing the private sector and governments abroad

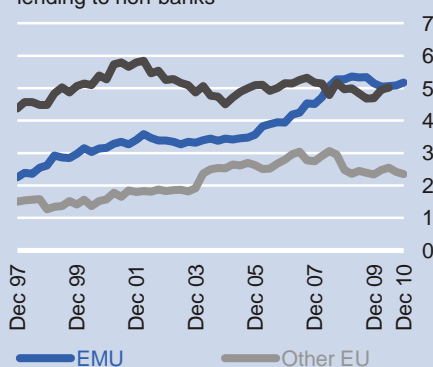
Besides gaining exposure to clients in other countries through the acquisition of subsidiaries, banks can approach potential customers directly. In the lending business, cross-border activity overall is rather limited even within the supposedly integrated euro-area financial market. **Loans** granted by euro-area financial institutions to **non-banks in other European countries** do not exceed 8% of all loans made to non-banks, and two-thirds of them remain within EMU (see chart 13). Although this share has about doubled over the past decade and even shown a relative resilience in the course of the financial crisis, it is still a far cry from the much deeper international relationships among banks themselves, as shown above (see chart 2). Consequently, domestic non-financial borrowers still account for the overwhelming part (more than 87%) of total euro-area lending to non-banks.

This observation holds true for almost all individual EMU countries (see chart 14). For example, EUR 2,584 bn of a total of EUR 2,773 bn in loans made by German banks to private households, enterprises and governments in Euroland go to German customers, just EUR 189 bn are directed to clients in France, Italy, Spain or other euro countries. In addition, the situation on the deposit funding side is very much the same.

⁵ Unfortunately, a comparable full country breakdown of banks' foreign liabilities is not available, preventing detailed analysis of foreign funding exposures. Chart 44 below at least looks at the specific case of banks' cross-border liabilities to other banks.

Euro-area cross-border bank lending to non-banks

By counterparty location, in % of total lending to non-banks

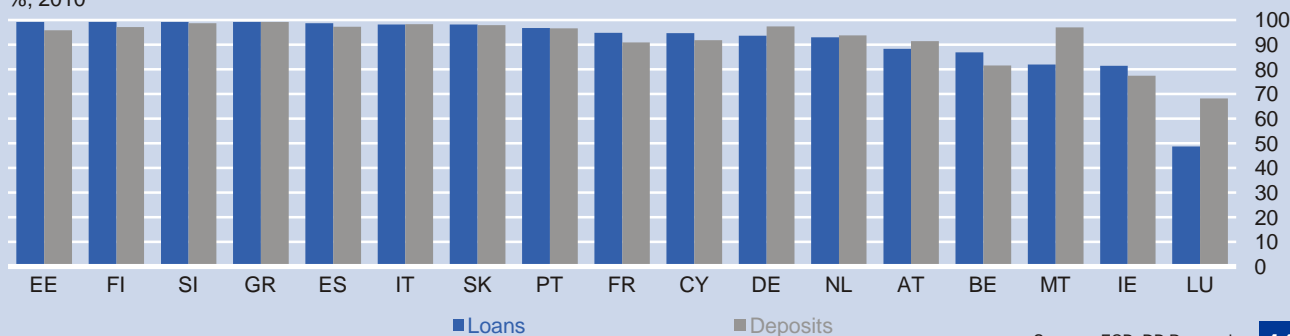


Sources: ECB, DB Research

13

Domestic share in total lending to/deposits from euro-area non-MFIs

%, 2010

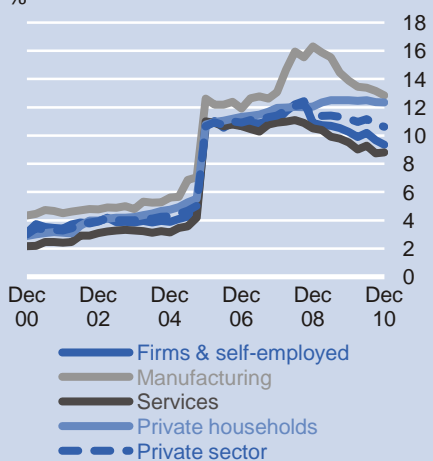


Sources: ECB, DB Research

14

Lending market share of foreign-owned banks in Germany by sector

%

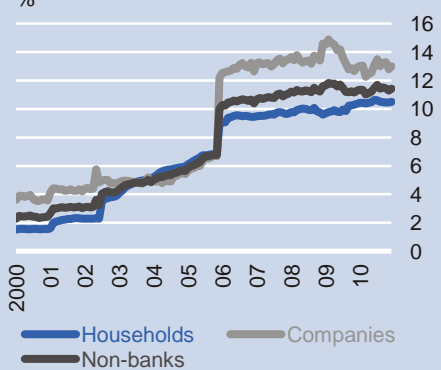


Sources: Bundesbank, DB Research

15

Deposit market share of foreign-owned banks in Germany by sector

%



Sources: Bundesbank, DB Research

16

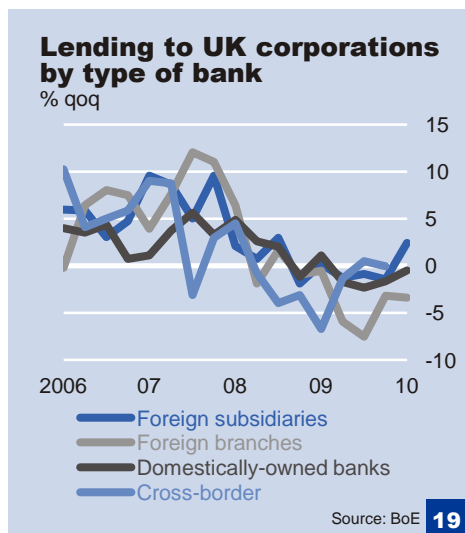
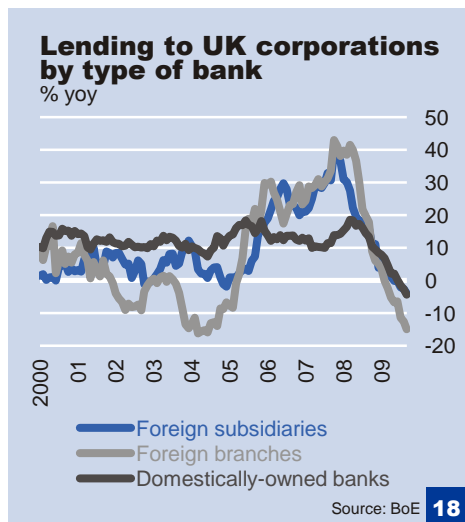
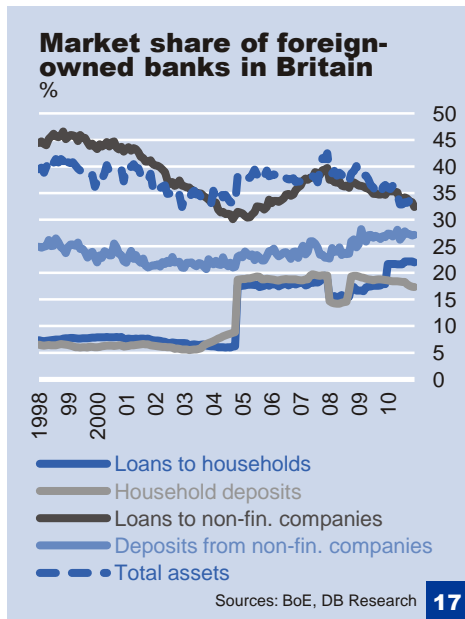
These figures take into account only banks incorporated in Germany (and their associated branches abroad) but exclude legally independent foreign subsidiaries. Hence, they may understate to some extent the true market share of foreign institutions. Only few countries provide data on the **consolidated lending volume of foreign-owned banks**. German figures give a detailed picture of the market position of both local branches and majority-owned subsidiaries of foreign institutions: the data shows a long-term upward trend in the market share of foreigners which was boosted in particular by the takeover of Hypovereinsbank by Italy's Unicredit in 2005 (see chart 15). With the financial crisis aggravating in late 2008, many banks sought to reduce risk-weighted assets (and foreign exposures in particular), and the expansionary phase that had mainly focused on industrial firms came to an abrupt end.⁶ Despite the economic rebound underway since last year, this retreat of foreign-owned banks in German lending especially to the manufacturing industry continues. Their market share is now back at the pre-boom level of 12-13%, considerably below the pre-crisis peak of more than 16%, although it still compares favourably with a mere 4% ten years ago.⁷ This is not unlike the situation in deposit-taking even though here foreign banks' position has evolved rather steadily throughout the entire boom-bust-recovery period (see chart 16).

Outside of the euro area, foreign and foreign-owned banks may command a greater share of the lending and deposit markets. For one thing, they are much more prominent in the UK thanks to the role of London as an international financial centre. For another, most banking sectors in CEE countries are predominantly in foreign hands and purely domestic institutions are less present than elsewhere.

In **Britain**, foreign-owned banks account for 20% of deposits from households and non-financial corporations as well as 25% of total loans to the private sector (see chart 17). Their aggregate market share in total assets, though, has declined moderately over the past decade, from about 40% to around one-third. This combines several diverging effects. 1) The role of interbank lending by foreign banks has decreased. 2) Foreign-owned banks have massively expanded their retail activities, mainly due to the repeated acquisitions of UK

⁶ The drop cannot be explained by a lack of demand for credit (which indeed was a major driver for the absolute shrinking of the lending volume) as we only look at relative market shares. Foreign banks' lending declined more strongly than that of domestic German banks.

⁷ In volume terms they recorded a substantial minus of EUR 42 bn in lending to businesses since 2008.



credit institutions by Spanish bank Santander. 3) They have substantially reduced the gap between a very strong lending position and relatively weak deposit-taking with British companies. Foreigners' market share in corporate lending fell from about 43% ten years ago to currently 32%, while in deposits it edged up by five percentage points to 27%.⁸

Lending by foreign banks, however, has usually been more volatile than that of domestic institutions. Whereas the latter expanded their loan books with UK corporates by a near-constant 10-15% on average in the run-up to the crisis, lending growth rates of foreign banks' subsidiaries and branches were mostly below that in the first half of the decade (and often negative), before rising far above this level during 2005-08 (see chart 18). Remarkably, the swings were even larger for foreign banks' branches than for their subsidiaries.

During the financial crisis, these distinctions became ever clearer: 1) Foreign banks generally cut back lending to UK residents faster and more significantly than domestic banks (see chart 19). 2) The stronger the institutional links to the British economy, the less volatile banks' lending behaviour turned out to be.⁹ Direct cross-border lending was the first to dry up. The slump in lending by foreign branches was also steep and it took longest to recover. By contrast, loan production by UK domestic banks and locally incorporated subsidiaries of foreign banks held up relatively well. Moreover, growth rates for these two groups of banks were very similar throughout the crisis, suggesting that the greater independence of legally separate institutions resulted in a more stable development of credit volumes than was the case with direct cross-border or branch-induced lending by foreign banks.¹⁰ Generally, political pressure on banks to continue lending to clients in the home country may have had a stabilising effect on domestic banks' credit volumes compared with foreign-owned institutions.

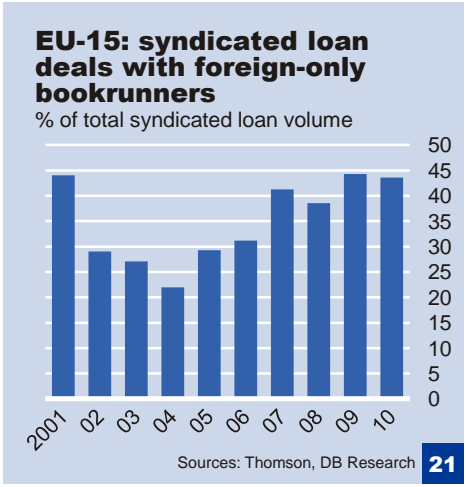
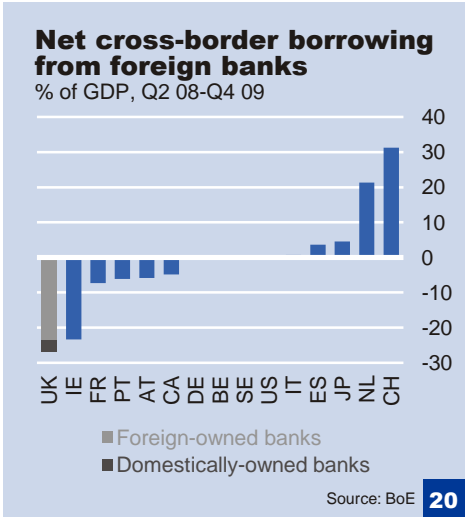
What may have contributed to the pull-back especially of foreign-owned institutions is a substantial withdrawal of funding by banks abroad during the time of turmoil. While liabilities of domestically-owned banks to non-UK peers remained almost constant throughout most of 2008 and 2009, they fell by more than 20% of British GDP at foreign-owned institutions – the highest relative outflow of cross-border interbank funds of any major developed country and probably a sign of foreign parent banks repatriating funds (i.e. liquidity) from their UK branches and subsidiaries (see chart 20). This, in turn, may have seriously constrained the financing capability of the affected banks in the UK.

In many **CEE countries**, lending to the private sector is dominated by foreign-owned financial institutions. Typically, average pre-crisis growth rates were higher and the slowdown in 2009 and 2010 more pronounced than in Western European banking markets. Yet in this case it would be premature to explain the difference with the extensive presence of foreign-controlled institutions in CEE economies. Instead, greater volatility in bank lending – more rapid expansion in boom times, stronger cutbacks in recessions – is a common feature of most emerging countries' financial sectors.

⁸ See also BoE (2010a) and BoE (2010b).

⁹ Again, of course, lending volumes are a function of both supply and demand and overall demand plummeted in 2008/09. It is possible that customers, too, discriminated to some extent between domestic banks – being more familiar with them or regarding them as more stable – and international banks which might have had a greater reputational problem.

¹⁰ See also BoE (2010a) and Hoggarth et al. (2010).



Banks usually pursue different strategies in emerging or “growth markets” than in developed economies, regardless of the role played by international institutions.¹¹

Rather than growing organically in retail or small-business banking in new, foreign markets, it might be considered easier to venture abroad in corporate finance, specifically in **loan syndication**. Hence, one would expect to see relatively larger fluctuations in the market share of foreign institutions in this segment than in more traditional, bilateral lender-borrower relationships, depending on the overall level of liquidity and risk appetite in the international financial system.

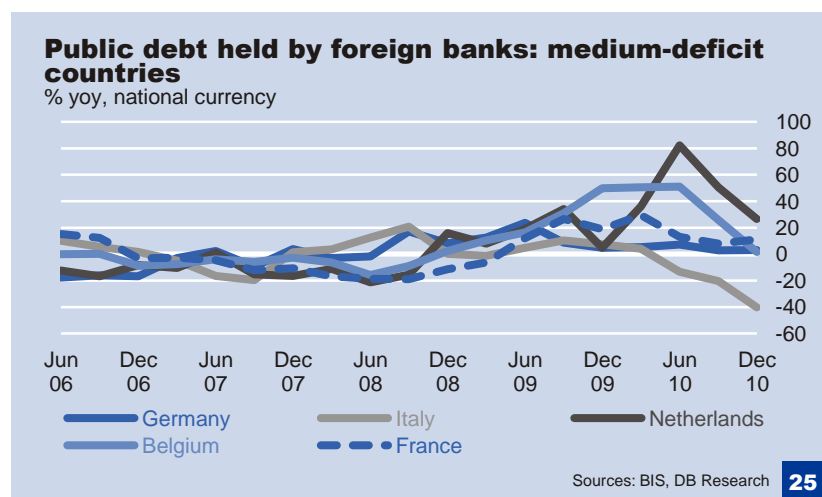
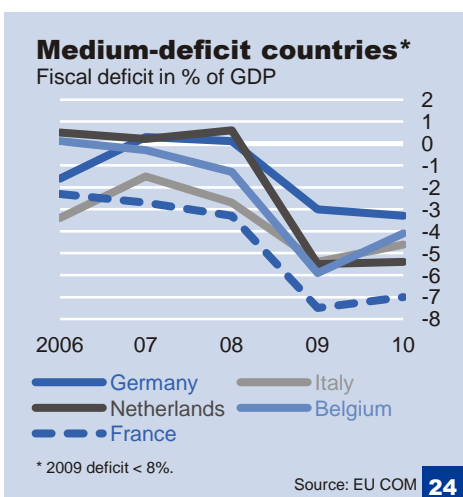
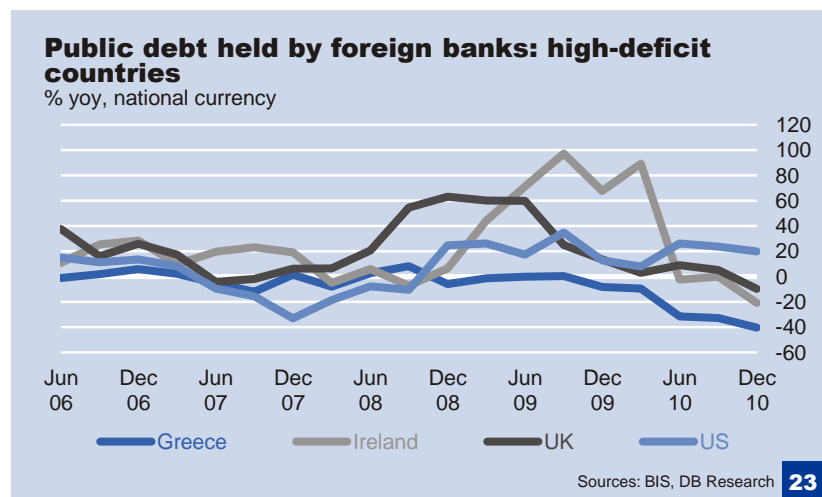
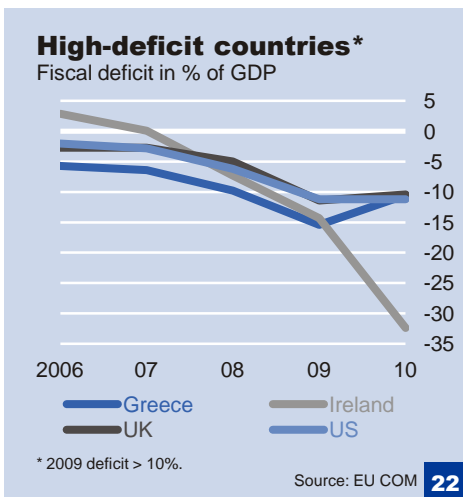
Indeed, throughout the past decade the commitment of corporate banks to their clients in other countries has varied significantly. A few years ago the market share of syndicated loan consortia in Western European countries with bookrunners solely from abroad halved when banks suffered from low profitability due to the bust of the “New Economy” bubble (see chart 21). During the recent financial crisis, however, in contrast to what could have been expected – a large drop in cross-border activity – banks did not pull out of foreign markets. The market share of syndication deals with foreign-only lead managers fell only slightly during 2008 before recovering in 2009 and 2010. Apparently, with respect to loan syndication foreign banks are nowadays providing more and steadier funding to corporate customers in Europe. This might be due to several reasons. First, overall market volume slumped, disguising an equally marked drop in foreign-arranged transactions. Furthermore, although bookrunners usually take a large share of a deal’s credit risk, they also earn substantial fees (in contrast to the sub-underwriters) for arranging a transaction which makes it more attractive for them. Finally, the lead-arranging teams are often multinational and based in international financial centres and may therefore be predominantly risk-oriented rather than influenced by “national” considerations of a bank’s headquarters.

In other ways, banks retreated from lending abroad to private-sector customers during the crisis, as our analysis above has shown. However, this did not mean a pullback from foreign markets as a whole: banks in part simply substituted public credit for private credit, i.e. satisfied the **increasing financing needs of governments, both domestic and foreign**, at the cost of reduced availability of loans for households and companies. The recession and stimulus packages pushed up fiscal expenditures in most industrialised countries, while private demand for credit decelerated so that public debt replaced private debt.¹²

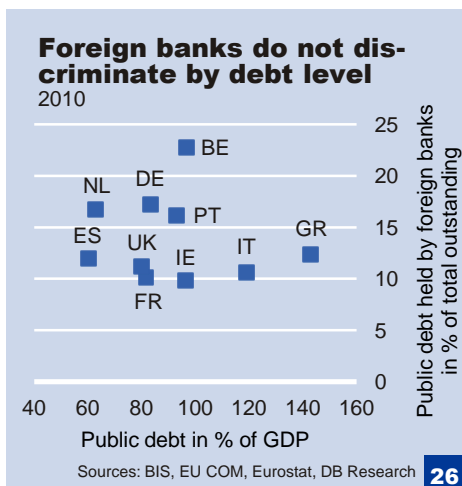
Generally, the deterioration in public finances from 2006/07 to 2009/10 has been dramatic. In the EU and the US, the average fiscal deficit ballooned from 1.2% to 6.6% and from 2.4% to 11.2%, respectively, in the course of just three years (see charts 22 and 24). In most cases, this led to banks significantly increasing their purchases of foreign governments’ bonds as well as lending to them, whereas they had often been net sellers in the years prior to the crisis (see charts 23 and 25). Of course, this deepened relationship has been mutually beneficial: while governments

¹¹ Mühlberger and Deuber (2010) even report some stabilising effects of foreign bank involvement in CEE countries, compared with credit developments in other emerging regions.
¹² With capital being a particularly scarce resource in the crisis, the lower risk weights for public-sector exposures provided another incentive for banks to finance governments rather than the private sector.

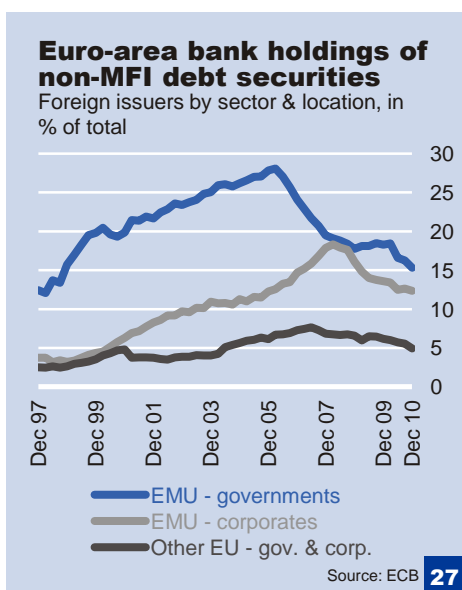
needed financiers for their spending increases, banks were looking for safe and liquid assets as a substitute for more risky private-sector lending during the financial crisis and the ensuing recession – and in anticipation of new regulation. With the onset of the euro sovereign debt crisis in spring 2010, foreign banks’ appetite for European government bonds slowed markedly, and by and large across the board. Not surprisingly, demand for bonds from the peripheral countries – i.e. Portugal, Italy, Ireland, Greece and Spain – even turned negative. On the other hand, there has been a flight to quality with foreign banks consistently buying sovereign bonds from the US, Germany, France, Belgium and the Netherlands over the past few quarters – issuers which despite often large deficits are still regarded among the most creditworthy in the world. For instance, foreign banks’ holdings of US Treasuries rose by more than two-thirds or USD 409 bn since 2007; exposure to the German sovereign climbed by more than EUR 50 bn. In the end, foreign banks had to compensate for these investments in government assets by somewhat reducing lending to other sectors, as the financial industry as a whole embarked on a process of deleveraging and shrinking.



Two more results are noteworthy with regard to banks holding foreign government paper (or lending to the state): first, despite the euro sovereign debt crisis, foreign banks still provide about 10-20% of total credit outstanding to the public sector (see chart 26). This is a substantial share considering that this figure does not even



26



27



28

include other major foreign investors such as insurance companies, mutual and pension funds, hedge funds or sovereign wealth funds. Second, the banks' share in the provision of funding to governments abroad is by and large uncorrelated with the level of sovereign indebtedness. Despite public debt being somewhat higher in Portugal than in France, foreign banks account for just 10% of the investor base for French government bonds, but more than 16% for Portuguese bonds. On the other hand, even though Greece is more than twice as much in debt as Spain relative to the size of its economy, foreign banks in Greece play a slightly larger role as investors. Hence, in spite of them having been net sellers of peripheral countries' debt in recent months, foreign banks remain no less important as an investor group than for more solid, "core" European countries.

Turning from governments to banks financing non-domestic **non-banks in general** by investing in their **debt securities**, the overall slowdown in cross-border activity as a result of the recent crises becomes visible again. In 1997, 15% of euro-area banks' total holdings of bonds issued by non-banks (i.e. governments and companies) were claims on residents of other euro countries (see chart 27). In addition, less than 3% were issued in the rest of the EU. By early 2006, these shares had risen to 41% and 7%, respectively. Even disregarding any investments in (non-MFI) debt securities issued outside Europe, the proportion of foreign issuers in banks' bond books had reached almost half of the total. Since then, this figure has declined to slightly less than one-third. The aggregate, though, masks substantial differences between issuer categories: the importance of other EMU government bonds started falling already before the financial crisis as investors' (i.e. shareholders') accelerating "hunt for yield" stepped up the pressure on banks to turn towards more profitable – and riskier – instruments. As a consequence, banks shifted weight in their portfolios from (EMU) government bonds to (EMU) corporate bonds, leading the latter to a record share of 18% in early 2008. This trend reversed sharply with the financial crisis and the ensuing recession during which non-domestic government bonds held up relatively well, before taking another hit with the euro sovereign debt crisis in 2010. Hence, today the proportion of investments in bonds of non-bank issuers from other euro-area countries is at its lowest level of the past decade, yet still twice as high as in the mid-1990s.¹³

Investment banking

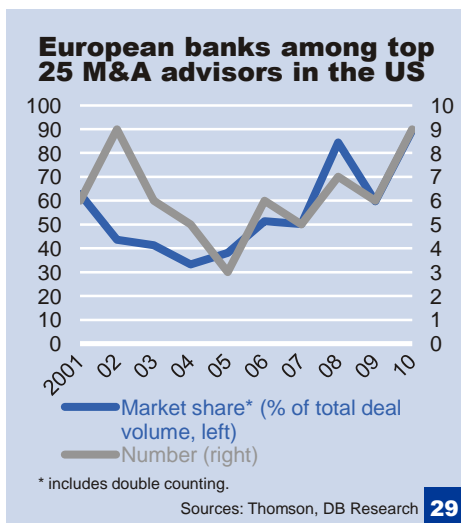
In core investment banking activity, a picture similar to that in loan syndication emerges. In Europe, US institutions have long had a strong foothold thanks to their expertise on the home market with its greater emphasis on market-based relative to bank-based finance. No wonder, hence, that US banks rank prominently e.g. in the **equity capital markets (ECM)** business, which covers the issuance of stocks and related instruments in primary (IPO) and secondary markets. In the past decade, US investment banks' share among the top 10 ECM bookrunners in Europe never fell below the 50% mark and has even trended slightly upwards further, dipping only minimally during the financial crisis (see chart 28). Looking at the mirror image of European banks' operations in the US, a sudden jump in their market share last year was due to a number of reasons: for one thing, European activity in the US tends to be more volatile than the market as a whole which, due to its overall size, is

¹³ See also ECB (2010).

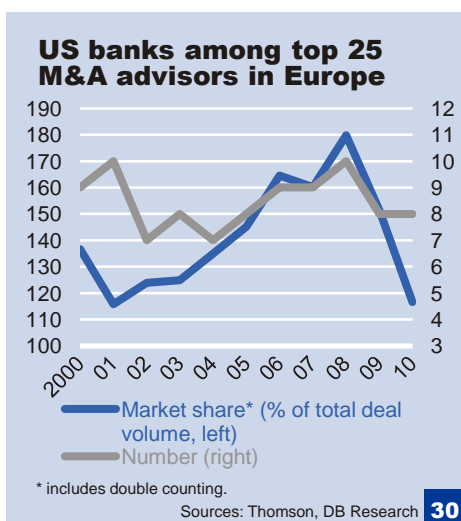


rather stable in deal and fee pool volume compared with, e.g., the European ECM market. Hence, the general environment for European banks in their home market seems to matter most for their commitment to the US – resulting in rising market shares during good times and declining ones in more difficult times. Consequently, European banks rode high in the 2004-07 boom but retreated to some extent in the course of the 2008-09 crisis (similar to the developments over the previous cycle), before taking advantage of benign market conditions again last year. Investments into new staff may also have contributed to an improved performance and enabled European banks to grow organically abroad. Finally, the figure for the past year is not least due to Barclays' late 2008 acquisition of the US operations of insolvent Lehman Brothers, a top 5 player prior to the crisis. The 2009 market shares did not yet fully reflect the takeover, but it established a fourth European player among the ten largest ECM bookrunners in the US – and with the major European banks returning to full strength in 2010, their US investments paid off.

In the most prestigious investment banking discipline, **mergers and acquisitions** (M&A), this development is even more pronounced. The market share of European banks among the top 25 advisors for M&A transactions targeting a US firm fell early in the last decade, before recovering during the boom period 2005-08 and reaching a new high in 2010 after a brief interruption in the wake of the financial crisis (see chart 29). Although double counting of deal volumes complicates a precise analysis, it is not the reason for the increasing European presence in the US: the number of European advisors in the US top 25 has tripled from just three in 2005 to nine in the past year – the same as in 2002, but with the Europeans much more at the front of the league table.



29



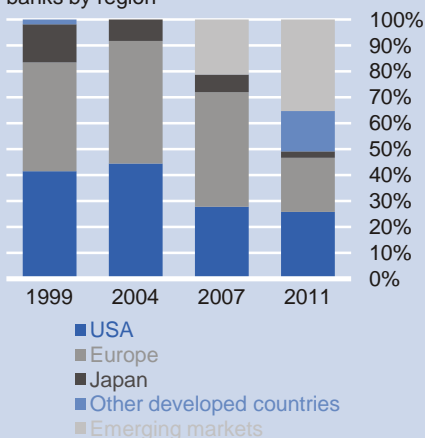
30

With respect to the market position of US investment banks in Europe, a familiar development appeared during the boom years, though the post-crisis situation differs somewhat from that on the other side of the Atlantic: the US market share in European M&A advisory was already very high at the start of the decade, but it still went up considerably further until 2008 before collapsing in 2010 (see chart 30). However, this may be more of a one-time slip rather than a signal of a permanently weaker role of the Americans in Europe. M&A is generally a very volatile business and individual performance in the league tables strongly depends on the participation in mega deals, hence a rebound of the US share in European markets would surely not be surprising. It is all the more likely given that the number of top US players has hardly changed over the past ten years, despite the infamous demise of Lehman Brothers.

All in all, the data confirms the often-held perception that wholesale financial markets are much more integrated across borders than commercial banking activities. For the last decade, European investment banks have been expanding significantly in the US whereas Europe remained an attractive and open market for their US counterparts (which had a strong starting position already). In spite of the financial crisis, the capital markets segment continues to be one of the most international – and thus competitive – in the entire banking universe. Furthermore, in future, this strength may well be maintained and complemented by an **increasing role of non-US and non-European investment houses**. Their importance to date is much smaller than that of the other two, but banks from both the emerging markets and other dynamic industrialised

Emerging market banks take the lead

Market cap of the world's 25 largest banks by region



As of mid-June each year (2011: mid-March)

Sources: The Banker, Thomson, DB Research

31

countries such as Canada or Australia can be expected to demand a larger share of the cake before long. In a sign of the great confidence many investors place in these institutions, they have already stormed up the ranks of the world's largest banks by market capitalisation in the past few years though it remains to be seen whether they will indeed live up to their potential (see chart 31).¹⁴

Asset management

No other banking segment has seen as dramatic a **consolidation** since the onset of the financial crisis as the **asset and wealth management** business. Six of the top ten private banking providers in 2007 have since been involved in a large transaction, either expanding or selling their operations to a competitor (see table 32). In part this happened voluntarily, in part as a by-product of the broader restructuring of the financial industry following the crisis during which several universal banks with large asset management activities failed or came close to failing. It certainly played a role that the value of asset management operations usually can be assessed relatively quickly and that they are often run in separate organisational units, making a sale easier.

Selected major asset management M&A transactions since 2008

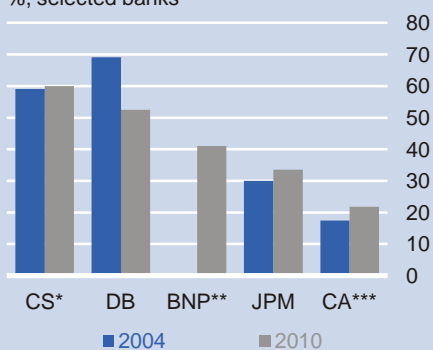
Year	AuM involved (EUR bn)	Acquirer	Country	Seller	Country
2008	177	Wells Fargo	US	Wachovia	US
2009	896	Bank of America	US	Merrill Lynch	US
2009	55	Allianz	DE	Commerzbank cominvest	DE
2009	200	BNP Paribas	FR	Fortis	BE
2009	863	Morgan Stanley	US	Citigroup Smith Barney	US
2009	1,187	Blackrock	US	Barclays Global Investors	UK
2009	170	Crédit Agricole	FR	Société Générale	FR
2010	137	Deutsche Bank	DE	Sal. Oppenheim	DE

Sources: Company reports, DB Research

32

Share of foreign assets in total AuM

%, selected banks



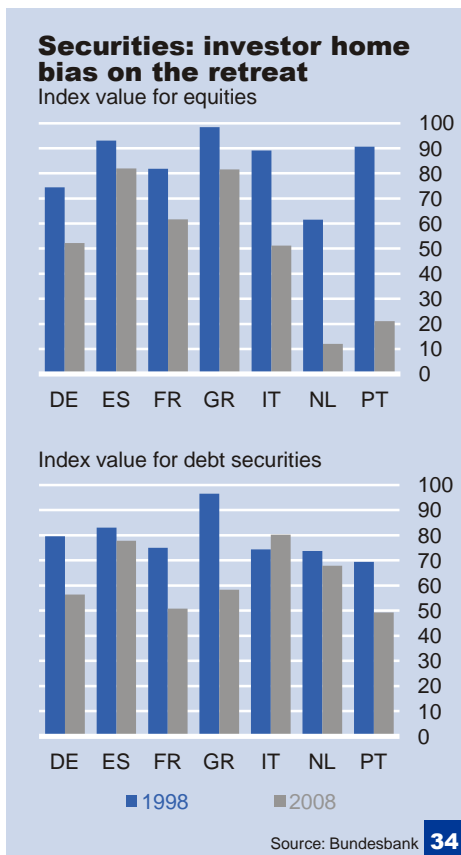
* 2006/10; ** Q1 10; *** 2004/09

Sources: Company reports, DB Research

33

Yet despite all this reshuffling, one thing has not changed: large asset and wealth managers tend to struggle with becoming truly international organisations. This is in contrast with most other banking segments where many of the biggest players already earn higher revenues abroad than in their home market (see chart 40 below). Though only few institutions disclose the split of their total **assets under management** into domestic and international clients, even those which do so (presumably banks with rather sizeable foreign operations) usually report a **lower international share than for the bank as a whole**. In addition, there seems to have been little progress over the past few years. Three of the banks shown in chart 33 modestly strengthened the relative position of their foreign asset management activities recently, while for Deutsche Bank the share dropped – not least due to the acquisition of domestic peer Sal. Oppenheim. Considering that most of the other M&A deals listed above were also among institutions from the same country, the broader industry structure may be skewed towards a strong domestic focus even more than for the banks included in the chart.

¹⁴ In fact, within the league of the top 25 global banks by market cap, the share of US and Western European institutions has for the first time in modern history now fallen below 50%, while banks from China, Brazil and Russia comprise the largest group – unthinkable still only a few years ago.



34

This reliance on the national market is also reflected on the investors' side. Of course, here it is not just a sign of a relatively weak market presence (and therefore distribution capacity) of foreign financial institutions, but also of a persistent preference of investors for home country securities and a consequence of regulation that still favours domestic markets. At least seen from a long-term perspective, investors' portfolios have become more international. In an unweighted average of most euro-area countries, the **home bias**¹⁵ for stocks declined from 84% in 1991 to 48% in 2008 – i.e., although domestic securities are still over-represented in investors' asset allocation, the scale of the distortion has decreased over the past two decades (see chart 34). Similarly, the home bias for bonds fell from 91% in 1991 to no more than 57% in 2008.¹⁶

Overall, international asset management is slowly moving forward, although it is lagging behind other banking segments where foreign players already play a stronger role and cross-border business is more developed. In line with the general setback the integration of national financial markets has suffered during the crisis, asset managers and their clients have increased their focus on the home market, too.¹⁷ Two conclusions can be derived from this: 1) In many ways, asset and wealth management remains a local business and banks will have to tread cautiously when trying to expand their business abroad. With growth opportunities in their domestic markets often limited, they may at least do so with somewhat greater enthusiasm over the coming decade than in the recent past. 2) Convincing clients and regulators to relinquish their bias for domestic service providers as well as domestic assets will be an even more difficult task after asset managers' hardly overwhelming performance during the crisis.

2. The rationale for business globalisation

Following our empirical analysis of *which* short- and long-term developments have taken place in international banking markets, it is worthwhile asking *why* these changes have happened at all. There are several **reasons for banks to consider broadening their geographic reach** and serving customers in countries other than their traditional home market¹⁸:

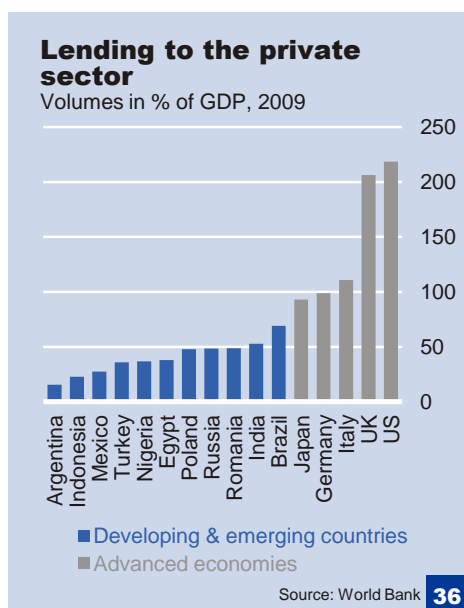
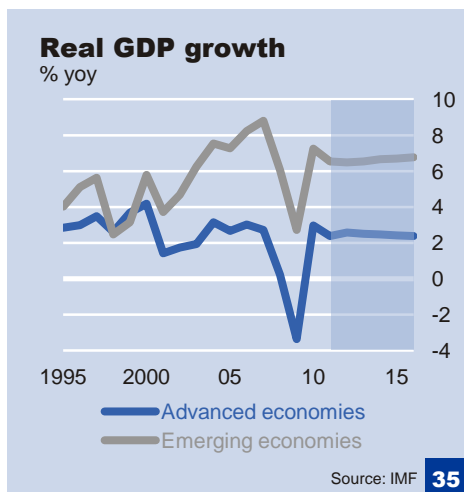
- Stronger growth abroad. Many Western banks face large, but mature banking markets at home, in addition to moderate potential for long-term economic growth. By contrast, the catch-up process of the emerging world barely started during the past

¹⁵ Measured as 100% - (share of foreign securities in the domestic investor's portfolio / share of foreign securities in the global portfolio). A home bias of 100% is equivalent to a portfolio consisting solely of domestic securities, a home bias of 0 signals a portfolio that has the same share of foreign securities as a portfolio encompassing all securities worldwide.

¹⁶ Part of this is due to the rise (since the turn of the century) of funds legally incorporated in countries such as Luxembourg or Ireland rather than a real shift towards a geographically more balanced portfolio. See also Bundesbank (2011) and Bundesbank (2009). Inzinger and Haiss (2006) observe similar trends in equity markets, while Capgemini and Merrill Lynch (2010) report a reorientation towards domestic assets during the financial crisis for the upper end of the wealth management market (high net worth individuals, HNWI).

¹⁷ The political initiatives in major economies targeting alleged tax havens have only added to this. Yet the role of offshore centres is often overstated – the vast majority of funds in developed markets is managed onshore whereas only in Latin America and the Middle East a meaningful share of investors' assets is held offshore, according to IFSL (2009). SBA (2009) and BCG (2010) report that the offshore market has been growing at a slower pace than onshore assets in the past couple of years and may also face continuing regulatory pressure.

¹⁸ See also Schildbach (2008).



decade and may continue for a sustained period of time – provided largely sound macroeconomic policies and a stable institutional environment remain in place (see chart 35). The relative position of emerging markets should be helped also by the onset of fundamental demographic change and the fact that credit markets are usually much larger in developed countries than in emerging economies, as chart 36 illustrates. Given all this, bank revenue growth in Asia, Latin America or the Middle East may substantially outperform that in more mature markets.

- Leverage of strong products, processes and brands. Western banks can use IT systems, product platforms, risk management technologies or brand names that have proven successful in their core markets to expand abroad and strengthen business volumes at relatively low marginal cost.
- Diversification of risk and return. Even during the global financial crisis, geographically diversified banks turned out to be more stable overall than specialised competitors – which somehow questions the wisdom of those banks that pulled out of foreign markets.¹⁹ Banks with a strong foothold in emerging nations generally recorded more robust earnings thanks to greater resilience of these regions. Hence, operating a multinational franchise should reduce volatility in banks’ revenues and profits as well as the likelihood of large, idiosyncratic shocks.
- Economies of scale and scope. For smaller banks at least, acquiring a larger size by going abroad may entail substantial advantages, not least the benefit of reduced unit costs. Admittedly, however, gaining size may sometimes be easier in the domestic market, and positive scale effects tend to become harder to achieve the larger an institution grows.²⁰

Of course, integrated financial markets are beneficial not only for banks. The **advantages for their clients** are also manifold:

- Higher quality of products and services. Foreign banks bring with them the expertise and experience acquired in other countries, and may enter new markets with their most successful products that can be superior to the existing offerings of local banks. The “import” of better-quality financial services is especially important in less advanced markets, though by no means confined to them.
- Enhanced scope of financial services. Cross-border integration not only has a quality aspect to it but also a quantity aspect. Foreign banks can be the first to make certain products available at all (or ensure their breakthrough – consider e.g. the use of credit cards in continental Europe).
- Lower prices. Non-domestic banks may intensify the competitive pressure in a previously closed market, leading not just to better quality and quantity of supply but also to lower costs for customers. Maintaining high-price oligopolies is much easier in isolation than in “contestable” markets – i.e. those open to foreign players.
- Foreign banks as service providers for large, multinational companies. Not all countries can boast major international banks that are able to act as equal partner for non-financial corporations of a similar size and reach. The latter may need a global cash management, a provider for complex cross-border

¹⁹ However, other than business reasons were important drivers in many of these cases, too. See e.g. ECB (2011).

²⁰ See e.g. Goisis et al. (2009).



transaction services, support with “big ticket” investment banking activities (especially debt or equity issuance) or other large-scale financing such as “jumbo” loans. Providing help for such companies is a prime task for global banks which therefore need access especially (but not only) to markets without domestic banks capable of fulfilling these functions.²¹

It is quite obvious that going global entails many risks for banks as well, such as political and legal risk, risk stemming from potentially greater macroeconomic volatility, from cultural differences or transfer risk if foreign banks want to repatriate earnings. Yet higher margins and risk premia should usually compensate for this so that in most cases, the benefits of internationalisation overall may outweigh the costs.

3. Outlook

For some time during 2008 and 2009, it looked as if one of the most fundamental trends the banking industry underwent in the past decades – the internationalisation of their business activities – might be dealt a serious blow. The crisis brought the return to centre stage of the state, as an investor of last resort and as a rule-setter, and by nature national governments focus on national markets.²² Virtually unprecedented global turmoil in financial markets and an ensuing “heart attack” of the real economy that at times looked like the beginning of a second Great Depression led to extreme uncertainty in the banking sector and made managers refocus on the very core of their banks’ activities – attention concentrated on the home market business (which, of course, does not necessarily mean one specific country but can equally refer to a larger geographic area). Stabilisation measures by national governments gave a further push in that direction as they often came in exchange for banks’ committing to continue lending towards domestic clients. However, in a period of restructuring, shrinking and deleveraging, this implied fewer resources were available for international operations. Finally, several banks that received state aid are still cutting back on non-core foreign assets as part of their ongoing restructuring (i.e. downsizing) programmes which were approved by the European Commission.

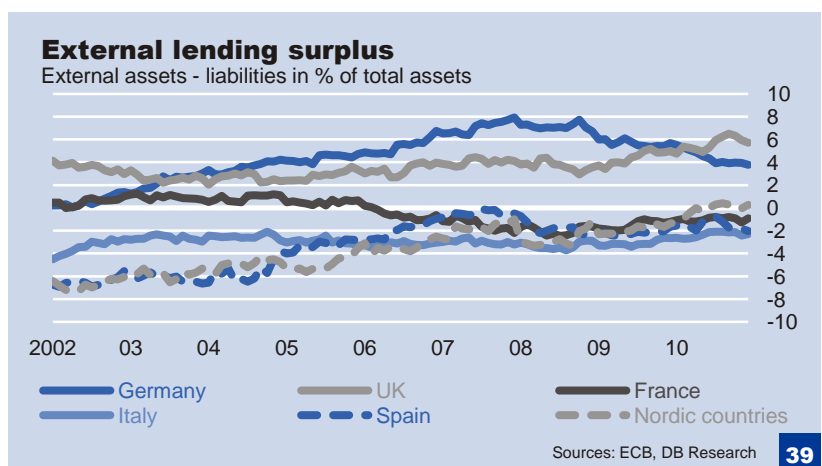
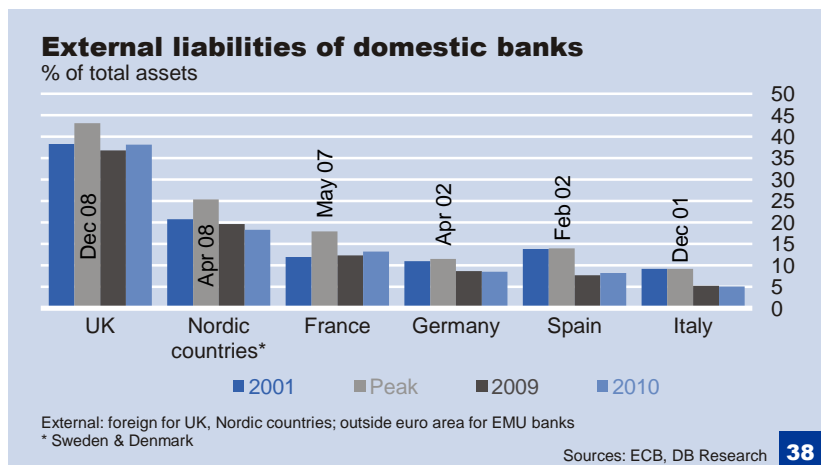
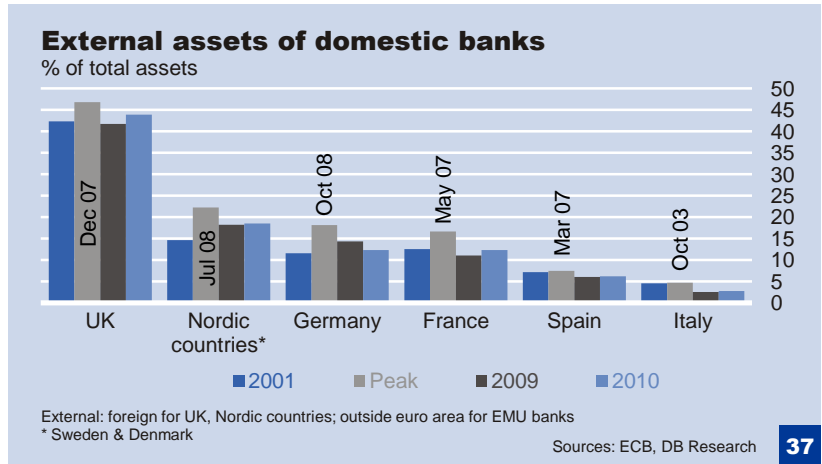
Most of the large European banking systems had reached the **peak in foreign activity in 2007/08**, measured by the share of external assets in total assets (the picture is less uniform on the funding side with several countries reaching the highest cross-border exposure already in the previous cycle, in 2001/02, as charts 37 and 38 demonstrate).²³ It then **fell substantially over the course of the crisis before stabilising in 2010**. Larger banks, which traditionally

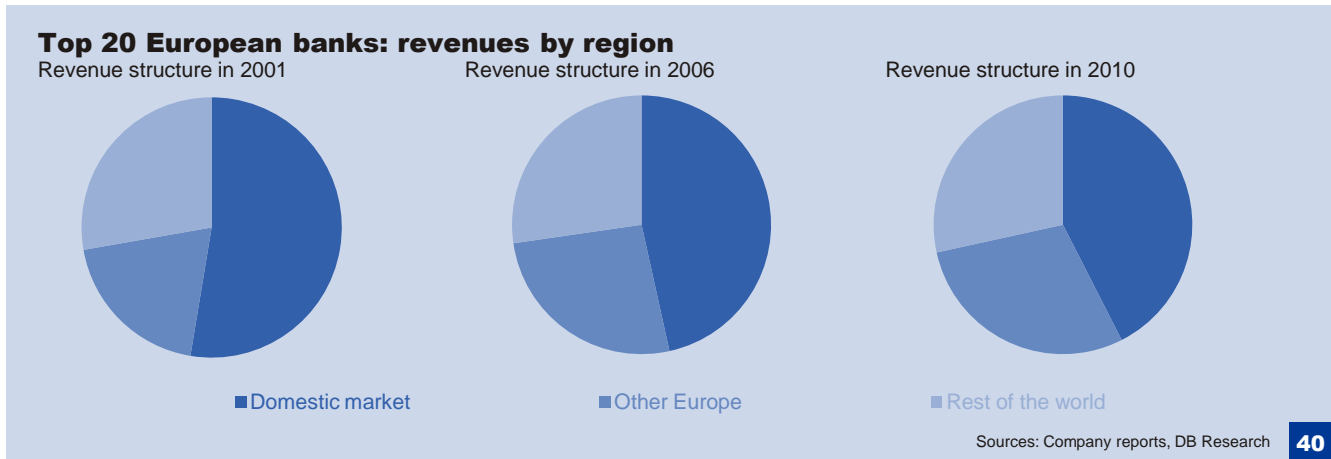
²¹ See also the case studies in IIF (2010).

²² In Austria, Belgium, Germany, Iceland, Ireland, Latvia, the Netherlands, Spain and the UK, among others, governments nationalised banks by taking a capital stake of more than 50%. In other countries such as France, Italy and Switzerland (or the US) the public sector also provided equity capital to financial institutions. See e.g. Schildbach (2009).

²³ German and British banks were the prime providers of foreign funding, with external assets exceeding external liabilities by about 4-8% of their balance sheet total (see chart 39). Yet the underlying factors were quite different: British banks have a long tradition of being very active abroad, in line with the country’s imperial history and London’s role as an international financial centre, whereas parts of the German banking system, namely the Landesbanks, increasingly lacked attractive profit opportunities at home – due to both a deteriorating business model and years of relative macroeconomic stagnation – and therefore turned to overseas markets. Banks from other large European countries were modest international borrowers, though often on a decreasing scale. The crisis led to imbalances declining (further), with the exception of British banks.

are much more international than the sector average, were also among the first to cast off the shadow of the turmoil: today, the top 20 European banks report a higher share of revenues generated abroad than ever, with the proportion of earnings from European countries besides the home market rising by almost 10 pp to nearly 30% over the course of the past decade (see chart 40).

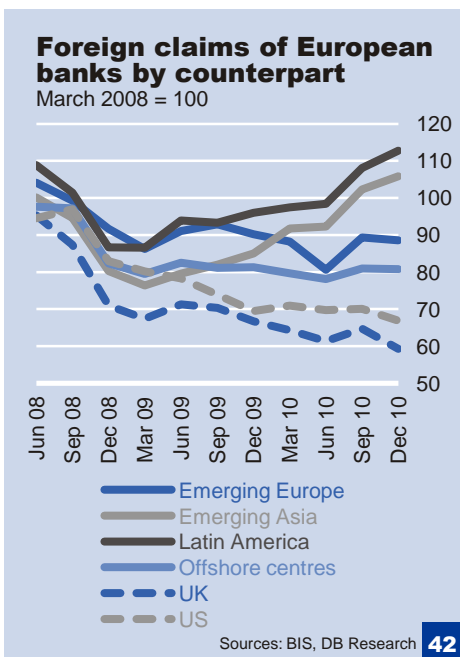
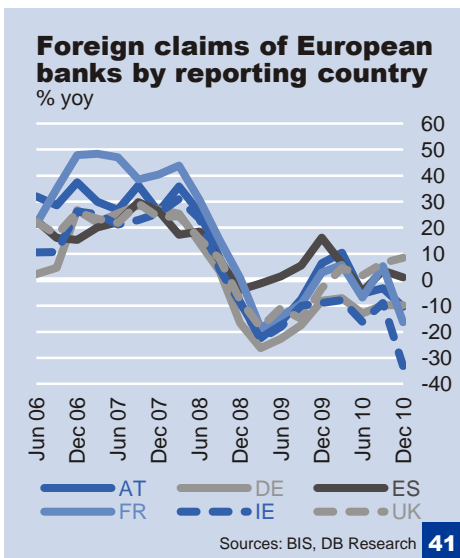




What drove the rebound? Mainly, it was the faster-than-expected stabilisation of financial markets thanks to massive and speedy state (and central bank) intervention, the brevity of the recession in developed economies – again helped by large-scale fiscal stimulus programmes – and buoyant emerging markets whose phenomenal growth rates soon lured back Western banks.

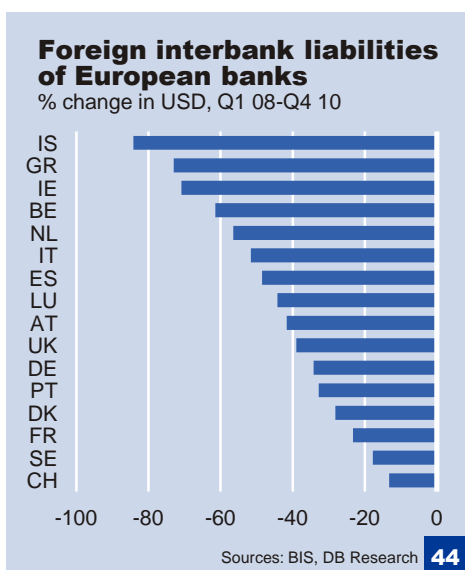
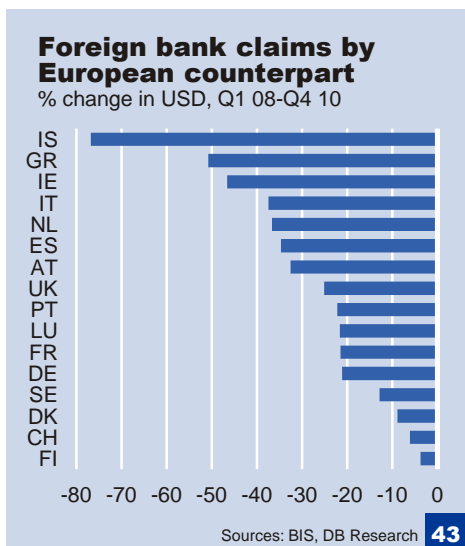
The banking sector figures above, though, again relate only to the cross-border business of banks incorporated in one country (and their direct branches abroad) but exclude legally independent foreign subsidiaries. Consequently, they may to some extent underestimate the real share of banks' international operations. The only source providing aggregated data including subsidiaries is the BIS consolidated banking statistics. Although not without flaws and subject to potentially inconsistent reporting by national authorities²⁴, it provides a unique overview of the individual banking sectors' foreign exposures.

The analysis displayed in charts 41 and 42 indeed resembles the results of chart 37 above. European banks were firmly on the internationalisation path before the crisis, with remarkably little variation between individual countries. This was driven by a mixture of organic growth abroad, acquisitions of foreign banks – and misguided investments, e.g. in securities backed by US subprime mortgages. Foreign claims then slumped across the board in 2008, while the ensuing stabilisation has seen those banking sectors lagging behind which are still struggling anyway, e.g. Irish or German banks. **Trends since summer 2009 are diverging** even more strongly with respect to the countries European banks invest in: the decline in activity abroad abated in many advanced economies, yet growth did not return. By contrast, European banks re-entered most emerging countries quite early and with pronounced momentum, in line with the overall economic resilience especially of South-East Asian and Latin American nations. Hence, exposures to these regions have already reached new all-time highs whereas to the UK and the US they linger at only about two-thirds of pre-crisis levels.²⁵



²⁴ See e.g. BIS (2010a), BIS (2010b) and BIS (2011) or Hoggarth et al. (2010).

²⁵ Chart 43 depicts the corresponding decline in external funding from banks for individual European countries which was by far the most pronounced in Iceland, followed by other troubled economies such as Greece and Ireland, whereas Scandinavia and Switzerland managed to maintain an almost stable foreign (bank) funding base. Looking at cross-border bank refinancing for the European banking industry alone, the fall was – unsurprisingly – even more marked (41% on average, compared with 27% for all economic sectors combined) as chart 44 demonstrates, combining the effect of the financial crisis with the repercussions of the ongoing sovereign debt crisis.



Where will international banking go from here? Much will depend on the development of some key drivers:

- **Macroeconomics.** The more the currently enormous growth differentials between the industrialised and the emerging world will become ingrained, the more irresistible the call for a greater presence in the high-growth regions will become. As this is not an unlikely scenario (also bearing in mind the looming demographic developments), Western banks may continue to expand their operations in particular in Asia and South America.
- **Regulation.** Following the financial crisis, a wave of new regulation is taking shape in Europe and in fact most of the world. As such, stricter capital requirements, e.g., do not hinder cross-border business. However, if they prove too harsh for banks and force them to restrain lending (growth), this might lead to discrimination against foreign borrowers. Faced with a choice between scaling back abroad and ending potentially long-standing relationships in its home market, risking a further political backlash and perhaps irreparable damage to its image as a responsible corporate citizen, a bank might well opt for the former. It will therefore depend on politicians and other decision-makers how much the new regulations will – openly or unintentionally – impede further cross-border integration of financial markets. The measures under discussion in principle may not be sufficient to discourage banks from looking beyond their home market, yet there are serious risks that a patchwork rug due to inconsistent implementation of such a large number of different rules could well do so.
- **Market access.** This is related to the previous point, yet taking the host instead of the home country perspective. Within Europe, the evolution of at least partly integrated financial markets over the past two decades depended to a large extent on the abolition of formal and informal barriers that had kept out foreign service providers. While this may not be fundamentally at risk, policy-makers still need to be careful in erecting new hurdles for banks from other countries, even other EU states. Pressure to establish independent subsidiaries with autonomous capital and liquidity pools, their own management bodies and extensive reporting requirements vis-à-vis national supervisors might deter some potential market players based abroad. Worse, especially in emerging countries, the whole concept of truly opening up the domestic market to foreign financial institutions (including allowing majority acquisitions), could be thrown into doubt if those countries' authorities used the financial crisis as an argument to block the entry of allegedly unstable and "fair weather" Western banks. Yet as shown above, banks from the West even had a stabilising effect in Central and Eastern Europe, and in EU-15 countries a somewhat larger volatility primarily hurts the retreating banks themselves and should be tolerated as long as it poses no threat for financial stability (which is unlikely given the moderate share of foreign banks in these markets anyway).²⁶

²⁶ Supervisors' pressure on the European passport (which enables banks to operate branches in any EU country without establishing independent subsidiaries) has intensified since the crisis due to the pull-back of international banks and as host authorities claim they lacked information and could not command compliance with certain (domestic) provisions. Though there may indeed have been some deficiencies in inter-supervisor relations, especially regarding the exchange of data and other information, some supervisors also did not make full use of their existing powers and are now risking to unnecessarily burden banks with red tape and hurt



Overall, the outlook is much brighter than two years ago. International activities among banks and between banks and their clients took a severe hit during the crisis, but are now recovering. Given that many of the fundamental trends that had driven the internationalisation process already before 2007 remain intact or have become even stronger, Western banks may continue to invest and expand abroad, especially in the emerging markets. However, risks remain, mostly on the part of new regulatory measures whose combined impact is as yet hard to assess but which may strengthen the relative attractiveness of banks' domestic markets at the expense of foreign business opportunities. Still, there is no way back for banks and they may and should, like other industries before them, move on towards becoming a truly international and global sector.

Jan Schildbach (+49 69 910-31717, jan.schildbach@db.com)

customers in their country which may not be able any more to reap all the benefits a multinational financial institution can offer, e.g. by channelling credit from one country to another. The right answer to these issues, however, would instead be for policymakers to adjust supervisory structures to the reality of existing pan-European banks by establishing a competent pan-European supervisory agency.

Literature

- Bank of England (2010a). Financial Stability Report No. 27. June 2010.
- Bank of England (2010b). Financial Stability Report No. 28. December 2010.
- BIS (2010a). BIS Quarterly Review. June 2010.
- BIS (2010b). BIS Quarterly Review. December 2010.
- BIS (2011). BIS Quarterly Review. March 2011.
- Boston Consulting Group (2010). Regaining Lost Ground.
- Bundesbank (2009). Monthly Report. December 2009.
- Bundesbank (2011). Monthly Report. January 2011.
- Capgemini and Merrill Lynch (2010). World Wealth Report.
- ECB (2010). Financial integration in Europe.
- ECB (2011). Financial integration in Europe.
- Goisis, Gianandrea, Maria Letizia Giorgetti, Paola Parravicini, Francesco Salsano, and Giovanna Tagliabue (2009). Economies of scale and scope in the European banking sector. *International Review of Economics*, 56 (3). pp. 227-242.
- Hoggarth, Glenn, Lavan Mahadeva, and Jeremy Martin (2010). Understanding international bank capital flows during the recent financial crisis. Bank of England Financial Stability Paper No. 8.
- Institute of International Finance (2010). Systemic risk and systemically important firms: An integrated approach.
- International Financial Services London (2009). International Private Wealth Management 2009.
- Inzinger, Dagmar, and Peter Haiss (2006). Integration of European Stock Markets. A Review and Extension of Quantity-Based Measures. WU Vienna University of Economics and Business. EI Working Paper No. 74.
- Milesi-Ferretti, Gian-Maria, and Cédric Tille (2011). The great retrenchment: international capital flows during the global financial crisis. *Economic Policy*, 26 (66). pp. 289-346.
- Mühlberger, Marion, and Gunter Deuber (2010). Eastern Europe. Deutsche Bank Research. Credit Monitor Eastern Europe. Frankfurt am Main.
- Schildbach, Jan (2008). European banks: The silent (r)evolution. Deutsche Bank Research. EU Monitor 54. Frankfurt am Main.
- Schildbach, Jan (2009). Global banking trends after the crisis. Deutsche Bank Research. EU Monitor 67. Frankfurt am Main.
- Swiss Bankers Association (2009). Wealth management in Switzerland.
- Weistroffer, Christian, and Jochen Möbert (2010). Monitoring cross-border exposure. Deutsche Bank Research. Current Issues. Frankfurt am Main.

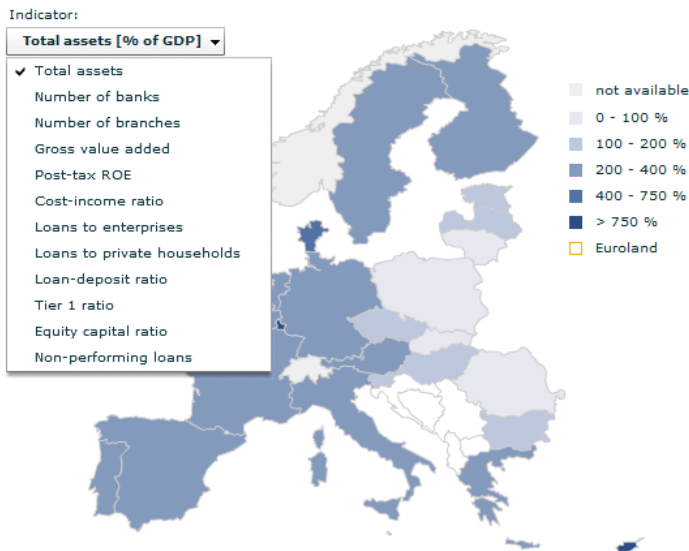


Interactive maps from DB Research are a unique solution for efficiently presenting large volumes of data in such a way that important correlations can quickly be detected. All our interactive maps comprise statistics, charts, graphs and maps in a user-friendly design that can be flexibly integrated in Microsoft Office applications.

Interactive map European banking markets

With its dozen main indicators, the Interactive map European banking markets offers a broad overview on structures and developments in the banking systems of EU countries. Data are available on, e.g., market size and lending business, capitalisation levels and profitability measures.

Our interactive maps are available here: www.dbresearch.com/imaps



© Copyright 2011. Deutsche Bank AG, DB Research, D-60262 Frankfurt am Main, Germany. All rights reserved. When quoting please cite "Deutsche Bank Research".

The above information does not constitute the provision of investment, legal or tax advice. Any views expressed reflect the current views of the author, which do not necessarily correspond to the opinions of Deutsche Bank AG or its affiliates. Opinions expressed may change without notice. Opinions expressed may differ from views set out in other documents, including research, published by Deutsche Bank. The above information is provided for informational purposes only and without any obligation, whether contractual or otherwise. No warranty or representation is made as to the correctness, completeness and accuracy of the information given or the assessments made.

In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht. In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange regulated by the Financial Services Authority for the conduct of investment business in the UK. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product.

Printed by: HST Offsetdruck Schadt & Tetzlaff GbR, Dieburg