Deutsche Bank Research

European banks: The silent (r)evolution

April 22, 2008

It's the last 10 years that count, not the last 10 months

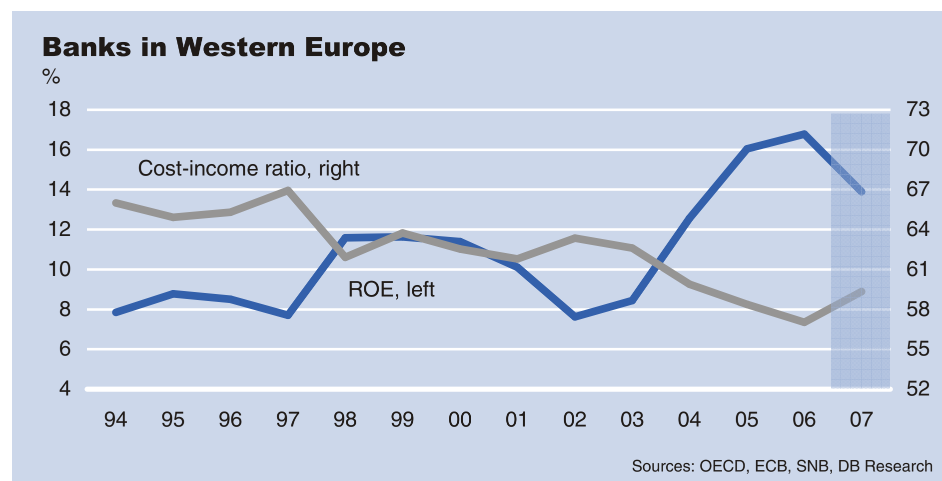
Recent market turmoil and its consequences will negatively impact the earnings of European banks for a considerable time. This reverses a **long period of improvements in profitability and efficiency**. But: the current environment should not distract from the trends that have shaped the structure of the industry for the last 10 years and will continue to do so.

Consolidation has led to greater size and higher market shares especially of large banks which can thus take advantage of economies of scale, handle “big ticket” transactions and become more stable institutions via a diversification of their revenue structure.

Internationalisation has opened up new sources of growth for Western European banks that experience lower growth rates in traditional home markets but can seize opportunities in other European countries, the USA, and emerging markets.

Convergence of bank- and capital market-based financial systems has led to fundamental improvements in the management of credit risk and to a shift of bank activities from asset intermediation towards the provision of fee-generating capital markets services.

Deconstruction, i.e. the break-up of the value chain, and increasing specialisation offer banks the chance to further benefit from economies of scale, deeper market knowledge and higher flexibility to adjust to changes in demand and competition.



www.dbresearch.com

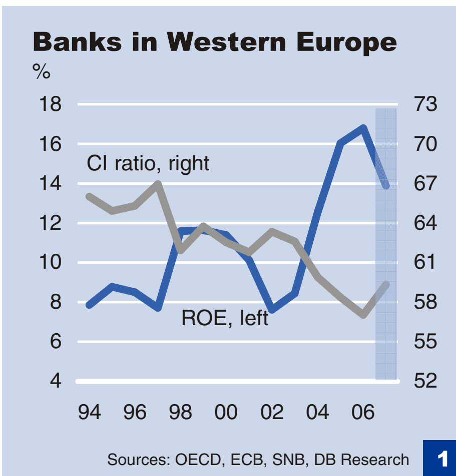
Author
Jan Schildbach
+49 69 910-31717
jan.schildbach@db.com

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
Norbert Walter



1. Long period of rising bank profitability in Europe

Since the beginning of the 1990s, the average profitability of banks in Europe has risen strongly: in fact, the average post-tax return on equity (ROE) for the eight most important Western European markets doubled from 7.9% in 1994 to 16.8% in 2006.[1] The development in the three largest Central & Eastern European (CEE) countries[2] was even more positive as banks' ROE jumped from a mere 2.8% to 22.0% over the same period of time. Setbacks in the wake of the Asian crisis in 1997/8, or the bursting of the "New Economy" bubble in 2002/03 were only of a temporary nature (see charts 1 and 2, table 28 in the appendix). Contagion effects from the US subprime crisis led to an estimated decline of not more than 3 pp in Western Europe last year, while ROE even increased further by 0.5 pp in CEE countries.

Several factors have contributed to these quite extraordinary improvements: on the one hand, economic growth certainly has played a role. Following economic crises in several European countries at the beginning of the 1990s, most EU nations experienced a period of steady economic growth, only interrupted shortly in 2002/03 (see chart 3). However, in contrast to other regions in the world, the last 15 years did not bring a significant rise in growth rates: many EU countries struggled with structural problems that kept them from reaping the full benefits of globalisation which established the emerging markets (EMs) as a new key driver of the world economy.

This suggests that – in addition to the overall benign macro-economic development – there are other reasons behind the remarkable success of European banks during the past years. In particular, industry- and bank-specific factors do account for a large proportion of this success. Operative and structural improvements within both individual institutions and the industry as a whole will in the end be reflected in the cost-income ratio (CIR). Indeed, the CIR of Western European banks declined from 66.0% in 1994 to 57.0% in 2006, while the fall from 78.9% to just 57.7% was even more pronounced in the CEE countries (see table 29 in the appendix).[3] It is rather straightforward that fundamental changes must have taken place to result in such a new quality in banks' financial performance, including developments in the external environment of banks as well as in the business model itself. In this study, we will take a look at these trends and will also consider to what extent they are going to further shape the banking sector in the foreseeable future. But first of all, we will turn to the new framework for banking in Europe that has evolved over the last few years, focusing on regulation, the emergence of markets outside Europe, and technological change.

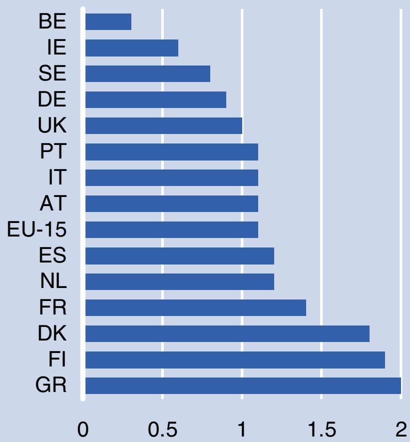
2. A changing framework for banking business in the EU

a. New regulatory environment

The integration of European financial markets has been a long-term project of both EU institutions and the industry itself, motivated by benefits for the financial sector as well as firms and consumers. These are mainly based on assumptions of a reduction in the cost of

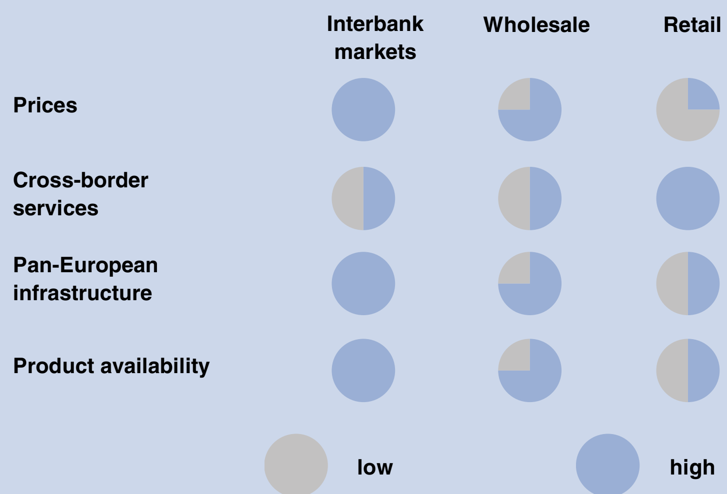
---

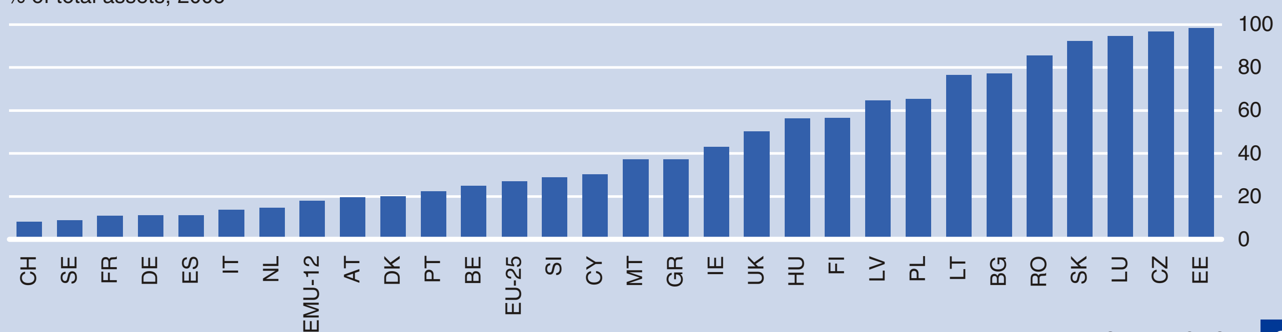
[1] Unweighted averages for Germany, UK, France, Italy, Spain, the Netherlands, Sweden, and Switzerland.
[2] Poland, Czech Republic, Hungary.
[3] We estimate that the CIR increased rather moderately by about 2 pp in Western Europe and recorded an equal decline in the CEE region in 2007.



equity, bond and bank finance and an increase in the intensity of competition in previously segmented markets. Advantages for corporate clients are primarily due to lower costs of capital, those for retail clients due to both cheaper financial services and a greater product variety.[4] The respective welfare gains were estimated to amount to as much as a one-time increase of 1.1% in the EU's GDP, or EUR 130 bn, in total, with some countries gaining even more (see chart 4). In addition, employment has been forecast to be 0.5% higher – amounting to about one million new jobs – upon completion of the single market for financial services.

The EU's effort to create a single European market for financial services has made substantial progress but is still far from being complete. Major steps have been accomplished in particular with the implementation of various measures of the Financial Services Action Plan (FSAP) since its adoption in 1999 which made possible the emergence of – by and large – integrated interbank and wholesale markets (actively been pushed forward by the major corporate and investment banks). On the other hand, the retail banking segment still remains much more fragmented along national borders, if one concentrates on the main indicators for measuring the level of integration: price convergence, cross-border supply of products and services, and the degree of foreign ownership (see charts 5 and 6).





[4] See also: London Economics (2002).

Current measures to further market integration

This implies that there is still considerable untapped potential to reap the benefits of continued market integration. The EU Commission is consequently pressing ahead with new legislation focusing in particular on retail market issues (even though there is more to do also with respect to the structure of financial supervision in the EU, the alignment of consumer protection and contract law, and tax issues, among other things). The Markets in Financial Instruments Directive (MiFID) which came into effect on November 1, 2007, will benefit retail investors through an increase in transparency in securities trading and the application of the best execution principle. Similarly, the Consumer Credit Directive (CCD), which has been passed at the EU level, but still has to be transposed into national law, aims at improving the cross-border supply of consumer loans, thereby making credit more easily available and cheaper for retail clients. The Payment Services Directive (PSD) provides the legal framework for the Single Euro Payments Area (SEPA) that is set to make EU-wide payment transactions as convenient and efficient as those at a national level – thus also lowering costs for retail customers and SMEs.

Rising demand for cross-border retail services

Despite several shortcomings regarding the effectiveness and efficiency of these measures, it can reasonably be assumed that EU retail markets will become more integrated in the years to come. There is evidence of an increasing demand for cross-border retail financial services from the customers' side – i.e. about 25% of EU-25 citizens surveyed by the EU Commission indicated their intention to obtain services – including a bank account or a credit card – from another member state (up from the 15% who have done so already).[5] With more cross-border retail banking services, consumers will benefit from greater competition and a broader product choice. More importantly, easier market access to other EU countries will also allow banks to realise economies of scale by leveraging standardised products, distribution and transaction capabilities and lowering fixed costs, e.g. in IT, legal and other corporate functions. This will be an important source for the benefits expected to result from retail market integration.

Risk of over-regulation

At the same time, however, there is a substantial danger that over-regulation may eliminate a substantial part of the potential gains from more open financial markets across Europe. Compliance costs are already high – bank-specific bureaucratic costs for instance, reach as much as EUR 3.1 bn a year in Germany alone, according to some estimates.[6] Increasing the regulatory burden further would certainly prevent banks from passing on lower costs to their clients – or, indeed, keep them from offering cross-border services at all. Furthermore, the dangerous trend to more – and more complex – rules remains fully intact also at the individual country level. The ongoing globalisation of financial markets, however, calls for a multinational regulatory framework. Optimally, this should be established on a global scale for globalised markets like wholesale and investment banking, and on a European level for European retail markets to reap the full benefits of integration.

b. Growing importance of markets outside the EU

Apart from European integration, the past decade has also witnessed a remarkable shift in the global balance of power – away

[5] Source: European Commission (2005).
[6] Source: IW Consult (2006).

especially from the industrialised countries in Europe, and towards emerging markets (EMs). Following the transformation of former socialist economies in Eastern Europe and China into (much more) market-oriented economies and as a result of a wave of economic liberalisation in many developing countries, growth has picked up there.

Strong growth in emerging markets...

Driven first and foremost by a deepening integration in the world economy and a surge in exports, GDP growth in EMs accelerated from a yearly average of 3.8% from 1989 to 1998 to an expected 6.5% in the decade from 1999 to 2008 – thereby widening the growth differential with the industrial countries from 1.1 pp p.a. to 3.9 pp, respectively.[7] Whereas the first period still included not only the dramatic losses during the transition of most countries of Central and Eastern Europe (CEE) to market economies but also the severe downturn in Latin America at the beginning of the 1990s or the Asian crisis of 1997/98, the last ten years were characterised by greater economic stability and an expansion of emerging economies that became more broadly based.

... from low starting levels

But despite high growth rates, per-capita income in many emerging countries remains only a small fraction of that of developed nations. Even some of the most advanced emerging markets – Hungary, Czech Republic and Poland – do not exceed the 60% level of G7 per-capita income[8] and it will take decades for the majority of EMs to catch-up with Western standards.

... but backed by favourable demographics

What should help the emerging countries to close the gap with the established economies are their increasingly efficient financial markets (which makes proper implementation of EU financial services rules and regulation in CEE all the more important) as well as their more balanced demographic structure (which, however, does not apply to Central and Eastern Europe, and some other countries). Whereas almost all advanced nations will face a further strong decline in the ratio of working people to retired people, the tendency towards a society dominated by the elderly is much less pronounced in most developing countries: e.g., the share of the population aged over 59 is expected to climb to 35% in Europe by 2050, compared with 24% in Asia, according to UN estimates.[9] The demographic development will therefore favour emerging markets as it affects the innovation potential of societies and their ability to stay on the technological edge: individual creativity and productivity growth tend to decline towards retirement, and entrepreneurship is usually associated with younger, not older people. In addition, most emerging countries' populations will continue to grow in absolute terms, while many Western nations will experience a decline.

... and improved stability and openness

Finally, economic and political stability usually go hand in hand. With ideological regimes globally on the retreat for almost two decades now, military confrontations have declined considerably, democracy has spread, and political stability increased.[10] In addition, the institutional framework for financial markets in many emerging countries has been strengthened.

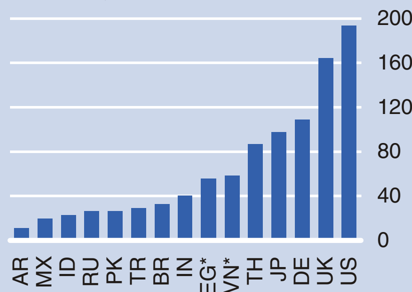
Thus, in sum, the favourable combination of high growth rates, low income, younger societies, and more stable institutions will continue

---

[7] Source: IMF (2007).
[8] Measured at market exchange rates.
[9] Source: United Nations, World Population Prospects.
[10] Sources: Freedom House (2008), Uppsala University, Uppsala Conflict Data Program.

Large discrepancies in banking sector sizes

Bank loans to the private sector in % of GDP, 2006



* 2005. Source: World Bank

7

to attract a large share of global investment flows and lead to a gradual catch-up of a substantial part of today's "developing" world.

The impact this will have on banks especially in Western nations can hardly be overestimated and reaches far beyond the traditional trade finance business (which in a first step benefits from the ever-growing interdependence of the world's goods markets and increasing trade volumes). In fact, rising wealth in the EMs will also enlarge the basis for financial intermediation in general and should lead to a much stronger rise in the size of EMs' banking markets than in industrialised countries: financial assets tend to grow faster than total economic activity (measured in bank credit to the private sector, resp., GDP) – a process called "financial deepening". It implies that credit-to-GDP ratios are usually higher in richer countries (see chart 7). Furthermore, GDP growth of emerging countries should continue to outperform that of Western nations, resulting in relatively larger increases in the credit-to-GDP ratios in EMs and higher growth rates in the absolute size of their banking sectors. However, banks in Europe not only have to adjust to shifting market shares in global banking, but also have to prepare for more intense competition from new global players from emerging countries, for which the Chinese banks that have already entered the world's top ten rankings by market capitalisation may just be a first indicator.

c. Technological change

A third key driver for changes in the European banking landscape in recent years has been technological progress, a factor whose influence can hardly be overestimated. Innovations in telecommunications and electronic data processing have considerably facilitated the flow of information between clients and banks, within financial institutions, and between them. The internet, e-mail, online banking and "Web 2.0" – to name just a few inventions – have made gathering and exchanging information much easier for clients as well as for any bank itself. They have sped up financial transactions to an extent still unthinkable a few years ago. And they have brought about tremendous changes in almost every process within a bank; from risk, liquidity, and capital management to back office activities. They have thus not only been a precondition for the far-reaching improvements in the quality of products, in-house operations and clients' services but at the same time allowed for enormous cost savings that have benefited both banks' earnings and customers via lower prices for many standard banking services.

The IT revolution, however, has not only turned upside down the way banking is conducted, but it also resulted in expenditures for technology and communication becoming one of the most important cost factors for the financial industry. Whereas some estimates put fixed costs (of which a substantial part is IT-related) at around 10% to 15% of total expenses at the beginning of the 1990s, in today's world this share might have risen to as much as 25% to 30%.[11] Understandably, this has triggered new considerations about how to contain similar growth in IT costs in future.

3. Major trends in European banking

Given these developments in the banking environment in Europe, how have banks in fact reacted to them – and achieved the substantial improvements outlined in chapter 1? One can at least identify four major trends: banking markets in Europe have become more

[11] Source: Morgan Stanley (2005).

consolidated and more international – and banks more capital markets-oriented and more specialised over the last few years. We will discuss each of these trends individually, starting with consolidation.

a. Consolidation

Size matters. This is the conclusion many banks have been drawing from the trends in regulation, technology, and the continued growth in capital markets. Reasons for the drive to create ever larger financial institutions mainly fall into two categories, either of operative or of a more strategic nature. Among the first group rank arguments relating to economies of scale, leverage opportunities of products and processes, stability issues, and "big ticket" transactions. The second group is less concerned with operative issues, but rather links consolidation to the strategic degrees of freedom and the level of publicity a bank obtains.

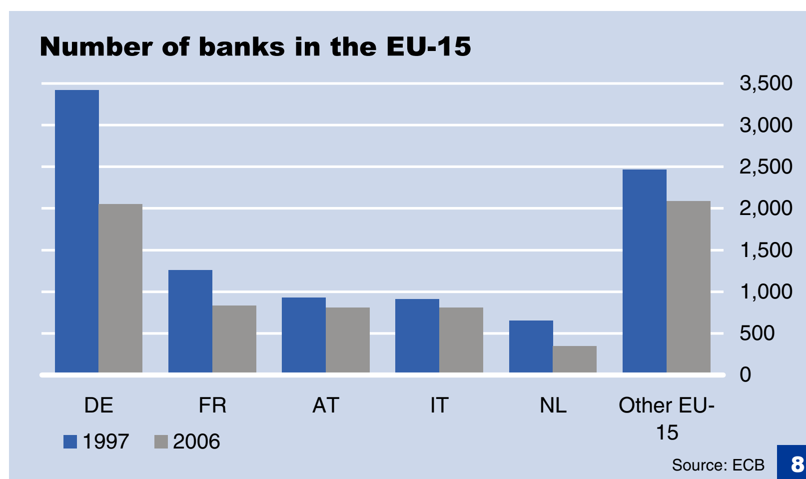
Plenty of reasons for consolidation

- Achieving economies of scale in areas where fixed costs are a dominant factor – from "regulatory compliance" to IT expenditures and other back office functions – poses a major challenge for bank managers. Equally, cost degression is also highly relevant in certain core businesses of banks, e.g. in payment transactions or in securities sales, trading and settlement.
- Another case for M&A among banks may be related to efficiency issues: a merger between two banks can allow for the mutual exchange of best practices and leverage of successful products, processes, and brands. Besides this exogenous "restructuring story", consolidation can also take place endogenously as the more efficient banks gain market share directly as a result of their effectiveness, which enables them to offer more competitive prices and leads to the market exit of inferior institutions.
- More support for the creation of large banks comes from them being seen as more stable institutions. A usually higher degree of diversification reduces the exposure to adverse movements in individual markets which in turn strengthens ratings and lowers refinancing costs.
- Large banks can also claim that they are the only institutions able to satisfy the increasing demand for large-scale ("big ticket") transactions that in particular require a broad capital base and sufficiently experienced personnel. As the latest boom in leveraged buy-outs and mega-M&A deals have demonstrated, volumes in the double-digit billion euro range are not exceptional any more in both syndicated loans and debt and equity underwriting.
- What adds to this are strategic considerations. Large-scale upfront investments often call for equally large and financially strong institutions because these investments usually take some time to pay off. Even more, high stock market capitalisation and a broad international reach reduce management's dependency on any single stakeholder (e.g. shareholders, labour unions, or governments) and increase its degrees of freedom.
- Finally, creating a larger bank might also be beneficial in terms of public awareness (and that of financial analysts) of the very existence of this institution. Wider coverage in the media, by equity analysts, and perhaps the admission to a major stock index can give a push to the share price as well as facilitate initiating future business – potential partners may just recognise

a possible supplier and intuitively place greater trust in a company they have heard of already.[12]

Shrinking number of banks…

Given that there is considerable theoretical support for a consolidation in the banking industry (as well as in other sectors)[13], it does not come as a surprise that the total number of banks in EU countries has declined considerably over the last few years and that banks are growing fast: in fact, the number of credit institutions in the EU-15 decreased by 28% from 9,624 in 1997 to 6,926 in 2006 (see chart 8).



... along with strong asset growth

At the same time, the average size of banks has grown more rapidly than the economy as a whole. Bank assets expanded by an average of 12.2% p.a. from 1997 to 2006, compared with a rise in nominal GDP of just 4.3% p.a., thus driving up the ratio of assets to GDP to 333% from 240%. In addition, larger banks have grown even faster than smaller ones: the world's top 25 banks managed to raise their share in total assets of the world's largest 1,000 banks from a mere 28% in 1997 to almost 41% in 2006.

... pushed by M&A

Organic growth and financial deepening did account for a substantial proportion of that growth, but M&A among banks has also been an important factor during the last years. From 1996 to 2005, for instance, domestic M&A transactions in Europe were valued at almost EUR 400 bn – more than the annual GDP of countries such as Belgium or Sweden.[14]

... leading to a rise in market concentration

Yet despite all the progress made with consolidation, European banking markets still differ substantially in terms of market concentration: bank assets in countries like Belgium, the Netherlands or many CEE nations are already concentrated in only a few hands, while the market share of the five largest banks, e.g. in Germany or France, lies far below that. Overall, however, the CR-5 ratio went up on an unweighted average base from 48.1% in 1997 to 53.6% in 2006 in the EU-15 countries and has meanwhile reached more than 50% in 17 of the 25 EU countries in 2006 (see chart 9).[15]

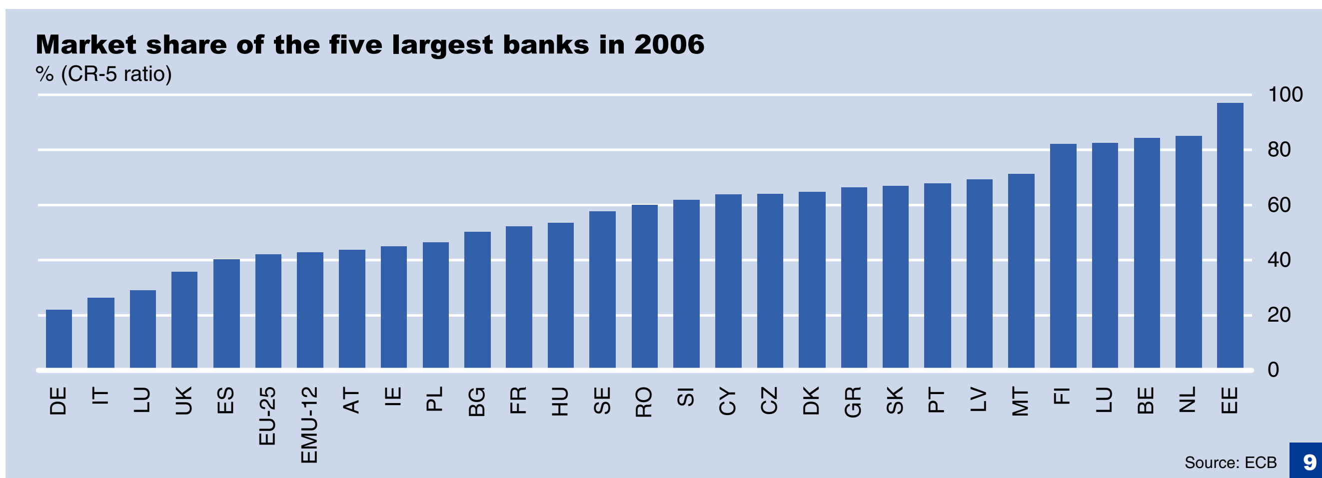
---

[12] In some cases, "empire building" by senior management (i.e. executive managers seeking to expand their power and reputation) might also influence a decision to merge with or acquire another bank.

[13] Empirical evidence that a larger size may indeed be beneficial for banks is found e.g. in Al-Sharkas et al. (2008), Cavallo and Rossi (2001), or Goddard et al. (2004).

[14] Source: PricewaterhouseCoopers (2006).

[15] The data is not without flaws, however: the ECB, for example, does not count as *one* institution the large Italian banking conglomerates that consist of several



b. *Internationalisation*[16]

In response to a changing environment and as a driver of profit growth over the last few years, internationalisation is the second major trend that characterises developments in the European banking markets. Internationalisation itself comprises mainly three dimensions – the fact that European banks increase the share of foreign earnings, that foreign banks (often from EMs) enter the European market, and that the shareholder base of banks in Europe has become more international. In the following, we will mainly focus on the first issue, but also briefly touch upon the other two.

Rationale for "going international"...

In general, the two main drivers behind European banks "going international" are the search for new sources of growth and diversification of the revenue structure. Many of the Western home markets of banks are already mature and show rather high concentration levels, limiting scope for further growth. Equally, broader geographic diversification is supposed to strengthen the overall stability of a bank as diverging national developments balance themselves out and smooth revenues and earnings of a multinational institution.

... with Europe an attractive market

The particular attractiveness of the Western European market is based on its huge size, a stable development as one of the most mature markets in the world, and its reliable – and increasingly harmonised – legal and institutional framework. However, even within the euro area with its single currency, macroeconomic developments as well as economic and fiscal policy etc. can diverge remarkably (let alone considering the UK and the new member states in CEE countries). Given the differences in market structures as described above, other European markets can therefore still offer banks substantial potential in specific market segments and allow for internal as well as external growth. Not surprisingly, banks have thus put special emphasis on strengthening their operations in other European markets.

... driven by advances in regulation

The concrete triggers for banks to "go European" have been the creation of a single European market for financial services and increasing competition in the banks' home markets as a result of the

independent legal entities but share the same management. This results in an underestimation of the true concentration level of the Italian banking market.

[16] Of course, internationalisation is a sort of consolidation, too, as the number of (independent) players that are active on a European scale decreases, even though the number of domestic institutions c.p. does not become smaller.

globalisation process that sped up dramatically in the 1990s.[17] In Europe, with the Treaty of Maastricht fully establishing the free movement of capital from 1993 and the Financial Services Action Plan (FSAP) of 1999 providing the framework for an integrated market for financial services, the EU accomplished major steps to facilitate the creation of truly “European champions”. The FSAP’s major measures – the integration of wholesale markets, the opening of national retail markets and the harmonisation of supervisory standards – greatly improved the conditions for the cross-border provision of banking services and the emergence of pan-European banks.

... resulting in higher M&A dynamic

The industry quickly responded to these new opportunities: “greenfield” investments and cross-border M&A activity in the EU gained momentum, the latter reaching a volume of almost EUR 160 bn[18] over the decade to 2005, in which year it rose to a new record level of more than EUR 41 bn. This figure has been surpassed by far in 2007 with EUR 112 bn, thanks mainly to the takeover of Dutch bank ABN Amro by three competitors for more than EUR 70 bn alone.[19]

Top 10 cross-border M&A deals among Western European banks, 1998-2007

	Value (EUR bn)	Year	Investor	Country	Target	Country
1	71.8	2007	RBS, Fortis, Santander	UK, BE, ES	ABN Amro	NL
2	15.4	2005	Unicredit	IT	HVB	DE
3	13.9	2004	Santander	ES	Abbey	UK
4	11.2	2000	HSBC	UK	Crédit Commercial	FR
5	9.0	2006	BNP Paribas	FR	BNL	IT
6	7.2	2000	HVB	DE	Bank Austria	AT
7	5.9	2005	ABN Amro	NL	Antonveneta	IT
8	5.7	2007	Hypo Real Estate	DE	Depfa	IE
9	4.8	2000	MeritaNord-banken	SE	Unidanmark	DK
10	4.1	1998	ING	NL	BBL	BE

Sources: PwC, DB Research 10

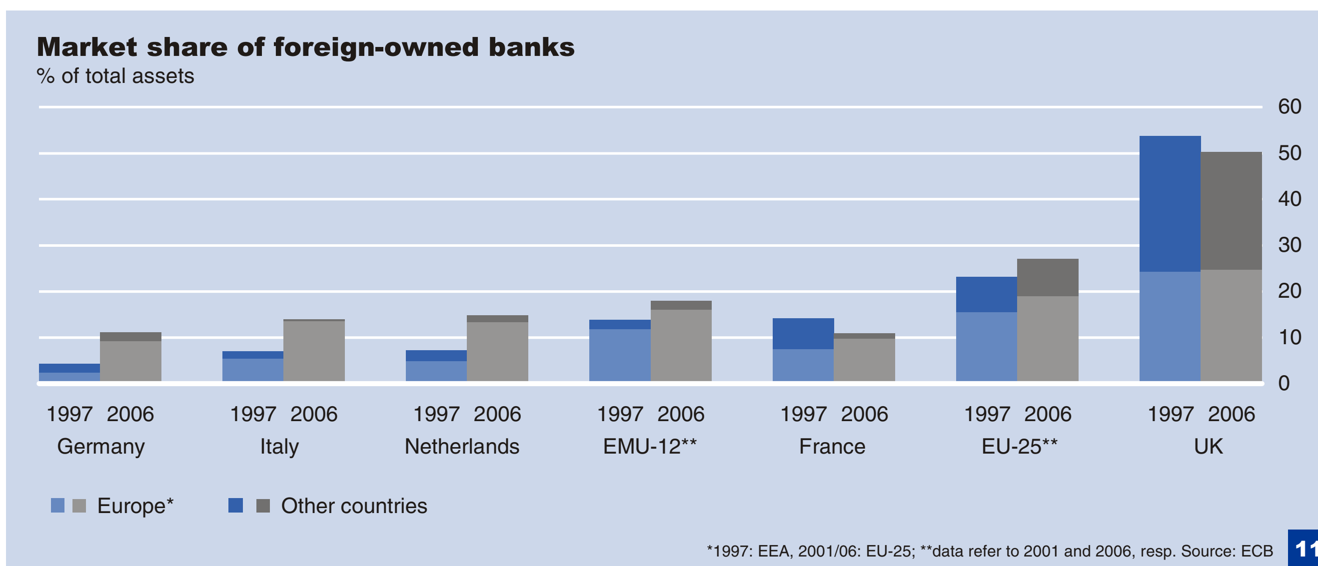
...and a stronger position of foreign banks

As a consequence, the share of total assets held by foreign-owned banks in the EU-25 has increased from 23.2% in 2001 to 27.1% in 2006; in the EMU-12, this shift was even more pronounced (with foreign bank-ownership climbing from 13.8% in 2001 to 17.9% in 2006).[20] Notable in particular was the development in those countries which previously had only a limited market share of foreign banks: in Germany, Italy and other – mostly large – Western European countries, foreign bank-ownership has picked up strongest since 1997, while e.g. in the already highly international wholesale part of the UK banking market (which was opened up years before), the share more or less remained the same. The difference between the euro area and the EU-25 stems not only from the inclusion of the UK, but additionally from the high market

[17] See chapter 2.
[18] Source: PricewaterhouseCoopers (2006).
[19] Source: Dealogic.
[20] See chart 11 and chart 6 in section 2. a.

share of foreign banks in the CEE countries. This in turn is predominantly the result of the privatisation process of the 1990s, when the former socialist CEE banking systems recorded large inflows of foreign capital.

Overall, the particular momentum in inner-European cross-border transactions is evidenced by the contrasting development of the market share of other European institutions in the EU-25 (which gained 3.5 pp to 19% from 1997 to 2006) and that of banks from third countries – which stayed almost flat at 8.2%, compared with 7.7% in 1997.



"Going global" – advantages…

In addition to becoming more active at a cross-country European level, European banks have also taken advantage of the rise of emerging markets by "going global". A wave of liberalisation, deregulation and growth in many countries has made less developed financial markets much more attractive – and made broadening the geographic scope not only desirable for Western banks, but also achievable. Whereas their traditional home markets are often expected to experience only moderate economic growth as well as ageing (sometimes declining) populations over the next few decades, rising nations may indeed provide for a complementary fit: they have huge catch-up potential in terms of income and wealth, increasingly rather stable institutions, and young and growing populations which are an important precondition for high growth rates in the long-run. Financial markets in general and banks in particular are set to benefit disproportionately strongly from this development (see section 2. b.).

... and limitations

Banks have to keep in mind, however, that growth opportunities are not without risk and limitations. On the one hand, the absolute size of emerging countries' financial systems is still no more than a tiny proportion of that of developed nations. Whereas in many emerging countries the volume of loans to the private sector falls in a spectrum of about 20% to 60% of GDP, in most OECD countries, on the contrary, this ratio has reached or exceeds 100% (see chart 7 in section 2. b.).[21] Retail-banking customers in the old EU-15 already hold more than 470 million current accounts, which is well beyond the total population of any developing country in the world, with the

[21] Equally, while bank deposits usually remain below 60% of GDP in emerging markets, in many industrial nations these figures come close to or exceed 100%.

exception of China and India. Similarly, mutual funds domiciled in Luxembourg alone manage assets of USD 2.2 tr – a higher volume than the USD 1.6 tr for all Asian countries combined.[22]

... higher risks

Notwithstanding the substantial improvements that have been achieved, emerging markets also still face higher risks than developed nations – be they of an economic, political or legal nature. The standard deviation of growth rates is just one indicator for persisting strong macroeconomic volatility in emerging countries – in fact, it has been twice as high as in mature markets over the past 15 years. Also, the rise of developing nations has in many cases been accompanied by large imbalances, e.g. current account surpluses or budget deficits not considered sustainable in the long run. Political and legal risks relate, among other factors, to the risk of nationalisation, restrictive and unstable regulatory environments, and corruption (Chile, ranked 20, is the first and only emerging market in the top 20 countries with the least corruption worldwide).[23]

... but some experience

Despite these risks, EMs' banking sectors have become much more attractive investment targets for Western financial institutions. While many European banks had been operating branches in the most distant locations for decades already, their motivation and the scale of their activities has for a long time remained distinctively different from today. Starting at the end of the 19th century, banks from Europe and the US went abroad to support domestic industrial clients, e.g. in Southern America, China, or Africa during the first wave of globalisation. Usually, however, they did not cater for local clients. With the globalisation of goods and financial markets accelerating since the 1980s, things have changed dramatically: granted, traditional trade finance also grew at an impressive pace, but with emerging countries rapidly gaining in importance, their markets as such became much more attractive – and open to foreigners following a process of liberalisation and privatisation.

...leading to a pick-up in investments

European banks have promptly seized these opportunities and invested large sums to buy into emerging markets as well as to build up capacities organically. The stock of FDI in financial sector firms in Central & Eastern Europe held by EU-15 countries has meanwhile reached EUR 52.6 bn (as of end-2005), up from just EUR 21.7 bn in 2003.[24] The value of financial sector investments in EMs worldwide made by companies from the four largest European economies rose to more than EUR 91 bn at the end of 2005, representing about one sixth of the total stock of investments of these countries in EMs.[25] German banks e.g. held investments of more than EUR 11.8 bn in emerging nations (even though this is still a low number compared with the EUR 98.5 bn invested in developed markets).[26] Entering emerging countries' financial markets, institutions from several European countries benefited from a mixture of (in part) a tradition as open economies themselves, historical links with former colonies or other forms of a joint history, a common language, and geographic proximity – and overall considerable experience in international politics and trade.

[22] Source: Investment Company Institute (2007).
[23] Source: Transparency International (2007).
[24] Source: Foltete and Kärkkäinen (2007).
[25] Source: Eurostat, Balance of payments statistics. Investments by German, British, French and Italian firms in non-OECD countries.
[26] Source: Deutsche Bundesbank (2007). It has to be kept in mind, however, that not all of these investments necessarily have to involve financial institutions as targets.

Selected investments by European banks in emerging markets, 1998-2007

Year	Investor	Country	Target	Country	Stake	Value (USD bn)	Notes
1998	ABN Amro	NL	Banco Real	BR	100%	2.1	ABN Amro's voting rights were initially limited to 40%; however, it had full management control.
1998	HVB	DE	BPH	PL	36.7%	0.6	HVB raised its stake to 86.1% in 1999.
1999	KBC	BE	CSOB	CZ	65.7%	1.1	
1999	Unicredit	IT	Bank Pekao	PL	50.1%	1.0	In its bid for Pekao, Unicredit was joined by Germany's Allianz which bought an additional 2%.
2000	Santander	ES	Banespa	BR	33.0%	3.8	Santander held 66.5% of the voting rights following its initial purchase of 33% of Banespa's capital and in 2001 increased its capital stake to 97% for an additional consideration of USD 1.1 bn.
2004	HSBC	UK	Bank of Commu-nications	CN	19.9%	1.8	HSBC has an option to increase its shareholding to 40% once legal restrictions on foreign bank ownership are lifted.
2005	Barclays	UK	Absa	SA	54.0%	4.5	
2006	Allianz*	DE	Industrial and Commercial Bank of China (ICBC)	CN	2.3%	1.0	Goldman Sachs, Allianz, and American Express together acquired an 8.5% stake in ICBC for USD 3.8 bn, diluted to 7.4% after ICBC's IPO at the end of 2006.
2006	Erste Bank	AT	Banca Comerciala Romana	RO	61.9%	4.7	Erste Bank increased ist stake further in 2006 to 69.2%.
2007	ING	NL	Oyak	TR	100%	2.7	

*Allianz SE is Europe's largest insurance company, but also the owner of Dresdner Bank, a large German bank, which bought the stake in ICBC.

Source: DB Research 12

USA another appealing market

While expansion into emerging markets draws considerable attention, investments by European banks in other developed markets must not be overlooked. This applies, in particular, to the US which is a highly attractive market for Western banks (along with some other, smaller developed markets outside the EU). The world's largest economy by far, the US has been growing faster than the EU for many years and has a much brighter demographic outlook in the long-run: while half of all EU countries will see their populations decline by 2050, the US is expected to remain a rather young society which will steadily grow from today's 300 million people to more than 400 million in 2050.[27] Immigration and higher birth rates than in most EU countries will thus lead to the US overtaking the old EU-15 with regard to population numbers by around 2050.

This will highlight even more the rationale for a presence in the US market of European banks, which have already been expanding their North American operations significantly in the last ten years (see table 13).

[27] Source: United Nations, World Population Prospects.

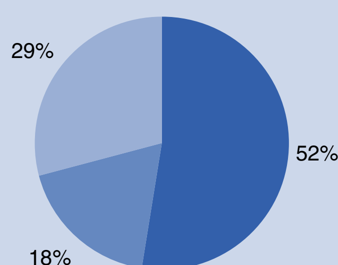
Selected investments by European banks in the USA, 1998-2007

Year	Investor	Country	Target	Stake	Value (USD bn)	Notes
1999	Deutsche Bank	DE	Bankers Trust	100%	9.1	
1999	HSBC	UK	Republic New York Corp. (RNYC)	100%	7.1	HSBC simultaneously acquired RNYC and Safra Republic for a total consideration of USD 9.7 bn.
2000	UBS	CH	PaineWebber	100%	11.8	
2001	BNP Paribas	FR	BancWest	55.0%	2.5	BNP Paribas already owned 45% of BancWest before seizing full control of it.
2002	Deutsche Bank	DE	Scudder	100%	2.5	
2002	BNP Paribas	FR	United California Bank	100%	2.4	
2003	HSBC	UK	Household International	100%	14.8	
2004	Royal Bank of Scotland	UK	Charter One	100%	10.5	
2006	Santander	ES	Sovereign Bancorp	24.8%	2.9	
2007	BBVA	ES	Compass Bancshares	100%	9.1	

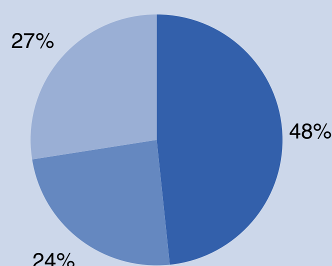
Source: DB Research 13

Revenues of the 20 largest European banks by geographical location

Revenue structure in 2001



Revenue structure in 2006



Domestic market
Other Europe
Rest of the world

Sources: Company reports, DB Research 14

All in all, many European banks – and the largest ones in particular – have thus indeed been following a “going abroad” path and have become multinational institutions. This is a significant change from only a few years ago, when most of these banks were in fact strong domestic players with rather limited foreign operations. The 20 largest European banks, e.g., have on average managed to increase their share of revenues coming from outside the traditional home market from less than 48% in 2001 to about 52% in 2006 – despite several domestic mergers that still rank among the largest deals ever in the banking industry. The strong widening of the share of other European countries by 6 percentage points is a result of the primary aim of most European banks to become “more European”, while the share of earnings from outside the continent declined slightly as growth in other regions could not fully keep up with the inner-European dynamic.[28] All in all, however, 70% of the banks in this sample now have a larger foreign exposure than five years ago, and an equal share of banks is now more “European” as regards their revenue structure.

In the end, given the stronger economic growth and new market opportunities in many regions outside Western Europe, this doubtless also had a significantly positive effect on banks’ earnings and cost structures, thus contributing to the overall benign development of European banks during the last decade (as outlined above).

A second aspect of internationalisation, still less frequently discussed, coincides with the emergence of new players on the global financial scene: apart from the growing importance of developing countries for European and other Western banks, banks from emerging markets themselves are in turn starting to become serious challengers for incumbent institutions in European markets (they join banks from other developed countries, especially the US, that have also been extending their position in the EU, particularly in investment banking).

[28] See also chart 11.

Motivation for EMs' banks expansion in the West

For one thing, growing demand for international support by their domestic corporate clients induces banks from emerging countries to start establishing a presence in Western markets. A second motivation, hardly less important, is based on EM banks' desire to learn and gain experience in competitive banking environments, especially in advanced countries. Finally, fuelled by highly dynamic growth in their home markets, banks in emerging markets increasingly also seek to expand in retail banking in mature markets, primarily by taking advantage of their low-cost structures and clearly focusing on niche strategies.

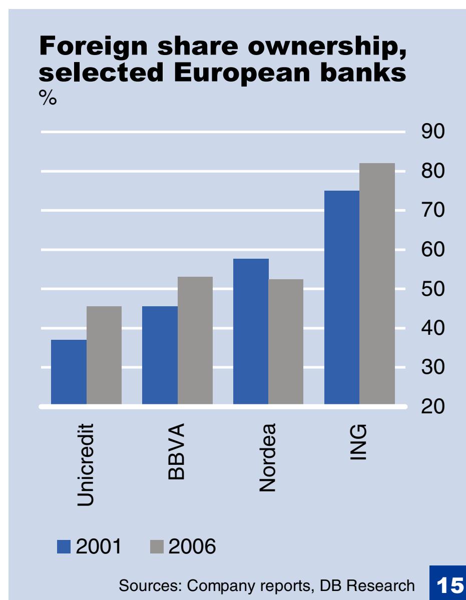
Examples of this new step in globalisation include

— the move of Chinese banks to the US where three of them have already been granted a banking licence and China's two largest financial institutions – ICBC and China Construction Bank – are applying for it.

— India's ICICI which already operates retail branches in Britain and Belgium and just extended its reach also to Germany.

— Qatar Islamic Bank that eyes Europe's market for sukuk (i.e., Islamic bonds) with a new London-based subsidiary.

As a consequence, competition in European banking markets has intensified further, bringing traditional players under continuous pressure to keep up with the newcomers and in particular to figure out their fundamental strategy on how to compete successfully in the long run – whether to concentrate on becoming a distinctive innovator or a mass market supplier.



Sources: Company reports, DB Research

But the internationalisation of European banking markets goes even beyond the focus on revenues, as globalisation is also taking hold of the shareholder base of (mainly large) European banks. In spite of the persisting "home bias" effect, the proportion of international investors in many banks in Europe has risen considerably. Analysing again the 20 largest European banks (of which, though, only a minority provides a geographic breakdown of their shareholder pool), the proportion of foreign stock owners has on average increased by several percentage points over the last five years. This is partly due to acquisitions of foreign banks that were financed with banks' own shares, and also a result of both banks actively seeking new core shareholders and international institutional investors searching for a more diversified portfolio. Recently, foreign ownership increased further as investments by sovereign wealth funds (SWFs) helped to recapitalise several large banks in Europe and the US in the wake of the US subprime crisis. Admittedly, however, the internationalisation of the shareholder structure seems a less uniform trend than that of the earnings profile: some banks indeed experienced a return to larger shares of domestic stockholders following the retreat of foreign investors after the severe market decline in 2001/02.

c. Convergence

The third secular trend in European banking is less related to market structures than the two previous ones, but rather refers to the products and services side: the convergence of bank- and capital market-based financial systems suggests that the clear distinctions which have been drawn between these two poles for decades may not be valid any more. Put simply, the term "convergence" describes the tendency in recent years of capital market activities and traditional on-balance sheet banking becoming ever more interlinked – often not substituting, but complementing each other.

Drawbacks of "originate and hold"

In the conventional "originate and hold" model of banking, banks granted loans and simply held them on their balance sheet till they were finally repaid. The drawbacks of this method are rather obvious: first of all, by passively sticking to their loan portfolios, banks became exposed to considerable concentration risks in those regions and sectors of the economy where they were positioned strongest. Conversely, when concentration risk became too high, new – potentially profitable – business had to be rejected, hurting client relationships at the same time. Second, as any bank loans have to be backed with equity, lending remained considerably restricted and subject to the capitalisation of banks. Overall, this seriously hampered the flexibility of credit institutions, in the end hurting both bank profits and client access to capital.

"Originate and distribute"

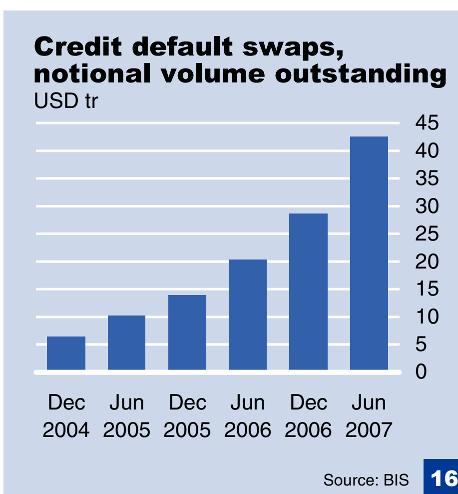
Therefore, a variety of (product) innovations that enabled banks to increasingly switch to a new model of "originate and distribute" benefited banks and customers alike:

— Credit derivatives allow banks to dispose of credit risks, while leaving the fundamental client relationship untouched.

— The securitisation of assets makes them tradable and transferable to other investors.

— The outright sale of loans improves the risk profile by reducing cluster risks and facilitating the diversification of the credit portfolio.

Instruments of credit risk transfer (CRT) such as credit default swaps (CDSs) offer banks the opportunity to actively manage their credit risk instead of letting it evolve passively. In principle, the protection buyer – the lender – enters into a CDS agreement with the protection seller – the insurer – to pay a regular fee in exchange for the guarantee to be repaid the insured amount of credit in case the borrower defaults. From a micro perspective, hedging the credit risk thus frees up capital of banks required to back risky assets and makes granting new loans possible.[29] More generally, as CDSs are publicly traded, they increase not only the transparency of asset valuations, but also the efficiency of the entire financial system: CDSs improve the allocation of risk and lower firms' cost of capital due to a higher risk appetite of investors and less restrictive lending by banks.



As a result, CRT instruments have become widely popular in recent years: the market for credit derivatives grew more than tenfold since the summer of 2004 to USD 51 tr by mid-2007, with CDS accounting for the vast majority of all contracts (see chart 16). Today, the outstanding level of insurance on a particular issuer often even exceeds the underlying debt volume.

Going one step further, banks have also increasingly turned towards fully passing on assets to other investors by making use of (true sale) securitisation techniques (see chart 17). The repackaging of ordinary loans and receivables into tradable securities can be applied to virtually any debt, be it mortgages, consumer and credit card loans or auto credit and corporate debt (which leads to the large variety of acronyms such as ABS, RMBS, CDO, CLO et al. that have recently gained broader attention). In addition, the securities can be sliced into different tranches of risk, with different probabilities of default, to meet the specific preferences of individual

[29] However, banks do not eliminate risk completely but rather replace the counterparty risk of their client with that of the protection seller (which should be considerably lower).

A brief comment on the subprime & credit crisis

Securitisation has been identified by many as a key cause for the subprime crisis and the resulting turmoil in financial markets. Specifically, it is argued that securitisation has weakened origination standards, led to the extension of credit to borrowers unlikely to be able to bear the ensuing burden, and to increased leverage of the financial system in general.

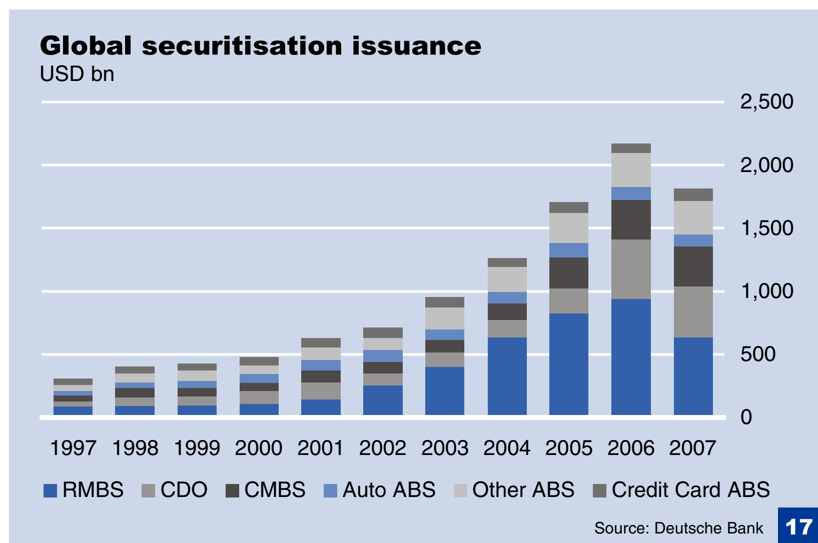
On the basis of available evidence, there is now wide-spread consensus that underwriting discipline suffered severely in the US mortgage market as the credit cycle matured in 2006 and 2007. The ability of mortgage brokers and banks to securitise mortgage loans, combined with strong investor demand for mortgage-backed securities, no doubt contributed to this development.

These deficiencies in US mortgage origination and securitisation must be analysed and addressed. In fact, the financial industry, e.g. via the Institute of International Finance (IIF), has already made recommendations to this effect. However, in doing so, a measured approach should be taken that does not damage the instrument of securitisation as such, which continues to have many beneficial effects on the stability of the financial system. The ability to distribute credit risk away from the banking system (for which securitisation is but one, albeit important instrument) increases financial stability and allows for more active risk management by banks. Securitisation also enhances the liquidity of loan portfolios and provides price signals which in turn are the basis for more active and more prudent risk management.

Clearly, though, the current crisis has highlighted that these benefits will only be fully realised if all participants in the securitisation chain face the right incentives that will ensure the observation of high standards for credit origination, pricing, credit risk transfer and monitoring. It is important to realise that these incentives are the result of various parameters and instruments whose combination differs depending on the nature of the specific transaction, as obviously the nature of securitisations differs substantially according to the underlying. Hence, a one-size-fits-all approach would be inappropriate and so would be simplistic solutions, such as the mandatory retention of first loss pieces by originating banks, as this would entail that securitisations would no longer be an instrument of credit risk transfer. In contrast, e.g. reputation effects from repeated transactions should help to partly overcome the apparent incentive problems in future.

investors. Securitisation therefore allows both banks to enhance their credit risk management – and generate revenues from the process as such – and investors to invest in fixed income products that are much more tailored to complement their portfolios efficiently than traditional corporate or government bonds.[30]

The subprime crisis has led to a reassessment of the perceived advantages of securitisation; new issuance declined in 2007 already and dropped dramatically in Q1 2008. So have revenues from securitisation activities, and a return to the growth rates seen before 2007 is unlikely. At the same time, it is clear that the securitisation model will undergo changes which stem from both market practices and regulatory change (see box).



A third way of disposing of credit risk, the complete sale of loans, has also become more popular among banks (and drawn a lot of public attention recently). A rather young market as well, there are a number of persuasive arguments in favour of it: first, banks can not only reduce concentration risks but also diversify their credit portfolio by buying loans originated by other banks. Second, banks may again use the capital relief stemming from a reduced loan book volume to grant new loans to their private and corporate clients – who could otherwise see their demand for credit not being satisfied. Investors, finally, benefit from greater transparency on underlying products compared with, for instance, a securitised loan portfolio.[31]

All in all and notwithstanding the excesses which led to the recent turmoil in global financial markets, banks' move away from the traditional asset intermediation to the new model of risk intermediation has been to the advantage not only of banks but also borrowers, investors and the economy as a whole: it resulted in a better allocation of risk, higher returns on assets, and broader, more diverse sources of funding for banks, in the end increasing the stability of individual credit institutions and the entire financial system. Last but not least, closer links between banks and capital

[30] See also Altunbas et al. (2007).

[31] Regarding criticism brought forward against the sale of loan portfolios, it has to be borne in mind that the majority of all loans sold are in fact non-performing loans (NPLs) where the borrower has failed to meet his or her obligation to pay interest and redemption. Furthermore, the investor buying a portfolio of loans in any case enters all obligations arising from the original loan contracts, being able to modify them only for NPLs or with consent of the borrower.

markets also provide incentives for innovation by allowing banks to reap first-mover advantages in new (often structured) products such as retail certificates or exchange-traded funds.

Households and firms in turn benefit from an increased supply of funds and possibly lower interest requirements, making higher leverage ratios viable – and thus e.g. large investments which would not have been feasible under the restraints of the traditional banking model.

"Disintermediation"

However, convergence does not only go hand in hand with ever stronger linkages between on-balance-sheet banking and capital markets, but also refers to the tendency of borrowers as well as investors to increasingly access capital markets directly without relying on conventional banking services. In the process of "disintermediation", the activities of banks – the traditional "inter-mediators" – thus shift more and more from borrowing and lending towards providing advice, market liquidity, underwriting and other fee-yielding services related to capital markets.

... and institutional borrowers

On the borrowers' side, private companies e.g. tend to finance themselves less through loans and increasingly via equity (incl. private equity), mezzanine or fixed income products, however, in relative, not absolute terms: growth rates of bank lending to corporates have still been positive, even though below that for other sources of financing.

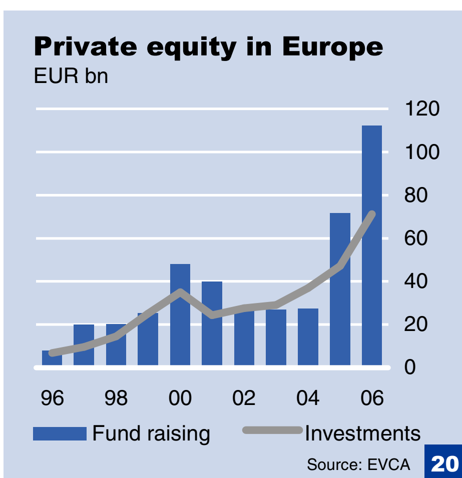
Chart 18 depicts this development for the four largest EU economies. In three of them, shares indeed play a greater role today than they used to a decade ago, with bank loans declining in relative importance as a source of funding. The only exception is the UK which, however, in 1996 already had a much more market-oriented structure than the large continental countries. Overall, in the euro area, the proportion of firms relying on shares and other equity for funding has grown by a remarkable 10 pp to 56% over the last 10 years, accompanied by a decline in the share of loans from 33% to 28% (the importance of bonds remained rather modest, though stable at well above 3%). Likewise, chart 19 demonstrates the positive development of stock markets in Europe; chart 20 the increasing popularity of private equity finance.

Stock market capitalisation in Europe

Sources: World Exchanges, IMF, DB Research **19**

Private equity in Europe

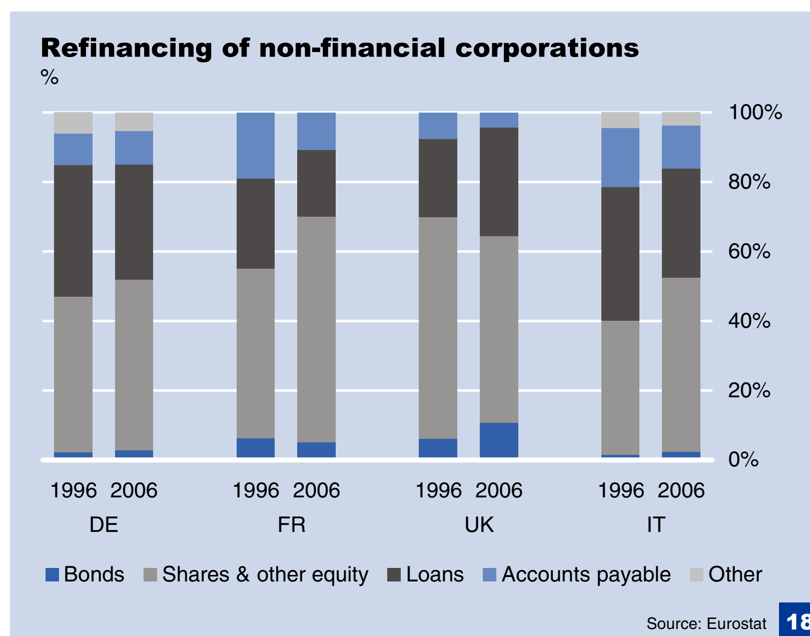
EUR bn



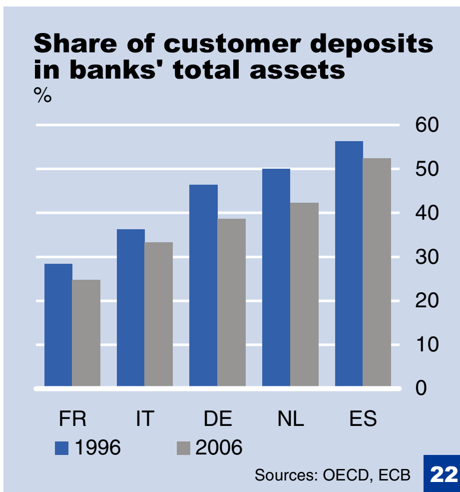
Source: EVCA **20**

Refinancing of non-financial corporations

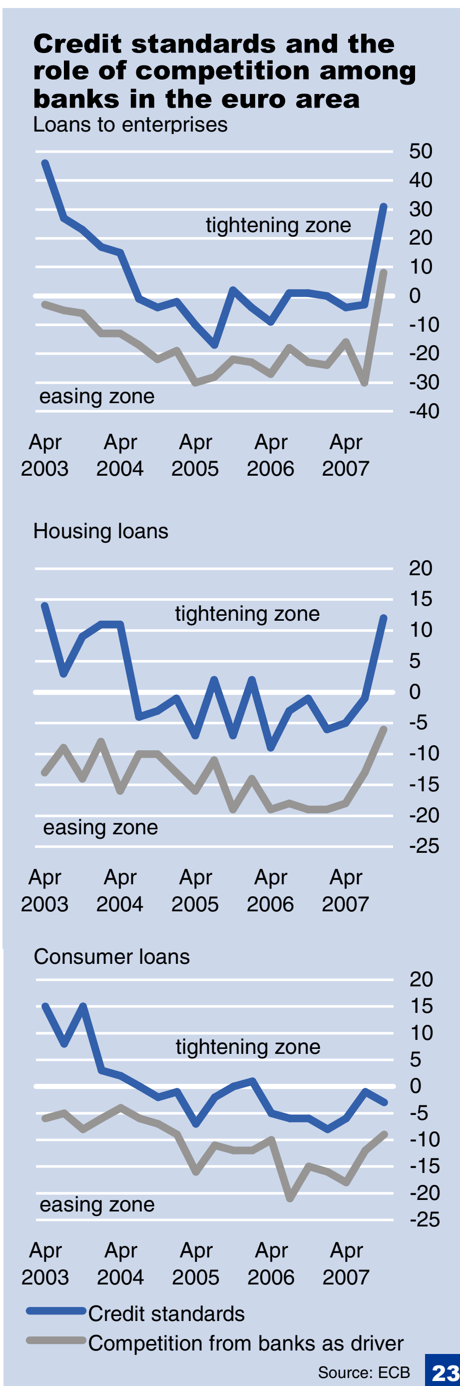
%

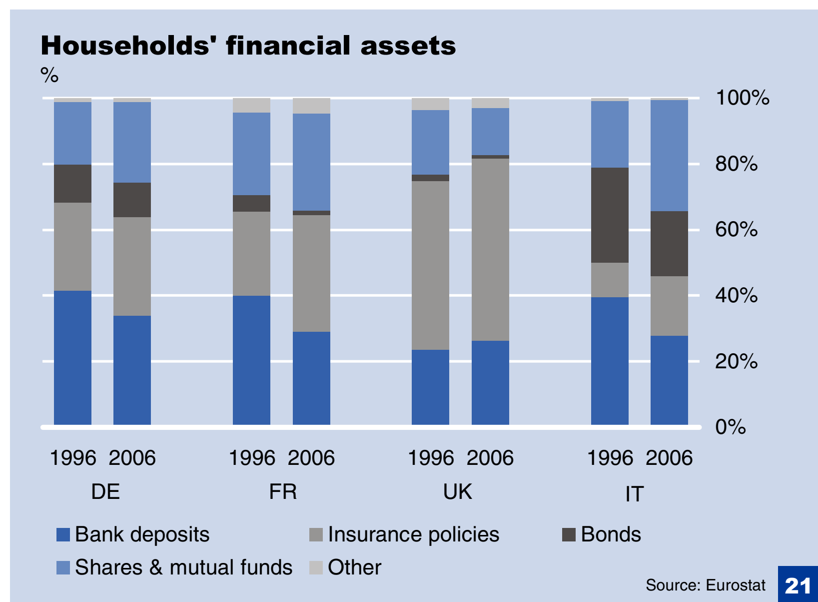


Source: Eurostat **18**



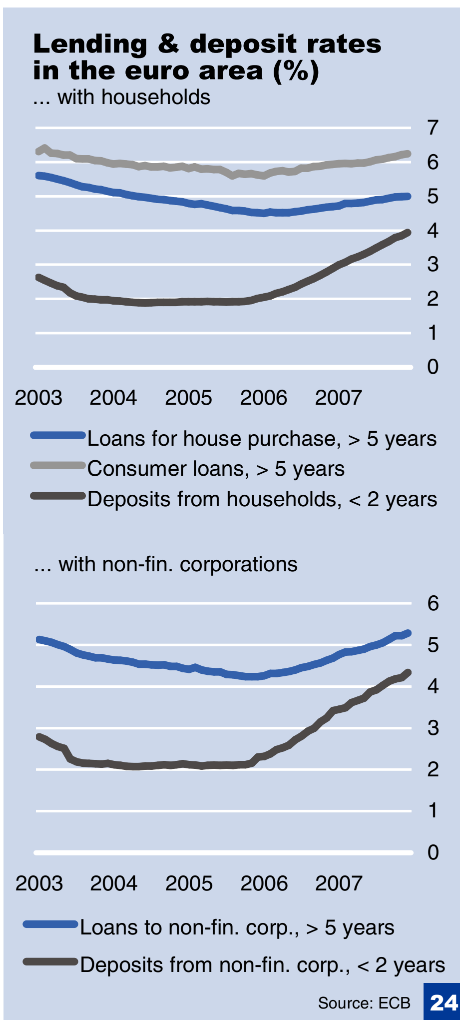
For private households, the long-term trend of declining interest rates made savings deposits in bank accounts less attractive as an asset class. Instead, in many European countries, they have shifted more weight on shares and other equity in their portfolios, while bonds also lost ground (see the three euro area countries Germany, France, and Italy in chart 21). The higher risk incurred by the new allocation was somewhat compensated for by an increase in insurance reserves. Again, the UK stepped out of line: bank deposits went up in relative terms, shares down and insurance policies continue to account for an exceptionally high proportion of households' total financial assets. In the euro countries on average, the share of bank deposits shrank from 40% in 1996 to 31% one decade later, while equity climbed from 23% to 30% and insurance reserves from 22% to 28%. Bonds (whose share fell by more than 4 pp to 9% in 2006) suffered from lower interest rate levels and rather sluggish supply from corporates.





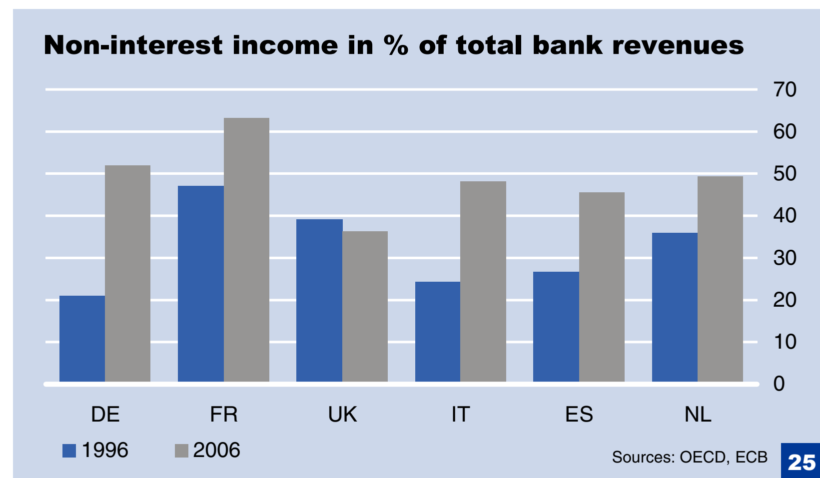
But challenges for the traditional interest-related business of banks arise not only from low volume growth on both the assets' and the liabilities' side (see chart 22 for an illustration of the declining role of deposit funding for banks), but also because of strong margin pressure: first, the level of competition seems to have increased in most European banking markets. As shown in chart 23, the ECB's Bank Lending Surveys indicate a growing importance of competition among banks for the trend of declining credit standards (until very recently). Second, standardisation has led to many traditional products becoming low-margin commodities, even though it enabled the realisation of economies of scale. This is also true for technological progress which made it easier for consumers to compare offers and helped new players to enter the market: the prime example for this is the rapid rise of direct banks which have especially increased banks' refinancing cost as a result of high deposit interest rates and low account management fees. Fourth, in a long-term comparison, interest rate levels are fairly low and limit the scope for banks' pricing policies.

As a result of the continuing pressure, intermediation margins have shrunk considerably over the last few years (see chart 24). The difference between lending and deposit rates in the commercial banking business with households and non-financial corporations,



for example, deteriorated by about half, from 2-4 pp at the start of 2003 to just 1-2 pp by the end of 2007. The main driver of this was in fact the steep increase in deposit rates, caused partly by rising official interest rates, while lending rates were largely held down due to strong competition.

With the share of interest-earning assets declining on both the asset (due to securitisation) as well as the liabilities side (due to low deposit growth) and competition exerting pressure on margins, it does not come as a surprise that the relative importance of interest income in total revenues of banks has shrunk considerably over the last few years: on the other hand, commission and fee income as well as trading revenues rose strongly, more than compensating for the rather modest development in interest income – and driven in part exactly by this shift from “originate and hold” to “originate and distribute”. Consequently, the share of non-interest-related revenues has soared in most EU countries, often close to or even above the 50% mark (see chart 25).



d. Deconstruction & specialisation

A fourth major trend in European banking markets is based on banks’ reviewing their core businesses, identifying competitive advantages as well as relative weaknesses, and in the end concentrating on their identified strengths. Financial institutions follow similar developments in other industries by evaluating which parts of the value chain to cover themselves and which services to procure from external sources. The efficiency gains associated with a higher degree of specialisation and a better division of labour in turn contributed to making the banking sector as a whole more effective and profitable – just as chapter 1 has shown.

Traditionally, banks used to consider a large number of activities “confidential” or indispensable to lose control of and therefore kept them in-house. For instance, they regarded product innovation as much a “core competence” as their relationship management capabilities vis-à-vis clients and the processing of all kinds of transactions, from payments and securities trades to the industrial processing of loans in a “loan factory”.

High share of in-house value added in banking

Rising complexity, the presence of economies of scale and growing international competition, however, are increasingly forcing banks to specialise in what they really do best, divesting from areas in which they have no particular expertise and too small operations. Banks hence concentrate on fewer in-house activities (which they expand),

while extending cooperation with other service providers in non-core businesses. Outsourcing of administrative tasks like IT or accounting – and sometimes customer support processes – has become a major issue since the 1990s, with off-shoring often being taken as a second or even parallel step (incl. the so-called "off-shore out-sourcing"). Nevertheless, banks still have a long way to go in reducing the depth of production from today's high level compared to other industries: the proportion of in-house value added continues to be up at a startling 50%-80%, whereas e.g. in automobiles it has already declined to about 25%, according to some estimates.[32]

Incentives for outsourcing…

The motivation behind banks now moving forward with scaling down the scope of their activities is mainly three-fold:

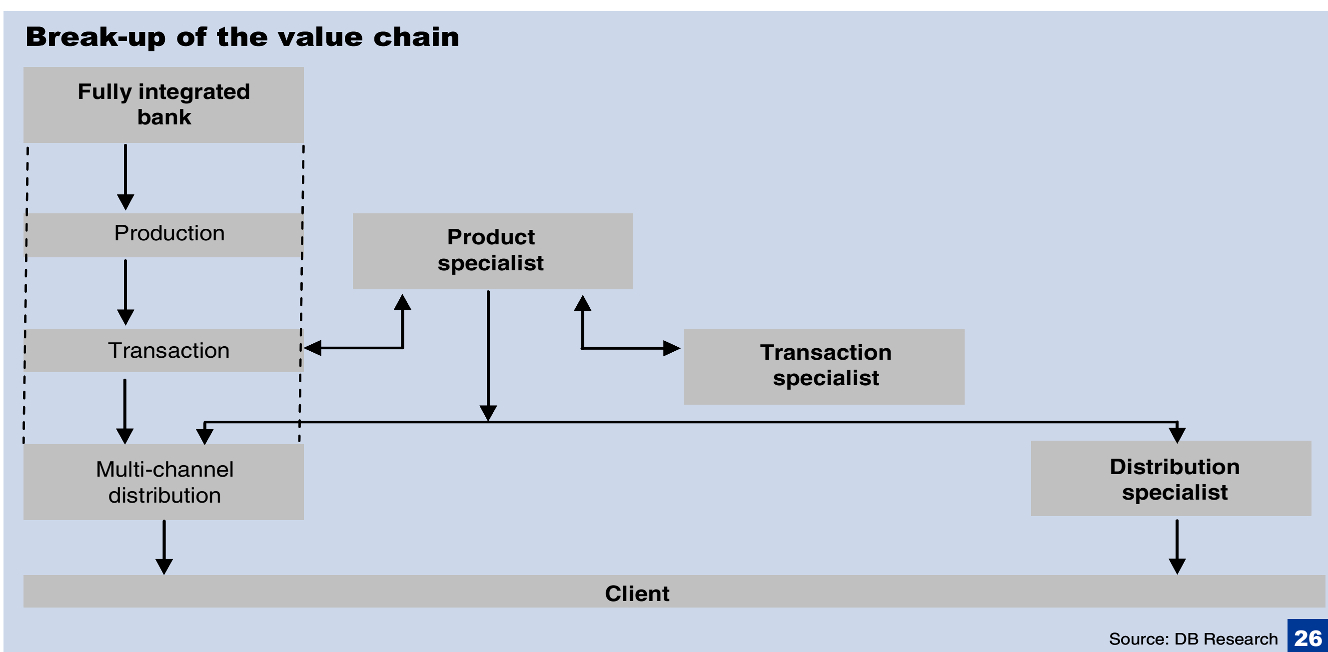
— First, outsourcing improves the division of labour and therefore releases efficiency gains as banks can benefit from deeper specialist knowledge.

— Second, outsourcing is an important way for banks to generate economies of scale, thus lowering costs (something that is especially true in transaction banking). The same applies to specialised suppliers that are more flexible in choosing cost-efficient locations where they can build on differing comparative advantages.

— Third, banks also gain from greater flexibility due to their more focused operations: they are more sensitive and pay more attention to changes in a specific market environment to which they can then adjust more quickly.

Overall, productivity and efficiency improvements are set to be particularly strong in case of rapid technological progress. In the end, production, distribution, and transaction specialists should emerge, alongside some large "universal" banking providers (see chart 26). Examples of this advance in specialisation among European banks include DVAG (distribution) and First Data, Equens, and Xchanging (transaction).

Break-up of the value chain



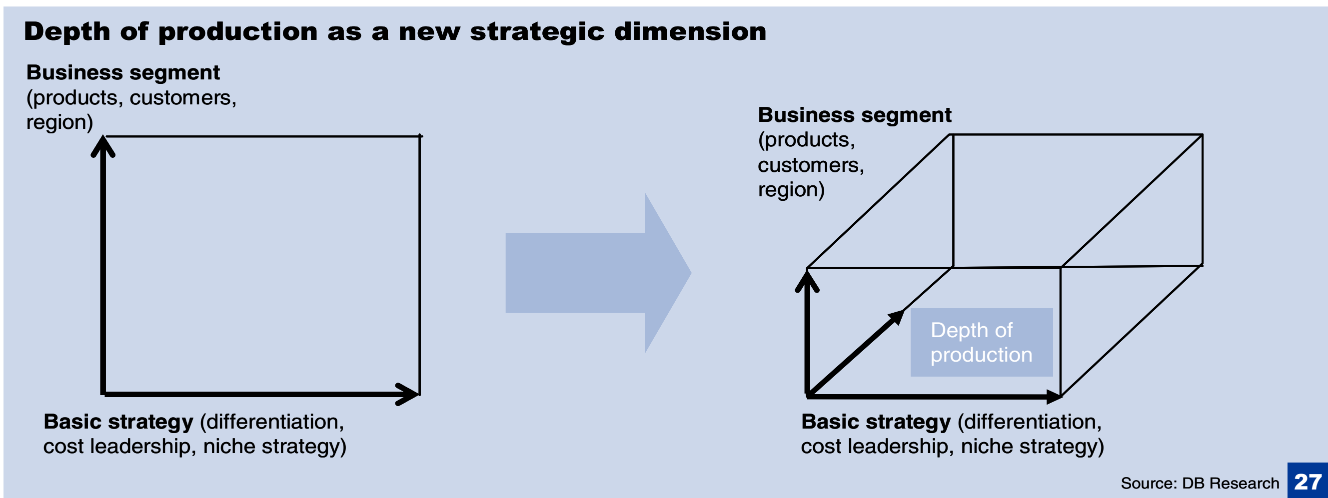
Source: DB Research 26

[32] See e.g. Zerndt (2006) or Disselbeck (2007).

... and risks

Despite the considerable benefits for all banks involved in processes like off-shoring and outsourcing, it is self-evident that such a new model is not without drawbacks, too, and that the conversion of the advantages into hard facts cannot be taken for granted. The most obvious drawback is the loss of direct control over possibly crucial operations and know-how of a bank. Product development, e.g., would seem to be a core competence of most financial institutions and is therefore usually not sourced out. A second point is closely linked to that: execution and reputational risks can arise if contractual partners apply lower standards regarding the quality, efficiency and timeliness of operations, compared with activities that are kept in-house.

Depth of production as a new strategic dimension



Source: DB Research 27

Furthermore, the deconstruction of the value chain goes hand in hand with two other trends in European banking markets: industrialisation and customisation as well as the integration of infrastructure.

Standardisation and commoditisation

Without the ongoing standardisation and commoditisation of basic products and services like a current account, consumer credit, but also foreign-exchange trading, and equally of largely homogenous processes (namely, payment transactions), the specialisation of banks on a particular part of the value chain would hardly have been possible to the extent experienced so far. That is, standardisation allows for automated processing of transactions which in turn frees up human resources that are newly available for individual services (in addition to automation usually being less error-prone and more reliable than personal handling). Yet at the same time, fierce competition and an extensive use of sophisticated IT infrastructure also lead to a decline in profit margins.

Customisation

Banks have been able to compensate for this at least partly by focusing more intensively on individual clients' needs: the fast emergence of ever more advanced and complex products has also strengthened the case for devoting more energy and capacity to the customisation of these new services. Customers far beyond the traditional private wealth and asset management segment increasingly rely on a thorough analysis of their financial position as a consequence of growing income and wealth. They will probably show stronger demand for more comprehensive – and possibly independent – advisory, especially regarding tailor-made (structured) products, where margins are more favourable for banks.

Integration of infrastructure

The other condition to be fulfilled for specialisation to have maximum effect – the integration of infrastructure – is also making substantial progress. Political flanking of industry efforts has generally been welcome, although there have been instances in which insufficient regard was given to market principles.

The establishment of SEPA, i.e. the establishment of a pan-European infrastructure and the harmonisation of rules concerning cross-border payment transactions in Europe so as to make them as easy as at the national level, is broadly based upon two components: on the political side, the PSD provides the necessary legal framework and will be implemented by all member states by November 2009. The European banking industry, on the other hand, has made the first SEPA transactions now officially available as of January 28, 2008, after having set standards for payment instruments as well as for clearing and settlement via the EPC (European Payments Council). The necessary investments in platforms and processes (which were sizeable in many cases) have already induced some banks to consider disposing off their respective activities – which other banks or pure specialists (e.g. Automated Clearing Houses, ACH) have taken over. Thus, the integration of Europe's financial markets will benefit not only consumers, but also be an additional impetus for banks to realign their scope of activities and to concentrate on their core advantages. The resulting efficiency gains will then continue to be a driver for higher bank profitability in the coming years, as did the improvements of the last decade.[33]

4. Conclusion

Notwithstanding a moderate reversal as a result of recent market turmoil, European banks have achieved substantial improvements regarding their profitability and efficiency levels since the beginning of the 1990s. While this is partly due to macroeconomic developments, trends within the sector have contributed as well. Operating in a highly dynamic environment of globalisation, regulatory change and technological progress, banks in Europe have risen to these challenges:

1. They have grown in size to take advantage of economies of scale and keep up with rising demand for "big ticket" transactions from their clients. M&A complemented organic growth, signifycantly reducing the number of banks and leading to higher market shares of the remaining institutions.
2. EU banks became more international than ever, expanding into foreign markets both in Europe and beyond. The majority of revenues of the largest European banks now stems from outside the traditional home market – a true novelty. Still, there is considerable scope for further cross-border integration and domestic banks continue to dominate national markets to a large extent.
3. Links between banks and capital markets are now much more intense than a decade ago as credit institutions have fundamentally adjusted their business models and turned increasingly from purely balance-sheet-based banking towards a more active approach with regard to credit risk management, called the "originate and distribute" model.

[33] A recent study conducted on behalf of the EU Commission estimates potential benefits from SEPA to reach volumes in the three-digit billion euro range over the next six years, accruing mainly to customers, but also to banks (see Capgemini (2008)).

4. Banks in Europe have refocused their business activities, trimmed them in scope and depth to realise gains from specialisation, a more advanced division of labour and of economies of scale. Substantial parts of the value chain have been sourced out, while others have been strengthened by also taking on responsibility for the provision of services for other financial institutions.

As there are good reasons for most of these trends and banks still lag somewhat behind other industries, we expect consolidation, internationalisation and specialisation to certainly continue in the years to come. On the other hand, financial market turbulences that were triggered by deteriorating valuations of securities backed by US mortgage loans will reduce revenues from securitisation for a number of years. Nonetheless, the underlying trend towards greater convergence of traditional commercial banking and capital markets remains intact and the banks' role will continue to shift from asset intermediation to risk intermediation.

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

Selected literature

Al-Sharkas, Adel A., M. Kabir Hassan and Shari Lawrence (2008). The Impact of Mergers and Acquisitions on the Efficiency of the US Banking Industry: Further Evidence. Journal of Business Finance & Accounting, 35 (1-2), pp. 50-70.

Altunbas, Yener, Leonardo Gambacorta and David Marqués (2007). Securitisation and the bank lending channel. ECB Working Paper 838.

Capgemini (2008). SEPA: potential benefits at stake. Researching the impact of SEPA on the payments market and its stakeholders.

Cavallo, Laura, and Stefania P.S. Rossi (2001). Scale and scope economies in the European banking systems. Journal of Multinational Financial Management, 11 (4-5), pp. 515-531.

Deutsche Bundesbank (2007). Bestandserhebung über Direkt-investitionen. Statistische Sonderveröffentlichung 10.

Disselbeck, Kai (2007). Die Industrialisierung von Banken am Beispiel des Outsourcings.

ECB (2007a). EU banking sector stability.

ECB (2007b). EU banking structures.

European Commission (2005). Public Opinion in Europe on Financial Services. Special Eurobarometer 230 / Wave 63.2.

Foltete, Anne, and Arja Kärkkäinen (2007). EU-15 Foreign Direct Investment in the new Member States continues to increase. Eurostat Statistics in focus 106/2007.

Freedom House (2008). Freedom in the World 2008. Selected Data from Freedom House’s Annual Global Survey of Political Rights and Civil Liberties.

Goddard, John, Phil Molyneux and John O.S. Wilson (2004). Dynamics of Growth and Profitability in Banking. Journal of Money, Credit and Banking, 36 (6), pp. 1069-90.

IMF (2007). World Economic Outlook October 2007. Globalization and Inequality.

Investment Company Institute (2007). Investment Company Fact Book. A Review of Trends and Activity in the Investment Company Industry.

IW Consult (2006). Bürokratiekosten in der Kreditwirtschaft.

London Economics (2002). Quantification of the Macro-Economic Impact of Integration of EU Financial Markets.

Morgan Stanley (2005). European Banking Consolidation: IT Synergies and Basel II Will Drive Cross-Border Restructuring.

PricewaterhouseCoopers (2006). European banking consolidation.

Transparency International (2007). Global Corruption Report 2007. Corruption in Judicial Systems.

Zerndt (2006). Die Transformation zur Netzwerkbank. Mit Sourcing Wertschöpfung visionär gestalten. Banken & Sparkassen, 14 (6), pp. 10-13.

Appendix

Return on equity, %

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
DE	5.5	6.0	5.0	6.1	6.1	6.0	5.8	5.3	8.9	5.2	5.0	3.7	2.0	-2.2	3.9	9.4	10.2
FR	5.5	6.1	4.3	0.5	-1.3	1.3	2.4	5.3	8.3	8.0	9.7	10.3	9.6	8.9	12.6	19.1	20.2
UK	7.8	5.0	3.3	12.2	18.2	18.9	17.0	18.1	20.0	21.0	14.9	13.8	11.6	15.4	16.8	16.9	17.5
IT	10.5	9.2	4.9	4.3	1.2	1.2	3.4	1.4	7.0	8.4	10.9	8.4	6.8	7.0	10.6	13.0	16.8
ES	9.9	9.3	8.1	1.3	6.3	7.1	7.6	8.4	8.9	9.0	8.8	8.2	8.0	7.6	15.1	17.1	20.3
NL	8.3	8.8	9.9	11.1	10.7	11.1	11.7	11.3	10.2	13.0	12.4	11.8	8.6	11.6	13.1	15.0	14.6
SE				0.8	15.7	17.8	19.7	7.8	14.5	12.4	14.8	16.0	7.4	9.5	15.8	19.5	20.4
CH	6.1	6.7	5.7	8.1	5.9	6.9	0.3	4.0	15.0	16.1	14.6	8.7	7.0	9.6	12.6	18.3	14.4
PL				-5.6	1.2	21.6	31.3	22.3	6.8	10.5	10.7	9.8	4.9	5.3	16.5	20.0	21.2
HU					5.2	13.3	15.7	5.9	-22.3	3.3	8.8	12.1	-0.9	13.5	24.9	24.8	21.5
CZ				2.6	1.9	1.1	-4.9	-3.1	-9.7	-18.7	0.8	10.3	11.8	14.1	24.7	24.1	23.5

Sources: OECD, ECB, SNB, DB Research 28

Cost-income ratio, %

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
DE	64.8	65.2	64.5	62.4	60.8	63.8	63.8	64.1	57.6	67.8	68.7	69.9	63.8	72.6	68.9	68.6	65.2
FR	68.3	65.6	66.8	64.8	71.3	65.6	69.9	68.8	67.7	67.6	66.0	62.1	64.7	64.0	66.0	62.0	60.2
UK	65.9	65.7	65.9	63.2	64.1	63.7	62.1	60.9	56.5	54.6	55.5	57.4	60.8	56.8	42.9	41.8	41.0
IT	62.8	63.9	65.6	60.8	68.4	67.6	66.7	68.7	61.0	60.7	56.0	55.4	59.9	60.9	58.1	61.5	59.4
ES	61.0	58.6	60.3	59.7	59.7	63.2	62.2	61.4	60.6	63.1	61.0	55.5	56.7	54.3	55.3	53.9	49.0
NL	68.7	68.0	67.2	66.6	67.1	67.3	67.3	69.2	70.8	67.9	70.5	69.6	70.9	67.2	67.3	67.1	68.1
SE	78.2	120.5	146.5	109.8	81.1	71.6	64.3	79.2	68.7	73.3	66.6	64.3	71.0	64.3	60.1	55.3	54.4
CH	59.3	51.8	52.1	58.6	55.6	56.4	66.1	63.2	52.5	55.0	55.9	60.0	58.9	60.7	60.5	56.7	59.0
PL				48.0	52.8	49.1	51.0	55.0	62.2	63.2	63.2	61.6	63.8	68.3	65.0	61.4	59.3
HU					111.2	113.0	73.5	76.7	115.8	87.0	74.9	64.6	65.3	59.9	56.0	55.2	58.8
CZ				61.5	72.8	81.9	96.9	92.4	98.0	103.9	104.5	75.1	72.5	69.1	62.6	56.9	55.1

Sources: OECD, ECB, SNB, DB Research 29

Structural indicators by country (2006)

Indicator	AT	BE	CH	CY	CZ	DE	DK	EE	ES
Markets:									
Total assets of banks, EUR bn, year-end	790	1,122	1,988	74	115.00	7,123	822	15	2,516
Total assets in % of GDP	306	357	657	512	101	308	374	118	258
Number of bank accounts in millions, year-end	8.2	13.2	NA	1.7	9	90.9	NA	NA	24.8
Number of issued cards with a payment function in millions, year-end	9.3	16.6	10.3	0.9	8.2	120.2	NA	1.6	74.3
Banks per million inhabitants, year-end	98	10	44	436	6	25	35	10	8
Branches per 100,000 inhabitants, year-end	51	43	50	122	18	49	39	18	99
CR-5 concentration ratio	44	84	81*	64	64	22	65	97	40
Revenues:									
Loans to non-banks in % of total assets, year-end	44.2	34.6	40.6	46.7**	45	42.9	54.4	74.0	63.7
Net interest income in % of total operating income	62.1	47.5	28.6	69.7	61.1	48	56.5	66.0	54.5
Net interest margin in % (NII in % of total assets)	1.6	0.90	0.73	1.77	2.38	0.84	1.01	2.29	1.49
Funding:									
Non-bank deposits in % of balance sheet total, year-end	34.1	41.6	43.0	62.6**	67.5	38.7	18.8	49.5	52.5
Profitability:									
ROE after tax in %	22.5	23.3	14.6	14.6	23.5	10.2	14.3	24.4	20.3
ROA after tax in %	0.94	0.71	0.67	0.82	1.23	0.31	0.7	1.67	0.96
Asset quality:									
Non-performing loans in % of total loans, latest date available	2.6	1.8	0.3	NA	4.1	4.0	0.4	0.2	0.6
Efficiency:									
Cost-income ratio in %	61.5	55.8	59.0	47.5	55.1	65.2	53.6	43.0	49.0
Solvency:									
Tier 1 ratio in %, year-end	7.9	8.4	13.9	10.2	9.6	7.7	9.2	8.7	7.4
Foreign banks:									
Share of foreign-owned banks in % of total assets, year-end	19.5	24.9	8.2	30.3	96.9	11.1	20.1	98.5	11.4

* CR-3 ratio; ** 2005

Structural indicators by country (2006)

Indicator	FI	FR	GR	HU	IE	IT	LT	LU	LV
Markets:									
Total assets of banks, EUR bn, year-end	255	5,728	315	94	1,186	2,793	17	840	23
Total assets in % of GDP	153	320	161	104	675	189	73	2,540	140
Number of bank accounts in millions, year-end	13.5	72.1	27.6	8.9	5.9	38.4	8.4	NA	3.6
Number of issued cards with a payment function in millions, year-end	6.3	94	15.1	8.2	8.3	70.9	3.5	1.1	2.1
Banks per million inhabitants, year-end	69	13	6	21	18	14	23	333	12
Branches per 100,000 inhabitants, year-end	30	63	33	32	22	55	26	51	27
CR-5 concentration ratio	82	52	66	54	45	26	83	29	69
Revenues:									
Loans to non-banks in % of total assets, year-end	51.5	33	53.1	60.1	34.1	51	70.9	19.0	68
Net interest income in % of total operating income	59.2	36.8	69.1	67.8	62.3	51.9	68.9	33.3	57.6
Net interest margin in % (NII in % of total assets)	1.33	0.77	2.64	3.82	0.89	1.79	2.12	0.49	2.32
Funding:									
Non-bank deposits in % of balance sheet total, year-end	35	24.8	67.0	50.3	24.5	33.3	50.2	34.3	48.7
Profitability:									
ROE after tax in %	14.4	20.2	16.4	21.5	14.6	16.8	22.8	18.4	26.4
ROA after tax in %	0.93	0.6	0.92	1.43	0.64	0.77	1.06	0.73	1.66
Asset quality:									
Non-performing loans in % of total loans, latest date available	0.3	3.2	5.5	2.5	0.7	5.3	1.0	0.2	0.4
Efficiency:									
Cost-income ratio in %	47.5	60.2	53.8	58.8	45.6	59.4	52.6	40.3	49.9
Solvency:									
Tier 1 ratio in %, year-end	13.0	8.5	9.9	9.4	9.8	7.1	6.6	13.5	8.7
Foreign banks:									
Share of foreign-owned banks in % of total assets, year-end	56.5	11	37.4	56.3	43.2	13.9	76.7	94.6	64.8

Structural indicators by country (2006)

Indicator	MT	NL	PL	PT	SE	SI	SK	UK
Markets:								
Total assets of banks, EUR bn, year-end	31	1,873	190	397	774	35	42	9,652
Total assets in % of GDP	600	355	70	256	253	129	140	506
Number of bank accounts in millions, year-end	0.8	23.5	23.9	20.3***	15.2	2.4	8.2	139.1
Number of issued cards with a payment function in millions, year-end	0.5	31.4	23.8	17.6	13.9	3.1	4.3	164.6
Banks per million inhabitants, year-end	44	21	19	17	22	13	4	7
Branches per 100,000 inhabitants, year-end	27	21	14	53	22	35	22	21
CR-5 concentration ratio	71	85	47	68	58	62	67	36
Revenues:								
Loans to non-banks in % of total assets, year-end	46.2	55.3	50.9	58.1	52.2	61.3	46.2	32
Net interest income in % of total operating income	72.9	50.7	58.1	54.7	52.5	58.7	63.1	63.7
Net interest margin in % (NII in % of total assets)	1.37	1.05	3.04	1.77	1.01	2.19	2.49	1.42
Funding:								
Non-bank deposits in % of balance sheet total, year-end	36.2	42.4	64.2	44.6	23.6	50.3	64.6	28.3
Profitability:								
ROE after tax in %	12.9	14.6	21.2	18.0	20.4	15.0	22.0	17.5
ROA after tax in %	1.02	0.47	1.56	1.01	0.73	0.89	1.27	0.71
Asset quality:								
Non-performing loans in % of total loans, latest date available	2.8	1	9.4	1.3	0.4	NA	3.2	0.9
Efficiency:								
Cost-income ratio in %	30.8	68.1	59.3	53.2	54.4	59.3	54.4	41.0
Solvency:								
Tier 1 ratio in %, year-end	20.8	9.3	12.9	8.1	7.3	8.3	11.2	8.5
Foreign banks:								
Share of foreign-owned banks in % of total assets, year-end	37.3	14.8	65.4	22.3	8.9	28.9	92.3	50.3

*** 2004

Sources: ECB, SNB, IMF 30

EU Monitor
ISSN 1612-0272

Available faster by e-mail:
marketing.dbr@db.com

ECB objectives and tasks:
Price stability vs. lender of last resort
Reports on European integration, No. 52 .... March 26, 2008

The real estate sector in relation to monetary policy
Reports on European integration, No. 51 .... December 20, 2007

Treaty reform: Consequences for monetary policy
Reports on European integration, No. 50 .... October 10, 2007

One Europe, one tax?
Plans for a Common Consolidated Corporate Tax Base
Reports on European integration, No. 49 .... September 25, 2007

Towards a new structure for EU financial supervision
Financial Market Special, No. 48 .... August 22, 2007

Better Regulation in Germany and the EU – Time to see results
Reports on European integration, No. 47 .... August 30, 2007

Euro riding high as an international reserve currency
Reports on European integration, No. 46 .... May 4, 2007

From free trade to deep integration:
Outlook on economic relations between the EU and US
Reports on European integration, No. 45 .... April 18, 2007

All our publications can be accessed, free of charge, on our website **www.dbresearch.com**
You can also register there to receive our publications regularly by e-mail.

Ordering address for the print version:

Deutsche Bank Research
Marketing
60262 Frankfurt am Main
Fax: +49 69 910-31877
E-mail: marketing.dbr@db.com

© Copyright 2008. 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

ISSN Print: 1612-0272 / ISSN Internet and e-mail: 1612-0280