

## **Still Overbanked and Unprofitable? Two Decades of German Banking\***

By Michael Koetter, Groningen, Thorsten Nestmann, Mainz,  
Stéphanie Stolz and Michael Wedow, Frankfurt/M.

### **I. Introduction**

The German financial system is often characterized as unique when compared to other industrialized countries. It is frequently cited as a role-model of a bank-based system, as German banks are second to none in their role as financial intermediaries, both compared over time and across countries (Hackethal (2004)).<sup>1</sup> At the same time, many observers like *The Economist* (2004) view the industry as follows:

“So it is with the well-worn picture of Germany’s banking market: too many banks making too little money.”

Despite the frequent references to the German financial system in the above mentioned line of thought, the literature provides only sparse evidence on market structure and performance. We therefore seek to shed some light on this claim by means of simple data evidence from publicly available sources.

We structure this paper as follows. In section II., we compare the German banking industry to those in three other large economies along two lines: structural characteristics and key performance indicators (KPI). Our data support the above quote of *The Economist*: Despite a high rate of consolidation, German banks are still more numerous (both in absolute and in per capita terms) and less concentrated than in other countries. Further, we find that they are less profitable and that their performance has even deteriorated over time relative to our reference countries.

---

\* This paper represents the authors’ personal opinions and does not necessarily reflect the views of the Deutsche Bundesbank. The paper is the result of a cooperation between the Utrecht School of Economics, the Department of Economics at the University of Mainz, and the Deutsche Bundesbank.

<sup>1</sup> See, for example, *Boot* and *Thakor* (1997) and *Thakor* (1996).

Given the particular three-pillar structure of Germany's banking system, we investigate in section III. whether the bad performance of the German banking industry can be traced back to a single (sub-)pillar. Our results indicate that each (sub-)pillar falls short of the international benchmarks. Since pursued business strategies are specific to each sub-pillar, we analyze next if we can establish obvious links between these different investment and funding strategies to the respective performance of each banking group. A comparison across (sub-)pillars, however, fails to yield such a simplistic relation. Apparently, banking studies need to account more carefully for prevailing differences across banking groups.

## II. International Comparison of German Banking

In this section, we investigate if the German banking industry is (i) over-banked and (ii) performs badly. To put both issues into perspective, we compare the industry to those in three other countries: Italy and France, as other European bank-based economies, and the US, as a market-based economy. Our comparison is based on aggregate OECD data depicted in Table 1 (OECD, 2005). In addition to the levels in 2002, Table 1 also contains long- (1988–2002) and short-term changes (2000–2002) of five structural characteristics and four key performance indicators (KPI).

### 1. Structure

First, we can confirm that Germany is the most densely bank-populated economy compared to the other two European peer countries. However, the number of banks in the US, the casual role-model of a market-based economy, is even larger. In absolute terms, German banks also host more branches compared to France and Italy. But the higher fragmentation of German banking is put into perspective on the basis of per capita terms.

While Germany and the US host the largest number of banks per capita, banks in France and Italy maintain more branches per capita. Thus, the notion that Germany is over-banked based on the high number of banks alone is challenged. On the one hand, the US host both more banks in absolute and per capita terms. On the other hand, while France and Italy have fewer banks in both absolute and relative numbers, these

*Table 1*  
**Structure and Performance: German Banks in International Comparison**

	<i>Germany</i>	<i>United States</i>	<i>Italy</i>	<i>France</i>
<i>A.I: Structure</i>				
<i>Number of banks</i>				
Level	2215	9403	794	951
LT change	-4.29 %	-3.93 %	4.08 %	-5.34 %
ST change	-7.25 %	-2.79 %	-2.02 %	-7.36 %
<i>Number of branches</i>				
Level	35187	n. a.	29829	26110
LT change	-0.77 %	n. a.	6.03 %	0.03 %
ST change	-5.41 %	n. a.	2.86 %	-0.23 %
<i>Banks per capita</i>				
Level	26.9	32.7	13.8	15.0
LT change	-6.07 %	-5.02 %	3.97 %	-5.75 %
ST change	-7.42 %	-3.77 %	-2.26 %	-7.91 %
<i>Branches per capita</i>				
Level	427	n. a.	519	438
LT change	-2.61 %	n. a.	5.93 %	-0.41 %
ST change	-5.58 %	n. a.	2.60 %	-0.82 %
<i>Total assets (billions of Euro)</i>				
Level	5658.8	7047.4	1998.63	3710.37
LT change	9.2 %	4.4 %	8.7 %	5.3 %
ST change	2.8 %	-5.7 %	5.8 %	12.9 %
<i>A.II: Performance</i>				
<i>CI: Cost-income ratio<sup>1)</sup></i>				
Level	63.79 %	56.31 %	59.9 %	64.7 %
LT change	0.12 %	-1.72 %	-0.02 %	-0.6 %
ST change	-3.64 %	-4.03 %	3.4 %	-1.0 %
<i>INC: Non-interest to interest income<sup>2)</sup></i>				
Level	50.76 %	70.31 %	39.3 %	132.9 %
LT change	4.43 %	2.76 %	0.5 %	13.1 %
ST change	-4.69 %	0.59 %	-16.5 %	-7.6 %
<i>NIM: Net-interest margin<sup>3)</sup></i>				
Level	1.39 %	3.42 %	2.4 %	0.9 %
LT change	-3.32 %	1.08 %	-2.2 %	-5.7 %
ST change	3.05 %	1.91 %	1.3 %	-5.6 %
<i>RoA: Return on assets<sup>4)</sup></i>				
Level	0.15 %	1.93 %	0.8 %	0.6 %
LT change	-9.17 %	8.10 %	-2.7 %	1.0 %
ST change	-31.77 %	5.88 %	-20.8 %	-9.0 %

*Source:* OECD (2005). Notes: Changes are compound annual growth rates (CAGR); Levels in 2002; L(ong) T(erm) CAGR: 1986–2002, except France 1988–2002; S(hort) T(erm) CAGR: 2000–2002.  
<sup>1)</sup> Operating expenses over gross income, <sup>2)</sup> Ratio of non-interest to interest income;  
<sup>3)</sup> Net interest margin over total assets; <sup>4)</sup> Profit before tax over total assets.

fewer banks serve their populations by more extensive branching networks compared to Germany.

Second, German banking market consolidation is fierce both in absolute and per capita terms. While France exhibits similar reduction rates, the German bank consolidation wave applies also to branches. Apparently, French bankers did not cut back on branching activities. In fact, Italian bankers even extended it. Since operating costs result primarily from extensive branch networks, cost pressure seem to have been most intense in Germany.

Third, despite this considerable consolidation, the German banking industry remains the least concentrated one in our comparison. Bikker and Bos (2004) report concentration ratios, that is the ratio of aggregated assets of the five largest banks relative to total industry assets (CR5). German banking is the least concentrated with 22 percent while the five largest banks in France command 47 percent of total assets.<sup>2</sup> As discussed in Koetter (2006), the German bank industry therefore still is one of the most fragmented markets among industrialized countries, thereby resembling perfect competition much closer than any other in this comparison.<sup>3</sup>

In sum, market structures differ substantially across countries. In terms of banks, either absolutely or per capita, Germany is more densely populated compared to other European countries. In that sense, the claim by *The Economist* that there are “too many banks” in Germany is correct. Yet, it seems appropriate to put this claim into perspective. First, Germany’s bank density is akin to that of the US, a market-based economy. Second, in terms of branches Italy and France are at least as overbanked as Germany. Third, the German bank industry exhibits one of the the strongest reductions of banks *and* branches recently. Next, we investigate the claim by *The Economist* that German banks make “too little money” by comparing the performance of German banks internationally.

---

<sup>2</sup> Bikker and Bos (2004) report for the US and Italy a CR5 of 23% and 28%, respectively.

<sup>3</sup> The ECB (2005) reports lower transaction and information cost, thus supporting this conclusion.

## 2. Performance

We use four key performance indicators (KPI) that are often used by practitioners, customers, investors and regulators to compare the performance of banks.<sup>4</sup> The first KPI is the cost income ratio (CI), equal to the ratio of administrative expenses to net interest and fee income. Higher ratios are traditionally interpreted to indicate poor cost management. The second KPI is the ratio of non-interest income to interest income (INC). It reflects the growing relative importance of alternative income sources e.g. due to enhanced competition in the traditional lending business. The third KPI is the net interest margin (NIM). It is the difference between interest income and interest expenditure relative to total assets. Declining margins could result from banks' needs to compete against other providers of financial funds.<sup>5</sup> The final KPI is the return on assets before tax (RoA). It measures bank performance in terms of the ability to generate required returns for investors.

In the lower panel of Table 1, most CI ratios range between 55 and 65 percent. In 2002, German banks did not perform any worse than their counterparts in France. But the CI ratio of German banks exhibits a compound annual growth rate (CAGR) of 0.12 percent over the period 1986 to 2002, while France, Italy, and the US managed to reduce their CI ratios. One hypothesis is that higher market concentration implies market power. This could then lead to an inefficient use of resources and, thus, to higher CI ratios. However, we observe that the more concentrated French banking system still performs better in this comparison. Similarly, CI ratios for the US have been substantially lower despite akin bank market concentration. Hence, the relation between market concentration and CI ratios appears to be weak or at least not readily obvious. The pattern suggests that German banks performed poorly and managed to reduce CI ratios only recently.

Regarding the importance of fee income, Table 1 suggests a more uniform tendency of an increasing importance of non-interest income in the long run. Since 1986, the share of non-interest income increased for all countries. The INC ratio in Germany increased considerably by 4.4 percent annually, a growth rate only outpaced by French banks. The latter raised INC by 13 percent annually, reaching the highest INC of all coun-

---

<sup>4</sup> For example, in the stability report of the *Deutsche Bundesbank* (2005).

<sup>5</sup> For example, aggressively priced car financing packages offered by manufacturers (*ECB* (2000)).

tries. US banks relied more heavily on alternative income already in the late 1980s, implying a less pronounced increase of the INC ratio by only 2.8 percent annually. Apparently, the need for income other than interest revenues was more pronounced in France and Germany compared to the US and Italy.

This conclusion is supported by the severe deterioration of net interest margins, NIM, in Germany and France, relative to other countries. NIM in German and French banking are at low levels compared to Italy and the US. Additionally, the margin declined in Germany over the period from 1986, while remaining relatively stable in the US. Apparently, the continuous deterioration of the classical income source renders the need for new lines of business more important than ever and elsewhere to German banks.

Finally, a comparison of both level and development of RoA completes the rather bleak picture of German bank performance. Banks in all other countries perform substantially better in terms of a higher RoA. The sharp decline over the period is unparalleled in this comparison of industries. Apparently, French banks managed to compensate for declining NIM by opening up new sources of income, while US and Italian banks did not see interest rates decline as much as in France and Germany.

In sum, all four KPI consistently indicate that German banks perform worse than Italian and US banks. Only French banks suffer from even higher costs but used non-interest income to raise profitability. Moreover, the data entail no indication that the KPI gap will close between Germany and Italy and the US.

### **III. The Three Pillars of German Banking**

So far we have shown that the German banking system is not more over-banked than other systems, but performs worse. We analyze next if these aggregate results for the system as a whole are driven by a particular (sub-)pillar. Therefore, we first need to understand the Three-Pillar System in German banking. It started to emerge already in the late nineteenth century and has remained a characteristic feature of the German banking system ever since. Universal banks are dominant and account for 75 percent of total assets. By and large, they are allowed to enter any line of business activity. In contrast, specialized institutions conduct only

selected banking operations, either because of regulation or chosen management focus.<sup>6</sup>

Universal banks are categorized into commercial, savings, and cooperative banks, the three pillars in German banking. Commercial and cooperative banks are privately owned. In contrast, savings banks are ultimately owned by the federal, state or local government.

Each of the three pillars can be broken down in sub-pillars. Commercial banks are categorized into large banks (Deutsche Bank, Commerzbank, Dresdner Bank and HypoVereinsbank) and regional banks, while savings banks and cooperative banks are divided into local banks and their respective head institutions.<sup>7</sup> For savings banks, the head institutions are the so-called *Landesbanken* and the DGZ Deka Bank. For cooperative banks, the head institutions are DZ-Bank and WGZ-Bank.

To analyze if aggregate structure and performance characteristics of German banking from the international comparison can be traced back to one particular (sub-)pillar, we discuss next market structure and performance for each of these (sub-)pillars. To this end, we employ monthly Banking Statistics available from the Bundesbank and investigate furthermore the specific business strategies of each (sub-)pillar in terms of their respective balance sheet structure.

### 1. Market Structure and Performance

In Table 2 we depict for both structure and performance measures descriptive evidence for levels as well as for short- and long-term trends. Four issues deserve particular attention with regard to market structure.

First, the savings bank pillar accounts for 36 percent of total assets in the German banking system compared to, for example, 17 percent of large commercial banks. Such a substantial control of the banking system in a large industrialized country by the public sector is unparalleled.

Second, the German banking market is highly fragmented. In line with CR5 ratios reported earlier, no single pillar commands a substantial

---

<sup>6</sup> Most of these few banks engage in real estate finance and are often subsidiaries of universal banks.

<sup>7</sup> In December 2004, Postbank joined the group of large commercial banks. Another sub-pillar consists of branches of foreign banks. As of 2004 there were only 84 such banks with a minuscule market share.

market share. Note, however, that this atomistic market structure is about to change. Large commercial banks and *Landesbanken* were able to constantly expand their market share at annual growth rates of 4.1 and 1.6 percent, respectively. In contrast, smaller institutes from all three pillars stagnated or even lost market shares since 1986. Only after the stock market crash in 2000, the short-term change indicates for the latter two groups indicate some tentative recovery of market shares.

This increase in market shares relates to the third aspect: a remarkable and continuous consolidation wave among German banks since the late 1980s. A compound annual change of the number of banks of -4.1 percent means that the number of banks more than halved since 1986.<sup>8</sup> Notably (local) savings and cooperative banks seem to have borne the brunt of increasing market pressures. The short-term changes for local banks in these two pillars suggest that especially small banks were forced to join resources as to improve efficiency and to fend off potentially threatening economic situations.<sup>9</sup> At the same time, the concentration of cooperative overhead banking activities suggests that this group envisions gains from pooling their activities at the domestic level into fewer central institutes.

Fourth and in line with the observed consolidation, the mean size of banks constantly soared across all pillars. Interestingly, the local cooperatives and regionally active commercial banks have been expanding their mean size above the federal average since 2001. Apparently, local savings bank mergers did not serve primarily the purpose to expand operations through acquisitions. Likewise, comparably low reductions in the number of regional commercial banks suggest that these banks preferred to achieve increases in mean size through internal and organic expansion.

In sum, Germany's three-pillar system is rather heterogeneous in terms of market structure. The system as a whole experienced similar trends, such as consolidation. But individual subgroups reacted markedly differently. Further, low market shares of the (sub-)groups continue to prevail.

In light of these structural trends, we emphasize in the lower panel of Table 2 four stylized facts regarding the performance of Germany's banking groups.

---

<sup>8</sup> In fact, the average number of active banks was 4,628 in 1986.

<sup>9</sup> See Koetter et al. (2006) for evidence that German bank mergers are defensive in nature.



*Table 2*  
**Structure and Performance in German Banking**

	<i>Total</i>	<i>Commercial Banks</i>		<i>Savings Banks</i>		<i>Cooperative Banks</i>	
		<i>Large</i>	<i>Regional</i>	<i>Central</i>	<i>Local</i>	<i>Central</i>	<i>Local</i>
<i>A.I: Structure<sup>1)</sup></i>							
<i>Number of banks</i>							
Level	2,296	4	179	14	501	2	1,446
LT change	-4.1%	-2.1%	2.8%	0.4%	-1.1%	-7.4%	-5.3%
ST change	-5.9%	0.7%	-0.9%	-0.2%	-3.8%	-10.1%	-7.2%
<i>Total assets (in billions of €)</i>							
Level	6,600	1,089	681	1,377	986	194	567
LT change	7.8%	12.8%	8.0%	9.5%	5.6%	5.8%	5.6%
ST change	1.5%	1.5%	3.0%	3.2%	1.2%	-4.5%	2.0%
<i>Mean total assets (in millions of €)<sup>2)</sup></i>							
Level	3,015	266,724	4,091	106,583	2,038	97,122	414
LT change	12.4%	14.4%	5.1%	9.1%	6.8%	14.2%	11.5%
ST change	7.9%	0.8%	8.8%	3.4%	5.1%	6.2%	10.0%
<i>Market share<sup>3)</sup></i>							
Level	n. a.	16.5%	10.3%	20.9%	14.9%	2.9%	8.6%
LT change	n. a.	4.1%	0.1%	1.6%	-2.1%	-2.0%	-2.2%
ST change	n. a.	-0.3%	1.7%	2.3%	0.3%	-8.4%	0.9%
<i>A.II: Performance<sup>4)</sup></i>							
<i>CI: Cost-income ratio</i>							
Level	72.9%	98.7%	73.7%	57.4%	67.5%	86.2%	74.3%
LT change	0.7%	2.2%	0.5%	0.7%	0.5%	3.2%	-0.5%
ST change	-3.0%	-1.3%	-3.4%	-5.6%	-2.5%	9.6%	-3.0%
<i>INC: Non-interest to interest income</i>							
Level	29.8%	63.1%	37.2%	17.0%	22.0%	36.6%	24.3%
LT change	3.3%	3.6%	1.6%	1.7%	4.7%	3.4%	4.4%
ST change	-3.5%	-0.9%	-10.3%	-3.6%	0.2%	23.8%	0.3%
<i>NIM: Net-interest margin</i>							
Level	1.3%	2.5%	2.0%	0.8%	2.4%	0.5%	2.5%
LT change	-6.8%	-10.2%	-6.3%	-4.9%	-5.6%	-9.0%	-5.2%
ST change	0.4%	-2.5%	0.3%	0.3%	2.7%	-14.2%	2.1%
<i>RoA: Return on assets</i>							
Level	0.27%	0.06%	0.61%	0.17%	0.46%	0.07%	0.46%
LT change	-13.4%	-28.2%	-7.9%	-10.3%	-12.2%	-18.8%	-12.8%
ST change	14.7%	-13.5%	25.4%	-1.7%	19.9%	207.6%	45.4%

*Source:* Monthly Banking Statistics of the Deutsche Bundesbank. Notes: Compound annual growth rate: CAGR;

<sup>1)</sup> Levels in 2004; L(ong) T(erm) CAGR: 1986–2004; S(hort) T(erm) CAGR: 2001–2004;

<sup>2)</sup> Measured as business volume; <sup>3)</sup> Relative to total assets of specialized and other institutes and excluding “Kreditbanken” and foreign owned banks; <sup>4)</sup> KPI defined as in table 1; Levels in 2003; L(ong) T(erm) CAGR: 1986–2003, except for RoA 1993–2003; S(hort) T(erm) CAGR: 2001–2003

First, consider mean profitability per pillar and subgroup. Profitability, measured by return on assets (RoA), is low, heterogeneously distributed across groups, and plummeted continuously in the longer run. Only since the crash of stock markets in 2000, RoA recovered significantly. Apart from the time variation, the stylized facts in Table 2 clearly illustrate that especially small banks are comparatively more profitable relative to large institutes within each pillar.

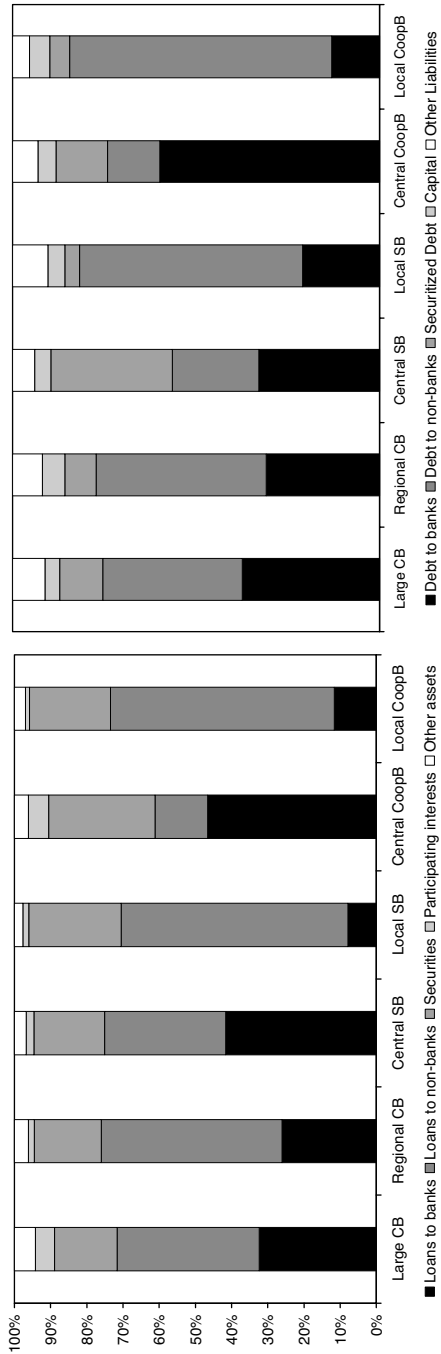
As a second issue, consider the level and the development of net interest margins (NIM). With the exception of *Landesbanken* and central cooperatives, margins are in a similar range. However, the recent trend has been very different for large commercials on the one hand and for local savings and cooperative banks on the other hand. Note also that *savings banks*, who borrow especially from their first tier institutions in the form of interbank loans, display lending-borrowing spreads of the same magnitude as large commercial banks. Thus, the popular argument of a direct loan market distortion cannot be confirmed.

This relates to the third issue, namely operative efficiency as measured by the cost-income ratio (CI). According to this measure, public sector banks appear – in contrast to conventional wisdom – more efficient than their private counterparts. Among private institutions, small banks exhibit a better cost-management capability than the large institutions. In fact, ambitions of the smallest competitors, local cooperatives, appear to be most vigorous. They managed both in the long and short run to improve their CIs (see also Koetter (2005)).

As a final point, we note that, across all groups, fee income gained in the long run a more prominent position in banks' profit and loss accounts. But again we have to acknowledge the fundamental differences across and even within pillars. The burst of the stock market bubble most likely explains recent declines in the relative importance of fee income. However, we hypothesize that balance sheet structures examined next will confirm the notion that banks of all groups and sizes will have to complement income from traditional credit business with new alternatives.

## 2. Balance Sheet Structure

In figure 1, we depict asset (left) and liability structures (right) of the (sub-)pillars as to link performance and respective business strategies. The following facts stand out.



Source: Authors' calculations based on data from the Deutsche Bundesbank; Data as of 2003.

Figure 1: Balance Sheet Structure of German Banks

First, both investment and funding strategies differ considerably already within the commercial bank pillar. Large commercial banks invest more extensively in securities and direct engagements in corporate firms. Equally important, the regional and large commercial banks differ substantially with respect to their funding structure. The former rely largely on deposits by non-banks. In contrast, the latter seem to have retreated from this business, potentially due to increased competition with increasingly narrow lending and borrowing spreads.<sup>10</sup> A lower capital ratio for large commercial banks may be due to the “too big to fail” argument, i. e. that large banks would be bailed out in case of an emergency, while the smaller regional banks cannot count on this public subsidy.

Second, the balance sheet of public sector banks reflects the two tier system. Savings banks operate locally: They lend to private households, enterprises, and municipalities and fund themselves through deposits of non-banks. *Landesbanken* operate as clearing houses: They lend to banks and fund themselves through securities and bank deposits. While local savings banks are mostly active in the domestic retail and deposit market, *Landesbanken* are also active in the international bond and interbank market.

Third, the cooperative and the savings bank pillar exhibit numerous similarities. To start with, the relationship between the local credit cooperatives and their central institutions is similar to that between local savings banks and the *Landesbanken*. Also, both local savings and cooperative banks lend primarily to private households and enterprises and fund themselves through deposits of non-banks. Finally, central institutions of both pillars operate as clearing houses and orchestrate the intra-pillar interbank market.

Fourth, we observe a number of differences between banking pillars. First, the average savings bank is about five times larger than the average credit cooperative (see Table 2). In contrast, the average *Landesbank* is about the same size as central institutions of the credit cooperatives. Second, while both local types of banks are rather similar in terms of funding and investment structure, this does not hold for their respective central institutes. Contrary to *Landesbanken*, central cooperative banks rely much less on financial markets to raise debt. In this regard they resemble much more large commercial banks. These banking groups also differ with regard to investment structures. Central cooperatives engage

---

<sup>10</sup> Note, however, that a full investigation of developments requires a comparison over time.

much less in non-bank lending compared to *Landesbanken*, but rather exhibit the highest investment share in securities in the German banking system.

Fifth, the balance sheets show even and uneven developments also over time (not shown in Figure 1). Total assets increased across all pillars, while traditional lending to non-financial firms declined for all banks between 1986 and 2005. Furthermore, banks from all pillars continuously reduced their retail banking exposure and further diversified their assets. The latter may reflect a disintermediation trend if traditional lending business is crowded out by alternative suppliers of financial funds. The increase of interbank business over time is, however, surprising because interbank loans are low yield assets compared to non-bank loans. The increased use of the interbank market could also signal improved liquidity management. In contrast to the similarities, note that the development of funding through securities has been uneven across banks. While this source of funding has gained in importance for Large Commercial, Cooperative and local Savings banks, funding through securities of Regional and Central Savings Banks declined.

#### IV. Conclusion

This paper analyzes the widely held claim that Germany is overbanked and that German banks perform badly in an international context. The international comparison of banking market structures yields three major conclusions. First, the German banking industry witnessed massive consolidation throughout the 1990s, which especially affected the cooperative and savings bank sectors. The ferocious reduction of banks and branches in per capita terms is unparalleled by any of our peer group countries. Second, despite this merger wave, Germany continues to be more densely bank-populated than France and Italy. Hence, it seems plausible that competitive pressure will fuel further consolidation. Third, bank market concentration remained the lowest relative to this peer group.

In the same time period, key performance indicators deteriorated continuously. CI ratios are among the highest, interest margins have declined since 1986, the share of non-interest income is low, and profitability is poor. At face value, all performance measures point to the conclusion that German banks perform substantially worse compared to French, Italian and US institutes.

Further, this paper analyzes whether the poor performance could be traced back to a specific (sub-)pillar and its respective line of business. Yet, we find that all pillars – to various degrees – perform poorly relative to banks in France, Italy and the US. Differences across (sub-)pillars could not be linked to the pillars' very different business strategies. However, the differences illustrate the necessity to distinguish carefully across pillars when analyzing the German banking market.

In sum, we confirm the claim of *The Economist*: Germany is still overbanked and its banks appear unprofitable in an international comparison.

## References

- Bikker, J. A. and J. W. B. Bos* (2004): Trends in Competition and Profitability in the Banking Industry: A Basic Framework. SUERF Series, 1–62. – *Boot, A. and A. V. Thakor* (1997): Financial System Architecture. Review of Financial Studies 10, 693–733. – *Deutsche Bundesbank* (2005): Financial Stability Review. Frankfurt a.M. – *ECB* (2000): EU Bank's Income Structure. Frankfurt a.M.: European Central Bank. – *ECB* (2005): EU Banking Structures. Frankfurt a.M.: European Central Bank. – *Hackethal, A.* (2004): German banks and banking structure. In J. Krahn and R. Schmidt (Eds.), *The German Financial System*, pp. 387–424. Oxford: Oxford University Press. – *Koetter, M.* (2005): Evaluating the German Bank Merger Wave. Deutsche Bundesbank Discussion Paper Series 2: Banking and Financial Studies 12. – *Koetter, M.* (2006): Measurement Matters – Alternative Input Price Proxies for Bank Efficiency Analyses. Journal of Financial Services Research, 30, 199–226. – *Koetter, M., J. W. B. Bos, F. Heid, J. W. Kolari, C. J. M. Kool, and D. Porath* (2006): Accounting for Distress in Bank Mergers. Journal of Banking & Finance, forthcoming. – *OECD* (2005): Bank Profitability – Financial Statements of Banks 2004. Paris: OECD. – *Thakor, A. V.* (1996): The Design of Financial Systems: An Overview. Journal of Banking & Finance 20, 917–948. – *The Economist* (2004): Cracks in the Pillars. The Economist, April 15th.

## Summary

### Still Overbanked and Unprofitable? Two Decades of German Banking

We analyze by means of descriptive evidence the widely held claims that Germany is overbanked and that German banks perform badly in an international comparison. We find that, despite a major merger wave, Germany continues to be more densely bank-populated than France, Italy, and the US. Measured by cost-income ratios, non-interest income, and return on assets, German bank performance deteriorated continuously, being particularly affected by the economic

slowdown in the very beginning of this century. This relatively poor performance is not driven by one particular banking pillar alone. Instead, all pillars perform badly in international comparison. At the same time, however, Germany's three-pillar system exhibits considerable heterogeneity with regard to market structure and performance not only across commercial, savings and cooperative banking sectors but also within each respective pillar. (JEL G21)

## **Zusammenfassung**

### **Immer noch zu viele Banken mit zu geringem Ertrag? Zwei Jahrzehnte deutsches Bankwesen**

Anhand deskriptiver Evidenz untersuchen wir die Behauptung, dass in Deutschland im internationalen Vergleich zu viele Banken zu geringe Erträge erwirtschaften. Wir stellen fest, dass es trotz der Übernahmewelle in Deutschland im Vergleich zu Frankreich, Italien und den USA immer noch viele Banken gibt. Ferner hat sich die Profitabilität deutscher Banken (gemessen durch die Aufwand-Ertrags-Relation, die Provisions- und Handelserträge und die Erträge bezogen auf die Bilanzsumme) nicht zuletzt aufgrund des konjunkturellen Abschwungs Anfang dieser Dekade über die Zeit noch verschlechtert. Das unterdurchschnittliche Abschneiden im internationalen Vergleich ist nicht auf eine einzelne Säule des deutschen Bankensystems zurückzuführen. Vielmehr erwirtschaften trotz ihrer sehr unterschiedlichen Geschäftsmodelle sowohl Geschäftsbanken als auch Sparkassen und Genossenschaftsbanken (und deren jeweilige Untergruppen) geringe Gewinne.