

# **The Migration of Corporate Finance from Banks To Capital Markets in Germany**

Christian Baier

The Leonard N. Stern School of Business  
Glucksman Institute for Research in Securities Markets  
Faculty Advisor: Ingo Walter  
March 31, 2004

# TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. HISTORICAL PERSPECTIVE ON GERMANY'S BANKING MODEL .....	2
III. PRESSURES FOR SYSTEMIC CHANGE IN THE MIGRATION PROCESS .....	5
<b><i>III.1 Competitive pressures facing non-financial firms and the cost of capital</i></b> .....	5
<b><i>III.2 High risk, low reward – the dilemma of German banks</i></b> .....	6
<b><i>III.3 Penetration of Anglo-American intermediaries</i></b> .....	7
<b><i>III.4 Capital adequacy rules Basle II</i></b> .....	10
<b><i>III.5 Public-sector intermediaries – abolition of the state guarantees</i></b> .....	11
<b><i>III.6 The growth of the institutional investor pools</i></b> .....	12
<b><i>III.7 The launch of the Euro</i></b> .....	14
IV. DEVELOPMENT OF THE INSTRUMENTS ON THE GERMAN CAPITAL MARKET .	15
<b><i>IV.1 The toolkit of external finance: Hypotheses on external finance migration</i></b> .....	15
<b><i>IV.2 Debt financing – bank lending vs. corporate bonds</i></b> .....	16
<b><i>IV.2.1 Bank Lending</i></b> .....	17
<b><i>IV.2.2 Outstanding Debt Securities</i></b> .....	18
<b><i>IV.3 The German equity market</i></b> .....	19
<b><i>IV.4 Alternative funding sources</i></b> .....	21
<b><i>IV.5 Share ownership of financial institutions</i></b> .....	23
<b><i>IV.6 Analysis: Migration in external finance of German corporates</i></b> .....	24
V. ANTICIPATED TRANSFORMATION OF INTERMEDIARIES AND CORPORATIONS	25
<b><i>V.1 Market shares of intermediaries in the migration to capital markets: The new players and the legacy banks</i></b> .....	25
<b><i>V.2 (Re-)Action of the regulatory bodies</i></b> .....	28
<b><i>V.3 Impact on the Hausbank system and corporate governance</i></b> .....	29
VI. SUMMARY .....	30
APPENDIX .....	33
REFERENCES .....	35

## I. INTRODUCTION

The headline of the Wall Street Journal on July 9, 2003 “German Convertible Deal Is Biggest Issue Offer Ever” should not be misinterpreted in the assessment of the European capital markets. Despite this €5.0 billion exchangeable-bond offering that can be switched into shares of Deutsche Telekom, Europe is still dominated by bank financing – a model with a very questionable future.

This research report will analyze the indispensable migration from the dedicated capital system to the Anglo-American fluid capital system. Although this process will take place in most continental European economies, the analysis is focused on Germany. There are mainly two reasons that support this decision: First, the success or the failure of the migration in Germany – as Europe’s largest economy – will have a major impact on the developments on the whole continent. Second, Germany is the European country that is lagging behind the most and that has to undergo the most radical structural reforms in order to satisfy the changing financing needs of its economy. One instance of this is that corporate debt securities in Germany only make up for 4% of the GDP while this ratio amounts to 22%, 27%, and 29% in France, the UK, and the US, respectively.<sup>1</sup>

The first of the report's four parts is dedicated to the historical assessment and the development of the traditional bank-corporate relationships.

The historical discussion in the first part provides the background for the analysis of the pressures for systemic change in the second part.

Part three of the report makes use of quantitative data in order to examine the current and the expected development of the instruments on the German capital market.

---

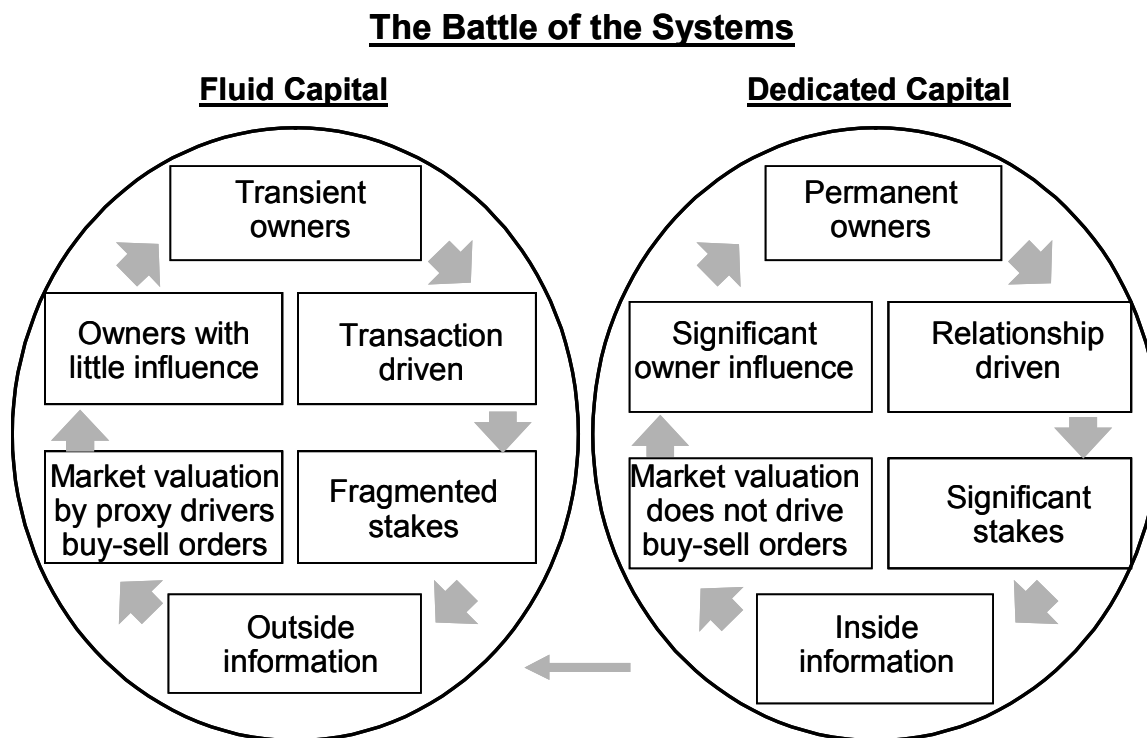
<sup>1</sup> Lehman Brothers European Research. 2003.

The last part describes the anticipated transformation of intermediaries and corporations as well as the (re-)action of the regulatory bodies.

## II. HISTORICAL PERSPECTIVE ON GERMANY'S BANKING MODEL

In order to put the German banking model into a global perspective, it is important to have a look at the two different capital markets models that are available. On the left side of Exhibit 1, the fluid capital system is described that is mostly used in Anglo-American countries and that is characterized by highly mobile capital and a transaction driven environment.<sup>2</sup> Conversely, the dedicated capital system that is shown on the right side has relatively immobile capital and permanent owners as its main feature.

Exhibit 1: The Battle of the Systems<sup>3</sup>



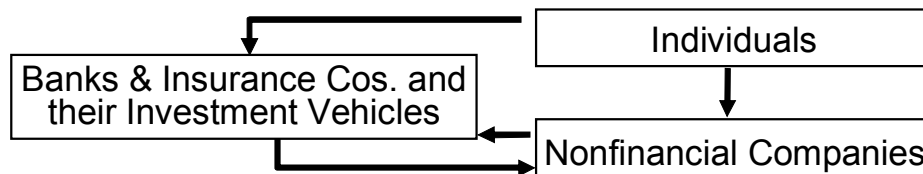
<sup>2</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

<sup>3</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

A result of the history of continental Europe, the dedicated capital system has significant drawbacks in the globalizing world. Therefore, in order to keep up with global competition and the requisites of more rapid growth, the continental European markets are migrating towards the fluid capital system. Among the developed European countries, Germany lags far behind in this migration process and will therefore have to undergo the most significant changes in the next future in order to keep its economy competitive.

The special position of the German capital market is also a result of its corporate control structure that is known as the "bank-based system". The respective control linkages of this structure are shown in Exhibit 2:

**Exhibit 2: Control Linkages in the Bank-Based System<sup>4</sup>**



In this system, the banks play a central 'coordinating' role as they influence the direction of the economy in multiple ways such as in debt and equity financing as well as in corporate control through voting rights and boardroom participation.<sup>5</sup>

First, German corporations cannot rely on a well developed bond market for their financing needs. Therefore, debt financing through banks is of high importance. One instance of this is that in Germany corporate loans currently amount to about 121% of GDP while corporate debt securities only make up for 4% of GDP. In order to mitigate the liquidity risk that results from the difficult access to the fluid capital markets, German corporations maintain a long-

<sup>4</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

<sup>5</sup> Traditionally, German banks are "universal" banks providing both commercial and investment banking services.

standing relationship to one bank ('Hausbank') on which they can rely even in difficult times and with which they run the core of their banking business.<sup>6</sup>

Second, in this system, banks and their investment companies hold large equity stakes in non-financial companies. Due to the underdeveloped German equity market those shareholdings are extremely high in the international context. For example, there is a majority shareholder for 57% of listed German companies while this percentage amounts only to 6% for listed UK companies.<sup>7</sup> The importance of financial institutions in German equity investing can also be seen in some of the investments that Allianz, the financial services conglomerate, still held in 2000: Beiersdorf 38.4%, Munich Re 33.3%, Karstadt 16.5%, E.ON 12.1%, BASF 11.3%, and RWE 11.2%.<sup>8</sup>

Third, in addition to the direct debt and equity stakes, German banks do influence the corporate sector through delegated voting rights ('Depotstimmrecht') and interlocked directorates in the supervisory boards. These important links with their clients give the banks the monitoring rights and (inside) information they need to provide long-term financing.<sup>9</sup> However, this private information creates reluctance of 'outsiders' to invest in corporate bonds and shares and it thereby slows down the development of strong capital markets.

This part has provided the historical perspective of the German banking and capital market and has already shown some of the problematic areas of the system. In the next part, the

---

<sup>6</sup> Quack, Sigrid / Hildebrandt, Swen. 1995. Hausbank or Fournisseur.

<sup>7</sup> Franks, Julian / Mayer, Colin. 2001. Ownership and Control of German Corporations, p. 947: Sample of the 171 and 173 largest German and UK listed companies, respectively.

<sup>8</sup> Allianz AG. 2003. Staying the Course. For an extensive list and the current shareholdings refer to the Appendix.

<sup>9</sup> Quack, Sigrid / Hildebrandt, Swen. 1995. Hausbank or Fournisseur, p. 6; Walter, Ingo / Smith, Roy C. 2000. High Finance in the EURO-Zone, p. 201.

pressures for the migration from the dedicated capital system to the fluid capital system will be analyzed.

### **III. PRESSURES FOR SYSTEMIC CHANGE IN THE MIGRATION PROCESS**

The current market environment puts immense pressure on the German banking and capital markets for an expeditious migration to the fluid capital system. This migration process will be indispensable in order to maintain the competitiveness of Germany's financial and non-financial institutions. The pressures result from legal and institutional changes as well as from changes in the competitive environment.

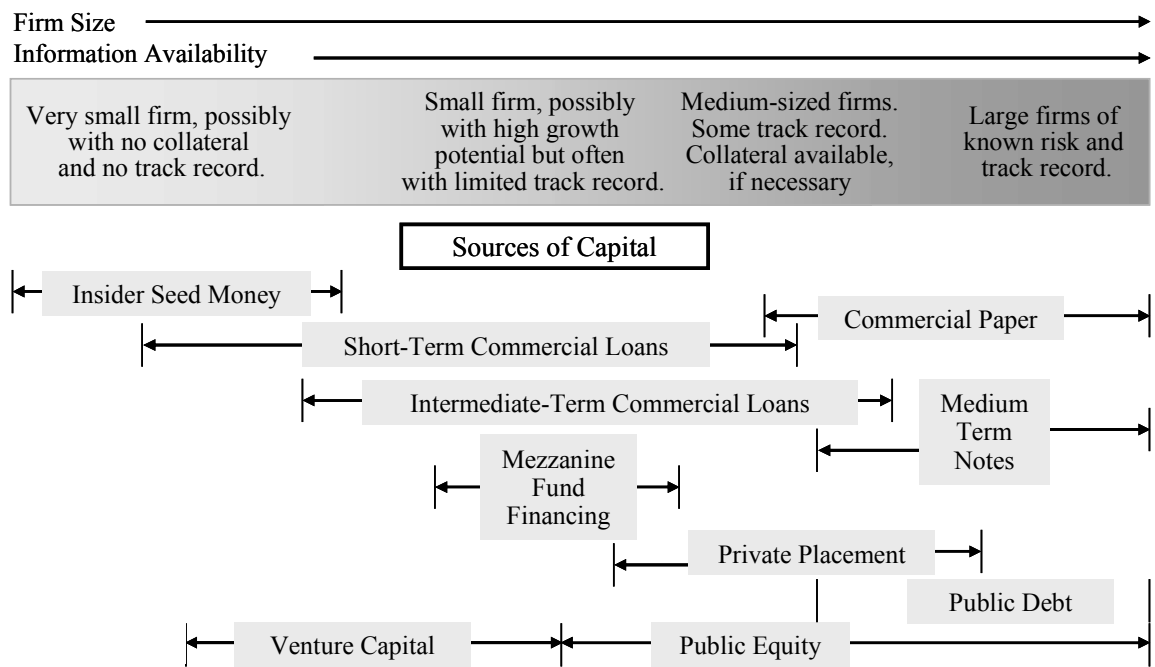
#### ***III.1 Competitive pressures facing non-financial firms and the cost of capital***

With hourly costs of labor that are 13% higher than in the U.S. and 43% higher than in Britain Germany has been relying heavily on its productivity and its innovation.<sup>10</sup> However, those advantages have almost disappeared over the last couple of years. Nowadays, the economy is burdened with a very inflexible labor market and over-regulation. In addition to that, German companies are facing the restrictive credit policies of their formerly generous Hausbanks.

In this market environment, German corporations are turning to corporate finance in an effort to uncover potential efficiency gains in order to maintain their competitiveness. In effect, this process can be described as a move to the right on the firm continuum that is shown in Exhibit 3. Thereby, they are taking advantage of capital markets products that represent more effective solutions in terms of WACC optimization.

---

<sup>10</sup> The Economist. 2002. Is Deutschland AG kaputt?



**III.2 High risk, low reward – the dilemma of German banks**

The crisis of the German banking system is exemplified by the recent discussions of the German government with the banks to create a "bad bank".<sup>12</sup> With corporate bankruptcies and bad-debt provisions at record levels, this creation was intended to help banks offloading their non-performing loans and returning them into a stable financial position. Finally, the idea of the bad bank has been rejected in order not to admit a crisis.

However, the problem of the German banks does not primarily result from the current economic downturn but from structural reasons. The coexistence of private banks with public-sector banks that obtain cheap refinancing through state guarantees has held interest margins

<sup>11</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

<sup>12</sup> The Economist. 2003. Shuffling the pack.



even for medium-sized companies consistently below 1%.<sup>13</sup> Thereby, the profitability has been squeezed out of the system. This marginal profitability is further diminished by having the luxury of 50,000 branch offices in Germany – far more than anywhere else in Europe.<sup>14</sup>

In order to position themselves effectively in the expected consolidation process, German banks need to diversify away from the risk-loaded lending to the fee-based capital markets businesses. This has been the approach of the Anglo-American banks that is described in the next paragraph.

### ***III.3 Penetration of Anglo-American intermediaries***

"[German banks'] migration in corporate advisory to capital markets products such as equity or bond issuance has been sluggish. This gap was filled with might and main by foreign financial institutions."<sup>15</sup> This quote by Rolf E. Breuer, Chairman of Deutsche Bank, reflects the current market sentiment among German banks that are still focused on the high-risk, low reward corporate lending.

In order to analyze the accuracy of this perception of the changing market structure and the penetration of the Anglo-American intermediaries on the German market, the SDC Platinum<sup>16</sup> database was used. It provides issuance and M&A data for the last 20 years and gives the possibility to create league tables in order to analyze the market penetration of domestic and foreign banks. An important caveat for this analysis is that a detailed disclosure of issuance data and investment banking fees has just been initiated gradually over the last 20 years. However,

---

<sup>13</sup> The Economist. 2002. This is tomorrow calling. Financial Times. 2004. Das Kapital - Allianz: The average interest margin in Germany has risen by 25 basis points in 2003 – "a sign that the banking sector starts to act more rationally".

<sup>14</sup> Der Spiegel. 2002. Kassieren und abhauen.

<sup>15</sup> Der Spiegel. 2002. "Alle haben Fehler gemacht".

<sup>16</sup> SDC Platinum is a product of the Thomson Corporation.

the reliability of the available data can be assumed since crosschecks with other, less detailed databases have led to no significant deviations.

The analysis is split-up into IPOs, secondaries, debt and M&A. In order to analyze changes over time, each area is divided into five 4-year brackets for which the number of issues/transactions, the principal/transaction value and the top three underwriters/advisors are analyzed.

As the following table shows, the German IPO market until recently has been dominated by the major German banks that have had long-standing relationships with the issuers. In recent years, however, more and more Anglo-American firms such as Goldman Sachs have obtained important roles in that market. The most probable explanation for this development seems to be the relationships and the placing power that they have built in Germany and the rest of Europe over the last years.

**Table 1: Development of the German IPO Market**

	1984 - 1987	1988 - 1991	1992 - 1995	1996 - 1999	2000 - 2003
<u># of Issues</u>	1	23	37	298	235
<u>Principal amount</u>	\$201.1m	\$3,205.2m	\$3,205.0m	\$17,378.6m	\$12,433.0m
<u>Top 3 Advisors</u>	Deutsche Bank -- --	Deutsche Bank DKW DZ Bank	Commerzbank Deutsche Bank Goldman Sachs	DKW Goldman Sachs Deutsche Bank	Goldman Sachs Deutsche Bank DKW

Table 2 shows the secondary issues that were separated from the primary offering because it could be expected that the major underwriters change significantly. This is because the secondary market is characterized by bigger, more mature issuers that might have better

relationships with the global banks. The analysis, however, has shown that also in this area Anglo-American investment banks do not play a significant role to date.

**Table 2: Development of the German Secondary Market**

	1984 - 1987	1988 - 1991	1992 - 1995	1996 - 1999	2000 - 2003
<u># of Issues</u>	12	74	273	143	118
<u>Principal amount</u>	\$759.1m	\$5,619.1m	\$28,524.2m	\$35,940.7m	\$25,034.3m
<u>Top 3 Advisors</u>	Deutsche Bank ING DKW	Deutsche Bank DKW WestLB	Deutsche Bank DKW WestLB	Deutsche Bank DKW WestLB	Deutsche Bank Goldman Sachs DKW

For the corporate debt markets, the SDC database does not provide enough historical data to assess the trend of Anglo-American underwriters on the German bond market. In general, however, this market is still dominated by the German private banks and the Landesbanken. One of the major reasons for this is that the German debt market mainly consists of issuances from the government (48%) and from financial institutions (47%) where domestic institutions usually play the key underwriting roles.<sup>17</sup> This fact – in combination with longstanding 'Hausbank'-relationships – gives the domestic banks a strong marketing tool in attracting the debt business from corporates.

With their international distribution power and their increased coverage, Anglo-American intermediaries will be able to play a more important role in German debt underwriting in the years to come.

Although the analysis of the German M&A activity is only remotely related to the financing theme it shows a strategically important area for Anglo-American intermediaries to

<sup>17</sup> Bank for International Settlements. 2003. BIS Quarterly Review..

enter the German market. Through their dominance in German M&A they should develop more and more relationships that help them improve their position as underwriters.

**Table 3: Development of the German M&A Market**

	1984 - 1987	1988 - 1991	1992 - 1995	1996 - 1999	2000 - 2003
<u># of Transactions</u>	15	66	72	205	201
<u>Transaction Value</u>	\$6,164.4m	\$34,208.3m	\$41,518.4m	\$266,282.0m	\$237,913.1m
<u>Top 3 Advisors</u>	Morgan Stanley CSFB UBS	UBS Morgan Stanley Lehman Brothers	CSFB JP Morgan Deutsche Bank	Goldman Sachs Deutsche Bank Morgan Stanley	Deutsche Bank Morgan Stanley JP Morgan

In summary the penetration of Anglo-American banks is not as big as the market sentiment has expected. However, due to their good distribution and their focused client coverage, they are gaining momentum. In addition to that, their profitability is still much higher than that of the domestic banks since the former can concentrate on the fee business leaving corporate lending to the domestic players.

### ***III.4 Capital adequacy rules Basle II***

While in other developed countries bank credits make up for 30% of corporate capital needs, German companies rely to 70% on banks.<sup>18</sup> These numbers show how important the banks' credit approval practices are for the German economy. Therefore, the new capital adequacy requirements "Basel II" that will enter into force in December 2006 will have a big impact.

<sup>18</sup> Jenkins, Patrick. 2004. Mezzanine hits the Mittelstand.

The main goal of Basel II is to link banks' capital requirements more closely than in the past to the actual economic risk which they face.<sup>19</sup> In order to operate profitably under the new rules, banks will become more structured in assessing the credit risk of their borrowers. While this appears to be a rational approach, it conflicts somewhat with the Hausbank system. There, loan commitments are rather based on the bank-customer relationship than on risk-adjusted pricing.

In the assessment of the consequences of Basel II, the undercapitalization of German corporations is another important factor. This is especially relevant for Germany's "Mittelstand", the medium-sized, mainly owner-run firms that make up the bulk of the economy. On average, they have a debt-to-equity ratio of 5.0 compared to 2.2 for the same segment in the U.S.<sup>20</sup> Since Basel II obliges banks to weigh this ratio with 15% in their credit risk measurement systems, German corporations will be at a major disadvantage in the international context.

As most banks have started to implement the new rules, the first results for German corporations can already be seen. As a survey of the Ifo-Institute, for example, has shown German banks have become more restrictive in granting loans and the credit terms have become less favorable.<sup>21</sup> This result provides an additional incentive for German corporations to turn to the capital markets to increase their capital base and to optimize their cost of capital.

### ***III.5 Public-sector intermediaries – abolition of the state guarantees***

With a market share of 34% of all bank loans to companies, German savings banks have a very important position in financing the economy.<sup>22</sup> These savings banks do not operate as

---

<sup>19</sup> Deutsche Bundesbank. 2004. Basel II – the new Capital Accord.

<sup>20</sup> The Economist. 2003. Without credit.

<sup>21</sup> N-TV. 2003. Banken verweigern Kredite.

<sup>22</sup> Quack, Sigrid / Hildebrandt, Swen. 1995. Hausbank or Fournisseur, p. 11.

isolated entities but form a network with other group members and centralized refinancing institutions – the so-called Landesbanken.<sup>23</sup> The refinancing costs of these Landesbanken that enjoy top credit ratings are extremely low since the state guarantees to bail out potentially ailing institutions.

These guarantees, however, have been forbidden by the European Commission and will be abolished by July 2005. According to Standard & Poor's, this abolition will shift all but three of the eleven Landesbanken into BBB credit-rating territory.<sup>24</sup> Considering the expected annual increase in refinancing costs of €4-5 billion,<sup>25</sup> this would render unworkable the Landesbanks' current business model that is based on borrowing cheaply in international markets.

The effect of this change on German corporate finance will be that the Landesbanken will not be able to lend as cheaply as before. In consequence, the affected corporations trying to minimize their WACC will have to turn to the capital market in order to stay financially competitive.

### ***III.6 The growth of the institutional investor pools***

Historically, Germany has been lagging behind in the market capitalization of its equity markets (please refer to IV.3). Furthermore, the development of significant institutional investor pools has been hindered by the system of very conservative investors and an unfunded pension system that did to promote investing in the capital markets.

However, driven by the Deutsche Telekom IPO in 1996, Germans have become aware of the benefits (and some of the drawbacks) of capital markets investing. In combination with the

---

<sup>23</sup> Quack, Sigrid / Hildebrandt, Swen. 1995. Hausbank or Fournisseur, p. 13.

<sup>24</sup> Jenkins, Patrick. 2003. German banks disclose merger talks.

<sup>25</sup> A.T. Kearney in WirtschaftWoche. 2004. Kinder der Sparkassen, p. 58.

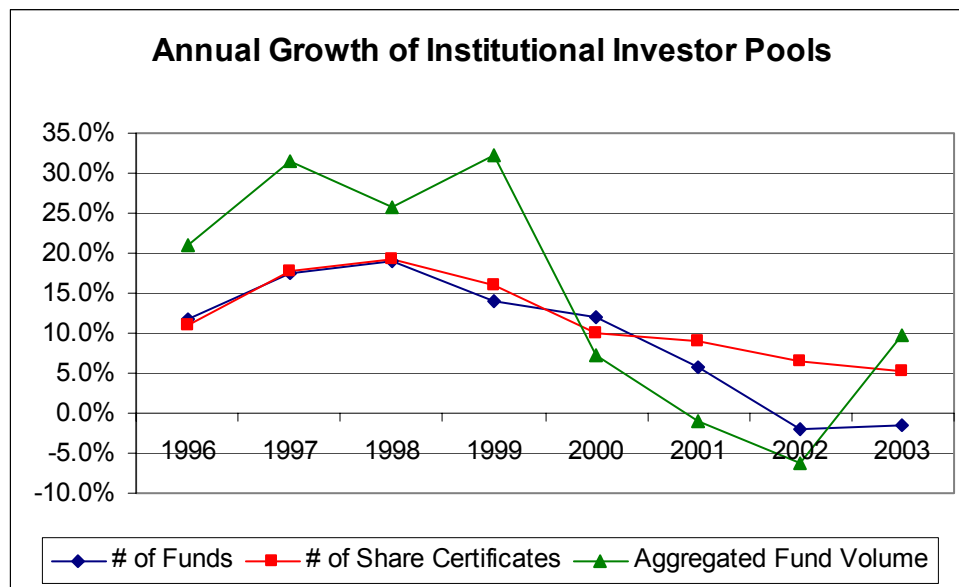
growing unreliability of the public pension system, this has promoted the growth of the institutional investor pools.

Table 4 and Exhibit 4 show the sustainable trend in the growth of institutional demand for capital market investments in Germany. One instance of this is, that even in difficult years like 2001 and 2002, there is a massive inflow, i.e. increase in # of share certificates, into German investment funds.

**Table 4: Growth of the Institutional Investor Pool<sup>26</sup>**

	<u># of Funds</u>	<u>%-Change</u>	<u>Number of share certificates</u> <u>(in millions)</u>	<u>%-Change</u>	<u>Aggregated fund volume</u> <u>(in EUR millions)</u>	<u>%-Change</u>
<u>1995</u>	3,233		6,648.9		288,852.3	
<u>1996</u>	3,610	11.7%	7,374.6	10.9%	349,737.5	21.1%
<u>1997</u>	4,240	17.5%	8,684.3	17.8%	460,317.1	31.6%
<u>1998</u>	5,050	19.1%	10,365.6	19.4%	579,102.0	25.8%
<u>1999</u>	5,757	14.0%	12,036.3	16.1%	766,082.0	32.3%
<u>2000</u>	6,447	12.0%	13,250.2	10.1%	821,211.0	7.2%
<u>2001</u>	6,825	5.9%	14,429.8	8.9%	813,292.0	-1.0%
<u>2002</u>	6,696	-1.9%	15,366.5	6.5%	762,698.0	-6.2%
<u>2003</u>	6,592	-1.6%	16,158.3	5.2%	836,717.0	9.7%

<sup>26</sup> Deutsche Bundesbank. 2003. Kapitalmarktstatistik.



### III.7 The launch of the Euro

As previously described, German corporations are struggling with the ailing banking system and the underdeveloped capital markets. In this context, the launch of the Euro in 1999 has provided major opportunities to satisfy their financing needs on a bigger, more integrated European market for capital.

In the bond markets the effect of the Euro has been the most prominent. It has increased the attractiveness of market-based financing methods by allowing debt issuers to tap institutional portfolios across and beyond the euro area.<sup>28</sup> One instance of this is the threefold increase in the issuance of bonds denominated in Euro whose timing coincided exactly with the new currency's

<sup>27</sup> Deutsche Bundesbank. 2003. Kapitalmarktstatistik.

<sup>28</sup> Galati, Gabriele / Tsatsaronis, Kostas. 2001. The impact of the Euro on Europe's financial markets, p. 1.



debut in 1999.<sup>29</sup> This trend is expected to continue as corporations will replace their maturing bank borrowings with capital market financings. The Bank for International Settlements even expects that about one third of all corporate bank loans will eventually be switched into debt securities. This would generate inflows into the corporate bond markets of about \$2,000 billion.<sup>30</sup>

In the equity markets, the main effect of the Euro has been that investors now focus more on sectors than on countries. Furthermore, their investment universe comprises the whole Euro area instead of just their national market.<sup>31</sup> Therefore, German corporations have to compete for capital with their European peers from the same sector rather than with other domestic firms.

Considering the underdeveloped domestic capital markets, German corporations do benefit from the Euro and the resulting increase in the investor pools. However, they will also have to be aware of the more international competition for funds.

## **IV. DEVELOPMENT OF THE INSTRUMENTS ON THE GERMAN CAPITAL MARKET**

### ***IV.1 The toolkit of external finance: Hypotheses on external finance migration***

Part one and two have analyzed the history of the German banking model and the pressures that are working against the current system. These analyses imply that German banks and corporations need to give up their dedicated capital system and migrate towards the fluid capital system in order to stay competitive.

---

<sup>29</sup> Galati, Gabriele / Tsatsaronis, Kostas. 2001. The impact of the Euro on Europe's financial markets, p. 11. It should be noted that 1999 was the peak of bond issuance in the telecoms sector. As a result of this, the increased issuance cannot solely be attributed to the new currency.

<sup>30</sup> Schatz, Eric et al. 1997. European monetary union and international capital markets.

<sup>31</sup> Smith, Roy C. / Walter, Ingo. 2003. Global Banking, p. 179.

The existence and the current stage of this migration process can best be assessed by analyzing the development of the different financing alternatives, as the 'toolkit' of external finance. In this analysis we would suspect to find the trends that are shown in Table 5 and that are examined subsequently.

**Table 5: Expected Development of External Finance Products**

---

<u>Product area</u>	<u>Expectation</u>
Bank lending	▼
Debt securities (amount outstanding)	▲
Equity securities (market capitalization)	▲
Alternative funding sources	▲
Investor pools	▲
Share ownership of financial institutions	▼

#### ***IV.2 Debt financing – bank lending vs. corporate bonds***

In Germany, banks still provide corporate loans that amount to 121% of GDP.<sup>32</sup> Conversely, corporate debt securities only make up for 4% of GDP while this ratio amounts to 22%, 27%, and 29% in France, the U.K., and the U.S., respectively.<sup>33</sup> In part two, we have described the various legal and competitive constraints that are opposed to the retention of the current way of debt financing in Germany. In our analysis of the actual market data, we would therefore expect a significant shift from bank lending to debt securities.

---

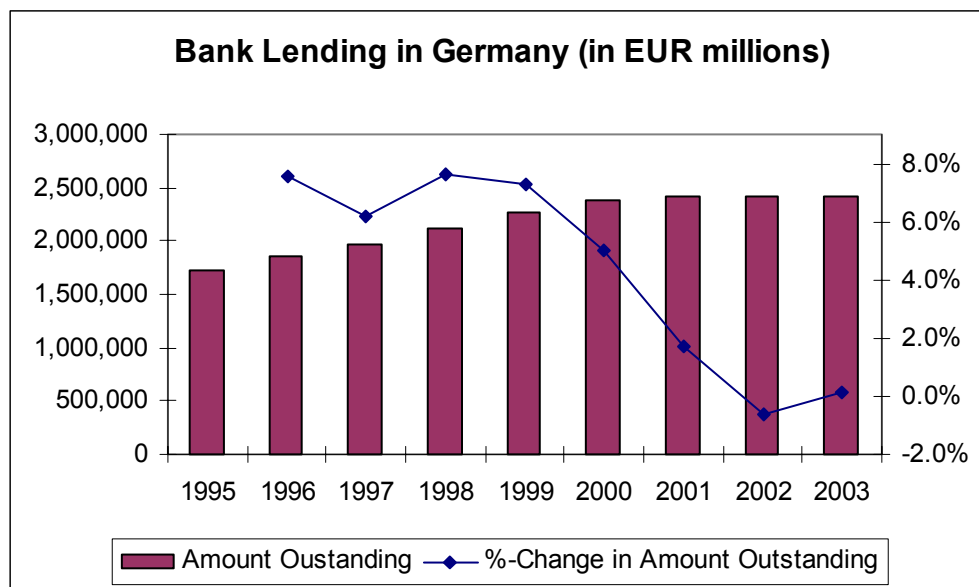
<sup>32</sup> Deutsche Bundesbank. 2004. Bankenstatistik.

<sup>33</sup> Lehman Brothers European Research. 2003.

#### IV.2.1 Bank Lending

Exhibit 5 shows the development of bank lending in Germany in the last decade:

**Exhibit 5: Bank Lending in Germany**<sup>34</sup>



As the external pressures are relatively new or will enter into force over the course of the next few years, the most important parts of this graph are the years from 2000 to 2003. There, a substantial reduction of the growth or even a decrease in the total amount can be observed. This phenomenon is an important sign for the starting migration away from bank lending to capital markets-based financing. Although one of the drivers of this development is the cyclical economic downturn, the most important reasons for this development are structural.

Taking into account all the forces that promote a shift away from bank financing a more important decrease could have been expected. Even by calculating the ratio of bank lending to

<sup>34</sup> Deutsche Bundesbank. 2002. Monatsbericht; Deutsche Bundesbank. 2004. Bankenstatistik.

economic activity (GDP), the result shows an only slightly decreasing importance of the bank lending for German corporations.<sup>35</sup>

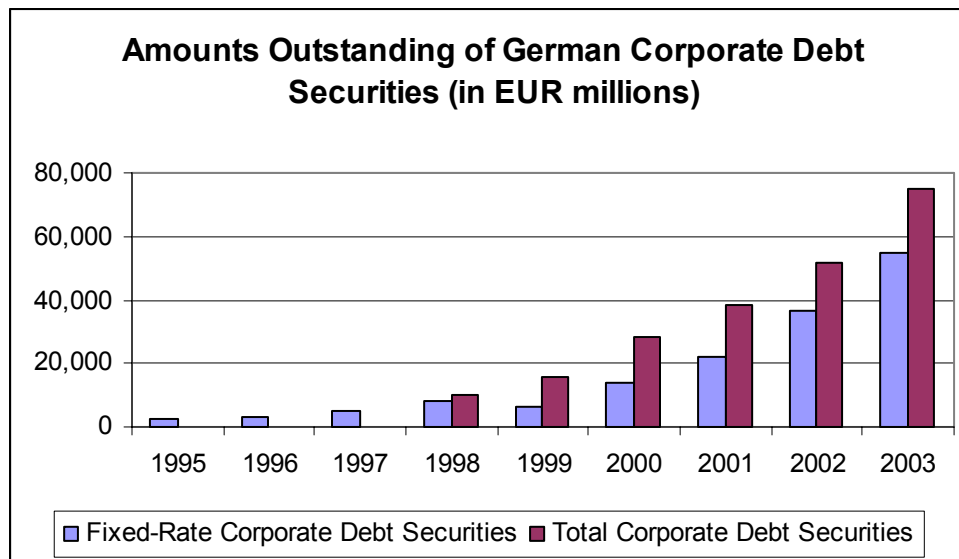
#### IV.2.2 Outstanding Debt Securities

The gathering of the historical data for the amount of outstanding debt securities in the German market has proven to be difficult. The Deutsche Bundesbank for example does only provide corporates-specific data on fixed-rate debt securities. The total amounts could only be found at the Bank of International Settlements which has started to publish a breakdown into corporates and financial institutions in 1998.

The available data (see Exhibit 6) shows a significant increase of outstanding debt securities over the last couple of years. One of the major reasons for this increase has been the favorable interest rate environment in the debt markets. However, more importantly, this trend has been driven by the starting penetration of Anglo-American intermediaries and from the restrictive stance of German banks towards bank lending.

---

<sup>35</sup> See Table A1 in the Appendix for the complete data table.



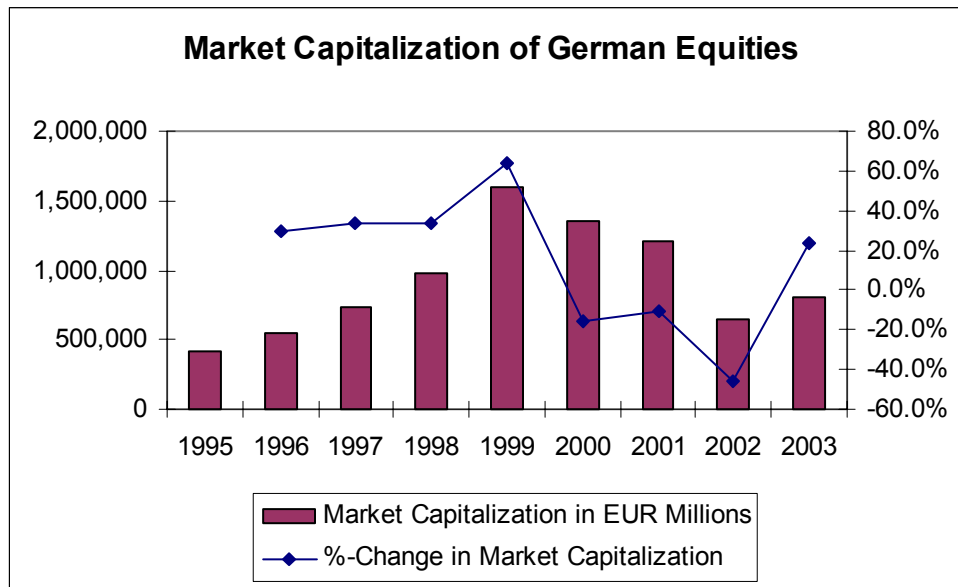
Although the total amount of outstanding debt securities is still only 3% of the bank loans, the migration of debt financing from bank lending towards the capital markets can be recognized.

### *IV.3 The German equity market*

With a capitalization that amounts to 54% of GDP the German equity market lags far behind other developed markets such as the U.S. (136%) or the U.K. (67%). The same relationship holds true when we look at the total number of domestic firms listed on German exchanges – 793 compared to 4,793 and 2,311 in the U.S. and in the U.K., respectively.<sup>37</sup> However, the development during the boom of the late 1990s has shown the potential in the German equity market that is shown in Exhibit 7.

<sup>36</sup> Deutsche Bundesbank. 2004. Kapitalmarktstatistik; Bank for International Settlements. 2003. BIS Quarterly Review.

<sup>37</sup> World Federation of Exchanges. 2003. Newsletter and Statistics.



Currently, the main concern of Deutsche Börse is to restore the trust of the investors into the capital markets that was lost through the failure of its small cap and new technology segment "Neuer Markt". In a first attempt to do that, the major German exchange has introduced two new market segments Prime Standard and General Standard that are characterized by much improved transparency and disclosure requirements.<sup>39</sup>

It remains to be seen if this measurement leads to the much needed trading liquidity for mid-caps and if it opens up the window for a meaningful stream of IPOs. In March 2004, the market sentiment at least seems to be positive and investors are looking forward to the first IPOs since 2002. With a strong pipeline of IPO candidates, such as Postbank, and significant inflows into mutual funds, demand seems to find supply again on the German equity market.

<sup>38</sup> Deutsche Bundesbank. 2003. Kapitalmarktstatistik.

<sup>39</sup> World Federation of Exchanges. 2003. Newsletter and Statistics.

#### *IV.4 Alternative funding sources*

In addition to their migration to bonds and equity instruments, German corporations do adopt innovative financing techniques to satisfy their capital needs. The most important developments in that context take place in the securitization, the private equity and the mezzanine market.

With €6.0 billion of issuance in 2003, German securitization activity was far lower than in most other European countries (e.g., Portugal with €10.1 billion). However, since securitization could help German banks as well as domestic corporations to free-up some capital it is in the interest of the German economy to build a meaningful market in this area. Therefore, important projects have been initiated that feed the hopes for high growth as shown in Exhibit 8.

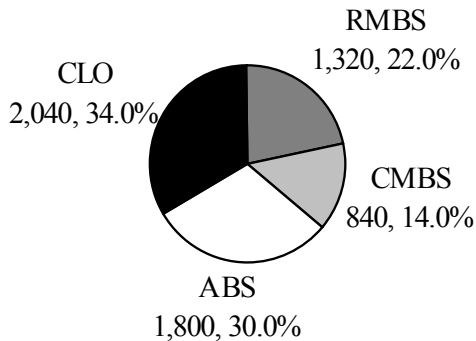
On the one hand, most German securitizations to date have been constructed synthetically, using credit derivatives to avoid corporation tax. In mid-2003, however, the German legislator has changed the tax law to support securitizations that are "true sales" of assets. On the other hand, twelve major banks<sup>40</sup> have created a joint venture with KfW, the state-owned development bank, which will securitize and sell significant amounts of their loans. In 2004, this initiative is expected to issue Collateralized Loan Obligations (CLOs) of around €10 – 11 billion.<sup>41</sup>

---

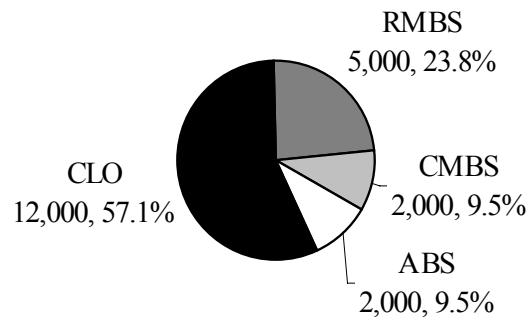
<sup>40</sup> Among those banks are Commerzbank, Deutsche Bank, Dresdner Bank, DZ Bank, and HypoVereinsbank. As the only non-German member, Citigroup is part of the joint venture.

<sup>41</sup> The Economist. 2003. Shuffling the pack.

2003A in EUR millions  
Total Volume: EUR 6.0 billion



2004E in EUR millions  
Total Volume: EUR 21.0 billion



In private equity, the restructuring needs of the German economy and the undercapitalization of the corporations provide entry opportunities for investors. The market appears to be divided between German investors focusing on small and medium-sized transactions and Anglo-American investors taking the lead in large buyouts. Overall, Germany has seen an increase in private equity activity from 59 deals with a transaction value of €6.3 billion in 2002 to 70 deals (€11.6 billion) in 2003. Despite this increase, the main struggle of the financial sponsors is the limited exit opportunities due to the dry IPO market. However, as this market appears to improve, the situation is expected to change in 2004.<sup>43</sup>

With € 6.9 billion of European mezzanine invested in the 12 months ending in June 2003 (€5.1 billion in the previous year), this financing technique is still in the early stage of its

<sup>42</sup> Bachmann, Reto et al. 2004. European Structured Products Outlook 2004.

<sup>43</sup> Ernst & Young. 2004. German Private Equity Activity 2002/2003.



development.<sup>44</sup> However, the growth perspectives for mezzanine appear to be advantageous in the German market. This is because mezzanine improves the company's credit rating while maintaining the ownership structure – a feature that is especially important for the German Mittelstand. These prospects explain the eagerness of German banks such as NordLB and SachsenLB to enter into this market and help their clients to organize their financing structure more efficiently.<sup>45</sup>

#### **IV.5 Share ownership of financial institutions**

In Parts one and two, we have shown that German financial institutions dispose of a high amount of non-core shareholdings and that they are struggling with their profitability and capitalization. Given that there is a growing investor pool that provides the demand for the securities and that most corporate divestments are tax-exempt since 2002, we would expect the institutions to reduce their investments significantly.

In fact, this sell-off of non-core shareholdings can be identified at most of the major financial institutions. One instance of this is Deutsche Bank which reduced its unrealized gains in its investment portfolio from €20 billion in 1998 to € 2 billion in 2003. €12 billion of this reduction directly resulted from the sale of its industrial holdings.<sup>46</sup>

Allianz is another example which is openly promoting its intention to unwind its cross-shareholdings and to sell their non-core investments. As the Table A2 in the Appendix shows, Allianz has been very active in this process over the last few years. Since 2000, it has sold €25 billion of its shareholdings.<sup>47</sup>

---

<sup>44</sup> Initiative Europe. 2003. Mezzanine Monitor – Second Quarter 2003.

<sup>45</sup> Jenkins, Patrick. 2004. Mezzanine hits the Mittelstand.

<sup>46</sup> Der Spiegel. 2003. Deutsche Bank - Das Milliardengrab.

<sup>47</sup> Fromme, Herbert. 2004. Achleitner will mit Beteiligungen jonglieren können.

#### *IV.6 Analysis: Migration in external finance of German corporates*

With the exception of the development in bank lending, all anticipated trends could be verified through the analyses of the different product areas. This result is summarized in the following table.

**Table 6: Actual Development of External Finance Products**

---

<u>Product area</u>	<u>Expectation</u>	<u>Result</u>
Bank lending	▼	►
Debt securities (amount outstanding)	▲	▲
Equity securities (market capitalization)	▲	▲
Alternative funding sources	▲	▲
Investor pools	▲	▲
Share ownership of financial institutions	▼	▼

In summary, the analysis of the quantitative data shows that the share shift is taking place and that it is expected to accelerate in the years to come due to anticipated changes in the market environment. Going forward, this migration will have a high impact on the profitability and the competitiveness of financial institutions and corporations in Germany. In order to thrive in this market, the participants have to adapt to the changes and to anticipate the future market structure. This market structure will be analyzed in the following part of the report.

## V. ANTICIPATED TRANSFORMATION OF INTERMEDIARIES AND CORPORATIONS

### *V.1 Market shares of intermediaries in the migration to capital markets: The new players and the legacy banks*

As it was analyzed in III.3, German banks are dominating bank lending and they still have the big chunk of the underwriting business. However, all the pressures and recent developments that were described previously are impacting the financial intermediaries, favoring those "in the flow" of debt, equity and M&A and harming those cultivating the classic (Haus-) banking relationships. It will be especially the Anglo-American and similarly positioned institutions which will benefit from the anticipated transformation of the German market for corporate finance. This is because they have a competitive advantage in the fluid capital system as opposed to most of the German legacy banks which are mainly focused on the dedicated capital system.<sup>48</sup>

Currently, there are four main groups of players on the German market for corporate finance: 1. Domestic private banks; 2. Savings and mutual banks; 3. Centralized refinancing institutions of the savings and mutual banks (i.e. *Landesbanken* and *Genossenschaftliche Zentralbanken (GZBs)*); 4. Anglo-American and other foreign institutions. However, since the savings and mutual banks transfer all their capital markets relevant clients to the *Landesbanken* and *GZBs*, group 2 can be excluded from the further analysis.

---

<sup>48</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

The following table shows the current strengths and weaknesses of the three groups on the German banking market which will play an important role in the anticipated migration to the capital markets.

**Table 7: Strength and weaknesses of the players on the German banking market**

	<u>Domestic Private Banks</u>	<u>Landesbanken and GZBs</u>	<u>Anglo-American and other foreign institutions</u>
<u>Strengths:</u>	<ul style="list-style-type: none"> <li>• Long-standing client relationships (Hausbank)</li> <li>• Domestic distribution through own investment fund companies</li> <li>• Lending capacity</li> <li>• Interlocked directorates</li> <li>• Strong position in domestic market for equities and debt</li> </ul>	<ul style="list-style-type: none"> <li>• Long-standing client relationships (Hausbank)</li> <li>• Domestic distribution through own investment fund companies</li> <li>• Lending capacity</li> <li>• Access to innovative small players through vast network of savings and mutual banks</li> </ul>	<ul style="list-style-type: none"> <li>• International distribution capacities</li> <li>• Market sensitivity</li> <li>• M&amp;A expertise</li> </ul>
<u>Weaknesses:</u>	<ul style="list-style-type: none"> <li>• Structural inefficiencies</li> <li>• Concerns over cyclical bad-debt provisions</li> </ul>	<ul style="list-style-type: none"> <li>• Structural inefficiencies</li> <li>• Concerns over cyclical bad-debt provisions</li> <li>• Reliance on state guarantees</li> <li>• Limited international distribution capacities</li> <li>• Sometimes, lack of market sensitivity</li> <li>• Lack of M&amp;A expertise</li> </ul>	<ul style="list-style-type: none"> <li>• Low penetration</li> <li>• Sometimes, limited lending capabilities</li> <li>• Difficulties to access conservative Mittelstand companies</li> </ul>

Most of the domestic private banks have added significant capital markets capabilities to their lending-focused business model over the last decade. Thereby, they have built a dominant market position in equities and debt. However, apart from Deutsche Bank, they could not build a significant international presence. As a result of this, they are struggling with high bad-debt provisions arising from the economic slump of the German economy. In recent years the domestic private banks have been tackling their structural inefficiencies and bolstering their

relationships with the most attractive segments of corporate clients. Going forward, those measures should help them maintaining an important position in the German banking market.

Historically, the Landesbanken have been benefiting from the state guarantees that allowed them to lend money to corporations at unrivaled rates. However, with the abolition of these guarantees most of the banks will experience a significant drop in their credit rating, thereby losing the competitive advantage in bank lending. Therefore, their penetration of the corporate market in the coming years will depend on their efforts and positioning in the capital markets business. Currently, it appears that only a few of the institutions, such as Bayerische LB and LBBW, have already undergone the necessary strategic adjustments to succeed in this space.

Although they do not depend on the state guarantees, the situation for the GZBs is comparable to that of the Landesbanken. Their future success with corporate clients also depends on their positioning in capital markets related areas. After numerous reorganizations in recent years, the actual potential of the GZBs in these areas remains to be seen.

The Anglo-American institutions whose business model heavily relies on the fee-based business will be the main beneficiaries of the migration of corporate finance from banks to capital markets in Germany. While in the 1980s and 1990s, they mainly entered into the market through their M&A expertise, they have been gaining momentum in the underwriting business in recent years. Going forward, their international distribution capabilities and their intense coverage of corporate clients will help them to achieve a strong position in Germany.

However, capital markets financing in Germany will remain – more than anywhere else – a complementary product to the traditional bank lending. Therefore, in order to be successful not only in M&A but also in underwriting, foreign institutions will have to be willing to commit significant amounts from their own balance sheet.

In summary, the ongoing migration process of corporate finance in Germany creates numerous additional requirements to the banks' business models. Since not all current players will fulfill these requirements, a concentration process in the market can be anticipated. Since this concentration process is likely to be comparable to what has been seen in the global wholesale and investment banking market, there will probably be about ten relevant players on the German market.<sup>49</sup> Due to their competitive advantage in the fluid capital system, it can further be expected that the most international domestic private banks and foreign institutions with significant lending capabilities will be the most successful.<sup>50</sup>

## ***V.2 (Re-)Action of the regulatory bodies***

The German regulatory bodies have acknowledged that the migration to the capital markets is indispensable for the competitiveness of its domestic corporations and financial institutions. Therefore, the German legislator has initiated numerous commissions and laws that are target to the modernization of the framework of the financial markets.

One of the most important measures – the German Corporate Governance Code – has been introduced in 2002. It has its legal foundations in the also newly created Transparency and Disclosure Law. The aim of the Code is to make Germany's corporate governance rules more transparent to both national and international investors, thus strengthening confidence in the management of German corporations.<sup>51</sup> Among others the Code addresses criticisms such as the inadequate transparency of corporate governance and the inadequate independence of German supervisory boards. In order to adapt the Code to market changes, a Government Commission

---

<sup>49</sup> See Table A3 in the Appendix on Global Wholesale Banking and Investment Banking Market Concentration.

<sup>50</sup> See Table A4 in the Appendix on Global Wholesale Banking and Investment Banking Rankings.

<sup>51</sup> Cromme, Gerhard. 2003. German Corporate Governance Code.

reviews it annually. This Code and the relating law create an important framework that will foster transparency and investors' understanding.

Furthermore, the legislator has reformed the tax treatment of both private equity firms and securitization transactions. For the former a law was introduced that creates legal security and will thereby attract investors who have previously shied away from the German market.<sup>52</sup> In mid-2003, the legislator passed a bill that grants a preferential treatment of the "true sales" of assets in securitization transactions. This law will increase the competitiveness and the international comparability of the German securitization market.

Prior to 2004, hedge funds were not allowed to set up and market their business in Germany. According to the so-called "Investment Fund Modernization Law", this is now possible. As a result of this law, the market for alternative investments is expected to grow to €100 billion within the next five years.<sup>53</sup> Although this development will not have a direct effect on corporate finance, the increased liquidity will make the German capital market more efficient.

In summary, the German regulators have shown their determination to prepare the banks and corporations for the ongoing change of the markets. Most of the introduced measures have got positive feedback from the parties involved. It is now up to the market players to effectuate the internal adjustments needed for a successful transition.

### ***V.3 Impact on the Hausbank system and corporate governance***

Historically, the transparency and the disclosure of German corporations have been quite limited. This can be explained by the fact that most corporations were family owned and that they usually covered their capital needs through their banks. Those banks obtained the relevant

---

<sup>52</sup> BVK e.V. 2003. BVK begrüßt BMF-Schreiben zur Besteuerung von Private Equity-Fonds.

<sup>53</sup> BAI e.V. 'Alternative investments' comprises both hedge fund and private equity investments.

information for their lending decisions through their close relationship with the management and / or their membership in the supervisory board.

Due to the preferential relationship with their Hausbank, corporations were usually provided with the needed liquidity, even in difficult times. However, in the current competitive and regulatory environment (e.g. Basel II), banks are not able anymore to give this "option for liquidity" without compromising their profitability. Corporations therefore have to be aware that they need to replace the Hausbank system in one of two ways. First, this can be done by adequately priced loans from banks which gradually lose their insights through the board memberships. Second, the capital markets provide a wide variety of financing opportunities even for medium-sized companies.<sup>54</sup>

However, transparency and proper monitoring are prerequisites to take advantage of the two, aforementioned financing alternatives. As a result of this, there is both a strong need and a trend among German corporations to organize their corporate governance policies according to international standards. The German Corporate Governance Code described in V.2 is the basis of those changes. One of its major recommendations is the creation of a capital markets oriented disclosure policy. This will create the transparency that is needed to regularly cover the corporations' financing needs on the public market.

## **VI. SUMMARY**

The analysis has shown that global competition and pressures for systemic change are pushing the German dedicated capital system to the Anglo-American fluid capital system.

---

<sup>54</sup> Walter, Ingo / Smith, Roy C. 2000. High Finance in the EURO-Zone, p. 92.



The dedicated capital system has mainly historical reasons and is based on close bank-corporate relationships. Through those relationships with its "Hausbank" German corporations have been able to secure debt as well as equity financing without getting exposed to the capital markets. This setup resulted in a marketplace that was heavily based on the insights of the powerful but hardly profitable banks and that was characterized by underdeveloped capital markets.

In recent years, however, changes in the competitive and legal environment have been promoting the transition towards the market system. As a result of those changes the domestic banking system cannot satisfy the financing needs of the German economy anymore. This has put pressure on companies to reorganize their corporate finance strategy by seeking broader ranges of financing. The growth of the institutional investor pools and the EURO launch have supported this reorganization.

The quantitative analysis of the instruments on the German capital market has proven that the expected transition process is actually happening. This holds not only true for the shift from bank lending to debt securities but also for alternative funding instruments such as private equity or securitization.

In order to be successful in this changing market, intermediaries and corporations have to adapt to the new system. With regard to financial institutions, the analysis has shown that it will be especially the U.S. firms and a handful of capital markets oriented German banks which will improve their market position.

With the support of the regulators, German corporations also try to adjust to the changing system. Namely, they are improving their corporate governance and transparency in order to be able to take advantage of the opportunities that capital markets oriented financing is offering.

In summary, this analysis has shown that Germany has already departed in the transition process from the dedicated capital system to the fluid capital system. Although there are still structural and cultural obstacles the further migration can be expected. If this is executed well, it will increase the financial competitiveness of German corporations as well as financial institutions. Furthermore, it will have a significant impact on the way corporate finance is done in continental Europe.

## APPENDIX

**Table A1: Bank Lending in Germany<sup>55</sup>**

<u>Bank lending to corporate and private households</u>						
<i>(in EUR millions)</i>						
	Total	%-Change	As % of GDP	Short term	Long term	GDP
<u>1995</u>	1,722,760		95.7%	298,570	1,424,189	1,800,980
<u>1996</u>	1,853,112	7.6%	102.1%	315,545	1,537,568	1,815,255
<u>1997</u>	1,968,088	6.2%	106.8%	319,981	1,648,107	1,842,722
<u>1998</u>	2,118,593	7.6%	113.0%	338,094	1,780,498	1,874,094
<u>1999</u>	2,272,536	7.3%	119.0%	328,889	1,943,647	1,909,550
<u>2000</u>	2,386,848	5.0%	121.2%	348,217	2,038,631	1,968,620
<u>2001</u>	2,426,914	1.7%	122.1%	356,702	2,070,212	1,988,420
<u>2002</u>	2,411,607	-0.6%	121.0%	331,936	2,079,671	1,992,750
<u>2003</u>	2,414,466	0.1%	121.4%	317,455	2,097,011	1,988,820

**Table A2: Exemplary Shareholdings of Allianz AG<sup>56</sup>**

<u>Selected Holdings</u> (Allianz + Dresdner)	<u>Beginning 2000</u> (% owned)	<u>End of 2003</u>			
		< 15%	< 10%	< 5%	< 0%
Monachia	48.7				X
Beiersdorf	38.4			X	
Munich Re	33.3	X			
Hypovereinsbank	20.5				X
IKB	19.8				X
Karstadt	16.5	X			
Dyckerhoff	15.4				X
Hauck & Aufhäuser	14.7				X
E.ON	12.1			X	
BASF	11.3			X	
RWE	11.2		X		
Leifheit	10.1				X
Deutsche Börse	8.2				X
Continental	7.8			X	
BMW	6.3			X	
Deutsche Bank	5.6			X	

<sup>55</sup> Deutsche Bundesbank. 2002. Monatsbericht; Deutsche Bundesbank. 2004. Bankenstatistik.

<sup>56</sup> Allianz AG. 2003. Staying the Course.

**Table A3: Global Wholesale Banking and Investment Banking Market Concentration<sup>57</sup>**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Top ten firms</b>												
% Market share	56.0%	64.2%	62.1%	59.5%	55.9%	72.0%	77.9%	77.0%	80.0%	741.0%	71.3%	72.0%
Herfindahl Index	327.8	459.4	434.1	403.0	464.6	572.1	715.9	664.0	744.0	603.0	549.4	595.3
Number of firms from:												
USA	5	9	9	9	8	8	7	8	7	7	7	7
Europe	5	1	1	1	2	2	3	2	3	3	3	3
Japan	0	0	0	0	0	0	0	0	0	0	0	0
<b>Top twenty firms</b>												
% Market share	80.5%	75.6%	78.1%	76.0%	81.2%	93.3%	97.1%	96.3%	97.5%	91.5%	91.0%	93.1%
Herfindahl Index	392.7	478.4	481.4	439.5	517.6	620.9	764.0	709.0	784.0	639.0	591.1	603.4
Number of firms from:												
USA	8	15	15	14	14	13	11	12	8	8	9	9
Europe	11	4	5	5	6	7	8	8	11	11	11	11
Japan	1	1	0	1	0	0	1	0	1	1	0	0

**Table A4: Global Wholesale Banking and Investment Banking Rankings 2003<sup>58</sup>**

Firm Rank 2003	Firm Rank 2002	Global Debt		Global Equity U/W & Private		M&A		Total	Share
		Syndicated Bank Loans	U/W & Private Placements	U/W & Private Placements	M&A Advisory Completed	MTNs Arranged			
1 JPM-Chase-Bank One	1	426,870	345,446	31,728	243,370	32,277	1,079,691	11.5%	
2 Citigroup	2	251,706	449,984	42,911	240,672	28,333	1,013,606	10.8%	
3 Goldman Sachs & Co	3	19,152	225,333	41,541	446,222	26,103	758,351	8.1%	
4 Morgan Stanley	7	10,180	317,365	37,134	275,730	13,500	653,909	7.0%	
5 Merrill Lynch & Co Inc	6	14,699	238,287	50,234	238,723	85,662	627,605	6.7%	
6 Deutsche Bank AG	4	92,974	282,330	19,262	136,940	30,215	561,721	6.0%	
7 Banc of America / Fleet Boston	8	243,630	189,618	13,106	94,303	13,659	554,316	5.9%	
8 Credit Suisse First Boston	5	41,224	290,722	23,614	182,823	8,011	546,394	5.8%	
9 Lehman Brothers	9	15,277	306,152	14,524	163,099	9,100	508,152	5.4%	
10 UBS	10	13,017	243,374	35,459	168,378	-	460,228	4.9%	
11 ABN AMRO	12	48,739	99,043	2,713	38,348	74,344	263,187	2.8%	
12 Barclays Capital	13	78,746	134,953	511	-	32,165	246,375	2.6%	
13 Bear Stearns & Co Inc	11	-	173,081	3,775	39,556	20,896	237,308	2.5%	
14 BNP Paribas SA	14	50,079	81,343	3,717	57,915	-	193,054	2.1%	
15 Royal Bank of Scotland	18	38,747	142,791	-	-	3,511	185,049	2.0%	
<b>Industry Total</b>		<b>2,166,310</b>	<b>4,290,434</b>	<b>412,393</b>	<b>1,639,280</b>	<b>88,482</b>	<b>9,393,241</b>		
<i>Top 5 as % of Total</i>		<i>33.4%</i>	<i>36.7%</i>	<i>49.4%</i>	<i>88.1%</i>	<i>21.0%</i>	<i>44.0%</i>		
<i>Top 15 as % of Total</i>		<i>62.1%</i>	<i>82.0%</i>	<i>77.7%</i>	<i>141.9%</i>	<i>42.7%</i>	<i>84.0%</i>		

<sup>57</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.<sup>58</sup> Walter, Ingo. European Economic Transition, Capital Markets and Investment Banking Competition. 2004.

## REFERENCES

- Allianz AG. 2003. Staying the Course. [www.allianzgroup.com/Az\\_Cnt/az/\\_any/cma/contents/222000/saObj\\_222479\\_03\\_10\\_Roadshow\\_US\\_Final\\_MD\\_PA.pdf](http://www.allianzgroup.com/Az_Cnt/az/_any/cma/contents/222000/saObj_222479_03_10_Roadshow_US_Final_MD_PA.pdf)
- Bachman, Reto et al. 2004. European Structured Products Outlook 2004. In: Lehman Brothers European Structured Finance Research.
- Bundesverband Alternative Investments e.V. – BAI e.V. [www.bvai.de](http://www.bvai.de).
- Bank for International Settlements. 2003. BIS Quarterly Review: International Banking and Financial Market Developments: December 2003. [www.bis.org/publ/qtrpdf/r\\_qt0312.pdf](http://www.bis.org/publ/qtrpdf/r_qt0312.pdf).
- Bank for International Settlements. 2003. The international banking market: Statistical Annex: December 2003. [www.bis.org/publ/qtrpdf/r\\_qa0312.pdf](http://www.bis.org/publ/qtrpdf/r_qa0312.pdf).
- BVK e.V.. 2003. BVK begrüßt BMF-Schreiben zur Besteuerung von Private Equity-Fonds. [www.bvk-ev.de/bvk.php/cat/39/aid/146/title/BVK+begrüßt+BMF-Schreiben+zur+Besteuerung+von+Private+Equity-Fonds](http://www.bvk-ev.de/bvk.php/cat/39/aid/146/title/BVK+begrüßt+BMF-Schreiben+zur+Besteuerung+von+Private+Equity-Fonds).
- Cromme, Gerhard. 2003. German Corporate Governance Code. [www.corporate-governance-code.de/index-e.html](http://www.corporate-governance-code.de/index-e.html).
- Der Spiegel. 2002 "Alle haben Fehler gemacht". October 14, 2002. [www.spiegel.de/spiegel/0,1518,217945,00.html](http://www.spiegel.de/spiegel/0,1518,217945,00.html).
- Der Spiegel. 2003. Deutsche Bank – Das Milliardengrab. February 10, 2003. [www.spiegel.de/spiegel/0,1518,234350,00.html](http://www.spiegel.de/spiegel/0,1518,234350,00.html).
- Der Spiegel. 2003. Kassieren und abhauen. October 14, 2002. [www.spiegel.de/spiegel/0,1518,217943,00.html](http://www.spiegel.de/spiegel/0,1518,217943,00.html).
- Deutsche Bundesbank. 2004. Bankenstatistik: January 2004. [www.bundesbank.de/vo/download/stat\\_beihefte/bankenstatistik012004.pdf](http://www.bundesbank.de/vo/download/stat_beihefte/bankenstatistik012004.pdf).
- Deutsche Bundesbank. 2004. Basel II – the new Capital Accord. [www.bundesbank.de/bank/bank\\_basel.en.php?pf=true](http://www.bundesbank.de/bank/bank_basel.en.php?pf=true)
- Deutsche Bundesbank. 2002. Entwicklung der Bankkredite an den privaten Sektor. In: Monatsbericht: October 2002. [www.bundesbank.de/vo/download/mb/2002/10/200210mb.pdf](http://www.bundesbank.de/vo/download/mb/2002/10/200210mb.pdf)
- Deutsche Bundesbank. 2003. Verhältniszahlen aus Jahresabschlüssen deutscher Unternehmen von 1998 bis 2000. [www.bundesbank.de/stat/download/stat\\_sonder/statso6.pdf](http://www.bundesbank.de/stat/download/stat_sonder/statso6.pdf).

- Deutsche Bundesbank. 2003. Kapitalmarktstatistik: December 2003.  
[www.bundesbank.de/vo/download/stat\\_beihefte/kapitalmarktstatistik122003.pdf](http://www.bundesbank.de/vo/download/stat_beihefte/kapitalmarktstatistik122003.pdf).
- Ernst & Young. 2004. German Private Equity Activity 2002/2003.  
[www.ey.com/global/download.nsf/Germany/Studie\\_PrivateEquity\\_12\\_2003/\\$file/PrivateEquity\\_12\\_2003.pdf](http://www.ey.com/global/download.nsf/Germany/Studie_PrivateEquity_12_2003/$file/PrivateEquity_12_2003.pdf)
- Financial Times Deutschland. 2004. Das Kapital – Allianz. March 19, 2004.
- Franks, Julian / Mayer, Colin. 2001. Ownership and Control of German Corporations. In: The Review of Financial Studies, 2001 Vol. 14, No. 4, pp. 943-977.
- Franks, Julian / Mayer, Colin. 1998. Bank Control, Takeovers and Corporate Governance in Germany. In: Journal of Banking and Finance, 1998 Vol. 22, pp. 1385-1403.
- Fromme, Herbert. 2004. Achleitner will mit Beteiligungen jonglieren können. In: Financial Times Deutschland. March 19, 2004.
- Galati, Gabriele / Tsatsaronis, Kostas. 2001. The impact of the Euro on Europe's financial markets. In: BIS Working Papers No. 100. [www.bis.org/publ/work100.pdf](http://www.bis.org/publ/work100.pdf).
- Initiative Europe. 2003. Mezzanine Monitor – Second Quarter 2003. [www.initiative-europe.com/press/downloads/mezzmonq2\\_03.pdf](http://www.initiative-europe.com/press/downloads/mezzmonq2_03.pdf).
- Jenkins, Patrick. 2003. German banks disclose merger talks. In: Financial Times. December 2, 2003.
- Jenkins, Patrick. 2004. Mezzanine hits the Mittelstand. In Financial Times. March 1, 2004.
- Lehman Brothers European Research. 2003.
- Manager-Magazin. 2003. Finanzplatz Deutschland: Bankenkrise, Börsenflaute: In Frankfurt herrscht Weltuntergangsstimmung. January 1, 2003.
- N-TV. 2003. Banken verweigern Kredite. [www.n-tv.de/5190305](http://www.n-tv.de/5190305)
- Quack, Sigrid / Hildebrandt, Swen. 1995. Hausbank or Fournisseur: Bank Services for Small and Medium Sized Enterprises in Germany. In: Wissenschaftszentrum Berlin für Sozialforschung. [skylla.wz-berlin.de/pdf/1995/i95-102.pdf](http://skylla.wz-berlin.de/pdf/1995/i95-102.pdf).
- Sauve, Annie / Scheurer, Manfred et al. 1999. Corporate Finance in Germany and France: A joint research project of the Deutsche Bundesbank and the Banque de France.  
[www.bundesbank.de/vo/download/vo\\_coporatefinancesummary.pdf](http://www.bundesbank.de/vo/download/vo_coporatefinancesummary.pdf)
- Schatz, Eric et al. 1997. European monetary union and international capital markets: structural implications and risks.

Securities Data Company: SDC Platinum Database

Smith, Roy C. / Walter, Ingo. 2003. Global Banking. 2nd edition. New York: Oxford University Press.

Story, Jonathan / Walter, Ingo. 1997. Political economy of financial integration in Europe: The battle of the systems. In: European Policy Research Unit Series. Manchester: Manchester University Press.

The Economist. 2002. Is Deutschland AG kaputt? December 5, 2002.

The Economist. 2002. This is tomorrow calling. October 17, 2002.

The Economist. 2003. Shuffling the pack. April 24th, 2003.

The Economist. 2003. Without credit. October 30, 2003.

Walter, Ingo / Smith, Roy C. 2000. High Finance in the EURO-Zone: Competing in the new European capital market. London: Prentice Hall.

Walter, Ingo. 2004. European Economic Transition, Capital Markets and Investment Banking Competition. February 11, 2004.

WirtschaftsWoche. 2004. Kinder der Sparkassen. February 26, 2004.

World Federation of Exchanges: Newsletter and Statistics – No. 125, July 2003.  
[www.fibv.com/publications/Focusweb125.pdf](http://www.fibv.com/publications/Focusweb125.pdf)