Reinhard H. Schmidt

On the change of the German financial system

SAFE White Paper No. 61 | July 2019

SAFE | Sustainable Architecture for Finance in Europe
A cooperation of the Center for Financial Studies and Goethe University Frankfurt

House of Finance | Goethe University
Theodor-W.-Adorno-Platz 3 | 60323 Frankfurt

Tel. +49 69 798 33684 | Fax +49 69 798 33910
policy_center@safe.uni-frankfurt.de | www.safe-frankfurt.de

On the Change of the German Financial System*

Reinhard H. Schmidt, Goethe University Frankfurt and Research Center SAFE

July 2019

Abstract

The financial crisis of 2007-08 has stressed the importance of a sound financial system. Unlike other studies weighing the pros and cons of market versus bank-based systems, this paper investigates whether the main elements of the German financial system can be regarded as complementary and consistent. This assessment refers to the idea that there is a potential for positive interaction between different elements in the system that is actually used to make it more valuable to economy and society and more robust to crises. It is shown that the old German bank-based system, where the risk of long-term lending by large private commercial banks was limited by the membership in supervisory boards and strong personal ties between all stakeholders, was a consistent system of well-adjusted complementary elements. After reunification, a hybrid system has emerged where, on the one hand, public savings banks and cooperative banks maintain their role as lenders, but on the other, large private banks have withdrawn from their former dominant role in financing and corporate governance. It is argued that this transition to stronger capital-market and, accordingly, shareholder value orientations has occurred at the expense of consistency.

I. Introduction

1. Questions and propositions

The financial crisis of 2007-2008 and the subsequent sovereign debt crisis once again confirmed the results of a large number of academic studies that stress the importance of a sound financial system for a country's development and growth.[1] However, it is not clear what exactly a sound financial system implies and whether a given financial system is sound or not and whether it is improving or deteriorating. Providing general answers to these questions

* SAFE policy papers represent the authors' personal opinions and do not necessarily reflect the views of the Research Center SAFE or its staff.

[1] For an overview of the earlier empirical work see Levine (1999) and for the most influential theoretical treatment Allen and Gale (2000).

would be beyond the scope of this paper since the ideas are too diverse, even if there are some points of consensus in the literature. The question which this paper addresses is more specific; it investigates whether the German financial system has improved or lost in quality during the past 20 years.

My views on these two issues can be summarized in the following two propositions:

(1) A financial system which is valuable from a social and economic point of view is one that creates overall economic advantages, and in my view this requires that its core elements fit together well and reinforce each other in a positive sense.
(2) Measured by this standard, the German financial system has changed in a negative sense over the past two decades.

In the next section, I will present my own point of view on what constitutes a good financial system in some detail and then, in Sections 3 and 4, apply this standard of assessment to the specific case of the German financial system and its changes over the past 20 years.

2. A terminological clarification

For the purpose of this paper, it is important to clarify the terminology and explain the distinction between the narrow concept of the financial sector and the broader concept of the financial system. In the way I use it[2], the term "financial sector" refers to the totality of financial institutions in an economy; it comprises of banks, non-bank financial intermediaries, financial markets, relevant supporting institutions and regulatory and supervisory institutions. The financial sector as a whole has the economic function of providing financial services to the non-financial sectors of an economy; these services are loans, equity participations, short- and long-term savings and investment opportunities and payment services as well as insurance contracts and other risk management instruments. The analysis of a country's financial sector also includes looking at the internal structures and the business policies and practices of the respective financial institutions.

It is important to understand that the financial sector merely represents the supply side of the market for financial services. The demand in this market comes from the non-financial sectors

[2] In terms of substance, almost all authors who write about financial systems (such as Allen and Gale, 2000) make a similar distinction between a narrow and a broader concept, without however using the same terms I am introducing here following Schmidt and Tyrell (2004).

of an economy, in particular from households and non-financial enterprises. This is what the broader term "financial system" covers: the supply and the demand for financial services and the extent to which supply and demand are adjusted to each other. Thus the concept of the financial sector also covers the financial activities and structures of the non-financial sectors, such as households' savings behavior and non-financial firms' financing patterns as well as the corporate governance of firms that shape their investment and financing decisions.

By way of implication, the notion of the financial system also includes those parts of the financial system which do not manifest themselves in a demand for services provided by the financial sector and in which the financial sector is therefore not involved, such as internal financing of investments by companies, real savings of households, various forms of risk management and the control over the use of capital raised from other economic entities. The most important and relevant part of this control is corporate governance (*Schmidt*/*Tyrell* 2004).

II. What are the characteristics of a sound financial system?

1. Common Views

Most of the answers to the question of what constitutes a sound financial system only relate to the financial sector, as defined above, and not to the entire financial system. The general consensus is that a sound financial sector has to be stable, efficient and innovative.

A stable financial sector is resistant to external shocks and does not cause internal shocks such as bank failures or stock market crashes, and even when such events occur, the risk of contagion in a stable financial sector is low. A financial sector is considered efficient if it fulfills its economic functions of allocating capital and qualitative transformation of assets[3] at low cost and to a large extent. Efficiency indicators include low but at the same time cost-covering interest margins for financial intermediaries, low transaction costs on stock exchanges, and low commissions of investment funds. In an innovative financial sector, new financial instruments and financial methods are rapidly adopted.

[3] The so-called qualitative asset transformation covers the transformation of maturity, lot size and risk by banks and other intermediaries, and capital markets that is usually associated with the allocation of capital.

Sometimes even a large financial sector, measured, for example, by the number of employees and their incomes, or key figures such as total bank assets and market capitalization relative to GDP, is considered as sound. Whether these are meaningful measures of quality of a financial sector – and, in particular, a financial system – can be doubted because size does not always imply a high level of performance. The same argument applies to high profit margins of financial institutions because high profits of banks and other financial service providers can mean that their clients have to pay overly high prices for the services. Equally, the rapid adoption of financial innovation is not generally a valid indicator of financial sector quality, since it may simply be driven by the interests of financial service providers and their staff and not by clients' interests.

Quality indicators relating to services provided by the financial sector to the so-called "real economy" and to society at large are more important. From this perspective, stability means above all a continuous credit supply for companies of all sizes and types that is not affected by crises, as well as stable, non-volatile securities markets. Efficiency means high-quality service offered at the lowest possible price for end customers and a provision of financial services to all segments of the population. The financial sector is regarded as innovative in a positive sense if its services realize the full potential of financial technology and address the real needs of the customers.

Some observers and actors seem to assume that a sound financial system is characterized by as many market elements as possible, i.e., a sound financial system is one that is largely based on the capital market and thus similar to the British and American financial systems, whereas bank-based financial systems are considered to be outdated and simply not competitive.

2. Complementarity and consistency as a standard of assessment

In this article I would like to go beyond the general answers to the question of what constitutes a sound financial sector in two respects: I concentrate on the financial system in the broader sense outlined above and I ask what the underlying causes are why a financial sector and a financial system are sound.

In my view, a sound financial system is one whose main elements are mutually compatible or that work well together, and thus reinforce each other in their positive aspects and mutually weaken the effects of their negative characteristics. In addition to the financial sector, i.e., the financial intermediaries and the financial markets, these main elements are the financing

patterns of firms and the forms in which private households can accumulate and hold wealth as well as corporate governance. Based on this standard, both bank-based and market-based financial system may be sound financial systems – provided they are consistent.

What does the vague expression „working well together" mean? It corresponds to the theoretical concepts of complementarity and consistency. The concept of complementarity is well known from the standard microeconomic theory of production. In this context it refers to the possible situation that the effects of using more of one factor of production increases the marginal productivity of another factor of production – in contrast to the "normal" case of decreasing marginal productivity. However, the concept of complementarity can also be applied to more complicated contexts than that of a neoclassical production function. This generalization is due to Paul Milgrom and John Roberts, who used it in the 1990s for a study of the fundamental difference between "lean production" and "mass production", the respective car production systems of Toyota and General Motors, the world's leading car manufacturers at that time.[4.]

Complementarity is also a key concept in the area of political economy, where it is used to identify and describe "varieties of capitalism" (VoC). As is well known, the VoC literature distinguishes between a Coordinated Market Economy (CME) and a Liberal Market Economy (LME) with the model examples Germany and Japan for the CME type and Great Britain and the United States for LMEs. In this line of research, complementarity is used as an explanation of why some countries are more economically successful than others: Complementarity is a source of economic strength. Furthermore, it helps to explain why partial or piecemeal reforms, that appear to lead to gradual improvements in a given economic system, may be less successful than expected. The reason is that partial reforms can lead to inconsistencies and may therefore be rejected by economic agents and ultimately fail.

The main sources of the VoC literature (*Hall*/*Soskice* 2001) focuses on competition policy, the role of the state in the economy, collective wage bargaining, the vocational training system and the social security system as the most important complementary elements of an economy. However, as in the work of *Milgrom* and *Roberts*, the financial system only plays a

---

[4] *Milgrom* and *Roberts* have developed this concept in a number of publications. A simple illustration can be found in their textbook from 1992. For further development, see *Brynjolfsson*/*Milgrom* (2013).

minor role in the VoC literature. In contrast, *Hackethal*, *Schmidt* and *Tyrell*[5] demonstrated in a number of papers that the concept of complementarity is very well suited for the analysis of financial systems and their development over time.

Theoretical work on the functioning of financial systems (*Allen*/*Gale* 2000 and *Hackethal*/ *Tyrell* 1999) shows complementarity is an important feature of all financial systems. For a deeper and country-specific analysis, it is, however, not enough to look at complementarity, instead, one also has to look at consistency. The reason is that complementarity in itself only implies that there is a potential for positive interaction between the main elements of the system, but not that this potential is also used. Consistency means that these elements take on values that allow this potential to be harnessed. Similar to what is shown in the VoC-literature, the twin concepts of complementarity and consistency can be employed (1) to identify and distinguish real financial systems, (2) to evaluate them, and (3) to understand and even to shape their development. On this conceptual basis it can be shown

1) that there are fundamental differences between the Anglo-Saxon type of a capital-market-oriented financial system and the continental European and Japanese type of a bank-based financial system and what exactly these differences are;
2) that and why it is impossible to make a general statement about which type of financial system, the German and Japanese or the Anglo-Saxon one, is superior. Both can be consistent and thus be sound. However, it is possible to evaluate financial systems on the basis of whether they are also consistent and therefore use the advantages offered by the property of complementarity;
3) that and why complementarity leads to path dependencies and why partial reforms of the financial system may not be successful. On the contrary, the attempt to insert supposedly sound elements of one type into a previously consistent financial system of the other type may have negative consequences since it may lead to inconsistencies.

This model of a sound financial system is used in the next Section to assess the development of the German financial system during the past 20 years.

[5] See *Hackethal*/*Tyrell* (1999), *Hackethal* (2000), *Schmidt* (2004), *Schmidt*/*Tyrell* (2004), *Hackethal*/*Schmidt*/*Tyrell* (2005) and *Hackethal*/*Schmidt*/*Tyrell* (2006). Individual references to these sources are largely omitted in the following.

III. The former German financial system

1. General characterization

In the following section, I look at the financial sector and, at its core, the banking system and the organized capital market, and at the financing patterns of companies, especially those of large corporations, and at their corporate governance as the three main elements of a financial system[6]. However, the isolated characterization of these elements is not sufficient for an assessment of the system as a whole, since it would not show if and how these elements fit together. For this purpose, it is necessary to also ask whether and to what extent these elements are complementary and whether the system as a whole is consistent.

2. Financial Sector

Until the turn of the century, the German financial system was clearly bank-oriented. Banks were the most important element in the financial sector and their total assets exceeded the stock-market capitalization substantially. Banks also dominated the other parts of the financial sector: they largely controlled the stock market and were closely associated with many non-bank financial intermediaries in terms of both capital and corporate policy. The most important investment companies, which managed the large German investment funds, were closely affiliated to banks or banking groups. All banks lent heavily to companies and households largely invested their savings in banks.

At that time, the German banking system still was a so-called three pillar system ("Drei-Säulen-System"), which had existed in Germany for about 100 years. It consisted of three groups of banks, the private commercial banks (including the so-called large banks), the public savings banks (Sparkassen, including the Landesbanken), and the group of cooperative banks. Thus the greater part of the banking business was in the hands of banks which, according to their legal form and their articles of association, were not primarily focused on achieving a high shareholder value. Even taking into account that large private banks have the legal form of a joint-stock corporation, maximizing shareholder value was by no means the overarching aim of their business strategy at the time (*Kotz/Schmidt* 2016).

---

[6] Additional elements that one could include into this analysis are the accumulation and the holding of private wealth by households, public finances, the monetary policy of the central bank, the basic structure of financial regulation and the pension system.

On the banks' balance sheets, loans to households and non-financial firms were the most important assets and their most important liabilities were customer deposits. Thus, the banks mainly acted as financial intermediaries.[7] Their involvement in the field of investment banking was still underdeveloped.

3. Corporate finance

As a consequence of the dominance of banks in the financial sector, bank loans were the most important source of external funds for companies of all sizes. The debt-to-equity ratios of companies were high compared to later periods and to many other countries. Moreover, the big banks held significant blocks of shares of large listed companies and typically also held seats in the supervisory boards or advisory councils of client firms. The old system of what used to be called "Germany Inc." ("Deutschland-AG") with its intensive network of capital and personal ties was still intact (*Höpner* 2006). Moreover, at that time close relations, so-called house bank relations, between large German banks and large German companies were still common; and, as has been empirically confirmed by *Elsas* and *Krahnen* (1998), the house banks behaved more like partners than other banks did when their client firms were in a difficult situation.

4. Corporate Governance of large companies

The corporate governance of German companies, especially the large ones, of course met the relevant legal requirements. These include the corporate structure of (large) firms in the legal form of a joint-stock corporation with the strict separation of the executive board and the supervisory board as well as the co-determination both at the corporate and the operational levels. It is remarkable that, according to the opinion of most legal scholars, the German Stock Corporation Act (AktG) stipulates that the management of a company should not only take the interests of shareholders into account but also that of other stakeholders (*Rieckers/ Spindler* 2004) – and this was also the view shared by most top managers at that time.

The core issue of corporate governance is how decision making power is distributed. According to the German Stock Corporation Act the executive board manages the business and the supervisory board monitors, appoints, dismisses and guides the executive board. That makes the supervisory board very influential and this is the reason why its composition is of

[7] The fact that banks are by no means always primarily financial intermediaries is shown by *Allen* and *Santomero* (2001) for the case of US banks. In their paper, *Allen* and *Santomero* compare American and German banks.

paramount importance for the understanding of corporate governance in Germany. About 20 years ago, the way in which most supervisory boards of large companies operated could be described as essentially a fruitful cooperation of three important actors. The shareholders were one group, but only the major shareholders or blockholders and their representatives. The second group was made up of representatives of large banks and insurance companies and the third one of employee representatives. Private retail shareholders as well as institutional investors did not play an important role. With their interest in short-term profits they would rather have destroyed the balance between the three groups of key players.

These three influential groups of players in the governance of large corporations had a common interest in the long-term and stable positive development of "their" companies. Large shareholders usually have a strategic and long-term interest in the preservation of their holdings; banks as the major lenders are more interested in stability and growth than in gaining profits at all costs, because high profits are often associated with high risk and this could endanger the repayment of their loans. Employee representatives are mainly interested in securing jobs and internal career opportunities.

The common interest of those who really had a say on the supervisory board, and thus the mandate given to the executive directors, was not the maximization of the "shareholder value" but maintaining permanent corporate profitability and growth. This created the basis for a cooperation despite the obvious conflict of interest between the three groups. Of course, conflicts existed, but there were kept within limits by generally accepted boundaries and behavioral rules. The fact that the same groups of actors repeatedly met in various supervisory boards within the framework of the "Deutschland-AG" is likely to have promoted cooperative behavior in the management of large companies and in the control of their executives.

In this system of informal governance cooperation, the large banks and their representatives played a central role since their "objective" interests as important lenders were quite similar to those of the employees, while they were most probably closer to the major shareholders in social and ideological terms. This intermediate position made them ideally suited for the role of the central player. Thus, the corporate governance of large German companies also formed a coherent system of complementary elements in itself (*Schmidt* 2004).

5. Complementarity and consistency of the former German financial system

The fact that the German banks were the dominant players in the financial sector allowed them to protect their role and function as firms‘ main financiers by restricting the role of the capital market as a competing source of funding and as a factor in corporate governance; and the fact that they regarded lending to businesses - with long maturities by international standards - as their core business activity complemented their central role in the governance of large joint stock companies. Supervisory board mandates, often also board chairmanship, were a source of information that appeared necessary to keep the risk of long-term loans within acceptable limits, and the substantial equity participations and voting rights of banks made it easy for them to make sure that their interests and expectations were respected by management. Obviously, this in turn made it easy for them to keep financing their large corporate clients even in difficult situations, as one would expect of a house bank.

The leading role of banks in the financial sector and in the corporate control of large non-financial corporations was reflected in the fact that corporate finance was largely provided in the form of long-term bank loans in Germany. Companies could in turn rely on their house banks, which allowed them to pursue longer-term strategies, even if these led to far-reaching changes.

At that time, the capital market did not play an important role as a source of corporate financing and as an instrument of corporate control which would be comparable to the one in Anglo-Saxon countries. In fact, there was no pressure from the capital market for closer attention to the goal of market value maximization. This, in turn, allowed the managers of the companies to pursue long-term and stable growth strategies in the interests of the above-mentioned three groups of governance-relevant actors.

In short, 20 years ago the German financial system was indeed a consistent system of well-adjusted complementary elements. In this respect, it was a sound financial system. One aspect that made the financial system look sound at the time concerned the forms of interaction and demonstrated what is aptly called the „Coordinated Market Economy“ in the literature on the "Varieties of Capitalism": conflicts were rather limited and many relationships were based on longer-term partnerships. This applied equally to the relationships between individual banks and different banking groups, to the relationships between house banks on the one hand and

non-financial companies on the other and to the corporate governance of non-financial companies.

However, this system also had negative sides which should not be overlooked. It used to stifle competition and innovation, and the close cooperative relationships of the key players were accompanied by intransparency and cronyism.[8] Nevertheless, it was rather positive for the German economy as a whole. This was at least true for the period of reconstruction after World War II. Towards the end of the 20th century, the old system started to change and as a consequence this essentially positive assessment became more and more contestable.

IV. Changes in the German Financial System

The consistency of the German financial system of that time brought a certain degree of stability and at the same time led to a certain resistance to reforms. This weakness became apparent 20 years ago. Just think of the oft-cited labelling of Germany as the "Sick man of Europe". The progress of European integration, the intensification of globalization and the associated opening up of the financial markets destabilized the old system. My analysis expands on these changes for the three main elements of the German financial system referred to above.

1. Changes in the financial sector

Structures and behavioral patterns in the financial sector changed rapidly. The rather cooperative relations between banks and banking groups, the "pillars" of the three-pillar system, were increasingly replaced by stiffer competition and serious conflicts. This was mainly due to the fact that interest margins declined significantly and the profitability of the banks, which had previously been regarded as almost guaranteed, was no longer assured. The fact that even the big banks started to experience a revenue problem was a long-term consequence of the German reunification: large American banks with a proven track record in investment banking entered the German market in order to benefit from the post-reunion privatization process in East Germany. When their business opportunities in former East Germany turned out to be way below expectations, they started to challenge the German big banks' position as house banks of the large companies in the West. One of the consequences

[8] And it was not overlooked either. Above all, the German Monopoly Commission has pointed this out repeatedly in its report and called for changes.

was that the large private banks used their political influence to oppose the state guarantees for the savings banks group. They demanded the abolition of these privileges and, finally, they got their demand through which ultimately did not affect the situation of the local savings banks at all, but drastically affected the public regional banks, the Landesbanken.

The big banks were trying — more or less successfully (*Janssen*, 2009) — to transform into investment banks. As a result, they sold most of their formerly significant equity stakes in Germany's large non-financial companies and also withdrew from their supervisory boards. At the same time, they started to restrict corporate lending, distancing themselves more and more from their former role as house banks. In parallel, they changed their business philosophy and adopted the goal of shareholder value maximization.

The big private banks have also repeatedly demanded the privatization of public banks, similarly to what happened in several other European countries at the same time. But this did not happen and the three-pillar structure of the German banking system was maintained. As the big banks increasingly withdrew from their former core business of lending due to profitability reasons and reduced their branch system, the stakeholder-value-oriented savings banks and cooperative banks were able to increase their market share in retail banking and lending to companies alike.

A major change in the financial sector took place at the level of the stock market. Deutsche Börse AG emerged as a private-sector stock exchange operator whose trading volume increased massively. Shortly after 2000 there was a boom in initial public offerings, a rapid rise in stock prices and an increase in the number of German households holding shares. But this upswing in the capital market was short-lived. With this in mind, it would be inappropriate to say that banks have completely lost their previous role as the main element of the financial sector, but that role was decreasing.

2. Changes in corporate finance

Changes in corporate finance have also occurred, but to a lesser extent. Only the really large German companies started to finance themselves more through the capital market. The resulting gap in the overall credit supply of the big private banks was largely filled by the savings and cooperative banks and so these banks increasingly became the house banks for the larger medium-sized companies. It would therefore not be justified to claim that the banks as a group have ceased to be the main source of external corporate finance.

3. Changes in Corporate Governance

The changes that took place at the turn of the century in corporate governance seem to be more substantial. Large corporations in the legal form of a joint-stock corporation started to increasingly act in the interest of their shareholders and turned away from their former stakeholder value orientation. This change was supported by Deutsche Bank, which aspired to become an important investment bank and therefore decided to sell most of its equity investments to loosen the ties to individual companies and to withdraw from almost all supervisory boards.

Around the turn of the century, the federal government set up a government commission to modernize corporate governance, which initiated many important changes. For example, the creation of a Corporate Governance Code and a Corporate Governance Commission responsible for its further development were proposed and implemented and numerous mechanisms of corporate control were strengthened.

4. Causes of change

First of all, the most prominent reasons must of course be mentioned: the European integration, the increasing globalization and the development in the field of information and communication technology. At the turn of the century, the European Union's financial sector policy started to embrace the goal of creating a single European financial market, guided by the capital-market-oriented model of the Anglo-Saxon financial system. This meant a general revaluation of the capital market and, at the same time, skepticism about the traditional structural features of the German financial system. Alliances, as they have played an important role in the public savings and cooperative banks, house bank relationships between banks and companies, the former tight capital and personal links and co-determination, as well as a more cooperative than competitive behavior in the financial system were not compatible with this model. This was not only reflected in numerous EU-wide regulations, but also increasingly shaped the mentality and behavior in the German financial system.

The increasing financial globalization worked in the same direction. It not only put pressure on financial sector players, but also on large non-financial companies to adapt to the expectations of foreign investors and business partners, and it also shaped the discourse on financial practices and policies.

Both factors - European financial market regulation and financial globalization - worked together and reinforced each other[9]. In fact, the intellectual and political „Zeitgeist“ in Germany in the first years of the new century was highly critical of the traditional features of the German financial system.

However, merely referring to the above-mentioned factors, which were in a certain sense external from the German financial system, would not suffice to explain the observed changes. There were also very influential internal impulses for change. In this respect, the reorientation of Deutsche Bank played the central role because the market leader among the major German banks decided to give up its traditional roles in corporate finance and as a house bank as well as in corporate governance. Its top managers wanted to transform the bank into one of the world's leading international investment banks and they were convinced – rightly so – that maintaining privileged relations with individual non-financial companies would not be conducive to the aspired success as a transaction-based investment bank as it would have made it difficult if not outright impossible to sell investment banking products to other companies. According to the leaders of Deutsche Bank, the former strategic focus on lending and the domestic German market did no longer fit to an international investment bank. This is why both business activities were drastically reduced by the former CEOs Breuer and Ackermann. As *Janssen* (2009) describes, the other large banks followed the example of Deutsche Bank.

V. Assessment of changes in the German financial system

1. Structural change or modernization?

It is not trivial to evaluate the changes that have occurred over the last 20 years. They could be interpreted as indicating an imminent system change towards a capital-market-oriented financial system of the Anglo-Saxon type or, alternatively, as a mere modernization of the bank-based system in response to changing circumstances.

The increasing stock market activity and the reduction of the big banks from the financing of large corporate clients and even more so their withdrawal from their formerly strong role in

[9] On the third factor, the changes in the field of information and communication technology, I do not enter here for reasons of space.

the corporate governance of large industrial companies are the main arguments supporting the hypothesis of an emerging switch from the former bank-based to a capital-market-based system of the Anglo-Saxon type and, thus, a structural change. However, there are many counterarguments which rather speak in favor of the modernization hypothesis. First of all, the three-pillar structure of the German banking system has remained unchanged, while in other European countries similar systems have almost completely been abolished at around the same time. Then, the role of *all* banks in the financing of *all* German firms weakened significantly less than that of the big banks in financing large companies (*Behr*/*Schmidt* 2016).

If we look at the changes in corporate governance in detail, there is - despite the retreat of big banks - little evidence in favor of a transition to the Anglo-Saxon model with its pronounced capital market orientation. The fact that bank representatives have resigned from the supervisory boards of large corporations has been offset by an increased presence of former top managers, and most of the legal changes pertaining to corporate governance in the years since 2000 represent a strengthening of the traditional German system and not a turn to a stronger capital market orientation. Most importantly, the legal structure of the joint stock corporation with the strict separation of the supervisory and the executive board - in contrast to the "Unitary Board" system commonly used in Anglo-Saxon countries - has not been abolished, and the legal rule that the decisions of the two corporate boards should take the interests of shareholders as well as those of other stakeholders into account has also remained in force. Finally, co-determination is still required by corporate law and largely well accepted in practice. Conversely, the capital market has not grown in importance for corporate control in Germany yet. Even after the takeover of Mannesmann by Vodafone, no "Market for Corporate Control" has emerged, which is the core element of corporate governance in the UK and the US.

Given the choice of whether to interpret the changes of the last 20 years as a structural change or as a modernization of the current structure of the bank-oriented system, I would rather lean towards the second alternative.[10] This may be regretted or welcomed, depending on one's political orientation. I abstain here from an assessment, simply because it does not seem possible to me beyond political confessions.

[10] For detailed reasons, see the sources mentioned in Note 5 above.

Of course, there is another possible interpretation. One can see the changes in the German financial system as the emergence of a hybrid system that incorporates features of both bank-based and capital-market-based systems, as *Hardie* and *Howarth* and their coauthors have written in a widely acclaimed volume (2013). However, these authors come to the very skeptical conclusion that what they call "market-based banking" is by no means a positive mix.

2. Loss of consistency

In the early years of the new millennium the view was widely held among politicians and journalists that one can assess financial systems on the basis of whether they are more bank-oriented or more capital-market-oriented and that the latter is in some sense simply better. As I explained above, I do not share this view; both types of financial systems can be judged as being either good or not so good, depending on whether a given financial system is consistent or not. In the light of this measure, how can the development of the German financial system over the last 20 years be assessed?

Not so long ago, the German financial system was consistent. The structure of the financial sector with the clear dominance of the banks, the financial patterns of the companies with the paramount role of bank loans and corporate governance with its stakeholder orientation, worked well together. If one takes any two of these three main elements of the financial system as given, the third element represents the appropriate, economically rational complement (*Schmidt*/*Tyrell* 2004). In the course of the last twenty years, changes within the German financial system have taken place that have virtually eliminated its former consistency. This concerns all three main elements of the German financial system discussed.

The financial sector has changed, even if the three-pillar structure of the banking system has been preserved. However, within the financial sector, and especially within the banking system, the role of the large banks is now quite different and less dominant compared to 20 years ago. Dresdner Bank has disappeared, Commerzbank has developed more and more into a "private savings bank" and UniCredit-HVB and Postbank never even aspired to play a role which resembles that of the former triumvirate of the German big banks.

The remaining large banks are no longer the most important lenders of the big German companies. They have also increasingly withdrawn from their former central role in the corporate governance of large public corporations and they are no longer masters over almost

the entire remainder of the financial sector. In particular, they are no longer the owners of the stock exchanges and the main players in running the German stock exchange system.

From the perspective of the big banks, this strategic reorientation may make sense. Why should German big banks, especially Deutsche Bank, continue to be as heavily involved in the corporate control of the large joint stock companies as before? After all, there had been sound economic reasons why they had been on corporate boards and had held substantial blocks of shares: these ties enabled them to get internal information and to influence corporate decisions with a view to reducing the riskiness of their extensive lending exposures. Now that the big banks have substantially reduced the exposures to their big corporate clients, information and channels of influence are no longer as important and valuable as they used to be. And conversely, what could make the big banks and especially the Deutsche Bank lend as extensively to the large German non-financial corporations as before after having lost their previously privileged access to information and their former influence on their clients' business policy? Why should they continue their efforts to dominate large parts of the rest of the financial sector after losing or even deliberately giving up the positions which they had formerly protected through this dominance? Why should companies continue to finance themselves above all through loans from the big banks, if they can no longer count on these banks as their main lenders and their house banks that protect them when and if this is necessary? And why should the other actors grant the big banks a central role in corporate governance - as was often the case in the past - knowing that they no longer have a genuine interest in fulfilling this role in the common interest?

At least as far as the big banks and their former big corporate customers and business partners are concerned, one could say that the time of the former consistent system is over. At least for a certain time, the aspiration of Germany‘s only remaining big bank to join the league of the world's leading investment banks seemed to make sense from a strategic point of view. This is not the place to discuss whether this strategy was successful and could have been successful at all and whether the attempt to become a leading international investment bank was good for Deutsche Bank, its shareholder, staff and clients. However, for the German financial system as a whole, the dissolution of the former system of large banks with its close relations between large companies and other parts of the financial sector, boils down to this: a loss of consistency.

Lack of consistency means that a financial system does not exploit the potential for welfare gains arising from the complementarity of its elements. It then seems natural to conclude that because of its loss of consistency the German financial system has become worse; it has lost its formerly positive role for people, the economy and society.

One consequence of inconsistency is that a financial system — like any other system of complementary elements — is vulnerable to crises. The financial crisis of 2007/2008 demonstrated the vulnerability of the German financial system and, thus, provided indirect evidence of the hypothesis put forward that the German financial system has become inconsistent due to the changes described above.[11]

One can see things differently and think that the end of a system that was previously consistent and therefore also resistant to reforms is necessary as a prerequisite for the emergence of something new and better as soon as conditions change. For this, it may also be necessary to accept inconsistencies for a certain period of time, knowing that short-term welfare losses and greater instability are the price to be paid for fundamentally transforming the system in a positive sense. However, this benevolent view does not seem plausible to me because I have no idea of how a new and better financial system should look like under changed circumstances. A few years ago, one might have thought that a capital-market-based financial system would be better anyway and, therefore, it would make sense to accept some inconsistencies during the transition period. However, this assessment was in my view never really convincing because there is neither theoretical nor empirical evidence for the superiority of a capital-market-based financial system. But now, after the great financial crisis, its plausibility is even lower because the starting point of the crisis was the American financial system, one of the two leading examples of such a capital-market-based financial system, and its core elements were the cause of the crisis. This consideration makes me uphold my earlier assessment: The changes in the German financial system in recent years have led to the loss of an earlier sound financial system.

[11] More about this can be found in *Kotz/Schmidt* (2016).

References

Allen, F., and D. Gale (2000): *Comparing Financial Systems*, Cambridge, MA: Cambridge University Press.

Allen, F., and A. M. Santomero (2001): What do Financial Intermediaries Do?, *Journal of Banking and Finance*, Vol. 25, pp. 271-294.

Behr, P., and R.H. Schmidt (2016): The German Banking System, in: Th. Beck and B. Casu (eds), *The Palgrave Handbook of European Banking*, London: Palgrave, pp. 541-566.

Brynjolfsson, E., and P. Milgrom (2013): Complementarities in Organizations, in: R. Gibbons and J. Roberts (eds), *Handbook of Organizational Economics*, Princeton, NJ: Princeton University Press, pp. 11-55.

Elsas, R., and J.P. Krahnen (1998): Is Relationship Lending Special: Evidence from Credit File Data in Germany, *Journal of Banking and Finance*, Vol. 22, pp. 1283-1316.

Hackethal, A. (2000): *Banken, Unternehmensfinanzierung und Finanzsysteme*, Frankfurt: Lang-Verlag.

Hackethal, A., and R.H. Schmidt (2005): Financing Patterns: Measurement Concepts and Empirical Results, Goethe University Frankfurt, Working Paper Series: Finance and Accounting No. 125.

Hackethal, A., R.H. Schmidt and M. Tyrell (2005): Banks and Corporate Governance in Germany: On the Way to a Market-Based System? *Corporate Governance: An International Journal*, Vol. 13, pp. 397-407.

Hackethal, A., R.H. Schmidt and M. Tyrell (2006): The Transformation of German Financial System, *Revue d'économie politique*, Vol. 117, pp. 431-456.

Hackethal, A., and M. Tyrell (1999): Complementarity and Financial Systems, University of Frankfurt, Working Paper Series: Finance and Accounting, No. 10.

Hall, P., and D. Soskice (2001): An Introduction to Varieties of Capitalism, in: P. Hall and D. Soskice (eds), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage,* Oxford: Oxford University Press.

Hardie, I., and D. Howarth (2013): *Market-Based Banking and the International Financial Crisis*, Oxford: Oxford University Press.

Höpner, M. (2006): *Wer beherrscht die Unternehmen? Shareholder Value, Managerherrschaft und Mitbestimmung in Deutschland*, Frankfurt: Campus Verlag.

Janssen, S., (2009): *British and German Banking Strategies*, Basingstoke New York: Palgrave-Macmillan.

Kotz, H.-H., and R.H. Schmidt (2016): Corporate Governance of Banks - A German Alternative to the "Standard Model", *Zeitschrift für Bankrecht und Bankwirtschaft*, Vol. 28, pp. 427-444.

Levine, R. (1999): Financial Development and Economic Growth: Views and Agenda, *Journal of Economic Literature*, Vol. 35, pp. 688-726.

Milgrom, P., and J. Roberts (1992): *Economics, Organization and Management*, Englewood Cliffs, NJ: Prentice-Hall.

Rieckers, O., and G. Spindler (2004): Corporate Governance: Legal Aspects, in: J.P. Krahnen and R.H. Schmidt (eds), *The German Financial Syste*m, Oxford: Oxford University Press, pp. 350-385.

Schmidt, R.H., (2004): Corporate Governance: an Economic Perspective, in: J.P. Krahnen and R.H. Schmidt (eds), *The German Financial System*, Oxford: Oxford University Press, pp. 386-424.

Schmidt, R.H., and M. Tyrell (2004): What Constitutes a Financial System in General and the German Financial System in Particular?, in: J.P. Krahnen and R.H. Schmidt (eds), *The German Financial System*, Oxford: Oxford University Press, pp. 19-67.