

**JOHANN WOLFGANG GOETHE-UNIVERSITÄT  
FRANKFURT AM MAIN**

**FACHBEREICH WIRTSCHAFTSWISSENSCHAFTEN**

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**The Convergence of Financial Systems in Europe**

**No. 75  
May 2001**



**WORKING PAPER SERIES: FINANCE & ACCOUNTING**



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May 2001**

**ISSN 1434-3401**

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# The Convergence of Financial Systems in Europe

(first version, February 2001

this version May 1, 2001)

## Abstract

Since the beginning of the 1990s, it has been widely expected that the implementation of the European Single Market would lead to a rapid convergence of Europe's financial systems. In the present paper we will show that at least in the period prior to the introduction of the common currency this expected convergence did not materialise. Our empirical studies on the significance of various institutions within the financial sectors, on the financing patterns of firms in various countries and on the predominant mechanisms of corporate governance, which are summarised and placed in a broader context in this paper, point to few, if any, signs of a convergence at a fundamental or structural level between the German, British and French financial systems. The German financial system continues to appear to be bank-dominated, while the British system still appears to be capital market-dominated. During the period covered by the research, i.e. 1980 – 1998, the French system underwent the most far-reaching changes, and today it is difficult to classify. In our opinion, these findings can be attributed to the effects of strong path dependencies, which are in turn an outgrowth of relationships of complementarity between the individual system components. Projecting what we have observed into the future, the results of our research indicate that one of two alternative paths of development is most likely to materialise: either the differences between the national financial systems will persist, or – possibly as a result of systemic crises – one financial system type will become the dominant model internationally. And if this second path emerges, the Anglo-American, capital market-dominated system could turn out to be the “winner”, because it is better able to withstand and weather crises, but not necessarily because it is more efficient.

**Keywords:** Financial system, pension system, risk allocation, human capital formation  
bank-based financial system, capital market-based financial system,  
(dis-)intermediation, securitisation, complementarity, convergence

**JEL classification:** G1, G2, G10, G30, G34, H55, P51



## I Problem definition and methodology

Starting in the 1980s, and in particular since the beginning of the 1990s, many, or even most, commentators on banking and finance and numerous academic economists predicted that Europe's financial systems would converge quite rapidly as the European Single Market project was implemented. To be sure, there were discussions among the many proponents of this convergence hypothesis as to whether the Anglo-Saxon type of financial system would end up being adopted everywhere, or whether a hybrid form combining elements of the Continental European and Anglo-Saxon systems would emerge.<sup>1</sup> But there was a broad consensus that the differences between the financial systems of the highly industrialised countries, which were still quite striking at the beginning of the 1980s, would not persist.<sup>2</sup>

Even though there have been clear indications of tendencies toward convergence in many areas, there was, at least during the period prior to the introduction of the euro as a common currency, no unambiguous evidence that the anticipated fundamental convergence *at a structural level* had materialised. Despite the influence of increasingly strong European integration processes, of globalisation and of EC-induced regulatory convergence,<sup>3</sup> the financial systems of advanced industrial economies, at least in Europe, still differ considerably, and they continue to show a surprisingly strong tendency to retain their traditional structures. In any case, this statement, which is to be regarded as a hypothesis, sums up the main findings of our research project, which will be presented and summarised in this paper.<sup>4</sup>

Given the limited space available here, we will only be able to develop our hypothesis of a limited degree of *structural* convergence until today, thus leaving aside discussions of those aspects of financial systems where there was a convergence.<sup>5</sup> We would like to emphasise at the outset, however, that our findings are shaped to a large extent by the approach we employed in our investigation, i.e. by the concepts of a financial system and a fundamental convergence and by the specific aspects of financial system convergence which we chose to examine. Even in a large research project, it is impossible to arrive at a comprehensive and definitive assessment of a phenomenon as complex as the question whether the financial

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<sup>1</sup> Thus, for example, the OECD (1995, p. 119) stated in its country study on Germany that “[...] an overall trend towards a degree of convergence in governance and financing patterns may eventually emerge, with Anglo-American systems accepting the best features of the German, and vice versa.”

<sup>2</sup> See Schneider-Lenné (1992) and Walter (1993) and, in retrospect, Walter/Smith (2000).

<sup>3</sup> For an overview of the elements of convergence relating to regulation see Lanoo (2000)

<sup>4</sup> The project, “The Convergence of Financial Systems in Europe”, received financial support from the Deutsche Forschungsgemeinschaft (DFG) from 1995 until the beginning of 2001 as part of the broad research programme on the “Efficient Design of Financial Markets and Financial Institutions”.

<sup>5</sup> For additional information on the findings of our research reported here and of research on other issues that was carried out in the framework of the project, and a list of publications which have resulted from the project, see the website of the Finance Department of the Goethe University of Frankfurt: <http://finance.uni-frankfurt.de>.

systems in Europe are becoming more similar over time, and it would of course be completely unrealistic to imagine that one could do justice to the subject in a relatively short paper like the present one.

In our project, we compared the financial systems of selected industrial countries in Europe by asking

1. how different they were at a certain initial point in time,
2. what important changes had taken place in the respective financial systems over the past 15 to 20 years, and
3. whether a process of convergence between the financial systems had occurred during this period, and if not, whether – and in what form – a convergence is to be expected in the foreseeable future.

So far, the convergence of entire financial systems is a topic that has barely been addressed in the economic literature, just as financial systems *in their totality and in general terms* – in contrast to individual aspects and parts of financial systems and the financial systems of individual countries – have so far been largely neglected by researchers.<sup>6</sup> This points to the existence of methodological problems. One particularly important problem of this type is the fact that it is difficult to define the term “financial system”: What forms part of a financial system, or, to put it differently, where do its boundaries lie? Moreover, it is hard to ensure that research on systems is scientifically rigorous, given that the whole concept of a “system” is extremely vague, and that there is always a danger that discussions of this topic will degenerate into “systems waffle”.<sup>7</sup> Last but not least, it is largely unclear under what circumstances one can rightly say of financial systems that a process of convergence between them has taken place. It seems appropriate to us to only speak of a convergence of financial systems if they have become more similar to each other in terms of fundamental or structural aspects. But this raises the next difficult question: which aspects of financial systems may be regarded as being fundamental or structural in nature? Even though there are no general solutions for these methodological problems, one must select a specific approach and stick with it if one is not prepared to simply reject as unworkable the whole idea of examining the issue of financial system convergence – something which we are not willing to do, given how important we consider the topic to be.

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<sup>6</sup> The works of Merton/Bodie (1995), Crane (1995), Thakor (1996), Boot/Thakor (1997) and most notably Allen/Gale (2000) and the earlier work of these two authors summarised in this important book, are among the exceptions in this respect. Interestingly, the term “financial system” is not listed either in the index of the New Palgrave Dictionary of Money and Finance (Newman et al., 1992) or in the Handwörterbuch des Bank- und Finanzwesens [Concise dictionary of banking and finance] (Gerke/Steiner, 1995).

<sup>7</sup> See D. Schneider (1985) pp. 218f. A useful discussion of the problems of defining the term “system” in a somewhat rigorous manner can be found in Nitsch (1993).



In part II of the paper we present our attempt to resolve these methodological problems. We will first elucidate the concept of the financial system which we have employed in our research, and then explain what makes a financial system a system. This will simultaneously provide us with a way of describing financial systems which will then be used to characterise the financial systems of the three major European economies, Germany, France and the United Kingdom. In part III we will present the results of our analyses of three core elements of the three financial systems separately, and following this discussion, i.e. in the first section of part IV, we will first describe how these elements interact to produce the specific overall configuration that is characteristic of each of the three systems. This will then enable us to assess whether a process of financial system convergence has taken place so far. Then we indicate some conclusions that can be drawn from our analysis regarding a future process of convergence. The paper concludes with a brief outline of the key issues raised by our project which require further research.

## **II Financial systems: Definitions and research design**

### **II.1 Defining basic concepts: The financial sector and the financial system**

In the relevant literature, the concept of the financial system is defined in many different ways.<sup>8</sup> Frequently, the financial system of a country is equated with its financial sector.<sup>9</sup> But at least with respect to the question we seek to answer, it is advisable to distinguish between the *narrowly defined* concept of the financial sector and the *broadly defined* concept of the financial system. In a sectoral perspective, the financial sector is the part, or sector, of an economy which offers the economic units in the other sectors opportunities to invest and to obtain financing, together with associated advisory and intermediation services. Its principal constituent elements are banks, other financial intermediaries and the financial markets, in particular the securities exchanges as organised financial markets.

The financial system, by contrast, may be characterised in general terms as the interaction between the supply of, and the demand for, the provision of capital and other finance-related services. In addition to the supply side, i.e. the financial sector, which is clearly very important, this concept of the financial system also includes the demand side. The demand for the services of the financial sector comes from households, which accumulate assets, and firms, which need capital in order to invest. Naturally, the state is also a part of the financial system – not only because it both supplies and demands financial services, but also because it serves as the organiser and regulator of the financial system, and especially of the financial

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<sup>8</sup> See Papenfuß (1999) on definitions of the term “financial system” and on ways of describing financial systems.

<sup>9</sup> See, for example, the descriptions of financial systems of industrialised countries in Obst/Hintner (2000).

sector. However, the financial system also includes the non-financial sectors of the economy, not only in so far as they make use of the services of the financial sector, but also in so far as they *do not* demand, or *do not* succeed in obtaining, its services. Indeed, if we wish to properly describe a financial system of a given country, we must also indicate the extent to which firms, as investors and deficit units, obtain financing directly from households and other surplus units or engage in self-financing in the broad sense, and the extent to which households accumulate assets by undertaking real investments and take measures themselves to insure themselves against risks. This expanded definition – rightly – includes as parts of the financial system all asset accumulation by households, i.e. in both monetary and non-monetary forms, as well as the most important ways in which people provide for their old age and the means by which firms finance their activities.

The interaction between the surplus units, the intermediaries and the deficit units encompasses not only flows of funds. Alongside these flows, relationships exist which serve as channels for information and for the exercise of influence. From the perspective of the theory of finance which is based on the new institutional economics, the financing relationships and the relationships serving as channels for information and influence are interdependent in the sense that each of the three types of relationship plays a key role in creating and maintaining – and determining the nature of – the other two, and, for this reason, the last two types of relationship are also part of the financial system. This is why corporate governance, or corporate control – conceived of as the totality of the arrangements and mechanisms that determine which interest groups will exert influence on the key decisions made by firms and the ways in which they will bring their influence to bear – is also part of a country's financial system. The inclusion of corporate governance considerably expands the content of the concept, and at the same time it once again highlights the definitional problem to which we referred in the introduction. The structural features of the financial sector, the financing patterns of the enterprise sector, and corporate governance systems are the three core elements of financial systems which will be discussed in this paper. They will first be analysed separately, and then presented as interdependent parts of an overall configuration.

Our investigation covers the timespan from the beginning of the 1980s up until the end of the 1990s. This period extends back far enough before the start of the Europe-wide process of regulatory convergence to enable us to monitor its effects over time. Moreover, our analysis deals only with large industrial countries which have all reached more or less the same high level of economic development, but which differ greatly with respect to their history and pattern of development, and are sufficiently strong to maintain a high degree of autonomy in so far as the evolution of the structures of their financial systems is concerned.

## II.2 What makes a financial system a system: Complementarity and consistency

We conceive of a financial system as an ordered set of complementary elements or subsystems. *Complementarity* denotes an attribute of relationships between the elements of a system, while *consistency* represents an attribute of the values taken on by these elements, and thus of the system itself. The definitions of complementarity and consistency presuppose that there is a standard of measurement with which systems can be evaluated – at least approximately – in terms of the benefits they offer, and that the values taken on by the elements can be measured – at least in the weak form of an ordinal ranking and/or that it is possible to distinguish between “polar” values.

Two (or more) elements of a system are complementary to each other

- if the positive effects of the values taken on by the elements mutually reinforce each other and the negative effects mutually mitigate each other, i.e.
- if a higher value for one element increases the benefit yielded by an increase in the value for the other element (and vice versa), and
- if, as a result, the “quality” or the “workability” or the “value” of a system depends on the values taken on by its (complementary) features being compatible with each other or, put simply, on the values “fitting together”.

Thus, our definition of complementarity implies that there is a potential for securing a benefit if the values taken on by the features are compatible with each other. It does not, however, presuppose that this potential is exploited. This is precisely the aspect covered by the concept of consistency: we characterise a system made up of complementary elements as being *consistent* if the benefits of complementarity are exploited and if, therefore, a small change in the value taken on by an individual feature, or by certain of the features, does not permit an improvement in terms of the objective function or the evaluation function.

A consistent system is in a state of equilibrium. The type of system for which the concept of complementarity is a useful analytical tool typically has several equilibria or local optima. In most cases it is impossible for the actors operating in the system to judge whether a local optimum is also the global optimum. For this reason, it may be problematic if efforts to effect changes are undertaken by actors who (1) are only able to influence the values taken on by individual elements, or who (2) do not have an overview of the totality of the relevant system, or who (3) can only initiate small changes. This means that it is very important to ensure that decisions are co-ordinated on a centralised basis.<sup>10</sup>

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<sup>10</sup> “[T]here is a strong need for global information, because local information or information based only on low-dimensional experiments will not reveal whether a completely different model would be better.” Milgrom/Roberts (1995b), p. 249

Although the concepts of complementarity and consistency may be quite intuitive and correctly describe what “system” means in the colloquial sense of the term, the following formal characterisation of the concept of complementarity will probably make it easier to follow the discussion presented below.<sup>11</sup> Although the concept is well known as part of general microeconomic theory, and specifically as an element of the theory of production, its evolution in recent years has led to important extensions which go beyond the limits of the original concept.

For a continuously differentiable output function, complementarity is equivalent to positive cross derivatives of the relevant arguments, e.g. the factor input quantities in a production function. However, if one is dealing with a function which also contains discrete arguments (e.g. the value of a firm as a function of employee representation on the supervisory board), lattice theory must be used. Lattice theory specifies as a necessary condition for complementarity that the domain of the arguments creates a lattice, i.e. that parallel to the increase (decrease) of a variable, the increase (decrease) of all other variables, or at least the maintenance of their values at the same level as before, is also always permitted *within* the lattice.<sup>12</sup> If this condition is met, then the following condition is sufficient in order for complementarity to exist between the arguments, and the function  $\pi(x)$  is characterised as being *supermodular*:

$$(1) \quad \pi(\bar{x}) - \pi(x) \geq \sum_i^n [\pi(\bar{x}_i, x_{-i}) - \pi(x)] \quad \text{where } \bar{x} \geq x.$$

If  $\pi$  denotes, for example, the efficiency level of a financial system which includes the complementary elements  $x_i$  – represented as components of the  $n$ -dimensional vectors  $\bar{x}$  and  $x$  – then, in accordance with (1), a simultaneous change of the values taken on by all elements is preferable to an isolated change.

This implies that the formal evaluation of a financial system to determine whether it is consistent would require a detailed and comprehensive knowledge of all of the elements of the financial system, of all of the values which they might take on, and of all of the mechanisms by means of which the elements interact and operate together in a functional nexus. Assuming such knowledge were available, one could then proceed to assess whether the specific function involved is supermodular and, if appropriate, where the local optima and the global optimum, are located. Unfortunately, we lacked the detailed knowledge of the features and mechanisms through which the elements interact, and the empirical data that

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<sup>11</sup> A simpler, but less exact formal illustration of the necessary conditions for complementarity is provided in Schmidt/Spindler (2001); for a formal presentation in the context of financial systems, see Hackethal/Schmidt (2000) and the literature cited therein, and the model in Hackethal/Tyrell (1998). For a detailed, general discussion, the reader is referred to Topkis (1998) and Fudenberg/Tirole (1991).

<sup>12</sup> More formally: A lattice is a partially ordered set (the  $\geq$  ordering is defined) where for any two elements  $x_1$  and  $x_2$ , the values  $\inf(x_1, x_2)$  and  $\sup(x_1, x_2)$  are also in the set.

would have been needed for this Herculean task. As a result, we defined a more modest goal for our project, namely to determine whether financial systems can be described in such a way that complementary relationships which were presumed to exist become discernible. If such relationships do in fact exist, then it is appropriate to speak of a “system” in more or less the same sense in which this term is used in colloquial speech. On this basis one can say that there are “fundamental” differences between two financial systems if (and only if) the values taken on by the complementary elements in the individual systems – which are consistent and thus “fit together” within those systems – are different for the two systems. By definition, these differences will necessarily be “large” and relate to several elements. An analogous line of reasoning can be applied to the definition of “fundamental” or structural changes in an individual financial system over time. A “fundamental” change can be said to have occurred if the way in which complementary elements interact and function together has changed. Moreover, it is appropriate to speak of a process of convergence if the patterns that describe the ways in which the complementary elements of two or more financial systems interact and function together, and the ways in which these elements “fit together”, have become, or are becoming, (more) similar.

By applying the concepts of complementarity and consistency to the financial systems of large industrial countries, we will assess not only the validity of the empirical hypothesis that a process of convergence is taking place, but also that of the methodological hypothesis that the use of the concept of complementarity permits one to produce accurate and valuable descriptions of financial systems. If it can be shown that the financial systems which we have analysed differ in such a way that in some systems *all* or most of the elements that have been examined take on “high” values, while in other systems *the same* elements all take on “low” values, then this would be a strong indication of the existence of complementarities between the specific elements in question. The important point to realise is that there may be more than one consistent configuration of financial system elements, i.e. that financial systems may differ from one another fundamentally or structurally, yet still each be consistent.

### **III The financial systems of Germany, the United Kingdom and France**

#### **III.1 The three financial systems prior to a possible convergence**

In the following, the financial systems of the three European countries covered by our investigation will be assessed in terms of three core elements or subsystems which we feel are central to the overall nature and workability of the respective national financial systems, and about which we were able to gain new insights through our own research. As we hope to be able to show, these insights can be combined to form an overall picture which will provide a

well-founded answer to the question whether the financial systems have converged, or are converging. The elements in question are

- (1) the structure of the financial sectors, and in particular the role of banks in the respective national financial systems;
- (2) the financing patterns of non-financial firms; and
- (3) the corporate governance systems of companies which are listed on the stock exchange.

In our discussion of these three areas, we intend to show

- (1) that financial systems are made up of complementary elements or subsystems, which, for their part, consist of complementary elements;
- (2) that the specific nature of the complementarity in a given case, as evidenced by the values taken on by the individual elements, is characteristic of – or of fundamental importance for – the financial system in question; and
- (3) that each of the countries covered by our investigation can still be regarded as having a different type of system in the sense that there are different ways in which the elements of a financial system can interact and function together, and different ways in which those elements can “fit together”.

This means that we will be primarily interested in demonstrating the existence of complementarities, which is the most important issue from the point of view of our overall research objective.

In order to put the discussion presented below in the proper context, it is necessary to briefly outline the overall structure of the financial system of each of the three countries as it existed prior to the onset of the reforms in the mid-1980s, and before the Single Market project might have begun to influence financial system structures, and also to describe the nature of the changes that have taken place since then.<sup>13</sup>

At the beginning of the 1980s, the German financial system was already shaped to a large extent by the influence of commercial banks. Banks, particularly the universal banks, were the principal source of corporate finance. Banks and bank financing were more important than the capital markets which, at least at that time, could fairly be described as “underdeveloped”. As represented by various levels of government and agencies of various types, the state, as the owner of many banks and as a regulatory authority, played an important – but at the same time largely passive – role. Even at that time, the regulatory system was already quite liberal. Corporate governance was characterised by three features: a strong influence on the part of the banks, legally mandated co-determination at company level, and the fact that the

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<sup>13</sup> The following overview of the financial systems of the countries covered by our investigation draws upon the discussions presented in Berglöf (1990), Walter (1993), Schmidt/Tyrell (1997), Schmidt (1997) and Allen/Gale (2000).

management board was largely autonomous vis-à-vis the various “stakeholder groups” which, both legally and in fact, were considered to be entitled to exert influence on the governance of firms. It is quite appropriate to characterise the German financial system at the beginning of the 1980s as a bank-dominated “insider control system”.<sup>14</sup>

Even then, the British financial system was capital market-dominated.<sup>15</sup> Banks and bank financing of firms played a comparatively minor role, while the stock exchange and “non-bank financial intermediaries” operating in close proximity to the capital markets were already key elements of the U.K. financial system. The country had an old-fashioned regulatory system based on various traditions, but it gave the capital market a great deal of freedom to operate. The nature of the regulatory regime in particular was indicative of the role generally accorded to the state in the U.K. financial system. This role had traditionally been weak. In so far as it was recognisable at all as a system, corporate governance in the U.K. was clearly capital market-dependent.

In France, on the other hand, the entire financial system had been shaped, and controlled, to a very high degree by the state since the Second World War. As part of the French economic system of the time, the *économie mixte*, the banks’ activities were shaped in large measure by priorities and targets set by the government; they were an instrument of state economic policy. The banks were given the task of financing the large enterprises, all of which were an integral part of the system of *planification* and were subject to a great deal of influence by the state, regardless of the precise nature of their ownership structures. The capital market, whose role was insignificant in every respect, served in essence as a means of financing the state budget and the large state-owned enterprises. In line with the dictates of this system, the state occupied a strong position in the regulatory regime for the financial sector and played an active role in financial regulation. Due primarily to the role played by the top managers of French companies, as defined both by law and by custom, and to the system by which they were trained and recruited, corporate governance arrangements in France were also geared to advancing the priorities and goals of the overall system, which was shaped by the state. Corporate governance and corporate strategy were not expected to serve the interests of shareholders or the interests of the various stakeholder groups, but rather to promote the broad, overall interests of the state.<sup>16</sup>

At the beginning of the 1980s the three financial systems represented very different system types: All three were, to a large extent, internally coherent, that is, their constituent elements were not only complementary, but also largely consistent in terms of the values which they

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<sup>14</sup> For a discussion of this concept, see Berglöf (1990) and Franks/Mayer (1994).

<sup>15</sup> For a more detailed discussion of the material presented in the following brief overview, see Llewellyn (1992) and Buckle/Thompson (1998).

<sup>16</sup> For more information, see Zerah (1993) and Faugère/Voisin (1994).

had taken on. This does not, however, mean that the three systems were not in need of change when, in the early 1980s, macroeconomic and global economic conditions changed fundamentally. But the processes of change that occurred also reflected the system characteristics which we have already pinpointed: In Germany, the financial system basically did not change at all in the 1980s; the key liberalisation measures had already been undertaken in the 1960s. In the U.K., a series of profound institutional changes took place in the 1980s. The wave of deregulation and modernisation that affected the entire financial sector (the “Big Bang”) was in essence a market-oriented response to altered market conditions. The process of structural change that took place in the French financial sector was the most far-reaching. The source material demonstrates conclusively that this process was planned and implemented by agencies of the state in order to find a solution to the budget problems faced by the French state.<sup>17</sup> Thus, the processes of change that were initiated in each of the three countries starting in the mid-1980s also fit into the overall picture of each country’s specific financial system type. However, the way in which the changes began is not a reliable indicator of how they eventually impacted the respective national financial systems, and that is the issue that we now address.

### **III.2 The structure of national financial sectors and the role of banks**

In our comparison of financial sector structures, we shall seek to answer the following question: What role do various types of financial institutions (banks, non-bank financial intermediaries (NBFIs) and organised capital markets) play in the countries that we are examining?<sup>18</sup> In order to answer this question, and to show how the roles of the different types of institutions (may) have changed over time, we will rely primarily on intermediation and securitisation ratios. Both types of ratio are based on the notion of an economy as a collection of sectors which exchange real goods, services and funds with each other. The implementation of transactions entailing financial resources implies that funds flow between the parties, the total amount of these flows being manifested in stocks of claims held by certain sectors which are matched by stocks of liabilities incurred by other sectors.

On the basis of the stocks accumulated over several periods, intermediation ratios (IRs) measure the share of the total claims and liabilities of a sector or group of sectors which are accounted for by claims on, and liabilities to, financial institutions (banks, insurance companies, pension funds, investment funds). Securitisation ratios, on the other hand, focus on the financial instruments involved, in so far as they measure the fraction of total financial

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<sup>17</sup> See Walter (1993) and Bertero (1994).

<sup>18</sup> For a more detailed discussion of the material covered in this section, see Schmidt/Hackethal/Tyrell (1999) and Hackethal (2001).



claims and liabilities<sup>19</sup> that is accounted for by securities such as shares, bonds and money market instruments. The breakdowns of financial flows within the respective national economies which are compiled by central banks and statistical offices provide an ideal source of data for the computation of the two ratios. Given that these figures distinguish between sectors rather than individual economic agents, our analyses deal only with intersectoral stocks, i.e. no intrasectoral stocks are considered.<sup>20</sup> In the charts shown below, a total of 16 ratios have been plotted for the world's five largest economies. The highest degree of aggregation is exhibited by the General Asset Intermediation Ratio (abbreviation: Asset-IR) and the General Liability Intermediation Ratio (Liability-IR) in Fig. 1. They indicate what fraction of the total liabilities or assets of all four non-financial sectors consists of claims on, or liabilities to, the financial sector, i.e. Banks and NBFIs.<sup>21</sup>

Each of the two general intermediation ratios for all non-financial sectors can be disaggregated in three ways to yield partial ratios. First, the investment and financing behaviour of individual non-financial sectors can be considered separately. The Asset-IR of Households (Fig. 2a) shows, for example, which fraction of the total financial assets of households consists of claims on the financial sector. By contrast, the Liability-IR of Firms (Fig. 2b) shows which fraction of the inter-sectoral liabilities of firms is owed to financial intermediaries. Second, it is possible to address the question of how the claims on the financial sector break down into claims on banks and claims on NBFIs. Thus, for example, the Asset-IR with Banks (Fig. 5a) indicates which portion of the total financial assets of the four real sectors is invested with banks, and the Liability-IR to Banks (Fig. 5b) shows the fraction of liabilities that is owed to the banking sector. Finally, the first two forms of disaggregation may be combined to produce a third form which is even more detailed. The Asset-IR of Households with Banks (Fig. 6a) quantifies the role played by banks in the management of households' financial assets. In an analogous fashion, the Liability-IR of Firms to Banks (Fig. 6b) quantifies the role of banks in corporate finance.

Securitisation ratios (SRs) are shown in Fig. 3, where the general Asset-SR and the general Liability-SR of all non-financial sectors are plotted, and in Fig. 4, where partial SRs indicate

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<sup>19</sup> Including in each case the corresponding equity capital positions on the asset and liability side.

<sup>20</sup> "For a given economy, the breakdown of financial flows shows who provides funds, and in what amount and what form they are made available, and it also shows which financial institutions are involved." (Deutsche Bundesbank 1995, p. 7). Data collection and reporting methods differ from country to country, and this makes international comparisons more difficult. However, when evaluating data it is usually possible either to make adjustments which will eliminate the distortions caused by the use of varying methods or to estimate the approximate extent of the distortionary effects. See Hackethal (2000) for a detailed discussion of the data base.

<sup>21</sup> If the financial account of the financial sector were balanced – that is, if financial institutions had no real assets, e.g. in the form of real estate – then, in line with the logic of a flow-of-funds analysis, the financial assets of the non-financial sectors would necessarily be equal to the total value of their liabilities. In that case, the Asset-IR and the Liability-IR would have to be identical.

the investment preferences of households (Fig. 4a) and the financing preferences of firms (Fig. 4b) with regard to securities.

If IRs and SRs are compared for various countries and periods, a body of quantitative data is produced which can be used to assess the roles of the various forms of financial intermediaries and financial markets in individual countries, how these roles differ between countries, how they change over time, and, finally, whether national financial systems are becoming more similar in terms of the roles played by various types of financial intermediaries and markets. Four main empirical conclusions can be derived from the information presented in Fig. 1 to 6:

(1) *Financial intermediation has increased*: The data provided in Fig. 1 and 2 show that there has *not* been a trend toward disintermediation in four of the five countries. With the exception of France, where in the 1980s and 1990s a clear trend toward more direct financing relationships between non-financial sectors could be observed, the share of financial claims which is held against financial intermediaries, and the share of financial liabilities that is owed to financial intermediaries, has steadily increased, or at least remained constant, in all countries. However, the figures also show that there are striking differences in the levels measured for the five countries, which in turn indicate that the roles of the various types of intermediaries and markets are allocated in fundamentally different ways in the respective national financial systems.

(2) *There has been an increase in the popularity of securitised financial instruments*: Fig. 3 and 4 indicate that in all three of the European countries the extent of securitisation, with regard to both the claims and the liabilities of the non-financial sectors, has continuously increased over the last 25 years. Although the ratios for the U.S., like all of the other ratios, were calculated using valuations based on market prices, the U.S. rates remained nearly constant over this period, and in a long-term perspective, i.e. since 1960, they have in fact exhibited a downward trend. If one were to adjust the data for Japan to offset the price effects of the bubble economy in the late 1980s, the figures would also show that the ratios have also evolved in a quite stable manner in Japan, with a slight upward trend emerging on the financing side in the period since the mid-1970s.

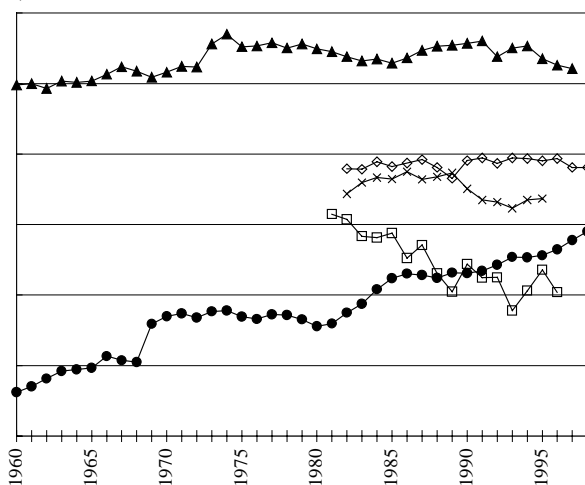
Based on an evaluation of all of the liability-side data presented in Fig. 1b to 4b, it is fair to say that securities – and, by extension, organised capital markets – play a more important role in financing in the Anglo-Saxon countries than they do in Germany and Japan.<sup>22</sup> France is a special case in this respect: its ratios have evolved from a level similar to those of Germany and Japan to one which is more in line with the levels of the U.K. and the U.S.

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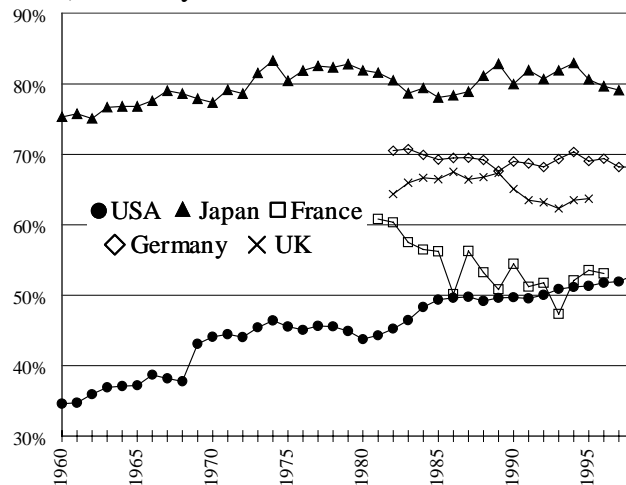
<sup>22</sup> An analogous assessment could be derived for the U.K for the asset side if it were not for the fact that claims on British pension funds are treated as unsecuritised claims when calculating the ratios.

**Figure 1: General Intermediation Ratios**

a) Asset-IR

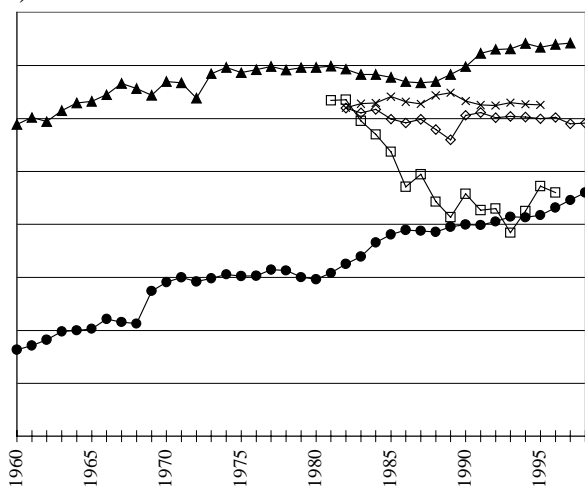


b) Liability-IR

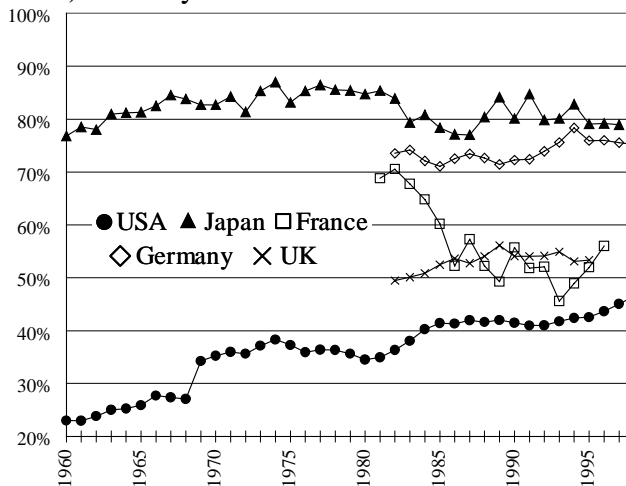


**Figure 2: Intermediation Ratios of Households and Companies**

a) Asset-IR of Households

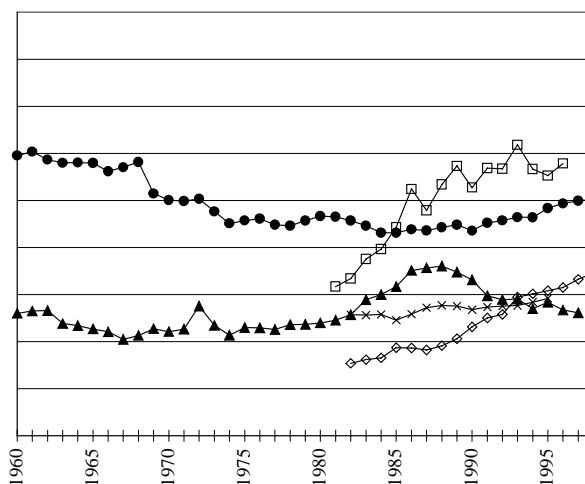


b) Liability-IR of Firms

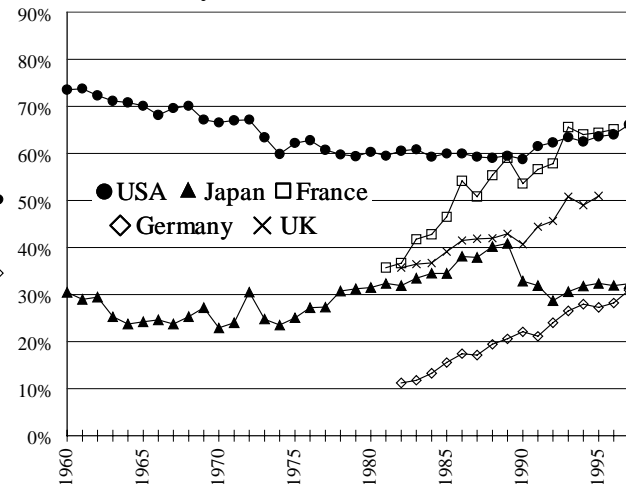


**Figure 3: General Securitisation Ratios of the Non-Financial Sectors**

a) Asset-SR

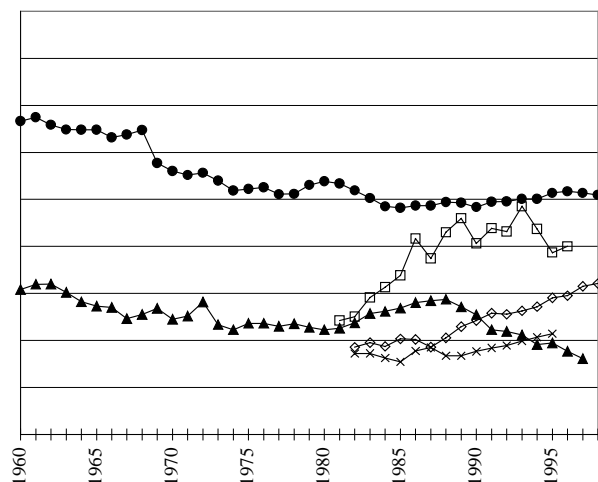


b) Liability-SR

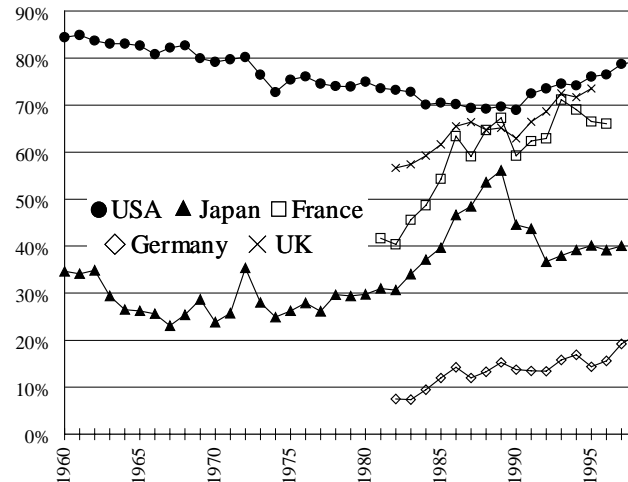


**Figure 4: Securitisation Ratios of Households and Firms**

a) Asset-SR of Households

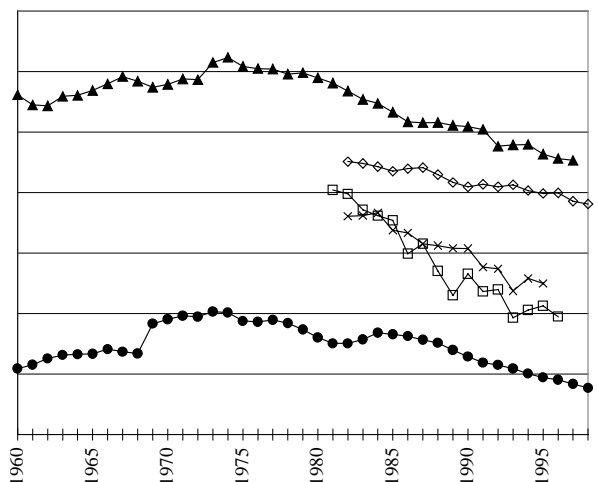


b) Liability-SR of Firms

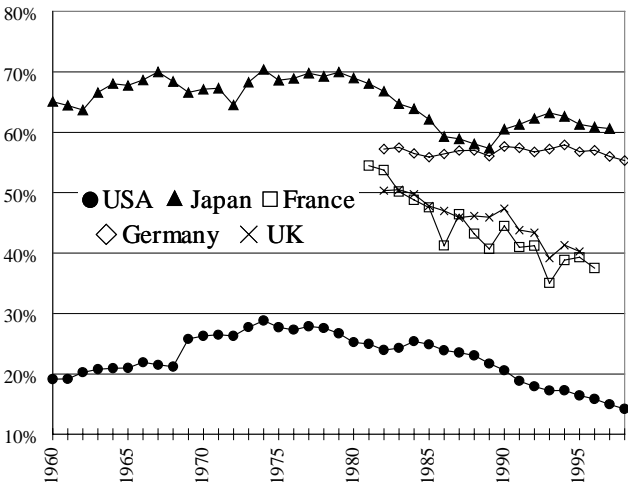


**Figure 5: Intermediation Ratios vis-à-vis Banks**

a) Asset-IR with Banks

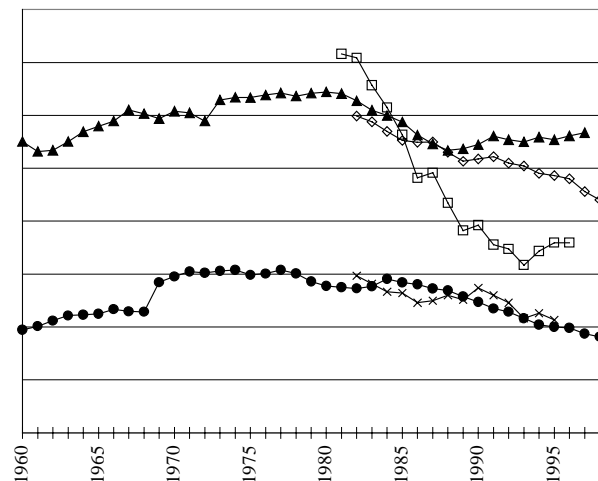


b) Liability-IR to Banks

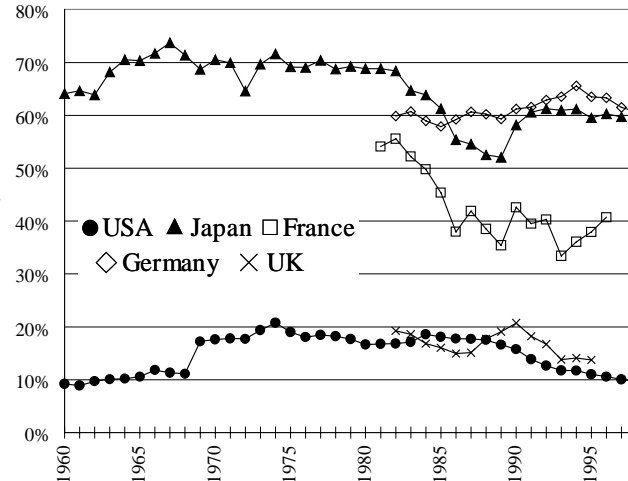


**Figure 6: Partial Intermediation Ratios of Households and Companies**

a) Asset-IR of Households with Banks



b) Liability-IR of Firms to Banks



(3) *There has been a decline in bank intermediation on the liability side:* From Fig. 5 it can be seen that, from the *point of view of investors*, the significance of bank intermediation has declined in all five countries since the beginning of the '80s. In the U.S. and Japan, the Asset-IR with Banks peaked in the mid-'70s, dropping thereafter to the level of previous decades (Fig. 5a). From the point of view of borrowers, banks lost ground only in the two financial systems which were already considered to be capital market-dominated,<sup>23</sup> namely those of the U.K. and the U.S., and also in France, where securitisation has increased the most and where intermediation has declined overall. By contrast, the German Liability-IR to Banks (Fig. 5b) has remained at a level of just under 60%, and the evolution of this ratio for Japan over the last 25 years also does not show a clear trend.

The varying initial levels and paths of development – which are also reflected in Fig. 6 – suggest that banks in Japan and Germany play a fundamentally different role than they do in the three other countries, and that the financial systems of both of these countries are (still) rightly considered to be bank-dominated. Interestingly, in terms of bank intermediation a trend towards convergence cannot be identified, despite the fact that national banking environments in countries around the world have undergone similar processes of change (deregulation, technological innovations and globalisation). On the contrary, the differences in the roles played by banks in the five financial systems were more pronounced in the late 1990s than at the beginning of the 1980s.

An additional point emerges if we look at the intermediation ratios of the banking sector itself, which can be calculated in a manner analogous to that used to compute the IRs of the non-financial sectors if total intersectoral assets or total intersectoral liabilities are selected as the denominator. The Asset-IR of Banks shown in Fig. 7a indicates the extent to which banks do not channel their funds directly to the real sectors, but rather provide them first to other financial intermediaries, which, by definition, are NBFIs. The Liability-IR of Banks in Fig. 7b shows the fraction of banks' funding which they obtain from NBFIs. The higher the values for these two ratios, the longer will be the chains of intermediation.

(4) *The chains of intermediation have become longer:* Since the early 1980s there has been a clear tendency on the part of banks in all five countries to increase the proportion of their funding which they obtain from NBFIs: According to Fig. 7b, the Liability-IR of Banks has at least doubled in every country. There has not been a corresponding change on the banks' asset side; indeed, Fig. 7a shows that in four of the five countries, there has been little, if any, movement towards a greater focus on bank lending to NBFIs. The U.S. is the only country whose banks have invested an increasing proportion of their total financial assets with NBFIs:

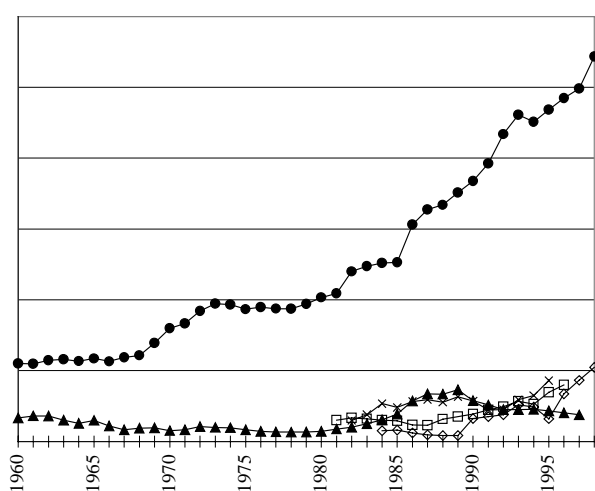
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<sup>23</sup> The practice of distinguishing between bank- and capital market-dominated financial systems was introduced by Rybczynski (1984).

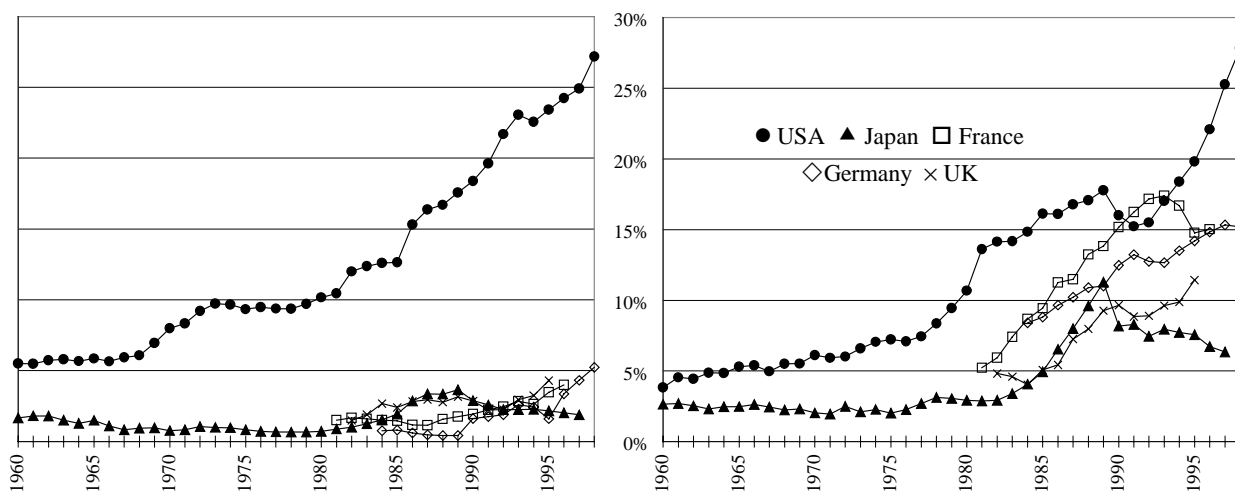
in 1998, more than one-quarter of their assets had been placed with such institutions. Evidently, NBFIs are substituting for banks everywhere in their function as institutions for the mobilisation of funds from surplus units. At the same time, the share of their total financial assets which non-U.S. banks channelled to NBFIs remained extraordinarily low, and thus it is fair to say that – at least outside of the U.S. – the two categories of financial institutions specialise in areas that do not overlap to any appreciable degree.

**Figure 7: Intermediation Ratios of Banks**

a) Asset-IR of Banks



b) Liability-IR of Banks



In view of the four conclusions which we have drawn from our analysis, the key question which we posed in this section can be answered quite easily: in the five countries covered by the data, and certainly in the three European countries which are the focus of our investigation, banks, NBFIs and capital markets play completely different roles. At least in this respect, financial sector structures have not become more similar over the past 20 years. Although a trend toward the substitution of banks as mobilisers of funds from surplus units can be identified in all five countries, banks continue to play the dominant role in Germany's financial system; by contrast, capital markets and financial institutions that operate in close proximity to the capital markets continue to be the dominant forces in the British financial system.<sup>24</sup> Only in the case of France would it seem appropriate to hypothesise that the basic structure of the financial system has been altered – especially in view of the fact that the changes that have taken place in the French financial sector over the last 25 years were set in motion by the state as part of a policy which was consciously intended to create a reorganised financial sector based on the Anglo-Saxon model.<sup>25</sup>

<sup>24</sup> For a more detailed discussion of the findings outlined here, including a more comprehensive interpretation of their implications, the reader is referred to Hackethal (2001).

<sup>25</sup> On this point, see, for example, Zerah (1993) and Faugère/Voisin (1994).

### III.3 Corporate financing patterns

In all of the countries covered by our investigation, companies have access to a great many different financing instruments and sources of finance. So far, though, the relevant research has not been able to specify, either in theoretical-normative terms or empirically, precisely how corporate financing structures and patterns<sup>26</sup> should be, or how they are in fact, taking into account the impact of key features of companies such as their size, age, profitability and the technology they employ, and key characteristics of the environment in which they operate, in particular the structure of the financial sector and the design of the legal-institutional framework.<sup>27</sup> The findings presented in the preceding section would appear to have provided a clear answer to at least the latter of the two questions, i.e. the question of how the financial-institutional environment in which companies operate shapes their financing structures. The dominance of banks within the German and Japanese financial sectors should be reflected in the financing structures of the hypothetical, average German or Japanese company. The same type of correspondence ought to apply in the case of the average U.S. or U.K. company, i.e. the dominance of capital markets in these countries' financial systems should be reflected in corporate financing structures. However, a series of highly influential studies by Colin Mayer et al.<sup>28</sup> questions the validity of precisely this correspondence, and, by extension, the validity of the entire "conventional" classification scheme for financial systems which characterises them as being either bank-dominated or capital market-dominated.<sup>29</sup> These authors draw the following conclusions from a four-country comparison of flow-of-funds data from National Accounts Statistics: During the period 1970 – 1994, internally generated funds were by far the most important source of finance for corporate investment, accounting for between 70% (Japan) and 96% (USA) of the total. The share contributed by banks was larger in the United Kingdom than in Germany (14.6% versus 11.1%), while the fraction provided by banks in the U.S. (11.1%) was almost identical to that computed for Germany. The authors' figures showed that, in net terms, shares accounted for 0.1% in Germany, and thus that they played a larger role in financing corporate investment there than in the United Kingdom (net contribution: -4.6%) and the U.S. (net contribution: -7.6%). If we were obliged to accept these very surprising findings as being accurate, we would in fact have to question the validity of the widespread assumption that financial systems can be divided into two groups, i.e. that they can be classified as being either bank-dominated or capital market-dominated. Moreover, if

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<sup>26</sup> The distinction between structures and patterns is primarily technical in nature.

<sup>27</sup> See the differing conclusions arrived at by Borio (1990), Frankel/Montgomery (1991) and Rajan/Zingales (1995).

<sup>28</sup> See, in particular, Mayer (1988), as well as Corbett/Jenkinson (1996, 1997).

<sup>29</sup> "[t]he celebrated distinction between the market based financial pattern of the United Kingdom and the United States and the bank-based pattern of Germany is inaccurate." (Corbett/Jenkinson 1997 p. 85)

these findings were valid, we would have to conclude that our attempt to identify “fundamental” differences between financial systems – and to determine whether such systems have become, or are becoming, more similar – was pointless.<sup>30</sup>

Proceeding from the supposition that financial sector structures and financing patterns do in fact have to be consistent, or “fit together”, we subjected the methodology employed by Mayer and his co-authors, and those who continued the line of research they had begun, to a critical assessment. We thereby came to the conclusion that Mayer et al. arrived at their findings above all because of the methodology they used. Implicitly, they proceeded from the following crucial assumption: all financing that flows into the company sector is first used to repay debts (or equity) of the same type, and only then are the funds used for investment purposes. If computations are made on this basis, bank loans that are taken out by one company explicitly for the purpose of financing investments are compensated for by the debt repayments of another company, which undertook investments in preceding periods with bank loans. In a hypothetical situation involving zero growth and in which investments are financed exclusively with bank loans, which of course must be paid back in subsequent periods, use of the method developed by Mayer et al. shows that the contribution of bank financing equals 0%. And since internally generated finance is the only source of funds for which there is no corresponding “offsetting item”, this method postulates that funds from this source are never employed to repay loans or repurchase shares, but rather are invariably used to finance investments. As a result, they must play a very important role in financing corporate investment.

Having the same basic intention as Mayer et al., but not wishing to employ the same problematic assumption, we developed an alternative design for our investigation and proceeded to evaluate a comparable set of data.<sup>31</sup> Instead of “arbitrarily” allocating inflows of funds from individual sources to certain outflows and then offsetting them against each other, we reconstructed gross financial flows, which do not specify how funds are used.

Table 1 shows the results of our calculations for the U.S., Germany and Japan. Here again, we distinguish between an institutional perspective (banks, NBFIs, households, Foreign countries/State) and an instrumental perspective (share accounted for by securities).

While banks were by far the most important source of corporate finance in both Japan and Germany between 1970 and 1996 – maintaining their share at roughly a constant level – the contribution of U.S. banks, which was small to begin with, declined during this period. By the mid-1990s, the share of corporate financing provided by banks had declined to just over one-

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<sup>30</sup> The finding of Mayer and his co-authors and those who closely followed his lead are reported in a large share of the relevant literature; a selection of these sources are quoted in Hackethal/Schmidt (1999), note 6.

<sup>31</sup> For a detailed discussion of the methodology, see Hackethal (2000) and Hackethal/Schmidt (1999).



third, with the fraction accounted for by NBFIs operating in close proximity to the capital market – e.g. insurance companies, investment funds and finance companies – showing a substantial increase. At the same time, the share of gross financing provided via securitised instruments, above all bonds and shares, continued to rise, increasing from a proportion which was already very high compared to that of other countries to a level of almost 50 percent.

**Table 1: Financing patterns of German, Japanese and American companies**

<i>Country</i>	<i>Sector</i>	<i>'70-'74</i>	<i>'75-'79</i>	<i>'80-'84</i>	<i>'85-'89</i>	<i>'90-'96</i>	<i>'70-'96</i>
<i>Percentages of the volume of long-term external corporate finance*</i>							
U.S.	Banks	0.51	0.49	0.49	0.46	0.36	0.44
	NBFIs	0.36	0.39	0.40	0.41	0.49	0.42
	Households	0.12	0.11	0.07	0.07	0.09	0.09
	Foreign countries/State	0.01	0.02	0.04	0.06	0.06	0.04
	<i>Securities</i>	0.42	0.42	0.41	0.45	0.48	0.45
Germany	Banks	0.80	0.82	0.84	0.82	0.83	0.82
	NBFIs	0.14	0.14	0.12	0.13	0.11	0.12
	Households	0.04	0.03	0.03	0.04	0.04	0.04
	Foreign countries/State	0.02	0.01	0.01	0.02	0.03	0.02
	<i>Securities</i>	0.12	0.09	0.08	0.11	0.13	0.12
Japan	Banks	0.95	0.95	0.95	0.91	0.92	0.93
	NBFIs	0.02	0.02	0.03	0.06	0.06	0.05
	Households	0.02	0.02	0.01	0.02	0.01	0.02
	Foreign countries/State	0.01	0.00	0.01	0.00	0.01	0.01
	<i>Securities</i>	0.10	0.10	0.10	0.15	0.16	0.13

Source: Hackethal (2000)

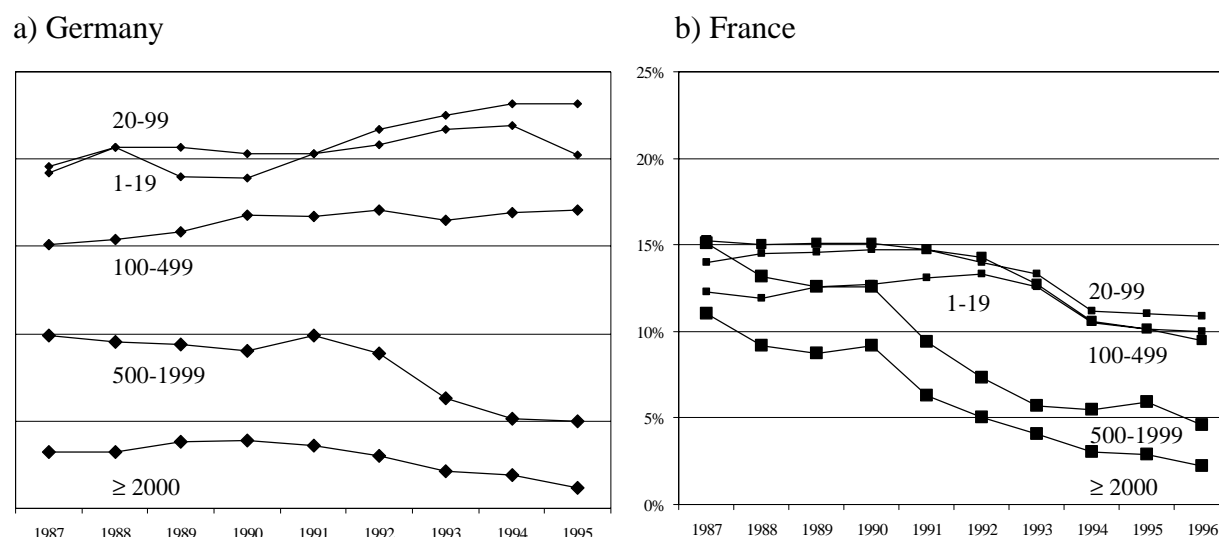
\* In order to avoid distortions as a result of transaction-intensive short-term forms of financing, the analysis dealt only with instruments with an original maturity of more than one year. Moreover, the data base covers only *intersectoral* financial flows, and thus, for example, cross-shareholdings between companies and trade credits are not taken into account.

As is shown by the figures in Table 1, organised capital markets were, and are, much less important as a source of corporate finance in both Germany and Japan than they are in the U.S. On average, they contributed less than 15 percent of total corporate finance over the period covered by the data. The overall picture of financing patterns which emerges from our data is therefore consistent with our findings on the structure of national financial systems, and, at the same time, fundamentally different from the picture suggested by the calculations presented by Mayer et al.

Unfortunately, due to a lack of data we were unable to carry out the corresponding calculations for the United Kingdom. However, there are a number of reasons why the

findings for the U.S. can be regarded as largely valid for the U.K. as well. As regards France, a recent study by the Deutsche Bundesbank and the Banque de France which is based on comprehensive and very carefully compiled balance sheet data makes it possible, for the first time, to arrive at a quite reliable assessment of the financing patterns of German and French companies in various size categories.

**Figure 8: The share of bank loans in the liabilities of companies (median for each size category – breakdown by number of employees)**



Source: Friderichs/Paranque/Sauvé (1999)

The findings of the study are unambiguous: small and medium-sized German firms still rely on financing via bank loans, and their reliance on this source of finance has evidently increased. By contrast, companies with 500 and more employees have become less and less dependent on this source of finance. However, the average value for all companies, i.e. the share of bank loans in the total volume of corporate finance, remained at a high level over the period covered by the data. The increasingly divergent patterns in the financing behaviour of German firms of various sizes indicates that the financial system environment is no longer comparable for large and small German firms. In contrast, the share of bank loan financing has decreased for all size classes of French firms and thus also for aggregate firm financing in France.

Thus it seems that on the basis of corporate financing patterns one can differentiate between countries – and specifically, between bank- and capital market-oriented financial systems. As in the context discussed in the last section, the French financial system can be seen as having experienced a far-reaching change which seems to make it more similar to the Anglo-Saxon financial systems. Nevertheless, the data provide no indication of a process of a general convergence between the countries.

### III.4 Corporate governance systems

#### III.4.1 Relevant issues and methodology

As we noted at the outset, corporate governance is one element of the financial system. Thus, the question of how different the national systems of corporate governance were at the beginning of the '80s and the question of how different they still are today – i.e. the question of whether or not they have already become more similar – are part of the broader question of whether financial systems in Europe are converging.

The concept of corporate governance denotes the entire range of mechanisms and arrangements that shape the way in which key decisions are taken in (large) companies. Corporate governance takes in the legal arrangements regarding the way in which the top management of a company is organised, other parts of company law, the product markets, the markets for capital and labour, and finally, both the formal organisational structure of a company and any informal organisational arrangements which may exist and function alongside of – or in place of – formal structures. Like our definition of the financial system, this definition of corporate governance is broad, and it suggests that one should seek to determine the extent to which interest groups, or “stakeholders”, are in a position to influence corporate decisions, and in fact do exert influence on such decisions, and the ways in which such influence can be, or is, exerted by them.

If corporate governance systems become more similar, the convergence can occur in three areas: the formal legal arrangements – and those which operate in practice – regarding rights and opportunities to exert influence; the way in which corporate governance is exercised in practice; and the characteristics of the system in the sense of the specific way in which the various elements of a corporate governance system interact and function together.<sup>32</sup> Due to space limitations, we will restrict ourselves here to a discussion in which we develop, and provide an initial, tentative demonstration of the validity of, the thesis that so far there is no indication that the characteristics of the respective national corporate governance systems are converging.<sup>33</sup>

Given that the usual classification of financial systems into two groups – those which are bank-dominated and those which are capital market-dominated – cannot be applied directly to corporate governance systems, an analogous distinction is made here between insider and

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<sup>32</sup> The following discussion draws in particular on the studies by Schmidt/Grohs (2000), Mann (2000) and Soroko (2001) which were carried out in the framework of the DFG project.

<sup>33</sup> For a discussion of qualifications of the hypothesis with regard to the legal and actual scope for the exertion of influence and the practice of corporate governance in the three countries, see the sources cited in the preceding footnote and the material provided therein.

outsider control systems.<sup>34</sup> In an insider control system, the activities of a company are guided, and its management is monitored, largely on the basis of mechanisms which presuppose that there are actors with a privileged position in terms of their access to information and their ability to exert influence – i.e. insiders, who are familiar with, and perhaps personally involved in, the company’s activities, but who are not themselves decision-makers within the company.

In an outsider control system the activities of a company are in essence guided by external market mechanisms. This presupposes that the persons who act in the markets, and who, through their behaviour there, influence companies and monitor their management, maintain arm’s-length relationships with companies, are not privileged in terms of their access to information and do not have any direct personal influence on the affairs of companies, and who, in this sense, may be regarded as outsiders.

Given the questions we are seeking to answer, we must make additional distinctions which go beyond this basic division into insider- and outsider-controlled systems. Specifically, we must ask whose interests are taken into account when corporate decisions are made, and also (this question is related, but addresses a separate issue) which stakeholders may be in a position to exert influence on corporate decisions, which mechanisms determine whether they in fact exert influence and whether they are able to ensure that their interests prevail, and how these mechanisms work.

The analysis of a specific corporate governance system comprises two steps.<sup>35</sup> In the first step, individual elements of the system which influence a mechanism which in turn has an impact on the affairs of the company – i.e. individual corporate governance-relevant instruments such as the requirements regarding the publication of information by companies – are analysed with regard to each stakeholder group to assess their significance. In the second step, the way in which all stakeholder groups and “impact mechanisms” or corporate governance-related instruments interact and function together is evaluated. This second step is absolutely necessary; indeed, without an evaluation of the entire range of links, mechanisms and relationships that are involved, we cannot even begin to assess how strong the influence of the various stakeholder groups and mechanisms or instruments really is, and precisely how their influence affects the workability and mode of operation of a given financial system. And without the information yielded by a comprehensive evaluation of this type, we cannot accurately characterise a specific corporate governance system.

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<sup>34</sup> See Franks/Mayer (1994).

<sup>35</sup> The methodological approach is explained in detail in Schmidt/Grohs (2000), which also shows how the results which are summarised in sections III.4.2. to III.4.5 were derived.

If one describes several corporate governance systems in this way, structural differences that may exist between the individual systems can be identified. Once such differences have been delineated, one can also attempt to ascertain whether the roles of the stakeholders and the various “impact mechanisms” and instruments have changed over time; and if this can be determined for several countries, it is then possible to assess whether their respective corporate governance systems have become, or are becoming, more similar.

### III.4.2 Corporate governance in Germany

In the eyes of the law, in the political sphere, in the self-perception of many managers and in some strands of management theory, the large German corporation, or *Aktiengesellschaft*, is regarded as a coalition of three to five core groups. The three undisputed members of this coalition are the shareholders, or at least the large shareholders, the top managers, and the other staff, whose influence derives partly, though not exclusively, from Germany’s co-determination laws. It is also possible, however, to see banks and “politicians” as additional members of this coalition.

Given that the large corporation is a coalition, it almost inevitably follows that large corporations are stakeholder-oriented. Despite the undisputed primacy of shareholders’ interests, the interests of the other stakeholders are also seen as being legitimate and relevant. This stakeholder orientation manifests itself, for example, in the predominance of the view that shareholder value is not the sole criterion for defining a company’s aims<sup>36</sup> and in the fact that the representatives of small shareholders are in a minority on the Supervisory Boards of companies.

The German system of corporate governance is certainly an insider control system. The most important mechanism is the Supervisory Board, made up of representatives of various interest groups, in combination with the “division of power” between the Management Board and the Supervisory Board. It is the legally mandated task of the Management Board to manage the *Aktiengesellschaft* “in the best interests of the company”<sup>37</sup>, while the Supervisory Board’s main function is to oversee the actions of the Management Board. Effective oversight presupposes that at least some of the members of the Supervisory Board are well informed of what is happening in the company, and are able to influence the Management Board, partly by virtue of their membership of the Supervisory Board and partly by other means. They must therefore be “insiders”.

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<sup>36</sup> For evidence, see, for example Schmidt/Spindler (1997) on the legal viewpoint, and numerous contributions to Kumar et al. (1999) on the views of business management experts.

<sup>37</sup> See Raiser (1969), Ott (1977) and later critical assessments by Schneider (1997), pp. 443 and Schmidt/Spindler (1997).

This division of roles does not imply that the Supervisory Board's position vis-à-vis the Management Board *as a controlling body* is weak under German company law, but it does mean that the Supervisory Board's ability to exert influence is limited. This limitation on the Supervisory Board's ability to take initiatives and exert influence is a necessary precondition for the stakeholder orientation of a German company, because only this constraint makes it possible, and economically sound, to have a plurality of interests represented on the Supervisory Board.

The interests of the "genuine" shareholders are comparatively weakly represented on the Supervisory Board of most German joint stock corporations. This is reflected above all in its composition. Most Supervisory Boards are not representative bodies of the shareholders, but rather coalitions of high-ranking former managers of the company, managers of other companies, representatives of banks, and representatives of the employees and the trade unions. In principle, there is a fundamental conflict of interests between the shareholders and the other interest groups,<sup>38</sup> but even in the medium-term view, these groups are already bonded together by a common interest in the stable development of the company. And in the longer term, this will probably also be in the interests of the shareholders. Thus, the conflicts of interest on the Supervisory Board are likely to be of relatively limited extent, and therefore it also makes economic sense for various interests to be represented on it. Fitting comfortably into this overall picture of limited conflicts of interest are the roles played by the banks and politicians in German corporate governance: these two groups are primarily interested in the stable development of the company. In this respect, the German corporate governance system is consistent.

The capital market is (as yet) largely irrelevant as a mechanism of corporate governance in Germany. This is in conformity with the system, given that the threat of hostile takeovers would put strong pressure on managements, and this pressure could only push them in the direction of shareholder value maximisation, which would be incompatible with the concept of a corporation as a coalition.

The German corporate governance system is a complex amalgamation of conflicts of interest and consensus. In this system, many of the key agreements on which it is based are implicit. Neither laws nor contracts would make it possible to ensure compliance with those agreements. Instead, this task is one of the functions performed by the many interconnections that exist in the German economy, both in terms of individuals holding positions in various companies, and cross-shareholdings between companies, and by the political-social network to which the major decision-makers belong. This function is facilitated by the fact that the

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<sup>38</sup> And to be sure, opinions differ on how – possibly very similar – goals can be achieved. But we do not take these "differences of opinion" into account here.

representatives of the various stakeholders, including the present top managers, are continually meeting each other, not least of all on the Supervisory Boards of various large companies, and in that context they have to be capable of co-operating with one another in a “sensible” manner.

### **III.4.3 Corporate governance in the United Kingdom**

In British and American literature and practice, the concept of corporate governance is reduced to the legal and economic relationships that obtain between shareholders and management. This reflects a fundamental feature of the British corporate governance system: the representation of interests within it is monistic, and the only legitimate stakeholders are the shareholders, above all those whose sole interest is in receiving dividends and seeing the price of their shares go up and who have no other connection with the firm in question. As regards other groups that have a close relationship with the large corporation, such as employees, customers and suppliers, banks and other creditors, and the state and society, it is assumed that their interests are sufficiently protected by laws, contracts and the relevant markets. That does not necessarily imply that they are also irrelevant to the proper functioning of governance mechanisms, but to a large extent this is indeed the case. However, this in turn certainly does not mean that their interests are not important, or indeed that those interests are infringed.

Internal control in large British corporations tends to be relatively weak. To the extent that it does play a role, it can be seen as an internal lever through which to reinforce external control. This leads us to the second pillar on which corporate governance in Britain rests: control via the capital market. Here it is possible to distinguish between two mechanisms; which of the two comes into effect is a function of the extent of the problems facing the enterprise.

The first mechanism rests on the interconnection between stock market valuation, capital costs and financing opportunities. If the stock market takes an adverse view of a firm’s published results or its corporate strategy the price of its shares will fall. The dissatisfaction of the shareholders may make it more difficult for the firm to obtain financing, and consequently to implement its corporate strategies, and this in turn may, in extreme cases, lead to the sacking of the CEO and other executive directors if there are no plausible reasons for the fall in share prices. For this reason, the management will make every effort to avoid such situations.

The second mechanism is the hostile takeover. Hostile takeovers frequently result in the dismissal of the entire Board and other high-ranking members of staff. This creates an incentive for management to make a takeover as unlikely as possible, which can best be

achieved by pursuing a policy which would make a takeover extremely expensive, i.e. one that pushes up the share price as far as possible – which is exactly what the shareholders want.

The way the British governance system works presupposes the existence of a functioning capital market. This also largely determines the time horizons of corporate strategies and the duration of contracts which companies conclude with their banks and their employees. These contracts tend to be short-term and explicit, and therefore more closely resemble the theoretical model of a market relationship than that of a partnership.

#### III.4.4 Corporate governance in France

In France, more clearly than in other countries including Germany and the U.K, the corporate governance system reflects the general social, economic and political traditions and also the current changes that are taking place in the state, the economy and society. One could not even attempt to characterise the basic structure of corporate governance in France without being much more specific about the timeframe than in the case of Germany and the U.K.<sup>39</sup>

The centralistic tradition of French society and the French economy manifests itself in a corporate governance structure that – mirroring the extensive powers of the *Président de la République* – is totally centred on the position of the *Président Directeur Général* (PDG). The statist tradition is evidenced in the close dovetailing of the political and economic spheres, where the connections go much deeper than mere cross-shareholdings and the involvement of individual politicians in various companies. The rationalist tradition can be discerned in the general distrust of “irrational”, anonymous market forces, and in the strongly held faith in the notion that social structures and processes can be planned.

The concentrated holdings of the state and of formerly state-owned enterprises, holdings which were acquired in the 1980s and were subject to restrictions on sale and similar constraints, served as a mechanism to shield the PDG from internal and external censure and control.<sup>40</sup> Since being comprehensively reformed in the mid-80s, the French capital market would, in principle, have been able to play an important role in corporate governance. In legal terms, at least, hostile takeovers are also comparatively easier in France. Yet the “hard core” of state and parastatal “strategic participations” and the multitude of other cross-shareholdings act as a protective shield for the incumbent management and have limited, at least until recently, the possibility of exercising control via the capital market.

All this makes it sound as though French corporations, or at least the people that run them, are in effect accountable to no-one. This impression is false, however, because the state, the bureaucracy and the network of the business and civil service elite did, at least until recently,

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<sup>39</sup> See Bancel (1997).

<sup>40</sup> See Morin (1995).





and to its decision-makers, and numerous mechanisms need to be in place in order for this system to function properly, as is indicated by the predominance of black circles in the top line of Fig. 9. The relationships between the influential groups are shaped by a blend of conflict and consensus. There is, at least in principle, a balance of power between the Supervisory Board and the Management Board, and this is – again, in principle at least – an equilibrium with a potentially high degree of conflict intensity. The reconstruction of the German corporate governance system permits us to hypothesise that the roles of the stakeholder groups on the one side, and the functional significance of the various mechanisms and institutional elements of corporate governance on the other side, fit neatly together. In this respect, one can describe the system as a consistent configuration of complementary elements. And this is surely also one of the main reasons for this system’s noticeable stability, as indicated by the many horizontal arrows. In other words, this stability could well be rooted in the evident consistency of the system.

The corporate governance system of the U.K. differs fundamentally from that of Germany, as is immediately apparent if one compares the respective lines of Fig. 9. No group is able to exert significant direct influence because it is not individuals and interest groups that control the British system, but rather the anonymous mechanisms of the market. This system is clearly controlled by outsiders, and although here too a balance of power can be discerned, the level of conflict intensity is low compared with the German system. The British system is also consistent, as is particularly evident in the unequivocal orientation towards the “one-dimensional” goal of shareholder value maximisation. The consistency of the British corporate governance system leads us to suppose that it is both functional and relatively stable, as the directions of the arrows in the middle line of Fig. 9 indicate.

Corporate governance in France simultaneously exhibits elements of both insider control and outsider control. Yet neither set of characteristics is particularly strong, and from a functional point of view they do not fit together easily. In the past, state influence and the peer control exercised by the elite provided a certain counterbalance to the powerful position of the PDG in large French corporations. Therefore, with hindsight, one might be justified in describing that system as an approximately consistent one, yet which did not fit into any of the conventional classifications. Today the French state has largely withdrawn from the governance structures of large corporations – and indeed from many other economic functions – and the weight of peer control over top managers and in particular PDGs, also appears to have declined. This has left a power vacuum. It is not clear whether the increasing significance of the capital market in France and the – to date rather half-hearted – attempts to strengthen internal control can be regarded as a new consistent system that has replaced the old one. This ambiguity, and the fact that corporate governance in France is changing more

extensively than in Germany and the U.K., is indicated by the bottom line of arrows, many of which are pointing either up or down.

This comparison of the basic structures of the three countries' corporate governance systems, and the changes they are undergoing, allows us to conclude that a convergence of system characteristics has not yet occurred. As in the past, fundamental differences continue to exist between the seemingly consistent systems of Germany and the U.K. In France, as regards the characteristics of the system as a whole, the changes of recent years could probably be interpreted as a loss of former consistency. Given the expectations with which we embarked upon this investigation of the convergence of corporate governance systems in Europe, this finding, as represented in Fig. 9, is remarkable both in its substance and in its clarity.

## **IV Conclusions and outlook**

### **IV.1 Overall configuration of the financial systems**

The three aspects of the financial systems that we have analysed so far – the structure of the financial sector and the role of banks in the intermediation process,<sup>41</sup> the financing patterns of non-financial firms, and the national corporate governance systems – do not provide any empirical evidence that Germany, Britain and France are converging. This is at odds with the expectations expressed by numerous commentators, both academic economists and business practitioners, during the past 15 years. Having devoted the preceding sections to an account of our findings with regard to each of these aspects separately, we will now conclude by considering the ways in which the elements interact and function together, i.e. the overall configuration of the three financial systems.<sup>42</sup> And here too, we will find confirmation of the finding that the systems – at least those of Germany and the U.K. - exhibit a high degree of stability.

As an approach to explaining the stability we have found to exist, we introduced in Part II the concept of the complementarity of the elements that make up each system and, associated with it, the concept of the consistency of individual systems. If it is a necessary condition for the functionality of financial systems that all, or at least the most important elements of the

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<sup>41</sup> As we emphasised at the beginning, this is only one aspect of the financial sector. Other aspects, and the differences as well as a possible convergence between the national financial sectors with respect to these aspects, are discussed in Schmidt (2001a) and Schmidt (2001b).

<sup>42</sup> For a more detailed analysis of the elements and how they interact and function together, and for a discussion of another conceivable subsystem of financial systems from the point of view of firms, namely "corporate strategies", see Hackethal/Schmidt (2000). For a discussion of the complementarity between the pension system and the other elements of the financial systems in the three countries, see Tyrell/Schmidt (2001).

system complement each other, then it follows that gradual changes, such as typically occur in convergence processes, will inevitably lead to welfare losses in the transitional period until the old configuration has been replaced by a new, totally different configuration that is fully functional. These welfare losses (or the prospect thereof) prompt contrary reactions on the part of those economic agents who will have to bear these losses, and thus tendencies towards inertia and path dependence in the system as a whole. Thus, in order to understand structural changes in financial systems, it is necessary to take into account not only the values taken on by the features of individual elements and subsystems but also and above all the ways in which the components of the system interact and function together.

To this end, we will first provide an overview of key elements of the financial systems of each of the three countries and the values their features had predominantly taken on towards the end of the period under review, and will then proceed to analyse the complementary character of the relationships between the features.<sup>43</sup>

#### **IV.1.1 The German financial system**

At the end of the 1990s, the financial system in Germany could be characterised by the following values for its core elements:

##### **Financial sector**

1. Banks, and universal banks in particular, dominate the financial sector.
2. Non-bank financial institutions that are independent of banks – especially pension funds and unit trusts – play only a minor role.
3. The market for share capital is still relatively underdeveloped by comparison with other industrialised countries.
4. The accumulation of assets by households mainly takes the form of investment in instruments offered by banks and/or insurance companies.

##### **Financing patterns**

5. External financing of small and medium-sized enterprises largely consists of long-term bank loans; “Hausbank”-relationships obtain.
6. Pension reserves continue to be an important source of internal financing.

##### **Corporate governance**

7. There is strong incidence of cross-shareholdings among companies, and complex group structures.
8. The public limited company is not the dominant legal form among corporations.

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<sup>43</sup> A similar characterisation of the three financial systems is given in Allen/Gale (2000), chapter 3.

9. Firms listed on the stock exchange are characterised by concentrated shareholder structures.
10. Aside from the shareholders, other stakeholders such as banks and employees are involved in exercising corporate control (insider system).
11. Long-term and implicit contracts between the stakeholders create stable bonds and form the basis for corporate control.
12. External control via the capital market (takeover market) is – still - virtually non-existent.
13. Firm-specific investments by the stakeholders (e.g. human capital investments by the employees and relationship loans by the banks) are encouraged by the “obligation to reach agreement” which exists as a consequence of the evenly balanced distribution of power among the insiders.

The elements outlined above are largely compatible with one another: the dominance of the banks in the financial sector is reflected both in the corporate financing patterns and in the dominant mode of corporate governance. A key difference between banks and capital markets lies in the way in which they process information.<sup>44</sup> Whereas capital markets externalise information via the price mechanism, thereby making this information public, banks are characterised by the fact that they internalise information relevant to the valuation of a company and are thus in a position to provide finance, even in “difficult cases” that are characterised by highly asymmetric information. This is why in Germany relationships between firms and financial intermediaries are often close, long-term and, by international standards, not very transparent. An advantage in terms of overcoming asymmetric information is often the fact that nearly all German banks are universal banks. The multiplicity of their relationships with firms enables them to exercise tighter control over the risks arising out of long-term credit relationships with companies and out of the contracts, some of them implicit, associated with those relationships. The consensus-based practice of corporate control in Germany makes this easier and is effective in incorporating the employees and the trade unions into this system of mutual reliance. The arrangement is stabilised by the fact that each of the stakeholders (shareholders, employees, banks, managers) has the power to negotiate and thus an “obligation to reach agreement” exists. A functioning and active market for corporate control would not fit into this picture. The stakeholders would fear that the implicit contracts might be broken by the new owners, which would reduce the ex ante incentives to make firm-specific investments. And indeed, given that share ownership remains concentrated in the hands of people and institutions with close connections to the companies they own, the German capital market continues to be regarded as “underdeveloped”. This means that the

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<sup>44</sup> See Tyrell (2001).

degree to which information is externalised is low, so that insiders have advantages over outsiders, and especially over private (small) shareholders.

#### **IV.1.2 The British financial system**

Nearly all of the elements that make up the British financial system take on values at the opposite end of the scale from those in Germany:

##### **Financial sector**

1. Not commercial banks but NBFIs (unit trusts and pension funds) dominate the financial sector. The market for share capital is highly developed.
2. The accumulation of financial assets by households occurs mainly through investment in the capital market, either directly, or indirectly via pension funds and unit trusts.

##### **Financing patterns**

3. External corporate financing occurs to a strong degree through the capital market, either directly or indirectly.
4. The predominant form of credit finance through the banks tends to be short term and “at arm’s length”.
5. As a consequence of the large volumes of capital they have at their disposal, pension funds are an important source of external financing for companies.

##### **Corporate governance**

6. The public limited company is the dominant legal form among corporations.
7. Cross-shareholdings between companies are rare, group structures are transparent and not very complex.
8. The shares of companies listed on the stock exchange are mainly held - either directly or indirectly via mutual funds - by small shareholders.
9. Corporate control is exercised via market mechanisms (takeover market) and is oriented towards shareholder value (outsider system).
10. Relationships to non-shareholding stakeholders are mostly governed by explicit contracts and on the basis of market mechanisms, and tend to be short term. This reduces the incentive for employees to invest in firm-specific human capital, but it does allow a much higher degree of flexibility.

The British system, viewed as a totality, can also be interpreted as a consistent system of complementary elements: the relationships between firms and financial intermediaries tend to be at arm’s length, short term, and largely transparent. Neither corporate finance nor corporate governance is dominated by banks; instead, market mechanisms, and thus the externalisation of information, play a major role in shaping the relationships between the stakeholders. In

such a configuration, from the point of view of the banks the advantages of forming a coalition as a means of obtaining, and acting profitably upon, firm-specific information, fade into the background, so that the organisational form “universal bank” appears less advantageous. On the contrary, in order to survive in the face of competition from highly specialised NBFIs, British banks also need to specialise to a greater degree than German banks. The relationship of most banks to their corporate clients focuses on short-term lending and transaction services. However, this denies the banks a base on which to build long-term customer relationships, which consequently remain at arm’s length for the most part. This is also reflected in the financing patterns and in the mode of corporate governance. Indeed outsiders – and above all the managers of large pension funds and unit trusts – have incomparably more influence over corporate management at the average British firm than they do in Germany. Maximisation of shareholder value is perceived as the exclusive objective of the firm. This principle, however, threatens to undermine the effectiveness of bonding mechanisms which managements may apply to other stakeholders. The danger that the management or their “principals”, i.e. the (possibly changing) owners, may try to take unfair advantage at a later date therefore reduces the incentive to undertake firm-specific investments; or, to put it another way, a very one-sided and very strong orientation towards the market value of share capital is easily reconcilable with a low level of bonding of the company’s other stakeholders. In place of implicit contracts there are explicit contracts combined with market mechanisms, and in place of a “voice” through which their interests are represented, the stakeholders have the option “exit”. Well functioning external labour markets take the place of in-house codetermination as a means of protecting employees’ interests. The other side of this coin is that firms can generally respond more flexibly to changes in the environment, yet at the same time have to accept the disadvantage that they will be less able to differentiate themselves on the basis of firm-specific resources. With banks playing a more subordinate role, there is also less incentive for them to come to the aid of a firm that finds itself short of liquidity.

The existence of such trade-offs, which are typical of systems with complementary elements, means that we are unable to pass judgement here on which of the two systems, the U.K.-style market-oriented financial system or the German-style bank-oriented financial system, is the more advantageous in general terms.

#### **IV.1.3 The French financial system**

The French financial system cannot be classified so unambiguously or, as far as the last 20 years are concerned, in such a time-invariant manner. In the past, until approximately 1986, the financial system was largely shaped by the state’s interest in, and activities aimed at, exercising control over the system, at the core of which was a highly fragmented banking

system. A considerable proportion of corporate finance – nearly 50 percent at the start of the ‘80s – took the form of credit provided at subsidised interest rates, with the Caisse de Dépôts et Consignation, the Banque de France and the Treasury forming the core elements of the intermediation system.<sup>45</sup> The capital markets were almost exclusively oriented towards state financing and were therefore ill-suited to the purposes of corporate finance. De facto, there was no clearly defined mode of corporate governance. Instead, the influence of the state overrode the instruments designed to protect the interests of insiders and outsiders. In this sense, it was legitimate at the start of the 80s to speak of a French “third way”.<sup>46</sup>

The new banking law of 1984 and the deregulation and opening of the money and capital markets in 1985/86 (“*le petit bang*”) were ultimately precipitated by the government’s intention to make public sector borrowing easier and cheaper. As a consequence, the (big) banks declined in significance as financial intermediaries. The obverse of this development was the triumphant advance of the capital markets. Nonetheless, complex group structures persist. Although gradually unravelling, the “*noyaux durs*” of (indirect) state holdings that evolved in the course of privatisation, and, associated with them, the interpenetration of interests represented by individuals with multiple directorships, remain important to this day. Corporate control is not very transparent, and is tailored to suit the chairman of the board (PDG), who enjoys far-reaching powers and can exercise them virtually without checks and balances. In this respect, French corporate governance is still an insider system, even though the influence of foreign institutional investors has in the meantime led to improvements in the *gouvernement d’entreprise* and in the degree of transparency. Relationships with stakeholders are still largely shaped by long-term, partially implicit contracts.

It is hardly surprising that changes in the structures of the financial sector and corporate governance have been accompanied by changes in the subsystem “corporate finance”. As emerged clearly in the preceding sections, increasing *désintermédiation* and *marchéisation* (securitisation) have meant that non-bank financial intermediaries and the capital market have gained in significance as a source of corporate finance (and as investment vehicles for households). Yet as they become increasingly important as sources of finance and as investment instruments, the insurance companies and especially the unit trusts and money market funds are seldom independent of the banks in institutional terms. The banks may still be involved in the cross-shareholding that interlinks firms, but they no longer play a dominant role in the financing process or in corporate control.<sup>47</sup> Corporate financing tends to be short-

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<sup>45</sup> On this point, see also Bertero (1994) and Schmidt (1997).

<sup>46</sup> The same conclusion is also reached by Walter (1993, p. 24): “*The French financial and industrial systems have traditionally been dominated by the strong influence of central government.*”

<sup>47</sup> On this characterisation of financing relationships in France, see also the monthly report of the Deutsche Bundesbank for October 1999.



term and “at arm’s length”; so far, pension funds and pension reserves have not played a major role.<sup>48</sup>

At first glance the French system appears to be in the process of shifting from the German type to the Anglo-Saxon type. However, the new structure that has emerged from the changes that have taken place over the last few years is still far from consistent – the elements of the system often do not fit together (yet). The observed instability is a sign of functionality problems and thus indirectly of inconsistencies. The element that used to be constitutive of the system, linking the various components of the financial system together and thus also ensuring that the system remained workable, was the strong position of the state and the elites that were closely associated with it. This element has largely disappeared. Contrary to the expectations of some observers,<sup>49</sup> the controlling function of the state – exercised mainly directly, or via the banks – has not been replaced by some other power centre that is state-controlled or in close proximity to the state apparatus. Moreover, the old statist controlling principle and the earlier form of complementarity and consistency have not (yet) been replaced by a new “*logique*”.

## **IV.2 Past and future convergence**

### **IV.2.1 Convergence to date**

In the preceding three sections we found that complementary relationships between the individual elements of the German and the British financial systems continued to exist right up until the recent past, and that the values taken on by the various elements of these financial systems were largely consistent. For the French system of the 1990s, we, at least, were unable to discern consistency. At the same time, we were able to demonstrate that the complementary relationships found in the German financial system were, and still are, of a different kind from those found in the British system. Therefore, with hindsight, it is not so remarkable that these two financial systems have not converged. This is the thesis that summarised the totality of our empirical findings – including those that have not been referred to in the present paper.

An overall financial system configuration in which, as in the U.K., market-based relationships predominate, can be consistent and, for this reason alone, relatively attractive in economic terms; and this applies equally to a system like that of Germany, whose features are much less like those of a market. Hybrids, such as the one that, in our opinion, currently exists in France, are inconsistent and therefore economically less attractive, even when considered as a static structure. It is not possible to draw a generalised conclusion as to which of the two

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<sup>48</sup> For a detailed evaluation, see Deutsche Bundesbank (1999).

<sup>49</sup> See in particular Pastré (1992).

*consistent* systems is superior. However, it does seem possible to make qualified statements. In all of the preceding deliberations, one element has received little attention: the “degree of stability of the environment”. By changes in the “environment” we refer to phenomena that we do not consider part of the financial system: the end of the Soviet bloc, the worldwide wave of privatisation, technological breakthroughs and dramatic changes in market conditions.<sup>50</sup> As a hypothesis we might add here that the degree of stability, as an exogenous parameter, may determine which type of financial system is better suited to which environment: A market-oriented financial system may be better suited to a rapidly changing environment, while a co-operation/conflict-based financial system may be better in a more static<sup>51</sup> environment.

#### **IV.2.2 Convergence in the future**

The analytical features of the concepts of complementarity and consistency – and, as we hope to have proved, in particular their empirical corroboration – suggest that these concepts might be useful as an aid to formulating predictions of the future development of financial systems and thus also of a possible convergence in the future.<sup>52</sup> Having a well-functioning financial system is surely economically advantageous for a country, its firms and its inhabitants. Furthermore, especially in these days of globalisation and technological change, there is a certain degree of pressure to make financial systems efficient. Proponents of the convergence thesis now argue that in the long run no country can afford to put itself at a competitive disadvantage by living with a financial system that is fundamentally different from the best financial system. Consequently, they predict a relatively rapid, yet at the same time a step-by-step convergence of the national financial systems towards the one that is currently widely regarded as the better of the two alternatives: the Anglo-American system.<sup>53</sup>

However, the thesis on corporate governance systems put forward in several papers by Mark Roe, namely that the development of financial systems is determined by path dependence which prevents them from converging – or at least, from converging rapidly – if the differences between the levels of efficiency are not extreme, rules out the possibility of an automatic convergence towards a superior financial system. Systems which appear inefficient

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<sup>50</sup> It would seem possible, however, to endogenise at least parts of the environment, as Dosi (1990) attempts to do in the case of technology.

<sup>51</sup> Static is not the same as stationary; on the contrary, in the context under discussion here, stable growth could be regarded as the ideal case of a static environment.

<sup>52</sup> The following argument is developed more fully in Schmidt/Spindler (2001).

<sup>53</sup> See, for example, The Economist (2000) or Roche (2000), and, from the academic world, Rajan/Zingales (1999). However, as recently as the 1980s, the – equally simplistic and inappropriate – view was widely held, especially in the U.S., that the German-Japanese system was superior. See Saunders/Walter (1994), e.g. p. 236, and to a very pronounced degree Porter (1992).

from a present-day viewpoint can survive if the *social* costs of transition to a better system are greater than the advantages to be had from converting to the better system. Convergence will occur only if the efficiency differences become too great, or if the cost of adjustment falls.<sup>54</sup>

Complementarity reinforces this argument. The fundamental transformation of an entire consistent financial system is no easy undertaking, even if the prevailing opinion in a society is that one particular system is better than another. Given the complexity of the necessary changes, one would expect the transition to begin with individual elements of the system as a whole or, to put it more simply – one element at a time. Yet if one element of a consistent system is replaced by one that is part of a fundamentally different system, even if it appears to be a very important and a very good part of that other system, the result will be an inconsistency and thus an at least temporary loss of efficiency. The impact of a politically driven attempt to put into practice an efficient financial system would be to create pressure in two different directions: on the one hand, there would be pressure to move ahead with the process of change, despite the temporary loss of efficiency, because the process as a whole promises a higher level of efficiency than existed in the initial situation; on the other hand, there would above all be a need for a rapid efficiency gain, and pressure to find ways of achieving it. This could be done by restoring the consistency of the system – and the most obvious and certainly the easiest way to achieve this would be to reverse the steps that have been taken so far. If the second effect outweighs the first, the partial reform fails and the path dependence emphasised by Roe becomes manifest. Therefore, systems characterised by complementarity do not lend themselves to gradual change; this makes them tend to be stable; and if they do change, the change occurs not gradually but abruptly.

It is not very realistic to believe that a consensus exists among economic and political decision-makers about the conditions under which real financial systems are consistent, about whether consistency is important at all, and if so, which consistent system is better. A possible and, as we see it, plausible scenario that does not rely on such an assumption would be the following: Political and economic actors within various existing systems, such as the German and the British system, see advantages in individual elements of the other system and initiate attempts to incorporate these foreign elements into their own system. If complementarity is essential, this will lead to inconsistencies, efficiency losses and a destabilisation of the systems; and if such attempts are frequent and compounded, they may even lead to “systemic crises”, i.e. serious inconsistencies with seriously adverse consequences. If partial and uncoordinated reforms have already reached an advanced stage, returning to the original system is no longer the most obvious solution, and indeed may no longer be possible. The system that ultimately prevails in a given country under these circumstances will not

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<sup>54</sup> See in particular Roe (1996) and Bebchuk/Roe (1998), and in response, Schmidt/Spindler (2001).

necessarily be the one that competent and neutral observers, on close objective examination and not allowing the crisis to affect their judgement, would recognise as being better. The reason for this is that crises tend to change and destabilise people's behaviour and the expectations associated with it. To ensure that a financial system, of whichever type, remains functional, at least some expectations should be mutually *compatible* and not subject to too much uncertainty; and agents should be able to conclude implicit or incomplete contracts without undue risk. However, this condition is not equally *important* in the two main types of consistent financial systems. In a financial system in which the financial sector and the patterns of corporate financing are dominated by (universal) banks that are able and willing to reorganise, in which corporate governance is characterised by insider control, in which firm-specific human capital and largely incomplete contracts with corresponding corporate structures are of great importance – in short: in a financial system of the German or also the Japanese type – the consistency and stability of expectations is much more important than in a financial system of the Anglo-American type.

The "systemic crisis" pictured above would make it more difficult to restore the German-Japanese system, in which trust, implicit contracts and mutually consistent expectations are of greater importance than in an Anglo-Saxon system, or at least, the situation that could be achieved within a relatively short period would be less attractive, than would be the case with a system of the Anglo-American type. This suggests that in a "systemic crisis" precipitated by uncoordinated, far-reaching reforms, a financial system of the British type would be a more suitable focal point for the then necessary coordinated restructuring efforts and would thus be more likely to prevail. This is true regardless of which system is "inherently", i.e. without a preceding crisis, the better of the two.

### **IV.3 Qualifications and topics for further research**

Financial systems and other similarly complex systems are not tangible objects that one can simply observe, describe and analyse. They are theoretical constructs, or products of the intellect. In the degree of freedom that this gives us when constructing systems about which statements are to be made, there is a danger of circularity. We hope, nonetheless, that the results of our description and our analysis – and thus also our construction – of financial systems through the application of the theoretical concept of complementarity and through extensive empirical underpinning do not appear too artificial.

The more an intellectual construction of a financial system appears to be a *re*-construction, i.e. the more the construct coincides with observable data, the less problematic it is. Yet it is precisely here that we perceive a problem in our approach: everywhere one looks, the systems we have constructed are disintegrating. The list of evidence to support this contention would be long indeed, but three examples may suffice to demonstrate the point: (1) In the United

States, the Glass-Steagall Act which shaped the American system by curbing the scope of activities pursued by banks is no longer in force. (2) In the first really big, really hostile bid to take over a company – a phenomenon which seems out of place in the German system of insider control – Vodafone won its battle for control of Mannesmann. And (3) in Japan there are trends towards the break-up of the *keiretsus*, the abolition of the principle of lifelong employment, and the opening of the financial sector to foreign competitors. Maybe the “systemness” we (re-)constructed as being the formative, stabilising force in Germany and Japan is weaker than we suppose. At any rate, much empirical and theoretically informed research remains to be done. This applies in particular to the analysis of bank-dominated and insider-controlled financial systems, an aspect that has so far received little attention from researchers, as was also emphasised by Jean Tirole in his Presidential Address to the European Economic Association in 1999: “*There is unfortunately little formal analysis of the economics of the stakeholder society.*” Conceivably, we may already be in the middle of a process of adjustment and convergence towards a generalised, not really consistent, “middle-of-the-road” financial system. Perhaps the “systemic crisis” referred to above, in which behaviour patterns change, implicit contracts are broken, and the uncertainty of the actors increases dramatically, has already become a reality.

Current developments in the real world do not necessarily give us cause to abandon our methodological hypothesis that complementarity and consistency are of key significance. However, they do give cause to question one of the premises of our investigation, namely that the analysis of financial systems should be based on national frontiers and that it makes sense to assume that each country has only one largely uniform financial system. Today it may be more appropriate, also where large corporations are concerned, to conceive of two financial systems per country, with the line of demarcation between the two segments drawn according to the size and the degree of internationalisation of the companies and financial institutions involved. It may already be accurate to distinguish between a more traditionally structured, nationally specific subsystem or segment of medium-sized enterprises, and a “top segment” of really big firms and financial institutions with close ties that transcend national boundaries.<sup>55</sup> Because the supranational network of interrelationships linking the institutions that make up this top segment is even more complex and even more difficult to delineate than at the national level, analysing how it is structured and how it functions would present a difficult but a very stimulating challenge for research. And in approaching this task, the concepts of complementarity and consistency are surely more relevant than ever.<sup>56</sup>

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<sup>55</sup> Or there may even be a case for perceiving three segments, with the third segment consisting of small and medium-sized firms.

<sup>56</sup> For a recent presentation of the idea of national corporate governance systems consisting of two tiers – with a closely knit international network linking the respective national top segments – see Mann (2000).

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