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FINANCIAL INTERMEDIARIES AND  
CAPITAL MARKETS: AN INTERNATIONAL  
PERSPECTIVE

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## **FINANCIAL INTERMEDIARIES AND CAPITAL MARKETS: AN INTERNATIONAL PERSPECTIVE**

### **Abstract**

The European single market in financial services has been built upon two pillars: deregulation and freedom of capital movements. Financial authorities have implicitly accepted the universal banking model.

This paper presents some international evidence on the two basic financial models: the bank-based model and the market-based model. The rivalry between financial markets and banks in many industrial countries is acute, but it is possible to observe a trend that reflects an increasing role of universal banks in capital markets.

## **FINANCIAL INTERMEDIARIES AND CAPITAL MARKETS: AN INTERNATIONAL PERSPECTIVE**

### **1. Introduction**

The deregulation of financial activities has become particularly significant in the EU. Indeed, the financial services industry has been one of the most affected by the 1992 single market programme, as the industry and its agents were hampered by numerous restrictions in the past. The single market of 1992 has sent new winds of freedom blowing through the industry and, with this, increased competition.

However, in their construction of the single financial market, both the EU and the various national financial authorities have avoided any reference to a critical issue: What should be the respective roles of capital markets and bank intermediaries in the new European financial space? Or, to put it another way, should markets –capital markets– prevail over bank intermediation?

Ultimately, this issue leads to an even deeper dilemma, namely, which system –capital markets or traditional bank intermediation– is more efficient in the long term in allocating financial resources? Will the flow of financial resources placed in productive investment be cheaper and more abundant in a system based on the capital market or in a system based on bank intermediation?

This is a decisive issue, not only for determining the financial system's configuration in the future, but also for ensuring the growth rates of savings needed to finance a country's investments and sustainable growth.

The international evidence shows the existence of two basic financial models. Table 1 presents the main features of those financial models. It reflects the different forms of bank-based financial systems in industrial countries and compares them with market-based systems.

The market-based model shows a clear predominance of capital markets over bank intermediation. A large part of the growth of capital markets in these countries is due to the high level of initial involvement of the banks. Banks seem to have played a less important role in financing firms. The United States and Britain are the best examples of this model.

**Table 1**  
**Financial models**

<b>Model</b>	<b>Countries</b>	<b>Banks as financial intermediaries</b>	<b>Banks as lenders to companies</b>	<b>Banks as shareholders</b>	<b>Banks as strategic shareholders</b>	<b>Banks as managers</b>
I. Bank-based model						
1. Specialised banks	United States Britain	Yes	No	No	No	No
2. Main bank	Germany Japan	Yes	Yes	No	No	No
3. Universal bank	Germany Spain France Italy	Yes	Yes	Yes	No	Yes
4. Conglomerate groups	Germany Japan Spain	Yes	Yes	Yes	Yes	Yes
II. Market-based models	United States Britain	Yes	No	No	No	No

Source: Canals (1997).

At the other extreme, there is another model in which financial intermediaries, mainly banks, still have a strong influence. This is the case of Germany, Spain or Japan. All of these countries share a series of common circumstances. First, the weight of bank financing in industrial companies (see Tables 2 and 3). Second, the less developed state of the capital markets. Third, the significant presence of banks in capital markets themselves as an indirect means of controlling their growth and sharing in the results. Finally, a greater or lesser degree of control, depending on the situation, exercised by banks in the management of industrial companies, either through direct stock ownership or through membership of these companies' boards.

**Table 2**  
**Industrial companies: total debt over total liabilities (%)**

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Spain	74.4	70.2	67.3	65.3	61.7	57.0	54.4	53.9	56.5	63.9	68.9
Germany	70.3	69.6	68.8	67.0	66.5	66.8	68.0	67.7	68.4	68.3	–
Belgium	68.2	62.8	60.0	58.0	57.4	58.4	58.2	58.1	59.1	63.9	63.9
France	82.0	84.2	79.6	76.8	72.4	69.0	66.3	66.1	65.0	63.9	63.4
Holland	55.8	49.2	49.4	47.7	47.1	47.4	48.2	49.4	40.5	54.4	51.7
Italy	73.2	73.8	72.4	70.6	71.2	72.6	72.8	73.5	72.8	74.8	–
Portugal	–	–	74.4	68.4	66.7	60.9	58.2	55.7	58.4	59.2	57.9
United Kingdom	51.2	48.6	48.8	50.6	50.7	50.9	54.0	60.1	–	–	–
United States	54.3	55.6	57.8	59.9	61.7	63.5	65.6	66.2	66.5	69.9	70.7
Japan	74.7	73.9	72.7	71.4	70.2	69.3	68.2	67.9	67.3	67.0	66.6

Source: BACH (European Commission: General Directorate II).

**Table 3**  
**Industrial companies: bank financing over total debt (%)**

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Spain	52.9	49.6	47.9	42.4	38.7	31.9	31.7	34.7	35.6	36.1	33.1	28.5
Germany	29.9	29.4	29.0	29.8	29.1	29.3	30.1	30.4	30.4	30.7	–	–
Belgium	28.9	26.8	26.6	27.0	26.3	25.0	26.1	26.1	23.9	24.2	23.2	–
France	–	25.2	26.0	23.6	22.1	20.1	20.5	20.5	19.7	17.4	16.2	–
Holland	24.9	23.3	21.6	22.3	23.6	22.5	20.3	18.7	20.5	21.8	20.6	–
Italy	32.1	32.4	31.3	29.7	29.5	28.6	29.2	31.6	31.5	31.8	–	–
Portugal	–	–	46.1	45.2	43.4	42.6	41.1	36.3	37.9	39.1	35.3	–
United Kingdom	32.6	34.1	31.5	22.0	18.8	23.5	27.2	27.9	–	–	–	–
United States	14.0	15.2	14.3	15.8	16.2	18.0	18.0	18.3	16.9	15.8	14.5	–
Japan	41.9	40.2	41.2	43.1	41.0	38.9	36.3	35.8	37.1	40.1	42.5	–

Source: BACH (European Commission: General Directorate II).

However, this initial classification requires further subdivision. Here are a few examples. In the category of bank-dominated systems, we would have to distinguish between at least two subgroups. The first would consist of countries whose governments have traditionally played a significant role in configuring financial groups, such as Germany, Belgium or Switzerland. The second group would include those countries where governments have historically played a major role, for various reasons, in forming the financial industry, such as Spain or France (see Table 4).

**Table 4**  
**Financial models**

		Degree of regulation	
		High	Low
<b>Financial system</b>	Capital markets	United States	Great Britain
	Banks	Japan South Korea	Spain France

The existence of such divisions does not allay one serious doubt: namely, whether the varying structure of financial systems has any real bearing on investment and income growth in a particular country. Indeed, given the diversity of financial models and the existence of a considerable historical experience, it seems reasonable to ask about each one's advantages and disadvantages, particularly during a period of profound change in the shape of the EU member countries' financial systems.

Unfortunately, this issue has not been raised explicitly in the course of creating a single market in Europe. Therefore, a unique opportunity to debate an issue that seems important for the member countries' economic development has been lost.

The absence of any explicit discussion of these issues has led, in practice, to a situation in which the various systems and models for organizing financial systems are in competition. For the moment, competition is low, but it will no doubt be stepped up in certain countries over the next few years, mainly led by universal banks.

There are two main reasons for this growing competition. The first has to do with the process of securitizing loans and financial assets held by banks. This process –which essentially consists of assigning to third parties loans that banks have granted to companies or private individuals– has been driven by different forces –such as financial innovation or information systems– but leads always to the same goal: the wish to reduce the weight of loans in the banks' balance sheets.

The second force behind this increasing competition between banks and financial markets is the globalization of finance, which we have already mentioned. While financial markets are already global, the banking industry is still local: each country has a group of national banks that dominate a large part of the market.

Furthermore, foreign banks play a limited role in each country, even after the lowering of national barriers associated with the creation of a single financial market in Europe. The number of truly global financial organizations that could be identified in the banking industry is indeed very small: Citibank, Barclays, Deutsche Bank and Crédit Lyonnais. In spite of the growing presence of the Japanese banks in Europe, this is still very small.

On the basis of this overview, it can be inferred that capital markets enjoy the advantages –and also the disadvantages (in this case, that of increased rivalry)– of being global, which enables them to offer at all times the best financial conditions for a particular financing or investment operation.

On the other hand, most banks are limited to their own country and their ability to identify opportunities worldwide is clearly less than that of the capital markets. Hence the interest of the banks in taking part, directly or indirectly, in capital markets.

Consequently, both securitization and globalization are taking business away from the banks in favour of the capital markets. Is this trend desirable for the financial system?

In order to answer these questions, we first have to ask a number of basic questions: What is the function of the financial system in a modern economy? What purpose should it pursue?

## **2. The financial system from the perspective of the theory of the firm**

The present configuration of modern financial systems is the result of a large number of historical factors, such as the development of the early industrialization processes, the role played by financial organizations in this process, the degree of government intervention in the creation of companies, or a country's savings patterns as shaped, for example, by the tax system.

With all the appropriate caveats, we can say that the various financial systems have been formed in accordance with the principle of efficiency in resource allocation. In other words, the decisive factor behind a certain financial system is the perception, maintained by the various actors in a country, that a particular framework, and not any other one, was the best for articulating the financial system in order to guarantee the resources required for investment.

The financial system's efficiency in resource allocation involves at least four dimensions. First, intermediation as such, insofar as it ensures a flow of financial resources towards the real sector of the economy at competitive prices.

Second, the control of the risk incurred by the savers or holders of the funds. Here, the financial system must articulate mechanisms to measure the risk incurred at any given time, with a view to controlling it or to limiting or broadening the risk of a particular investor.

Third, the financial system should provide suitable diversification of risk. It is not sufficient to control it; it is necessary to enable savers as far as possible to reduce the variability of the various financial assets' price and yield.

Finally, the financial system must implement the necessary mechanisms to reduce the risk of a financial crisis –normally, in the form of supervision by the financial authorities– and mitigate, when necessary, the effects of such a crisis.

Although the features defining a financial system's efficiency seem to be clear, criteria are needed to help make the above-stated outlines operational. The modern theory of the firm has a number of arguments that are helpful in this discussion.

The view of the firm offered by neoclassical economics is that of a production function that the entrepreneur seeks to maximize, with the constraint of certain costs deriving from the use of production factors. Alternatively, the problem could be stated as the minimization of costs for a given production volume.

This view of the firm has become consolidated and enriched in recent years thanks to the spectacular growth of the models based on game theory, and particularly those based on the so-called strategic behaviour of firms.

Neoclassical economics has paid little attention to the institutional and organizational aspects of the firm. In fact, the contributions by Barle and Manne (1932) on the separation of ownership and control in organizations, or that by Coase (1937) on the firm as an alternative organizational mechanism to the market did not make any serious dent in thinking about firms until the early 1980s (1).

In the last few years, there have been successive attempts to reconcile the two views of the firm: that of effectiveness –the neoclassical maximization approach– and that of the internal efficiency of organizations –the institutional approach– (Holmstrom and Tirole, 1989). The gap between the two approaches has been narrowed but it has not disappeared completely.

The neoclassical view of the firm was reflected very closely in the dominant approach to investment and finance until the 1970s. The main hypothesis of the classical financial theory states that there is no conflict of interest between the financial investors who lend funds to companies and the companies that receive the funds. Fisher (1930) states that, in a setting of perfect capital markets, a financial investor's decision about an investment project depends solely on the investment's expected return and the interest rate. Personal consumption decisions or other temporary considerations are not relevant to this decision. This is what is known as Fisher's separation theorem, as it states that the investor can separate the financial investment decision from the consumption decision over time.

This theorem was consistent with the Walrasian paradigm, according to which an economy's state of equilibrium does not need financial intermediaries to act as an interface between savings and real investment. The reason for this argument is that the Walrasian paradigm assumes the perfect functioning of anonymous markets. These markets configure an optimal institutional model which any other institutional model (for example, a financial system based on the existence of banks) will tend to resemble.

A few years later, Modigliani and Miller (1958) went a little further with their theorem according to which a firm's financial structure does not have any effect on its capital cost or its value (2). This theorem was subsequently reformulated by Stiglitz (1974).

Transposing this thesis to the area of financial intermediation, it points out the absolute irrelevance of the debate about whether banks are more efficient in providing financing to firms than capital markets. According to this view, the debate between one type of financing or another, or between one type of creditor or another, is irrelevant.

In other words, in real life, these authors say, there is a complete separation between investment decisions and financing decisions. Fama (1970) stresses this separation in a more graphic manner by stating that firms have a series of investment projects they intend to undertake and investors decide to provide the necessary financing (equity or debt) to whichever firms have the most interesting investment projects.

Logically, this conception of financial theory leads to a complete separation between investment decisions and financing decisions. According to this view, the financial system would confine itself to an absolutely neutral task of mere financial intermediation, governed by the price formation mechanism for financial assets in near perfect markets. Such a



financial system would ensure capital flow from savings to investment. At the same time, the market itself could gauge the risks incurred by investors, forcing a sensible risk diversification.

A financial system operating in accordance with these guidelines would doubtless induce proclamations about the superiority of the systems based on the capital markets –in which the financial agents decide where to invest their resources– versus the systems based on bank financing. The contrast is particularly significant in the case of those financial systems where banks are shareholders of industrial companies.

Against this apparent superiority of capital market-based systems, certain recent empirical experiences (Mayer, 1988; Porter, 1992) suggest that some financial systems have been more successful than others in steering financial resources towards investment (3). This superior performance is confirmed particularly in industrial restructuring processes (Kester, 1991), as a result of the crisis affecting certain sectors of the economy. In such circumstances, the bank system seems to be more efficient than the capital market in achieving prompt allocation of resources.

Subsequent contributions to modern financial theory also express certain reservations about the results obtained by Modigliani and Miller. First, the perfect financial markets hypothesis does not hold true in the real world. In some cases, a high degree of efficiency is observed in financial markets, but it is a long way from being perfect.

There are a lot of reasons for these imperfections. Perhaps the most important are the following. First, the existence of asymmetric information problems between savers, financial intermediaries and company managers. These problems prevent prices from reflecting the proper value of financial assets and, on occasions, may give rise to an excess or shortfall of resources for certain investment projects (Stiglitz and Weiss, 1981).

Second, the existence of asymmetric information leads to agency problems, in which the relationship between economic agents may become difficult not only due to bounded rationality but also to the search for and exploitation of opportunities at the expense of the other agent –opportunism, to use the generally accepted terminology (Williamson, 1975).

Third, as Jensen and Meckling (1976) and Hart (1995) have pointed out, the combination of debt and equity is a way of structuring the governance of companies. This combination generates a series of incentives guiding the behaviour of the firm's managers, so that the capital structure influences the firm's performance through the behaviour of managers. Looking at it another way, a certain combination of debt and equity may be a better instrument for achieving a match between the managers' goals and the shareholders' goals. In other words, an ideal financial structure would enable a solution to be found for the asymmetric information and moral hazard problems arising between the investors of funds (lenders or shareholders) and managers (4).

Fourth, financial intermediation carried out by banks when they lend money to firms leads financial companies to deploy monitoring and supervisory activities. In some cases, there may be significant economies of scale to be obtained in such tasks (Benston and Smith, 1977; Diamond, 1984). Insofar as this is so, the cost of the resources provided by banks could perhaps include a lower cost and risk premium than that levied on the resources provided by capital markets, with less capacity for monitoring and supervision.

As a result of this role of financial intermediaries, transaction costs (deriving from asymmetric information between lenders and borrowers or possible opportunistic behaviour) will be less than those generated by transactions on capital markets. The outcome is that the cost of the financial intermediation would be lower.

A study sponsored by the U.S. Council of Competitiveness and run by M. Porter (1992) stressed the importance of a greater connection between the financial system and industrial companies to improve efficiency in the allocation of resources for investment. This study's authors argue that one of the causes of the decline of North American companies' international competitiveness is to be found in a financial system that favours short-term considerations over long-term real effects.

Considerations on the ownership and control of companies therefore have a deeper impact on a financial system's efficiency than would initially appear. It is not enough for the system simply to transmit the price of financial assets, depending on the sector and the company's risk within the sector. If the financial system unbalances relations between investors, intermediaries and companies, sooner or later the results will be catastrophic.

Although none of the arguments we have just put forward is sufficient to prove the opposite of Modigliani and Miller's thesis, together they enable us to say that that thesis will only be valid under certain conditions. In other circumstances, the combination of debt and capital may have major consequences for a company's long-term growth.

To summarise, looked at both from the viewpoint of modern financial theory and from that of empirical experience, the conception of the financial system as a mere chain for transmitting the savers' decisions to the investors' decisions seems to be definitely out. To think that the financial system should confine itself to ensuring that this chain operates as efficiently as possible contradicts both recent experience and numerous academic contributions. The real world is more complex than certain sophisticated theoretical models suggest.

The features of the financial system that we have highlighted here are also applicable to other sectors of the economy. To think that markets, through the mechanism of the invisible hand, always lead to optimal resource allocation again goes directly against empirical evidence.

Indeed, the successful development of the industrial company in the 20th century, which replaces the exchange of products or services on the market by a hierarchy that organizes operations under the control and supervision of a team of managers, is one example of the market's limits. This reality leads Chandler (1977) to state that, in modern societies, Adam Smith's invisible hand has been replaced by the visible hand of professional managers.

The ultimate reason for the success of the modern corporation and professional management is their greater efficiency compared with the market. In certain circumstances, the market's transaction costs are much higher than traditional price theory says. These transaction costs –which do not include production costs as such– are the costs arising from writing, supervising and enforcing compliance with the contracts that are to regulate the transactions that would be carried out on the market (Williamson, 1975). In short, the market and the organization of transactions within the company itself appear as two alternative mechanisms for organizing economic activity.

In the market mechanism, efficiency in resource allocation is highest when there are no transaction costs such as those described above. However, when these costs appear on the scene, the market's advantages are no longer so clear.

On the other hand, the organization of activities within the company is based on reducing transaction costs or, to put it another way, on reducing the cost of carrying out a particular activity. This decision will be the most efficient for the company. However, it may be that the same cannot be said for society as a whole, for example, due to an excessive accumulation of economic power in the hands of a few people or of a certain market power in some sectors.

These considerations about the organization of economic activity can be applied to the financial system. The question is whether the market –capital markets– will be more efficient than the firm –banks– in providing the necessary flows of funds for the non-financial company.

A second question, directly related to the former, is whether banks should become active shareholders of industrial companies in order to narrow the gap between the investors of savings and the holders of savings. In this sense, the banks would carry out the role of stabilizing financial flows and putting long-term considerations before short-term priorities.

Obviously, these two extremes –market versus firms– are two cases which are not incompatible in real life. In fact, both resource allocation mechanisms coexist in many countries' financial systems. The critical issue we wish to stress here is which of the two mechanisms is right in which circumstances and at what price.

In Table 4, we show some alternative systems for organizing the financial model, taking into account the degree of regulation of the banking industry. In the extreme case, we find dominance of capital markets on the one hand and the strong presence of banks in the industrial sector on the other. Other alternatives in between are also possible and will be more or less efficient, depending on the size of transaction costs.

### **3. Some elements of the financial intermediation theory**

The essential function of any financial intermediary is to transform one financial asset, in certain conditions, into another financial asset. For example, commercial banks convert savers' deposits into mortgage loans. In general, this function of converting one type of financial asset into another is carried out by the different financial intermediaries operating in the economy.

The study of financial intermediation is usually approached from two different angles. The first is the institutional approach: financial intermediation is studied through the detailed analysis of the institutions that make up the financial system. From a slightly more dynamic viewpoint, the institutional analysis could raise questions as to the ability of financial institutions to adapt in a context of dramatic change in the sector, the required level of regulation, or the separation of activities within universal banks (Llewellyn, 1989).

The second is the functional approach. This approach asks what functions does or should a society expect from the financial system and financial intermediaries. Institutions may react more or less promptly to change or they may oppose it, but the functions that

society expects from its financial intermediaries might be basically the same, although they may be carried out more efficiently as financial intermediaries improve their services or innovate.

Indeed, the improvements that can be expected from a financial system are related not so much to new functions that the financial system may or should perform but to the efficiency with which the financial intermediaries perform the functions expected of them and improve that efficiency over time.

Efficiency, as we will see further on, has a number of different aspects, although they all have to do with some of the basic functions of a financial system, such as risk control, smooth transfer of resources from savings to investment, and reduction of transaction costs (the cost of carrying out the financial asset exchanges or the agency costs arising from situations of asymmetric information).

Some authors (Merton, 1993, 1995; Pierce, 1991) stress the desirability of adopting the second approach, the functional one, in order to adequately study financial intermediation and its changing nature.

What are the financial intermediaries' functions in an advanced economy? We can reduce the number of primary tasks that should be carried out by an efficient financial system to five (5). First, the financial system must enable and guarantee the operation of the payments system that facilitates the exchange of goods and services. Second, the financial system must facilitate the allocation and transfer of resources over time (savings and investment) between different sectors or between different geographical areas.

Third, the financial system must offer a system of guarantees that reduces the uncertainty regarding the true value of money and that provides investors with a reasonable and sufficient control of the risk of the various financial instruments.

Fourth, the financial system must make possible the issue of financial products –debt or capital– in order to finance real investment projects. These projects are different from financial investments undertaken by a private investor or by a financial institution.

Finally, the financial system must provide information on the price of financial assets –which, in some cases, may be related to the price of real assets– to the other sectors in a country. The functional approach to financial intermediation goes hand in hand with the complex issue of the financial innovation process. In fact, financial innovation represents an adaptation by financial intermediaries who are attempting to carry out their basic functions but in a setting that is different from that which existed in the past. The features of this new setting are those we have briefly discussed in previous sections of this chapter: deregulation of the financial sector, increased rivalry, emergence of new competitors, the growing importance of information technologies and the relentless internationalization of financial activity.

In fact, the supply of new financial services by the intermediaries is not only a process deriving from financial innovation, but also a path leading financial intermediaries towards a voluntary specialization. This hypothesis fully concords with the reality of financial systems in industrial countries.

Increased competition in the various segments of financial activity induces universal banks to sharpen the focus of their activities or specialise in a few businesses. As we will see further on, there are fewer and fewer universal banks with a vocation to be exactly that and

that, at the same time, are efficient. Therefore, the processes of institutional or strategic change take place in financial institutions as a consequence not of new functions that the intermediaries must carry out but of new ways of offering new financial services within the new regulatory and technological environment.

Therefore, the dramatic changes experienced by the international financial system and the various financial intermediaries and the hectic process of financial innovation are responses to this change in competitive conditions.

However, the changes in regulatory and legal conditions governing the financial sector and the financial innovations that these changes have triggered do not stop here. As a result of the process of financial innovation, there are signs of rethinking not about the financial system's functions but about which institutions can carry out these functions most efficiently.

Thus, the growth of international capital markets has reduced some non-financial companies' dependence on universal banks, which had traditionally acted as lenders to such companies. Capital markets provide banks with a new competitor that, in some cases, may act more efficiently.

However, the new competition is not just between financial organizations and financial markets; there is also intense rivalry within the two. Thus, there is increasing rivalry between universal banks, savings banks and insurance companies to attract savings. And there is considerable rivalry between national stock markets and international capital markets to attract corporate debt or equity issues.

These examples clearly show that the function carried out by these intermediaries is basically the same; the difference is that some intermediaries have been able to adapt more quickly and are more efficient than others in this dynamic game of innovation. In other words, financial organizations and financial markets should not be viewed as two opposing, rival realities.

Obviously, firms –hierarchies– are different from markets (Williamson, 1975), and their functioning responds to different mechanisms. However, in the changing scenario of the financial industry, financial companies and markets are complementary –and not necessarily mutually exclusive– ways of organizing a financial system.

In other words, both can coexist in the same country, even though each country's financial model may indicate a preference for one of the two. From the viewpoint of society as a whole, this coexistence is desirable, not only because it encourages competition, but also because it reduces transaction costs within the financial system, increases its efficiency and, ultimately, helps improve resource allocation within the economy.

A completely different issue is whether it is desirable for a financial organization to specialise either in activities that are traditionally associated more with banking or in activities that are moving slowly towards the capital markets.

However, at this point we can say that, *a priori*, no one choice is better than any other. The optimal strategy simply does not exist. At best, there will be a preferable strategy that a financial firm could implement to specialise or become a universal bank. The success of such a strategy will depend on many factors, including the various types of resources the organization has available to it, its history, its reputation among its customers and its positioning in the various segments of the financial market in relation to other competitors.

Consequently, the financial system's functions remain basically the same. What has changed is the regulatory and competitive framework within which financial organizations and markets carry out their activities. This change of framework has triggered two closely related processes: a process of intense financial innovation and a strategy of change and/or specialization of financial organizations within the new framework. It is impossible to generalize about the quality of the latter without a thorough knowledge of the history and resources available to each organization to deal with this change.

#### **4. The configuration of the financial system: The capital market-based model**

The prime examples of financial systems based on intermediation by the capital markets are those of the United States, Britain and Holland. Figure 1 provides an overview of privately held financial assets in the United States and some European countries in 1987 and 1991. The differences are striking and reflect considerable discrepancies in the functioning of the respective financial systems. The American model basically follows the following patterns. First, companies obtain their financing mainly through fixed and variable yield security issues on the capital markets.

Second, financial innovation in these markets is permanently fostered, thereby enabling operations to be closely tailored to companies' real needs.

Third, there is a virtually complete separation between investors acting on capital markets and non-financial companies. The former play no part in managing the non-financial company's daily tasks or in setting its long-term strategy. Their only influence arises from the assessment - which may be more or less accurate, as the case may be - made by the markets of the company's business decisions and performance.

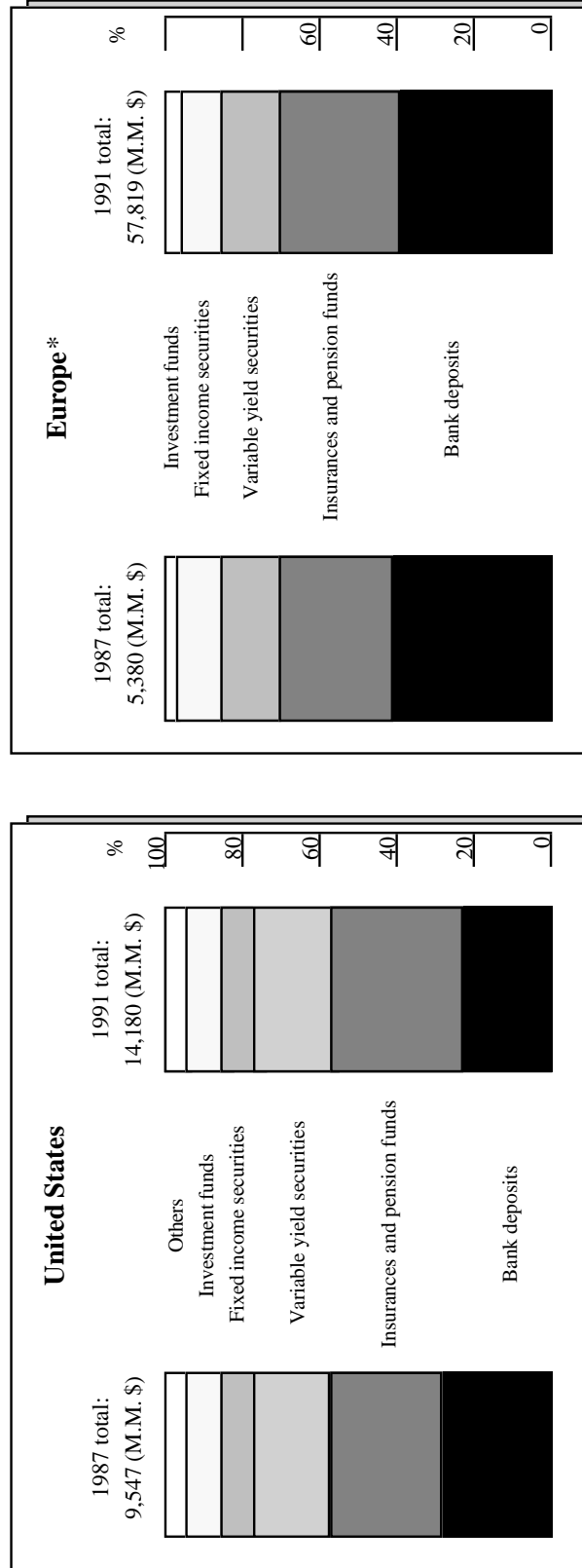
Finally, governments play absolutely no part in the process whereby companies and capital markets freely agree the most suitable ways to finance business projects. The government's only involvement - occasionally - consists of the regulations it imposes on certain operations on capital markets. In particular, these restrictions are especially significant in the case of international operations, as a result of the more or less strict controls still in force on international capital movements.

As can be inferred from these observations, market-based financial systems provide a constant valuation of the various instruments through price mechanisms, which provides invaluable help in improving the process of allocating financial resources between alternative projects competing for the same financing.

Furthermore, capital markets provide a means of efficient risk diversification, performed by the investor of the funds. That investor is ultimately responsible for the decisions made in allocating the resources.

Capital markets separate the risks of one financial asset from that of all other financial assets, so that the investor knows at any given time exactly where the risk is located and how much of it he is bearing, unlike in the bank intermediation systems, where the bank takes on the entire risk vis-à-vis its asset customers.

**Figure 1**  
**Financial assets held by private individuals**



Source: McKinsey.  
 \* Belgium, United Kingdom, France, Germany, Holland, Norway, Portugal, Spain, Sweden and Switzerland.

The securitization process implemented by banks pursues precisely this aim: to break loans up into assets and distribute them among potentially interested investors in a certain yield-risk combination and so release the bank from credit risks.

Consequently, capital market-based systems, in principle, allow a more efficient diversification of resources; they also provide a much greater spread of the risk borne by investors.

Likewise, the scope of transactions on capital markets provides the holders of financial assets with a high degree of liquidity, which always offers an excellent incentive for underwriting the placement of new issues in the future. The markets also enable an investor's asset portfolio to be adapted to changing personal needs and to any changes that are observed in the market.

Alongside these advantages, the system based on capital market transactions also has a number of disadvantages, which we will describe below. The first is the difficulty in monitoring and supervising companies due to the fragmentation of company ownership and, hence, the fragmentation of responsibility for this task.

When no shareholders are clearly involved in the company –due to the complete separation between capital markets and company– the “free rider” problem may arise: no single shareholder is large enough to be concerned about adequately supervising the quality of a company's management. In such situations, the mistakes made by the company's managers are unlikely to be detected in time by the shareholders.

It is true that financial intermediaries operating on capital markets try to provide ongoing information about what is happening in companies. However, this information may be incomplete, insufficient or out of date, as these intermediaries do not always know what is really going on inside the companies concerned or else they have information that is different from that being handled by the companies' managers (Myers and Majluf, 1984).

In addition to this problem, capital markets are also affected by what are referred to as agency problems, i.e. delegation problems between shareholders or bond holders –the principals– and the company's managers –the agents (6). Agency problems arise in situations where there is asymmetric information, i.e., where certain information is available to one of the parties but not to the other.

Agency problems can be partly solved by incentives that help correct inappropriate behaviour in using this information. For example, a management compensation scheme that reflects or takes into account certain variables, such as annual financial performance, performance over a period of three years, or domestic or international market share.

However, no matter how sophisticated the incentives are, it is obvious that all of these design variables have advantages and disadvantages and that none will ever be precisely targeted enough to unfailingly induce a particular type of behaviour (Milgrom and Roberts, 1992).

In the final analysis, one cannot forget that incentives are necessary but insufficient. Without a clear attitude of respect on the part of managers for ethical decisions in the performance of their tasks, even the best designed incentive scheme will eventually fail, as has been shown by the events that have taken place in the second half of the 1980s in the United States.



Some authors (mainly Jensen, 1986, 1989) have pointed out that the best incentives that managers of listed companies have are capital markets and the possibility that their company, if its performance is poor, will be bought by other investors, who will change the management team. The phenomenon of LBOs –leveraged buyouts– is basically a manifestation of this rationale, in that it aligns the interests of owners and managers and, consequently, improves the managers' efficiency.

Although this argument may be right, it is only partly so. The reason is that LBOs generate a tremendous amount of uncertainty, not only for managers but also for the company's workers, customers and suppliers. Furthermore, it is unclear whether LBOs significantly improve companies' profitability after the operation (see, for example, Shleifer and Summers, 1989); consequently, their effectiveness is not universally proven.

A third major limitation of capital markets is that, in general, there are no controlling shareholders in companies, except in cases where this is justified by historical reasons (for example, a company which has traditionally been family-owned and has recently been admitted to the stock exchange).

This can be a serious weakness, as we have already said, in that there are no shareholders powerful enough to counterbalance the company's management. In other words, the shareholders' social responsibility is much more diluted. This leads to a situation in which, should it be advisable to carry out major surgery (close production plants, reduce overheads, sell off some of the company's businesses), there is no guarantee that capital markets will properly evaluate these decisions.

This situation may sometimes lead to serious conflicts and it is only in societies like the United States, where there is no strong union pressure, that it is possible to carry out this type of action without too much noise in the media. These processes are more difficult to implement in European countries, where people are much more sensitive about closing companies and where there is less geographical flexibility.

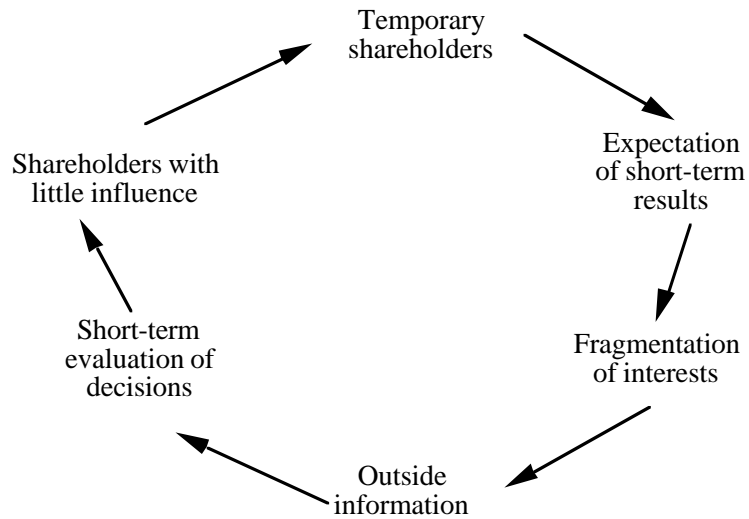
Finally, one cannot ignore the exclusive emphasis of some shareholders on short-term performance in capital market-based systems. The emphasis on performance and efficiency leads to situations in which shareholders look only at short-term results. The system generates a major shift in the investors' outlook in this direction.

Some authors have accused the US capital markets of being the main cause of the declining competitiveness of American firms on the international markets and on the United States domestic market (Jacobs, 1991; Porter, 1992). Other authors are not so sceptical about the real functioning of the United States capital markets, pointing out that the emphasis on results is a guarantee of efficiency (Jensen, 1989).

Porter (1992) has expressed these doubts in a graphic manner. Referring to the capital market-based financial system, he speaks of fluid capital markets, thus underscoring one of the basic features of the market-based financial system. The fluid capital system is the opposite of what he calls the dedicated capital system, represented primarily by the German and Japanese systems. These latter systems are based on bank intermediation and a relatively large presence of banks in the financing of industrial companies.

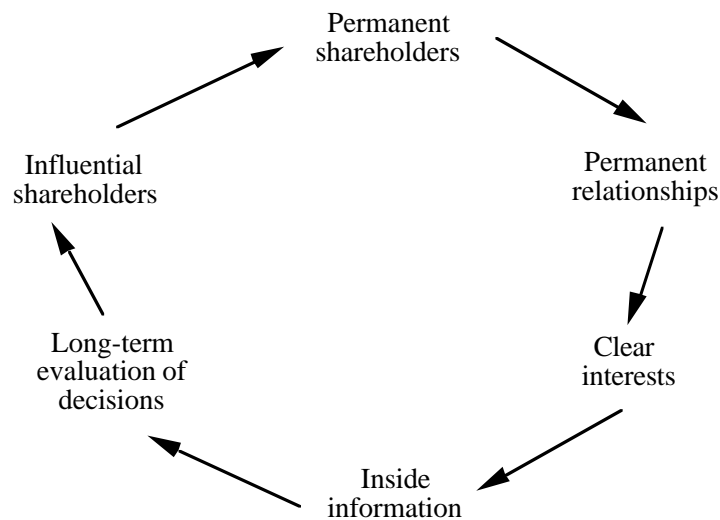
Tables 5 and 6 give an overview of the virtuous (the system based on bank-company relationships) and vicious (the system based on capital markets) circles that can be created in each case.

**Table 5**  
**The fluid capital system:**  
**The Anglo-Saxon model**



Source: Porter (1992).

**Table 6**  
**The committed capital system:**  
**The German model**



Source: Porter (1992).

These tables underline the idea that the capital market-based system can offer higher economic performance for investors, but not necessarily for the company or for society as a whole. Indeed, the system makes it possible to identify opportunities immediately and offers considerable mobility in the investment of funds and the ready availability of information on companies.

Some critics point out that the capital market-based system can lead to a lower level of investment, particularly in assets where the return appears only in the long term, such as technology or intangibles (for example, brand image). Also, it is a system that favours investment in mature industries but not in emerging high-tech industries. A case in point are the biotechnology companies, which are heavy loss-makers during their first years of life and only start to pay after a fair number of years have passed. These statements require some qualification. Thus, if we look at the geographical location of these emerging industries, we see that they are concentrated in the United States, where the financial system is primarily based on the capital market. It could perhaps be that the disadvantages of the market-based financial model are outweighed by its relative advantages (Allen, 1994), or by the greater entrepreneurial influences in the United States. However, these are hypotheses that have not been proven empirically and should therefore be handled with caution.

Finally, the main incentive in the market-based system are hostile takeovers, a procedure that does not always guarantee the company's stability or success in the medium and long term, as we have already discussed.

These considerations lead Porter (1992) to state that far-reaching reforms of the US financial system are needed if the investment rate in US industry is to continue to grow and not lag behind that of other industrial countries with financial systems based on a strong bank presence.

The evidence shows that financial markets enjoy important advantages in terms of spreading information and flexibility in resource allocation. We shall weigh these advantages against those of the bank-based model.

## **5. Configuration of the financial system: The bank-based model**

This financial model basically rests on the intermediation carried out by banks. This process is the main mechanism for allocating financial resources obtained from family savings by channelling them towards financing corporate investments. The role played by financial markets in this case is less important.

This second model of organization of the financial system is not uniform but allows for a great number of possibilities. For the moment, we will discuss only two. The first are the systems in which banking plays a major role in the industrial sector, as is the case in Germany, France or Spain.

The second type consists of those countries in which the share of banks in total corporate financing is high but consists mainly of short or long-term financing in the form of loans or credits, not of large holdings in companies' equity. The prototype of this model would be Japan.

However, this division into two types is subject to many qualifications. The first and most important is that the accounting figures do not usually provide all the information. In Japan, the accounting figures suggest that the involvement of banks in the industrial sector's total capital is less than in other countries. However, the functioning of the Japanese industrial groups ("keiretsu") around a major bank, which leads the group, renders the accounting figures meaningless.

A similar finding is obtained when one considers the economic history of Japan. In fact, relations between banks and industry have been very close since the second half of the 19th Century, at the time of the Meiji revolution, which was when the country started to enter the modern era. These historic factors are as important –or more so, in this case– as anything that the accounting figures might suggest.

In this section, unless we specify otherwise, we will be referring to the extreme case in which banks play a major role in financing industrial activity, either as lenders or as holders of part of industrial companies' equity.

The differences between financial systems reflect very different historical contexts. Thus, Great Britain (and, later on, the United States) experienced an unparalleled surge in technological innovation in the second half of the 18th century. The new opportunities were exploited by numerous entrepreneurs, who marketed the innovations, particularly in the textile and steel industries.

The fact that at that time, Great Britain dominated a large number of international markets provided many British companies with a monopoly position, which, together with other advantages, enabled them to accumulate reserves that would later be used to finance new investments.

On the other hand, families' savings were channelled towards investment banks and capital markets, which started to specialise in issuing financial securities. The internal financing of companies grew in parallel with capital markets, while the involvement of banks in industrial projects was distinctly less.

In countries such as Germany, Spain or Japan –each with very important differential aspects– the lag in the industrialization process, the traditional presence of the state in economic life and the absence of private capital led governments and banks to take part in this process (7). The combination of government-bank interaction was crucial: the government encouraged banks to become involved in certain companies, either through long-term loans or by acquiring an interest in their share capital.

The paths subsequently followed by these systems have been very different. In Germany, government involvement in industry has been very low. In Spain, involvement has been greater, although banks have been controlled mainly by private shareholders. In Japan, the connection –through informal links– between government, banks and industrial companies has been unquestionable down to modern times.

Strangely enough, however, there are certain similarities. Even though they are two different systems, both Germany and Japan have the idea of the main bank leading one or several industrial companies –the “Hausbank” in German (8). This bank may or may not have a major interest in the industrial companies' equity. However, it plays a crucial role in relationships between companies and financial intermediaries, shareholders or domestic and international capital markets.

On studying the role of banks in financing companies, a number of basic questions arise. What advantages do banks offer compared with the markets? Is it not enough to have a number of well-developed financial markets to provide financing for companies?

The classic explanation of the function of financial intermediaries is that they obtain financial resources from savers by issuing deposits or other financial instruments and channel

these resources towards companies that need them to finance their investments. In the final analysis, financial intermediaries act as a bridge between savings and real investment. In addition, this function makes it possible to diversify the savers' risk.

However, this classic view of financial intermediation seems to have been overtaken by events. Indeed, the growing sophistication of financial instruments and markets in recent years has made it possible to improve the markets' efficiency, thus allowing a better diversification of the risk. It therefore appears that the classic argument is not enough to account for the rationale and role of financial intermediaries.

In recent decades, a new approach has developed that accounts for the existence of banks in terms of the asymmetric information and moral risk problems that arise between savers and companies that receive funds from them. Savers usually have incomplete information about companies, which could make it more difficult for companies to obtain the financing they need.

Thus, bank intermediation may offer significant advantages for companies as it mitigates these agency problems (9). In fact, when the cost to the providers of financial resources of acquiring information on companies is high, the process of financing companies may be done more efficiently if the prospective investors delegate the task of obtaining this information to a specialized organization (Diamond, 1984). Therefore, financial intermediation can be justified on the grounds of the information collection and company monitoring functions performed by banks.

The delegation of this function to banks offers significant advantages, owing to the economies of scale involved: this activity is associated with substantial fixed costs that can be absorbed by a greater volume of operations. Thus, banks may have a portfolio of loans whose respective returns do not correlate with each other at any one time. The main prerequisite for this to happen is the existence of true competition between the various financial institutions, so that the cost of the financing does not include monopoly income. Therefore, the presence of financial intermediaries provides significant incentives that allow many of the above-mentioned agency problems to be solved.

This argument is useful, but it cannot be taken to extremes. The reason is that if it were universally valid, companies would operate with only one financial organization, which is not the case in real life (Hellwig, 1991). Therefore, an important aspect of financial intermediation is that banks may enjoy significant economies of scale in information collection and processing.

Second, banks may be better placed to solve asymmetric information problems and thus reduce the transaction costs resulting from the behaviour of small shareholders who are not interested in putting the necessary effort or resources into monitoring a company's progress. We shall come back to the issue of the effects of the concentration of ownership in companies at a later point.

A third aspect, related to the previous point, is that financial intermediation may be better than capital markets at solving the problem of the small investors who wish to invest but lack the information to do so efficiently. The function performed by banks in turning deposits into investments provides an alternative to directly placing the savings of small investors on the capital markets.

Another important aspect is that financial intermediation makes it possible to establish long-lasting relationships, which is something that capital markets cannot do. These relationships take the form of implicit, long-term contracts that the company considers beneficial. Mayer (1988) and Porter (1992) propose the concept of capital committed to companies. In fact, a basic problem of the relationship between investors and companies, namely the establishment of complete contracts, is solved by the supervisory role played by the banks. This function would provide an alternative solution to the long-term contracts between savers and companies. This argument is elegant but, as we will see further on, even in systems where bank intermediation plays a crucial role, the average maturity of bank loans tends to remain fairly short.

In a series of more general discussions, Allen (1993, 1994) has shown that the supposed advantages of financial intermediation over financial markets will depend on the industry concerned and, in particular, on its maturity and degree of technological innovation.

In mature markets, with a low level of innovation and, therefore, less uncertainty, financial intermediaries offer clear advantages over capital markets. When there is agreement as to what can and cannot be done to compete in such an industry, banks have advantages over capital markets. This argument is related to that of Diamond (1984): providing that the uncertainty is low, the banks can diversify the risk among a number of companies, so that these companies' respective yields is relatively uncorrelated.

On the other hand, in emerging industries, with significant financial and technological risks, knowledge about the industry is much more imprecise. In this case, a financial intermediary's opinion will be less reliable. On the other hand, the high volume of information exchanged in the financial markets may help to achieve a better allocation of financial resources.

In other words, banks may be the best agents for financing companies' investment or growth projects in consolidated or even mature industries. However, the stock markets may obtain better information in the case of emerging industries, where technological, financial and commercial uncertainty is usually greater.

This explanation is fairly consistent with what happens in the real world, although it may not be the only explanation of why it happens. The United States is the country with the highest rate of product innovation and, in recent years, the new industries have tended to emerge in the United States, where, precisely, financial markets have greater weight than financial intermediaries.

On the other hand, in countries where the degree of technological innovation is lower, banks play a more important role, as the relative efficiency of their activity is greater. This would be the case with countries such as France or Japan.

Another advantage of bank intermediation-based financial systems is that there is always a major shareholder –the bank itself– which, as owner of the company, is interested in the company's doing well (Jensen, 1989; Berglof, 1990). This major shareholder may influence the company's development –by appointing its senior managers, for example. The relationship with the management team also enables the major shareholder to mitigate the asymmetric information problems that we mentioned earlier in our discussion of the capital market-based system.

In general, banks are able to exercise control over companies at a lower cost for the reasons we have stated above. Consequently, in a context of asymmetric information and incomplete contracts, banks may exercise control over a company more efficiently than financial markets.

Note that this argument goes beyond that of Jensen and Meckling (1976). They point out that debt and capital are two different mechanisms for governing companies and discuss how control is exercised with each mechanism. Here, we have taken this argument a little further and one wonders why a country, its banks and companies choose one system or the other.

The answers to this question have been provided indirectly on previous occasions (Diamond, 1984; Mayer, 1988; Hellwig, 1991). However, there are two institutional aspects that must not be forgotten in this context (Roe, 1994). First, in the United States, the bank legislation passed in the 1930s has prevented banks from playing a more active role in company financing. It is true, however, that we do not know what would have happened if that legislation had not been passed.

The second aspect is the specific concentration of the ownership of banks and companies in each country. The presence of a major shareholder –or, at least, of a major creditor– may ensure the establishment of relationships between banks and companies that are geared towards the long term, that are less exposed to passing circumstances, and that lead to the emergence of capital committed to the long-term financing of companies. This argument was developed by Demsetz (1983), who points out that controlling shareholders take on a greater risk in the company and, consequently, the benefits to be obtained from monitoring the company exceed the costs.

Generally speaking, there seems to be a positive correlation between concentrated share ownership (or, failing that, controlling interests) and efficiency. The reason is that when members of a Board of Directors (for example, banks who are shareholders or creditors) who play a major role in the company also have an interest in it (as shareholders or creditors), the company's and the investors' incentives are more consistent and agency problems tend to disappear (Jensen and Meckling, 1976; Shleifer and Vishny, 1986). (10)

These long-term relationships provide a financial structure for industrial companies which contains a greater proportion of external debt with a lower cost. This structure may give a slightly lower capital cost. A financial structure such as that described here is less easy to sustain in a system based on financial markets, due to the agency problems described above, which would lead to a higher capital cost. Kashyap and Scharfstein (1991) provide interesting indirect evidence on this point: Japanese companies with bank shareholders invest, on average, more than those that do not have bank shareholders.

The concentration of ownership may make it possible to resolve conflicts between a company's shareholders more quickly, as there is one shareholder –a bank– that is genuinely interested in the company's future. This system also makes it possible for less traumatic solutions to be applied in situations of crisis; on many occasions, bankruptcy is avoided and the restructuring process is less harsh, thereby reducing the intensity of the resulting social conflicts. This is an important argument that is used when describing the advantages of the Japanese financial system (Aoki, 1988; Kester, 1991). Thus, Hoshi, Kashyap and Scharfstein (1991) show that the cost of company restructurings in Japan is lower.

On the other hand, as we have already mentioned, in capital market-based systems, bankruptcy is usually the mechanism used to solve a feasibility problem. Obviously, this system involves a greater degree of social conflict.

Together with these undoubted advantages, the model based on financial intermediation also has its problems and limitations. The first and most important is the excessive risk accumulated by the banks through their loans and shareholdings. These holdings have been the cause of many bank crises, such as the North American crisis in the 1930s, or the Spanish crisis in the 1970s and '80s. The recent cases of *Crédit Lyonnais* and *Banesto* are illustrative examples.

A second limitation of the financial intermediation-based model is that control mechanisms are no longer based on the prices set by the market for certain financial assets but on the bank's ability to supervise the companies with which it has commercial and financial relations. Obviously, this requires a much greater effort on the part of the main shareholder or, in the case of the bank, the main shareholder and/or creditor.

Third, the absence of stricter disciplining mechanisms like those provided by capital markets may lead some companies to become complacent. This is particularly true in cases where the products offered by the company are not subject to market discipline. However, if there is a high degree of rivalry in the industry the company is operating in, this risk is lower.

A fourth limitation of the bank intermediation-based model is the tendency to overinvest and, therefore, create excess production capacity in industries where companies operate with bank financing (Hoshi, Kashyap and Scharfstein, 1991). The reason is that the assumption that the company has the continued support of a bank investor may lead to complacency and prolong indefinitely a situation of mediocre management.

In spite of these limitations, the model based on bank intermediation has achieved good results in countries such as Japan or Germany, both in terms of higher productive investment and in terms of greater social stability. These superior results have led some authors (Kester, 1992, Porter, 1992) (11) to argue that capital market-based systems should gradually incorporate features of the bank intermediation-based system in order to maintain high investment rates and increase corporate competitiveness.

## **6. Financial models and bank-industry relationships**

In the previous sections, we discussed the main features of the two extreme models of organization of financial activity that can be observed in industrial countries. One of the conclusions we have come to is that the historical context of these countries' industrialization process is important in explaining the particular configuration of their financial systems.

However, this explanation on its own is not enough. It is reasonable to think that certain features of the industrialization process - for example, the role played by governments and banks in encouraging the process - have weighed heavily in the subsequent evolution of the financial system. However, we would also have to add to this explanation those institutional aspects of each country that, in practice, have enabled this evolution to take place. The most important of these institutional aspects is the way companies are organized and managed (Williamson, 1975; Chandler, 1977).



Companies –industrial or service companies– operate in a context of different types of relationships with customers, suppliers, competing companies and financial organizations. A critical decision for the company as a whole is the degree of vertical or horizontal integration that it wishes to attain in order to achieve greater efficiency in its operations. This degree of integration will affect the investment decisions that the company will make and, in particular, the investments in highly company-specific assets, whose value outside the company is consequently very low (Williamson, 1985).

These investments in specific assets carry a high risk. If the investment ceases to be profitable due to sudden changes in the demand for the final products or in raw material prices, the value of the investment will fall sharply. This volatility in the rate of return of certain investments is an adverse factor when deciding on their viability.

Consequently, in the case of investments in company-specific assets, the existence of a long-term relationship between the capital market and the company takes on particular importance. As we have already said, the financial models based on capital markets tend more towards capital fluidity and short-term mobility. The models based on bank intermediation, on the other hand, may look more to the long term, as a result of the intrinsic nature of banking.

If this is so, then the financial models with strong bank involvement would show higher investment rates (Mayer, 1988) or, at least, a higher percentage of outside financing for new investment projects. In the financial models based on the capital markets, in contrast, non-financial companies would show a lower percentage of long-term outside financing.

Further on, we will discuss some empirical observations on the outside financing of non-financial companies in a number of countries. For the time being, in this section, we will describe a few basic features of the relationship between non-financial companies and the financial system in some countries (from the viewpoint of the non-financial firms).

### *6.1. Relationships between non-financial companies and the financial system in Japan*

At first sight, the organizational structure of the Japanese company is special, at least if we look at it with a Western mentality. However, as some authors have pointed out (Aoki, 1984; Kester, 1991), the Japanese model of business organization has a coherent, homogeneous internal structure, which accounts –at least in part– for the successful penetration of international markets by Japanese companies in the 1970s and '80s.

The first feature of Japanese companies is that they are very often members of a larger industrial group made up of a number of large industrial corporations and one or more banks: the famous “keiretsu”. The most well-known “keiretsu” are those that have grown up around the large automobile companies, such as Nissan or Toyota, and the large consumer electronics and computer companies such as NEC or Matsushita.

The companies that make up one of these groups constitute a complete economic system, a sort of microsystem within the Japanese economy. They have a high degree of production specialization, through which they serve both the companies in the group and other outside companies.

The companies belonging to a “keiretsu” are also extremely stable. Indeed, the close relationships formed between them encourage situations in which, when one of the member

companies experiences periods of financial difficulties, the other members tend to lighten its financial burden. At the core of these decisions, there is usually one of the large Japanese banks leading operations.

Obviously, membership of a group and the requirement of loyalty and solidarity vis-à-vis the group's companies gives rise to a tremendous degree of flexibility and adaptability to a changing environment. Think, for example, of the just-in-time system implemented by Toyota to manage the supply of components for its automobiles. Without the close relationship between the Toyota Group's companies –extended to its suppliers– this system is extremely vulnerable. In terms of efficiency and flexibility, therefore, this system is successful.

However, it places an additional burden on the group's companies when one of them starts to falter or is unable to offer other companies the products they need with the same quality-cost combination as other companies outside of the group. In this case, relations between companies become strained and, as likely as not, some of the companies' profits take a dip.

Consequently, the system is flexible and favours long-term relationships, but the rates of return may, on average, be lower. This emerges from international comparisons of the return on equity obtained by North American, European and Japanese companies. The latter are usually grouped at the bottom of the list.

The factors that define the relationships between the companies belonging to a "keiretsu" can be synthesized as follows (12). First, there is an explicitly declared business relationship between two or more companies. These agreements are not usually of a legally binding nature: compliance depends not on the force of the law but on mutual trust.

A second feature of the Japanese system is the exchange of senior managers between companies in the same group. The existence of a group is sometimes due to a shareholder holding shares in more than one of the companies of the group. Thus, it is not unusual to find that the president of a Toyota supplier is, for example, an ex-Toyota manager; or that a top executive of one of the large Japanese banks sits on Nissan's Board of Directors.

Such practices have a twofold purpose. First, they familiarise managers with the way different types of company work. They also enable managers to get to know each other and build personal relationships, which, generally speaking (Suzuki, 1980), help professional relations run more smoothly.

As a result of these personal relationships, which are explicitly encouraged by the "keiretsu's" member companies, the companies' managers are more open to sharing information on the situation of their own companies, the industry or other issues that are useful for the group's progress.

This sharing of information between the group's members makes it possible to monitor the situation of a company much more closely than would be possible for a financial intermediary in the capital market (Gilson and Roe, 1992).

Also, these continual flows of information provide a powerful incentive to make sure that no company lags behind in performance, either in relation to others in the same group or to competitors outside the group.

In this sense, it should be stressed that the information and the indicators that can be examined in this case are much richer than the simple indicators of financial return used in

capital markets. For example, they can include aspects such as the number of new products recently introduced, the turnaround time in responding to customers' needs, the degree of customer loyalty or the quality levels in the supplies to other companies in the group. As can be seen, the wealth of information that is shared can be overwhelming.

The third feature of Japanese industrial groups is the existence of cross-holdings between companies. Thus, at the end of 1990, holdings by companies belonging to different "keiretsu" of the equity capital of other companies in the same group were as follows: in Mitsubishi, 25.3%; in Fuyo, 18.2%; in Sumitomo, 24.5%; in Mitsui, 18%; in DKB, 14.6%; and in Sanwa, 10.9%.

Clearly, these holdings are not particularly high and by no means constitute an absolute majority. However, they provide a means of controlling the other companies and create a closely knit structure on which to base relationships between the group's companies.

In the case of shareholdings by banks in industrial or service companies, a very interesting situation arises. Bank holdings in such companies is not very high. However, in practice, these banks are also these companies' main lenders.

Indeed, in practice, the distinction between debt and capital in these companies becomes less clearly defined as, in both cases, the financial resources usually remain for prolonged periods in the company that has received them. This stability in the sources of financing may cause problems for some banks when the companies are insolvent, but it also provides an incentive for the companies to consider investments that have a longer payback than normal.

There is one final feature that is unique to the Japanese industrial groups, namely what is known as the selective intervention in some companies by other companies in the group and, above all, by the group's leading bank.

This selective intervention takes place when major problems appear in a company's management and particularly in situations of persistent deterioration of the company's profit levels or financial solvency.

In many industrial countries, serious financial troubles might lead to bankruptcy. In Japan, however, these solutions are avoided if at all possible. The explanation is to be found in Japanese culture: the companies in a group are concerned first and foremost with the group's survival and the preservation of jobs. Logically, this guarantees a tremendous social stability.

When a group company is in difficulties, the group's leading bank –which is usually the troubled company's main shareholder and lender– assumes a prominent role. Normally, it takes on the debts of the other creditor banks and becomes the main creditor. As leading bank, it is perfectly aware of the company's internal situation and draws up loan recovery plans tailored to the company's possibilities. In such cases, access to information gives the bank a decisive advantage, compared with the situation in the capital markets, where access to information on the company is more limited.

Japanese commercial banks cannot hold more than 5% of the equity capital of industrial corporations. However, by virtue of their membership of a "keiretsu", their influence is usually much greater in practice.

In a sample of large Japanese companies, the largest shareholder was a Japanese commercial bank in 72% of the companies (Sheard, 1989). There is also a close link between bank holdings of equity capital and the volume of credit granted. Indeed, in one study performed by Prowse (1990), in about 60% of the companies surveyed, the largest shareholder was a bank which was also these companies' main lender.

In recent years, however, these bank practices have started to show signs of strain. The reason is the erosion of Japanese banks' profitability, which has limited their ability to raise capital in international markets. This circumstance has made banks increasingly sensitive to the return on equity, which has already led them to abandon some companies in their groups for fear of damaging their solvency.

Consequently, the Japanese model has functioned in a very unique manner in recent decades, with a very close relationship between banks and industrial companies. These relationships are not going to disappear, at least not in the short term. However, Japanese banks may become increasingly less inclined to rescue group companies whose financial viability is uncertain, particularly during times of recession, as has been seen in the recent economic downturn. If this trend continues, it will mark a major shift in the relationship between Japanese banks and industrial companies.

## *6.2. Non-financial companies and banks in Germany*

On many occasions, the German and Japanese financial systems are grouped together, on the grounds that the strong presence of banks and the lesser importance of the capital markets are factors common to both countries.

Indeed, there are a number of similarities in the way banks work in the two countries. One example is the presence of a leading bank (the so-called "Hausbank") in some medium-sized and large companies, which behaves in a similar manner to the leading banks in Japanese industrial groups.

In many cases, this presence includes shareholdings. The large banks are shareholders of large companies in Germany. At the end of 1990, German banks were shareholders of 9% of all listed German companies. They held more than 25% of the equity capital of the 33 largest German companies (Harm, 1992a). Likewise, the insurance companies held 11% of the equity of these 33 companies.

These figures reflect a significant bank involvement in the share capital of German industrial companies. However, one very important distinction must be made. The presence of banks as shareholders of industrial companies is confined to large companies. In other words, German banks hold no interests in the equity of small and medium-sized industrial companies, unlike the leading banks in the Japanese "keiretsu", which do have holdings in the small and medium-sized companies that form part of the industrial conglomerate.

This distinction is important because it should not be forgotten that the core of Germany's industrial might is not its large companies but the vast fabric of highly innovative small and medium-sized companies with their strong international vocation.

In any case, the presence of German banks in industrial firms is not confined to shareholdings in large groups. The German banks also act as the main depositaries of the shares traded on the Stock Exchange. At the end of 1990, the German banks held on deposit

about 40% of the market value of the shares of listed companies. If we add to this the 9% directly held by the banks, we find that, directly or indirectly, banks control about 50% of the equity capital of listed companies.

It is true that having shares on deposit does not guarantee, per se, the ability to influence shareholders' decisions. However, in Germany, a mechanism known as "Vollmachtstimmrecht" operates, whereby, under certain conditions, the banks act as proxies for those shareholders who have deposited their shares in the bank.

For many years, this proxy was almost automatic (Harm, 1992a) and did not require any special conditions imposed by the shareholder. Nowadays, the situation is somewhat different. The bank must ask for instructions from the shareholders. Furthermore, each proxy is valid for fifteen months, after which it has to be renewed.

Publicly listed companies (AG) are legally required to have two types of Board: the "Vorstand", which is a Management Committee that takes on the company's executive responsibilities, and the "Aufsichtsrat" or Supervisory Board. The members of the "Vorstand" are appointed by this Supervisory Board.

The specific channel for influencing the shareholders of listed companies is the "Aufsichtsrat" or Supervisory Board. By virtue of a regulation passed in 1976, half of this Board's members are elected from among the workers' representatives. The other half are representatives of the shareholders. These Boards have been considered as one of the pillars of Germany's social stability in recent years.

As in Japan, the shareholders' representatives may be managers of other companies and, particularly, of the banks that are shareholders or depositaries of shares in the company. Hence the relative importance of the banks' presence in German industry, at least in listed industrial companies.

There are clear similarities between the German and Japanese cases. However, there are also significant differences. The first is that in Germany –with a few exceptions, such as the Daimler-Benz group– there are no industrial groups comparable with the Japanese "keiretsu". Relations between companies and banks are more direct.

One of the consequences of this reality is that relations between industrial companies and their suppliers are more often governed by transactions on the products markets and not by agreements deriving from the existence of cross-holdings in these companies' equity.

There is also a clear difference between bank presence in industry in Japan and in Germany. Thus, whereas in Japan direct shareholdings by banks in large industrial companies exceed 20%, in Germany, as we have already indicated, they amount to about 9%. In any case, these two figures are not comparable. The reason is that the Japanese figure includes unlisted companies, whereas the German figure includes only listed companies.

However, both the German and Japanese cases show that the relationships between banks and industrial companies, shaped by the very specific historical context, help account for the specialization of financial systems. A combination of historical circumstances and government decisions have led to direct or indirect involvement of banks in industry being greater in some countries than in others.

A subject of major debate is the degree to which one can force a change in specialization or financial model in a country that has operated for many years with a particular model. A number of unique experiences have been observed in some developing countries (such as South Korea and Mexico).

However, the situation is very different in an industrial country. The incentives to change are less powerful, due to existing vested interests, although some experts maintain that this is highly desirable (13).

In any case, what does seem to be beyond doubt is that in countries such as Germany or Japan, banks have played a major role in financing the industrial sector, although this has not been without its costs and inefficiencies. The one big doubt is whether these systems –intimately associated with certain financial practices that revolve around a leading bank– will be profoundly changed as a result of the securitization and financial globalization processes we have discussed in the previous chapter.

Our opinion is that this dramatic change is not likely to occur, at least not in the foreseeable future. What is growing is the importance of capital markets in corporate financing in these countries, as an inevitable result of development and financial innovation.

There are also serious reform attempts taking place in the United States, a country with a market-based financial model, aimed, among other things, at allowing a greater degree of competition between banks and other financial intermediaries. These reform attempts include the possibility of commercial banks acquiring shareholdings in industrial companies, within certain limits (Bryan, 1991).

To summarise, the financial models of the United States, Germany and Japan are evolving towards a convergence which, while not absolute, is opening each model to the advantages of the others. We can predict that, in the next few years, industrial countries will witness a combination of universal banks –playing a major role in the financing of industry– and increasingly sophisticated capital markets in the long-term financing of companies, with heavy involvement of bank groups.

With the strengthening of universal banks, it will be necessary to reexamine the advantages and disadvantages of each of their businesses and introduce the necessary changes in specific organizational strategies in order to ensure that the bank group is managed efficiently.

## **7. Some conclusions**

In this paper, we have identified and analyzed two major models of organization of the financial system. First, the model based on capital markets as the primary nexus for the flows between savings and investment. The second model is based on the role played by banks and other financial organizations, which is much more important than that played by the financial markets.

However, these two models, deeply rooted in different countries, are not static but are in a process of continual change or mutation. This process seems to be tending to bring both models closer together rather than pull them further apart.

Thus, in countries such as Japan and Germany, where banks traditionally play a crucial role, capital markets are becoming increasingly important. This is due, in part, to the growing volume of banking activity on capital markets. Universal banks have been the driving force of development and change in many European countries in recent years.

In the United States, a prime example of the financial market-based model, there are growing pressures for banks to play a greater role in corporate finance. Something seems to be moving on the international financial stage. And these movements seem to be heading in one direction: towards an eclectic model in which banks and financial markets both play an important role in corporate finance. This trend has to do not only with the need to improve the efficiency of the financial system, but also with the quest for survival of universal banks in an increasingly competitive industry. □

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- (1) This matter has been the subject of recurrent debate in recent years. In general, corporate governance is a complex issue that has been made even more complicated by the enormous changes that have taken place in the financial industry. For further discussion, see the comparative work of Charkham (1994).
  - (2) For further discussion of this theorem, see the excellent comments by Miller (1988), Modigliani (1988), Ross (1988) and Stiglitz (1988).
  - (3) However, this opinion is contested by other authors, who stress the efficiency of the capital markets. See, for example, Miller (1994).
  - (4) In an argument which we shall discuss further on, Mayer (1988) points out that the different financial systems have mechanisms for solving the asymmetric information and agency problems that arise between a firm's lenders, shareholders and managers.
  - (5) Merton (1993) suggests six functions for a financial system, which refine or expand on some of the functions discussed here.
  - (6) See Jensen and Meckling (1976) for an introduction to these problems.
  - (7) Gerchenkron (1962) studies these issues from a broad historical view and points out that bank involvement in financing economic growth is a sign of economic backwardness.
  - (8) Kester (1991) and Harm (1992 a) discuss the importance of the "Hausbank" in both countries.
  - (9) See, particularly, Jensen and Meckling (1976), Diamond (1984) and Tirole (1993).
  - (10) Demsetz and Lehn (1985) cannot confirm this hypothesis empirically, although other authors have confirmed it in other contexts. See Shleifer and Vishny (1986), Hill and Shell (1988) and Pound (1992), among others. Lowenstein (1991) offers another argument against this thesis, according to which many controlling shareholders do not spend time on supervisory tasks.
  - (11) However, the arguments are hotly countered by other authors, who maintain that the capital markets are an efficient mechanism for governing companies. See Allen (1994) and Miller (1994).
  - (12) See Kester (1991) for a detailed study.
  - (13) See, particularly, the persuasive arguments of Porter (1992) and Bhide (1994).

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