

**UNIVERSAL BANKS: THE PROTOTYPE
OF SUCCESSFUL BANKS IN THE
INTEGRATED EUROPEAN MARKET?
A VIEW INSPIRED BY GERMAN EXPERIENCE**

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Working Paper n° 9001

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D/1990/3082/01

**Universal Banks : The Prototype of Successful Banks in
The Integrated European Market ?
A View Inspired by German Experience**

by

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"La raison du plus fort est toujours la meilleure"
Jean de la Fontaine, Fables, Le loup et l'agneau.

- * The authors wish to thank Franco Bruni, Pier-Luigi Gilibert, Ulrich Schröder and two anonymous referees for comments. Views expressed in this paper are personal and do not necessarily reflect those of the commentators or of the authors' institutions.

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1. Introduction

Regulators, bankers and consumers are preparing for the expected integration of financial markets within the wider goal of a Single European Market by 1992 or some later date. Whether the 1992 deadline is met or not, financial markets will dramatically change to the point of bearing little resemblance to what they used to be. Elsewhere it was argued that whilst the overall economic benefits may not be all that overwhelming, the effect on financial institutions risks to be just that (Steinherr and Gilibert, 1989). Hence it is of paramount importance for financial institutions to understand the implications of financial market liberalization and integration to be able to prepare and adapt.

Financial market integration will offer opportunities to reach beyond national frontiers by exporting financial services, by acquiring or establishing service centers abroad, in markets hitherto sealed off to foreign penetration. In this context a key issue will be the optimal scope and organization of banks. Unfortunately our knowledge about competing organizational forms is far from what a scientist would call a conjecture ; there are some partial theoretical arguments and there is some empirical evidence. Taken together it still does not add up to scientific knowledge. In the end, only experience will be able to tell and survival of the fittest will be the ultimate proof.

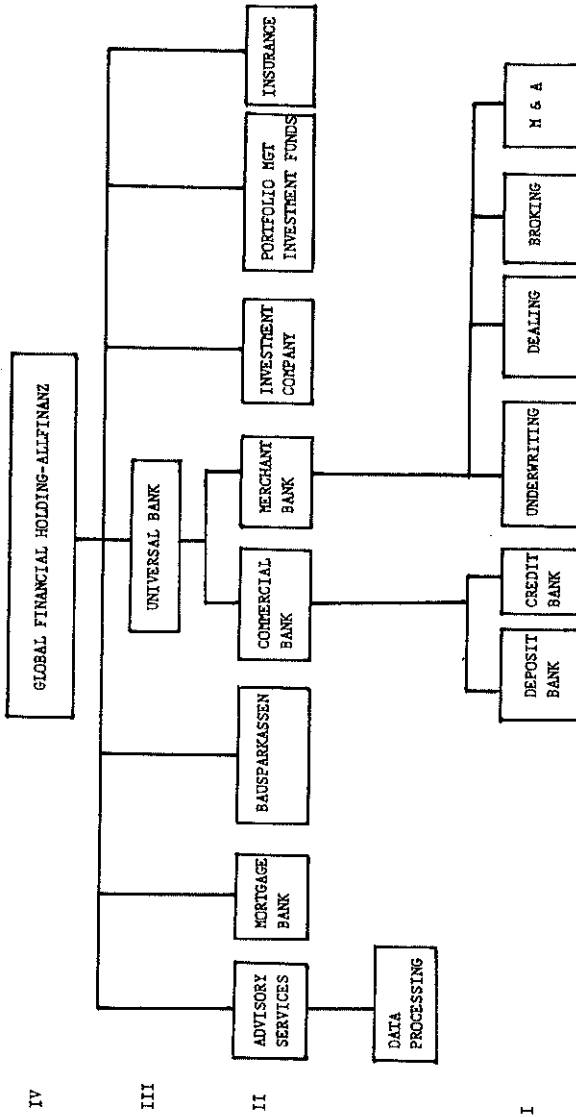
Bearing these provisos in mind, this paper is a modest attempt to evaluate the advantages and the problems posed by a particular model of the bank, referred to as universal banking. In most countries regulations have restricted banking activities by activity or geographically for reasons discussed in Steinherr (1989). Only in a few countries, and notably in Germany, have banks been allowed to carry out virtually all banking activities within a single firm and without geographical limitations. It is often felt that if it was not for regulations all large banks would become universal. Such trends can be observed even in countries traditionally committed to banking segmentation such as Japan and the United States. One interpretation of this trend is that the universal model is the most efficient one. Another is to argue that it may not be the most efficient one but that it serves to maximize size and market power and ultimately to generate non-competitive rents. Both arguments would be consistent with the hypothesis of survival of the fittest but the social implications would be different. Hence there is a nut to be cracked by regulators.

A major phenomenon of financial innovation in recent times has been disintermediation and securitization. This poses a threat to commercial banks and creates an incentive to compensate for losses in traditional commercial banking business by entering into investment banking. The incentives for investment banks to enter into commercial banking exist as well, albeit less pronounced. Investment banks vie for the large capital resources of commercial banks, particularly needed during stock market downturns, the deposit base and the branch network which could serve as a retail distribution network for brokerage.

So far we have implicitly followed a restricted definition of universal banking : a combination of commercial and investment banking. German universal banking is, in fact, not bound as narrowly : it includes participations in non-banking firms, with direct voting rights reinforced by proxy-votes for shares held in custody for clients. Chart 1 provides a useful overview of banking activities embraced by universal banking. To traditional universal banking activities are added those which are part of universal banking groups (such as mortgage banking, building societies, investment funds) and non-banking financial services such as insurance. All of them are regrouped in the more recent concept of Allfinanz or global financial holding. One focus of this paper is whether it is useful drawing a boundary line around the activities of a universal bank and prevent creation of global financial firms. If so where should the line be drawn ?

Section 2 of this paper discusses the analytical issues involved concerning efficiency and market power. Section 3 reviews the historical German experience. Section 4 investigates modern universal banking in Germany and distills a few but important lessons. Section 5 discusses regulatory issues and draws the boundaries for bank activities from both a theoretically desirable and a practically feasible point of view. Conclusions and their policy implications are presented in Section 6.

EXHIBIT 1



2. Economic efficiency of universal banking : a theoretic framework

Universal banking is generally thought to benefit from its wide-spread activities and the global banking service they can offer to customers. In economic terms, universal banking may benefit from economies of scope and from informational superiority. In addition, the multiple relationships with a corporate client, including shareholdings, may give the universal bank a special relationship and, in the limit control over corporations which could give rise to non-competitive behaviour. This section discusses these considerations in turn, starting with the very essential issue about universal banks' competitive position in collection and management of information. Most of the discussion is of a theoretical nature and should not be read as an interpretation of specific existing banking systems. Theoretical issues pertaining to the market for corporate control are more closely related to German experience and therefore relegated to Section 4.

Acquisition of information

The theory of financial intermediation has extensively addressed the question : why do financial intermediaries exist ? Answers to that question should provide assistance in evaluating competitive advantages of universal banks as a particular type of financial intermediary. The major reason advanced for existence of financial intermediaries is asymmetric information, that is, the borrower has information about the amount and risk of future cashflows which is superior to the information available to the lender (Diamond, 1984). Diversification by itself is a necessary but not a sufficient response of lenders because of adverse selection problems. What is needed is acquisition of information to narrow the information gap. In cases where, or to the extent that, information can be acquired by anyone at some cost, an independent agent (rating agency) would be socially efficient. The rating agency has an incentive not to cheat and to make information available as a public good. The borrower has an incentive to bear these costs and to benefit from market access. However, in many cases the hypothesis that information can be acquired by an outsider is too strong.

When information is asymmetric it often can only be acquired through a continuous relationship in credit evaluation and monitoring. Banks gains from accumulating information which will be reflected in lending conditions. Nevertheless, once acquired it is difficult preventing revelation of this information to competitors. Every time a bank awards a loan or a back-up facility it provides a signal to the market. The studies of James (1987) and Slovin et

al. (1988) confirm indeed that share prices rise after a loan agreement and that conditions for commercial paper issues improve.

How does the universal bank compare in this respect with a commercial bank? From the point of view of information collection the universal bank seems to be better placed. By meeting all the financial needs of a company and by being involved in advisory functions, the universal bank exploits economies of scope and minimizes the cost of information and the cost of monitoring the relationship (Steinherr and Gillibert, 1989). Supplying an additional service is free of information and monitoring costs. If, in addition, the bank holds stock of the company and is represented on its board, the information gap can be narrowed further and monitoring of the company becomes easier and more efficient.

Doubts about universal banks' informational superiority are however raised by performance comparisons. If the information superiority of universal banks as compared to commercial banks was really significant then one should be able to observe at least one of the following differences in loan contracts : loans granted by universal banks should exhibit greater differentiation in risk premia, lower default ratios, or credits with longer maturities. But there is no empirical evidence that loan portfolios of universal banks differ significantly in these respects from those of traditional commercial banks.

Even if universal banks did enjoy informational superiority some problems would subsist. One is that risk is less diversified for a given amount of resources if the bank is lender, adviser, bond and shareholder. The empirical weight of this argument is however likely to be marginal. More concern is raised by another consideration. Loan commitments by a commercial bank are useful signals to capital markets and improve the borrowing firm's access to it. When the lending bank acts as the underwriter of the firm's debentures or share issues the informational value of loan signals is reduced : a bank may be motivated to underwrite debentures in situations where it would not be ready to extend more loans. In fact, the adverse selection problem re-emerges : if the firm is sound the universal bank has an incentive to increase its loans. If the firm faces difficulties the bank would prefer to refinance the firm through the market. Nor can the firm be sure to obtain the best conditions. If captive to the universal bank it may not be able to search for the best conditions in the market.

Economies of scope

The question whether universal banking is more efficient than specialized banking depends on whether there are economies of scope or not. Economies of scale are irrelevant as they measure the importance of the size of production on average cost, given the product mix. Global economies of scope exist when the costs of joint production are lower than the sum of costs of separate production for a given scale for each product. Product-specific economies of scope arise when production efficiency can be enhanced by adding a particular product to a given product mix. Baumol, Panzar, Willig (1981) have suggested that economies of scope and cost complementarities in production arise from inputs that are shared or utilised jointly.

For universal banks, several arguments suggest that economies of scope may be sizeable. First, there is a fixed cost in managing a client relationship : it includes the branch network, the accumulation of human skills, computerized systems ... and such overhead costs can be spread by offering a whole array of financial services to clients. From the client's point of view it is also convenient to concentrate within one bank all sources of funding (short-term borrowing, long-term financing and equity holding) : it reduces transaction costs and reduces the marginal costs for new services. (See also Dermine, 1989).

Second, financial institutions produce highly substitutable goods. Specialized institutions are therefore exposed to the risk of demand shifts among products. Universal banks are believed to cope more easily with such substitutions due to their economies of diversification : resources can more easily be shifted in-house in line with shifts in demand.

Third, in meeting all the financial requirements of a company, the universal bank minimizes costs of information and of monitoring the relationship as argued above. Instead of assessing creditworthiness of a corporation on a separate basis for each financial transaction, an integrated account requires only one such information cost. The simultaneous holding of the client company's stock improves the monitoring of the aggregate relationship and gives the universal bank an insight into the client's earning stream and a control on risks which a commercial bank would not obtain.

Such a universal and long-standing client relationship is valued by banks because it allows progressive accumulation of knowledge about the customer. Typically a borrower has projects whose future returns are much more important

for the service of the debt than material guarantees. The better a borrower is known, the easier it will be for a bank to deal with him flexibly.

The empirical literature, reviewed in Clark (1988), not only fails to support the hypothesis that economies of scale are important in banking but also the one that economies of scope are important. The general conclusion is

- (i) that economies of scale are significant only for depository institutions of small size (less than USD 100 million in total deposits) ;
- (ii) that the empirical evidence does not support a conclusion of global economies of scope ; and
- (iii) that there appears to be some evidence of economies in joint production among some specific pair of products.

None of the 13 studies surveyed used European data but studies on European banks, such as Pacolet (1987) are not suggestive either for strong economies of scope. It needs to be recognized that data for these empirical studies have weaknesses. One should therefore not draw the conclusion that there are definitely no economies of scope. Nor should one neglect the message of these empirical studies that the evidence in favour of universal banking still needs to be delivered.

If economies of scope were important then one would expect that universal banks exhibited lower operating costs than specialized banks, for a given volume of operations⁽¹⁾. Within national banking systems it is difficult to make comparisons because either specialised banks for each product type are lacking (Germany) or universal banks are not existing.

Table 1 assembles some relevant international comparisons. These comparisons are obviously flawed by aggregation, regulatory, fiscal and accounting differences. Nevertheless, the operating surplus, total costs and personnel costs of Germany's banks -all of which are not universal- are only slightly better than average. This is likely to be an underestimate of the performance of German

(1) Alternatively, the operating surplus should be higher. Cost data seem preferable because the surplus may reflect non competitive pricing.

banks as gains from equity holding are not reflected in the surplus but corresponding costs are included in the cost data.

Again, this is not evidence that universal banking is more efficient. The same conclusions with an associated doubt about competitive pricing emerge from the Price Waterhouse study for the Commission of the EC (1988). In Germany, banking products with the exception of letters of credit and travellers cheques are priced significantly higher than in a "competitive" market. If universal banking enjoyed cost advantages they would seem not to be passed on to consumers.

We now turn to some potential economic inefficiencies inherent in universal banking.

Contagion risk (externalities)

Corporate control by diversified banks may not only generate information and monitoring advantages but also some drawbacks. The most obvious pitfalls are the risks of contagion and conflicts of interest. Conflicts of interest will be discussed below.

Bankruptcies of affiliated industrial companies could endanger the bank's assets, with a possible loss of confidence and run on deposits ; for this reason regulation in some countries assures that the risks and failures of industrial companies are not transmitted to the bank's deposits (corporate separateness).

Ownership of universal banks could also give rise to problems. When an industrial company gains control of a bank, it gets not only a cheap and large source of funding (less so with competition from deregulated capital markets) but it also gains important information about competitors : universal banks could therefore become a source of distortions in the non-banking sector. This would be all the more the case if markets are not competitive and if anti-trust laws do not exist (as is the case in some European countries) or are not rigorously enforced.

Universal banking with control over firms in the non-banking sector and the possible control of universal banks by large non-banking concerns raises the issue of market power. We do not think that universal banks are equipped and willing to engage in the usual uncompetitive strategies within the industries where they hold participations (price-fixing cartels, coordination of industrial

firms whose products are complementary or substitutes, vertical concentration). Rather the set-up of large universal banks (or even of financial conglomerates) could generate power beyond the confined boundaries of some industrial markets: one thinks of interlocking directorships, the ability of the banking sector to shape and to coordinate the behavior of their affiliated companies. (These questions are analyzed in Section 4). Again, these possibilities are particularly relevant warnings for economies that lack competitive structure. These warnings are less pertinent for the future integrated European market.

It is not immediately obvious why banks would benefit from holding major stakes in industrial companies as they are already exposed to the risk of failures of their corporate clients. A lesson may be gained from the experience of industrial conglomerates. Whilst in fashion in the 60s and 70s as a device to spread managerial capacity and to diversify risk, the ultimate result is failure. Lack of focus and managerial dilution has generated under-performance forcing conglomerates into divestment and restructuring. Why should a conglomerate managed by a bank, itself perhaps controlled by a non-bank, achieve superior results? We see no convincing reasons from an efficiency point of view limited to returns from shareholdings. But this may be a too narrow approach.

The dual role of banks as lenders and shareholders of the firm is studied by Aoki (1984) in the context of the Japanese financial system. Two important conclusions emerge from this study which assumes that banks fix their strategy as lenders and shareholders such as to maximise net income. (This may not always correspond to reality as argued in Section 4). First, the model generates a level of indebtedness of firms such that their equity value is maximum. However, this is only an equilibrium solution when shares are held by individuals. If banks also are shareholders the debt of a firm exceeds the level which maximises the firm's value. This solution is preferable for banks because the loss incurred from lower share prices are more than compensated by higher credit amounts at, in fact, higher effective interest rates. This compensating feature also suggests that banks have no advantage in holding all shares of the firm (as they lose on shareholdings) and rather prefer to hold a stake small enough to minimize the loss on share holdings under the constraint of effective control over the firm's borrowing decisions. Equity stakes as small as 5-20 percent seem to be in the optimal range and this is precisely what can be observed in Japan, Germany and elsewhere.

Second, banks as lenders and shareholders share the industrial risks of the firm and as a result have an interest in influencing not only the financial but also

the industrial decisions of affiliated non financial corporation. What seems to be valid for Japan appears also consistent with observations in Germany.

Conflicts of Interest

The major reason for separation of commercial banking from investment banking in the United States was the alleged risk of conflicts of interest. The issue is difficult to evaluate because direct information is not available. If it was it would have given rise to complicated legal battles.

Repeated concern about market power of universal banks and potential conflicts of interest led in the 1970s to an investigation of these issues in Germany.

The Commission for Fundamental Problems of the Credit Sector (Gessler Commission)(2) identified seven such potential areas of conflict (see Krümmel, 1980) :

- (i) Since universal banks conduct deposit business and stock exchange transactions they may not uphold the interests of their customers in investing in securities.
- (ii) There is a danger that banks withhold information obtained in the credit business from their customers in the securities business.
- (iii) Banks could be inclined to build up participations without transacting on stock exchanges.
- (iv) Universal banks may be more interested in credit business than in their borrowers' capital issues.
- (v) They may use information from credit business which gives them an advantage over other stock exchange operators.
- (vi) Because banks own participations, exercise proxy-votes and are represented on supervisory boards they accumulate inside information which they may use as investment advisers of their clients.

(2) The Gessler Commission was appointed in 1974 by the Minister of Finance and presented its report in 1979.

- (vii) They could force upon their investment funds own stocks or issues of their customers.

To these possible problems could be added :

- (viii) Diversified banks may not have detailed information on their costs, profits and risks across the wide array of the services they offer. There is therefore a danger of implicit or explicit cross-subsidisation.
- (ix) The securities business could be used to support own trading positions.

After examination of these issues in Germany, most of these objections were found unjustified by the Commission. It admitted, however, to be unable to definitely refute them. "On the whole, considerations of potential conflicts of interest in universal banking did not lead the Commission to recommend the separation of the banking functions but rather to conclude that restraints of competition caused by such conflicts of interest are small and can be remedied or abolished by provisions within the existing system" (Krümmel, 1980, p.46). Administrative "provisions" would certainly be useful but may be insufficient. Only intense competition and an extensive choice among suppliers within and outside of the universal banking system would provide a sufficient basis for ignoring conflicts of interest. In particular, competition in the non-bank sector needs to be high to force firms to minimize finance costs ; they need access to specialized investment banks (and hence to the securities market) to be able to opt out of a universal bank relationship ; and investors also need alternatives.

TABLE 1

Comparison of costs and margins in European banking : 1982-86
(figures in % of total assets)

	Operating surplus	Total costs	Personnel costs	<u>Person. costs</u> Total costs
Denmark	2.96	2.73	1.77	64.89
Spain	1.62	3.02	2.05	67.86
United Kingdom	1.56	3.28	2.01	61.14
Italy	1.49	2.96	2.13	71.89
Germany	1.30	2.18	1.47	67.31
Portugal	1.16	2.14	1.54	71.83
Netherlands	1.11	1.93	1.25	64.73
Luxembourg	1.02	0.40	0.22	55.00
France	0.99	2.12	1.38	65.34
Greece	0.73	2.47	1.99	50.70
Belgium	0.39	1.71	1.02	59.67

Source : V. Conti, (1989).

3. Universal banking in Germany : the origins(3)

In Germany universal banks were not created by design but rather were shaped by conditions of economic development and response to the interwar financial crisis. For proper perspective it is thus useful to first look backwards.

One of the hallmarks of universal banking is the close relationship between the bank and the borrowing firm, which is maintained primarily through current accounts. The current account arrangement is similar to the overdraft or cash credit account of U.K. commercial banks, under which credit limits are sanctioned on the basis of certain securities, and borrowers then use these limits when needed or credit to their accounts any receipts that may accrue to them. The current account arrangement of German universal banks is different, in that it binds the borrower to the bank more closely and for a longer duration. The average borrower depends, to a very large extent, on these current accounts, not only to obtain short-term credit but also to obtain credit for financing fixed capital formation, which at times is repaid subsequently by issuing securities.

Opening an all-purpose current account only marks the beginning of a bank's deep involvement in the affairs of the borrowing company. A common method of promoting creation of new firms in the Federal Republic of Germany is for a bank to finance, as a promotional effort, the entire capital requirements of an entrepreneur from the beginning(4). When entrepreneurship has to be encouraged, this comprehensive form of promotional activity is useful. Even after the entrepreneurship ceases to be a constraint, banks continue to adhere to this practice and their insights and close surveillance into the business network of customers lessen the dangers of business failure. Promotional activity by banks does not stop at floating the initial capital and selling stock to the public. Once the profit opportunities are discerned and contact with the firm becomes closer, other areas of opportunities open up which make it advantageous for banks to continue their ownership of stock in companies.

(3) The historical overview owes much to Khatkhate and Riechel (1980).

(4) Historically, the reward for assisting in the creation of a new firm was the unchallenged role of "Hausbank". More recently this reward has become highly uncertain. A top banker estimates that in recent experience 40 % of banks acting as midwives in setting up new firms subsequently lost their Hausbank privilege. See Terrahe (1989).

This very positive and traditional account calls, however, for some reservations. To preserve reputation and by professional obligation banks tend to be particularly risk-averse. Influence over client firms transmits this conservative bias. And, indeed, German firms are on average better known for solidity than for innovation and risky creativity. It is also a fact that control by banks tends to be less effective for modern corporations with extensive and sophisticated treasury and exchange operations. Major German firms have lost large sums of money in exchange and commodity markets to the astonishment of outside observers. Although "housebanks" stood ready to save the china, neither their board presence nor their tight working relationships could prevent financial mismanagement.

While bank holdings of participations sometimes can be large, banks do not always hold large amounts of stock by design. Their function in regard to the bulk of the stock is essentially that of a middleman who tries to diversify and to match liquidity with profitability of invested funds. Often, the intention is to hold a major part of stock for a minimum period of time until the stock has appreciated and is able to be disgorged on the stock market. However, banks sometimes end up involuntarily holding some stock on their own account because of temporary or prolonged difficulties in the market. Such involuntary holdings by banks may perhaps indicate the extent of risk involved in universal banking for banks themselves as well as for the economy(5).

In Germany, Austria, and Switzerland a close alliance between banks and industry has more often than not helped to accelerate the process of industrialization. Universal banking not only extended the range of banking functions beyond that of the British model, but also transformed the organizational structure of both banks and industry. In the Federal Republic of Germany the present association of universal banks with industry does not end with the provision of credit or underwriting of capital issues ; it extends all the way to the organization and management of industry (Wilson, 1986). Banks, both directly through ownership of equity as well as the granting of loans, and indirectly through proxy-voting on depositor's account, have stakes in the growth and prosperity of industry, so that they place their representatives on

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- (5) Although German governments are at times questioning the power of the largest universal banks, at other times they invite them to take control of large concerns in difficulties. Nevertheless, it is difficult to believe the argument of some universal banks that they hold large blocks of shares "against their interest". Section 4 provides an analysis of this and related questions.

the boards of client companies often on request of the latter. In the past, this often introduced financial expertise into nonfinancial firms. Along with provision of credit and the discharge of some managerial functions, universal banks also assume the role of technical consultants and marketing advisors.

Emergence of universal banking has been a financial manifestation of innovative responses of economic agents to the challenges they faced. The form of banking that became prevalent after the industrial revolution in the United Kingdom was "commercial" with the accent on short-term credit to trade and industry, the underlying theory being that credit should be self-liquidating. The implications of this were that the banks refrained from explicitly financing fixed capital formation because it would lock up funds, contrary to the tenets of "sound" commercial banking as reflected in the "golden rule of banking" and also because it would increase the problem of "moral hazard". However, this form of banking also reflected the particular nature of British economic development. In the United Kingdom, the process of industrialization had "proceeded without any substantial utilization of banking for long-term investment purposes. The more gradual character of the industrialization process and the more considerable accumulation of capital, first from the earnings of trade and modernized agriculture and later from industry itself, obviated the pressure for developing any special institutional devices for provision of long-term capital to industry" (Gerschenkron 1962, p.14). However, some change came about in the United Kingdom towards the end of the nineteenth century, when large industrial concerns evolved that required mobilization of long-term funds. This need was met from the bond and equity markets that emerged in the United Kingdom, initially to finance government debt but later also to finance private sector debt. Thus, the demand by borrowers for long-term finance from banks remained limited.

In Germany the development of universal banks is intimately related to historic conditions of economic development. Prior to 1848, the year in which the first joint-stock bank was established, there was little evidence of the rapid pace of industrial development that was to emerge. Banking and industry were to develop together with the former adapting to the needs of the latter. A number of banks that were established after 1848 were from the beginning specifically linked to the promotion of industrial enterprises.

For this reason, the banks were inclined to rely mainly on their own capital resources in assisting industry and it is not until after 1874 that there was any major departure from this policy, when Deutsche Bank began to seek deposits

through offices specially opened for the purpose. This was done to provide cheap finance for traders, with deposits being invested in mercantile bills which were regarded as both safe and liquid.

This was an important period in the evolution of German banking, because it was at this time that the attempt was begun to fuse the principles of deposit banking on the British model with long-term financing that was favoured by the French banques d'affaires. Once the decision had been taken to supplement the available resources by attracting deposits, the way was open to the building up of a widespread network of branch offices. These also became the means of establishing and maintaining industrial contacts throughout the country. Such developments were greatly assisted by the unification of Germany, which removed the political obstacles to the emergence of a more integrated banking system and the selection of Berlin as the capital ensured its choice as the country's financial center. When the Empire was proclaimed in 1871, four of the largest German banks were already established in Berlin and the new Reichsbank was set up there in 1876. Furthermore, the Berlin stock exchange rapidly displaced Frankfurt am Main as the country's leading securities market and this assured Berlin of its pre-eminence as an outlet for short-term funds.

Differences in the development of Germany and other European countries from the UK pattern explain the differences in both the financial instruments and the scope of banking institutions that emerged in those countries. Thus, the role of banks in Germany was a reflection of the different needs of its economy, among which promotion of entrepreneurial activities and mobilization of savings were the most preponderant. There was an urgency to augment physical capital through various devices. Credit creation by banks was perceived as the most powerful instrument of mobilizing financial resources for industrialization. Bank credit enabled borrowers to acquire command over real resources, thereby linking up the savings and the entrepreneurship, so that credit was considered both essential for development and a phenomenon of development. However, the concept of universal banking exceeds provision of short and long term credit, in the sense that it radicalized not only the usual functions of banks but also their organization and mode of operation. As Gerschenkron (1962, p.14) puts it : "A German bank... accompanied an industrial enterprise from the cradle to the grave, from establishment to liquidation, throughout all the vicissitudes of its existence".

There are two features of the German banking system that are striking : its universality and its fairly low degree of concentration. Both are to a large extent the result of historical factors.

Before unification in 1871, Germany consisted of a large number of mostly small, independent states. Many of these states issued their own currency through licensed private banks. Since the use of the various currencies was generally restricted to their respective states of issue and since there had been a myriad of tariffs across them, banks were numerous and their overall size and importance was usually as limited as the size of the states in which they operated.

The industrial revolution and the accompanying strong impulse toward economic integration led to an enormous increase in both the total amount and the average size of credit demand⁽⁶⁾. A great number of new banks were founded, initially as independent, privately owned institutions : soon, however, many banks merged to form bigger units -organized mostly as joint stock companies- in order to be able to meet the large credit demands of big industrial ventures that were being undertaken at the time. As monetization of the country progressed, yet another type of financial institution, the rural or commercial cooperative, appeared on the scene.

Competition between financial institutions was fostered by the freedom that the institutions in the subsystems had as to the range of financial services they could supply. If not always in practice, they were potentially universal banks from the very beginning. Restraints on the coverage of banking business were exercised voluntarily rather than enforced by regulations.

With few exceptions, there were no specific laws or regulations for the financial sector until the beginning of this century. This situation changed during and after the depression of 1929-31, when all banking institutions were subjected to a unified General Banking Act. However, unlike the United States, where the collapse of hundreds of banks during that period led to a rigid legislated separation between important banking functions and thus brought about a fairly high degree of specialization of financial institutions, Germany did not interfere

(6) This is a historical example of the effects of integration on the volume and structure of the financial sector. Such effects are at present much discussed in view of the goals of market integration in the European Communities. See Steinherr and Gilibert (1989).

with the organizational structure and functional orientation of financial institutions, but concentrated instead on prudential regulations covering in particular capital adequacy and liquidity. Though it has been amended several times, the Banking Act has remained unchanged over the years in its major features. However, following the Herstatt debacle the Federal Banking Supervisory Office has stiffened its supervisory disposition to better monitor exchange and group risks.

4. Universal banking in Germany : recent evolution

The legacy of history, regulations favourable to easy access to the banking industry and regional particularism all have contributed to the development of a low degree of concentration in the banking industry. With a few exceptions, notably underwriting, the German market has not been sealed off to foreign competition. As in any other financial market there are of course barriers to entry relating to traditions, institutions, established brand names and distribution systems. As a result foreign institutions account for a very small market share (Table 2).

The best-known universal banks are the three largest German banks (Deutsche Bank, Dresdner Bank, Commerzbank). There are, however, numerous universal banks spanning three groups : (i) credit banks ; (ii) public savings banks and Landesbanken ; and (iii) credit co-operatives and their central credit institutions. Although they all engage in various banking activities and may engage in any, in actual fact there is some specialization.

In 1988, the share of the three largest banks(7) in aggregate deposits is around 10 %, (which compares to 12 % in 1974) and the share in lending is about 9.2 % (8 % in 1974). This underestimates of course their overall economic weight as they achieve a higher share in investment banking products and own a higher share of industry : big banks own 14.6 % of securities held by all banks. They also have a strong capital base representing 15 % of aggregate bank capital (see Table 2). However, a rising share of the big banks in banking business over time is not revealed by these data. Only for securities and participations has volume growth of the big banks outperformed the aggregate banking sector ; growth in lending, deposit taking and of aggregate assets has been, in fact, smaller (Table 2, III).

One remarkable feature of the postwar period is the expansion of the retail network of big banks. As shown in Table 3, between 1957 and 1987 domestic branch offices of big banks increased from 795 to 3125 (nearly four-fold) as compared to an increase of all bank offices by a factor of 1.68. This seems to reflect a strategy of building up a dense nation-wide service coverage to complement the traditional emphasis on corporate banking with a retail outlet for

(7) Bundesbank statistics refer to these three banks as the six large banks counting their fully owned Berlin subsidiaries separately.

deposit collection and placement strength for diversified financial products. Thus, universal banks have only become truly universal on a national scale in the postwar period.

Banks' control over firms(8)

Bank control over firms through voting rights derives partly from shareholdings which tend to be long-term and are not always acquired voluntarily. In fact, during the interwar years banks were forced to convert loans to ailing enterprises into shares. Capital reconstruction in rescue operations continues to force banks to unwillingly acquire participations. This raises some intriguing questions, such as whether "involuntary" rescue operations are consistent with value maximisation of the bank in the long term. If the answer is yes it becomes irrelevant whether it is voluntary or not. If the answer is no, then the bank would contribute to social welfare or to augment power of bank management. Not being in the interest of shareholders one must ask how bank management can justify such decisions. Alternatively it is possible that they are not closely monitored by shareholders and do not need to justify an action against the interest of shareholders. This would also shed new light on the motivation of firms to seek board membership of bankers. The traditional interpretation has been that bankers provide financial expertise. This reason should however lose in importance with increasing financial sophistication of firms. If bank managers did not pursue value maximisation of the bank's shares but rather were sharing the discretionary decision-making power of corporate managers (if inside managers value power why not outside board directors ?) then invitations to boards would need to be seen in a different light. An alternative interpretation that conflicts however with the claim of "involuntary" rescue operations is that due to the deep and tight relationship between firms and banks it is in the interest of the bank to bail out the firm. This represents a "normal" risk of banking activity in the same way as loan rescheduling and throwing good money after bad is the "normal" risk of banks providing credit to sovereign borrowers.

In the aftermath of the takeover of MBB by Daimler-Benz, the largest German corporation, the fact that Deutsche Bank owns 28.24 % of Daimler-Benz has rekindled public debate about the power of banks. To de-dramatize this discussion the German Banking Association published data that shows that between 1986 and 1989 participations of the ten largest private banks have

(8) Prudential regulatory applications are summarized in the Appendix.

declined : the nominal share value by less than DM 100 mn and the number of participations in stock-listed firms by 8, although participations in all firms have increased(9). See Table 4. Full information on equity stakes of bank groups are not available and the picture would certainly look differently. In terms of influence and control the relevant unit is obviously the group. Moreover, to exert effectively control it is clear that in many cases much less than absolute majority of votes is sufficient.

The proportion of voting rights controlled through direct holdings is quite small, around 5 % of the top 100 companies (Monopolkommission, 1978). Greater voting power accrues to the banks from the exercise of proxy-voting. When proxies are added, the overall proportion of votes in the top 100 companies controlled by banks rises to 36 %. Because small investors deposit their shares with banks and tend to invest in large and well known companies, proxy votes exercised by banks rise with the size of companies. For the ten largest companies the average proportion of votes controlled by banks exceeds 50 %.

In the mid-1970s banks held 145 seats on the boards of the 100 top companies, or 10 % of the total, and supplied 20 board chairmen and 6 deputy chairmen. Of the 145 seats 94 belonged to the "big three" universal banks. By 1988 the board seats held by private banks of the top 100 corporations fell to 104 and those of all banks and insurance companies to 161(10).

(9) The data are not easy to interpret. For example, in 1989 the participations in the range of 25 % - 50 % of nominal share capital amount to DM 830 mn for the 10 largest banks. This compares roughly with 28.24 % of Mercedes-Benz' nominal capital and seems therefore to be an underestimate. The data is also not comprehensive for groups and therefore neglects indirect holdings and aggregation for the group. One major German bank lists in its Annual Report for 1988 73 participations with equity shares in German firms ranging from 23 % to 100 %. Excluding leasing, factoring, real estate, consulting, and financial holdings there remain 19 non-financial sector holdings with equity stakes between 10 % and 25 % in 10 non-banking companies. Two newly revealed additional equity stakes are in insurance companies which are, in their respective areas, the largest in Europe. The market reacted with astonishment and one may ask the question whether much of the current debate, sometimes ideological and ill focused, is not the result of the lack of clear and comprehensive reporting requirements. Equity stakes held by bank managed funds and bank owned investment holdings add to the influence of the bank group but are not published. Investment holdings are mostly non-incorporated and therefore there is no legal publication requirement.

(10) The data for 1988 are taken from Bundesverband Deutscher Banken (1989).

Corporate control can be exerted directly by shareholders or, if this control is deficient, by the market through takeovers. The latter aspect is discussed below.

Shareholders' control is brilliantly analysed by Grossman and Hart (1988). Their main conclusion is that any voting structure restricting the principle of "one share-one vote" is detrimental to value maximization of the firm. It facilitates fending off a value-enhancing take-over to detrone an inefficient incumbent management and may also facilitate a value-reducing takeover. Restrictions of the "one share-one vote" principle can take various forms : vote restrictions(11), often introduced explicitly to protect the firm against takeovers ; issuance of non-voting shares ; agreements with friendly shareholders, in particular those who value corporate stability and other non-value maximising objectives(12) or mutual parking of shareholdings.

The most significant deviation from the principle of "one share-one vote" is proxy-voting which gives banks more votes than the shares they own. Therefore, the structure of voting rights and of dividend streams are different. It is true, of course, that on important issues shareholders are asked to give voting instructions. Absence of specific instructions results, however, in voting power attributed to the deposit bank. In addition banks usually prepare an analysis of voting issues that should help shareholders to facilitate their choice.

An empirical analysis which sheds some light on the possible benefits of universal banks for the performance of their affiliate corporations is the study by Cable and Dirrheimer (1983). Their cross-section multiple-regression analysis of 48 among the top German companies concludes that those companies subject to the internal control exercised by financial institutions (the three big universal

(11) Adams (1989) cites an instructive example : Management of a large German bank justified the introduction of conditional limits on shareholder votes in 1989, with the argument that the value of the bank exceeds its stock market value. Not only are shareholders deprived of value that they own they furthermore cannot recuperate that value through a takeover. How can one explain that shareholders approved such a proposal ? Labour board directors clearly have incentives to vote in favour of a measure that is detrimental to shareholders. Other board directors are former managers of the firm or managers of other firms confronted with similar issues. Representation of small shareholders on a proxy-basis is also contributing to focus more on corporate interests than on those of shareholders.

(12) Exercise of proxy-voting creates another agent-principal problem. The shareholder (principal) has little monitoring capacity of the agent which, in turn, may have wider objectives than value maximization.

banks) display -all other things being equal- a higher rate of return on capital than other companies in the sample (other companies are foreign or public owned). The results of Cable and Dirrheimer indicate that, in the German environment, external control by universal banks maintains the tendency of large corporations to focus on profit goals, minimize costs, and guide resources towards highest yield uses.

This interpretation calls for some reservation. It is true that large companies, when no longer controlled by families, are subject to the danger of managerial control. The results of Cable and Dirrheimer suggest then that the presence of bank representatives on the board of companies allows for a better control. However, multiple regression analysis may not be the best method to control the sample of 40 large firms for other forms of ownership and management (e.g. multinational enterprises and their transfer pricing, public sector enterprises pursuing more widely defined goals than profit-maximisation). Furthermore, higher return on capital could reflect a higher debt-equity ratio or non-competitive rents. The question of corporate control is further analyzed below in the context of macroeconomic performance.

In view of the influence universal banks may gain through the combination of equity holding, short and long-term lending and investment banking the addition of proxy votes provides them with a perhaps unwarranted additional leverage. The justification that small shareholders can exercise their voting right if they so wish, but that most small shareholders are uninterested and that vote exercise is needed for meeting quorum requirements is not totally convincing. In countries where proxy-voting is much more severely restricted no such problems exist. And if proxy-voting were necessary then it would be preferable to separate the custody function of securities deposits from the activity of universal banks. If a specialized institution, such as an independent investment fund, exercises proxy-votes at least the potential conflict of interest related to holding equity on own account and voting on behalf of others is avoided. In other countries the current trend in favour of savings intermediated by institutional investors (pension and mutual funds, insurance companies) reduces the alleged necessity of proxy-voting for individual share-holdings entrusted with banks. However, in Germany most fund managements are owned by banks, a situation reinforced by acquisitions of insurance companies. Vote control by banking groups is thus enhanced, rather than diminished by the growth of institutional investments.

One may also question the economic advantage of allowing banks to hold "large" participations in non-banks. There were certainly good historic reasons but there seems to be much less justification in today's world. With developed capital markets the needs of firms for direct bank participations in capital issues are much reduced except for new, high risk ventures to which universal bank do not cater primarily. Institutional investors with a variety of differentiated investment strategies and, without exercising majority control, are increasingly funding capital market needs and could, if they were independent, more neutrally take over one of the historic functions of universal banks.

A concern frequently expressed by the Monopolkommission (e.g., Handelsblatt 13 September 1989) is that some large banks are represented on the boards of the major companies in certain economic sectors or industries. Collusive behaviour or at least restricted competition could be facilitated and one target of the Monopolkommission is to limit "large" shareholdings and board representation to one firm in an industry. This raises, however, difficulties in defining appropriately an "industry", particularly for diversified concerns. In some cases definition of industry poses no difficulties as, for example, for department stores which have drawn attention to the influence of banks over all major firms.

Even if there is no need it may be desirable for banks to hold participations. One argument is that earnings from participations stabilize total profits. Whilst it remains to be established that stock returns and lending returns are not highly correlated(13), the argument is flawed anyway. Any investor can achieve the desired diversification by holding bank shares and a portfolio of bonds and non-bank shares. For that purpose universal banking is not needed.

The Commission for Fundamental Problems of the Credit Sector arrived at the opposite policy recommendation(14). It admitted that concentration of proxy-voting rights in a few universal banks gives rise to influential power in some big industrial and trade companies. However, in the Commission's view there is not much that could be done because "until now, nobody has been able to suggest a purposeful replacement for proxy rights which secures the

(13) Because banks in Germany hold participations for long periods of time and evaluate them at historic costs variations in stock prices are not reflected in the balance sheet or the profit and loss accounts. Dividend policy of German firms is also rather stable so that there is little volatility in accounted stock returns.

(14) The report is reviewed in Krümmel (1980).

attendance in general meetings and excludes random majorities. The Commission examined every proposal without discovering one preferable to proxy rights" (Krümmel, p.54).

More positively, panel members expressed concern about bank participations and recommended :

- (i) limiting the acquisition and holding of shares by banks on a consolidated basis to 25 percent plus one share of the nominal capital of the company in which shares are held (a blocking minority)(15),
- (ii) to request retrenchment of existing holdings within a transitional period of 8 to 10 years.

Banking vs capital markets

One of the historic reasons for the development of universal bank in Germany has been the nonexistence of a sufficiently developed capital market. Universal banking has developed alternative channels for financing companies and, by itself, has slowed the growth of capital markets. In 1987, 514 firms were listed on the German stock exchanges. This compares to 650 firms listed on the Paris, 1174 on the Toronto, and 2135 firms on the London stock exchange(16).

The small number of companies listed on the German stock exchanges suggests an important qualification for the role of universal banks. So far we have repeatedly quoted theoretical arguments about the potentially all-embracing role of universal banks acting as commercial and investment bankers for their clients. But excepting the largest firms most of which are publicly incorporated the role of universal banks is not very different from a commercial bank. A company that is not quoted on the stock exchange usually does not have access to bond markets, nor would it have easily access to the commercial paper market if it existed in Germany. Hence the role of universal banks for small and medium-

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- (15) Thereby they followed the wishes of the Monopolkommission which pleaded for a sizeable reduction of the shares held by banks in non-banks.
 - (16) There are a number of other factors at work some of which relate to the structure of industry and others to financial regulations outside of banking. For example, regulations of insurance companies and of pension funds limit their investments in shares and bonds issued by private companies. Of significance is also the fact that incorporation implies for most firms "Mitbestimmung" by employees which can be avoided by remaining private.

sized firms is one of a commercial bank. What is remarkable is that in Germany medium-sized firms have only few alternatives to bank financing, unlike in countries such as the United States or the United Kingdom where universal banking does not exist or is less dominant⁽¹⁷⁾.

In countries where universal banking does not exist yet and where regulators are faced with a choice about the future organization of financial markets, overall coherent objectives would be needed : either they favour development of an efficient and wide-ranging securities market or they assign such tasks to banking. It is argued in the next section that, although universal banking historically was a response to non-existing securities markets, over time the universal system has stifled the growth of securities markets. To develop simultaneously universal banking and efficient securities markets seems only possible in a competitive environment, such as the integrated European market, and with well designed regulatory constraints.

For this basic choice, the German lesson is of only limited value. First, because the historic reasons for the development of German universal banking may be largely irrelevant for today's choices. Second, with rapidly increasing securitisation in Europe, the most important argument for universal banking may have lost its significance. Third, because neither in the recent past nor for the new market configuration in Europe beyond 1992 is there strong support for the hypothesis of superior economic efficiency of universal banking. And the suspicion remains that universal banking lends itself to conflicts of interest, and excessive concentration of economic influence and power.

Universal banking and performance of the economy

The debate over the extent to which financial systems influence economic performance (efficiency, growth) is an old and very complex one. In the past, the main attention was focused on the transfer of current savings to productive sectors for increased working capital and fixed investment. More recently attention has shifted to new factors proper to mature economies. Such economies are characterized by rapid and pronounced shifts in industrial structure, de-industrialization and their transformation into service economies. This involves large reallocations of physical and human capital, and repositioning of

(17) The non-existence of a money market is due to regulations and the turnover tax. However, it is also a fact that the German Banking Association is not favourable to the introduction of money market funds.

corporations on a large scale. Unlike during phases of earlier growth, timely and efficient exit from declining activities is as important as entry into new activities. The speed at which such transformations occur augments the risk of retarded exit or entry and renders investments riskier than in the past. Liberalization of trade flows and of foreign investments increase competitive pressure and the speed of shifting comparative advantage. Rybczynski (1988) argues therefore that financial systems need to adjust accordingly and evolve from a bank-oriented into a market-oriented system and eventually into a securitized system. In this system "...ownership of productive resources, though nominally widespread, is increasingly in the hands of institutional investors. It is they and less so banks who determine the degree of risk the economy assumes and who increasingly select and monitor managerial teams responsible for the efficient use of resources representing an accumulation of past savings" (Rybczynski, 1988, p. 7).

Thus, the performance of a modern financial system is not only to be judged by its ability to intermediate efficiently savings and investment decisions. Of equal, if not greater, importance is its capacity to restructure existing resources efficiently. Both aspects are treated below.

The question whether an economy, where banks exercise a dominant influence, behaves more or less efficiently than one where the stock market plays this role is still debated. Whilst doubts are permitted concerning the short-run efficiency and flexibility of an economy where banks are participating in the control of industry, it is an interesting fact that in Anglo-saxon countries short-run performance is often claimed to dominate long-term profitability considerations. Such a tendency would, of course, not exist in a truly efficient capital market but the information requirements for long-term strategies may well put into question long-term capital market efficiency. Although this cannot imply that bankers are better able to evaluate long-term strategies, it is often claimed that in Germany and Japan industry is more long-term than short-term profit oriented by escaping the whims of capital market control. If these arguments were true, then universal banking and its close involvement with industry would be of considerable social value. However, the empirical evidence in support of these arguments is flimsy and mostly impressionistic. We therefore have to turn to less global considerations.

The claim that stock markets are myopic and value short-run performance does not resist empirical evidence. First, the vast evidence on market efficiency indicates that stock prices incorporate all currently available public information.

There is probably no other proposition in the social sciences that is better documented than the efficient market hypothesis. Second, the fact that price-earnings ratios differ widely among securities suggests that markets are valuing something other than current earnings, in particular the growth potential. In the United States, start-up companies with little record of current earnings have been continuously marketable at high price-earnings ratios. This is clearly inconsistent with the notion that the market does not value future earnings. Moreover, McConnell and Muscarella (1985) provide evidence that stock prices respond positively to announcements of increased investment expenditures and negatively to reduced expenditures. This is again evidence which is inconsistent with the notion of myopic markets since it confirms that the market values spending current resources on projects which promise returns in the future.

Mayer (1989) contrasts the German bank-oriented financial system with market oriented systems (in which savers channel their funds directly to industry through capital markets) and securitised financial systems (with a large role for institutional investors).

Comparing a bank-based system with a market system, Mayer's analysis suggests that market-oriented systems are not necessarily superior. The most striking evidence is that the removal of inefficiencies in the corporate sector (eg. replacing inefficient management through take-overs) is very costly in a market system. Mayer puts the direct costs of acquisitions at 7 % of the assets acquired. (Furthermore that figure does not take into account the management costs of arranging acquisition and defense strategies. However, the share of hostile takeovers is still very small).

In a bank-based financial system, universal banks can more smoothly arrange mergers and replace at lower cost inefficient management. Whether they do in fact fulfill this role efficiently will be tested when the integrated European market allows foreign companies to screen more easily take-over targets in Germany.

Universal bank are also known to facilitate surmounting critical phases in the development of a company and to support a basically healthy enterprise going through temporary financial difficulties. Whether they are able and ready to engineer drastic restructuring comparable to those following leveraged buy-outs is less certain and a complete comparative efficiency analysis is not available. To some extent, universal banks would be also an answer to the well-known problem of market failure due to ruinous competition. Their involvement would lower

bankruptcy risks (and the corresponding risk premium in the companies' capital cost) and allow for a higher debt-equity ratio (Lewellen, 1971).

Whilst it is important to stress the exorbitant cost of takeovers, it needs to be compared with the gains achieved thereby. Because takeover activities in Germany have been far less important than in the United States, the United Kingdom and lately in other European countries (France) we have to resort to U.S. experience. In Germany the market for corporate control is much less competitive due to major barriers to entry (cemented by the role of banks and interlocking directorships), a much less developed stock market for reasons that become apparent below and limited information on real corporate performance. The observed stability of corporate managements and ownership is a result of less contestable markets for corporate control and needs to be judged against the performance of more competitive markets for corporate control.

A key consideration is the need for quick adaptation to a rapidly changing competitive environment in open modern economies. Established managements often have difficulties in reverting strategies they have pursued in the past. Takeovers in the United States generally occur because changing competitive conditions require a major restructuring of corporate assets and a fresh view on business outlooks. New managers brought in from outside find it easier to accept and implement change. Thereby, takeovers play an important role in facilitating both entry into new and exit from an existing activity. In such cases the gain from takeovers is an overall efficiency gain and not simply redistribution. One feature of German industry is its emphasis on and stability of traditional corporate and industrial structure (e.g. one out of six industrial jobs still depends directly or indirectly on the automobile industry)(18). This may be a partial reason for the relatively mediocre growth performance of the German economy over the last 10-15 years.

Another major motivation for takeovers is the agency costs associated with conflicts between managers and shareholders over the payout of "free cash flow". Free cash flow is cash flow in excess of that required to fund all of a corporation's projects that have positive net values when discounted at the relevant cost of capital. Free cash flow must be paid out to shareholders if the

(18) The study by Steinherr and Runge (1978) shows that between 1962 and 1972 Germany's industrial structure remained extraordinarily stable and export specialisation remained relatively labour-intensive facilitated by migrant labour inflows.

firm is to be efficient and to maximize value for shareholders.

Managers are the agents of shareholders, and because both parties are self-interested, there are necessarily conflicts between them over the choice of the adequate corporate strategy. Such conflicts can never be resolved perfectly and the cost that arises in monitoring managers plus the remaining efficiency losses are the agency costs. Payment of cash to shareholders reduces the resources controlled by managers and thereby their power. When after payment of dividends the firm must obtain new capital they are potentially subjected to monitoring by capital markets.

What do managers do with free cash flow ? In the most favourable case they use these resources efficiently for inside or outside growth of the firm. But such an outcome is not assured. There is, first, the risk of overinvestment in the firm's traditional activity or in outside acquisitions. As shown by Donaldson (1984) such behaviour is the rule rather than the exception and in line with the hypothesis of size rather than value maximisation (Mueller, 1969). Second, there is "private" appropriation and consumption of free cash flow. The redistributive effects and efficiency losses of both uses of free cash flow can be substantial. To gain an idea Jensen (1988) provides the following empirical results for the United States. The gains to shareholders of firms which were sold in mergers and acquisition activity in the period 1977-86, that is before the recent sharp acceleration, amount to USD 346 billion (in 1986 dollars). The gains to shareholders of the acquiring firms are estimated in excess of USD 50 billion. The total gain is therefore in excess of USD 400 billion or equal to 51 percent of the total cash dividends paid to investors by the entire corporate sector over the same period. Those gains represent efficiency gains, equal to about 8 percent on average of the total value of both companies involved in a takeover, and not redistribution between various parties.

German companies provide relatively opaque information on their performance and distribute a rather regular dividend stream that does not reflect changes in profitability. So-called hidden reserves are high on average, using as yardstick the difference between accounting and market values. Of course, hidden reserves is another name for free cash flow. Corporate managers have therefore considerable leeway in allocating these funds, unhampered by the market for corporate control and by boards with interlocked board directorships and with directors appointed by employees whose objective cannot be value maximisation for shareholders. Agency costs tend therefore to be high, making investment in stock companies less attractive to those shareholders who cannot participate in

sharing the free cash flow. The underdevelopment of the German stockmarket has thus less to do with the allegedly peculiar psychology of German savers, as is often claimed, than with a major agent-principal problem that reduces returns to individual shareholders.

As argued before, the performance of a financial system needs to be appreciated in terms of its capacity to allocate resources efficiently and in terms of the cost of financing intertemporal resource allocation. The two aspects are separable : at any financial cost static resource allocation can be efficient or not. Similarly, one can have an efficient static Walrasian equilibrium without corresponding intertemporal efficiency.

Investments are financed either through retained earnings, equity or debt. Retained earning were already discussed and in the absence of strict monitoring of the agent (corporate management), as is the case in Germany, there is the risk of inefficient intertemporal resource allocation. Table 5 shows that German firms are highly indebted to banks and finance in international comparison the highest share through retained earnings. These data are consistent with the hypothesis of managerial discretion. Equity financing is best discussed on the basis of Tobin's q-ratio, that is, the ratio of the market value of firms to the replacement value of their assets. The hypothesis that investment is positively related to the q-ratio is supported by a plethora of empirical studies, although q-ratios explain only a small part of variation in investment. For Germany see Funke et al. (1989). If q-values for Germany are downward biased because shareholders cannot appropriate the full return and because funds are not used for value maximization then investment will also be lower. Not only is this a macroeconomic effect, but to the extent that the downward bias is not uniform firms with the largest undervaluation of their market value will experience the highest disincentive (or highest foregone reduction in capital costs) to invest. Free cash flow comes back with a vengeance !

Finally, there is the cost of debt. Because most firms are not able to securitise their debt they have to rely on bank lending. The question then is whether banks provide long-term funding with small intermediation margins.

It is claimed by Mayer (1989) that banks in Germany practice lower interest rates on loans, administered by the banks themselves rather than determined by pure market forces. The argument of lower loan rates must be appreciated against the institutional background of interest rate determination in Germany. Until recently, maximum (but never minimum) lending rates were linked by a

complex formula to the discount rate of the Deutsche Bundesbank. In practice, this arrangement never served as a constraint, since competition among financial markets always resulted in rates below the prescribed maximum. Some link, but by no means a stringent one, existed also between deposit rates and the discount rate. After each change in the discount rate, representatives of the central bodies of the commercial banks, savings banks, and credit associations -the so-called Central Credit Board- would discuss possible changes in deposit rates and convey its proposals for adjustments to both the Supervisory Office and the Deutsche Bundesbank. At present, the decision on both deposit and lending rates has been left entirely to the discretion of the financial institutions. To speak of a competitive solution would nevertheless be abusive : the decision-making process, the influence of major banks, and large spreads between deposit and lending rates suggest that competition is not assured by the existence of a large number of banks.

Mayer's argument of more favourable pricing of loans in Germany is not easily confirmed by empirical verification. It must be recognized that there is no point in comparing interest rates across countries which are largely influenced by macroeconomic factors(19). More revealing is a comparison of spreads between lending and borrowing rates. For example, a comparison of spreads between prime and savings rates yields for 1988 a spread of 5.02 % for the United Kingdom and 5.28 % for Germany. This comparison is therefore inconclusive.

To shed additional light on this question Table 6 lists spreads between prime rates and money-market rates as a measure of spreads between market-oriented rates. It needs to be recalled here that non-banks have no access to money market rates in Germany. Hence competitive pressure on bank spreads is much more limited. This is confirmed by the data in Table 6 showing spreads for Germany that are a multiple of U.K. spreads for any single year over the last ten years. We are therefore led to believe, in spite of the fact that such data are not entirely comparable, that a bank-based financial system is rather costly for the non-bank sector. Savers cannot invest in money-market instruments and must be content with much lower interest rate on savings deposits. Borrowers

cannot turn to the (inexisting) money market which offers funds at low cost and

(19) Mayer also examines net interest income as a percentage of total assets. The comparison between different banking structures is surely flawed because universal banks have a larger share of their assets in non-interest earning investments (stocks) and hence their share of net interest income is biased downward.

are confined to bank lending(20).

These considerations lead to several tentative conclusions. First, the German securities market is underdeveloped because shareholders' agency problem is not well resolved. Banks claim to contribute to development of stock markets by holding equity stakes. In fact, one should not lose sight of the problems amplified by such equity holdings which render the market for corporate control less efficient. Second, and as a result, resource allocation statically and over time is bound to suffer from inefficiencies because managers of banks and non-banks have large free cash flow and are not subjected to stern board controls. Third, outside financial resources (equity and debt) are expensive in Germany. Equity financing is expensive because due to large free cash flows stocks are undervalued by the market. As a result of under-developed short or long-term securities markets for the private sector, firms must rely on bank credits. These credits are more costly than securitised debt and intermediation margins are rather comfortable.

The combined effects of these distortions contribute to an explanation of the observed relative rigidity of resource allocation and the slow growth of Germany over the last 10-15 years.

For a more widely defined evaluation of the advantages of universal banking and a tentative approach to assessing the question whether universal banks are the prototype of the future bank in the integrated European market one may resort to a "revealed" comparative advantage argument. Germany has a relatively liberal regulatory environment for trade in financial services, the DM is a leading international currency and there are no exchange controls. In addition, Germany's exports of goods and services are larger than those of any other country and for a number of years its current account surplus has been one of the highest in the world. All these facts would suggest that Germany should be a major exporter of financial services : exports of financial services following and backing up trade in goods and non-financial services, providing investment opportunities for the current account surplus, advising German companies in

(20) This conclusion is fully in line with the estimates of Price Waterhouse concerning potential decreases in financial product prices as a result of completing the internal market. For German banking the average of prices in excess of competitive prices is estimated at 33 %. Only Spain matches Germany in non-competitive pricing. It may be sheer coincidence that large Spanish banks are universal banks. See Commission of the European Communities, 1988, p. 91.

investing and producing abroad and servicing non-residential investors in DM assets. Strong performance of financial service exports would not prove that universal banks have a competitive advantage but the opposite would raise serious doubts in view of the favourable free trade and macroeconomic base from which German universal banks operate.

Net exports and imports of financial services are recorded in Tables 7 and 8. The data represent intermediary services and not capital exports or imports. Two different sources are quoted because data on trade in financial services are very unreliable due to differences in coverage, definitions, and sources. Both data sources yield different amounts of net trade, but converge in assigning to Germany a role of largest importer of financial services.

Although the quality of these data is debatable it is still possible to draw the following conclusion : the fact, that Germany is the world's largest importer of financial services does not support the hypothesis that Germany's financial service industry enjoys "revealed" comparative advantage. Although regulatory conservatism concerning securities markets⁽²¹⁾ is likely to be another important explanation, something is left to be explained. Internationally competitive banks should be expected to benefit from the international status of the Deutsche mark, Germany's role in international trade and the need to reinvest the current account surpluses abroad. Germany's first place among net importers of financial services is not evidence in favour of the competitive strength of universal banks.

A share of the imports of financial services are, in fact, produced by foreign subsidiaries of German banks (London, Luxembourg, etc). This part of imports could be a measure of the regulatory displacement. As shown in Table 8, about half of Germany's foreign financial services trade occurs within the Community and this could be considered as an upper bound for the regulatory displacement.

(21) The lack of futures and option markets, little developed money markets, the securities turnover tax and a host of other reasons could also be cited. But the fact remains that the banking system did not produce the need and pressure for development of competitive, deep and innovative capital and money markets. Hence, what is often considered as exogenous may be a result of the choice of banking structure. For example, Germany is lacking a legal framework for "inside trading" although the risk of inside trading is definitely at least as high in a universal bank than in any securities firm. It is, however, a fact that inside trading laws are only well developed in the Anglo-American tradition and that underdeveloped securities markets are the rule rather than the exception, independently of the banking system.

TABLE 2

Assets and Liabilities of the various categories of banks

I. ASSETS

: End of	: Number of	:	:	:	:	: Securities	:	:	:
: month	: reporting	: Volume of business	:	: Lending to non-banks	:	: (excluding bank	: Participations	:	:
: 1988 March	: banks	:	:	:	:	: securities)	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	%	:	%	:	%	:	%
: All categories	:	:	:	:	:	:	:	:	:
: of banks	: 4,457	: 3,726,911	: -	: 2,332,046	: -	: 133,967	: -	: 37,732	: 5.5
:	:	:	:	:	:	:	:	:	:
: Commercial	:	:	:	:	:	:	:	:	:
: banks	: 313	: 864,699	: 23.2	: 554,424	: 24.8	: 50,232	: 37.4	: 20,956	: 55.6
:	:	:	:	:	:	:	:	:	:
: Big banks	: 6	: 318,756	: 9.7	: 209,451	: 9.2	: 19,637	: 14.6	: 14,694	: 39.0
:	:	:	:	:	:	:	:	:	:
: Branches of foreign	:	:	:	:	:	:	:	:	:
: banks	: 59	: 69,365	: 1.9	: 24,118	: 1.0	: 4,783	: 3.6	: 30	: 0.1
:	:	:	:	:	:	:	:	:	:

II. LIABILITIES

: End of	: Deposits of and	:	:	:	:	:
: month	: borrowing from	:	: Bearer bonds	:	: Capital*	:
: 1988 March	: non-banks	:	: outstanding	:	:	:
:	:	:	:	:	:	:
:	: %	:	: %	:	: %	:
: All categories	:	:	:	:	:	:
: of banks	: 1,870,516	: -	: 711,549	: -	: 139,374	: -
:	:	:	:	:	:	:
: Commercial	:	:	:	:	:	:
: banks	: 385,616	: 20.6	: 84,465	: 11.9	: 48,764	: 35.0
:	:	:	:	:	:	:
: Big banks	: 183,689	: 9.8	: 17,585	: 2.5	: 20,962	: 15.0
:	:	:	:	:	:	:
: Branches of foreign	:	:	:	:	:	:
: banks	: 4,796	: 0.3	: -	: -	: 3,844	: 2.8
:	:	:	:	:	:	:

III. COMPARATIVE GROWTH OF THE THREE BIG BANKS AND OF ALL BANKS 1980-86

	Three big banks	All banks
Loans to non-banks	39.6	44.5
Securities and participations	103.6	89.4
Non-bank deposits	45.6	52.8
Total assets	38.7	52.1

* Including published reserves pursuant to section 10 of the Banking Act.

Source : Deutsche Bundesbank, June 1988.

TABLE 3

Number of banks and their branches

Level at end of year

Category of banks	1987			1986			1987			Memorandum items	
	Banks	Domestic branches	Domestic bank offices, total	Banks	Domestic branches	Domestic bank offices, total	Banks	Domestic branches	Domestic bank offices, total	Foreign branches	Foreign subsidiaries
Commercial banks	364	1,917	2,281	308	6,362	6,690	311	6,291	6,602	93	85
Big banks	8	787	795	8	3,118	3,124	8	3,120	3,128	54	47
Regional banks and other commercial banks	90	1,020	1,116	140	2,911	3,050	157	2,814	2,971	39	35
Branches of foreign banks	15	6	21	82	36	96	59	31	90	—	—
Private bankers	245	104	349	82	317	409	80	326	415	—	3
Regional giro institutions	14	191	205	12	235	247	12	231	243	18	20
Savings banks	871	8,102	9,063	589	17,248	17,837	606	17,307	17,893	—	—
Regional institutions of credit cooperatives	19	89	108	7	48	55	6	36	42	7	10
Credit cooperatives	11,795	2,305	14,100	3,507	15,835	19,532	3,478	15,910	19,366	—	—
Mortgage banks	44	19	63	37	29	66	38	32	70	—	—
Private	25	8	33	25	23	48	27	26	53	—	—
Public	19	11	30	12	6	18	11	6	17	—	—
Investment sales financing institutions	194	225	419	—	—	—	—	—	—	—	—
Banks with special functions	18	34	50	16	80	96	16	84	100	2	2
Building and loan associations	—	—	—	20	20	40	20	21	41	2	—
Private	—	—	—	17	20	37	17	21	38	2	—
Public	—	—	—	3	—	3	3	—	3	—	—
Categories of banks not covered by the monthly balance sheet statistics	42	2	44	78	2	78	78	3	81	—	—
Investment companies	5	—	5	34	2	36	38	2	40	—	—
Securities depositories	7	1	8	8	—	8	7	1	8	—	—
Guarantee banks and other banks	30	1	31	34	—	34	33	—	33	—	—
Memorandum items											
Banks majority-owned by foreign banks	—	—	—	48	403	451	52	407	459	—	—
by foreign non-banks	—	—	—	22	67	79	26	47	73	—	—
Total	13,368	12,974	26,333	4,862	36,078	44,641	4,543	39,915	44,458	122	117

Source : Deutsche Bundesbank, June 1988.

TABLE 4

Participations of the 10 largest private banks in non-banking firms

	Nominal capital (mn DM)		Number of firms	
	1986	1989	1986	1989
1. <u>All enterprises</u>	1748	1676	89	101
Participations :				
between 10 % - 25 %	430	713	47	63
between 25 % - 50 %	1277	919	33	29
more than 50 % bn	41	44	9	9
2. <u>Enterprises listed on a stock exchange</u>				
Participations :	1503	1380	46	38
between 10 % - 25 %	287	536	19	23
between 25 % - 50 %	1204	830	23	12
more than 50 % bn	12	14	4	3

Source : Bundesverband deutscher Banken, 1989.

TABLE 5

**Internal and external financing of non-financial enterprises
(percentages)**

	Total debt(1)			Long-term debt(1)			Direct debt(1)			Retained earnings(2)	
	Debt + equity			Total debt			Total debt			Total financing	
	1975	1985	1987	1975	1985	1987	1975	1985	1987	1975-80	1981-87
Germany	57.1	56.0	59.9	33.8	28.6	28.5	n.a.	n.a.	n.a.	68.3	84.0
France	70.0	69.9	66.5	25.3	26.2	23.8	2.3	2.5	1.9	47.3	40.6
Italy	68.4	67.8	n.d.	37.3	34.2	n.d.	1.0	2.1	n.d.	23.8	23.9
U.K.	52.1	54.6	55.1	21.4	15.3	14.5	16.7	8.9	10.7	52.6	55.3
Netherlands	55.3	56.2	60.9	45.7	39.5	31.2	8.5	1.7	1.4	53.1	74.9
U.S.A.	34.3	40.5	40.4	54.1	54.2	64.8	34.3	30.4	40.3	57.2	69.6
Spain	n.d.	62.7	59.4	n.d.	52.6	51.0	n.d.	11.4	13.1	n.d.	51.1

1) Debt shown in balance sheets.

2) Average flows for the periods.

Source : OECD non-financial companies Financial Statements.

Reproduced from Viñals, Berger y Valero (1989).

TABLE 6

Spreads between prime and money-market rates*

GERMANY				:	U.K.		
Prime rate	Money-market	Spread	:	Prime rate	Money-market	Spread	
(3 m-interbank)			:		(3 m-interbank)		
(dec)							
1988 :	6.00	5.50	0.50	:	13.00	13.19	-0.19
1987 :	6.25	3.65	2.60	:	8.50	9.00	-0.50
1986 :	6.75	4.90	1.75	:	11.00	11.25	-0.25
1985 :	7.25	5.60	1.65	:	11.50	11.94	-0.44
1984 :	7.75	5.75	2.00	:	9.50	9.88	-0.38
1983 :	7.75	6.30	1.45	:	9.00	9.31	-0.31
1982 :	8.75	6.20	2.55	:	10.00	10.50	-0.50
1981 :	13.00	10.50	2.50	:	14.50	15.69	-1.19
1980 :	11.50	10.20	1.30	:	15.00	14.75	0.25
1979 :	9.75	8.70	1.05	:	18.00	17.00	1.00
1978 :	5.50	3.70	1.80	:	13.50	12.50	1.00
1977 :	6.00	3.60	2.40	:	8.00	6.50	1.50
1976 :	6.50	4.80	1.70	:	15.50	14.38	1.12

Source : Morgan-Guaranty, World Financial Markets.

* These rates were chosen because they are less influenced by regulation than others. Spreads are not interpreted as margins which depend on a variety of funding sources and on commission structures. Spreads rather ought to indicate the degree of competition in those markets.

TABLE 7

The largest exporters and importers of financial services

NET EXPORTS				
Rank 1987	Rank 1983	Country	In USD bn	
			1987	1984
1	1	Great Britain	884	739
2	7	Cayman Islands	476	90
3	8	Hong Kong	362	50
4	2	Bahamas	322	255
5	5	Singapore	316	166
6	4	Switzerland	288	198
7	3	Belgium/Luxembourg	287	202
8	-	Japan	89	-
9	9	Panama	44	47
NET IMPORTS				
Rank 1987	Rank 1983	Country	In USD bn	
			1987	1984
1	1	F.R. of Germany	752	305
2	13	USA	580	50
3	3	Italy	408	114
4	4	Canada	288	92
5	-	France	267	-
6	12	The Netherlands	171	54
7	7	Corea	149	60
8	6	Australia	140	68
9	8	Sweden	126	58
10	5	Saudi-Arabia	84	81

Source : M. Kurm, "Der Exportweltmeister bei Finanzen in der zweiten Liga", Handelsblatt, 23.3.1989 and F. Thiessen, Standorttheorie für Internationale Finanzzentren, Cologne, 1988.

TABLE 8

Foreign trade in financial services

A. Credit and insurance resources and uses 1980

Proportion of total resources (equal to 1000 in each country)

	EUR-8	D	ES	F	I	NL	UK
RESOURCES							
Imports from the EC Countries	-	12	11	24	23	2	7
Import from Third Countries	28	27	37	27	42	2	27
Total Imports	28	39	49	51	66	3	35
USES							
Total intermediate output	786	811	760	781	885	690	630
Consumption of households	115	128	81	95	54	150	161
Gross fixed capital formation	57	42	126	51	-	111	88
Exports to EC Countries	-	6	15	22	12	29	25
Exports to Third Countries	42	13	18	51	49	21	96
Total exports	42	19	33	74	61	49	121
Balance*	-14	20	16	-23	5	-46	-86

* A positive share represents net imports.

B. Trade in banking services by West Germany, 1979-85
(in ECUm)

	1979	1980	1981	1982	1983	1984	1985
CREDITS (exports)							
Brokerage fees and commission	440	494	536	658	786	898	994
DEBITS (imports)							
Brokerage fees and commission	2322	2458	2934	3400	3234	3448	3900

Source : IMF, S.O.E.C., Bundesbank, Statistical Supplement Services.

Reproduced from Price-Waterhouse.

5. Boundaries for bank activity : some regulatory issues

Universal banking raises several issues of concern to regulators. These comprise conflicts of interest, risk exposure, and control over the non-banking sector.

Conflicts of interest were discussed in Section 2 and we argued that they cannot easily be assumed away. Regulation can certainly reduce such conflicts, particularly in the area of holdings of participations. It could also restrict the total bank control over an enterprise by establishing global ceilings : the weighted sum of equity holdings and of loans could be bounded. Board memberships could be limited and proxy-voting prohibited. In the end, such regulations will only have partial success in comparison to segmentation of banking activities.

Less perceived is the problem of cross-subsidization and risk bundling. One example of cross-subsidization occurs within the commercial bank where deposit insurance provides an implicit subsidy for loans. Another example is provided by payments systems whose costs are usually charged on deposit rates so that neither service tends to be properly priced and competition tends to be reduced by the lack of price transparency. On the risk side, commercial banks are exposed to credit risks, maturity transformation risks, funding risks and in international operations to exchange risk. The cost of assessing the riskiness of each bank would be prohibitive to depositors, so that banks of different risk exposure get away with identical deposit rates. This is a subsidy to risk-taking. Even more troublesome is the fact that banks themselves may not have a precise notion of their risk exposure : most banks fail to have a comprehensive asset-liability management system and fail to operate a portfolio approach to their loan risk management. Some bankers and academics (Bryan, (1988), Chase (1985), Friedman (1959), Kareken (1986)) argue therefore strongly in favour of "splitting-up" the commercial bank and, a fortiori, the universal bank.

Whilst this proposal in its logical extreme is unlikely to play a role in the future organization of financial markets, it provides a highly valuable benchmark against which universal banking can be assessed. Moreover, once the current fashion of deregulation fades under the stress of time and of new difficulties, some form of reregulation could occur and ideas about corporate separateness could well find partial application. Excessive accumulation of power, cases of flagrant conflicts of interest and reaction by non-bank firms could produce the pressure for restricting the scope of banks.

As in other countries, banks in Germany are entering the insurance sector. In strategic reaction the largest insurance company has taken a participation in, and has concluded a cooperative agreement with, the second largest German bank in line with similar cooperations existing already with large regional banks(22). The potential of formation of gigantic financial groups controlling a large number of non-financial firms is therefore more than a theoretical possibility and may provoke one day regulatory reaction.

Independently of the regulatory evolution, the market itself is likely to develop specialized bank structures along these lines. As long as interest rate and exchange rate volatility were small there was less pressure on risk separation. But, over the last 20 years increasing volatility (risk) has generated a rising trend to securitize assets and diminish traditional risk exposure. For example, financial institutions that either refinance themselves with securities rather than deposits, or that take assets off their balance sheet for sale in repackaged form are moving closer to the model of the lending bank without a deposit base as suggested by Bryan and others.

Investment banking is a growing activity inside of universal banks and, when successful, separated through Chinese walls from commercial banking. In the United Kingdom the largest commercial banks have acquired or set up investment banks but have retained corporate separateness. Securities firms are either specialized (money market funds, investment funds, brokers, etc.) or non-specialized (investment banks). Securities firms have no deposit base and are nevertheless competitive with those non-specialized institutions with a deposit base and a dense distribution network. There is no evidence as yet that universal banking does or will outperform specialized investment banks or securities firms.

A last and debatable part of universal banking is holding of controlling interests in non-bank firms. As pointed out in Section 4 the influence and informational advantage German banks derive from being joint providers of loans, business and investment advice, investment banking services, and being owner of large blocks of equity is further and substantially enhanced by proxy-voting. This suggests that proxy-voting clearly is a candidate for regulatory reform.

(22) The European Second Banking Directive proposes limits on bank ownership of non-financial firms and allows national governments to exempt insurance companies. This may be an additional reason for the recent wave of takeovers and cooperative agreements between banks and insurance companies.

According to the tests by Cable (1985) performed on the 100 top German companies there is no evidence of conflicts of interest with other shareholders. His results confirm that banks do exert a strong influence on business policy and strategic decision. This influence shows up in higher bank lending but also in improved financial results of firms through both higher efficiency and more market power. His tests do not properly reflect the fact that deeply committed banks not only control firms but also are locked-up : if the firm fails the house-bank is forced to engage in rescue operations. This commitment may even dominate purely economic considerations as failure by the firm is also failure of the controlling bank and therefore puts its reputation at stake.

In the view of a universal banker (W. Guth, p. 43) :

"As a result of innovations... the borrower today has access to practically all market sectors. He can mobilize funds without going through his bank wherever he can get them at favourable interest rates and, as it were, without being asked uncomfortable questions... But banks, too, can easily lose their feeling of having established links with customer if they mainly engage in one-off commission deals where the cheapest offer wins. One does not need much imagination to picture how much more difficult it would be, under such anonymous conditions, to surmount critical phases in the development of a company, which is precisely when a "house-bank" would feel obliged to assist". The literature emerging from the third world debt problem suggests, however, that it is precisely the implicit commitment forcing the borrower to throw good money after bad which may make bank lending inferior, in such difficult situations, to securitized lending.

From a regulatory point of view a solution where a holding company can control separately incorporated and regulated financial firms and where the holding company could possibly span the activity of the universal bank offers several attractive partial features. Ideally separation would descend to level I in Exhibit 1. Regulation could then become much more precise and efficient both for banks and for the social goal of the regulator. Deposit banks would incur little risk and therefore would require low capitalization, no deposit insurance subsidy and pose little risk for central bank bail-outs. Lending banks would have to satisfy higher capital requirements than deposit banks, but less than implicitly today. Because risk is not being subsidized it will not be overextended. Risk will be further reduced through increased maturity matching in the absence of a deposit base. Regulators can more easily impose prudential limits on maturity transformation. Purchasers of the lending bank's securities will tightly monitor

risk and request a corresponding risk premium. Investment banks will get rid of the perennial conflicts with commercial bank colleagues and will also be disciplined by their bond holders. Again regulators of investment banks can target more pointedly capital requirements. The same can be said of controlling share blocks held by investment banks. Regulators can more easily target capital requirements, limit exposure risk and limit influence over firms in which participations are held.

This extreme regulatory solution is useful as a reference ; it certainly has no chance to see the light of day in the near future. Because it has attractive features and lies at the opposite end of the regulatory scale from universal banking one would wish to have more supportive empirical evidence of the efficiency advantage of universal banking. If only efficiency was at stake free competition would assure that the fittest banking model survives. But reliance on universal banking raises also issues of market power and conflicts of interest, precisely those matters of concerns to regulators and anti-trust agencies.

6. Conclusions and policy implications

In spite of the actual worldwide tendency in favour of universal banking the picture that emerges from theoretical considerations and the actual experience of Germany is mixed. Universal banks are said to enjoy advantages from economies of scale, economies of scope and from the possibility of reallocating resources internally in response to demand trends. Empirical verification of these alleged advantages is extremely difficult and to date no conclusive evidence exists.

On balance, we arrive at the conclusion that the alleged advantages of universal banking tend to be overemphasized. Economies of scale are not an outstanding feature in banking and where they exist they can be better exploited by specialized firms (e.g., payments systems, investment banking). For example, computer systems do generate important economies of scale. But they need to be designed specifically for payments systems, loan processing, securities analysis, etc. Hence, although economies of scale exist for some areas of banking there are no positive economies of scale for a widely diversified bank. Hence, economies of scale are a weak justification for universal banks.

Economies of scope is a more appropriate concept but the empirical evidence fails to provide support. Economies of scope are likely to be bounded by the increased difficulty to manage efficiently a complex, non-focused organisation. There is also a problem of quality well-known from other service sectors : supermarkets and boutiques cater to different customers. Only for standard financial products is convenience the overriding considerations ; corporations and wealthy clients are ready to make an additional trip to deal with a high value-added supplier. Finally, markets internal to the firm have their own problems and escape the invisible hand of market control. Only in very efficiently organised firms are internal markets competitive with external markets. So the argument is circular : internal markets are efficient if the firm is efficient and what makes the firm efficient ?

What historical evidence cannot illuminate is the challenge posed for hitherto protected markets by internationalisation of banking in the context of European financial integration. Is a universal bank better equipped to take advantage of the larger and more competitive European market than specialized institutions ? If so can newly created universal banks catch up in a short period of time with universal banks that evolved through history ? Available evidence suggests that the answer to the first question is already unclear. Germany seems to be the world's largest importer of financial services in spite of its leading role in world

trade, its large current amount surpluses, and the international role of the Deutsche mark.

What the German experience shows is that the major historical reason for universal banking, namely provision of long-term financial resources to the economy in the absence of well-developed securities markets, is not an decisive consideration anymore. Furthermore, the market power of universal banks needs to be checked by competitive conditions both among universal banks and through specialized institutions. This concern is weighty in small protected markets but less so in a well diversified European market. Our view is that specialized institutions will remain highly competitive through excellency and scale economies so that there will be no scope for some universal banks to dominate the market.

In addition, internationalization of specialized firms appears considerably easier than of universal banks. It would be a formidable challenge for a specialized, national bank to develop simultaneously into an international and universal bank. Even after 1992 Europe will retain national characteristics and therefore organizational and managerial integration of a European universal bank seems quite difficult. The objectives of an integrated corporate culture and adaptation to different national markets are bound to create conflicts. Nor is there scope for marketing a universal bank brand name throughout Europe and thereby achieve economies of scale. Whilst the name of a reputed German bank has household value for a German customer it may not exert the same attraction in foreign markets. In line with this observation acquired foreign banks tend to retain their names.

In those countries where universal banking has not existed in the past they would have to be created through ex novo expansions into new territories or through mergers and acquisitions, in the home country and elsewhere. This is a frightfully difficult and also risky undertaking. The history of mergers and acquisitions suggests that more often than not the ultimate result falls short of expectations. This is particularly true for newcomers and when one or both parties involved suffer from X-inefficiency. Management attention tends to get diverted from traditional tasks for long periods of time. The European context is less favourable to restructuring, cost savings and management changes than the American context. Costs of mergers are therefore higher and the scope for improvements lower. All the more if transnational operations are involved.

Potential problems posed by universal banks are the embracing control over customers, possible conflicts of interest and risk-bundling. These concerns would be further enhanced if the universal bank itself was controlled by a

corporation or an individual and thus not subjected to stock market control. In Germany this did not happen : the shares of major universal banks are held by a wide public although insurance companies have held and are increasing their participations. It would be reassuring to have regulatory dispositions preventing control of, at least, larger universal banks by particular interest groups. Furthermore, effective anti-trust policy and strict enforcements of competitive market conditions for financial and non-financial markets seem necessary. Bank control of firms with market power multiplies the risks and costs of local monopolies.

From a regulatory viewpoint it would seem possible to preserve the potential advantages of universal banking without being fully exposed to its major dangers. The already existing " Chinese walls " separating different activities within the universal banks should be transformed into brick walls through corporate separateness. This would allow the Bank Holding Company to operate a span of activities similar to the universal bank. It would, however, break-up risk bundling and thus facilitate risk management ; it would facilitate regulations and allow less arbitrary regulatory rules in the interest of banks ; and it would reduce the potential conflicts of interest.

To this corporate separation should be added regulation of investments as already mentioned. Bank investments in non-bank corporations combined with proxy-voting, may yield inefficient and unwarranted control over firms. This could be substantially reduced by restricting proxy-voting which, in the German context, provides banks with more voting rights than does share ownership. Participations themselves need to be regulated for prudential and anti-trust reasons. In practice, this regulation can be largely ineffective, as is the case in Germany, if there are no strict accounting conventions for evaluation of stock ownership closer to underlying real (market) values.

According to the European Second Banking Directive (Article 11) shareholdings of a single firm are not to exceed 15 % and overall holdings are not to exceed 60 % of a bank's capital. To represent an effective constraint these shareholdings would have to be evaluated more realistically and, from an antitrust point of view, holdings of the group should be consolidated. Article 11 remains mute on these problems. Also from an anti-trust viewpoint, the exclusion of financial sector firms from the restrictions of Article 11, including insurance companies, should be evaluated carefully.

Finally, we have attempted to assess some of the economy wide gains or inefficiencies (externalities) that may derive from a universal banking system. Such a system is prone to contribute significantly to restricted efficiency of the market for corporate control. As a result the allocation of resources in a modern economy requiring drastic corporate and sectorial reallocations, is not subjected to close efficiency monitoring. It gives incumbent corporate managers excessive discretionary freedom, unhampered by shareholder control or by contesting outside raiders. Free internal cash flow in banks and non-banks can therefore be used in ways not compatible with value maximisation. Two results follow : inefficient static resource allocation and reduced and inefficient investment patterns. Because it does not provide access to free cash flow, equity ownership outside of the control group is less attractive. The underdevelopment of German securities markets can thus be seen to some extent as a consequence of a financial system that is anchored in banking.

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APPENDIX

Prudential regulation

Although the German banking market is relatively free of direct government controls and interventions, prudential regulations are fairly stiff, at least on paper. The Banking Act in its Sections 10 to 20 sets out the basic legal framework. Section 10 of the Banking Act defines what is to be regarded as liable capital (paid-up share capital plus reserves plus certain elements according to the legal form of the bank). The Federal Banking Supervisory Office draws up principles according to which it assesses as a rule whether the requirement of adequate liable capital are satisfied.

- Principle I stipulates that a bank's loans and investments should not exceed eighteen times its liable capital. For calculation of this ratio the loans are weighted in accordance with various risk groups. The parent banks of banking groups must ensure that Principle I is also complied with on a consolidated basis.

Section 11 of the Banking act constrains banks to invest their funds in such a way as to ensure adequate liquidity all the time. Liquidity is assessed according to Principles II and III.

- Principle II restricts the sum of the long-term assets not to exceed financial resources which are deemed to be long-term.
- According to Principle III the sum of various short and medium-term assets should not exceed short and medium-term financial resources.

In essence Principles II and III establish bounds on the bank's scope for maturity transformation.

Section 12 of the Banking Act stipulates that a bank's fixed assets and shareholdings in other enterprises must not exceed its liable capital. However, there are important exemptions, listed in Section 12 : participations in enterprises not exceeding 10 percent of capital ; securities for own trading and participations acquired for a third party as long as they are not held for more than two years.

In Section 13 of the Banking Act the loans to (plus securities of) a single borrower exceeding 15 % of the bank's liable capital (large loans) are twofold restricted to enforce diversification : no single loan may exceed 50 % of the liable capital. These limits also apply to banking groups as a whole. An implication of the definition of "large" loan in relation to a bank's capital is, of course, that only large and highly capitalized banks can provide large loans. Finally, loans to borrowers closely linked to the lending bank (insider loans) must be granted on the basis of unanimous decisions by all managers of the bank and only with the explicit approval of the supervisory board.

Of course, one way to escape the teeth of the regulatory dispositions on participations is to evaluate participations below market value or the value of expected future earning streams. Most often book values based on historic costs fall far short of actual values either because the acquisition date goes far back into the past, or because shares were acquired to rescue a company. As long as banks are not forced to adopt more informative and market oriented accounting standards both the tax collector and the regulator look better on paper than in business.

This regulatory framework raises several fundamental questions. First, because the banking structure is universal, there are no specific and separate rules for commercial and securities activities. This problem has recently emerged again in international attempts to provide a harmonized capital requirement framework for securities firms. German universal banks do need to back their securities holdings, like loans, with capital, without any regard to market and position risk. One reason may be that universal banks used to be long-term holders of securities with relatively less important trade and underwriting positions. Whether securities are highly correlated with the overall portfolio, whether they are highly volatile (market risk), or of low rating (credit risk), they are all added to loans and this total cannot exceed 18 times capital.

Hence, regulations focus primarily on solvency and liquidity risk and not on market (interest rate) risk. As universal banks are increasing their trading activities existing regulation may not be fully adequate anymore. In addition, Section 13 may already be overly generous (viz : no single exposure may exceed 50 % of liable capital), particularly when such loans are extended to firms in the same economic sector. What is clearly lacking is a portfolio approach to risk combined with marked-to-market principles.

In the end, these arguments highlight the regulatory difficulties posed by universal banking. When commercial and investment banking are separated regulation can be both more specific and can cope more appropriately with different risk concerns. For commercial banking the focus is on solvency and liquidity risk. For investment banking it is on position and market risk and therefore assets and liabilities are, or ought to be, marked to market unlike in commercial banks.