GERMAN "UNIVERSAL BANKING" AS A MODEL FOR US BANKING REFORM

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SUMMARY: The German 'Universal Bank' form has frequently been suggested as a model for the reform of the U.S. banking system because it does not restrict banks by means of market segmentation of their activities. This paper looks at the historical evolution of financial institutions in Germany and its modern structure. It concludes that the success of the German financial system is less due to the fact that German banks can operate in all financial markets than the unique financial supervisory structure which controls banks balance sheets, and the structure of financial asset holdings in Germany, which is primarily due to the impact of the second world war. The paper concludes with a series of recommendations which would have to be implemented if the US system were to introduce all the factors which characterise the German financial system, in addition to the absence of market segmentation.

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INTRODUCTION

The German financial system has become the subject of increasing attention by economists and policy makers in the United States as difficulties in the commercial banking system have quickly followed the crisis of the savings and loans banks. The problems facing the US financial system are in part the result of piecemeal reform of legislation introduced during the New Deal which has eroded the separation between commercial and investment banks, permitting the latter to encroach on areas which have traditionally been restricted to deposit-taking banks, while preventing commercial banks from entering activities such as underwriting and securities dealing which remain the preserve of investment banks. It is the partial erosion of segmentation that has led to the call for an elimination of all restrictions in order to create a "level playing field" in which all types of institution could compete in any type of product market.

In Germany financial institutions are not restricted by type of market. German bank legislation permits banks to engage in both retail deposit-taking and the financing of industry through underwriting, and the ownership of financial and corporate debt and equity. Such a system of "universal" banking has been suggested[1] as an alternative to the "segmented" US financial system. Support for the unification of banking activities and capital market finance in a single financial institution is also found in some recent studies which suggest that universal bank systems may provide lower capital costs to industry[2], and thus offer national competitive advantages to those countries who do not impose segmentation. Universal banking is thus credited not only with assuring stability of the financial system, it is also more efficient in providing the finance required to allow manufacturing industry to expand. This is particularly important, given that the current US recovery is being held back by financial constraints caused by weakness in the banking sector.

Critics of the "universal banking" system counter that allowing financial institutions freedom to operate in any and all financial markets would involve substantial risk of conflicts of interest and fail to provide sufficient investor protection and prudential regulation. This might

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[1] See for example the statements by Gerald Corrigan, President of the Federal Reserve Bank of New York in the summer 1989 and spring 1991 numbers of the Federal Reserve Bank of New York's *Quarterly Review.*

[2] See McCauley and Zimmer, and Zimmer and McCauley. These studies refer to both Japan and Germany; Japan is technically not a universal bank system since bank activities are restricted by legislation which was patterned on the US New Deal legislation.

occur, for example, when a bank that is a major short-term lender to a company becomes responsible for advising the company on the issue and pricing of securities which the bank is also responsible for placing with buyers who may also be among the bank's brokerage or trust clients, and which the bank may also buy or sell for its own proprietary trading account. While it is not impossible that the different operating units or subsidiaries of a single institution should act in the best interests of its industrial client, its private and trust clients, as well as its own shareholders, the "universal" banking system does nevertheless create a potential conflict of interest between the banks and its various clients which opens a possibility for abuse which is more easily prevented in a segmented system.

In addition, active participation in underwriting and proprietary trading may lead banks to take investment risks which are incompatible with their role as deposit-takers and part of a national payments system. In financial systems which operate with implicit government guarantees, explicit government deposit insurance, or with central banks charged to provide "last resort" lending support, this means that some of the increased risk of the banks is borne by the general public. This is the "free rider" problem which emerges (as it has in the US) when government, or a government agency, explicitly or implicitly guarantees deposit liabilities of private banks that are used as public means of payment without exercising detailed prudential control over the level of risk associated with the investments which banks may undertake with the funds raised by offering guaranteed or protected deposits.

Despite these risks inherent in a universal system, the German financial system appears to have been at least as, if not more, stable than more highly regulated systems, such as in the US, which are based upon strict compartmentalization. The present paper seeks to satisfy four goals. First, to provide a detailed description of the evolution and the current state of the German financial system in order to show how it differs both from the US financial system and from its common representation as a system dominated by a few large "universal" banks. The second is to suggest that the success of the German system has had less to do with the level playing field offered to all German financial institutions, than with the German approach to bank regulation and supervision which appears in certain respects to be even more restrictive than the US system of market segmentation. The third is to argue that, despite the absence of market segmentation, the German system has maintained specialization among financial institutions. Finally, it will be argued that the peculiar development of the system in the post-war period has produced a particular pattern of securities ownership between firms, banks and the public which has so far prevented the types of conflict of interest noted by critics. Since this pattern appears to be historically

determined there can be no guarantee that it will be a permanent feature of the system.

Sensible discussion of the appropriateness of the German playing field as a model for US banking reform can only take place if all of these factors, and in particular the unique approach to, and central role played by, bank supervision and regulation, are taken into consideration.

THE DEVELOPMENT OF "UNIVERSAL BANKING" IN GERMANY

The German "Effektenbank" or "Kreditbank" were patterned on the examples of Crédit Mobilier and Société Générale and organized as limited liability joint-stock companies following British institutional form. The first of these banks was created with the express intent of financing German industrialization in the second half of the 19th century.[3]

The original British system for floating a public company was through a public subscription list (originally left in a coffeehouse). In the US an investment bank formed an underwriting syndicate which aimed to sell the company's shares directly into the market. In Germany the "simultan (or Ubernahme) Gründig" method was used. A Kreditbank invested its own capital in starting a company and took an active interest in its affairs until its prospects were sufficiently promising to provide an attractive investment opportunity to the public. Only then were shares issued and sold to the public through a market issue. This was usually done either by subscription at a fixed price with admission and quotation on an official exchange, or by admission to an official exchange and then through sales in the market, or by private placement to private customers or to other banking firms.

The founders of these banks were initially frustrated by the unwillingness of the major German cities to license private joint-stock, limited liability banks because they feared competition for their local banks; for this reason they were usually founded in smaller German cities. This was the case of Gustave van Mevissen, who had managed A. Schaaffhausen'scher Bankverein, and founded the Bank für Handel and Industrie in Darmstadt, a city of less than 100,000 located strategically only 15 miles from Frankfurt (which

[3] However, they only became common after 1870. The Banks founded earlier had experienced difficulties during the 1857 crisis and the war which meant the banks has to give substantial support to shares in markets and they thus acquired larger holdings than desired. It was during this period that the current account connections became dominant in the banks' activities. French reparations, starting in 1871, and a liberalization of company law which allowed virtual free formation of companies without government approval set the stage for the formation in this period of Deutsche (1870) and Dresdner (1872) Banks.

had denied Mevissen a license).[4]

Thus, the first Kreditbanks started as joint-stock ventures investing their own capital selectively in new companies, acting as active venture capitalists. But, these investments were not considered as permanent or long-term relationships, but only as launching operations, with the investment lasting only long enough to make the firm sufficiently attractive to sell to investors from the general public. The crucial role of these banks in launching new industrial ventures has been explained by the unwillingness of the general public to invest in industrial companies, which were then considered an innovation. Individual investors were also hesitant to subscribe to new issues unless they bore the stamp of approval of prior bank ownership and control.

The role of banks in floating new issues in the stock markets was also aided by the fact that a number of prudential regulations were introduced after the 1873 Krach requiring formal admission for the issue of securities. The Aktiennovelle, 1884 Handelsgesetz and 1896 Stock Exchange Act (Borsengesetz) required that the entire issue be subscribed, and at least 25% fully paid, before a company's shares could be traded on the market, with suspension if the subsequent monies were not paid. Further a prospectus in which independent auditors' evaluations of the assets to be acquired by the company, as well as all underwriting and promotion fees were presented, was required for listing. Shares could not be acquired below their par prospective value of the company at launch. Feis suggests that the registration requirements were also used to control the issue of foreign securities in Germany and as such became an instrument of German foreign policy.

These Effekten or Kredit banks formed in the 1850's were the ancestors of today's universal grossebanken; they were generally joint stock or limited liability share partnerships, and initially restricted their activities to industrial promotions. They did not borrow short-term from the public by taking deposits. The vagaries of the economic cycle meant that they faced periods of frenetic issue activity interspersed with crisis.

As a buffer against earnings fluctuations in periods when floatation was difficult and capital was tied up because of crisis or depressed market conditions prevented the sale of

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[4] Mevissen also wanted his "Effektenbank" to be a bank of issue, but this was denied as being too risky. An associate of Mevissen's, Moritz von Haber, founded a bank of issue, the Bank für Suddeutschland in 1855, which resolved the problem as the two banks had the same management. The Darmstädter Bank, which founded the Amsterdamsche Bank and was part of the group that formed the Banca Commercial Italiana, and was merged with the Nationalbank fur Deutschland (run by Schacht) to form the Danat Bank which failed in the 1931 crisis and was merged into the Dresdner (which was linked to J.P. Morgan). See Emden, pp. 200ff, 388ff.

shares into the market, the banks started to offer "kontokorrent" services to their industrial clients. To further smooth earnings banks created wholly-owned joint-stock subsidiaries, usually with head offices in the same town, but which operated branches throughout the region. Some sought to expand business abroad and to finance international trade. This activity eventually led to their raising short-term funds via deposit-taking through special offices, *depositkassen*, to compete for deposits with the regional *sparkassen*.

Deutsche Bank, which departed from the emphasis of the Effekten banks on underwriting activity, was the first bank to consider deposit-taking as a basic source of funds. The bank, which was founded in 1870 and opened deposit facilities in Berlin in 1871, was a new departure in banking because it was originally formed with the basic purpose of financing overseas trade. In difference from the banks formed in the 1850's, its charter explicitly allowed it to take deposits. The move by the Kreditbanks into deposit taking and giro business continued as they absorbed failed deposit takers. In the crisis of 1873 (this was also the year in which Germany moved to a unified currency based on gold) Deutsche absorbed seven other banks. It did not operate actively in industrial underwriting until the late 1880's.

Thus, as part of their industrial underwriting activity, the Kreditbank also offered 'kontokorrent' services. Companies would often retain these services after the bank's equity stake in a company had been sold; such services were also offered to companies that were independent of the bank. The kontocurrent was not a direct equivalent of a modern-day "current" account, but was more like a line of credit to the firm, or an overdraft account, in which debit and credit balances attracted interest and balances were drawn at fixed, usually half-yearly intervals. But, these accounts were used not only to provide liquid working capital, but also to finance fixed capital investments in anticipation of raising funds from the capital market, usually through an issue managed by the same bank which provided the kontokorrent.

Thus, a Kreditbank which had floated the shares of a company which it had launched, and in which it no longer had a direct stake, might continue to provide short-term working capital for the firm as well as financing fixed capital expenditures which it would later fund by issuing securities in the capital market. The sale of additional securities would usually be carried out by means of what would now be called a "bought deal"; the bank would purchase the new share issue from the firm and then float it in the market in one of the three ways mentioned above.

In both the case of floating a new company or an issue for an existing company, it was not uncommon for the banks to form Konsortium where the lead (leiter) bank acted as a central selling agency to which the members passed their firm commitments at fixed prices,

and who took active responsibility for stabilizing prices during the issue by intervening in the market as buyer or seller.

It was the *Kontokorrentverbindung* (current account relationship), rather than the permanent control of firms through equity ownership, which provided the permanent influence of German banks on German industry in this period. The practice of bank representatives holding places on the companies Aufsichtratstellen (and frequently vice versa with company directors on the boards of the banks) also stems from this relationship and is explained not by the permanent ownership of equity by banks, but through their role in extending what was effectively capital financing through current account lending until funding could be obtained through the capital market.

Indeed, it was often the case that a bank's clients became too large and made servicing all the firm's investment needs represented too great a risk for a single bank. Larger companies would thus have current account relationships with a number of banks (even grossebanken). In some cases the larger companies formed their own banking enterprises to handle their financial affairs. Electrical engineering companies such as AEG, and Siemens in light railways are examples. These company-linked banks raised capital, usually by the sale of fixed interest debentures, and engaged in short-term kontokorrent deposit banking for the company and its subsidiaries. Many of these financial units were set up in periods of slack demand for the company and served to provide financing for projects which provided business for their company owners. The financing was thus more speculative than the private banks themselves would undertake, although the Kreditbanks did cooperate with the companies by taking participations in the financial enterprises. In these cases, rather than the banks controlling business enterprises, it was the opposite that prevailed. In general the Kreditbanks attempted to keep their investment and kontokorrent risks spread across companies in an industry, as well as across industries.

The process of industrialization in capital intensive fields such as machine tools, electrical engineering and shipbuilding, as well as accelerating industrial concentration, organized in part under the direction of the large banks, produced a strong incentive for banks themselves to expand to be able to service the expanding industrial groups. This process was primarily via mergers of the large banks rather than via takeovers of smaller banks. Before the First war Schaafshausen'scher Bankverein merged with the Disconto-Gesellshaft, and after the war Commmerz und Discontobank merged with the Mitteldeutsche Privatbank and Darmstädter merged with Nationalbank fur Deutscheland.

The Kreditbanks also acted as underwriting syndicates for government loans. In order

to reduce risk this was always done in *Konsortien* with other banks. Thus, all new securities, public and private, which came to the capital markets did so through the banks, either as underwriters for new firms or as flotations for existing firms or as government underwriters. As underwriters the banks would be active in the market to stabilize prices during the issue period. The banks also served as guarantors or sponsors for the admission of new securities issues to the official capital markets. For this reason the Kreditbanks were members of the Bourse and both orders from non-financial firms and from the public to purchase and sell securities usually were made through them.

The Kreditbanks could use a broker to execute a client order on the exchange, or the order could be met out of inventory with the bank itself the counterparty. Since prices were determined by a single-price "call" auction or *Einheitskurs* system, it was this official price which would be paid by any buyer or seller, irrespective of whether the order went through a broker and was executed on the exchange, or the bank executed the order itself on the exchange, or the banks simply filled the order from its own inventory. In the latter case the bank earned both the brokerage and its agency commission without having to expose the order in the market.[5]

The official trade prices were determined by an "official-broker", the *Amtlicher Makler*, also called the kursmakler or "market matcher", whose job it was to fix once each day the price at the level which balanced demand and supply orders in the market. This was the price used for all transactions made during the session. The kursmakler was not permitted to deal on his own account. Continuous trading, at freely variable prices, applied to non-listed issues. Free, or independent "maklers" could trade on their own account.

In addition, time bargains could be arranged, but in difference from the London delayed settlement system, they were usually arranged by borrowing at the Lombard rate against deposit of the securities with the bank, rather than via an account settlement carry-over with contango or backwardation. Instead of being credited to the customer's account, the securities borrowed or lent in time bargains were placed in the bank's general account. This gave the bank not only the right to borrow against them, but according to the "depotstimmerecht", it gave the bank the right to vote the shares at shareholders meetings. This, along with the right to vote shares held by the banks in trust accounts and in safekeeping for clients, increased

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[5] It is interesting to note that this "off market" trading was already under sharp criticism as reducing information and impairing efficiency of the market in the late 19th century. The legal right of "selbsteintritt" which is given to the Kommissionar (the person charged to execute the order) to complete the deal himself has always been part of the banks general conditions of business, but subject to getting the best possible terms for the client.

the banks' power over a company far in excess of the bank's actual ownership of company securities, which was usually not very large.

These large, "universal" banks all developed independently of the control of any central monetary authority. When the federal structure of the German Reich was created in 1871 there were thirty-three independent banks of issue in existence; in 1875, after the unification of the currency and the official adoption of the gold standard, the Prussian Bank was reconstituted as the Federal Reichsbank, but the government could not deprive the other banks of their "rights" of issue granted by the federal states. These "private issuing banks" were, however, pressured to give up the issue of notes and by 1935 only five remained and their rights were canceled.

At the beginning of the 20th century the large German banks were very similar to a large Wall Street investment banks before the Stock Market Crash. The most important difference was that they were much better capitalised than their US counterparts because they were originally conceived as joint-stock banks formed to invest their own equity in industrial ventures, rather than as intermediaries or underwriters. They had also developed large subsidiary branch networks to collect deposits. Before the first world war capital, reserves and undistributed profits were usually kept at a minimum of 20% of assets. Because the banks considered investments in company equity as short or medium term, and because they offered deposit and underwriting facilities on a long-term relationship basis, they were more actively involved in the operation of the stock market than British merchant bankers or US investment bankers. Because of the implications of the "kontokorrentverbindung", they were also more actively involved in the monitoring the day to day operation of companies than a British or American banker offering deposit services. Although the banks held a large proportion of their equity capital in company securities, these were not long-term holdings in individual companies and thus not the basis for direct control of banks over companies. The banks' position in underwriting securities provided a permanent linkage between banking firms and manufacturing firms in which the banks had a major influence on the development of the structure of manufacturing industry in Germany. In this they did not differ substantially from US banks such as Morgan.

Although the Kreditbanks all eventually became deposit-takers, the major source of their deposit funds was the companies they formed rather than the general public. In Europe banks did not offer retail deposit facilities to the general public until the late 1960's. The deposits of the public were generally held in the saving banks formed by the municipal governments and served not only as a means of holding wealth, but also provided payments

services through the giro system.

The large "universal" banks were not the only institutions in the German financial system. In addition to the already mentioned note-issuing banks, and the Landesbanken, operated by the provincial governments to provide local authority finances and provided giro services, and Sparkassen, created by municipal authorities to encourage savings, there were joint-stock mortgage banks who issued Pfandbriefe against mortgages on real property, and cooperative credit societies grouped together by the Zentralgenossenschafteskasse which acted as their 'central" bank. Both the notenbanken and the Hypothekenbanken were more closely regulated than the Kreditbanks because they issued specialized credit instruments, which the latter theoretically did not.

During the Weimar period the Federal government extended its presence in the financial sector by founding the Reichskreditgesellschaft, a government owned bank which functioned as a private bank. It soon grew to a size equivalent to the larger Kreditbanks (the four D's: Deutsch, Dresdner, Darmstädter-National and Diskonto-Gesellschaft banks). Most of the federal states (Länder) which had not already formed banks did so in this period. In addition, special purpose banks were also created by the Reich or the federal states, such as the Deutsch Bau- und Bodembank, to provide construction financing, as well as a number of mortgage banks. The National Railway even founded its own bank, the Deutsche Verkehrs Kredit Bank, to provide trade credits to large shippers. The Deutsche Rentenbank, which had been formed during the currency stabilization, remained in existence and one of its subsidiaries became the most important long-term lender to agriculture, a role which was formalized with the creation of the Rentenbank-Kreditanstalt. Another institution from the stabilization period, the Golddiskontobank, which was formally a subsidiary of the Reichsbank also continued to function financing foreign trade.

THE IMPACT OF THE STOCK MARKET CRASH and the GREAT DEPRESSION

-- The New Deal Reform Measures in the US

Before the financial crisis which hit the US in 1929 the US financial system resembled the then more advanced European financial centers. While there were restrictions on bank location, most banks could operate much as German "universal banks", although few did so. These large banks played an even more important role in the US system; because of the absence of a national bank until 1914 they effectively organized the bank clearing network and acted together to insure the stability of the system. Up to that point the US had operated on a gold standard system, and there was no official government agency or bank to control note

issue.

As the 1914-18 War weakened Britain's hold on the Empire and brought about the collapse of the gold standard, the US banks entered the inter-war period on a stronger basis; the return to gold brought depression to Europe, while the US economy, after a short recession, prospered. Although the new Federal Reserve System provided more elasticity to the currency, the operation of US financial markets still had disturbing international effects. During the period of rapid growth and the stock market boom, low interest rates fostered extensive US lending abroad and New York became an international and national underwriting center. Much of this lending eventually went to finance reparations and the failing German banking system. This was facilitated by the Pepper-McFadden Act of 1927 which extended to nationally chartered banks the right to act as investment banks and underwrite securities, usually through subsidiaries[6].

The Federal Reserve Board's policy of raising interest rates to try to break the stock market boom caused severe disruption in international finance, in particular by halting the flow of international capital into Germany, and contributed to the collapse of the gold standard and the international financial crisis which broke before the collapse of the stock market in the US. When the New York stock market crashed, it brought about massive bank failures far beyond the ability of the Federal Reserve to offset and assured that the collapse of investment values produced a worldwide Depression.

The evidence of widespread bank fraud which emerged after the Crash suggested deficiencies in the supervisory function of the Federal Reserve and in its ability to use monetary policy to prevent failures of well-run banks. A series of measures, including the nationalization of gold, the phased devaluation of the dollar to $35 per ounce of gold, and the

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[6] The Act also made provision for short-term credit to farmers. It is better known because it permitted mergers between state and national banks. Between 1922 and 1929 around 4000 mergers occurred. It was in this period that National City bank became the largest bank in the US. Since the mergers usually involved the conversion of the acquired banks into branches, the Act permitted the creation of branches, but only in so far as permitted by existing State banking regulations. Generally branching was permitted in only 10 states, while 21 had partial restrictions and the rest prohibited branching. It is for this reason that McFadden is known as the Act which introduced prohibition of branching, a far from exact description of either the intentions or the results of the Act. To evade the State restrictions banks formed "chains" of banking associations and affiliates which escaped regulation at both the state and local level. The Bank of the United States, whose failure in 1931 is often cited as the real cause of the depression and the bank holiday, had 60 such unregulated affiliates. It is interesting to note that this bank, which attempted to grow rapidly by attracting deposits from immigrants who presumed it was the US equivalent of the central bank, was heavily involved in (second and third) mortgage lending; it also had formed the Bankus Corporation to manipulate its stock, all of which became worthless after the crash.

1935 Banking Act which strengthened the position of the Federal Reserve Board and its Chairman, creating control over monetary policy via the Open Market Policy Committee, finally created a Federal Reserve System equivalent in its powers and duties to European Central Banks. It also created a market for the new issues of government securities which became a major tool of monetary policy and under the direction of the New York Federal Reserve and the Treasury via the system of primary dealers and interdealer brokers.[7]

The segmented banking market, separating deposit-taking banks from those financing and underwriting business investment was the result of the Glass Banking Act of 1933, the Securities Act of 1933, the Securities Exchange Act of 1934 and the Banking Act of 1935. The 1933 Act also included the introduction of government guaranteed deposit insurance through a Federal Agency[8]. Action was also taken to prevent the fraudulent activity which had occurred during the boom of the 1920s by imposing controls on the liability side of banks balance sheets through Federal Reserve Board regulation Q which limited the banks' ability to attract deposits via price competition[9]. It also provided for controls on the asset side, forbidding underwriting of securities, as well as the ownership and secondary trading and brokerage of corporate securities by commercial banks. It also placed strict regulations on the financial viability of underwriters and brokers in securities as well as on the companies issuing liabilities and the markets in which they were traded through the two Securities Acts. As a result, the possibility of a "universal" bank, operating simultaneously in a number of different financial markets, was eliminated. It also meant that when financial market "deregulation" was introduced into the US market it was conceived in terms of a "level playing field" or freedom

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[7] A major role was also played by the Glass-Steagall Act of 1932 which temporarily made government securities eligible, along with gold and commercial bills, as backing for Federal Reserve Notes. The provision became permanent in 1945.

[8] It is widely believed that deposit insurance saved the banking system, but the deposit insurance provisions of the Act did not come into operation until the beginning of 1934, leaving unexplained how the banks survived from March to December. The answer is to be found in the authorization on March 9, 1933 to extend Hoover's Reconstruction Finance Corporation, which had been supporting banks from February 1932 (Bank of America), to provide the capital necessary to reorganize the balance sheets of the banks which emerged from the bank holiday by direct purchase of, or lending against, preferred stock or capital notes of bank and trust companies See Jones, pp. 17-87. According to Jones "This program of putting capital into banks prevented the failure of our whole credit system. It was carried out without loss to the government or the taxpayer" (p. 26).

[9] It has also been suggested that the preclusion on payment of interest on deposits was to offset the cost of insurance premiums which were one-half of one percent of the banks' deposit liabilities. The magnitudes do not seem comparable.

of access of financial institutions to different market segments. By this definition, "deregulation" has very little meaning within the German system.

The primary goal of the New Deal legislation was to preserve the banking system because of the role checking deposits had come to play as means of payment. The response to the crisis provided for recapitalization of the banks, provision of federal insurance for deposits up to $5,000, but imposed restrictions on bank competition for funds via price, as well as restricting the destination of those funds to short-term commercial lending or government securities. Restrictions were also placed on both the issue of new securities and the trading of securities in capital markets to prevent fraud. These actions preserved the banking system, but did little to create incentives to increase the flow of long-term lending to firms or the efficiency of the allocation of funds to industrial borrowers. This task was eventually taken on by the Reconstruction Finance Corporation which became the de facto source of long-term funding of private industry during the depression, and virtually replaced capital markets.[10]

As a result, the US emerged from the Great Depression with a dual (state v. federal chartered), segmented (commercial v. investment banks), unit (single banks subject to restricted branching) banking system. It is this combination of factors which prevented the gradual process of consolidation and growth of the banks as seen in Europe in which a small number of large, polyfunctional universal banks have come to dominate domestic markets, and are sufficiently large to compete against each other and against foreign competitors in the provision of financing and other services in international markets.

-- The German Response to the Financial Crisis and the Slump

The German response to the financial crises of the 1920s is perhaps less well-known than the New Deal legislation which created the segmented banking system in the US. The fact that the universal form of banking practiced by the large German banks was preserved rather than abolished, as in the US, has led to the idea that the German system is relatively less regulated than the US system and thus more prone to the risks believed to be inherent in permitting banks to finance long-term capital market investments with short-term deposit funds and to the conflicts of interest inherent in serving customers with diverse interests.

The German banking crisis of the 1930s was not the result of a speculative frenzy in

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[10] For those convinced by Kindleberger's representation of the Reconstruction Finance Corporation as the US equivalent of the Italian IRI, one should recall that IRI was a holding company created to receive the equity of (usually failed) corporations removed from failing banks' balance sheets, while the RFC was operated as if it were a bank, generally limiting lending to good collateral; IRI could not make Jesse Jones's statement that it had not lost the government or the taxpayer any money!

stocks which bred fraud or the use of deposit funds for speculation in capital markets. It was the lagged result of hyperinflation in the inter-war period which decimated the large banks' capital position and extensive reliance on foreign borrowing to shore up the banks, to finance local government, and to fund the payments of war reparations. The inflation of the 1920's set the stage for the crisis of 1931 by depleting bank capital. The demise of the banks was only delayed by the flows of foreign funds into Germany. Thus, the conditions of bank balance sheets became critical when a sharp outflow of foreign and domestic funds caused by contagion from the collapse of the Austrian Creditanstalt[11] and a run on the Danat bank after the announcement of the collapse of one of its largest clients led to a bank holiday in July 1931. US funds had ceased to flow to Germany with the run up in the US stock market in 1927 and the subsequent increase in US interest rates started to draw foreign funds to the US. But domestic panic reinforced this reversal of capital flows.

The German government was well placed to respond to the crisis by means of direct intervention for, as already noted, its presence included the Reichskreditgesellschaft and the special purpose banks which had been greatly increased in number in the 1920's. The Golddiskontobank was used during the crisis to reorganize the private banks by taking equity positions in failing banks and extending emergency credit by methods which foreshadowed those of the Reconstruction Finance Corporation under Jesse Jones. The government also created the Akzept- und Garantiebank to provide the third signatures for bank acceptances which were required in order for them to be discounted by the Reichsbank.

As a result of this direct acquisition of the equity of failing banks, and other rescue operations[12], the German government subsequently came to own 91% of Dresdner Bank, 70% of Commerzbank and 35% of Deutsche Bank. A 1933, government sponsored, Banking Enquiry reached the conclusion that there were no structural defects in the banking system

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[11] Which had recently merged with the insolvent Boden-Creditanstalt, heavily exposed to industrial borrowers. The French government considered the announcement of a Austro-German Zollverein a defacto "anschluss" of Austria by Germany and a violation of the Treaty of Versailles; this led to rumors, but apparently no more than that, of the withdrawal of funds by French banks from the already weak Creditanstalt and a generalized run on the bank. Cf. C.P. Kindleberger, 1987, chapter 7.

[12] Part of which were the famous large public works programs which were initiated in 1932 as pump-priming for private sector investments. When the latter failed to appear military spending provided a ready substitute. The financing of these expenditures was undertaken by some 31 public "central credit institutes" which may be classified as providing financing for: public works and utilities, personal credit, agricultural credit, manufacturing credit, rural settlement and cultivation of the soil, and urban credit and building, cf. Poole. They very much resemble a decentralized RFC.

and that its precise organizational form was best left to private initiative, subject only to general overall supervision by the government. This conclusion should be read within historical context; the government already had extensive ownership and virtual control over the financial system and through it of the largest industrial concerns at precisely the time that it was initiating its rearmament program.

The German Banking Law (Kreditwesengesetz) embodied this view of the structure of the system and was limited to the creation of a single supervisory agency with jurisdiction over every type of financial institution with the exception of insurance. By 1936 the big Berlin "universal" banks had recovered sufficiently to reprivatize themselves and, in difference from the US, the German financial system emerged from the 1930's crisis without any major structural changes or special prudential regulation, but with the potential for substantial indirect governmental controls.

THE IMPORTANCE OF POST-WAR RECONSTRUCTION TO THE CURRENT FINANCIAL STRUCTURE

While the structure of the German financial system emerged from the war virtually intact, its modern development has been conditioned by a series of decisions made during post-war reconstruction which have been of crucial importance in changing the overall structure of the system. As the result of the close pre-war relationship between banks and manufacturing industry, there were proposals to recast the German system along American lines (e.g. the Dodge Plan of 1945) in order to reduce the potential for the abuse of power by the large banks and industrial cartels which were thought to have brought the National Socialists to power and provided support for German military pretention. It was with this intention that the large Kreditbanks were broken up and reorganized as independent regional institutions in April 1948. The liberalization of controls on branch organizations introduced in the Large Banks laws of 1952 and 1956, and finally the elimination of any controls on bank location in 1958, allowed Deutsche, Dresdner and Commerz banks to regroup their regional units into national institutions within a decade. The intended introduction of "unit" banking with regional branching was thus scrapped virtually as soon as Germany was free of Allied control.

Other factors were of more lasting importance. The 1948 currency reform had the effect of wiping financial balance sheets clean, in both the public and private sectors. As a result, until 1974 the German government remained a net creditor to the private sector, while

families were slowly rebuilding their wealth positions through small savings deposits.[13] In 1950-51 the savings ratio of private households was barely above 2%. Most firms had been able to write down or eliminate their liabilities and build "hidden reserves" by overvaluing assets (which could be translated into large depreciation allowances against taxable earnings) when they drew up their new balance sheets in Deutsche Mark. Banks resumed operations with liabilities composed of DM deposits held by the public (originally to be converted from Reichsmarks at a rate of 10:1, but in fact at 106.5:1). To replace their worthless loans to firms, special compensation credits, *Ausgleichsforderungen*, paying 3% annual interests were issued to the banks by the government to allow them to establish balance sheets with income earning assets.

New capital investments by firms were financed primarily from retained earnings and secondarily by bank financing as banks' deposits increased, rather than through borrowing in capital markets.[14] Thus, the war had the effect of virtually wiping out both the existing supply of government and private securities, eliminating the secondary capital market, and centralizing the financing of new investment through retained earnings and short-term bank borrowing.

This situation required a sharp change in the methods of operation of the large banks. First, it meant that the banks could not finance and underwrite the issue of share capital in the formation of new firms because there was no market in which to float the shares once the companies were launched. It also meant that the "kontokorrent" mechanism in which the banks lent short-term to finance fixed investments which would then be floated in the securities markets could no longer be completed since there was no capital market to absorb the new issues.

Banks thus continued to build up demand and time deposits and short-term loans to firms were rolled over into medium and long-term loans (the ratio of short to medium-long lending was split about evenly in 1954) since they could not be repaid by floating securities

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[13] This helps to explain why open market operations have never played a very important part in monetary policy -- the Bundesbank had to be given powers to force the government to create financial assets which it could trade in the markets.

[14] In addition, the tax credits used to encourage investment provided an interesting impact on financial markets. Tax rebates were given on the entire value of interest free loans made by individuals or corporations for the financing of housing, shipbuilding and reconstruction investment by third parties. The loans were taxable when called. See Wallich, pp. 160 ff. Wallich estimates that up to 20% of investment in the housing sector was financed in this way. Accelerated depreciation allowed the firms to keep most of their profits, as assets were overvalued in the preparation of the new DM balance sheets.

in capital markets. Only 5% of banks' assets were in securities. The banks were thus faced with an ever increasing maturity mismatch.[15] The financing of reconstruction by the large banks in the absence of capital markets created potential instability because the short-term deposits could be withdrawn at any time, creating a liquidity crisis, and any change in the yield differential, as might be caused by inflation, might cause insolvency if short rates had to be increased rapidly to retain deposits. The former was a threat for the smaller banks, but for the larger banks with extensive branches the threat of a deposit drain was small. The inflation threat applied to all banks. There was an additional threat due to a loss in deposits from a drain of deposits abroad, but this was possibility was eliminated by the existence of controls on both trade and financial flows. This may also explain the concern to maintain balance of payments surpluses, which were achieved very rapidly and have been defended tenaciously in the face of international criticism long after the reconstruction period.

There were a number of policy initiatives to attempt to revive the capital market. These included the deduction from tax of savings invested (by direct purchase from the issuer and held for at least three years) in federal, state and some municipal and for low cost housing mortgage bonds that were from personal income tax assessments. The deduction did not, however, apply to private sector issues. The first Capital Market Law of 1952 applied a flat 30% withholding tax on interest paid on private bonds, confirmed the tax exempt status of mortgage bonds, and freed them from all interest controls. After the law was passed these bonds sold in the market at 5%, implying that the rates paid on taxable, private issues had to be in the range of 7.5 - 8% to be competitive. With interest expensed from corporate tax, which averaged around 70% (except for income paid as dividends which was subject to a special 30% rate), equity finance was by comparison extremely expensive, especially since it did not enjoy the tax deduction on income saved and dividends were taxed fully at the personal tax rate. It does not take much more than this to explain why equity issues played such a minor role in the reconstruction of the German financial system. As can be seen in Table 1, the use of equity actually declined as a proportion of capital market issues in the immediate post-war period.

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[15] The criticism of inherent instability in the universal bank system stems primarily from these conditions in which the system was operating without the benefit of an active capital market. It must be presumed that both the detailed attention to balance sheet ratios in the supervisory system and the attention to inflation, which might cause short rates to rise, to prevent flight from short-term deposits were largely determined by this anomalous structure of banks balance sheets during the reconstruction period. This link between bank balance sheets, financial stability and the importance of the control of inflation is stressed in Nardozzi.

Table 1: **Securities Issues (% of Total Value of Issues)**:

	Mortgage bonds	Muni bonds	Special Credit Inst	Indust-rial Bonds	Govt Bonds	Shares
1951	51.3	17.4	0.2	6.8	6.2	18.0
1952	38.8	9.9	1.2	8.05	25.9	16.0
1953	32.7	13.5	8.1	12.3	15.3	8.4

Elaboration of Wallich, p. 186.

The Capital Market Law did, however, give a boost to the issue of fixed interest securities, but the buyers were initially predominantly in the public sector, and then the banks became the principal purchasers and issuers. As may be seen in Table 2, individuals hardly participated at all.

Table 2: **Buyers of Securities (% of Value of Securities Issued In 1953)**

Banks	34.6%
Nonfinancial Business	10.2%
Individuals	10.2%
Insurance Companies	8.6%
Government and other	36.3%

Elaboration of Wallich, p. 187

Note that while the government provided 15% of the issues, it bought almost twice that amount. Much of this difference was represented by the purchase of mortgage bonds for low-cost housing, a large proportion of which financed contracts with private sector companies, an indirect form of government support. The purchases by the banks can be explained by the tax advantages, for their profits were taxed at the same rates as industry. Thus the most profitable strategy for a bank in this period would have been to lend to the point at which net interest margins covered operating and funding costs and then to place the rest of its funds in tax free securities earning 5%, which would constitute tax free profits. Firms also borrowed extensively at market rates of 8%, in order to purchase tax free securities paying 5%. The insurance companies, which paid only minimal tax, placed hardly any of their funds in securities. Thus, the tax structure which was introduced positively discriminated against equity, and did little to satisfy its goal of increasing the sales of bonds to households.

The post-war reconstruction of the economy was thus intermediated by the banking system as households' savings were held in savings deposits; firms expansion outpaced the growth of internal funds and they increased their medium and long-term borrowing from the banks. Table 3 shows the relative stability of bank deposits in household portfolios along with the slow increase in fixed interest assets and the decline in their holdings of equity.

Table 3: **Household Asset Portfolios**

Proportions of households total monetary assets:

	Deposits	Thrifts	Insurance	Bonds	Shares	Other
1950	50.00%	2.27%	16.82%	1.36%	25.00%	4.09%
1960	61.56%	7.34%	17.70%	4.94%	7.89%	7.18%
1970	59.07%	8.66%	16.69%	10.24%	4.99%	6.37%
1980	52.99%	6.91%	17.03%	13.21%	2.13%	9.33%

Source: Tables accompanying the article "The capital finance account of the Federal Republic of Germany for (various years)" published annually in the May number of the Monthly Report of the Deutsche Bundesbank.

On the side of the firms' balance sheets (cf. Table 4) there is a slow decline of the ratio of self-financing to gross investment, offset by the rise in borrowing from domestic banks, along with a slow shift in the composition of deposits from domestic to foreign banks.

Table 4: **Share of Selected Assets and Liabilities in Firms' Portfolios:**

	Self financing ratio	Share of Financial Assets: Domestic Deposits	Foreign Deposits	Share of Liabilities: Domestic Borrowing	Foreign Borrowing
1950	71.14%	61.88%	17.33%	48.37%	11.16%
1960	63.86%	50.45%	21.68%	57.74%	7.64%
1970	65.79%	49.34%	25.28%	59.74%	11.13%
1980	67.37%	48.71%	28.36%	60.46%	10.18%
1989	64.50%	40.26%	35.85%	60.11%	9.62%
1990	65.00%				

Source: Tables accompanying the article "The capital finance account of the Federal Republic of Germany for (various years)" published annually in the May number of the Monthly Report of the Deutsche Bundesbank.

Thus, in the 1980's share financing took on a more important role in providing finance for the small proportion of German firms listed on the stock exchange. At the same time, internal funds also increased and the "own funds ratio" calculated as the ratio of equity capital and reserves to the balance sheet total for public limited companies recovered to 30%, 4 percentage points above the low reached in 1981. New issues were particularly high in 1990 in the boom which preceded Unification. This increase in new issues in the 1980's does not seem to have produced major changes in the distribution of share ownership (see Table 5), although the banks became more active in the process of underwriting the new issues.[16]

The decline of the importance of internal funds appears to have stabilized in the 1980's, as corporate earnings improved dramatically. This increase in earnings was also accompanied by a three-fold increase in share prices, and an increase in the issue of corporate equity. Yet, this did not represent a sharp increase in the role of capital markets in

[16] (Cf. "The significance of shares as financing instruments," see Monthly Report of the Deutsche Bundesbank, Oct. 1991).

allocating financial resources.[17] At the end of 1990 the number of listed companies was only 42 higher than in 1980, reaching 501, or only one-fifth of the total of public limited companies. There are more than 400,000 private limited companies and 100,000 partnerships in the German economy.[18]

Table 5: **Pattern of Share Ownership in Germany**

(percentages of total)

Sector:	1960	1970	1980	1990
Households	27	28	19	17
Enterprises	44	41	45	42
Public Authorities	14	11	10	5
Banks	6	7	9	10
Non-Residents	6	8	11	14
Insurance Companies	3	4	6	12

Source: "The significance of shares as financing instruments," Monthly Report of the Deutsche Bundesbank, Oct. 1991

In the face of the almost complete failure of recovery of the equity market (and the failure of the recovery of the underwriting activities of the big universal banks) in the post-war period, the dilemma caused for the banks by the absence of an active equity market was resolved by increasing long-term bank funding via the bond market, primarily by selling to other banks and institutions (see Table 7&8), with households remaining largely absent from securities markets, as may be seen from Table 6.

Table 6: **Families' Capital Market Assets (shares of annual flows)**

	1980	1985	1986	1987	1988	1989
Bonds	20.9%	17.70%	7.30%	18.90%	11.00%	37.00%
Shares	-0.7%	2.80%	1.10%	3.50%	3.00%	-4.13%
Insurance	21.2%	31.10%	30.80%	29.60%	30.80%	29.60
Pensions	11.3%	9.00%	9.60%	8.10%	6.80%	7.80%

Source: Tables accompanying the article "The capital finance account of the Federal Republic of Germany for (various years)" published annually in the May number of the Monthly Report of the Deutsche Bundesbank.

Table 7: **Bank Investments in Selected Financial Assets** (% of total value outstanding)

Shares	9.03%	10.17%	10.72%	9.87%	11.82%	14.42%	13.55%
Bonds	38.89%	38.20%	38.77%	39.85%	37.68%	36.49%	34.89%
Bank	42.75%	44.20%	46.03%	47.86%	45.01%	43.53%	41.94%
Industrial	11.26%	12.07%	11.71%	12.52%	12.95%	14.21%	35.70%
Public	29.86%	25.92%	25.71%	27.16%	25.95%	25.18%	23.39%

Source: Monthly Report of the Deutsche Bundesbank

[17] This increase, however, is not directly visible in company accounts. The average issue prices for new shares in the 1980's was four times par value. The increase in equity is given in terms of par value, while the excess of issue over par is entered as reserves in company accounts.

[18] In 1987 a secondary market (the geregelter markt) was instituted with less stringent listing requirements for smaller firms. At the end of 1990 there were more than 150 enterprises listed. Also in 1987 "Risk Capital Investment Companies", limited liability public companies which raised capital in the stock market to lend to small and medium sized companies unable to meet listing requirements. At present there are fewer than twenty such companies.

Table 8: **Structure of Firms' Liabilities (shares of annual flows)**

	1980	1985	1986	1987	1988	1989
Bank loans:						
short	29.6%	9.00%	-3.70%	-12.30%	-17.90%	17.76%
long	24.5%	37.10%	59.40%	45.50%	36.70%	43.33%
Institutions	4.5%	5.90%	-0.60%	3.60%	1.40%	0.1%
Bonds	0.9%	6.20%	11.00%	14.30%	3.50%	-0.0%
Shares	6.1%	7.70%	20.00%	11.70%	5.60%	7.22%
Money Market Liabilities	1.0%	-	-	-0.60%	-0.50%	-0.21%
Other*	33.4%	34.10%	13.90%	37.80%	35.60%	30.55%

*Includes households claims under company pension commitments.

Thus, the German financial system also differs from the US system where "institutional" investors have played a dominant role. Institutional investors were not absent from the process of reconstruction, but the institutions are of a rather different sort than in the US, being limited to banks, insurance companies and the government. These "institutions" tend to hold a much lower proportion of equity investment than their US counterparts, unless non-financial firms are included in the definition of institutions; firms own roughly the same proportion of outstanding equity issues as institutional investors in the US (cf. Table 8 and Table 11 below), while the dominance of medium and long-term bank finance has led to a dominant position for bond financing in the system.

In addition to the influence of post-war developments and tax factors (almost all of which have been eliminated in the 1977 tax reform which abolished double taxation of dividends), the difference in the role of institutional investors is due to the fact that Germany has had a comprehensive statutory pension scheme since the time of Bismarck (who used it as a policy against the Left), so that private and company pension schemes have only recently been instituted and as yet have had little influence on capital markets.

Table 9: **Portfolio Composition of Securities Deposited in Banks By Owner**

	Households	Insurance Co	Investment Co	Public Sector*
Bonds	51.7	63.7	76.2	44.9
Domestic	36.3	61.8	44.0	43.9
Public	20.0	18.4	9.2	18.6
Bank	16.1	43.3	34.4	25.3
Industrial	00.2	00.1	00.4	0.0
Foreign	15.4	1.8	32.3	0.7
DM bonds	3.6	1.3	2.1	-
Forex	11.7	00.5	30.1	0.7
Shares	34.9	11.9	23.7	42.8
Domestic	29.8	11.5	18.1	42.8
Foreign	5.0	00.3	5.6	-
Inv. Funds	13.4	24.5	-	12.8
Domestic	12.0	24.4	-	12.8
Foreign	1.4	00.1	-	-

*Includes Social Security Funds and Central, Regional and Local Authorities.
Source: Elaboration of Bundesbank, May 1989, p. 24. NB: figures cover only securities deposited in trusts or for safekeeping with banks -- they do not include bank investments in securities or securities held privately.

Since these private and company pension schemes are administered, either through insurance

companies, which have a high preference for liquid assets and bond investments, or by the companies themselves, they do little to offset the low proportion of equity in household portfolios. The company administered funds are usually managed "in house" by the company and may be used to provide internal financing either directly or indirectly via lending to the firm[19], so that they are in a sense a substitute for the issue of equity in capital markets.

In the 1970's and 1980's the increase in importance of *publikum* and *spezial* investment funds has provided a new institutional investor in the German financial system. The public funds are open to the general public while special funds are created specially for particular customers or tailored to customers needs (e.g. a company pension fund). Originally set up to encourage private household investment in equity by reducing the transactions costs of diversification and providing easier access to securities markets, the funds also invest primarily in bonds. They have also served as the primary vehicle for households' diversification of their portfolios into foreign assets, but still primarily in bonds rather than in shares (see Table 10). They have also come to be used by insurance companies and private and company pension funds, which explains the large proportion of domestic securities in the special fund portfolios. The Act on Investment Companies (KAGG) extended investments in unlisted securities to up to 30% and created open-end funds investing primarily in real estate. A number of German banks offer funds through their Luxembourg subsidiaries in order to avoid national regulations which are much stricter than the minimum EEC legislation which apply there.

Table 10: **Composition of Publikum and Spezial Investment Fund Portfolios**

	Domestic Bonds	Foreign Bonds	Domestic Shares	Foreign Shares	Cash reserves and other
Public					
1970	33.7	6.4	39.6	11.9	8.3
1980	56.1	7.4	25.0	3.4	8.2
1985	35.5	35.8	18.4	4.6	5.7
1988	31.0	48.3	9.6	3.7	7.4
Spezial					
1970	39.8	9.2	23.4	14.9	12.6
1980	57.1	3.4	24.8	6.3	8.4
1985	48.2	7.2	31.9	8.5	4.2
1988	54.2	7.3	23.5	6.3	8.8

Source: Bundesbank, October, 1988

The anomalous position of the share of equity in German investment portfolios may be seen from a comparison of share ownership patterns with the USA, UK and Japan in Table 11.

[19] The Bundesbank, August, 1984, p. 36 estimates that in 1982 15.5% of own and borrowed long term capital available to companies came from companies' pension funds.

Table 11: **Common Stock Ownership -- US, UK, Japan and Germany - 1979 and 1988-**
% of Total Outstanding Common Shares

1979	USA	UK	Japan	Germany
Financial Institutions	15.8	40.9	34.9	12
Commercial Banks	0	0	11.6	8
Insurance Companies	2.9	12.2	15.4	
Pension Funds	8.2	9	7.8	4
Other Financial	4.7	19.7		
Nonfinancial Business	9.1	5.4	23.1	35
Individuals	72.2	47.4	39.9	29
Foreigners	2.9	6.6	3.2	15
Other	0	2.6	0.2	10
1988				
Financial Institutions	30.4	52.5	51.2	15
Commercial Banks	0	4.3	18.9	9
Insurance Companies	4.6	19.6		
Pension Funds	20.1	48.5	12.7	6
Other Financial	5.7			
Nonfinancial Business	14.1	10.1	24.9	40
Individuals	50.2	28	22.4	16
Foreigners	5.4	6.5	4	21
Other	0	2.5	0.7	8

Source: Prowse, in Sametz, 1991, p. 50.

CURRENT GERMAN BANK REGULATION

The other basic change in the post-war period was the revision of banking legislation. The basic Bank Law which had been introduced in 1934 in the aftermath of the banking crisis was replaced in 1962. It was amended in 1976, 1985 and 1990 to take changes in banking practice into account. The new law preserved the basic regulation of German banks via a Federal Banking Supervisory Office; reporting to the Minister of Economics. It was made legally independent of the Bundesbank, although it mandated close cooperation between the two institutions. It also reconfirmed the findings of the 1933 Enquiry that direct control over the structure of financial institutions and their entry into particular financial markets was unnecessary, although it did preserve powers to set maximum interest rates (but these were quickly abandoned).

The Bank Law takes an indirect approach to the problem of bank stability and the protection of depositors by requiring a matched maturity structure of the balance sheets of financial institutions. The balance sheet constraints are set out in the "Principles Concerning the Capital Resources and Liquidity of Credit Institutions".[20] The most basic of these is Principle II, the 'liquidity principle', which limits long-term assets to long-term liabilities. Long-term funding is defined as the sum of the bank's own equity, the bank's sale of bonds, other long-term borrowing by the bank, 60% of savings deposits and 10% of current accounts and

[20] Bundesbank Annual Report, 1962, p. 97 ff. These Principles simply made formal the "Guiding Ratios for Credits" which had been applied previously by the Bank Deutscher Länder and then the Bundesbank.

time deposits held by non-financial entities.

In addition, Principle III limits the bank's portfolio of loans, advances, discounted bills, quoted shares and liabilities of other credit institutions to a maximum of 60% of the sum of its current and time deposit liabilities to non-financial entities, 35% of its current and time deposit liabilities to financial entities, 20% of its savings deposit liabilities, 35% of its borrowing with a maturity from one month to four years and 80% of the bank's issue of acceptances, notes, bills drawn on itself and international letters of credit.

Principle II - Liquidity Principle

Assets	Liabilities
-Long-term Assets	-Equity -Bonds -60% of Saving Deposits -10% of Non-Financial -Current + Time Deposits -Other Long-term Borrowing

Principle I sets capital adequacy rules which require a bank's capital (including reserves and retained earnings) to be a minimum of 1/18th (a little over 5.5%) of total lending to firms and individuals plus its book credits and non-controlling equity interests. Since the 1974 Herstatt Bank crisis (which was the result of fraudulent foreign exchange trading) there have been additional regulations limiting open foreign exchange positions to 30% of capital plus reserves and retained earnings.

Principle III

Assets	Liabilities
-Loans -Advances -Discounts -Securities of Financial Institutions	-60% of: Non-Financial Current and Time Deposits -35% of: Financial Current & Time Deposits -20% of: Savings Deposits -35% of borrowing with 1 month-4 yr maturity -80% of: acceptances, notes credit letters bills drawn on itself

The Herstatt crisis, which occurred in a private bank was accompanied by losses to private depositors. The experience provoked the creation of two institutions to insure depositors' funds. In 1974 the Bundesbank set up the Liquidity-syndicate Bank which accepts bills drawn by banks facing liquidity shortages and which can be discounted at the Bundesbank. In 1976 the banks themselves created a private "deposit insurance fund" which reimburses individual depositors for up to 30% of the bank's most recently published net worth

statement. Membership of banks in both institutions is voluntary.[21]

In 1990 Principle I was extended to include risk-adjusted off-balance-sheet exposures for financial swaps, forward contracts and option rights. In addition, Principle Ia limits a bank's outstanding acceptances, promissory notes and bills drawn on debtors to a maximum of 1.5 times its own capital, calculated and reported on a daily basis. In 1990, Principle Ia "was amended more substantially to limit all 'price risks', - including in particular those arising from off balance sheet financial instruments - to 60% of a bank's liable capital" (1990, p. 39). Within this 60% limit there are individually binding class limits of 30% for foreign currency and precious metal risks, 20% for interest rate risks from interest rate forward contracts and options, and 10% of other forwards and options on shares and index-linked contracts.

The introduction of new financial products has thus made it necessary for Principle I to be "extended to constitute a *general counterparty risk principle* going beyond mere credit risk. Principle Ia ... provide(s) a general set of rules aimed at containing ... the *price risks* involved in certain types of transactions which are particularly risk-prone because they require little or no capital input (leverage effect)."[22]

Further, there are regulations on the size of loans: single loans cannot exceed 75% (reduced to 50% in 1985) of the bank's own capital; the five largest loans cannot exceed three times own capital (abolished in 1985) and all large loans cannot exceed eight times loan capital.[23] These large loans, defined as those which exceed 15% of bank capital, have to be reported without delay to the Bundesbank, and all loans above DM 1 million also have to be reported. "The main duty of the recording center is to ascertain the overall indebtedness of borrowers who have obtained credits of or exceeding DM 1 million from two or more institutions, and to inform the lending institutions regarding the amount of their borrowers' total credit indebtedness and the number of lenders." (Bundesbank, 1962, p. 95). In addition, the

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[21] It is for this reason that legal reserve requirements to insure that "prudential" levels of reserves are maintained by financial institutions may be considered as redundant in the German system, although they do provide an important additional tool of monetary control to the Central Bank.

[22] The detailed procedures for the calculation of the risk adjustments and the computation of the exposure limits is given in Bundesbank Monthly Report, August, 1990. The weights are generally in line with those in the EEC Solvency Ratio Directive based on the Cooke committee proposals for the BIS international capital adequacy requirements.

[23] In addition, in the 1985 amendment to the Banking Law these regulations were redefined to apply to the consolidated balance sheets of banking groups, i.e. to include any company in which the parent bank has 40% capital interest or "direct or indirect controlling influence".

Agency may inspect banks' asset portfolios and make recommendations based on them.

These Principles demonstrate the difference in basic philosophy[24] between the German and US approach to prudential bank regulation and investor protection. The German system does not restrict the field of activity of financial institutions in any way, nor does it attempt to regulate a bank's ability to operate in a specific financial product market (although it does limit the products that can be traded), rather it imposes prudent banking behavior on all institutions by requiring control of the maturity mismatch of balance sheets and by imposing minimum capital ratios and maximum risk exposures. Within these structural constraints, financial institutions are free to enter any approved activity and to act in any market without further restriction or other direct government regulation.

It is clear that whatever potential instability might be caused by a single institution acting as a borrower in the short-term money market and a lender in the long-term capital market is restricted by regulations on maturity matching. Active monitoring for compliance, including on site portfolio examination, along with these detailed balance sheet restrictions, may been seen as a substitute for the restrictions on assets and liabilities permitted to specific types of institutions which resulted from market segmentation of the US system. It is clear that the regulatory structure is an integral part of the successful operation of the German universal bank system, in particular in the truncated form of the absence of an active securities market which has characterized the post war period.

THE STRUCTURE OF THE GERMAN FINANCIAL SYSTEM

In the discussions of the advantages and disadvantages of the German system of universal banking there seems to be a presumption that it is completely dominated by a few,

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[24] The German position reflects the "ordnungs" or "order" approach to theory and policy based in the work of Walter Eucken which gives priority to the design of the rules and institutions making up the economic framework or "order", rather than regulating the permissible behavior of individual agents.

Table 12: **Size Distribution of Financial Institutions by volume of business: 1990**
(m = million DM, b = billion)

	Number	Branches	<100m	100-500m	550m-1b	1b-5b	>5b
Commercial Banks	341	6552	74	100	43	91	33
Big Banks	6	3234	-	-	-	-	6
Regional	192	2976	28	58	28	54	24
Foreign	60	34	13	19	7	18	3
Private	83	308	33	23	8	19	-
Regional Giro Banks	11	311	-	-	-	-	11
Savings Banks	771	19036	7	275	188	267	34
Co-op Giro Banks	4	33	-	-	-	-	4
Credit cooperatives	3392	17402	1903	1288	134	64	3
Mortgage Banks	36	58	-	4	1	4	27
Private	27	50	-	2	1	4	20
Public	9	8	-	2			7
Postal Giro System	16	-	-	-	-	-	-
Building and Loans	32	63	1	2	7	13	9
Private	19	63	1	1	4	9	4
Public	13	-	-	1	3	4	5
Special Function	18	34	1	2	2	2	11
Total	4621						

Source: Monthly Report of the Deutsche Bundesbank

extremely large, universal banks which in addition to being subject to potential conflicts of interest may exercise undue economic and political power because of their large size. In the German system this is not the case in any absolute sense; the large universal banks are generally bigger and better capitalized than either commercial or investment banks in the US, but this is because they have not been subject to the same constraints on product markets or geographical location.

Nor is it the case that all financial institutions in the German system operate in all markets as universal banks. As Table 12 indicates, institutions dealing in particular product markets co-exist, and actively compete, with big commercial banks. Further, just because Federal government regulation does not limit entry to markets, this does not mean that all banks are free to enter all markets. Yet, financial institutions operating as "universal" banks represent a majority of two of the four different basic types of financial institutions which make up the financial sector:

a) commercial banks (including the "privat" banks),

b) public savings and giro banks,

c) special interest co-operative banks (and their giro bank), and

d) special function financial institutions including public and private mortgage banks, building societies, postal savings banks, consumer credit banks and investment companies.

The majority of private household deposits have been concentrated in the savings banks (see Table 13), although the commercial banks have recently increased their activity in this area.

Table 13: **Share of Deposits by Type of Bank**

	January 1991			January 1985		
	Total Deposits	Sight Deposits	Time Deposits	Total Deposits	Sight Deposits	Time Deposits
Commercial	39.57%	51.16%	31.77%	33.07%	45.94%	42.61%
Big 3	8.41%	7.23%	8.76%	8.39%	13.99%	7.01%
Regional	24.62%	37.80%	13.59%	13.09%	17.41%	12.05%
Private	1.97%	1.56%	1.59%	2.37%	2.84%	1.74%
RegionalGiro	18.38%	15.33%	35.30%	15.17%	18.65%	21.93%
Savings	10.27%	7.85%	6.67%	11.26%	4.69%	4.58%
Regional Coop Giro	10.77%	9.95%	13.30%	14.46%	21.37%	20.27%
Cooperatives	4.75%	3.30%	1.50%	6.49%	2.69%	1.96%

Source: Monthly Report of the Deutsche Bundesbank

It is also not the case that there are no geographical limits to the operations of banks. The public savings banks and giro banks are licensed by individual federal State governments, much like State chartered banks in the US, and are limited to operations with their Land. Most of these banks were initially established by local governments in order to provide finance for public expenditures. Since these banks were operated in the social and economic interest of the areas in which they were located, and since lower income earners did not generally have access to the commercial banking system until the 1970's, these banks also offered transactions services in the form of giro clearing accounts which first linked all the local banks in a single Ländesbank-girozentrale, and then through a country-wide clearing via the Deutsche Girozentrale. These banks initially dominated deposit-taking in Germany and retain a relative position equal to that of the commercial-universal banks through their Zentrale organizations. The individual savings banks located in single länder combine to form large multi-branch banks which are able to operate just as the larger universal banks and to compete actively with the large commercial universal banks. Each individual savings bank thus has access to the same national and international markets and can offer the same products and services as any large commercial bank, by participating with other small banks through its regional or national Giro organization.[25]

It would be inappropriate to push the analogy too far, but the German regional public savings banks face restriction much like State chartered banks in the US system, restricted in terms of branching to a particular region, and are much like savings and loans in the restrictions in the types of investments which they may undertake. The difficulties that these restrictions have caused in the US have been alleviated by the operation of the centralized

[25] This is similar to the way the correspondent system operated in the US before the Pepper-McFadden Act of 1927 and Glass-Steagall, 1933. In the absence of this legislation a natural evolution would have been for the larger money center banks to take equity interests in their regional correspondents to form large national clearing structures which channeled funds to the larger main banks in a way very similar to that in Germany.

clearing organizations which have allowed the smaller banks to operate as partners in a larger single bank which is not bound by the same regional controls. Although the large universal banks play an important role within the German system, a great deal of specialization and competition remains.

--Deregulation and Innovation

The dominance of banks in the stock market, and their dominance in bond trading, has not produced the same push for changes which institutions exercised in both the US and the UK. For example, the German stock market is still a regional system, with Frankfurt the dominant center, but relatively active trading still occurring at Dusseldorf, Munich, Stuttgart, Bremen, Hamburg, Hannover, and Berlin. Each regional market is controlled and regulated by their Land government. There is no regulation of insider trading.

If German investors have been relatively uninterested in equity, the same is not true of foreign banks and foreign investors who have been buying increasing amounts of German stocks. The German government, with a growing deficit to finance, has also become increasingly interested in developing the capital markets and has produced a white paper Konzept Finanzplatz Deutschland, which proposes unification of the eight regional stock exchanges to form a fully automated central stock exchange regulated by a central supervisory authority. Frankfurt, which has more than 70% of total trading, is the likely center of such a system, but none of the regions appears willing to give up its position, while Berlin, as the new capital, will be a potential competitor to Frankfurt.

Rather than the German universal banks, it is likely to be the foreign banks which apply pressure for changes in market regulations. For example money market funds are still forbidden due to Bundesbank opposition, and there is no real commercial paper market for firm financing. While such markets should not create difficulties for the larger banks, who could operate in them without difficulty and compete successfully with foreign banks, such changes would produce substantial changes in the structure of banks' balance sheets. It must be presumed that households would shift their deposit holdings from savings banks to money market funds, which would in all probability hold large amounts of government debt. On the other hand, increasing issues of commercial paper by firms would reduce banks short-term lending, but it is unlikely that the paper would find a way into money market funds. Thus, by reducing both the sources of banks funds in relatively cheap deposits and reducing the quality of its short-term borrowers it is likely that firms' financing costs for borrowing from banks would rise, while the costs for the larger, most credit-worthy firms would fall. But, since the banks would be free to organize both the money market funds and the commercial paper

underwriting any deterioration of net interest margins should be offset by increased fee income. The net impact on bank earnings and on financing costs to industry is thus unclear. All of these sorts of financial "innovations", which have generally been resisted by the Bundesbank, because they are a response to the segmentation of the US system which never existed in Germany. It is likely that they will eventually be allowed, but should have only marginal effects since there are no barriers, except size, which discriminate against particular institutions participating in them. The grouping of the smaller banks in Girozentrale or as Landesbank alleviate the advantages to the larger individual universal banks.

The real anomaly of the German system thus remains the the minor role of issue and sale of equity by firms and in the portfolios of households and institutions. Changing this situation to something more closely resembling the pre-war situation will be the real "innovation" which is still to occur in the German market. When the Geregelter markt was introduced it was with the intention of attracting more firms to issue equity, yet since 1987, less than 100 firms have taken advantage of the market, which has reduced costs and regulations compared with the official market. There are thus a little more than 700 of a potential 2,700 limited public companies who have raised equity capital traded on the first or second market (there are over 2 million businesses in Germany). It is thus clear that there will not be a "Big Bang" or a Mayday similar to the UK or the US in Germany. This is because many of the financial innovations in other markets have been due to attempts to escape regulations or separation of banking and finance, neither of which is present in Germany. Yet, while the innovations may not be needed by German banks, foreign banks may still seek the possibility of offering them to German investors, forcing German banks to respond. This process may be seen in the opening of the DTB (Deutsche terminborse) to trade futures and options. Yet, substantial changes may be expected if Germany is to compete successfully for the role of Finanzplatz Europe with London. For example, such exotic products as have now become common, such as zero coupon bonds, floating rate DM notes and swaps are still banned in Germany, and their introduction by foreign banks threatens the relationship between the large banks and their clients. Thus, the elimination of regulations on specialized and derivative products may threaten the ability of the large German banks to act as "investment" or "hausbanks" to their larger industrial clients, breaking the structural stability of the German financial system. It would have a similar effect to the introduction of regulation 415 allowing shelf registration of anticipated securities issues in the US. German authorities are torn between a belief that these changes are not really necessary, and the recognition that they will have to allow them if Germany is to be a realistic competitor for the role of financial center

of the EEC.

--Banks and Corporate Control

While the universal bank system does preserve substantial competition and has strong supervisory controls on balance sheets which prevent excessive risk in a single bank which takes both short-term deposits and is free to invest in corporate equity, there is another difference that is of importance. In the German universal-bank dominated financial system, corporate equity appears to be predominantly controlled, if not directly owned, by the larger universal banks, rather than private individuals (or the representatives of private individuals as in the case of the large US institutional investors such as pension funds, insurance companies, investment and mutual funds). Despite the fact, noted above, that officially reported bank holdings (which understate actual positions) are a relatively small proportion of outstanding corporate equity, this is not a good measure of the influence exercised by universal banks. First, although the largest banks do hold substantial interests in manufacturing firms[26], the striking feature is the large proportion of shares held by businesses themselves. This increases the control of the Board of the large firms.

The Commission of Enquiry on "Basic Banking Questions" set up in 1974 to recommend changes in the commercial banking system reported that in 1974/5 while banks owned only 9% of corporate capital stock, they represented 62% of the votes at stockholders meetings (the "depotstimmrecht" gives the bank the right to represent beneficial owners of shares which they hold as custodians or in trust accounts, which may include shares held by firms) and held 18% of the seats on corporate supervisory boards.

Table 14 Equity Control of Commercial Firms By Universal Banks

	% of Firms (1974-75)							
	Equity				Including Proxies			
Type of Bank	>50%	25-50%	10-25%	<10%	>50%	25-50%	10-25%	<10%
Big 3	0	7	3	2	0	10	17	73
Big Regional	0	6	0	2	2	7	9	82
Big Commercial	4	11	4	2	16	30	22	32
Savings+Giro	0	3	0	4	1	1	6	92
Coops	0	0	0	0	0	0	0	99
Other Banks	2	2	2	15	0	7	9	84
All Financial Institutions	11	12	5	10	55	22	14	10

Source: Bericht der Studienkommission: "Grundsatzfragen der Kreditwirtschaft", Table 10, p. 436, reprinted in Pozdena,1991, p. 25.

Table 14 shows the distribution of voting power of different types of banks in the German

[26] For example, Deutsche Bank, the largest of the universal banks is reported to hold in its investment portfolio 28.2% of the capital of Daimler-Benz, 25% of Karstad and 25.9% of Horten, retail chains, 11% of Metallgesellschaft, 41.4% of Kloeckner a machine tool firm, 35.4% of Holzman, a construction company among its other equity interests.

system given in a 1979 report of the German Monopolies Commission. The Table shows that 11% of all firms had over 50% of their equity held directly by financial institutions, while 55% has over 50% of their equity under control of financial institutions due to the deposstimmerecht. However, only 10% of firms had from 25-50% of their equity controlled by the Big Three universal banks.

In addition, the preponderance of short-term lending in firms' total financing means that banks will be more directly involved on a day to day basis in major financing decisions. Although much has been made of the role of the "hausbank", most German public companies have now outgrown the ability of even the larger banks to provide all their required services, yet the high proportion of short-term lending which must be continuously re-evaluated and rolled over means that contacts between firms and their bankers must be active and continuous.

In this way short-term lending takes on a long-term character, and it follows as a by-product of this system that only a small proportion of firms seek public listing to raise equity capital. Until 1990 there were fewer than 500 publicly quoted companies (AG). Indeed, it has been the banks, rather than firms, which have been the most active participants in both the debt and equity markets in recent years. For non-listed firms the large banks may exercise even more control than they do over the large public corporations, influence which is independent of their ability to purchase or underwrite equity.

--Conflicts of Interest

Given the portfolio composition of the German economy there is little possibility for conflicts of interest between banks and its various types of clients for private retail clients hold only small proportions of capital market securities in their portfolios and the majority of firms seldom require the bank to act as underwriter. The major proportion of equity is held by firms or banks and the major portion of bonds are issued by banks and held in bank portfolios, as well as other institutions such as pension funds and insurance companies.

CONCLUSIONS

The most significant aspect of the German "universal bank" based financial system is not the absence of "regulations" imposing market segmentation and thus the possibility of a level playing field for different classes of financial institution, but rather the unique approach taken to bank supervision and prudential regulation. The German approach uses tight balance sheet restrictions on financial institutions for the controls produced in the US by market segmentation which restricts liabilities and asets by charter restrictions. The US system may

be viewed as an indirect method of controlling the maturity structure of bank balance sheets which the German supervisory technique applies directly to all financial institutions.

Those who have favored the introduction of "universal" banking as a remedy to the US banking crisis by providing a "level playing field" for commercial banks with respect to investment bank-broker-underwriters have failed to recognize the full extent of the changes which would be required to introduce German style banking supervision and balance sheet regulation, which are an integral part of such a system.[27]

On the other hand, the fear that a system of unsegmented "free entry" would lead to market dominance by a small number of large banks does not seem to be supported by the German experience. The German system continues to exhibit specialized banking institutions and competition, even at the level of the larger "universal" banks. This is in part the result of the way the smaller banks have been joined into larger umbrella organizations, which operate as universal banks and provide a channel by which small banks can compete with the large commercial banks.

Although the German experience has not yet produced significant examples of conflict of interests, it is clear that this evidence cannot be taken as conclusive for it is the result of the anomalous development of the German system and the associated structure of asset portfolios in the post-war period. Since the US system does not have the same structure of asset portfolios, the risks would be substantially greater.

Within the context of recent discussions of banking reform in the US the introduction of a German type universal banking system would thus have to include:

1. The introduction of a unified supervisory structure for all financial institutions, working in conjunction with, but separate from, the Federal Reserve System.
2. National charters for all financial institutions (although it may be sensible to follow the German practice of excluding pure insurance providers).
3. Detailed balance sheet regulations to provide a rough match of maturities and controls risks, as well as daily reporting and examination to insure compliance.
4. Free entry of all financial institutions into all areas of business, geographically and by product.
5. No limitation on mergers of financial institutions, either within or across product or geographical area.

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[27] It is interesting to note that in precisely the period in which capital adequacy requirements were being introduced on an international basis, a comparative study of the financial structure of the G-10 countries (Cumming and Sweet) did not even consider balance sheet restrictions imposed by national supervisory authorities.

6. The elimination of government sponsored deposit insurance. Encouragement of private insurance provided by those banks who choose to offer transactions services to the public. Explicit lender of last resort responsibility of the Federal Reserve for systemic crises.
7. The provision of a public transactions institution for private individuals. The Fed already provides a clearing house for the large transactions of financial institutions, the Post Office could provide a clearing house for small payments for individuals who do not have access to the financial system or who do not wish to bear the risk associated with private transactions structures that might be offered by financial institutions. Most European postal administrations offer such Giro services. It should probably be provided without cost to users; the equivalent of electronic currency.
8. A full revision of SEC legislation, limiting it to supervision of public markets.[28]
9. Control by the Federal Reserve (or the chartering authority if different) of the type of financial products which may be offered by financial institutions, and the rapid adjustment of balance sheet regulations to take them into account.

Any attempt to introduce the German system without the regulatory constraints would run the risk of recreating possibilities for abuse as great as those which existed in the 1920's and which reappeared in the 1980's. It should be clear that the introduction of universal banking is more than just removing barriers between financial product markets to create a level playing field, it requires the construction of an alternative set of uniform barriers in the form of a uniform regulatory structure. It is not clear that the public, the Congress, the administration, the commercial banks and the investment banks recognize the extent of the new regulations and the close supervision to assure compliance that would be required to replicate the advantages of the German system.

Neither is it clear that the potential conflicts of interest, which are absent in the German system due to the peculiar structure of asset holdings which developed in the post-war period, would be absent in the US where equity financing and equity investment form a much larger proportion of firms' funding and households' investments and where proprietary trading forms

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[28] Since the SEC is the result of the separation of deposit banking and investment introduced by the 1930's legislation many of its activities would be redundant in a universal banking system under a single supervisory authority operating on German principles; in particular most of the consumer protection provisions concerning information disclosure by firms and securities institutions would be redundant. In any case, most of these sunshine regulations were written in a period when the individual investor was active in the market. Today, with over half of holdings under professional management these regulations may be out of place. Its basic remaining activity would be the organization and supervision of financial markets.

a large proportion of the earnings of an increasing number of large banks. While balance sheet requirements can do much to curb the risk of maturity and interest rate mismatches which might occur under universal banking, they can do little to eliminate conflicts of interest. The absence of conflicts of interest within the German system seems to have been the happy result of spontaneous market segmentation resulting from the post-war development of the German economy. If private clients seldom hold capital market assets directly and when banks are themselves the largest issuers and holders of securities, the possibility for the kinds of conflict of interest, or fraud and abuse, such as characterized the 1920's, is greatly reduced, although this has not prevented particular cases within the larger German banks. Since this particular structure of asset holding grew out of the experience of post-war reconstruction under Germany's peculiar banking law, it cannot be replicated in other countries, nor can it be guaranteed to persist in Germany. The problem of conflicts of interest remains to be tested by universal banks who are active on both the issuing and placing sides of the equity markets.

-- The Importance of Reform of the Banking System

Almost all banking systems have come to combine the two major roles of banks: providing for safekeeping and transfer of funds and the creation and allocation of investment funds. Regulations to protect the payments function have tended to restrict the efficiency of the investment allocation function. Indeed, it is argued that this latter function would be better accomplished through the capital markets. The German experience shows that this is not the case, that banks are crucial in the process of creating and developing new industrial enterprises. The capital market only emerges at a second stage. The post-war German experience suggests that much of this stage can even be bypassed without detriment to overall economic performance.

While the German banking system has been able to preserve its role in allocating capital and developing the industrial structure of the economy, the US system has become less and less capable of carrying out this vital function. As short and long-term markets have become more dominant in the allocation of capital, attention has been shifted to the potential for short-term gains in the purchase and sale of existing assets, rather than in the long-term process of creating new productive potential. In the German system, on the other hand, the possibility of banks to take a longer term interest in the economic development of their clients by investing in their capital market securities appears to allow them to take a longer term view which makes the creation of income rather than capital gains the goal of their activity. It is for this reason the German system offers an alternative to the US system. It should be clear from the above that these benefits cannot be gained simply by allowing free access of all

institutions to all markets without at the same time introducing the prudential and supervisory regulation which has always been part of the investment oriented German system.

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