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# Recent trends in U.S. and German banking: convergence or divergence?

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#### Nr. 29

## Recent Trends in U.S. and German Banking: Convergence or Divergence?

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## Recent Trends in U.S. and German Banking: Convergence or Divergence?\*

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#### Abstract

The purpose of this study is to focus on two leading industrialized nations - the U.S. and Germany - analyze the differences in the recent trends in their respective banking sectors and see if indeed the banking industries in these two leading economies are gravitating towards a homogeneous global banking structure or, even after the current changes, have entered the 21<sup>st</sup> century with continuing differences. We find a convergent model of universal banking with voluntary separation, by subsidiary, of commercial and investment banking.

#### 1. Introduction

During the past decade, significant socio-economic, political and technological changes have occurred around the globe, resulting in a breakdown of the traditional ways in which banks do business. While deregulation and globalization have lead to both product and geographical expansions by banks, implementation of new technologies has accelerated that process. Banks are facing increased competition from both within the immediate industry and from general providers of financial services. Disintermediation has been occurring, as more and more non-banks and on-line sources are providing traditional banking business products. These changes have resulted in a fundamental shift in the cost structure of the distribution of financial services. The resulting increased pressure on the bottom-line has forced the industry as a whole, as well as individual banks, to change the way in which business is conducted.

The purpose of this study is to examine the ways in which the banking industries in the U.S. and in Germany have been responding to these changes and pressures over the past decade. With the final repeal of the Glass-Steagall Act in 1999, the U.S. financial industry is making a significant move in the direction of universal banking (International Monetary Fund, 2000, pp.23-24). Bank holding companies are now allowed to undertake both commercial and investment banking activities without the restrictive *firewalls* between subsidiaries mandated till now and approved on a case-by-case basis.

Germany, on the other hand, is restructuring the traditional model of universal banking too (see, for instance, Hawkins and Turner, 1999). Policy reforms of the 1990s laid the foundation for the long-needed restructuring and now the wheels of privatization and deregulation are in motion. Recent tax reforms and disintermediation has spelled an end to relationship banking for the larger companies while the coming of the Euro in 1999 and its accompanying bond and equity market developments have enticed even the German "mittelstand" (traditionally family owned-managed medium sized companies) to direct financing in the capital markets. However, these companies need investment banks to organize their corporate financing needs. Leading German banks are responding by streamlining their operations, separating retail and investment banking and many are focusing on the latter (see, for instance, Deutsche Bundesbank, 1998).

The interesting issue then is to examine whether all of these recent trends are leading to a convergent global model or are the two countries' banking systems diverging even further in their attempts to cope with the current dynamics of world banking. A qualitative analysis (based on both quantitative and qualitative indicators) to examine the validity of this hypothesis is the primary focus of this paper.

Our findings suggest that the erosion of the Glass-Steagall Act in the U.S. and the creation of the European Union and other institutional changes in Germany seemed to have resulted in *functionally* similar banking models in the two countries. Major banking groups in the U.S. now have a primary focus on either commercial or investment banking with subsidiaries performing the other functions. In Germany, though legally allowed to participate in integrated universal banking, due to other structural reasons, the major banking groups are adopting strategies similar to their U.S. counterparts. Recent consolidation and restructuring are resulting in voluntary separation of commercial and investment banking activities, by subsidiary. So, one could argue that the Glass-Steagall Act might not have been a binding constraint after all for the banks in the U.S. — even without its restrictions, the banks might have found that dichotomizing their commercial and investment banking made better business sense.

The rest of the paper is organized as follows. We first describe the way the banking industry is organized in the U.S. and in Germany, emphasizing the differences. Section three provides the regulatory backdrop against which banks conduct business in the two countries. Section four follows, with the recent trends in the banking industries of the two countries, especially with respect to industry structure, performance, balance sheet composition, product portfolios, implementation of technological changes and other institutional changes. The final section concludes with a discussion on the issue of whether a uniform global banking model is emerging, towards which the two countries' leading banks are converging. We present a micro-level comparison.

#### 2. Organization of the Industry

The term "banks" in Germany, typically refer to financial institutions that are allowed to participate in a broad range of activities, including investment banking, insurance services (though only through subsidiaries), security brokering and dealing, payment services (in Germany, this requires a banking license) and commercial banking activities. On the other hand, a typical "bank" in the U.S., until late 1980s, would typically refer to a commercial bank, as opposed to an investment bank. However, as we see below, the Glass-Steagall Act requiring the separation of commercial and investment banking activities had begun to be eroded even as early as in the late 1980s. The larger banking groups were making forays into investment banking through special "Section 20" subsidiaries with legal blessing.<sup>1</sup>

The banking industry in Germany has a few other distinguishing features that we will describe here since it helps understand the industry organization (see Bauer and Domanski, 1998). Most important, unlike in the U.S., in Germany, the public sector, through the state-owned savings banks and the Land banks, has a share of around 40 percent of the total retail banking business.

<sup>&</sup>lt;sup>1</sup> For an excellent description of the gradual erosion of the Glass-Steagall Act, see Fields and Fraser, 1999.

Second, banks in Germany have capital locked-in in industrial holdings. For instance, the ten biggest private banks own 0.5% of German publicly traded companies with over DM 1 million. Business contacts arising from these cross-holdings generated good loan businesses to the banks but this "relationship banking" structure is changing. The relevant tax reforms which will go into effect January 1, 2002, relieve the seller of any capital gains taxes on the sale of these cross-holdings. The larger banks have already announced their plans of the sale of such holdings, popularly referred to as "the end of Deutschland AG." For instance, Deutsche Bank AG has announced that it will sell its entire holdings of Daimler-Chrysler. Also, due to the substitution of bank finance by capital markets financing, the role of investment banking is becoming more important and the German banks are eager to establish their leads in this new domain.

Table 1, Panel A, shows the classification of the financial intermediaries in the U.S. As shown, they are broadly categorized into depository and non-depository institutions. Depository institutions are further categorized into commercial banks and thrifts, with thrifts including savings banks, savings and loan associations and the not-for-profit credit unions. Non-depository institutions include investment banks, security dealers and brokers, mutual funds, pension funds, insurance companies and finance companies.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>For a detailed description of each of these types of financial intermediaries, see Saunders, 2000.

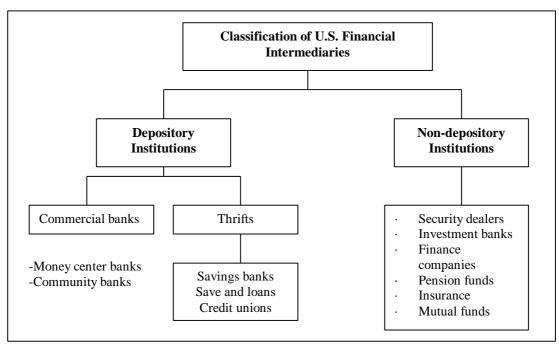


Table 1 ( Panel A)

While the 1960s saw clear distinctions between these different categories of financial intermediaries, these distinctions are no longer so clear cut due to two reasons. First, the de-regulationary Acts of 1980 (see next section for details) gave asset expansionary powers to the thrifts resulting in a fuzzy distinction between commercial banks and thrifts with respect to products offered. Second, the prohibitions under the Glass-Steagall Act were being relaxed on a case by case basis during the 1990s resulting in lower and lower walls between depository and non-depository institutions. Table 2 presents a comparative picture of the situation in 1990 and 2000 showing no changes in the German system but significant changes have occurred in the U.S. system.

| Service   | USA: 1950 | USA: 2000 | Germany:<br>1950/2000 |
|---|-----------|-----------|-----------------------|
| Consumer and industrial lending                       | X*        | Х         | X                     |
| Equities brokerage                                    | X         | X         | Х                     |
| Equities investment and underwriting                  | _         | X         | Х                     |
| Debt underwriting (govt.) Debt underwriting (private) | <u>x</u>  | X<br>X    | X                     |
| Debt brokerage (govt.) Debt brokerage (private)       | X<br>X    | X         | Х                     |
| Insurance brokerage and underwriting                  | _         | X         | X                     |
| Real estate brokerage and investment                  | _         | X         | Х                     |
| Mutual funds brokerage and management                 | _         | Х         | Х                     |

<sup>\*</sup>X indicates 'yes.'

Table 2: Services allowed to be offered by the commercial banks in the U.S. and Germany

Returning to the classification of the financial intermediaries, in Germany, as we see in Table 1, Panel B, financial intermediaries may be broadly categorized into universal banks, special banks, near banks and non-banks. Universal banks include privately owned business banks, savings banks (mostly state-owned) and mutually owned credit co-operatives. Though the savings banks and credit institutions are legally allowed to be universal banks; however, their core business, especially for the savings banks, is clearly in retail or commercial banking. Special banks consist of mortgage banks, mutual funds and public banks while near banks include insurance companies and credit institutions. Captive company banks come under the category of non-banks. However, given that universal banks can legally participate in all the product areas of financial services, a large

In Germany, the savings banks and the credit cooperatives are managed by a "headinstitute" (*Spitzeninstitut*). For the savings banks, this *Spitzeninstitut* or managing institute is the Landesbanken while for the credit cooperatives the managing institute is the Deutsche Genossenschafts Bank. While the majority of the regional savings banks and the credit cooperatives clearly focus on retail banking, these managing institutes however, for both groups, are true universal banks performing significant investment banking functions.

banking group in Germany (like Deutsche Bank Group) may well have subsidiaries straddling the functions of all four of the categories described above.<sup>4</sup>

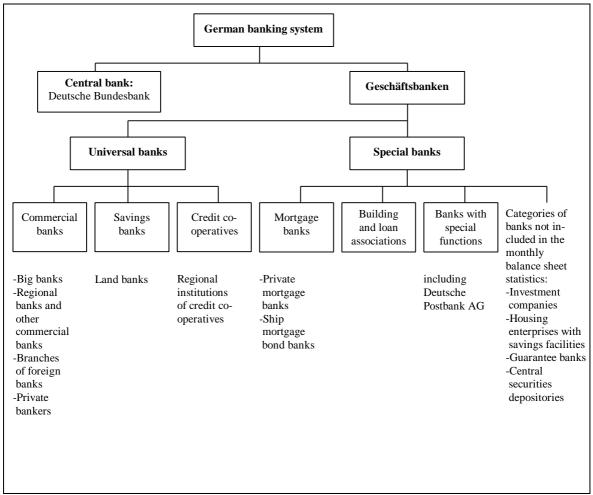


Table 1 ( Panel B)

Relative to Germany, one feature of the structure of the U.S. banking industry is the diversity in the size of U.S. banking institutions. There are many small banks, also known as community banks, and these tend to specialize in consumer or retail banking. The larger banks (banks with more than \$1 billion of total assets) on the other hand, are often either regional or super-regional banks with a much wider array of wholesale commercial banking services, often financing their lending and investment activities with purchased funds (mostly, the interbank reserves market). The very biggest of these, primarily bank holding groups and

<sup>&</sup>lt;sup>4</sup> In the U.S., till recently, the closest comparative group would be bank holding groups like Citigroup and J.P.Morgan, which had obtained specific approval for owning such functionally diverse subsidiaries.

located in New York or Chicago, are called money center banks. The diversity in bank size in the U.S. however, does not prevent the industry from being concentrated. As of 1997, around 80 percent of the total U.S. bank assets are concentrated in 4 percent of the banks (in 1983, 3 percent of the banks held 63 percent of the total assets).

Another feature of the U.S. banking structure is the decline in the number of banks. As of 1999, there were 10,070 commercial banks, down from 15,304 in 1990. Two opposing forces have been at work here. First, branch banking and interstate branching have increased in recent years due to the Riegle-Neal Act of 1994 that did away with federal restrictions on interstate branching. This is evident again from Table 3, where we see that the number of bank branches have increased from 72,346 in 1990 to 78,928 in 1999. On the other hand, while branches have proliferated, cost considerations have lead to a dramatic trend towards consolidation so that the number of banks have declined. Further, as the larger banks consolidate, we find that the share of the top 5 largest banks has increased from 11.3% in 1990 to 26.56% in 1999.

|                                     | USA    |        | Germany |         |
|-------------------------------------|--------|--------|---------|---------|
| Measure                             | 1990   | 1999   | 1990    | 1999    |
| Number of institutions              | 15,304 | 10,070 | 4,719   | 3,167   |
| Number of branches                  | 72,346 | 78,928 | 44,345  | 44,443  |
| Total assets to GDP                 | 80.8%  | 73.3%  | 158.9%  | 230.8%* |
| Market share of top 5 largest banks | 11.3%  | 26.56% | 17.1%   | 18.8%*  |

<sup>\*</sup> as of 1998; figures for 1999 are not available for Gemany

Source: Bank for International Settlements, 2001

Table 3: Structure and Composition of the Banking System in the U.S. and Germany

We now discuss the structure and composition of the banking industry in Germany (see Deutsche Bundesbank, 2000a and Table 3 below for the comparative figures). Currently, there are 3,167 banks with more than 44,443 branches. Of these 3,167 banks, around 9% are private business banks, around

20% are savings banks (sparkassen) and the state-owned Landesbanks, around 66% are credit cooperatives and approximately 5% are special banks (including Postbank). The highest percentage of market share in retail banking is enjoyed by the primarily state-owned savings banks (40%), followed by the private banks (25%), the mortgage banks (16%) and the credit cooperatives (15%). In terms of size distribution, unlike the U.S., there are only five large banks in Germany and over 3000 small banks and these top five banks own less than 20% of the industry's total assets. However, there is excess capacity in the industry as there are over 44,400 branches serving Germany's 82 million people. Due to some consolidation the number of banks have declined by around one third in the 1990s, but the excess capacity problem remains. The excess capacity is in retail banking and this is primarily due to the 2,700 savings banks and credit cooperatives that specialize in retail banking. It is to be noted that the consolidation is only within bank groups so as to maintain the share of the respective owner-groups, i.e., the privates, the cooperatives and the state.

In sum, due to the removal of interstate branching restrictions in the U.S. and due to the restriction of only within-group consolidation in Germany, we find that both branch proliferation and consolidation have been higher in the U.S. Also, in Germany, the privatization of the Postbank and the subsequent inclusion of its innumerable small branches has lead to a one-time increase in the number of branches of German banks. On the other hand, total assets in the financial system as a percentage of the Gross Domestic Product has declined in the U.S. but grown in Germany. Part of this could be explained by the prolonged economic growth cycle experienced by the U.S. during this past decade while in Germany, the unification and its subsequent burden slowed the growth in GDP to less than expected. The more fundamental reason is apparent from the figures in Table 4. The share of banking assets in the total financial sector is only 23% in the U.S. as compared to a significant 77% in Germany, confirming the evidence of thin capital markets there, reflecting the traditional methods of bank financing in Germany versus a tradition of market financing in the U.S.

| Measure   | USA   | Germany |
|---|-------|---------|
| Share of banking assets in total financial sector | 23%   | 77%     |
| Share of state-owned banks                        | 0%    | 47%     |
| Share of foreign-owned banks                      | 20%   | 6%      |
| Share of foreign assets to total assets           | 15.5% | 23.2%   |

Source: Deutsche Bundesbank, Monthly Report, Statistical Section, January, 2001 and Federal Deposit Insurance Corporation Website

Table 4: Ownership of the Banking Industry in the U.S. and in Germany (1998)

Finally, as we see from Table 4, as mentioned earlier, while state ownership has been and is zero in the U.S., in Germany, state ownership, though down to 47% from 50% in 1994, remains a formidable barrier to deregulation, consolidation and performance. Surprisingly, despite the trend towards globalization, in both the countries, there is little change in foreign assets and in the share of foreign owned banks. In the U.S., the share of foreign assets to total assets have remain unchanged at around 15% since 1994 while in Germany, it has increased from 19.28% in 1994 to 23.2% in 1998. The share of foreign-owned banks out of the total bank assets is 20% in the U.S. in 1998 (down from 22% in 1994) while in Germany, it is up from 4% in 1994 to 6% in 1998.

We now turn to discussing the regulatory backdrop against which the banking systems in the two countries have developed and now operate.

#### 3. The Regulatory Framework

Broadly speaking, the main objectives of banking regulations in Germany and the U.S. are the same: (i) to protect creditors, (ii) to maintain price stability and (iii) to counter market imperfections such as lack of competition, destructive competition and other external effects (for the German regulatory background, see Burghof and Rudolph, 1996, and Klein, 1998; for the U.S., see Klebaner, 1990 and Rose, 1987). Over time, the relative priorities of each of these objectives may

have differed across the countries. We first present a brief historical backdrop to U.S. banking regulations and then describe the German bank regulatory system.

In the U.S., economic growth and development, combined with financial innovation, altered the structure of the financial system during the period between the passing of the National Banking Act in 1863 until the early 1900s. During those years, there were several instances of financial and economic misallocations that had their origins in the shakiness of financial structures. All of these factors culminated in the passage of the Federal Reserve Act in 1913 giving the U.S. its first central bank. The Federal Reserve System was designed to act as a "lender of last resort" to local banks - to provide elasticity of lending power rather than elasticity of currency. The pre-depression era saw two more significant Acts. First, the National Bank Consolidation Act was passed in 1918, which made full-service branching by national banks easier by allowing them to keep the offices of the state banks that they acquired. Second, the McFadden Act was passed in 1927, which relaxed restrictions on the real estate lending of national banks and allowed them to open full-service branches.

Then came the Great Depression and some radical changes in the organization of the banking structure. The Glass-Steagall Act or Banking Act of 1933 was passed with prohibitions on interstate bank branching, separation of commercial banking from investment banking activities and the establishment of the Federal Deposit Insurance Corporation (FDIC). The FDIC was to insure demand, savings and time deposits at commercial banks. The Glass-Steagall Act also increased the authority of the Federal Reserve System. State banking agencies also increased their requirements for a bank charter. Set in place, then, in the wake of the Depression era was an elaborate *dual regulatory system* of federal and state controls on both internal bank operations and external bank growth.

Today, or rather, this past November 1999, we saw the final repeal of the Glass-Steagall Act. What transpired in between the post depression era and 1999 is a reversal of trends. Initially, the focus of U.S. bank regulation was on penalizing or prohibiting unsafe banking practices and promoting public confidence

in the banking system. Subsequent regulation, however, aimed at protecting various groups - small banks, thrifts, small businesses, consumers and agriculture - and in promoting greater efficiency in supplying financial services to the public. The ultimate repeal of the Glass-Steagall Act is really the culmination of a deregulatory trend that started in the 1970s. Growing public dissatisfaction with the performance of financial institutions in meeting business and household demands for financial services and inflationary pressures on operating costs led to the first major deregulatory legislation in 1980. The Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980 conferred expanded credit and deposit services upon thrift institutions and set in motion the elimination of interest rate ceilings on deposit accounts. This was soon followed by the Garn-St.Germain Depository Institutions Act in 1982 deregulating not only the deposit side of banks but also the asset side for the first time, giving them more latitude in making loans. Since then, piece by piece, several rounds of legislation had been passed to erode away the Glass-Steagall Act and its final dissolution in November 1999 was almost a non-event.5

In terms of *regulators*, banks in the U.S. may be supervised by up to four regulatory bodies: the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of Currency (OCC) at the federal level and the relevant state banking agency. The Federal Reserve System conducts the nation's monetary policy, supervises and regulates banks, protects the credit rights of consumers, maintains the stability of the financial system and provides certain financial services to the U.S. government, the public, financial institutions and foreign official institutions. The FDIC, on the other hand, insures banks' deposits up to \$100,000 in return for a premium very broadly related to the risk of the bank and in case of troubled banks determines the restructuring or liquidation procedures. The OCC is responsible for granting or revoking federal level charters to/from banks.

We now turn to banking regulations in Germany. The fundamental law on the supervision of German banks is the Banking Act of 1961. The basic purpose

<sup>&</sup>lt;sup>5</sup> For instance, the Riegle-Neal Act of 1994 ended restrictions on interstate branching.

of this Act was to provide, for the first time, a uniform regulatory framework across the Federal Republic and to create the legal basis for the establishment of the Federal Banking Supervisory Office.<sup>6</sup> Since 1961, the Banking Act has been amended several times - of significance are the Amendments of 1976, 1985, 1993 and 1998. The failure of Bankhaus I.D. Herstatt in 1974 made it obvious to the authorities that some gaps in the existing legislation had to be closed and this was the focus of the 1976 Amendment. The 1985 Amendment introduced a consolidated procedure for banking supervision purposes with respect to subsidiaries' business operations. The most recent Amendment of 1998 served to implement European Union (EU) Directives in order to harmonize banking supervision and associated legislation in the EU area. The harmonization was with respect to the authorization and ongoing supervision of credit and financial services institutions, the supervision of branches in other EU countries, the definition of capital, the consolidated supervision of groups of institutions and financial holding groups and large exposures.

The impetus for *deregulation* in Germany was provided by the formation of the Common European Market and accelerated significantly by the European Monetary Union (EMU). The external pressure from joining the EMU lead to deregulation in financial markets that in turn lead to deregulation in the banking industry. Due to the unification of financial markets, more products were now in play in the arena of investment banking and in order to ensure that German banks remained competitive, restrictions on their product choices were removed. However, unlike the U.K., where deregulation happened in the early 1980s and took the form of a *big bang*, German banking deregulation maintained the European tradition of gradual change. The deregulation was brought about in steps by two main institutional changes: (a) *the Erstes, Zweites und Drittes Finanzmarktforderungsgesetz* (the First, Second and Third Financial Market Development Laws) of 1990, 1994, and 1998 and (b) the three KWG-Novelles in 1992, 1994 and 1998. These changes basically expanded the possibilities for institutional investors on the exchanges, introduced futures exchanges, allowed

<sup>&</sup>lt;sup>6</sup> Until 1961, the state or Lander governments, established in 1948, together with the respective Land Central Banks, performed the functions of banking supervision.

electronic deals and deals denominated in foreign currencies, did away with exchange barriers and allowed special investment funds and liberalized equity laws with stricter supervision of securities. Changes under (b) were basically adjustments based on the EU Directives.

With respect to the *regulators*, banking supervision in Germany is carried out by the Federal Banking Supervisory Office (FBSO), working in cooperation with the Deutsche Bundesbank. The Banking Act of 1961 assigned the central role in banking supervision to the FBSO which in turn reports directly to the Federal Ministry of Finance. However, since the FBSO has no substructure of its own, it is the Bundesbank system, with its main offices and branch offices, that ensures efficient and cost-effective supervision at a local level of the more than 3,500 credit institutions and of the almost 3,000 financial services institutions in Germany.

At the same time there is a clear division of functions between the FBSO and the Bundesbank with respect to banking supervision. The Bundesbank is responsible for the regular surveillance of credit and financial services institutions and for the analysis of their annual and other reports. The FBSO is responsible for sovereign functions such as the issuing of administrative acts but when the acts involve capital, liquidity etc, it is required to act in conjunction with the Bundesbank.

With respect to *deposit insurance*, there are significant differences between the U.S. and German systems. As noted above, the current U.S. system of federal deposit insurance was actually introduced in the Glass-Steagall Act with the creation of the FDIC, with only slight changes being made in recent years for linking it to the riskiness of the bank in some way. Under this system, all member banks pay a deposit insurance premium related to the riskiness of their portfolios and contributions are maintained by the Bank Insurance Fund (BIF). The BIF is allowed a maximum capitalization of \$1.25 per \$100 of insured deposits so that if there are no payouts in good times, deposit insurance premiums are revised

downwards.<sup>7</sup> Finally, in return for these insurance premiums, member banks' deposits are insured up to \$100,000.

German banks however, operate under a *dual system* of risk-based deposit insurance - a statutory system recently introduced and the pre-existing voluntary system. The coming into effect of the Amendment implementing the European Commission (EC) Deposit Guarantee Directive on August 1, 1998, marks the first time that some legislation was passed with respect to providing compensation to depositors. Before August 1998, all credit institutions involved in the deposittaking business were voluntary members in various banking associations that provided the deposit insurance. Currently, since the EC Deposit Guarantee Scheme only provides basic coverage, the voluntary schemes are also being continued. Further, while the purpose of deposit insurance for the commercial banks is to protect the depositors, the voluntary quarantee schemes operated by the savings banks and the credit cooperatives are designed to avert their liquidity problems. With respect to coverage, under the EC driven Amendment, deposits are covered up to a level of 90% and an amount of ECU 20,000 for individuals but no coverage is provided to institutional investors, the public sector and enterprises that are part of a group. However, these entities may claim losses of deposits from the Deposit Protection Fund set up for the commercial banks on a voluntary basis by the Association of German Banks. Finally, in order to prevent liquidity crises in the wake of bank failures, the Bundesbank and all groups in the German banking industry joined forces to set up the Liquidity Consortium Bank in 1974 this bank grants, as and when necessary, liquidity assistance to credit institutions of unquestioned soundness.

Based on the history of legislation in the two countries' banking systems, one can understand some of the reasons behind the organizational and product structures. For instance, as we saw above, up to the 1970s, there were restrictions on the payment of interest on demand, time and savings accounts. So, mutual savings banks in New England began offering a hybrid form of interest-

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<sup>&</sup>lt;sup>7</sup> See Biswas, Fraser and Hebb, 2000 for a more detailed description of deposit insurance premium revisions.

bearing savings-checking accounts called the NOW (negotiable order of withdrawal) accounts. Attacked by the banking community as a violation of the Glass Steagall Act which allowed only commercial banks to offer checkbook deposits and also specified that such deposits could not bear interest, Massachusetts savings banks pleaded their cause in court, arguing that federal banking laws did not apply to state-chartered non-bank thrift institutions (which is precisely what the savings banks were). The Massachusetts Supreme Court upheld this argument in 1972, and the new payments service spread in the ensuing years throughout New England. Not to be competitively disadvantaged, commercial banks in that region sought Congressional approval to offer NOWs, which was granted in 1974 to all federally supervised depository institutions in Massachusetts and New Hampshire. In 1976 banks and thrifts in Connecticut, Maine, Rhode Island and Vermont were added to the NOW-approved list. Passage of the DIDMCA permitted the offering of NOWs nationwide beginning in January 1981. Then, in January 1983, the Depository Institution Deregulation Commission (DIDC) surprised the industry by coming forward with still another flexible-rate deposit instrument, the Super NOW. The Super NOW's yield to the customer was left to the financial marketplace and the discretion of the offering institution. The above brief history of the NOW illustrates how the structure of legislation has been the reason why U.S. banks and thrifts offer a more complex range of deposits and other products relative to their German counterparts.

In sum, both in the U.S. and in Germany, the purpose of regulations in banking switched from ensuring the smooth functioning of the market to safeguarding the positions of certain pressure groups. A more significant similarity however, is that both the U.S. and German banking industries are undergoing deregulation. However, in the U.S., this trend started in the mid-1970s under pressure from *within* the banking community, i.e., from dissatisfied customers and bankers. In Germany, on the other hand, the trend started in the late 1980s, with the impetus coming from an *external* source - the creation of the European

Monetary Union.<sup>8</sup> The issue is, have these differences in the regulatory framework lead to differences in the products sold and risks faced by the banks in the two countries? For instance, the deposit insurance system is substantially different in the two countries; has this impacted the risk-taking behavior of the banks differently? In the next section, we address this and other related issues pertaining to the pressures on the banking systems and the resulting responses by the banks of the two countries.

### 4. Pressures on the Banking Systems of the Two Countries and Their Respective Responses

#### 4.1. The U.S. System

The past decade has seen significant changes in the environment in which financial institutions do business. For the American banks, perhaps the most prominent force to reckon with has been the pressures of globalization. This has affected not only the scale, but also the scope of banking business in the U.S. Further, even for the American banks, the formation of the European Union accelerated the pace of globalization. Before we describe the response of the system to these pressures, we first present the structural dynamics that was already under way from the 1960s. Viewed against this backdrop, the correct context for the current responses can be established.

As the name suggests, commercial banks in the U.S. first arose to take care of the business needs of "commercial" customers. Savings banks, savings and loan associations and credit unions catered to the households. However, after World War II, two forces over-whelmed the commercial banks and flattened their growth. First, large corporate customers discovered the more flexible and often cheaper commercial paper market and second, corporate treasurers, now better trained in cash management techniques, were finding higher yielding outlets for

<sup>&</sup>lt;sup>8</sup> In fact, it has been alleged that the private banks in Germany have been strong supporters of the EU all along primarily because all their previous efforts at deregulation had been frustrated by domestic politics.

their liquid funds, outside the banks. At the same time, the post-World War II period saw explosive growth in the consumer credit and deposit markets. Higher family incomes (women had now joined the work force) had increased the supply of loanable funds while higher consumer spending had increased the demand for profitable installment and real estate loans. For the first time, commercial banks aggressively competed with the thrifts for consumer accounts.

This trend continued on to the 1970s and 1980s but for different reasons. Relative to the financially troubled energy and farming sectors and poorly performing real estate and developing country loans, the retail consumer business looked more and more profitable and stable. However, gradually consumers got more educated in terms of managing their finances and demanded greater convenience from their banks. In their scramble to provide one-stop shopping convenience to their customers, banks found their operating costs soaring and their profits eroding. Not surprisingly, bank failure rates climbed to postwar record levels in the 1970s and 1980s.

To deal with these pressures and encouraged by the federal deregulation that really began to take hold in 1980, banks elected to follow a strategy of proliferating into new services and competing in multiple markets. Today, banks are continuing to follow this strategy and the major trends we see in the American banking structure, stem primarily from this background.

Finally, with the growth of competition from the nonbanks (including thrifts and non-depository institutions such as finance companies) bank holding companies have proliferated to circumvent Glass-Steagall restrictions on investment banking activities. Originally, in 1933, the Glass-Steagall Act had prohibited commercial banks from participating in any investment banking activities. However, since the deregulatory trend of 1980s, on a case-by-case, the regulatory authorities have been allowing bank holding companies to participate in investment banking activities under certain conditions. First, revenues from securities underwriting activities cannot exceed 10 percent of total income. Second, so-called *firewalls* had to be present - that is, the investment banking activities must be conducted through distinctly separate subsidiaries, popularly

referred to as Section 20 subsidiaries. The logic behind these conditions can be found, once again, in the history of U.S. banking. Before 1933, banks in the U.S. were allowed to participate in both investment and commercial banking activities (just like the current universal banks of Germany). However, one school of thought believed that this presented a potential conflict of interests within the banks - the banks could use the private balance sheet information they obtain from lending to underwrite corporate securities that they know to be bad. Banks would then be free to market the issue to the public and use the proceeds to repay bank loans. Recently, based on both historical and modern data, Puri (1996, 2000) concluded that although banks were faced with conflicts of interest, they did not unduly exploit private information available to them to underwrite bad issues. In fact, she found that the presence of banks as underwriters benefited firms in helping them obtain better prices for their securities.

The Gramm-Leach-Bliley Act, passed in November, 1999, is perhaps the most significant response of the U.S. financial system to the pressures of global competition. In the past, several attempts at the repeal of Section 20 of the Glass-Steagall Act had failed - the success of the most recent attempt is proof of the recognition of current changes in the financial systems around the world and the need to modernize U.S. financial regulations in response. affiliations between banks, securities firms, insurance companies and other financial service providers are now permitted. It also modifies the Bank Holding Company Act of 1956 by allowing holding companies that own commercial banks to engage in any type of financial activity. Securities firms are now allowed to buy banks through the medium of this financial holding structure. These financial holding companies can also now acquire insurance companies. Finally, federallychartered banks are now allowed to own directly a new type of financial subsidiary that can participate in the newly authorized financial activities, except for insurance underwriting, real estate development and investment, merchant banking or other complementary activities. State-chartered banks can engage in these same scope of activities as long as state law permits.

#### 4.2. The German System

Unlike in the U.S., the pressures on the German banking system are manifold. The most significant one stems from the formation of the European Union and the forthcoming introduction of the Euro as the single currency for the participating 12 countries (see, for example, Bank for International Settlements, 1998, Deutsche Bank Research, 1998 and European Central Bank, 1999). The world's largest domestic financial market is in the process of being created and this has opened up possibilities of previously local players to become global players. German players, along with other EU member states' players, are suddenly finding nationally fragmented markets being homogenized, opened up and often getting deregulated too.

On the other hand, the formation of the European Union has made the European market comparable in size to the U.S. market and this fact alone has brought its own pressures on the German banks. Their performance standards, as measured by the return on equity (ROE) and/or cost-income ratios are now being compared with the U.S. counterparts. The larger German players now consider themselves in direct competition with the larger U.S. players in the global financial arena.<sup>9</sup>

The performance of the German banks however, is quite different from their U.S. counterparts and at least some of the differences could be attributed to the traditional organizational structure discussed in an earlier section. First, tight margins in retail banking have caused the private banks to steer more and more toward investment banking (see Deutsche Bundesbank, 2000b). Second, despite almost nonexistent entry restrictions, inward internationalization has been extremely low especially in comparison to outward internationalization or the foreign expansion of German banks. State ownership, excess capacity and low margins in retail banking have jointly made the German banking industry unattractive for other countries' banks to foray into. In fact, the low margins in

<sup>&</sup>lt;sup>9</sup> For an excellent discussion of this point, see Walter and Smith, 2000, Funke, 2000, and Groeneveld, 1999.

retail banking have also been the source of low return on equity ratios for the large private banks relative to their U.S. counterparts.

| Measure                     | U.S          | 5.A.          | Germany      |              |  |
|-----------------------------|--------------|---------------|--------------|--------------|--|
|                             | 1990         | 1999          | 1990         | 1998*        |  |
| Pre-tax income (billions)   | USD 18.67 b. | USD 116.31 b. | DEM 17.47 b. | DEM 59.21 b. |  |
| Pre-tax Return on<br>Assets | 0.39%        | 1.76%         | 0.48%        | 0.71%        |  |
| Deposits to assets          | 78.1%        | 65.9%         | 52.1%        | 43.7%        |  |
| Capital to assets           | 5.6%         | 8.4%          | 3.8%         | 3.9%         |  |

<sup>\*</sup> For Germany, figures for 1999 are not available Source: Bank for International Settlements, 2001

Table 5: Comparative Performance Measures of U.S. and German Banks

The EU has also brought about indirect pressures on the German banks. The *mittelstand* has grown both in size and in geographical outreach and in its turn, is responding to the expansionary pressures by turning to capital markets rather than banks for their financing needs. From the banks' point of view, the EU has brought about increased external competition through its impact on the integration of capital markets and on price transparency. However, internally the German banks face certain pressures which may be hindering their ability to compete with the external pressures. To begin with, like other developed countries German banks too are going through a securitization trend, a globalization trend and adopting the new technology, but unlike their global counterparts, the deregulation in Germany is still in progress. Consolidation is still limited to within sectors (such as within the credit cooperatives, within the savings banks and within the private banks) and state ownership remains.

However, as we see from the comparative figures in Table 5, the return on assets before tax has increased for both countries and more importantly, the banks in both countries are diversifying away from traditional banking as evident from the decline in the deposits to total assets ratio and relying more and more on feebased income sources.

### 5. After the Responses to Pressures – Convergence or Divergence?

This paper has examined the differences in structure, regulations and performance between the banking industries in the U.S. and Germany. Due to differences in the historical perspectives and cultural traditions between the U.S. and Germany, we found many differences in the organization, structure, composition and performance of the two countries' banking industries. For instance, in the U.S., until very recently, there was legislation prohibiting commercial banks from undertaking securities underwriting activities on an unrestricted basis unlike in Germany where universal banks can undertake any banking activity they want. On the other hand, German banking is characterized by state ownership, high cost-income ratios, excess capacity and low margins in retail banking.

Surprisingly, these very institutional and structural differences have lead to functional similarities in the strategies followed by the global players in the two While the starting point for Germany was integrated respective countries. universal banking, for the U.S., it was mandated separation of banking and commerce. For both countries however, the end point is the same, i.e., universal banking for the group as a whole with strategic separation of investment banking and commercial banking by subsidiary. For instance, Deutsche Bank Group's current organizational structure, so similar to Citigroup's organizational structure (as shown in Table 6), has only been introduced two years ago. The organization is along functional lines (rather than geographical lines) with asset management, consumer banking and investment banking as the three broad functional areas. On the one hand, the groups are evolving into more and more of financial conglomerates diversifying into differentiated products to realize economies of scope, but on the other hand, to facilitate productivity and efficiency some clustering of services is necessary. The clustering, as we see, is turning out to be quite similar for the leading global players.

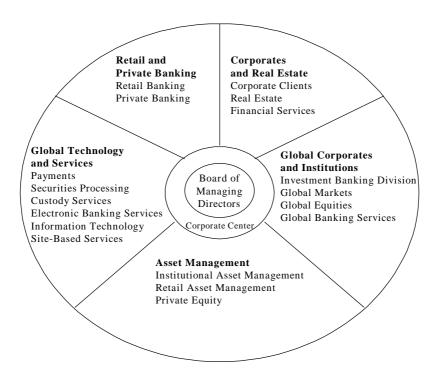


Table 6 ( Panel A): Organizational Structure of the Deutsche Bank Group, 2000



Table 6 ( Panel B): Organizational Structure of Citigroup, 2000

In the U.S., perhaps not by choice but due to past legislation, the global players are primarily investment banking groups (Citigroup might be an exception with its fairly well-balanced portfolio of services). In Germany, on the other hand, despite the absence of a Glass-Steagall Act, by choice, the global players are streamlining their core businesses to be investment banking, leaving the retail banking business to their smaller counterparts. In other words, while in the U.S. the *firewalls* were due to the Glass-Steagall Act, Germany's banks are establishing *firewalls* as a strategy for dealing with the competitive challenges of globalization and technology. In this sense, global banking is converging towards a model of universal banking with *voluntary* firewalls. The interesting issue for the future is whether this convergence of business strategy will lead to a new surge of consolidation at the global level or not.

#### 6. References

Bauer, H. and D. Domanski, (1998), "The Changing German Banking Industry: Where Do We Come From and Where Are We Heading To?" in *BIS Conference Papers, The Monetary and Regulatory Implications of Changes in the Banking Industry*, Vol. 7, pp. 208-225.

Bank for International Settlements (ed.) (2001), *G-10 Report on Consolidation in the Financial Sector*, Also available from International Monetary Fund and Organization for Economic Cooperation and Development.

Bank for International Settlements (ed.), (1998), "The Coming Transformation of Continental European Banking System," *Working Paper* No. 54, Basel, Switzerland.

Biswas, R., D.R. Fraser and G. Hebb, (2000), "On the Shareholder Wealth Effects of Deposit Insurance Premium Revisions on Large Publicly Traded Commercial Banks," *The Journal of Financial Research*, Vol.23, No.2, pp.223-241.

Burghof, H. and B. Rudolph, (1996), "Bankenaufsicht – Theorie und Praxis" Der Bankenaufsicht, Gabler, Wiesbaden.

De Bandt, O. and E. Philip Davis, (1999), "A Cross-Country Comparison of Market Structures in European Banking," *European Central Bank Working Paper Series* No.7.

Deutsche Bank Research (ed.), (1998), "The Effects of EMU on the Structure of the European Banking System," EMU Watch No. 59, Frankfurt am Main.

Deutsche Bundesbank (ed.), (1998), "Development of Banking Industry," *Monthly Report*, March, pp. 33-64.

Deutsche Bundesbank (ed.), (2000a), Bankenstatistik März 2000, Statistisches Beiheft zum Monatsbericht 1, Frankfurt am Main.

Deutsche Bundesbank (ed.), (2000b), "The Performance of German Credit Institutions in 1999," *Monthly Report*, September, pp. 45-77.

Deutsche Bundesbank (ed.), (2001), Monthly Report, January, Statistical Section, Frankfurt am Main.

European Central Bank (ed.), (1999), "Possible Effects of EMU on the EU Banking System in the Medium to Long Term," Frankfurt am Main.

Fields, P.L. and D.R. Fraser, (1999), "On the Compensation Implications of Commercial Bank Entry into Investment Banking," *Journal of Banking and Finance*, Vol.23, Pp.1261-1276.

Funke, Norbert, (2000), "Die Zukunft der Europäischen Bankenlandschaft, in: Horst Löchel (ed.), *Finanzmärkte in Euroland*, pp.49-68, Bankakademie Verlag, Frankfurt am Main.

Groeneveld, J.M., (1999), "The Forces Behind the Consolidation Trend in the European Banking Industry," *Kredit und Kapital*, March, pp.369-392.

Hawkins, J. and P. Turner, (1999), "Bank Restructuring in Practice: An Overview," *Bank for International Settlements Policy Papers* No. 6, August, Basel, Switzerland.

International Monetary Fund (ed.), (2000), "International Capital Markets," Washington D.C.

Klein, D.K.R., (1998) "Die Bankensysteme der EU-Länder," Fritz Knapp Verlag, Frankfurt am Main,.

Klebaner, B.J., (1990), "American Commercial Banking: A History," Twayne Publishers, Boston.

Puri, Manju, (1996), "Commercial Banks in Investment Banking: Conflict of Interest or Certification Role?" *Journal of Financial Economics*, Vol.40, No.3, pp.373-401.

Puri, Manju, (1999), "Commercial Banks as Underwriters: Implications for the Going Public Process," *Journal of Financial Economics*, Vol.54, No. 2, pp.133-163.

Rose, Peter S., (1987), "The Changing Structure of American Banking," Columbia University Press, New York.

Saunders, A., (2000), "Financial Institutions Management: A Modern Perspective," Irwin McGraw Hill, New York.

Walter, I. and R. C. Smith, (2000), "High Finance in the Euro Zone: Competing in the New European Capital Market," Pearson Education Limited, London.

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