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The Blurring Borders of Banking

Gunter Dufey

The University of Michigan Business School, Ann Arbor MI, USA
WHU Otto-Beisheim Graduate School, Vallendar, Germany

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A. Introduction: Context and Significance

Capital flows do not take place in a vacuum. They are channeled through institutions that constitute an important part of the world's financial landscape. This institutional framework has a significant impact on the magnitude, the direction, and the volatility of capital flows.

Issues related to the structure and the dynamics of the institutional framework of the global financial system have attracted renewed attention in the 1990s. The world has learned that "financial system architecture" (Booth A. and Thakor A. Fall 1997) can and does affect economic performance in significant ways in terms of both quantity --- in the sense of attaining growth potential -- as well as the quality -- macroeconomic stability. While a well functioning financial system can yield growth rates on the basis of very modest savings rates by minimizing the misallocation of resources, as we have seen it in the United States during the 90s, a nonfunctional system will cause persistent value destruction, as shown by the Russian economy during the last decade. The Asian crisis finally has taught everyone a lesson about the role of the financial system in ascertaining macroeconomic stability, or rather the lack thereof.

Traditionally, banks have constituted the core of the financial system. In some countries they played a dominant role (e.g. Japan); in others, they had to share the delivery of financial services[1] with many nonbank financial intermediaries as well as independent capital market institutions, depending on the historical/political evolution and the resulting regulatory framework.

To illustrate this point, in the United States, for political reasons deeply imbedded in the history of that country, the power of banks has been deliberately curtailed, through regulatory intervention, as exemplified by the McFadden and the Glass-Steagall Acts. In line

[1] For purposes of this paper the term 'banking services' is used in the traditional, narrow context of commercial banking services e.g. the execution of payments, time deposit accounts for savers, various overdraft facilities and loans. In contrast, the term 'financial services' takes a comprehensive, broad view of financial products, including insurance, leasing, securities broking and other portfolio investment products and their distribution

with this tradition, the United States also defined banks in a very narrow sense, i.e. as "deposit taking institutions".

In contrast, Europe and Japan chose a different path. The European Union, for example, uses a much broader definition: banks comprise all 'monetary financial institutions' whose business is to receive deposits and close substitutes for deposits (for example, through the issuance of debt securities) and, for their own account, grant credit (including investing in securities). The consequences in terms of the shape of the institutional framework are substantial as comparative analyses show. (Dufey, G. 1998b and sources cited therein). None of these observations is new and there exists an extensive literature. What the analysis of the legal framework shows, however, is that the institutions which make up a financial system have been shaped through time by a complex combination of the interaction of (a) microeconomics, (b) systemic "accidents", and (c) regulatory response. In other words, extant financial systems are path dependent.

Technological change over the last 20 years or so has accelerated the process. The purpose of this paper is to show the driving forces of these change and ultimately explore the results in terms of the borders of banks in particular and the financial services industry in general. Such an examination begins logically with a look at the traditional core of the community of financial service providers, i.e. institutions called "banks," before proceeding with an analysis of the blurring of the borders of such enterprises.

The Theory of Banking and the Uniqueness of Banks

Clearly, rapid technological progress has permitted a host of new entrants into the market for financial services, which were traditionally the domain of banks. Of course, this phenomenon has given rise to the question whether there are any areas of banking that represent a field of unique competency of such institutions. Banks and banking have been the subject of intense academic analysis for a very long time. However, under the seemingly sudden onslaught of new competitors and the arrival of new forms of delivering financial services, the issue of what is the essence of banking has gained a new urgency.

For a long time banking theory has been dominated by the notion that these institutions posses information-based advantages. Monitoring the transaction accounts of their customers, banks obtained unique insights as a matter of course. Such information, in turn, was believed to allow them to arrive at superior judgements about the financial services needs and the creditworthiness of their customers. With the spread of information technology, data mining and similar techniques accessible to many other institutions, this traditionally held advantage of banks has been weakened considerably. Indeed the question has been raised to what extend are banks still necessary at all (see Llewellyn, D.T., 2000 and sources cited therein). This challenge consequently gave rise to the search for a revisionist view of the essential advantage of banks.

The evolving theory of banking of the 90s arrives indeed at a consensus about banking: *yes*, there is something unique about banks. It is they who provide "liquidity services", i.e. options on readily available purchasing power, to both businesses and consumers.

While previous theories of banking have focused on either the deposit taking or, alternatively the lending function (for a concise presentation of the literature see Bhattacharya and Thakor, 1993), the emerging view of the 90s recognizes explicitly the *relatedness* of these functions. On both sides of the balance sheet, such intermediaries, i.e. banks, capture unique advantages because of their ability to reduce uncertainty by pooling, by capturing scale economies and, last but not least, by exercising greater market power in comparison to that exerted by individuals. In a recent paper (Kashyap, et al. 1999) it is recognized that the importance of banks is based not so much on the loans that they disburse but, indeed on their loan *commitments*, i.e. the options on liquidity that they offer their customers. Thus, both on the deposit side as well the lending side, banks offer similar services --- often to the very same customers: namely the provision of purchasing power on demand in response to unpredictable requirements for funds. Both the deposit business as well as the provision of loan commitments require "reserves" in the form of cash and securities holdings. The synergistic effect between the two activities becomes particularly clear when it is recognized that the timing of liquidity demands of depositors and borrowers are less than perfectly correlated.

The concept of the uniqueness of banks based on the provision of liquidity would be incomplete however without an inherent institutional feature of modern financial systems: the efficiency of banks in providing liquidity services is further enhanced by the fact that they have direct access to liquidity reserves at the respective Central Bank. Thus, they have not only available liquid reserve accounts which are default free, but they tend to have access to overdraft facilities (see Corrigan, E.G., 1982 and 2000). It is true, such facilities are often available on a discretionary basis only, but almost always at preferential rates. In return, banking firms must accept a special regime of supervision.

This public policy dimension of banking gives the concept of defining the institution "bank" a certain arbitrary aspect: banks are financial intermediaries that perform a unique economic function for other entities in the economy. Yet, whether they can perform this function competitively depends ultimately on a discretionary regulatory decision: *exclusive, direct access to Central Bank liquidity*!

Recently, the issue how further advances in technology affect banks and central bank powers has come to the fore, particularly with respect to the growing introduction of e-money by non-bank institutions such as web-based auction houses, firms that provide travel and other services electronically, or even other entities who command a degree of operational competency and integrity. The resulting debates have yielded a number of interesting insights that parallel in some respects earlier controversies regarding the role of non-bank financial intermediaries. The outcome of the debates is likewise quite similar: First, e-money is unlikely to replace cash for transactions completely, for a variety of reasons, mainly having to do with the privacy motive. And as long as there is some cash in the system, Central Banks will be able to influence the "short-term rental fee" for liquidity, i.e. interest rates. Second, indeed if all cash in an economy were to be replaced by e-money, the respective Central Bank would still be able to influence short-term interest rates by offering to lend or borrow e-money at a rate below or above the prevailing time value of purchasing power.[2] Such activities may affect a Central Bank's profitability, but not its essential ability to control the supply of liquidity to an economy.

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[2] For an extensive analysis, see papers Goodhart, C. et al, Conference Proceedings, forthcoming in International Finance, 2000. See also the similar conclusions of earlier work published in Deutsche Bundesbank, Monthly Report, June 1999 and March 1997.

The conclusion from the review of traditional banking can be generalized. The *interaction* between economic performance and regulatory discretion, while not totally unique to banking, is a significant aspect of all the institutions that comprise the financial system as a whole. This becomes clear when one looks at the business of providing financial services in a broader context.

Other Financial Service Providers

Generic FSP's (financial service providers) focus on delivering services which involve originating contracts, gathering, analyzing and disseminating information, managing risks and in the process establishing and maintaining relationships with customers and other FSP's. Depending on the technology available which determines product cost, a wide variety of institutions have emerged that meet two conditions: (1) The ability to produce and deliver a financial service (or bundle of services) competitively *and* (2) being licensed to operate in a given market (see Table 1). Thus, it is the *interaction* of economic/managerial capability with the regulatory framework that results in the institutional structure of a financial system.

Table 1

Structure of Financial Institutions

United States	**Europe**
Commercial banks	
Savings institutions	
Credit unions	Banks*
Finance companies	* differences due to
Securities brokerage	ownership
On-line brokerage	
Investment Banks	
Mutual fund companies	Affiliates of banks
Mortgage companies	Mortgage banks
Insurance companies	Insurance companies

B. Dynamic Factors Driving Changes in the Banking Industry[3]

The objective of this section is to show the causal links among the drivers of change in the banking industry. Beginning with a brief review of developments regarding relevant technology, we look at the impact on the internationalization of the financial service business. It will be shown that this internationalization process had a major impact on the regulatory environment. By allowing financial institutions to choose a regulatory regime for all or parts of their business, internationalization became a driving force with respect to the process of deregulation and liberalization that occurred in world financial markets, albeit at various speeds in different countries.

Regulatory liberalization has many effects on the financial service industry. The essence of these effects is reflected in the pace of financial innovation. In turn, financial innovation has changed profoundly cost structures within and among institutions for creating and delivering financial services. The result is an ongoing reshuffling of the shape and scope of the institutions that produce and deliver such services. It is at this point that the real essence of the blurring borders of banking becomes apparent. Finally, we will emphasize the dynamic nature of this process.

1. Technology and it's Impact on Financial Services

Of the multiple and complex aspects of technology, two appear of particular importance for a business such as financial services, whose essence consists of contracts and bits of information. One is computational capability that allows the manipulation of numerical data at very high speeds. The other aspect of technology that is relevant here refers to communication technology. It allows the transmission of large amounts of data over long distances at ever decreasing costs, making geographical distances less and less relevant. Obviously the latter phenomenon has given rise to the internationalization, or even globalization of financial services.

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[3] Parts of this section are based on Dufey, G. (1998a).

2. Internationalization/Globalization

With advances in communication technology it was no surprise to find that financial claims began to cross borders in the post world war period, in spite of the fact that during wartime extensive regulations were imposed on transactions. "Currency inconvertibility" is the term that characterized the period. However, it was recognized early on that economic recovery and growth require a modicum of freedom to conduct financial transactions, and once the regulatory environment for those transactions had been sufficiently liberalized, e.g. convertibility on current account transactions had been introduced, the process could not be curtailed. Once the dikes had been breached, money like water created ever widening gaps in the bulwark of capital controls. The advances in information and communication technology allowed financial institution as well as their customers to look for more hospitable environments.

A dramatic example is the growth of the so-called offshore markets. The essence of this phenomenon was reflected in the fact that substantial proportions of the total credit intermediation activity for major currencies has shifted onto the books of banks outside the country where the respective currency is means of payment. To illustrate this point, by the 1990s, more than 50 percent of all USD *time deposits* were found to be on the books of banks *outside* of the United States. Although many of these institutions are simply branches of U.S. banks, often no more than "mailbox entities" in some convenient offshore jurisdiction, many are foreign based banks who are now enabled to competitively offer deposits and loans denominated in US dollars. For other convertible currencies the proportions of funds intermediated offshore are somewhat smaller, but still significant.

In practical terms, the advantage of the offshore market means that every transactor, resident or non-resident, has had increasingly the alternative of contracting for a time deposit in a market outside the country in which the respective currencies is means of payment. The same is true on the credit side. Any potential borrower now has a choice; funds can be obtained from a financial institution in the national market of their currency, or a market outside that country in the very same currency. It is not surprising that these developments have increased competition among banks dramatically. Essentially, through the offshore markets it became possible to separate currency, jurisdiction and institution. To illustrate this point: anyone with significant liquid funds can obtain a Yen (time) deposit in a branch of a

Canadian Bank in, say, Singapore. Of course the same holds on the borrowing side. Indeed, this phenomenon can well be considered the true essence of the globalization of financial markets, the disappearance of the links that define traditionally a national financial market: currency, regulatory framework and the governance of financial institutions.

3. Deregulation and Liberalization

It is a common place to state that banking and finance are regulated industries. In virtually all countries, the role of government extends far beyond the traditional scope of economic regulation, i.e. the enforcement of contracts and basic consumer protections. Three reasons are traditionally put forth to justify the need for a more extensive regulation of the financial market place relative to the markets for most other products: (a) banks are institutions that offer demand deposits that constitute the primary means of payments; (b) the safety of the institution must be protected because of the possibly secondary effects of the default of financial institutions on the non-financial sector of the economy and (c) to assure an "appropriate" or "just" allocation of credit.

Over time, public debate initiated in academic writings has found most of these arguments wanting. It has been recognized that the quest for regulation in a political economy originates primarily from two sources: (1) established competitors wish to maintain their market positions, and regulation is definitely an effective way to defend established market shares from the onslaught of new entrants in the industry. (2) The other powerful force for financial market regulation is represented by the political establishment, whose members find the financial system a wonderful opportunity to allocate resources according to political imperatives rather than the rules of economic efficiency. Obviously it is at this point where internationalization comes into play. Financial institutions and their customers have the opportunity to escape such constraints by moving their activities to alternative jurisdictions.

The resulting arbitrage compels a rethinking of the needs for regulation. Put differently, the question surfaces in terms of the *economic benefits* of regulation. The body politic, albeit slowly, begins to distinguish between regulations that create value by making the system more efficient and those that only serve special interests but detract from the benefits accruing to the economy at large. Regulatory economic value is created by rendering the system more efficient by making it a safer and more transparent place to do business.

Conflicts between individual institutions and society at large must be reconciled at this juncture.

It is not surprising then that the globalization of markets as it is often referred to, has put tremendous pressure on different national regulatory systems. It has been the ultimate source for further liberalization, a phenomenon whose success is difficult to understand in the face of resistance not only from established competitors, but also the bureaucracies and members of the political class who lose power and influence in an important dimension of the political economy, namely the allocation of financial resources. In such an environment regulators are forced to focus on the true need for regulation.

Globalization of competition in financial services has in turn brought to the fore the need to harmonize and coordinate regulatory systems across borders. The confrontation of various national regulatory regimes in combination with the pressure to harmonize has forced regulators to find common ground by restricting themselves to focus on those regulations which are really essential, i.e. those that indeed create value by enhancing the safety and efficiency of the system. In contrast, regulations that have negative economic value by detracting from the efficiency and safety of the system tend to be eliminated. A perfect example is provided by rules stipulating minimum reserve requirements that exceed the working balances of banks with a central bank.

A review of liberalization efforts in financial markets during the last thirty years and more recently in many emerging markets is illustrative of these dynamic effects. Clearly, the trend toward deregulation provided the scope for banks and other financial institutions to enlarge the offerings of their products and to offer them in different forms. Recent changes in the United States illustrate this principle. New legislation in the form of Gramm-Leach-Bliley Act (see Appendix) has been put into effect in 1999, expanding considerably the permissible scope of operations and services for US banks.

With respect to the liberalization process in financial markets of emerging markets and transition economies, a troubling observation has vexed policy makers and indeed a wide range of financial market participants: it appears that the process of (external) financial market liberalization advocated strongly by most industrialized countries and the international institutions such as the IMF and the World Bank, has been accompanied by

subsequent financial crises. This empirically observable pattern has been so pervasive, that a causal relationship was suggested.

Closer analysis of the circumstances of such crises provided evidence that early analyses of the liberalization-financial crises linkage tended to overlook a crucial aspect of this process: in almost all countries afflicted by this phenomenon, it turned out that *external* liberalization was not matched by *internal* financial market liberalization. The credit allocating banking institutions continued to be influenced disproportionately by government and/or related non-bank entities. The absence of proper incentives for prudent lending, combined with unrestrained access to funds from abroad and a regulatory system that made for moral hazard by providing implicit or even explicit government guarantees could not help but create conditions that were prone to systemic bank failure.

4. Financial Innovation

Historically, it was not surprising that the wave of financial innovation that has characterized financial markets during the past two decades arrived shortly after markets of industrialized countries had become internationally integrated and gone through a thorough process of *de jure* and *de facto* liberalization. Banks and other financial institutions began to explore new products and to experiment with new delivery systems in response to forces on the demand side as well as the supply side. On the former, market turbulence that accompanied deregulation stimulated demand for hedging products. At the same time, supply of such products was facilitated by low cost computing power that became quickly widespread. Further, and probably for first time in history, there was a significant impact of the contributions from academia in providing formal models of new instruments allowing for hedging and therefore relatively precise pricing of such instruments[4].

The process of financial innovation which began in the United States in the early 80's, reaching Europe in the mid 80's and establishing itself in Japan in the early 90's, has been the subject of an extensive literature. There is indeed evidence that the design of a financial

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[4] The most prominent example are options. While records of the use of such financial contracts go back to the 15th century where options on commodities were traded in Osaka and later Amsterdam, only the relatively recent work of Black, Scholes and others permitted institutions to offer such products as an integral part of their business

system has a distinct impact on its ability to innovate. (Boot, A., and Thakor, A. 1996). The process of financial innovation *per se* comprises essentially three distinct aspects: the unbundling and bundling of financial contracts, the 'securitization' of illiquid claims and the development of new channels for distributing financial services via telephone and the internet, the mobile dimension representing the most recent refinement of technological progress.

The unbundling/bundling technique of financial innovation starts with the premise that traditional financial contracts, say a fixed rate loan, consist really of a bundle of different 'instruments' which, with the help of some computational capabilities, can be 'stripped' into a variety of components: among others there is the *availability guarantee* that has become incorporated in various 'commitment' instruments such as revolving Underwriting and Note Issuance 'facilities'. Closely related are a variety of credit derivatives. Further, it is possible to strip out the commitment of a fixed interest rate, isolate it and trade it as *interest rate futures, FRA's* and *swaps*. This is not all: when borrowers can get out of fixed rate obligations by law or simply market power, the lender has granted an *interest rate option*. And to the extent that assets whose price correlates with the price of a commodity collateralize the loan in one way or another we are dealing *de facto* with a *commodity option*.

The economic advantage of this process is based on the potential of selling the various risks and 'burdens' to those in the marketplace who charge least for them, lowering total costs in the process. By the same token however, it must be recognized that this activity facilitates arbitrage transactions that leave some of the traditional and slower reacting institutions with those elements of the "bundle" where compensation is inadequate relative to the risks taken.

Just as easy as traditional contracts can be unbundled is it possible to combine various elements, but now into packages that fit more precisely the needs of market participants who will be paying only for what they really want and not for 'packages' with elements of little or no interest to them. This of course is the essence of financial engineering that has become the defining trademark of the modern investment banking industry.

Another dimension of financial engineering involves the process of securitization: the "repackaging" of illiquid financial claims in to tradeable securities. The classic illustration of this principle is represented by the development of the negotiable CD that substituted for an

illiquid time deposit. The economic benefits of securitization are obvious. Economic agents value liquidity because it allows reaction to unexpected needs for funds and it permits to get out of value loosing positions quickly, before other market participants have heard the 'news'. Obviously, the latter is mostly an illusion, especially in light of ever more efficient communications -- but then people are willing to pay for illusions.

Much has been written and said about the arrival of new delivery systems for financial services (for an excellent survey see "Online Finance: The Virtual Threat." Survey in The Economist, May 20th, 2000) Clearly, by changing the marginal cost for the most mobile customers these new technologies have an impact on the both individual firms as well as the structure of the industry that goes far beyond their relatively small market penetration in even the most advance countries. What is important however is that these technologies have rendered markets *contestable,* thoroughly changing the competitive dynamics in the market for financial services.

5. Changing Institutional Structures, 'Blurring' Borders

From the forces of change identified above, for observers of the rapidly changing industrial structure of the financial services industry, a confusing pattern of crosscurrents becomes apparent: very few generalizations hold up to scrutiny if one reviews global markets for financial services and their providers. (Walter, I. 1998). Indeed, looking at two major dimensions of 'diversification' by geographic reach and scope of product offering, a seeming contradictory pattern emerges. While a handful of US American investment banks has achieved significant market shares by the second half of the 1990's, hovering around 50 percent in Tokyo, Frankfurt, Paris and Madrid, not to mention London, their commercial banking brethren rarely attain more than 5 percent market share in terms of local business, which includes the local affiliates of multinational companies headquartered in their respective home countries. Those that hail from other countries do even worse in markets outside heir home countries. Significant exceptions to this picture can be found only in emerging markets where foreign commercial banks enjoy technological and reputation advantages against local competitors, weakened by eons of abuse by their governments who forced them to channel funds into politically attractive projects.

At the same time, one observes a constant shift in focus: while a number of financial firms attempt to turn themselves into supermarkets for financial services, attempting to offer their customers 'wall to wall' fulfillment of financial needs, others are narrowing their focus, shedding retail operations, or investment banking activities, concentrating on narrow market segments, such as active traders in the retail markets, for example. It appears that firms in the financial services industry choose their strategy in a trial and error mode, taking into account their existing portfolio of resources, lined up against evolving market opportunities and regulatory constraints.

Interestingly, as regulatory constraints in many countries have been loosened considerably and firms are free to extend their reach both geographically and in terms of product scope, managerial constraints ar becoming more important. The difficulties to manage complex organizations with different corporate cultures across international borders become increasingly the criucial constraint on the expansion plans of financial services firms. In particular, specialized personnel and its care becomes a factor in determining the shape of institutions. Recent examples abound; they comprise the shifting of investment banking operations of banks in Continental Europe to London, where the environment seems to be more conducive for a business that requires the payment of 'trucksize' bonuses in one year and brutal cuts in personnel the next. Alternatively, the painful abandonment of the merger of Dresdner and Deutsche Bank due the rebellion of mobile investment banking staffs in both institutions clearly highlights the constraints that impinge on remaking institutions, regardless of the apparent favorable economics of the total deal. Other examples include frequent failures of acquisitions of investment banking institutions by commercial banks, where value was destroyed by the inability of management to successfully integrate the different business cultures.

Another illustration of these crosscurrents is provided by the asset management industry.[5] On the one hand, one observes a distinct process of concentration resulting in the emergence of a large 'fund factories', reaping economies of scale in processing, trading and most importantly, marketing and promotion. Only a large stable of funds provides the opportunity to wind-up or merge poorly performing funds in order to enhance aggregate fund

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[5] For a comparative analysis of the drivers behind the changes of the mutual fund industry in Europe vs the United States see Walter, I. (1999).

performance taking maximum advantage of the "survivor bias." At the same time, however, there will always be a significant group of investors looking for the fund manager with the magic hand who is able to outperform the market -- for a while. This situation represents fertile ground for new investment management boutiques, hedgefunds and other exotic specie.[6]

Such considerations point to a unique and perhaps defining characteristic of the market for financial services: it is incredibly segmented! To illustrate this point, while the sophisticated treasury operation of a multinational corporation, staffed with academically trained analysts and savvy traders will buy the elements of financial contracts from a number of specialist suppliers and assemble them themselves to tailor-made packages, fitting the need of enterprise financial strategy, there exist many customers incl. high networth professionals who are not only willing to pay for advice but value the convenience of obtaining bundled products and one-stop shopping

C. Conclusions

1. How will technology affect the banking industry?

What does the presentation of dynamics described above, focusing on the interaction between technology driven changes (a) in the economics of producing and delivering financial services products and (b) the results from the regulatory arbitrage in globalized markets tell us about the future of the financial services industry?

What will this mean for the "borders of banking" as reflected in the evolving structure of the banking industry?

We would venture first the conclusion that there will be little change in the core function: banks will continue to provide transactions and payment services due to their cost

[6] (For a comprehensive survey of the asset management industry in the United States see Wermers, Russ, August 2000)

efficiencies and the fact that they have access to Central Bank clearing and overdraft facilities. In this respect aone banks will continue to play a unique role at the core of any financial system. It is true they will have to fight for market share even in payment services with a number of institutions who will get business through "preclearing" (i.e. credit cards and other payment providers). However, Banks will be able to defend their core posititon, while markets "around the edges" of this core will be hotly contested.

The retailing industry is probably a good model to show the trends in the broader financial scene. Thus, it is probably safe to say that the trend toward the emergence of a limited number of financial supermarkets, selling their global reach, while being firmly entrenched in a "home" market will continue. Citibank Group, Deutsche Bank, HSBC and Merrill Lynch represent a *type of institution* that will surely be around, although their names may change as mergers and acquisitions will be the major process to redefine the boundaries of such financial service firms.

Interspersed among these mammoth institutions will be a few quite specialized firms with global reach, primarily in the investment banking and asset management area, broadly defined. In today's environment, Goldman Sachs, Lehman, Fidelity and Schwab would be the prominent examples. Further there will be room for institutions who will build up strong positions in larger national markets e.g. Japan and various economically integrated regions of the world. Among those come to mind Development Bank of Singapore in South-Asia or Hypo-Vereinsbank in Continental Europe.[7] In between theses more traditional structures of relatively large institutions, there will be lots of room for boutiques as well as chains of convenience stores. Their names will rapidly change in an M&A environment where "the fast eat the slow".

To sum up the industrial structure of the financial services firms, or "banks," if one prefers, will characterized by dynamic change as the borders of individual firms will be redefined rapidly by technologically driven changes in cost structures. The requirement for substantial reputational capital as well as remaining regulatory constraints will assure that this process will not be quite as rapid as technology permits.

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[7] Note, we are not courageous or naive enough to make predictions about theses institutions per se. We simply use them as being a representative for a type of institution, e.g. global players, regional universal banks etc.

2. Challenges for the regulatory regime

All of this will compel substantial change with regards to regulatory regimes. First of all, the forces pushing toward global coordination of regulatory regimes will increase in order to respond to the process of regulatory arbitrage described in the body of this paper. Second, there will be the new emphasis on regulatory technologies which are based on a) increased disclosure, precariously balancing privacy concerns of financial firms and their clients with the public need for increased information; b) there will be continued and rapid substitution of direct supervision by a system that focuses on designing incentives for proper risk management in financial service institutions.

The direction of these trends is already clearly recognizable: they involve primarily appropriate risk based capital adequacy rules. The general introduction of layers of subordinated debt in banks which relies on market forces to obtain early warning signals represents another important step in this direction.

It would be naive to leave out of this catalogue some unresolved issues. To quote Hal Varian: "Technology changes – laws of economics do not." Applied to bank supervisions, this means that the same old issues continue to be with us:

- conflicts of interest
- moral hazard
- occasional irrationality of markets
- incomplete information

In the same category of unresolved issues are deposit insurance and public policy questions about "too big to fail – too small to be saved". It may well come to the point then that the rapidly changing shape of the financial service industry will compel fundamental reconsideration of the *scope* of regulation; possibly regulators will throw in the towel in frustration and move to the narrow bank concept where in line with modern banking theory, one will segregate institutions that provide the crucial and unique function of providing liquidity to the rest of the participants in the economy. In turn the remainder of the financial services industry will be left to market forces. At this point, economic theory may well clash irreconcilably with the real world of the political economy with outcomes that are quite random.

APPENDIX

Financial Modernization –

A Summary of the Gramm-Leach-Bliley Act of 1999[1]

On Friday, November 12, 1999, President Clinton signed into law the Gramm-Leach-Bliley Act of 1999 (henceforth GLB) that repeals the Depression-era laws governing the U.S. financial system. Prior to the President's action, the bill cleared the Senate and House by substantial margins, 90-8 and 362-57 respectively, on November 4, 1999. In brief GLB is organized as follows: Tittle I, II and III apply to organizational and regulatory structure issues, Title IV limits unitary thrift holding companies, Title V creates privacy protections, Title VI modernizes the Federal Home Loan Bank System, and Title VII address other issues. This article discusses the bill, its components, and its implications on the financial industry landscape.

Title I – Facilitating Affiliation Among Banks, Securities Firms, And Insurance Companies

The main purpose of this initiative was to repeal the provisions of the 1933 Glass-Steagall Act and the 1956 Bank Holding Company Act that prohibit the affiliation of banking, securities and insurance firms. The GLB Act removes these barriers in various ways.

Bank holding companies will be allowed to enter the previously prohibited lines of business after qualifying as a financial holding company (FHC). FHCs will be allowed to engage in approved financial activities including insurance and securities underwriting and agency activities, merchant banking[2], and insurance company portfolio investment activities. To qualify as a financial holding company all insured depository subsidiaries must have attained at least a "satisfactory" CRA rating at the time of application. The holding company will not be allowed to make new non-banking acquisitions of engage in new financial activities if even one insured subsidiary falls below a CRA[3] rating of "satisfactory".

GLB also establishes guidelines, under which national banks may enter new financial activities, including securities underwriting, through a financial subsidiary[4]. (National bank subsidiaries will not be permitted to engage in insurance underwriting, real estate investment and development or merchant banking.[5]) The legislation also allows banks to directly deal in,

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[1] The Research Department, Federal Reserve Bank of Chicago has prepared this summary from legislation and press releases. It has been published in Capital Market News, December 1999 and has been slightly edited by the author.

[2] Merchant banking is defined as the privately negotiated purchase of equity instruments by a financial institution with the objective of selling the instruments at the end of an investment horizon, typically measured in years.

[3] CRA refers to the Community Reinvestment Act, a piece of legislation compelling U.S. banks to engage in social lending activities esp. the "inner cities".

[4] Financial subsidiaries are defined as any subsidiary other than those solely engaged in previously approved activities.

[5] In five years national bank subsidiaries may be able to engage in merchant banking activities if both the Fed and the treasury agree to allow it.

underwrite, and purchase municipal bonds (including revenue bonds) for their own accounts. National banks must meet the following requirements in order to engage in these new activities:

- The bank and all of its insured depository institution affiliates must be well capitalized and well managed after the bank's investment in its financial subsidiaries is deducted from the bank's capital. A bank may not invest more than 45% of its assets, or $50 billion, whichever is less, in financial subsidiaries.
- Banks' loans to and investments in its subsidiaries would be limited to no more than 20% of the banks' capital. The bank and all depository affiliates must have at least a "satisfactory" CRA rating
- The following ratings-based criteria must be met:
- If the bank is among the 50 largest insured U.S. banks (in terms of assets), it must have al least one issues of long-term, unsecured debt outstanding that is rated within the top three rating categories of an independent rating agency.
- If the bank is among the 100 largest insured U.S. banks (but not the 50 largest) the bank must meet either the rating requirement noted above or a comparable test jointly agreed upon by the Federal Reserve and the Treasury.
- The above does not apply to national banks that are not among the 100 largest insured U.S. banks; that is, these institutions will not be able to engage in new financial activities.

GLB preempts State law, with certain exceptions, and puts national and State chartered banks on a more equal footing in exercising expanded powers. State banks will have to meet criteria similar to a national bank before they would be able to establish new financial subsidiaries. The bill also mandates that all individuals engaged in insurance activities be appropriately licensed as required by State law.

The legislation provides for the streamlining of bank holding company supervision. The responsibility of the Federal Reserve (Board) will be extended to the regulation of FHC organizations. In the Board's execution of its supervisory activities, it will accept reports from other regulatory agencies to the fullest extent possible. The Board may examine functionally regulated subsidiaries when they pose significant risk to affiliated banks and thrifts, when existing reports do not adequately depict risk monitoring systems, or where there is sufficient reason to believe that the subsidiary is not in compliance with Federal law. GLB also contains provisions under which FHCs and banks may enter additional activities, and the Federal Reserve and Treasury must jointly approve these new activities.

Title II – Functional Regulation

GLB eliminated the broad broker-dealer exemption currently given to banks, with a few exemptions. This generally means that banks providing securities related products would be subject to the same regulation as other providers. The Securities and Exchange Commission has primary regulatory authority over these activities, however, banks may continue to be participant in derivative activities involving credit and equity swaps. The SEC and Board share "rulemaking and resolution" powers regarding the treatment of new products that contain both banking and securities elements. The SEC is tasked with determining the treatment of any new hybrid product created by the industry. Prior to commencing the

rulemaking process for any product, the SEC is required to seek agreement with the Federal Reserve regarding broker-dealer registration requirements.

In drafting the bill's language and Conference Report, lawmakers were careful to ensure that the SEC" oversight will not disturb traditional bank trust activities. To that end, the bill exempts banks that execute transactions in a trustee or fiduciary capacity from registration under Federal security laws. Two criteria that must be met to qualify for this exemption: The bank must be chiefly compensated for these services by means of administration of annual fees[6], a percentage of assets under management per order processing fees[7], or any combination thereof. Additionally, the institution may not publicly solicit brokerage business.

Title III - Insurance

The legislation preserves and expands the primary jurisdiction of State insurance regulators over insurance activities, including serving as the functional regulator of insurance activities at national banks. Federal regulators are tasked with establishing consumer protection rules for the sale of insurance by national banks. They are to ensure, for instance, that customers are not mislead into believing such insurance products are federally insured, and are not coerced into buying other bank products.

Title IV – Unitary Savings And Loan Holding Companies

Lawmakers effectively closed the banking-commerce loophole created by the Unitary Thrift Charter. Existing unitary holding companies may only be sold to financial companies and de novo thrifts are prohibited from engaging in or affiliating with non-financial companies.

Title V – Privacy

Title VI – Federal Home Loan Bank System Modernization

Title VII – Other Provisions

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[6] Administration or annual fees may be payable on a periodic basis (i.e. monthly or quarterly).

[7] Processing fees may either be flat or capped and may not exceed the cost of executing transactions on behalf of customers.

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