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The Impact of Regulation on Financial Intermediation

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Financial systems are subject to extensive regulation in both developed and developing countries. The challenge for policy-makers is to create a robust regulatory framework that promotes stability and efficiency and avoids the need for costly interventions.

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This paper — a product of the Financial Policy and Systems Division, Country Economics Department — is part of a larger effort in PRE to study the impact of regulation in the financial sector. Copies are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Wilai Pitayatonakarn, room N9-003, extension 37666 (25 pages).

Financial regulation has a pervasive impact on the structure and efficiency of financial intermediation. It is perhaps the most important determinant of differences exhibited by countries at a similar level of economic development and with access to common technologies.

The 1980s witnessed extensive deregulation and reregulation. Understanding the rationale for removing some regulations and introducing others is essential for designing and implementing effective regulatory reform.

Vittas classifies financial regulations by their primary objective into six types: macroeconomic, allocative, structural, prudential, organizational, and protective. He notes that most regulations have effects that cut across different objectives.

Historical experience suggests that macroeconomic and allocative controls tend to be ineffective and inefficient. It also shows that prudential, organizational, and protective controls are necessary because financial systems (1) suffer from moral hazard, adverse selection, and the free rider problem; (2) are susceptible to imprudent and fraudulent behavior; and (3) are prone to instability and crisis.

Vittas argues that structural controls are the most controversial types of financial regulation. Such controls are often motivated by political considerations, such as preserving the monopoly position of domestic banks or protecting the turfs of different types of financial institutions.

He maintains that many of the problems facing the U.S. financial system, such as the fragmented and fragile banking system, the financial crisis of the thrift industry, and the segmented banking and nonbanking parts of the financial system, can be attributed to the adverse effects of structural regulations.

Historical experience also suggests that regulatory reform can take place more easily if it can be accomplished without cumbersome legislative changes. In fact, the threat of regulation, if prompt action is feasible, may be as effective as actual regulation.

Vittas argues that the most important task facing policymakers is creating a sound and robust financial constitution that governs what financial institutions are permitted to do and what basic conditions they have to meet. But, he adds, the financial constitution needs to be, as far as possible, neutral between different types of financial intermediaries and markets. Such a framework would contribute to higher efficiency and stability in the first place and would thus avoid the cost of later interventions.

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I. INTRODUCTION

Financial regulation has a pervasive impact on the structure and efficiency of financial intermediation. It is perhaps the most important determinant of differences in financial structure that are exhibited by countries at a similar level of economic development and with access to common technologies. Regulation also affects the efficiency of financial institutions through its impact on competitive practices, financial and technological innovation, and transaction costs.

Historical accidents and differences in financial culture also influence the shape and behavior of a country's financial system. The importance of regulation lies in the fact that it is shaped by policymakers and is, therefore, amenable to radical change. In contrast, historical accidents are by definition outside the control of policymakers, while financial cultures reflect habits that change slowly over time.

Although financial regulation is amenable to radical change, it is not an exogenous process imposed from without on a country's financial institutions and markets. Rather, both regulation and deregulation are part of an endogenous response to changes in financial systems, and especially to financial crises and to real or perceived problems in the functioning of financial systems.

Regulation is also influenced by political and social pressures. Some of these reflect the interests of special groups, which often include the firms that are subject to regulation. Others reflect basic beliefs and perceptions of different societies about the role of the financial system and its interaction with the "real" sectors of the economy. Like regulation itself, social and political beliefs are not exogenous, but are shaped by the historical performance of the financial system. Historical accidents, in particular, have as large an impact on values and perceptions as they have on regulatory practices.

Thus, the aversion to inflation that characterizes current attitudes in Germany is rooted in the disastrous experience with hyperinflation in the 1920s and again in the 1940s. Similarly, the reliance on direct credit controls in many countries, both developed and developing, in the first two decades after World War II can be attributed to the massive failures of financial institutions and the devastating impact of the Great Depression. In a similar vein, the hostility towards foreign banks in many developing

countries was bred during colonial times when foreign banks were little more than colonial institutions.

But although historical accidents have a strong impact on the formation of social and political values and beliefs, their influence fades with the passage of time. New historical experiences cause a gradual change in attitudes and lead in due course to a reconsideration of prevailing policies.

The endogeneity of the whole process may suggest a fatalistic approach, but this need not be so. There is a positive and most important role to be played by political leadership when the values and beliefs of society about the structure and role of financial systems are contrary to the fundamental regulatory requirements of efficient and stable financial systems. Political leadership is very important in the area of prudential regulation and supervision where supervisory agencies need to be awarded decisive powers of intervention and crisis resolution (Polizatto 1990). It is also crucial for the success of financial restructuring operations when political considerations must be set aside in order to ensure the viability of restructured institutions. But political leadership is perhaps even more important in creating a sound and robust framework of regulation that contributes to higher efficiency and stability in the first place and thus avoids the need and cost of later interventions.

Assessing the impact of regulation on structure and efficiency is a complex exercise because a variety of regulations are required to meet a variety of objectives. There is no simple correspondence between objectives and effects. Moreover, there is a constant interaction between regulation and market practice. Financial innovation and technological progress undermine the effectiveness of regulation and often cause radical changes in regulatory philosophies. A constant process of evaluation and adjustment may be required to maximize the benefits (and minimize the costs) of financial regulation.

To be effective, political leadership requires a thorough understanding of the merits and demerits of different types of regulations and different regulatory approaches. There is an interesting contrast between the widespread perception of financial deregulation in the 1980s with the growing realization of the need for prudential and other regulations that ensure the soundness and stability of financial systems. Understanding the rationale

for removing some regulations and introducing others is essential for the design and implementation of effective regulatory reform[1].

This paper discusses the rationale and objectives of financial regulation and reviews its impact in both developing and developed countries over the past forty years or so. The paper highlights the interaction between different types of regulation and emphasizes the importance of a sound and robust financial constitution.

II. OBJECTIVES OF FINANCIAL REGULATION

The Rationale of Financial Regulation

Financial intermediaries and markets are subject to extensive regulation in both developed and developing countries. To be sure finance is not unique in this regard. Other industries, such as utilities, pharmaceuticals, airlines and nuclear energy, are also subject to extensive regulation for both good and bad reasons. The main rationale for financial regulation is the existence of market failure in financial systems arising from externalities, market power and information problems.

Externalities include the risk of systemic failure (i.e the risk of failure of one or more institutions as a result of the actual or threatened failure of another), the infection effect (i.e. the general lowering of standards and prices caused by excessive competition) and network effects (the costs and benefits of linking together competing institutions to a common network). Other externalities are the achievement of macrostability (to avoid the distortions in relative prices, incentives and expectations caused by high and volatile inflation) and the enhancement of the allocative efficiency of the financial system (to ensure the financing of projects and sectors, including small firms, that have dynamic efficiency benefits).

Concern about market power stems from the fear that dominant firms may undermine both allocative and dynamic efficiency (the former, by charging high prices and earning excessive profits and the latter by avoiding competitive pressures). Finally, information problems arise from poor price and product information, from the free rider

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[1] The contrast between deregulation in some areas and more extensive regulation in others is similar in many respects to that between trade and investment liberalization, on the one hand, and strengthening of competition or antitrust policy, on the other (for a discussion of competition policy and its interaction with trade liberalization, see Boner and Krueger 1991).

problem, and from informational asymmetries between the suppliers and users of financial services[2].

Market failure is a necessary but not sufficient condition for regulation. The other condition is that regulation can correct market failure in an effective and efficient way. Much of the debate among alternative theories of regulation is about the cost and effectiveness of regulation rather than about its rationale.

Types of Financial Regulation

Whatever its rationale, the ultimate goals of financial regulation are the achievement of efficiency, stability and fairness, not only in the financial sector but also in the economy at large. To achieve these ultimate goals, governments adopt various direct controls and interventions that can be classified in six categories depending on their particular objectives:

a. macroeconomic controls - to maintain overall control over the level of aggregate economic activity and contain major internal and external imbalances (reserve requirements, direct credit and deposit ceilings, interest rate controls, and restrictions on foreign investments);

b. allocative controls - to influence the allocation of financial resources in favor of priority activities (selective credit programs, compulsory investment requirements and preferential interest rates);

c. structural controls - to control the structure of the financial system (entry and merger controls, geographic restrictions, and limits on the range of activities of different types of financial institutions);

d. prudential controls - to preserve the safety and soundness of individual financial institutions and sustain public confidence in the stability of the financial system as a whole (authorization criteria, minimum capital requirements, limits on the concentration of risks, and reporting requirements);

e. organizational controls - to ensure the smooth functioning and integrity of financial markets and information exchanges (rules of market making and

[2] For an interesting discussion of the rationale for financial regulation, see Kay and Vickers (1988).

participation, disclosure of market information, and minimum technical standards); and

f. protective controls - to provide adequate protection to users of financial services, especially consumers and nonprofessional investors (information disclosure to consumers, compensation funds, and ombudsmen offices to investigate and resolve disputes).

Differences in financial structure may also arise from differences in company law that affect the formation of different types of companies (joint stock companies, limited partnerships, etc.) and in the organization of a country's social security system. The effect of these regulations is similar to that of structural controls on financial institutions.

Macroeconomic controls. Macroeconomic controls, and especially the use of direct credit ceilings, have often been motivated by the paramount importance of controlling the expansion of credit and maintaining price stability. The case for the use of macroeconomic controls is strengthened in many countries by the absence of adequate market mechanisms for the operation of indirect methods of monetary and credit control. However, both economic theory and historical experience suggest that the macroeconomic objectives of financial regulation can be achieved more efficiently by market-based mechanisms that do not distort competition between individual institutions and between different types of financial institutions. Rather than relying on the use of direct credit ceilings and interest rate controls that stifle competition and inhibit innovation, governments should stimulate the development of efficient money and government bond markets.

Allocative controls. Allocative controls have been motivated by the desire to compensate for the tendency of financial institutions, and especially of commercial banks, to finance either low risk activities, such as short-term trade finance, or high risk speculative projects with short payback periods, such as real estate development. Commercial banks are generally less willing to finance investment projects with high risks and long payback periods, even though they may have beneficial effects on total factor productivity. They are also generally reluctant to finance small firms without adequate collateral, even though such firms may be innovative and promise high returns. The rationale for intervention is then the need to direct financial resources to uses with dynamic efficiency benefits. Allocative controls are often combined with macroeconomic

controls that aim to limit the total supply of credit without raising the level of interest rates.

However, the existence of this externality provides a good example of the argument that market failure is a necessary but not a sufficient condition for regulation. There are many reasons why commercial banks may be unwilling to lend for projects with long payback periods or to small firms without adequate collateral: investment projects may be subject to high uncertainty, which may be compounded by high inflation and macroeconomic instability; commercial banks may be relying on short-term deposits and may thus be unwilling to assume the higher interest rate and credit risk exposure of long-term lending; accounting and auditing standards may be very weak limiting the quantity and quality of information available to lenders, especially on the performance and prospects of small firms; and legal procedures for collateral, foreclosure and debt recovery may be very ineffective.

The absence of capital markets and other sources of long-term finance (including venture capital and equity finance) may compound the shortage of investment and small firm finance, but the imposition of allocative controls, involving directed credit programs and preferential interest rates, is unlikely to be effective if no action is taken to improve the legal and accounting systems or to develop more appropriate sources of funding. Moreover, without a better monitoring of both banks and their borrowers, allocative controls suffer from the problem of moral hazard, as subsidized resources tend to be diverted to unauthorized uses.

Very few countries have been able to design and implement effective allocative controls. Where they have worked, these have been based on the achievement of overall macroeconomic stability and the development of quite effective monitoring systems. In fact, the general case for allocative controls has been undermined by the failure of most countries to design and implement effective and efficient controls. In general, the experience of most countries implies that the scope of allocative controls should be limited and that any subsidization of the cost of credit should also be small.

Structural controls. Structural controls are mainly motivated by economic and political considerations. For instance, the legal separation of commercial and investment banking and other restrictions on the permitted types of activities of banks mainly aim at preventing undue concentration of economic and financial power. Structural controls often

discourage, or even prohibit, the maintenance of close links between the suppliers and users of financial services because of the potential conflicts of interest that may arise and the potential abuse of information and financial flows. Restrictions on new entry by foreign banks (including restrictions on interstate banking in the United States) aim to protect the position of indigenous institutions. In addition, controls on the expansion of operations in foreign countries are often motivated by the desire to channel financial resources in the domestic (or local) market.

Structural controls aim to deal mainly with problems caused by market power. But by putting limits on the size and diversification of individual firms they may cause a fragmentation and segmentation of the financial system and may also prevent large firms from achieving economies of scale and scope. They may also weaken the incentives of individual institutions to invest in the acquisition, processing and dissemination of information and may thus aggravate the free rider problem.

Prudential controls. Prudential controls aim to reduce the risk of systemic failure and avoid the disruptions caused by financial crises. They require financial institutions to be adequately capitalized, professionally managed, diversify their risks, adopt proper accounting policies, report their true financial position and be subject to effective supervision. They impose "fit and proper" tests on the managers and owners of financial institutions to minimize adverse selection and detailed conduct rules to guard against moral hazard.

Prudential controls are necessary because financial institutions are susceptible to both imprudent and fraudulent behavior. Experience has shown that private financial institutions make mistakes and their decisions are imperfect and prone to excesses. Market-based financial systems, like public ones, are subject to fraud and instability. A main concern of prudential regulation is the acievement of stability without undermining efficiency, though it is not clear to what extent prudential controls can be devised that are based on market mechanisms and do not distort competition and financial behavior.

Organizational controls. Organizational controls aim to cope with the externalities caused by the existence of networks such as stock and other trading exchanges, payment clearing systems, and information networks. By setting out the rights and obligations of market participants on objective criteria, such as technical competence and financial

standing, they promote the efficiency and integrity of networks without discriminating against new institutions.

Protective controls. Protective controls deal with the information problems that affect the relations of financial institutions with their customers, especially small ones. These arise from the existence of informational asymmetries between the suppliers and users of financial services and from poor price information. In most markets, the main informational asymmetry is the inability of consumers to judge the quality of the service being purchased. But in banking and insurance, asymmetric information also affects the suppliers of financial services. Financial institutions often lack adequate information on the behavior of their customers that may affect their creditworthiness and insurability.

One way to deal with asymmetric information is by specifying contracts that impose restrictions on behavior and discriminate between high and low risk customers. However, these may be open to abuse by individual institutions and regulation about contract terms and conduct rules is required to protect the interests of consumers. Protective controls may also be required to ensure the quality of price information that is provided to consumers. This need is greater where products are not standardized and markets are fragmented and where there is price dispersion and uncertainty about the quality of products.

Interaction and Overlap of Financial Regulations

Although financial regulations are usually introduced with a particular objective in mind, they tend to have effects that cut across different objectives. For example, credit ceilings are mainly applied for macroeconomic purposes, but they also restrain banks from engaging in an uncontrolled and imprudent expansion of credit and thus serve to fulfil a prudential objective. Moreover, because they tend to stifle competition among banks, credit ceilings also have a structural effect.

Similarly, global interest rate controls can have both macroeconomic and prudential objectives, while branching restrictions tend to have both structural and prudential effects. In many countries, interest rate and branching controls were introduced after the Great Depression in order to curtail excessive and destructive competition among banks. In the insurance industry, price and product controls are extensively applied for prudential rather than allocative purposes, but such controls also have pervasive effects on the structure of insurance markets.

Even the modern approach to prudential regulation, which emphasizes risk-based capital requirements, subject to a minimum capital for new entrants, has structural effects since it may discourage new entry and may differentiate in favor of some activities as a result of the risk weights that are applied to different types of assets.

Organizational controls are clearly essential for the development of financial networks, but such controls may discriminate against particular groups of institutions, such as foreign banks, and may thus have direct effects on the structure of financial markets.

Regulations for consumer and investor protection may also have both prudential and structural effects. To protect the interests of investors financial institutions may be induced to adopt more prudent practices, while increased requirements for information disclosure and the cost of compliance with an array of complex regulations may increase operating costs and thus discourage new entry.

Structural controls are motivated by political considerations to prevent excessive concentration of market power, but by limiting the risks that different institutions can assume they may also have prudential effects. On the other hand, some structural controls may undermine the effectiveness of prudential regulation. This is because they may cause a fragmentation of the financial system into a large number of small institutions with limited capital resources. Both the risk of systemic failure and the risk of infection are likely to be greater in fragmented systems. In contrast, consolidated financial systems with a high degree of concentration are likely to be more stable and much less exposed to systemic risk. Structural controls on foreign investments by domestic institutions may have adverse prudential effects in that they may impede risk diversification and increase the fragility of individual institutions.

There is clearly a tradeoff between the various objectives of financial regulation and especially between controls that stimulate competition, efficiency and innovation on the one hand and those that promote stability, safety and fairness on the other.

In this regard, it is worth emphasizing that the most important and fundamental regulatory action is the enactment of what may be called the basic financial constitution of a country. This should cover the structural, prudential, organizational and protective regulations discussed above and should govern what financial institutions are permitted to

do, where they can operate, who is allowed to own or manage them, and what basic conditions they have to meet.

A sound and robust financial constitution would not place arbitrary entry, branching and merger restrictions on individual financial institutions and would encourage them both to diversify their risks and to accumulate substantial capital reserves that would then be available to absorb losses. In many ways, it would define the ability of financial institutions to exploit economies of scale and scope and generally operate on a sound and managerially efficient basis. Individual financial institutions would have a strong incentive to develop effective internal audit and control systems, thus reducing the amount of external policing that financial supervisors have to undertake and placing a smaller burden on the resources of compensation funds.

A sound and robust financial constitution should be complemented with a system of effective supervision. Financial supervision is important in order to ensure that the various rules and regulations are complied with. Traditionally, supervision was mostly concerned to ensure compliance with the various credit and exchange controls, but increasingly greater attention is focussed on ensuring the adoption of prudent and sound practices. It also has a crucial part to play in preventing attempts to cover up losses and thus stopping them from being magnified out of control.

Other forms of regulatory action include financial accommodation, through the lender-of-last-resort facility, to deal with short-term liquidity problems and financial restructuring, through intervention by the appropriate authorities, to deal with more permanent solvency crises. Compensation funds in general, and deposit insurance in particular, also have a role to play, especially in protecting the interests of small investors. But if they attempt to safeguard financial stability by preventing runs on fragmented and fragile individual institutions, they are likely to create major distortions in incentives and to suffer from the problems of moral hazard and adverse selection.

In the United States proposals for reforming deposit insurance have received extensive publicity following the debacle of thrift institutions. But discussing deposit insurance in isolation from other regulatory issues is not very meaningful. Indeed, a financial constitution that avoids the fragmentation and segmentation of the financial

system and discourages the continuing existence of fragile institutions can lead to greater stability and efficiency than any reform of deposit insurance[3].

III. THE IMPACT OF FINANCIAL REGULATION AND DEREGULATION

Financial Regulation in Developing Countries.

Financial regulation in developing countries was very extensive in the immediate postwar or post-independence period. Most regulations had macroeconomic, allocative and structural objectives, while prudential regulation and supervision were conspicuous by their absence as were controls to protect consumers and nonprofessional investors. To a large extent this reflected the emphasis placed on two of the sources of market failure identified above: externalities and market power. Information problems generally received little attention in most developing countries. Moreover, the ability of the regulatory system to correct market failures was taken for granted.

Although prudential regulations were mostly absent, direct controls had a prudential effect by inhibiting banks from expanding too fast and engaging in imprudent and excessive competition. On the other hand, failure to provide for prudent policies on suspending interest accrual on nonperforming loans and for loan provisioning against doubtful debts resulted in many cases in a build up of nonperforming loans and unrecognized losses that undermined the financial standing of both commercial and development banks (World Bank, 1990).

Moreover, failure to monitor the performance of borrowers, especially large state-owned firms in strategic sectors, resulted in both overleveraging of individual companies and abuse of subsidized credit facilities. In many countries, industrial and financial conglomerates used their control over finance to capture economic rents by passing cheap credits to related firms, engage in speculative ventures and deny credit to potential competitors.

Extensive exchange controls limited the scope for risk diversification and isolated domestic financial systems from developments in international financial markets. Foreign

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[3] The recent proposal of the US Treasury for a major overhaul of banking regulation implicitly recognizes the importance of these points. The proposal aims to abolish the legal separation between commercial and investment banking, between banking and insurance, and between banking and industry or commerce. It also aims to reform the structure of financial regulation and the operation of deposit insurance (US Treasury, 1991).

financial institutions, especially deposit banks and insurance companies, were prevented from entering domestic markets and from engaging in a beneficial transfer of financial technology and financial innovation.

To be sure most developed countries, ranging from Scandinavia to Central Europe and the Mediterranean Region and further away to Australia and New Zealand, also applied similar types of controls. The main difference between developing and developed countries was in the extent and severity of controls. In general, these were far more extensive and comprehensive in developing than in developed countries and this had a discernible impact on the functioning and efficiency of national financial systems.

Apart from stifling competition and inhibiting innovation, financial regulation also had an impact on the overall structure of financial intermediation. In several countries, nonbank financial intermediaries, such as finance and leasing companies, were left out of the tight regulatory regime, either by design or by accident (Cho 1989). As a result, such companies were able to grow by paying high interest rates, although in many countries (e.g. Malaysia, Thailand, Sri Lanka and Pakistan) finance companies engaged in imprudent or fraudulent operations and caused financial crises and losses for depositors.

In the 1980s several developing countries, following the precedent set by some developed countries, such as France and Japan, used financial regulation as a means of stimulating the development of capital markets. These involved both allowing higher interest rates on company debentures than on bank deposits and providing strong fiscal incentives for issuing and investing in company securities.

Another way in which regulation affected the structure of financial intermediation was through the establishment of national provident funds or more generally through the promotion of contractual savings institutions. Two countries, Singapore and Malaysia, established employee provident funds with high contribution rates and substantial long term savings. In Korea, Zimbabwe, Chile and a few other countries, various types of contractual savings institutions, covering life insurance and pension plans, were encouraged to grow and play a significant part in the mobilization of domestic long-term financial savings and the development of capital markets.

Financial Regulation in Developed Counties.

Macroeconomic and allocative controls, including credit ceilings, interest rate controls, reserve requirements and directed credit programs, were extensively used in

most developed countries, especially during the period of reconstruction and high growth, following the end of World War II. This was particularly the case in Japan (Patrick 1984, Teranishi 1986), but was also true of most continental European countries[4]. However, Germany and the United States made little use of credit ceilings, while Germany, the Netherlands, Switzerland and the United Kingdom either had no recourse to interest rate controls and branching restrictions or removed them at quite an early stage.

Many countries imposed extensive structural controls, separating commercial and investment banking, limiting the scope of activities of specialized housing, rural and savings banks, and restricting the expansion of regional institutions, although Germany and some other European countries refrained from imposing structural controls and generally allowed both their commercial and savings banks to operate as universal banks. Among OECD countries, the use of structural controls was most extensive in the United States, Italy, Norway and Japan.

In the United States structural controls, especially branching restrictions dating from the nineteenth century, caused a fragmentation of the banking and thrift industries that increased their fragility and susceptibility to financial crises. Following the massive failures of banks and thrifts in the 1930s, two deposit insurance funds were created to prevent runs on individual institutions and, thus, protect the stability of the system. The thrift industry was also subjected to a series of controls and restrictions that maximized its exposure to interest rate, sectoral and geographic risks[5].

The fragmentation of the banking industry and the absence of nationwide banks stimulated the development of corporate securities markets and the growth of investment banking. In the postwar period, the structural controls imposed on banks have been

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[4] For a review of financial regulation in the 1960s and 1970s in several developed countries, see Vittas et al (1978).

[5] The recent experience of US savings and loan associations contrasts sharply with the continuing prosperity and success of UK building societies. The impact of regulation on the thrift industries in the UK and the US is discussed in Vittas (1991).

instrumental in contributing to the growth of the commercial paper market and to the emergence and growth of money market mutual funds[6].

In the United Kingdom the institutional segmentation between commercial (clearing) banks and merchant banks was not imposed by regulation, but reflected the traditional concerns and prevailing practices of major banks. The absence of branching controls and other rigid regulatory restrictions permitted the emergence of large commercial banks with nationwide operations that were able to diversify progressively into other areas, such as hire purchase finance, merchant and investment banking, mutual funds, insurance broking and, more recently, stockbroking and real estate broking. In contrast to commercial banks, savings banks and building societies were compelled to specialize in collecting retail deposits from households and investing them in government securities in the case of savings banks and housing loans in the case of building societies. However, neither type of institution was prevented from expanding operations on a national scale.

Most countries paid little attention to prudential, organizational and protective regulations, although Germany and Switzerland imposed rather strict prudential controls on both banks and insurance companies[7]. In the United Kingdom, prudential regulation was mostly based on informal arrangements. This was facilitated by the small number of banks and the greater consolidation of the UK banking system. In contrast, in the United States, the use of deposit insurance and the large number of deposit institutions necessitated the imposition of detailed prudential controls and the development of an extensive machinery of examination and supervision. Because of the fragmented structure of the US banking system, the supervisory process was forced to rely on large numbers of skilled examiners for probing the integrity of bank managers and second-guessing their business decisions. Policing costs were externalized and bank losses covered to a large

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[6] In this respect, it is worth noting that the commercial paper market has expanded at a rapid pace in Spain, Portugal and France, countries where banks have been subjected to extensive credit ceilings but not in other European countries such as the United Kingdom, the Netherlands or Germany. Moreover, money market mutual funds have generally thrived in countries with strict controls on interest rates on retail deposits, such as the United States, Japan, France and Australia but not in the United Kingdom, Sweden and other European countries where deposit institutions have been free from interest rate restrictions and high interest has been offered on various types of bank accounts.

[7] For a discussion of insurance regulation in Germany, see Finsinger et al (1985), Finsinger and Pauly (1986) and Rabe (1990).

extent by deposit insurance funds and ultimately by taxpayers if the reserves of the funds were not adequate. In more consolidated banking systems, policing costs were internalized and losses at the branch level were absorbed to a greater extent by bank shareholders.

The limited use of macroeconomic and allocative controls but extensive reliance on structural controls in the United States contrasts rather sharply with the experience of most European countries. As documented by banking historians[8], the fragmentation of the banking and thrift industries reflect a strong tradition of localism in American banking that was based on populist policies motivated by fear of the concentration of power that large banks from out-of-state centers might acquire. Neither politicians nor economists have done much to dispel this fear.

The restrictions on the geographic expansion of banks have prevented the emergence of large banks with nationwide operations. In some states, branching restrictions have confined banks to very small geographic areas. Geographic restrictions have been eroded in recent years, although the fragmentation of the industry still persists. One could argue that economists have undermined potential support for consolidation of the banking and thrift systems by downplaying the potential economies of scale and scope of large banks. By focussing on the production side of banking services and neglecting potential economies in risk and marketing, they have largely failed to establish a strong case for greater consolidation. Politicians responded to the financial crisis of the 1930s by introducing deposit insurance, despite some early concerns about the distortion of incentives but failed to allow a consolidation of both industries.

The fear of out-of-state banks may have made sense when communications were poor and the ability to regulate and supervise large institutions with nationwide operations may have been limited. But improvements in communications and regulatory practices should have removed any concern about the ability to control large institutions and prevent them from abusing their market power. Lack of political leadership, which may partly be explained by the belief that deposit insurance imparted a sufficient degree of financial stability, has allowed this irrational structure of regulation to persist. However, as already

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[8] See Hammond (1957) and Krooss and Blyn (1971).

noted above, the recent thrift crisis and the poor financial condition of a large number of banks suggest that a major overhaul of bank and thrift regulation is now likely.

Financial Deregulation in Developed Countries.

Most developed countries have undertaken extensive deregulation of their financial systems since the late 1970s, although the focus and pace of deregulation have varied considerably across countries. In many countries, deregulation has primarily affected the provision of corporate financial services.

A good example of this approach is Japan, where financial deregulation has involved the progressive relaxation of restrictions on domestic and foreign bond issues and the liberalization of interest rates on bank loans and large deposits (Hoshi et al 1989). In retail banking many regulations are still imposed, limiting opportunities for branch network expansion and controlling interest rates on retail deposits.

Financial deregulation has been accompanied by an explosive growth of activity on the securities markets which now play a central part in the Japanese financial system. The creation of markets for financial futures and options has further increased the flexibility of the financial system. Although the role of banks in corporate finance has declined, close links between banks and industrial companies and extensive cross-shareholdings among firms belonging to conglomerate groups continue to predominate.

In France, deregulation has been more extensive and has involved the abolition of the legal separation of commercial and investment banks, the lifting of branching restrictions, and the relaxation of interest rate controls on loans and large deposits. But controls on retail deposits have continued to apply and use has been made of fiscal incentives to encourage households to invest in marketable securities and contractual savings. As in the case of Japan, there has been a large expansion of activity in the money, capital and derivative markets.

In Germany, financial deregulation has been less extensive, mainly because the system was already quite free from structural controls[9]. Because of the traditional emphasis on prudential and anti-inflationary concerns, authorization of new financial instruments (such as negotiable certificates of deposit, floating rate and zero coupon bonds, and indexed instruments) was considerably delayed and this held back the

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[9] See Deutsche Bundesbank (1986) and Broeker (1989).

development of active money markets. Moreover, securities markets for corporate equities and bonds have continued to be underdeveloped.

The underdevelopment of German securities markets may be explained by five factors. First, the close links between corporations and the universal banks, which provide financial and managerial support for expansion plans and restructuring operations and may thus mitigate the need for strong financial independence by the corporate sector. Second, the preference of most medium-sized companies to operate as limited partnerships[10]. Third, the imposition of turnover taxes that affected, in particular, the development of markets for short-term securities, such as commercial paper. Fourth, the limited role played by pension funds in the German financial system as many company pension schemes are based on internal reserves that are reinvested in the sponsoring companies and are not available for investment in marketable securities. And, fifth, the recurrent crises in the German financial system, which have undermined the confidence of the saving public in marketable securities and have interrupted the evolution of the German financial system towards a more varied and balanced structure[11].

Financial deregulation in the United Kingdom has involved the abolition of credit ceilings and exchange controls and the reform of the stock exchange to allow membership by banks and other financial institutions. On the other hand, prudential controls have been progressively enshrined in legislation, in line with international developments. There has also been a major overhaul of organizational and protective regulations. The new regulatory framework covers all firms engaging in financial services and is based on a

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[10] It is not clear why unlisted German firms are reluctant to go public. For firms with less than 2,000 employees, an important reason may be the desire to avoid the burden imposed by company law on listed companies through the provisions for co-determination (i.e. the requirement that half the seats on supervisory boards of listed companies must be reserved for representatives of workers). For larger firms, which are subject to co-determination irrespective of legal form, the reluctance to go public may be related to fears about losing company control and perhaps also to the lack of any clearly perceived benefits from listing.

[11] Historical crises occurred as a result of the boom and bust of company promotions in the 1870s, World War I and the hyperinflation of the 1920s, the suspension of market mechanisms in the 1930s and the devastation of World War II. Universal banks played a crucial part in promoting industrialization before World War I and they were called upon again to play an equally crucial part in financing and supporting the economic reconstruction effort of the postwar period.

combination of statutory agencies and self regulatory organizations. It is supported by a network of ombudsman offices for the independent examination of consumer complaints and by a series of compensation funds for the protection of small investors in all kinds of financial assets.

In the United States deregulation has involved the removal of interest rate controls and a gradual but slow relaxation of branching restrictions. In addition, the wide ranging restrictions on the activities of thrift institutions were removed in response to the losses suffered in the late 1970s, although their new powers led to the thrift debacle that resulted from the provision of deposit insurance with deficient supervision (White 1990).

There is now considerable and growing pressure for an overhaul of the whole system of bank and thrift regulation. Interest rate deregulation has already been completed and interstate barriers have been substantially reduced and are likely to be completely eliminated in the near future. The three remaining issues are the reform of deposit insurance, the legal separation of commercial and investment banking (or more generally the issue of universal banking), and the permissible level of market concentration. There is also some concern about the growing volatility of financial markets and the need to coordinate the regulation of different types of markets.

Financial Deregulation in Developing Countries.

In developing countries, the experience of financial deregulation has been more varied. Many countries have taken measures to develop money and capital markets, promote nonbank financial intermediaries and strengthen prudential regulation and supervision. There has also been a general reduction in the scope and intensity of macroeconomic and allocative controls. However, developing countries continue to place greater reliance than developed countries on direct credit controls, while prudential, organizational and protective controls have yet to be fully developed.

Structural controls have been reformed in favor of market-based mechanisms, although many countries continue to restrict entry of foreign banks to the domestic market or to place strict limits on their range and level of activities. In countries where commercial and development banks were under public ownership, privatization programs have been implemented slowly and with caution, to some extent because of the limited size of the domestic capital markets. Universal banking has been permitted in a growing

number of countries, even though prudential regulation and supervision are not as well developed as in most high income countries.

Financial deregulation has generally been more successful in countries that have maintained moderate price stability and have adopted a gradualist approach in implementing their reforms. In countries where inflation has been too high and the exchange rate has tended to be overvalued, deregulation has been accompanied by considerable distortions in incentives and has resulted in extensive instability, in terms of both high real interest rates and massive defaults (Cho and Khatkhate 1989).

IV. CONCLUDING REMARKS

The experience of both developed and developing countries suggests that regulatory change tends to happen when there are large economic disruptions. Thus, extensive financial regulation was introduced in the aftermath of the Great Depression. More recently, financial deregulation in the 1970s was motivated by the large increase in the level and volatility of inflation, exchange and interest rates.

Regulatory change also takes place more easily if it can be accomplished without requiring cumbersome legislative changes. A corollary of this idea is that the threat of regulation in a society where regulatory action is not subject to long delays may be as effective as actual regulation. In fact, the threat of regulation may be as important a concept in explaining the behavior of incumbent firms in highly concentrated industries as the threat of potential competition. It may, for instance, be an important factor in Germany where the large universal banks have been reticent in exercising their influence on corporate affairs, although another factor may have been the need to build and sustain a reputation of good and responsible behavior.

In both developed and developing countries financial regulation is now moving towards the elimination or substantial reduction of macroeconomic, allocative and structural controls and towards the adoption or substantial strengthening of prudential, organizational and protective controls. One issue that continues, however, to remain unresolved is the question of the role and scope of universal banks.

In developed countries, a consensus is emerging in favor of universal banks as one type of institution among a wide range of specialized financial intermediaries and a wide network of financial markets. The most important remaining issue concerns the organizational form of universal groups and in particular the usefulness of a holding

company structure as against direct involvement in universal banking activities through departments or subsidiaries of the parent company.

In developing countries, the question of universal banking is closely linked with the development of more effective prudential and supervisory mechanisms. Universal banking relies to a large extent on functional and conduct regulation and implies a greater need for collecting and analyzing detailed information and for taking prompt corrective action.

In the past, universal banking has produced negative results in several developing countries, though in large part these may have been encouraged by the laxity of supervision and/or the availability of heavily subsidized credits that provided strong incentives for excessive borrowing and for abusing the system. In a less distorted regulatory framework and with more effective supervision, universal banking may be able to make a more positive contribution to economic and financial development even in developing countries.

Political leadership has a substantial part to play in reforming the regulatory system. Experience shows that structural controls that are mainly motivated by political considerations, such as preserving the monopoly position of domestic banks or protecting the turfs of different types of financial institutions, can be very damaging. Many of the problems facing the US financial system, such as the fragmentation and fragility of the banking system, the financial crisis of the thrift industry and the segmentation of the banking and nonbanking parts of the financial system, can be attributed to the adverse effects of structural regulations.

Among developed countries, political leadership would be required to remove any remaining restraints on geographic and sectoral diversification of financial institutions. The most important task is the creation of a sound and robust financial constitution that governs what financial institutions are permitted to do and what basic conditions they have to meet. As far as possible, the regulatory framework should be neutral between different types of financial intermediaries and markets.

In developing countries, political leadership would be required in undertaking and implementing a major reform of the regulatory framework that would emphasize the prudential, organizational and protective objectives of financial regulation and downplay the importance of macroeconomic, allocative and structural objectives.

A major challenge facing political leadership in developing countries lies in reforming structural regulations to allow foreign financial institutions to play a more active part in the domestic financial system. In earlier periods, foreign banks behaved like colonial institutions, exploiting local resources and contributing relatively little to local economic and financial development. But in the modern world foreign institutions (banks, insurance companies, securities firms, etc.) are more likely to be beneficial by transferring financial technology and training local staff, providing effective competition to the large domestic institutions that often dominate the financial systems of developing countries, and instilling greater stability in local financial markets.

Political leadership would also be required in implementing an ambitious privatization program. These would permit competitive market forces and decentralized decision making to play their full part in mobilizing and allocating financial resources and in monitoring the performance and controlling the behavior of the ultimate users of financial resources.

POSTSCRIPT

One question that has not been explicitly addressed in this paper concerns the relevance of differences in financial arrangements. The financial systems of different countries exhibit considerable differences in both structure and practice and regulation is clearly a major determinant of such differences. But how important are they for economic performance and development?

Unfortunately, economic theory is not very helpful in answering this question. As Gertler (1988) pointed out, the working hypothesis of most economists has long been that the structure of financial intermediation is irrelevant[12]. This approach contrasts sharply with the widespread belief among policymakers, bankers and other financial practitioners that financial intermediaries and markets play important roles in economic development and stability.

A comparison of data on long-run economic growth, as reported by de Long (1988), and financial structure suggest that countries characterized by a greater reliance on bank finance and close links between banks and industrial companies have achieved higher rates of economic growth, especially in relation to their economic potential, than countries with market-based systems. The first group of countries includes Japan, Germany and other continental European countries, and (at least regarding close links between industry and finance) the United States in the pre-Depression era. The second group covers mostly Anglo-American countries (the United Kingdom --with Scotland as a special case of an economic region suffering relative decline--, Australia, New Zealand and, to a lesser extent, Canada and the United States in the post-Depression era).

Differences in financial arrangements are only one of the factors that may explain differences in economic performance. Other factors, such as the stance of

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[12] "Irrelevance" propositions represent a long tradition in economics. They cover the "money is a veil" argument, which implies the associated concept of the long-run neutrality of money, even though it is incompatible with the view that inflation distorts relative prices, fuels speculative behavior and misallocates resources. They also cover the "finance is a veil" argument that argues that the financial structure of corporations is irrelevant for their market value and that investment and financing decisions can be completely separated. This proposition is at variance with observed practice in financial markets, which emphasizes the importance of matching the maturities of assets and liabilities, maintaining stable dividend payouts, minimizing the cost of capital and avoiding excessive reliance on debt finance.

macroeconomic policies, the functioning of the labor markets, the availability of natural resources and historical accidents, are also important. However, the growing emphasis that is being placed in theoretical work on information asymmetries, long-term relationships and commitments, and the building of reputations suggests that differences in financial arrangements may be important and that views about the irrelevance of the structure of financial intermediation may change.

The new approach is likely to pay less attention on the distinction between bank-based and market-based systems and to focus more on the distinction between financial systems that emphasize long-term relationships and those that emphasize a more transactional approach. The former encourage closer monitoring of the operations of industrial companies and overcome the problems of asymmetric information. They also create mechanisms for more effective support of long term expansion or restructuring operations.

There is some evidence that bank-based systems are better able to cultivate close links between banks and industrial companies (Vittas, 1986). But strong evidence that such links have beneficial effects on investment and aggregate activity is still limited, although a recent study of corporate investment in Japan shows that companies that have severed their links with banks have been more constrained by their internally generated funds in their investment operations than companies with continuing close links (Hoshi et al 1989).

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