A U.S. Perspective on Japanese Financial Liberalization*

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I. Introduction

Many industrialized economies during the 1970s found that their financial and monetary arrangements failed to achieve basic objectives. Financial systems, defined by a structure of markets, institutions and government regulation, came to be regarded as inefficient, unable to adapt to the changing economic environment, and prone to instability and even collapse. At the same time, monetary authorities encountered difficulty in achieving noninflationary monetary growth as they found that existing monetary control instruments and strategies were being frustrated by financial innovations initiated by private markets and institutions.[1]

The numerous and significant changes in the financial and monetary arrangements in many individual countries have come to be referred to as financial reform. Financial reform represents the efforts of both the market and the regulator to restructure the financial system and the monetary authority. Even though regulatory change redefines and recodifies the financial system and the monetary authority, market innovations and market forces are at the center of the financial reform process. Regulatory change responds to conflicts in the current structure only after the market has revealed those conflicts, and frequently market innovations suggest the

* This paper was prepared while the author was a Visiting Scholar, Institute for Monetary and Economic Studies, Bank of Japan. He expresses appreciation to Kagehide Kaku, Hajime Koike, Hiroyuki Kubo, Akira Nambara, Kermit L. Schoenholtz, Kinzo Shima, Yoshio Suzuki and Yosuke Tsuyuguchi for comments on an earlier version; however, the author remains responsible for interpretations and remaining errors.

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1. An overview of the financial reform process in a number of countries can be found in M.A. Akhtar (1983), the Bank for International Settlements (1983) and the Federal Reserve Bank of San Francisco (forthcoming).

form of regulatory change. The market is dynamic and innovative while regulators are passive and reactive during the process of financial reform.

The financial reform process in the United States has exhibited many similarities to that of Japan, but more importantly, many differences.[2] The process is referred to as "liberalization" in Japan and "deregulation" in the U.S., though in both cases the terms are inaccurate descriptions of the actual events taking place. There is a long tradition of imposing constraints on financial institutions and markets to protect depositors, to ensure confidence in the financial system, to ensure a stable and sound financial system, and to achieve monetary control objectives. The current emphasis on deregulation or liberalization in no way implies that financial institutions and markets will be left unregulated, but only that the form of regulation will change. Specifically, deregulation and liberalization are designed to remove or relax key constraints on financial institutions and markets that have limited competition and isolated markets from general economic forces.

The experiences of the two countries have attracted significant attention for at least four reasons. First, the U.S. and Japan are the two largest economies in the free world and there exists an important interface between their respective economies and the rest of the free world. Second, the U.S. stands at the center of the international monetary system and as such, significant changes in its financial and monetary arrangements have an impact on the rest of the world. Third, while Japan does not yet play a major role in the international financial system, its financial system is rapidly becoming integrated with those of other countries and the "internationalization" of the yen will increase Japan's role in the international monetary system consistent with its economic power. Fourth, the Pacific Basin region of the world has the potential for significant economic growth during the next decades. Japan's central role in this region and the historical, cultural, and economic relationships existing between the U.S., the Pacific Basin and Japan render the financial reform process in the U.S. and Japan important.

The objective of this paper is to provide a U.S. perspective on the financial reform process currently underway in Japan. This perspective is made with the

2. The financial reform process in each country has been extensively discussed. References for the U.S. include: Thomas F. Cargill and Gillian G. Garcia (1982 and 1985), Thomas D. Simpson and Patrick M. Parkinson (1983), and John Wenninger (1983). English references for Japan include: Stephen Bronte (1982), Cargill and Shoichi Royama (forthcoming), Dorothy B. Christelow (1981), Robert F. Emery (1984), Federation of Bankers Association of Japan (1984), Organisation for Economic Cooperation and Development (1984), Charles Pigott (1983), Royama (1983-84), Eisuke Sakakibara (1984), Sakakibara et al. (1982, 1983, and 1984) and Yoshio Suzuki (1980, 1983a, 1983b, 1984 and forthcoming).

Cargill (forthcoming) and Sakakibara et al. (1982 and 1983) present a comparative analysis of the financial reform process in the U.S. and Japan.

experience of the U.S. in the background and focuses on a number of issues that pertain to comparisons between the U.S. and Japanese experiences as well as those that pertain only to the Japanese situation.

Several caveats should be mentioned before proceeding with the discussion. First, a perspective on a process that is still evolving is hazardous even when one is intimately familiar with the economic forces and structure of the financial system. Second, a perspective is influenced by a given base, and in this case the experience of the U.S. may not be an appropriate base from which to judge Japanese financial reform. Third, the one offering the perspective may misinterpret the nature of the reform process, and being an outsider he may not fully comprehend the nature of the Japanese economy.

Despite these caveats, a U.S. perspective on Japanese financial reform can be a useful exercise. First, it focuses on international comparisons of financial reform and this, by itself, is important. The financial reform process in the U.S. is frequently viewed only in domestic terms; however, most industrialized economies have experienced many of the same problems and as such, financial reform is an international phenomenon. Second, financial reform should be pursued in each country with an international perspective. Uneven developments in financial systems generate innovations to shift capital from regulated to less regulated systems thus increasing exchange rate fluctuations and disrupting international trade. Not only do major trading countries need to coordinate trade policies, but the coordination of financial policies is equally important. Third, the financial reform process in the U.S. has been in progress for a longer period and may reveal insights to Japanese regulators. Fourth, an outside perspective may point to issues that have not been fully recognized nor incorporated into current discussions of Japanese liberalization. An outsider may not have full information, but an outsider is also less likely to accept traditional and institutional structures that are ingrained in a financial system.

Thus, despite the caveats, a U.S. perspective would appear worth the effort. The remainder of this paper is composed of four sections and an appendix. Section II highlights the differences between the U.S. and Japanese financial reform process; Section III comments on recent reevaluations and "revisionist" views of the Japanese financial system; Section IV presents an assessment of selected aspects of the reform process in Japan; and Section V discusses the advantages of Japanese reform from the U.S. perspective. A chronological appendix has been included in this paper to highlight the major steps in the reform process from 1975 to early 1985.

II. Comparison of Japanese Liberalization with U.S. Deregulation

The comparison between the U.S. and Japanese financial reform processes can be categorized under five headings: (1) the structure of financial and monetary arrangements, (2) the catalysts of financial reform, (3) the regulatory responses to the catalysts, (4) the ensuing interaction between the market and the regulator(s) during the process, and (5) the constraints on the financial reform process. This is not an exhaustive list of categories; however, they form a meaningful basis for a comparative understanding of financial reform in each country.

1. Structure of Financial and Monetary Arrangements

Intermediation markets in Japan are distinguished from those of the U.S. in the following ways. First, the number of private financial institutions in Japan is considerably smaller. As of 1983, there were 86 banks (13 city banks, 63 regional banks, 3 long-term credit banks and 7 trust banks), 996 institutions for small businesses, 4,404 institutions for agriculture, forestry and fishery, and several hundred other institutions (insurance companies, securities companies, etc.). Private depository institutions alone in the U.S. as of December 1982 included approximately 15,300 banks, 3,833 savings and loan associations (S&Ls), 386 mutual savings banks (MSBs) and 20,000 credit unions. In addition, there are a large number of nondepository financial institutions (finance companies, private pension funds, insurance companies, securities companies, etc.) as well as nonfinancial firms offering financial services such as Sears, Roebuck and Co.

Second, Japanese banks play a more important role in intermediation finance compared to the U.S. banking system; however, there is considerable segmentation among Japanese banks. Ordinary banks (city and regional banks) primarily make short-term business loans and are restricted to accepting short-term deposits while long-term and trust banks make long-term loans and rely on long-term sources of funds. U.S. banks also emphasize short-term business loans; however, they deal with a broader range of borrowers and have a broader maturity spectrum in their overall loan portfolio as well as rely on a broader maturity range of sources of funds.

Third, Japanese intermediation markets are not influenced by the dualistic system of chartering, organization and regulation characteristic of the U.S. Since the National Bank Act of 1864, the concept of dualism has been an important characteristic of intermediation finance in the U.S. and accounts for the presence of constraints against interstate banking, the variation among states in their regulation over intrastate banking, and the large number of major depository institutions.

Fourth, government plays a more significant role in Japan's intermediation, via an extensive Postal Savings System (PSS) and other public institutions, than it does in the U.S. During the period 1965-73, the distribution of the total flow of funds to final borrowers was as follows: 62.9% for deposit banks, 11.9% for other private financial institutions and 17.1% for government financial institutions (Suzuki, 1983b, p. 44).

In addition, government financial institutions have increased their share of total lending since 1973. In 1982, government intermediaries provided 29.2% of the total flow to final borrowers. This increase in government intermediation has been attributed to the rapid growth of the PSS.

Eisuke Sakakibara (1984, p. 163) presents comparable statistics on the role of government intermediation for the period from 1953 through 1978. Government intermediation is measured as the share of government financial institution loans in financial sector loans on a net basis. Over the period 1953-78, the government shares were 17.5% and 6.3% in Japan and the U.S., respectively. Aside from limited public intermediation directed toward agriculture and housing, the majority of intermediation finance in the U.S. is conducted through private institutions.

Fifth, the relationship between Japanese banks and securities companies is closer than in the U.S. Despite the frequent claims that Japan has its own version of the Glass-Steagell Act, banks in Japan are allowed to operate closely with securities companies in forming syndicates to purchase government debt, banks can hold corporate debt, and banks can hold corporate equities. These activites exceed those permitted U.S. banks.

Sixth, securities markets in Japan are considerably underdeveloped compared to those in the U.S. The U.S. possesses broad and deep securities markets in both spot and future contracts. The securities markets cover the complete term structure from very short to very long maturities. The government and the business sector are the main participants and the government securities market plays an important role as a base for the entire securities market, as a liquidity base for intermediation finance, and as the focal point for monetary policy conducted via open market operations. Japan's long-term securities market has not developed until recently because (1) government budgets were balanced or deficits were small enough through the early 1970s that there was no need to develop a securities market for government debt, and (2) corporations did not use the securities markets as a source of funds. Only the largest corporations were permitted to issue securities and even these were discouraged from using direct finance as a source of funds. Short-term securities markets for government debt or Treasury bills, commercial paper, and bankers' acceptances do not exist as of early 1985. The main short-term markets consist of the interbank market (similar to the federal funds market in the U.S.) organized before World War II, the gensaki trade that emerged in the late 1960s, and the large bank CD market authorized in 1979. Despite the limited development of new-issue markets in Japan, the secondary market in government bonds has grown dramatically since 1975.

Thus the high ratio of indirect to direct finance is one of the most significant differences between the U.S. and Japanese financial systems. In 1973, 93.2% of the flow of funds was transferred through financial institutions compared to about 75.0% for the U.S. A major outcome of liberalization since the early 1970s has been a continual decline in the importance of intermediation finance. In 1982, the intermediation share declined to 85.3%.

Seventh, there are considerable differences in the regulatory structure between the U.S. and Japan. Regulation in the U.S. has been primarily designed to restrain competition to limit risk, especially among banks. The competitive constraints were focused on intermediation finance, whereas direct markets were closely monitored and a system of financial disclosure was enforced. The structure and objectives of regulation in the U.S. were strongly influenced by the collapse of the banking system during the 1930s. Regulation also came to be regarded as an important part of a social policy to support the housing sector.

In the case of Japan, regulation similarly constrained markets, but regulation differed in at least four ways: (1) Regulation was far more extensive, especially regulations over interest-rate movements and restrictions designed to isolate domestic finance from the international financial system. (2) Regulation was not designed to encourage mortgage or any type of consumer credit, but was more concerned with accommodating industrialization, export-led economic growth and a high savings rate among individuals. (3) While financial regulation has always been concerned with the soundness of financial institutions and markets, the concern with soundness did not dominate Japanese regulatory attitudes as it did in the U.S. The experience of the Great Depression and how it influenced financial regulation in the U.S. cannot be understated. (4) There exists a multiplicity of U.S. financial regulators, partly as a result of dualism. Even at the federal or state level, however, there exists a multiplicity of regulators. The most important regulators at the federal level are the Federal Reserve System, Federal Deposit Insurance Corporation, Federal Home Loan Bank Board, Federal Savings and Loan Insurance Corporation (part of the Federal Home Loan Bank Board), National Credit Union Administration and the Securities and Exchange Commission. In Japan, there is a much simpler, unified regulatory structure. The Ministry of Finance (MOF) and the Bank of Japan (BOJ) are the major regulators followed by the Ministry of Posts and Telecommunication (MPT). This distinction between the U.S. and Japan has an important bearing on the reform process in each country.

2. Catalysts of Financial Reform

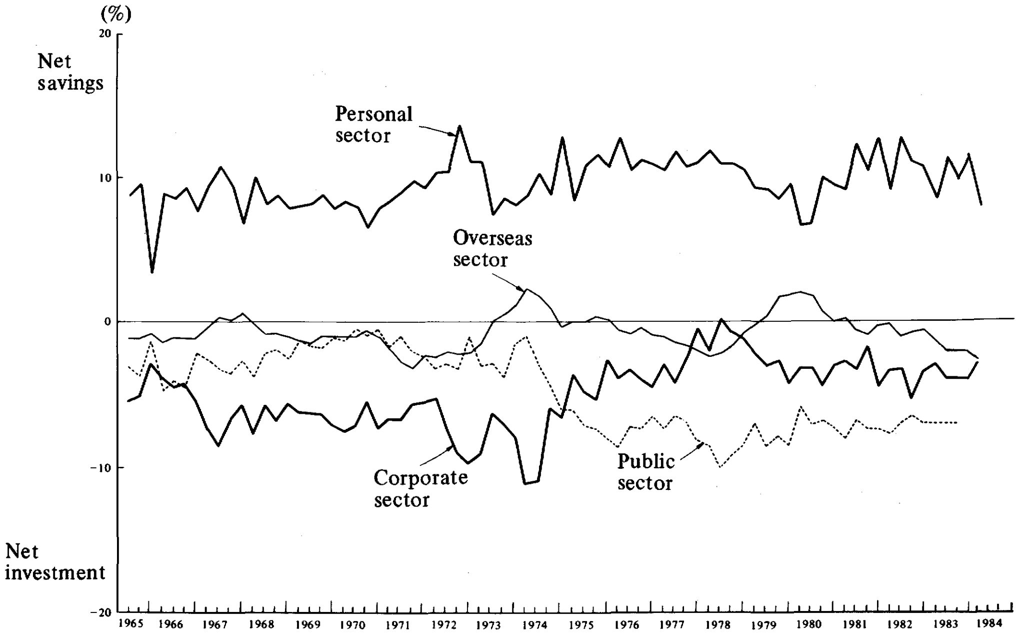
There is a tendency among observers of the financial reform process to attribute the process in different countries to a common set of forces: high rates of inflation and high interest rates, fluctuations in interest rates, government deficits, supply-shocks, changes in the underlying growth process and advances in computer and communications technology. No doubt these and other common forces have induced financial reform in both the U.S. and Japan; however, the unique environment of each country is important to understanding the forces of financial reform.

In the U.S., financial reform was made necessary because of a conflict between two policies. First, regulation was designed to insure the soundness of financial institutions as well as gradually adopting the additional objective of supporting a social policy to encourage residential housing. Thrifts (S&Ls and MSBs) were regulated to allocate funds to residential housing at favorable terms. This has frequently been viewed as part of a social contract to support home ownership between the government, the housing industry, purchasers of residential housing and institutions that specialized in mortgage lending. Manifestations of the social contract included: Regulation Q ceilings, differential Regulation Q ceilings between banks and thrifts, mortgage tax incentives available only to thrifts, regulation that limited thrift asset diversification, and deductibility of interest in computing income taxes. Of these, Regulation Q and the restricted uses of funds for thrifts became increasingly incompatible with high and fluctuating interest rates throughout the 1970s (Carron, 1982).

Second and most importantly, the Federal Reserve failed to achieve noninflationary monetary growth throughout the 1970s. Excessive monetary growth was the result of inappropriate operating policies that focused on interest rates rather than monetary aggregates and accommodation to pressures to monetize the growing federal debt. As a result, inflation and expectations of future inflation generated high interest rates in securities markets and rendered Regulation Q binding. Thrifts were the most sensitive to high interest rates because they obtained funds from short-term deposits and allocated funds to long-term, fixed-rate mortgages. Prior to 1966, thrifts were not subject to Regulation Q ceilings; however, as interest rates increased significantly in 1965 and 1966, Regulation Q was extended to thrifts. This merely exposed thrifts to greater liquidity or disintermediation pressure; consequently, combined with their limited asset diversification powers, problems in the thrift industry threatened the stability of the entire financial system more than any other sector.

Thus by the late 1970s the conflict between existing financial regulation and the failures of monetary policy generated intense pressure for financial reform. In Japan, the situation is quite different. The primary catalyst of financial reform was generated by the sudden end of the High Growth Period (HGP) in 1973 and the impact that slower growth had on the flow of funds (Figure 1). The failure of monetary policy in the early 1970s to stimulate the economy by expansionary monetary growth certainly contributed to the pressure for reform; however, the events in the real sector of the Japanese economy were sufficient to generate financial reform. The end of the HGP reduced the role of the corporate sector as the primary deficit unit. Supply shocks shifted the demand for capital to the left and reduced corporate demand for credit and their dependence on banks. The end of the HGP period saw increased government deficits as tax revenues declined and expenditures were increased to offset the slower economic growth. The budget deficits reflected both

Figure 1 Sectoral Net Investment (Deficit) and Net Saving (Surplus) as a Percentage of GNP



endogenous- and exogenous-induced changes in the fiscal program in reaction to the end of the HGP. The end of the HGP reduced income growth to individuals in the household sector that had, in the past, compensated for the limited availability of financial assets and the regulated return on those assets.

Other aspects of the Japanese experience contributed to financial reform; however, the end of the HGP must be judged the most important and sharply differentiates the U.S. and Japanese situations. Events in the monetary sector are relatively more important in the U.S., whereas events in the real sector are relatively more important in Japan. In this regard, the catalyst of financial reform in Japan cannot be placed primarily on the failures of monetary policy.

3. Regulatory Response

There are three significant differences between U.S. and Japanese regulatory responses to the catalysts of financial reform. First, Japan is a less legalistic society and as such, reform has not been reflected by the type of legislative events characteristic of the U.S. To date, the Japanese government has not enacted such broad and complex legislative packages as the 1980 Depository Institutions Deregulation and Monetary Control Act or the 1982 Garn-St Germain Depository Institutions Act.

Japan's financial reform process in an administratively directed process largely conducted by the MOF and the BOJ; however, there are two legislative events worth mentioning. The most important are the December 1980 amendments to the Foreign Exchange and Foreign Trade Law and, of much less importance, the May 1981 amendments to the Banking Law. Even though important, these legislative events differ from those in the U.S. They primarily establish principles to be made operational over time via administrative decision. The 1980 amendments to the Foreign Exchange and Foreign Trade Law are important because they introduced the principle that unrestricted capital flows in and out of Japan are to be the rule rather than the exception. Since 1980, regulators have introduced a series of administrative changes that have liberalized international capital flows. The 1981 amendments to the Banking Law established the principle that foreign banks were to be treated on the same basis as Japanese banks in the domestic financial system and defined the scope of a bank's securities operations. Again, administrative actions will make this principle operational.

Second, regulator response in general tends to be crisis oriented since government is inherently reactive and passive in the process of financial reform. U.S. regulators have generally responded only to crisis situations, perhaps due to the emphasis on codification of significant regulatory changes and the need to coordinate the various objectives and interests of a dualistic regulatory framework. To illustrate this point, one only needs to review the history[3] of the U.S. economy prior to the major legislative events of 1980 and 1982. As early as 1971, the Hunt Report had correctly analyzed the structural problems of intermediation finance and proposed a set of recommendations that would effectively have prevented the instability that characterized the financial system throughout the 1970s, and yet nothing was accomplished. The same analysis and similar recommendations were made in 1975 in the Financial Institutions and the Nation's Economy study; however, that study also failed to initiate regulatory change. Financial reform became a reality only with the occurrence of serious economic problems in late 1979 and early 1980, the threatened withdrawal of hundreds of banks from the Federal Reserve System, and the recognition that existing regulation was increasingly being circumvented by market innovations. And again, the plight of the thrift industry was recognized both before and after the 1980 act; however, it was only after a crisis situation developed in the thrift industry in the summer of 1982 that further financial reform occurred. This crisis-reaction scenario does not easily fit the Japanese situation for two reasons. (a) The Japanese financial system has experienced only one period of extreme incompatibil-

3. A survey of U.S. financial history supporting this statement can be found in Cargill and Garcia (1985).

ity with economic forces (during the inflationary period of 1973-74). The environment was quickly stabilized by policies of the BOJ, and continued emphasis on noninflationary monetary growth has prevented the wide spreads between market and regulated interest rates characteristic of the U.S. in the 1970s. Thus, compared to the U.S., the Japanese scene has not been characterized by a series of episodes of major incompatibility between existing regulation and economic forces. The catalysts of reform have instead emerged in a more continuous and less dynamic fashion and have thus allowed regulators to adopt a "gradual" or "soft landing" approach that would be difficult to adopt in the U.S. (b) The cost of making incremental changes in the financial and monetary structure of the U.S. tends to be higher because of the importance of legislation and codification. Legislation lags behind the need for structural change, given the difficulties of enacting major financial legislation at any point in time. Thus it is more likely that the forces of change will accumulate further in the U.S. before regulators react in meaningful ways.

Third, the regulatory framework in any economy influences the structure of regulation, how regulators respond to problems in the financial system or the monetary authority, and the degree and type of market-regulator interaction during the process of financial reform. The multiplicity of U.S. regulators and the dualistic structure of intermediation finance have widened the range of innovation as market participants "shop" for the most favorable set of regulations and at the same time force regulators to deal more dramatically with binding regulations. It has brought federal and state regulators into conflict with each other, though the federal regulatory framework has clearly come to dominate financial regulation in the U.S. Japan is not faced with this type of problem because of the existence of a more unified and numerically smaller number of regulators; however, the Japanese regulatory framework does pose problems for the liberalization process. This will be discussed below.

4. Interaction Between the Market and the Regulator

It is difficult to model the financial reform process; however, the broad outlines are clear. (1) Existing regulation becomes binding as new economic forces emerge, such as high interest rates in the U.S. and lower economic growth in Japan. (2) The market innovates by introducing new financial assets, financial institutions and services to circumvent the binding regulation. (3) Regulators react to financial innovation by first attempting to constrain the circumvention efforts and when that fails, relaxing the most binding of the constraints. (4) Despite the terms "liberalization" or "deregulation," financial regulation is regarded as a fundamental basis for monetary control, insuring the soundness and public confidence in the financial system, and insuring that the financial system is compatible with specific government, social or industrial policies. Thus liberalization or deregulation is concerned with changing the form of regulation, but not the amount of regulation. (5) Computer and communications technology, as an exogenous force, continues to lower financial transaction costs and increase the potential return from market innovation. (6) As a result, a conflict emerges between the ability of the market to innovate and circumvent regulation and the desire of the regulator to impose some type of constraints on the financial system.

These elements have characterized the financial reform process in most industrialized economies and there exists considerable debate as to whether the process is stable or unstable. Edward J. Kane (1981) and Eugene F. Fama (1980) have emphasized, from different perspectives, the unstable nature of the interaction between the market and the regulator. In both views, the role of exogenous computer and communications technology destabilizes the reform process. Kane argues that the interaction between market and regulator evolves in a regulatory dialectic process of regulation-innovation—reregulation-innovation and so on in some unspecified, unstable process. Fama emphasizes how innovation renders ineffecitive the regulatory foundation of monerary policy and price level control. Regulatory constraints such as reserve requirements or credit controls designed to achieve monetary control will induce innovation, interfere with the efficiency of the financial system and ultimately fail to achieve the goal of price stability.

Kane and Fama have suggested important aspects of the current reform process that deserve close attention, given the past and future improvements in computer and communications technology. One does not need to accept their complete analysis in order to recognize the importance of the market-regulator interaction, and there are several aspects of the U.S. and Japanese cases that highlight the issues raised by Kane and Fama.

The dualistic structure of intermediation finance in the U.S. presents greater opportunities for market-regulator conflicts since it provided a greater degree of freedom to innovate and "shop" for favorable regulation. In recent years, the most significant examples of this are the declining Federal Reserve membership problem and the due-on-sale (DOS) controversy.[4]

The declining membership problem refers to the increasing number of banks that withdraw from the Federal Reserve System by choosing to operate under a state

4. The DOS controversy refers to the use of the DOS clause in a mortgage contract that allows the lender to call the loan "due-on-sale" if the title of the property is altered. Until the 1970s, the DOS clause was used mainly to protect the security of the mortgage in the event the new title holder was not credit worthy. Most mortgage loans were "assumable" at the original interest rate; however, in the 1970s, the DOS clause was used as a means to adjust the mortgage loan rate upwards independent of the credit rating of the new title holder.

charter and thereby operate under a less restrictive set of reserve requirements.[5] The declining membership problem became so severe by 1979 that it is regarded as a major force behind passage of the 1980 act. It was solved by replacing state with federal regulation and imposing federal reserve requirements on all federally insured depository institutions. De facto, all insured depository institutions became members of the Federal Reserve.

The DOS controversy illustrates the opposite type of shift, that is, from state to federal regulation to avoid binding state regulation. In 1978, the California Supreme court ruled that a DOS clause in a mortgage contract was a "restraint on alienation" of property and therefore could not be used by a financial institution as a portfolio management instrument. In reaction, state chartered institutions began to change their charter status to federal. California courts then interpreted the 1978 decision to apply to all mortgage lenders irrespective of charter type. The 1982 act ended the controversy by providing a federal override to state imposed restrictions on the use of the DOS clause as a portfolio management instrument. The act left a loophole for individual states to reject the federal override, but state restrictions could then only apply to state chartered institutions.

Both of these examples illustrate the market-regulator interaction in the U.S. and how the multiplicity of regulators influences the financial reform process. There is no doubt that the regulatory structure is shifting toward the dominance of federal regulation; however, the dualistic structure is still important and continues to influence deregulation, especially in regard to the issue of geographic constraints.

Japan has not experienced the same degree of market-regulator conflicts for several reasons. First, Japan does not have the multiplicity of regulators and a dualistic regulatory structure. In Japan, financial institutions have limited ability to "shop" for favorable regulation. Secondly, the range of financial innovation in Japan is more limited than in the U.S., for other reasons. The U.S. system is codified by a set of rather explicit laws that define parameters of operation, and combined with a more individualistic value system this increases the probability that markets will circumvent the spirit of the law while adhering to the letter of the law. One might characterize the difference by the following: the market participant in the U.S. assumes that an action is permissible if it is not explicitly prohibited by legislation; in Japan, the market participant assumes the action is not permitted unless administratively authorized. Market participants in the U.S. are also willing to challenge even the letter of the law. These points are clearly illustrated by the current controversy over nonbank banks. A bank is defined as an institution that accepts demand deposits *and* makes

5. Nationally chartered banks must become members of the Federal Reserve System. Membership is optional for state chartered banks.

commercial loans; hence, an institution that does not do both is legally not regarded as a bank. This has made it possible to circumvent geographic and product-line constraints and allows a nonbank entity (insurance company, securities company or even a furniture company) to operate a nonbank bank and evade important federal regulation, especially over interstate acquisitions by holding companies. As of late 1984, there were about 320 applications for charters before the Comptroller of the Currency to operate nonbank banks and the issue has yet to be settled (*American Banking,* 1984) to anyone's satisfaction. This type of market-regulator conflict seems unlikely in Japan. The importance of continual administrative review over the operations of financial markets and institutions, the consensus nature of Japanese culture, and a more unified regulatory framework reduces the range of financial innovation and market-regulator conflicts compared to the U.S.

5. Constraints on the Financial Reform Process

The record of financial reform to date in the U.S. and Japan suggests that the objectives of an efficient, adaptable and sound financial system are not easily achieved. The existing regulatory structures of both Japan and the U.S. were designed to limit competition, segment institutions and markets and support specific social or industrial policies. Reforms that expose the financial system to new competitive forces and expand the portfolio operations of market participants threaten established groups that benefited under the previous regulations. The self-interest of these groups will prevent or at least slow down the pace of reform. Both the U.S. and Japan face this type of constraint, but from different groups.

In the U.S. the social contract to support the housing sector has been weakened, but not destroyed, by the recent reforms. The widespread use of adjustable-rate mortgage instruments has allowed continuation of mortgage lending even in an environment of high and uncertain interest rates. Adjustable-rate mortgages represent a market solution which is consistent with the goals of deregulation. Unfortunately, financial regulation in the U.S. continues to enforce the social contract in such a manner as to reduce the efficiency of the financial system and continually expose it to more risk than necessary. Thrifts still retain a strong incentive to allocate the major part of their assets to mortgage lending under the current tax system, and despite the new asset diversification powers granted by the 1980 and 1982 acts, it is not likely that thrifts will diversify away from mortgages (Federal Reserve Bank of Chicago, 1983). There is every indication that U.S. policy will continue to provide subsidies to the housing industry and that financial regulation will remain part of that subsidization. An efficient financial system is one in which funds flow to those sectors affecting the greatest demand, and credit allocation efforts, in whatever form, conflict with an efficient and adaptable system.

In Japan, the PSS presents serious obstacles to achieving an efficient and adaptable financial sysem. The PSS is a major source of funds for the Trust Fund Bureau of the MOF and those sectors of the economy that depend on those funds. The MOF and MPT have allowed the PSS to become very competitive with the banking system by more favorable tax treatment of interest income earned from PSS deposits, favorable compounding features for long-term time deposits, and no penalties for early withdrawal of funds after six months. In addition, the PSS has requested authority for expanded lending powers, to sell newly issued government securities over the counter, and to generally function more like a private intermediary. The size of the PSS presents a serious problem to the liberalization effort. As of 1983, PSS deposits represented over 30% of total personal deposits. The size of the PSS and the fact that it is represented in every part of Japan via a network of almost 23,000 post offices, makes it a powerful force in the Japanese financial system. The political importance of the PSS and of those sectors dependent on PSS funds will surely constrain efforts to improve the ability of banks to compete for deposits. Like the role of housing in the U.S. system, the PSS will limit the extent of financial reform.

III. Reevaluation and Revisionist Views of Japanese Finance

Japanese economists are devoting increased attention to the financial system, and like their U.S. counterparts, they have found that the process of financial reform provides opportunities to apply historical, quantitative and theoretical approaches to help decide important policy issues of the 1980s. Much of the literature is important because it reevaluates and revises previously held views about Japanese finance. In this regard, there are two issues worthy of attention.

First, Koichi Hamada and Akiyoshi Horiuchi (1984), Yutaka Kosai and Yoshitaro Ogino (1984), Horiuchi (1984), and Eisuke Sakakibara et al. (1982, 1983, 1984) have objected to the view that the Japanese financial system during the HGP was highly regulated, administered and supervised for the purpose of supporting specific industrialization objectives of the government. They also deny that the "artificially low interest rate" structure, which allocated funds to high growth sectors and restricted the allocation of funds to less productive sectors was responsible for the performance of the economy during the HGP. In a more general sense, these and other writers strongly reject the concept that Japan's financial system was part of a so-called "Japan, Inc." plan to support specific governmental policies.

Second, Sakakibara, Robert Feldman and Yuzo Harada (1982), Sakakibara and Feldman (1983) and Sakakibara (1984) have extended the argument even further and suggest that the Japanese financial system, at least the banking sector, was more competitive during the HGP than commonly believed. This view is also shared by

Kosai and Ogino (1984). Sakakibara et al. (1982, 1983) further argue that Japanese banking was more competitive than U.S. banking and, by implication, suggest that this continued to be true after the end of the HGP.

These are important issues from the U.S. perspective. The first issue deals with the ability and desirability of credit allocation schemes to support specific social and industrial policies, and it reveals insight into Japan's impressive growth record. Past writers may very well have overstated the extent and effectiveness of financial planning in Japan. The view that the Japanese financial system was more competitive than previously thought may also have merit; however, the view that Japanese banking was more competitive than U.S. banking is incorrect and based on a misunderstanding of U.S. institutions and markets as well as a neglect of recent developments in the theory of contestable markets.

Let us now turn to a discussion of the two issues: the role of financial planning in Japan's postwar economic growth, and the relative degree of competitiveness between U.S. and Japanese banking.

1. The Financial System and Japan's Economic Growth

There is no doubt that a reevaluation of the role of financial regulation during the HGP is in order. The view that the Japanese financial system was regulated to support the specific industrialization goals of the government ignores the other rationales for financial regulation and the conflicts that arise between the different objectives. Financial regulation is designed not only to support specific social or industrial policies, but is also designed to insure adequate monetary control by the central bank, to protect depositors in a fiduciary monetary standard, to insure the soundness and stability of markets and institutions and other objectives. Just as in the U.S., it is difficult to characterize Japanese financial regulation in simple terms.[6]

The financial system that emerged during the 1950s was strongly influenced by historical developments that started in the prewar period, the continuation of Zaibatsu-type relationship between banks and corporate borrowers despite the official dissolution of Zaibatsu during the Occupation, the high levels of risk faced by lenders in financing reindustrialization and the absence of a government securities market. As suggested by Hamada and Horiuchi (1984), the financial system that emerged by the 1950s was more the result of the unique economic, social and cultural environment of Japan than it was of the designs of the regulators. Even though the financial system did support economic growth by transferring the large savings of individuals

6. Cargill and Garcia (1985) discuss the various objectives of financial regulation. Also see the study by Kenneth Spong (1983).

to corporate deficit units, a close analysis of the allocation of government funds to industry, the regulatory practice of the MOF with regard to branching, and the "window guidance" of the BOJ suggest that "financial policy was not directly or solely devoted to the objective of accelerating growth. Financial policy had many objectives, each of which reflected the benefits for various industrial sectors and bureaucratic organizations." (Hamada and Horiuchi, 1984, p. 26)

There is no doubt that the recent reevaluations of the financial system during the HGP, such as expressed by Hamada and Horiuchi, offer new and important insights. There is no difficulty in accepting the thesis that financial regulation had objectives in addition to industrialization and that the direct attempts of government to influence the flow of funds were not always consistent with accelerated economic growth. At the same time, there is a danger in going too far in this direction and neglecting the significant role played by financial regulation in Japan's postwar economic growth. Several considerations should be kept in mind.

First, the financial system during the HGP was extensively segmented, portfolio choices of institutions and market participants were severely restricted, and interest rates were either directly regulated (in the case of deposits, bank debentures and newly issued corporate debt), or were indirectly regulated (in the case of intermediation lending). There is ample evidence that many of the regulations were frequently binding and that there existed a fairly continuous excess demand for bank credit (Royama, 1983-84, pp. 9-10 and 30-31). The existence of such extensive and often binding regulation had to be based on a regulatory objective function. While one can accept the existence of several parameters in the function, it would be difficult to deny that a major intent of regulatory policy was to maintain a financial system consistent with industrialization.

Second, even though direct government allocation of funds was concentrated in the slower growth sectors of the economy (Table 1) and bank branch administration was designed to encourage loans to small and medium size businesses, these actions may still have been important to the growth process. Agriculture, forestry, fishery, electric power, etc. provided an important infrastructure for the Japanese economy and direct funding support of these sectors was consistent with economic growth objectives. There is no disagreement that government intermediation played a more important role in the Japanese economy than it did in the U.S.; however, to emphasize the fact that those sectors receiving the most significant amount of government funds were the least dynamic is to base the analysis on too narrow a standard. A closer analysis of the role of those sectors receiving a significant proportion of government funding is necessary.

Third, even though direct government funding for the most dynamic sectors of the economy was not as important as private sources of funds, government intermediation may have played a critical role in reducing risk. Even if government funding

Table 1 Proportions of Government Funds to Total Supply of Industrial Equipment Funds (1954-67 average; percent)

Coal mining	49.8	(0.2)[c]
Iron & steel	4.1	(7.0)
Machinery	10.4	(4.7)
Chemicals	7.4	(6.4)
Textiles	14.8	(1.2)
Agriculture, forestry & fishery	50.0	(0.5)
Water transportation[a]	41.8	(5.1)
Land transportation[a,b]	15.5	(1.7)
Electric power	26.8	(4.4)
Total including other industries	18.8	(3.1)

Notes: a Since the amount of funds acquired by issuing stocks and shares in 1964 is not available concerning both the water and land transportation, estimates of these industries exclude the year 1964.
b 1965-67.
c The figures in parentheses present a proportion of the amount of foreign loans based on the Law Concerning Foreign Investment in the sum of the industrial equipment funds each industry acquired in domestic markets and through foreign loans 1957-67.

Source: Based on Bank of Japan data sources and taken from Hamada and Horiuchi (1984, p. 22).

contributed to only a minor part of the total flow of funds to a specific industry, or even firm, this provided information to the private intermediaries about the perceived importance of that sector. In addition, even if government funding was not part of the source of funds, the blessing of government regulators to support certain industries conveyed important information.

Fourth, it is not surprising that financial regulation in Japan was designed to insure effective monetary control. This is consistent with supporting economic growth and cannot be used as an argument that Japanese financial regulation was not designed to support industrialization.

Fifth and most importantly, since so much of the financial regulation in Japan is administratively directed rather than codified by explicit and detailed legislation, it is difficult to judge the degree to which the policies were binding. For example, the financial system for all practical purposes has limited individuals from using the system as a source of funds for consumer purposes. It is true that there were, and continue to be, no explicit rules against making consumer loans. However, city banks, long-term credit banks, trust banks and other large financial institutions have been generally understood as institutions designed to make business as opposed to nonbusiness loans, and this has in fact prevented the individuals from using the financial system as a source of funds.

Thus from an outsider perspective the argument that there did not exist a detailed financial regulatory structure designed to support specific industrialization goals appears reasonable. It is easy to accept this argument since specific real sector planning was not enforced. Japan's economy was and is not a controlled economy. At the same time, one cannot easily reject the view that financial regulation established major parameters of operation that accommodated industrialization, export-led economic growth, an internationally isolated financial system, and a high savings rate among individuals.

2. The Degree of Competition of Japanese Banking

Sakakibara et al. have advanced two arguments: (1) Japanese banking was and is presently more competitive than commonly believed in spite of the extensive regulatory framework; and (2) a comparison between U.S. and Japanese banking indicates that the latter was more competitive than the former during much of the postwar period and presumably remains more competitive.

One can accept the first argument since we know that financial innovation can partially and sometimes completely circumvent regulation and that regulation merely changes the form of competition when regulation is binding. For example, despite the prohibition of interest payments on demand deposits in the U.S., banks paid implicit interest rates as well as offered repurchase agreements on large deposits. The system of points[7] in mortgage lending effectively circumvented usury limits on mortgage loans. Other examples can be provided and the situation is much the same for Japanese banking. It is well known that the "artificially low interest rate policy" was not successful given the practice of varying the amount of the compensating balance. There is also evidence that Japanese banks attempted to use premiums on several occasions to circumvent deposit ceilings.

The second argument however, is difficult to accept. Sakakibara et al. emphasize the following points to support the view that Japanese banking was and presumably is more competitive than U.S. banking: (1) The absence of major geographic constraints in Japan compared to the importance of U.S. restrictions against interstate and intrastate branching. (2) Reference to the voluminous U.S. literature using the structure-performance framework that suggests that the geographic constraints adversely impact bank performance. (3) Comparisons between three and five bank deposit concentration ratios in U.S. branching states and in Japan's two major cities, Tokyo and Osaka which show that U.S. banking markets are more concentrated. (4) The claim that intermediation finance in Japan is less segmented than in the U.S. (5) Japan has a larger number of financial institutions and branches per physical unit of space than the U.S. (6) The larger role of direct financing in the U.S. does not necessarily imply a more competitive environment, and U.S. securities markets are not as competitive as they appear since a significant proportion of corporate bonds are placed privately and many public placements are underwritten by syndicates of investment bankers. Though not explicitly stated by Sakakibara et al., it is implied that the role of the syndication manager is similar to the lead bank in Japan and thus is not significantly different in terms of the degree of competition.

One can readily agree that the lack of comparable data for the U.S. and Japan makes it difficult to quantitatively assess relative degrees of competition. At the same time, the view that Japanese banking is more competitive than U.S. banking should be rejected because it is based on a weak and incorrect interpretation of the evidence cited by Sakakibara et al., neglects the role of financial disclosure in U.S. securities markets, neglects the openness of the U.S. financial system to individuals, neglects the financial innovations introduced by the banking industry and neglects international competition. This is not a claim that U.S. banking was competitive or efficient prior to the legislative events of 1980 and 1982, but only that Japanese banking by any reasonable standard should not be regarded as a closer model to a competitive and efficient system.

Let us address each of the above six points as well as introduce other aspects of the comparison to support the claim that the "revisionist" view should be rejected. First, the role of branching restrictions has been overemphasized. Branching is the rule in many of the important banking states such as California and New York, multibank holding companies circumvent branching restrictions in states such as

7. A point refers to a loan discount, which is a one-time charge, used to adjust the yield on the loan to what market conditions demand. Each point equals one percent of the principal amount.

Texas, and there has been a continuous weakening of branching restrictions at the state level during the past decade. Intrastate branching restrictions may or may not be significant depending on the regulatory attitude about chartering new banks. Restrictions on interstate banking do exist; however, these have been partially circumvented by banks in a variety of ways. Aside from multibank holding companies that expanded prior to the Bank Holding Company Act of 1956, banks have continually established loan production offices across state boundaries; most recently, the advent of the nonbank bank has been designed to circumvent restrictions on interstate banking.

Most importantly, while there may be no explicit legal constraints on branching in Japan, the administration of branching requests by the MOF has not been designed to encourage competition. The more favorable treatment of regional as opposed to city banks has been designed to allocate funds to small and medium-sized business firms. Thus the legal geographic constraints in the U.S. have been overemphasized while Japan's administrative branching constraints have been underemphasized.

Second, the structure-performance literature in the U.S. is a week reed on which to hang any analysis. The literature is subject to both econometric and theoretical criticism. The econometric issues are serious and concern estimation techniques, data, appropriate definition of a banking market and failure to adequately incorporate the influence of suppliers of substitute bank services. In addition, recent advances in the theory of contestable markets and potential competition (for example, see Bailey, 1981) raise serious doubt about the structure-performance framework and any empirical results based on that framework. R. Alton Gilbert (1984) has recently provided a critical evaluation of the structure-performance literature and a close reading of that paper should caution anyone against the use of structure-performance empirical results.

Third, comparisons between three and five bank concentration ratios reveal little information about relative degrees of competition. Aside from the general issue of how to interpret a concentration ratio, one cannot draw conclusions from noncomparable ratios. A state or even an SMSA (Standard Metropolitan Statistical Area) is not a measure of the extent of a banking market in the U.S., nor does a bank concentration ratio incorporate the deposits supplied by S&Ls, mutual savings banks, and credit unions. In addition, Sakakibara et al. offer no explanation as to why other institutions are combined with regular banks for the Japanese ratios, while only banks are considered for the U.S. situation.

Fourth, the claim that Japanese financial institutions are less segmented is misleading. Even if a meaningful index of segmentation could be constructed, it would not be overly important in determining degrees of competition. Both U.S. and Japanese regulators have imposed various degrees of segmentation on financial intermediation; however, the important issue is how that segmentation has influenced the choices available to those who supply funds to, and demand funds from financial institutions. In Japan, corporate borrowers have few alternatives other than to deal with a small number of city banks and other institutions; whereas in the U.S., corporate borrowers deal with a significantly larger number of banks and other institutions as well as routinely use direct markets as a source of funds. In addition, corporate borrowers in the U.S. do not face the same level of compensating balance requirements as is characteristic of Japanese banking. Medium and small firms that do not have access to direct markets also have a much wider choice set in the U.S. than do their counterparts in Japan. Individuals in the U.S. can obtain credit from a large number of banks, S&Ls, mutual savings banks, credit unions and finance companies. It shoud also be noted that finance companies in the U.S. bear no resemblance to Japanese "sarakin." Depositors in the U.S. also have a larger choice set of financial assets than in Japan. Despite the fact that banks dominate the issuance of demand deposit accounts and business firms are prohibited from holding substitute demand deposit accounts (NOW accounts), depositors still have more degrees of freedom in the U.S. Savings and time deposits are offered by all depository institutions. Since the early 1970s, depository institutions have increasingly offered demand deposit substitutes such as NOW accounts in the New England states, credit union share drafts and ATS accounts. These transactions accounts were well in place before passage of the 1980 act. In addition, large banks compete vigorously for business deposits.

Thus segmentation by itself is not very meaningful and it would be difficult to construct an index of segmentation to compare the U.S. and Japan. The real issue is the choice set available to those who use intermediation finance.

Fifth, the comparison between the numbers of institutuions in Japan and the U.S. is again misleading. The appropriate standard is not the State of Montana (Sakakibara et al. 1982, p. 33) as the physical unit, but the number of institutions per capita if one wants to pursue the numbers game. If Sakakibara et al. believe that it is appropriate to include post offices in the case of Japan because they accept deposits, though depositors do not have access to the PSS as a source of funds beyond the amount of their deposited funds, then why not include post offices in the U.S. that sell savings bonds? Why are finance companies excluded from the U.S. total? Despite these observations, the number of depository or depository-like institutions in the U.S. exceeds in absolute and per-capita terms those in Japan. In any event, the number of institutions is not a meaningful criteria of the degree of competition.

Sixth, Sakakibara et al. imply that securities markets are not as competitive in the U.S. as they would appear because of the role of underwriting and private placement, and that by implication there is not much difference between the role of the syndicate manager in the U.S. and the main bank system in Japan. These views are not correct. The existence of deep and wide securities markets in the U.S., with extensive secondary market activity and a large government securities market, make it unlikely that the institutional arrangements for underwriting or private placements will result in anything but market-determined rates. The efficiency of U.S. securities markets is supported by an extensive and widely used financial disclosure system and by the independent evaluation of firms that trade on organized securities markets by Standard & Poor's, Moody's, and Value Line. In regard to this latter point, there is no comparison between the manager of a syndicate and the main bank in Japan. The existence of meaningful financial disclosure in the U.S. and the lack of meaningful disclosure in Japan sharply differentiate both the rationale and the role of the two institutions.

Seventh, the U.S. financial system has been internationalized to a high degree during much of the postwar period, whereas the Japanese system has been internationally isolated until recently. The ability of large bank depositors and borrowers to operate in both the domestic and international markets has forced a degree of competition on U.S. banking that is lacking in Japan. In addition, U.S. regulators have allowed foreign banks, many of them Japanese, to compete with domestic banks. In fact, until passage of the 1978 International Banking Act, regulatory constrains were less restrictive for foreign banks compared to domestic banks.

Eighth, as already discussed above, the potential for circumventing and challenging financial constraints is greater in the U.S. than in Japan. Thus the potential to offer substitute financial services by institutions influences the competitiveness of U.S. banking. U.S. banks have faced significant potential competition in the past decades and the theory of contestable markets makes a strong case that competitive results can be achieved even though the structure may appear to be noncompetitive. The legislative orientation of financial regulation in the U.S. and the lack of any group consensus makes it more likely that any financial market will be contested if it yields results significantly different than predicated by competition.

The above discussion is not meant to imply that U.S. banking is competitive and that Japanese banking has not been competitive. Both systems have operated under constraints that limit competition; however, the U.S. constraints have been less extensive, have permitted a greater degree of competition, and have been easier to circumvent via financial innovation than has been the case in Japan. The passage of the 1980 and 1982 acts increased the degree of competition both within banking and between the banking industry and other suppliers of financial services. Even though the goal of an efficient and competitive intermediation financial sector has yet to be achieved in the U.S., the gap between the degree of competitiveness between Japan and the U.S. is much wider than suggested by Sakakibara et al.

IV. Assessment of Japanese Liberalization: Selected Topics

Japanese regulators have responded to the pressures for financial reform in a cautious, reluctant and less than enthusiastic manner. These are not unique characteristics of the Japanese situation, however. They exist in the U.S. and elsewhere. The forces for financial reform have continued to increase since the early 1970s, and Japanese regulators have allowed the financial system to adjust to a more liberalized structure. The appendix provides a chronological listing of the major changes and suggests that considerable progress has been achieved. There are two issues that can be raised about the progress to date. First and most obvious, there is a need to continue the liberalization process in those sectors of the financial system that have already benefited from past reform policies. Specifically, regulators need to increase the degree of interaction between domestic and international finance, expand the number of money market instruments, expand the long-term market for both government and corporate bonds, and eliminate constraints over interest rate movements. There is no doubt that reforms will continue to be made along these and related lines. Second, there are a number of issues that have played an important role on the U.S. situation, many of which have not been sufficiently emphasized in the Japanese liberalization process. Attention is now directed to some of these issues.

1. Development of a Meaningful Financial Disclosure System

Meaningful and accessible financial information on nonfinancial firms that sell bonds or equities on organized securities markets and on federally insured commercial banks has provided an important foundation to the confidence and stability of U.S. financial markets since the Great Depression. The presumption is that financial disclosure increases the efficiency of financial markets. In addition to regulator required financial disclosure, several well-known private firms provide detailed analyses that increase the ability of market participants to assess the risk of lending to any single borrower. In addition, certified public accounting firms are required to carefully follow regulatory guidelines in compiling financial statements for public release and the accounting profession establishes well-known standards and procedures to be followed in compiling financial statements for all firms. The decision in late 1984 by the Securities and Exchange Commission to require a recomputation of Financial Corporation of America's quarterly financial report illustrates the importance ascribed to the U.S. system of financial disclosure.

The above is not meant to imply that U.S. financial disclosure is without problems, but it does provide meaningful information on corporations and major financial institutions that are a prerequisite to deep and wide financial markets and active participation by large numbers.

In contrast, the Japanese financial system has virtually no meaningful financial disclosure system. Publicly traded firms provide only meager financial information that is difficult to evaluate even for those having detailed knowledge. Combined with the complexty of the Japanese tax system, published profit rates are devoid of meaningful information about the firm's performance. To illustrate, until 1977 (Ministry of Finance, 1977, and Japan Securities Research Institute, 1983, p. 159), the accounts of subsidiaries were not required to be consolidated with the parent company, and until 1983 consolidation was optional. This is a rather serious omission. The situation is much the same for major financial institutions in Japan. Although banks are required to provide annual financial statements to the MOF, the scope of the disclosure requirement is narrower than in the U.S. In addition, much of the information provided to the Japanese regulators is not publicly available.

The lack of a meaningful financial disclosure system is partly responsible for the undeveloped corporate bond market, the speculative nature of the Tokyo stock market, and the importance of the main bank system and customer relationship characteristic of intermediation finance. Obviously, the financial system has functioned without a U.S.-style financial disclosure system; however, this may no longer be possible if the objective of liberalization is to increase the role of direct finance for nongovernmental borrowers.

A meaningful financial disclosure system is a necessary condition for the development of broad and deep corporate securities markets. In addition, regulators need a more continuous flow of information on at least the major financial institutions to assess risk exposure, especially if the banking system becomes more directly involved in the securities markets. Japanese finance can not continue to rely on customer relationships, main bank systems, or government administration to assess risk. If a more market oriented financial system is the ultimate goal of liberalization, then an improved financial disclosure system should become part of that goal.

2. Limited Access to the Financial System by Individuals

Sakakibara (1984) and others have noted that consumer and mortgage credit (hereafter referred to as consumer credit) have not played an important role in intermediate finance. Even as late as 1978, consumer and mortgage credit in Japan as a percentage of GNP was 17.5% compared to 68.1% in the U.S. This figure understates to some extent the amount of consumer credit since employees frequently borrow from their companies; however, there is little doubt that the Japanese financial system has not been a major source of funds for the individual. It is somewhat problematical as to whether this is a result of implicit regulation to restrict consumer access or the result of free choice on the part of individuals. Both factors are probably important. In addition to limited access as a source of funds, individuals in the past have not had a large choice set of financial assets. The available financial assets (bank deposits, bank debentures, trust accounts and PSS deposits) have frequently been subject to binding interest rate ceilings. In fact, the limited choice set of financial assets may partially explain the high cost of land and housing, and attempts to build financial porfolio models of the household sector in Japan should consider land and housing as an alternative to financial assets.

Hugh Patrick (1984) has raised the issue of equity in the Japanese financial system and suggests that the system has explicitly and implicitly been designed to limit access by individuals to credit and to channel large individual savings to the business sector, especially the large corporate sector. Even a superficial overview suggests that Partick's view is correct. Despite the recent increase in consumer credit and use of credit cards, the individual's claim on financial resources has a low priority in the Japanese financial system. The limited access is partly reflected by the rapid growth of sarakin. The sarakin amount to nothing less than legalized loan sharking and do not well serve the image of a developed country (*The Economist*, 1984, p. 26).

The exclusion of the individual from equal access continues under the present liberalization efforts. Consumer credit is still not encouraged and the prevailing view is that the financial system should be liberalized to achieve a more efficient allocation of funds for industrialization and economic growth. The recent decision to regulate some of the activities of sarakin have the individual in mind; however, sarakin are still permitted to impose extremely high interest rates on consumer loans. In terms of the use of funds, the individual has not benefited to the same extent as the large firm. All of the new financial assets bearing market determined interest rates (CDs, gensaki and the proposed money market certificates) are available in minimum amounts (usually ¥100 million) that exclude almost all individuals. Financial assets in smaller minimum amounts are regulated and though rate ceilings have been more frequently adjusted since 1975, lost interest income would appear to be substantial. In addition, regulators have expressed the view that large deposits will be deregulated first with the deregulation of small deposits to be considered in the future.

There are two considerations to be made about the individual's limited access. First, it is simply not equitable for individuals to continually subsidize industry and economic growth. There is a convincing argument that this was necessary for the first few decades after the war and that individuals were compensated by high economic growth and increased real income; however, this argument is less meaningful in the present context. Second, it is not efficient to regulate one class of financial assets and deregulate another class. If the constraints are binding, then individuals and the financial system will devote resources to circumventing the constraints. The circumvention may expose financial institutions and markets to new risks that have not yet been experienced and the circumvention utilized resources that have a high opportunity cost. A close study of the U.S. attempt to regulate small deposits and allow large deposits (CDs) to reflect market forces should convince regulators that all deposits should be liberalized. And even if the constraints are not binding, then valuable regulatory resources are being utilized to continually change deposit ceilings.

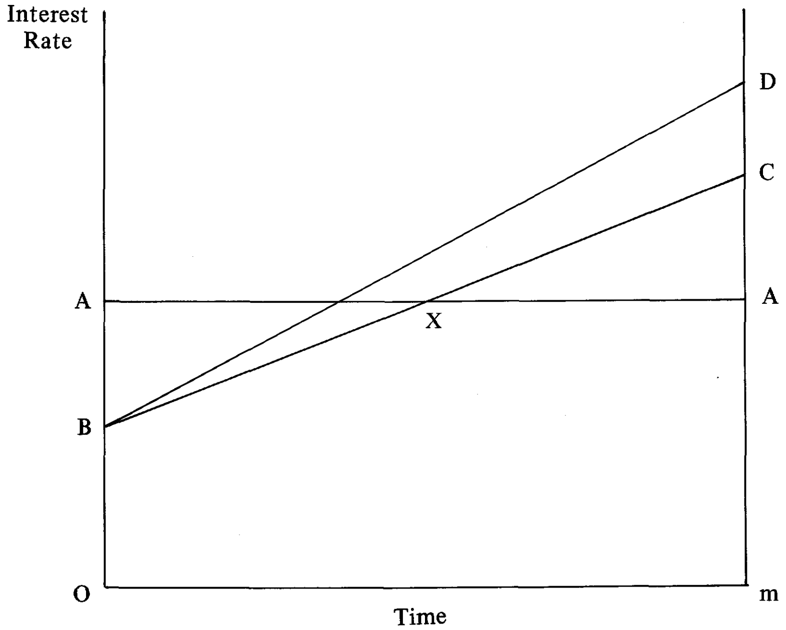
It is clear that the individual in Japan bears a good deal of credit for Japan's economic growth record and it is equally true that limited access to the financial system has subsidized industrial development. Efficiency and equity arguments suggest that the individual should be afforded a greater role in the current liberalization process.

3. Increased Risk Exposure for Financial Institutions

The thrift industry in the U.S. had until recently been constrained by regulation to allocate funds almost exclusively to long-term, fixed-rate residential mortgages but was increasingly required to rely on short-term sources of funds that became more and more sensitive to market interest rates. Thrifts, especially, had an unbalanced maturity or duration position between uses and sources of funds and starting in the mid-1960s were exposed to new types of risk. In an attempt to constrain the cost of funds for thrifts, Congress in 1966 extended Regulation Q ceilings to thrift deposits; however, the attempt to isolate thrifts from market pressures failed. Interest rate ceilings exposed thrifts to liquidity or disintermediation risk as depositors withdrew funds and placed them in higher yielding assets. Disintermediation was especially destabilizing during several "credit crunch" periods and at those times threatened the viability of the entire financial system. Regulators attempted in 1978 to deal with disintermediation in a partial equilibrium setting by allowing thrifts to issue market-sensitive six-month money market certificates of deposit in minimum amounts of $10,000. This merely shifted the problem from liquidity and disintermediation risk to interest rate risk because thrifts were still regulated to make long-term, fixed-rate mortgages.

Interest rate risk can best be illustrated by considering how a long-term fixed-rate is established. The long-term rate is determined by the current cost of deposits, the expected cost of deposits over the maturity of the loan, the cost of administering the loan, the cost of possible default and a profit margin. In Figure 2, AA represents the interest rate on the loan over maturity m, and BC represents the current rate on deposits at time 0 and the expected path of deposit rates through period m. Administration costs, default and profit are ignored. Even though deposit rates eventually rise above the loan rate, the loan is profitable since ABX = CXA; however, if BD represents the actual path of the cost of funds the loan will be unprofitable. Interest rate risk is thus the risk that the actual cost of funds will differ from the expected cost of funds and render the asset portfolio less profitable. The more unbalanced the maturity and the more interest sensitive the sources of funds, the more significant the interest rate risk. Thrifts have been especially sensitive to interest rate risk and many of the legislative reforms and financial innovations have been designed to reduce interest rate risk.

Figure 2 Determination of Interest Rate on a Fixed-Rate-Loan of Maturity m.



Source: George G. Kaufman and Eleanor Erdevig (1981).

Financial institutions in Japan have experienced liquidity and interest rate risk, though not on a par with that experienced in the U.S. Banks have experienced the disintermediation of large deposits to the gensaki market in the case of large corporate clients and the disintermediation of deposits to the PSS system in the case of individuals. The introduction of large CDs in 1979 was designed to offset increased liquidity risk much in the same vein as the 1978 introduction of money market certificates in the U.S. And like the U.S., this then increased the market sensitivity of bank deposits; however, the problem has not yet become serious. Only about 15% of bank sources of funds are market determined and banks continue to offer primarily short-term business loans. Long-term credit banks have also not experienced significant liquidity or interest rate risk since both sources and uses of funds are primarily long term.

The continuation of domestic and international liberalization will expose financial institutions to increased risks and this may not be fully appreciated by Japanese regulators. As long as regulators attempt to constrain interest rates on selected fund sources, there will be an incentive to shift to less or unregulated sources of funds and expose financial institutions to increased liquidity risk. If deposit rates are liberalized across the board then institutions like the long-term credit banks will be exposed to interest rate risk unless other reforms are adopted.

Several approaches to dealing with interest rate risk can be illustrated by referring to Figure 2. (1) Impose interest rate constraints on deposits to prevent path BD from occurring; however, this is not effective and only induces disintermediation. (2) Increase deposit maturity; however, in a more liberalized environment with fluctuating interest rates it may be difficult to attract funds with long-term, fixed-rate deposits. (3) Use financial futures markets to hedge against interest rate risk; however, this requires the existence of futures instruments compatible with the long-term loans. In addition, financial futures markets do not yet exist in Japan. (4) Introduce adjustable-rate, long-term loans to shorten the duration of the uses of funds. (5) Provide institutions with increased asset diversification powers to achieve a better balance between the duration of the uses and sources of funds.

The latter two alternatives are being pursued in the U.S., especially in the case of the thrift industry. As liberalization progresses in Japan and institutions are exposed to market forces, regulators will be required to reduce the artificial heterogeneity that has been an important characteristic of intermediation finace as well as encourage adjustable-rate, long-term loans. Interest rate risk may become a serious problem for the long-term credit banks since they typically make fixed-rate loans. In contrast, city and trust banks typically make variable-rate loans.

4. Deposit Insurance

The deposit insurance system in Japan was established in 1971 and based on the U.S. system.[8] Like the U.S. system, the deposit insurance system is inadequate for a more competitive environment. There are three basic problems with the insurance system: capitalization, the moral hazard of risk-insensitive insurance premiums and the amount of the insurance per depositor.

In a sense, any insurance fund in a fractional banking system is underfunded. The basic rationale of deposit insurance is to maintain public confidence in the event that one or a few institutions fail, as well as to protect the depositors of the failed institution. The Federal Deposit Insurance Corporation would be unable to meet the claims of depositors if a large number of banks simultaneously failed; however, the objective of the FDIC is to prevent that from occurring. Compared to the FDIC, the Japanese insurance fund is grossly undercapitalized and the failure of even one medium size institution would deplete its resources.

The moral hazard problem is more serious and remains even after an adequate capital fund has been established. Under the current system of fixed-rate premiums,

8. An overview of deposit insurance with a number of references is provided by William R. Keeton (1984).

deposit insurance subsidizes risk for a large number of institutions. It encourages risk taking and depositors (at least up to the insurance level) have no incentive to impose discipline on the institution. In the U.S., regulation of the quality of assets and close supervision have been designed to adjust for the different risk levels of institutions; however, recent experience has shown that these are not effective methods of monitoring risk. The insuring agencies would be better advised to allocate resources to determining a method to impose risk-adjusted deposit insurance premiums. If such a method had been in place during the late 1970s for example, it is unlikely that large U.S. banks would have expanded as much lending to non-oil developing countries as they did.

The insurance limit per depositor of ¥3 million appears rather low and indicates that a large proportion of bank deposits are not currently insured.

Thus the existing capital inadequacy of the insurance fund and, more importantly, the modification of the insurance system to incorporate risk should be a high priority item in the Japanese liberalization process. In addition, the insurance limit of ¥3 million per depositor should be increased.

5. Monetary Control

The financial reform process in almost all countries has created serious problems for monetary control and this is especially true in Japan. The BOJ in the past was able to provide effective monetary control because of the regulated structure of intermediation finance. Monetary control was based on controls over the interbank call and bill market, "window guidance" that defined bank lending limits, and changes in the discount rate. The discount rate was maintained below the interbank market rate and since city banks were net borrowers in the interbank market, the BOJ was in a position to allocate credit to the city banks and achieve effective credit and monetary control. Judged by yearly growth rates of the money supply and inflation performance, one would judge that the structure of monetary control was effective (Friedman, 1983, and Suzuki, forthcoming). The old structure that proved so effective is changing rapidly. The large corporations are no longer as dependent on bank credit and the role of banks in intermediation finance has declined since the mid-1970s. At the same time, the lack of a new-issue, short-term government securities market prevents the adoption of flexible open market operations. In the U.S., open market operations are the most effective instrument of monetary control. The BOJ has been vocal about the need to consider the new environment for monetary control in a more liberalized environment, but the MOF has been less than enthusiastic about allowing a broad government securities market to emerge.

The BOJ correctly recognizes the need to alter the framework of monetary policy as liberalization continues; however, it faces several difficult issues even assuming the establishment of an active short-term government securities market.

Liberalization creates both transitional and longer term problems for monetary policy. There is little disagreement that the transitional problems can be serious as the public adjusts to new portfolio opportunities. During the transition, money multipliers and measures of money are significantly altered. The Federal Reserve has had to make frequent adjustments to account for the introduction of NOW accounts, super-NOW accounts, money market deposit accounts and other changes in the financial system. Despite the difficulties however, the Federal Reserve found that the transitional periods were relatively short (several months) and manageable.

On at least one occasion, the BOJ has adjusted its policies to take into account financial reforms. In 1979, the BOJ revised the money measures to include CDs and continues to focus on M2 plus CDs as the appropriate money measure for Japan. At the same time, there is reason to believe that the BOJ will face more serious transitional problems than experienced by the Federal Reserve. The "gradual" and administrative approach to financial reform will introduce new financial assets and services more slowly and more continuously over time than has been the case in the U.S. This gradual approach will constantly force the BOJ to make a series of adjustments, thus complicating monetary policy and making it more difficult to develop long range strategies. In addition, the relationship between the degree to which domestic and external finance are liberalized will influence the transitional problems; for example, significant unbalanced liberalization between these two sectors will complicate monetary control in ways difficult to predict.

The longer-term implications of liberalization are more serious. While the views of Fama (1980) may not be relevant for the near future, financial reform does create difficulties for monetary control (Cargill and Garcia, 1982 and 1985). In the case of Japan, the longer-term problems may become more serious than for the U.S., for two reasons. First, the BOJ appears to be moving toward the view that monetary policy should rely on the Keynesian interest rate–expenditure framework; however, the stochastic variation of the underlying equations are likely to increase as liberalization progresses. Second, the shift of focus to the interest rate channel of monetary policy and the tradition of controlling interest rates may encourage the BOJ to target interest rates rather than monetary aggregates, especially if the aggregates become more difficult to measure over time.

Interest Rate–Expenditure Channel

Akhtar (1983) and Suzuki (1984 and forthcoming) have made a case for focusing on the interest rate–expenditure channel and both have suggested that the interest elasticity of real spending in Japan has increased. In fact, Akhtar argues that increased expenditure interest elasticity should be an expected result of liberalization in most economies, thus increasing the interest elasticity of the IS function. At the same time, liberalization reduces the interest elasticity of the LM function, and the two combined effects improve the potential for monetary policy to stabilize income within the context of a Keynesian framework.

The argument that the IS and LM functions will change in a beneficial direction is persuasive; however, the stochastic variation of the functions will also increase. The current view emphasizes that the variation of the LM function will increase in the environment of a financial system subject to varying degrees of regulation, increasing ease of circumvention by the market and attempts by regulators to reregulate. Recent research suggests that traditional demand functions for money have experienced increasing difficulties since the mid-1970s in providing a base for monetary policy. In the case of Japan, Suzuki (1984) argues that the demand function has remained stable; however, there are two issues that can be raised about the results of traditional money demand functions such as reported by Suzuki. (1) Stability tests are frequently based on the Chow-Fisher test which tests only the statistical difference between two sets of constant coefficient estimates. Aside from the problem of determining the appropriate subperiods, the Chow-Fisher test is not an appropriate test of the type of cumulative movement over time in the money demand function that is likely to occur during the process of financial reform. This is especially true in Japan where gradualism has been the accepted approach. Other approaches based on moving coefficient models would be more appropriate. (2) Past demand functions for money may prove to be poor guides for the future in Japan, given the rapid growth of consumer credit and credit card usage in the past few years. A theoretical and empirical case can be made for the view that credit cards influence the demand for currency (Garcia, 1980). More importantly, the possibility of a full fledged electronic funds transfer system in Japan within the next few years questions the future stability of the demand function for money.

Interest Rates and Monetary Aggregates

The current discussion of the new monetary policy framework, focused on the interest rate–expenditure channel and the IS/LM framework, is interesting in a number of ways from a U.S. perspective. The view that the BOJ can exercise effective monetary policy in a liberalized environment via the interest rate–expenditure mechanism is clearly Keynesian, and yet the BOJ appears to accept monetarist attitudes about short- and long-run impacts of monetary changes.

The U.S. experience clearly illustrates the dangers of focusing on interest rates and relying on the Keynesian indirect channel of monetary policy. The relevant interest rate in determining expenditures is the real interest rate; however, the central bank has little control over the real rate. Central banks influence the nominal rate, and given the existence of liquidity effects, income effects and Fisher effects resulting from changes in monetary growth, it is difficult to infer movements in the real rate from movements in the nominal rate. In addition, focusing only on the interest rate–expenditure channel ignores other and potentially more important money-income relationships.

The BOJ has already accepted the intermediate targeting framework of monetary policy; however, it will face new challenges to maintain noninflationary monetary growth. The BOJ will increasingly face new issues generated by the existence of two intermediate targets: interest rates and monetary aggregates. In the past, the interest rate target was not relevant since interest rates were highly controlled. As liberalization continues, the BOJ will have more flexibility to adopt operating strategies. At the same time, the past concern with interest rate control and the "artificially low interest-rate policies" might serve as a precedent for the BOJ to focus on interest rates in much the same way that the Federal Reserve did in the 1970s, and with the same adverse results.

6. Electronic Funds Transfer

Japan is moving much more rapidly into the age of electronic funds transfer than is the U.S. The technology exists in the U.S.; however, restrictions against interstate banking and various intrastate branching restrictions pose as regulatory barrier. Japan does not face this problem and certainly possesses the technology. The planned introduction in 1985 of the Information Network System (INS), a national optic fiber telecommunications system, could dramatically change the structure of the financial system and the ability of the BOJ to control and define the money supply. At this stage, the impact of INS has not been carefully explored since there are many uncertainties as to how rapidly electronic funds transfers will be adopted. While Japan does not face the same type of regulatory barriers to an electronic funds transfer system as exist in the U.S., it does have other barriers. There is considerable emphasis on maintaining secrecy about individual financial matters, and the fear that such a system might allow access to individual financial information on a broad scale may pose a major constraint to development.

7. Government Intermediation Finance

Government plays a major role in Japanese intermediation finance and the role has increased during the late 1970s. The rate of increase in loans was about equal for government and private financial institutions over the period from 1956 through 1975; however, over the period 1976-82, the rate of increase of government and private lending was 16.6% and 9.3%, respectively (Federation of Bankers Associations of Japan 1984, p. 10). During the period 1965-73, government intermediaries provided 17.1% of the flow of funds to final borrowers; but by 1982, government intermediation had increased to 29.2%. There are a number of government financial institutions; however, the PSS has become the most controversial and illustrates the difficulty of achieving an efficient and adaptable financial system in the presence of such major involvement by government.

The PSS provides the major source of funds for the MOF's Trust Fund Bureau as the sole user of those funds. These funds are distributed to public corporations, local public bodies, special corporations and a number of government financial institutions (Export-Import Bank of Japan, Japan Development Bank, People's Finance Corporation, etc.) and have played an important role in postwar economic growth. The PSS has become very competitive with banks. Regulation has favored PSS deposits in a variety of ways and the fact that a number of politically important sectors of the economy depend on funds obtained by the PSS suggests that continued favorable regulation is likely.

The attempt to maintain such a large government presence in intermediation finance and the temptation to isolate government financial intermediation from market forces is inconsistent with the goals of an efficient and adaptable financial system. In the U.S., the role of housing has acted as a constraint on financial reform. In Japan, the PSS and the large role of government intermediation in general represent at least as serious a constraint to Japanese liberalization.

8. Conflicts between Regulators

The structure of regulation influences both the process and the goals of financial reform. The U.S. situation is unique because of the multiplicity of regulators; however, Japan has experienced and will increasingly experience conflicts among its regulators. At present, the BOJ and MOF are the two major regulators, followed by the MPT, which has responsibility for the PSS.

Regulator conflicts exist and will influence the liberalization process. First, the MOF has an internal conflict arising from competition between banks and the PSS. The PSS supplies a major portion of the funds to the Trust Fund Bureau, and as such the MOF is reluctant to reduce the role of the PSS and may be inclined to allow the PSS expanded powers. At the same time, this will conflict with the interests of the private banks who have been losing ground to the PSS as well as the securities companies. The MOF also has an internal conflict between banks and securities companies. Second, there exists a number of potentially serious conflicts between the BOJ and the MOF. The BOJ is concerned that rapid internationalization of the yen and liberalized Euroyen activity will weaken monetary control. The MOF favors a more rapid process of international liberalization, perhaps because the MOF is more susceptible to recent U.S. pressure. There exist conflicts between the MOF and the BOJ over how best to insure the soundness of financial institutions. The MOF has called for an expanded deposit insurance scheme to be administered by MOF. The BOJ argues that the discount window and the lender of last resort services of the central bank would be a more effective method of insuring stability, though neither regulator has seriously considered how to differentiate between insurees on the basis of risk. The BOJ wants a new-issue, short-term government securities market established in order to have access to flexible open market operations, whereas the MOF is reluctant to allow market determined rates on all of the newly issued securities. The MOF wants to maintain the current subsidization provided by the BOJ's willingness to purchase short-term debt and the requirement that syndicate members hold purchased government debt for a period of time.

Third, until recently the MPT has not played a major role in the regulatory conflicts other than as regulator for the PSS. This could radically change in the next few years if the INS provides a basis for an electronic funds transfer system. The MPT is the main regulator of the INS and as such may emerge as a major financial regulator. The range of conflicts between the MOF, the BOJ and the MPT will then increase sharply.

In the U.S. the term deregulation is not an accurate description of what is occurring. Only the form of regulation and not the amount of regulation has changed. Recognizing the self-interest of the regulator, the last activity a regulator wants to cease performing is regulation! Our understanding of regulatory theory in the U.S. has shown that the traditional view that regulation exists to correct specific market failures is too narrow. The initial emergence of regulation may have resulted from market failure such as the banking collapse during the Great Depression; however, the objective function of the regulator is more complex than the market-failure view suggests. Regulators are concerned about the public interest, but more importantly, they are responsive to special interest groups and they are concerned about self-preservation. This is no less true in Japan. The regulator conflicts are important and will influence the process of liberalization.

V. Benefits of Japanese Liberalization to the U.S.

It is perhaps fitting to close this discussion with some references to benefits to the U.S. financial reform in Japan since the U.S. has chosen to make domestic and international liberalization a public issue. The U.S. has brought considerable pressure on Japan to liberalize domestic financial markets, increase access for foreign financial institutions and take steps to internationalize the yen. The 1983 meeting between the U.S. Treasury and the MOF and the Working Group Report of May 1984 highlight the extent of this pressure.

There is no doubt that liberalization, both domestically and internationally, will benefit Japan. The benefits to the U.S. are more important in the long run as opposed to the short run and the recent pressure brought on Japan can be explained primarily in noneconomic terms.

The short-run impacts of the specific recommendations of the Working Group and other liberalization reforms have been evaluated by Jeffrey A. Frankel (1984) and Richard Freeman (1984). The general conclusions that emerge are that international liberalization will not have a major net impact on the demand for the yen. Japan's domestic market has become well integrated with the international market, and capital flows in and out of Japan have increased significantly since 1980. Thus it is difficult to understand the U.S. Treasury's position and the claimed benefits that Japanese liberalization will have on the doller/yen exchange rate. The U.S. Treasury has not followed Hugh Patrick's advice (Patrick, 1984, p. 193) of several years ago when he suggested that U.S. policy makers should not excessively attempt to influence financial reform in Japan. He wrote that U.S. influence would have only marginal significance, that the Japanese financial reform process would occur in any event and that the U.S. would only be placed in a scapegoat position to be utilized by Japanese policy makers.

The explanation for the U.S. pressure is largely political, though as suggested by Patrick, not well conceived. The large trade deficit, much of it with Japan, presents a serious problem for the U.S. political establishment. It is always easier to shift the responsibility for one's economic problems to others, and unfortunately the U.S. has focused attention on Japanese liberalization rather than high interest rates and the deficit in the U.S. The dollar/yen exchange rate will not be significantly affected in either the short or the long run by Japanese liberalization; rather the problem must be solved within the U.S. domestic financial system by reduced government deficits and lower interest rates.

At the same time, there are significant long-term benefits to the U.S. of continued Japanese domestic and international liberalization. Three come to mind. First, only with a freer financial system can Japan expect to become a major financial center for the Pacific Basin region; and the unique historical, cultural and economic relationships between the U.S. and Japan suggest that the two countries will share major responsibility for providing the financial infrastructure.

Second, the emergence of the yen as an international reserve asset and the greater overall role of Japan in maintaining a stable international financial structure will reduce the considerable pressure that has been placed on the U.S. during much of the postwar period. Economies of both the free and even some parts of the Communist world have become far too interdependent for one country to support the international financial system.

Third, the U.S. may benefit from enhanced ability to export financial services to Japan. This is one area in which the U.S. appears to have a comparative advantage; and if not constrained by regulators, U.S. supplied financial services may make some inroad into the Japanese economy. The 1981 amendments to the Banking Law are particularly important in this regard and greater access by U.S. financial institutions is to be encouraged. It remains to be seen how this develops.

Appendix

Major Developments in Liberalization of Japanese Financial Markets Since 1975

This appendix lists the major changes that have contributed to a more liberalized financial system chronologically. The list is selective and based on subjective judgment as to the most important changes since 1975. The list has been the joint effort of the author and Division II of the Institute for Monetary and Economic Studies and is based on sources provided by the MOF (1984), the Economic Planning Agency (1984) and the Report of the Working Group (1984). Each listed changes is keyed according to the following characteristics:

A: relating to short-term securities market
B: relating to government bond market
C: relating to introduction of new financial instrument or service
D: relating to internationalization of domestic financial markets
E: relating to interest rate liberalization

November 1975: Joint operation of cash dispensers among city and regional banks in large cities. (C)

March 1976: Circular notice issued by MOF concerning gensaki transactions which officially recognized a market that had emerged in the late 1960s by securities companies. Gensaki transactions represent the resale or repurchase of government bonds at a fixed price for a fixed time period, usually three months. (A)

April 1977: Government-bond-purchasing syndicate members were authorized to sell deficit-covering government bonds held more than one year. Deficit-covering bonds are issued to cover current-account central government deficits. (B,E)

October 1977: Syndicate members were authorized to sell construction government bonds held more than one year. Construction bonds are issued to finance public works projects. (B,E)

January 1978: MOF initiated the sale of government bonds held by the Trust Fund Bureau on a bidding basis. (B,E)

June 1978: Medium-term (three years) government bonds issued on a bidding basis. (B,E)

June 1978: Operations by the BOJ to purchase government bonds from syndicate members executed on a bidding basis. (B,E)

February 1979: Nonresident's investment in Japanese securities totally liberalized, except for gensaki transactions. (D)

April 1979: The posted-rate system for the interbank call rate abolished. (A,E)

May 1979: Negotiable certificates of deposit (CDs) introduced with unregulated interest rates and issues limited to 10% of bank's net worth. (A,E)

May 1979: Medium-term (two years) government bonds issued on a bidding basis. (B,E)

May 1979: Restrictions on short-term impact loans made by foreign banks removed. Impact loans are unrestricted borrowing in a foreign currency from abroad. (D)

May 1979: Short-term impact loans by Japanese foreign-exchange banks authorized. (D)

May 1979: Restrictions on nonresident's gensaki transactions removed. (A,D)

June 1979: The BOJ adopts a "quick" system for purchasing outstanding government bonds, that is, the timely and flexible buying operations in small lots. (B,E)

October 1979: The posted-rate system for two-month interbank bill rate abolished. (A,E)

January 1980: Medium-term government bond fund authorized for securities companies. This is an open-type investment fund in small denomination (¥100,000), possessing limited transaction features, and in which more than half of the funds are invested in medium-term government bonds. Interest rate is not officially regulated; however, MOF influences rate via "moral suasion." (B,C)

January 1980: Ceiling on bank CD issue raised to 25% of net worth, to take effect January-March 1980. (A,E)

March 1980: Interest rates on nonresident's (official institutions) free yen deposits liberalized. (D,E)

March 1980: Medium- and long-term impact loans by Japanese foreign-exchange banks authorized. (D)

March 1980: Joint operation of cash dispensers by 6 city banks commenced operation. (C)

April 1980: Joint operation of cash dispensers by the remaining 7 city banks commenced operation. (C)

April 1980: Ceiling on city banks' gensaki transactions with repurchase removed. (A)

April 1980: Ceiling on bank CD issue raised to 50% of net worth, to take effect April-June 1981. (A,E)

May 1980: Limitations on the sale of outstanding government bonds by syndicate members reduced from one year to seven to nine months after issue data. (B,E)

June 1980: Medium-term (four years) government bonds issued on a bidding basis. (B,E)

October 1980: Joint operation of cash dispensers by 63 regional banks commenced operation. (C)

October 1980: Joint operation of cash dispensers by 71 sogo banks commenced operation. (C)

November 1980: Joint operation of cash dispensers by 158 shinkin banks commenced operation. All shinkin banks now participate. (C)

November 1980: Financial institutions with surplus funds, such as regional banks and trust banks, permitted to borrow on the call market, while investing funds in the bill market. (A)

November 1980: Four major securities companies (Nomura, Yamaichi, Daiwa and Nikko) permitted to borrow in the call market subject to a ¥10 billion ceiling each. (A)

December 1980: Amendments to the Foreign Exchange and Foreign Trade Law:
Permission no longer required for impact loans. (D)

Import usance facilities by usance bill for one year or less liberalized. (D)

Shift from the non-resident free yen account system (yen account convertible into foreign currencies held by non-residents) to a non-resident yen account. (D)

Major foreign exchange banks exempted from the requirements to report on the issue of foreign currency securities such as overseas CDs and on the acquisition of foreign currency securities (over one year). (D)

Resident foreign currency deposits in foreign exchange banks liberalized (¥3 million ceiling per deposit removed). (D,E)

December 1980: Ceiling on foreign exchange banks' conversion of foreign currency into yen raised. (D)

April 1981: City banks authorized to invest funds in the call loan market. (A)

April 1981: The BOJ commenced selling holdings of short-term government securities on the open secondary market. (A,E)

April 1981: City banks' gensaki transactions with resale permitted. (A)

April 1981: Limitations on the sale of government bonds by syndicate members relaxed from seven to nine months to 100 days after issue date. (B,E)

May 1981: Amendments to the Banking Law. (D)

June 1981: New type of maturity-designated bank time deposit authorized in which depositor can withdraw funds at any time after one year as long as depositor designates maturity. Interest is calculated on a compound basis. (C)

June 1981: New type of loan trust fund ("Big") account authorized for trust banks for two maturities (two and five years). Interest is calculated on a compound basis. (C)

October 1981: Accumulation-type of government-bond fund account authorized for securities companies; this is a closed-type investment fund of long-term government bonds. (C)

October 1981: New type of bank debenture ("Wide") authorized for long-term credit banks in which interest is calculated on a compound basis for five years. (C)

December 1981: Borrowing on the call market authorized for 8 medium-scale securities companies (up to ¥5 billion per company) and call borrowing ceiling for the four large companies raised from ¥10 billion to ¥30 billion. (A)

January 1982: Two additional medium-scale securities companies permitted to borrow in the call market. (A)

February 1982: New type of property accumulation maturity-designed bank time deposit authorized. The deposit is applicable to the special tax-exempt plan called "worker's property accumulation plan." (C)

April 1982: City banks introduced installment savings accounts in which depositor specifies either the amount or maturity of the account. (C)

April 1982: Call money brokers permitted to deal in the bill market. (A)

July 1982: Government-bond fund with profits retained until maturity ("Jumbo") established by securities companies. (C)

October 1982: Property-accumulation pension instruments established by private financial institutions and the PSS which are applicable to the special tax-exempt plan called "worker's property accumulation plan." (C)

November 1982: Open-type of government bond funds ("Rikin-Funds") established by securities companies. The funds are designed only for interest accruing on government bonds which is automatically invested every interest-payment date. After 30-day period, investor can withdraw funds at any time. (C)

February 1983: Ceiling on bank CD issues to be raised to 75% of bank net worth, effective January-March 1984. (A,E)

April 1983: Joint operation of cash dispensers by the 7 trust banks commenced operation. (C)

April 1983: Banks permitted to sell newly issued long-term government bonds over-the-counter. (B,C)

June 1983: Securities companies commenced lending on the security of government bonds. (C)

August 1983: Government-bond time deposits established by banks. (C)

September 1983: Government-bond trust accounts established by trust banks. (C)

September 1983: New type of combined account ("High Pack") established by securities companies with limited transactions features. (C)

October 1983: Banks permitted to make over-the-counter sales of newly issued medium-term government bonds. (B,C)

October 1983: Government-bond discount bank debenture account established by long-term credit banks. An instrument composed of long-term government bonds and discount bank debentures in which the interest on government bonds is automatically reinvested in the discount bank debenture. (C)

January 1984: The two city bank cash dispensers systems integrated into one service network. (C)

January 1984: Minimum denomination of bank CDs lowered from ¥500 million to ¥300 million. (A,E)

April 1984: The real-demand rule regarding forward foreign exchange contracts abolished. (D)

April 1984: Shinkin bank and securities company offer new financial instrument composed of a medium-term government bond fund and ordinary deposit. (C)

April 1984: Domestic sales of foreign-denominated CDs and commercial paper authorized for banks and securities companies. (A,E)

April 1984: Ceiling on bank CD issues raised from 75% to 100% of bank net worth, effective April 1985. (A,E)

April 1984: Guidelines on the issue of Euroyen bonds by residents relaxed so that the number of domestic companies authorized to issue Euroyen bonds is enlarged. (D)

April 1984: Overseas yen lending by authorized foreign exchange banks liberalized. (D)

June 1984: Restrictions on the conversion of foreign currencies into yen (the "Yen-Ten" restrictions) for financial institutions removed. (D)

June 1984: Restrictions on short-term Euroyen lending to residents removed. (D)

June 1984: Financial institutions commenced selling and buying outstanding government bonds. (C,E)

October 1984: 3 foreign banks permitted to commence selling and buying outstanding government bonds. (B,D)

November 1984: 6 foreign banks permitted to make over-the-counter sales of newly issued government bonds. (B,D)

December 1984: Non-Japanese residents authorized to issue Euroyen bonds. (D)

December 1984: Removal of withholding tax imposed on the interest earnings of non-residents on Euroyen bonds issued by Japanese residents. (D)

December 1984: Euroyen CD issues by Japanese banks (through their overseas branches and subsidiaries), Japanese securities companies (through their overseas banking subsidiaries) and foreign banks permitted. (D)

December 1984: Foreign banks authorized to establish trust banks in Japan. (D)

Forthcoming: Minimum denomination of bank CDs to be lowered from ¥300 million to ¥100 million and minimum maturity to be reduced from three months to one month in April 1985. (A,E)

Forthcoming: six-month money market certificates (MMC) with minimum denomination of ¥50 million to be introduced by financial institutions in April 1985. (C,E)

Forthcoming: Establishment of a yen denominated bankers' acceptance market. (A,D,E)

Forthcoming: Establishment of a futures market for government securities. (A,B,E)

Forthcoming: Restrictions on long-term Euroyen lending to residents planned to be removed. (D)

Forthcoming: Interest rate ceiling on large denomination deposits planned to be removed within a few years. (E)

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