
A Comparative Study of Financial Innovation, Deregulation and Reform in Japan and the United States*

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I. A General Framework for Studies of Financial Innovation, Deregulation and Reform

Generally speaking, at any time and in any country, financial innovation arises as a device on the part of the private financial sector to solve or to circumvent conflicts between the newly developing economic and technical conditions and the old statutory financial framework and regulations which played an important role in the past but which have then become obsolete. Financial innovation is further promoted when the financial authorities recognize the obsolescence of the existing statutory framework and deregulate the essential part of it. This process of interaction between the private financial sector and the regulators forms a history of financial reform. The financial innovation, deregulation and reform facing us today is merely an example of this paradigm (Suzuki (1983a, 1984a,b, 1986), Suzuki-Yomo (1986), Silber (1983)).

The common background against which financial innovation has been proceeding, more or less, in every industrialized country since the 1970s is the common economic and technical conditions which have emerged simultaneously during the past decade, and the old financial framework which more or less failed to cope with these newly developing conditions.

The reasons why the speed and spread of financial innovation differ from country to country are that the old statutory framework and regulations, and the extent of the newly developing economic conditions in each country are different. Hence the seriousness of conflicts between them also differ from country to country

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(Suzuki-Yomo (1986), Akhtar (1984), Bingham (1985)).

In my view, there are four common economic and technical conditions that developed in the past decade: first, the high and volatile interest rates due to the worldwide inflation following the First Oil Crisis in 1973; second, the application of technological progress in computer and telecommunications to financial transactions; third, more active international shifts of funds among industrialized countries since the shift to floating exchange rates in 1973; and finally, the increase in public-sector deficits resulting in the large-scale issue of government bonds which has stimulated the development of open markets in the financial system. These conditions have created demands for and supplies of new financial instruments and services.

Along with these four newly emerging economic and technical conditions, financial regulations existed that were incompatible with the new financial environment. First of all, there were regulations on the interest rates on financial instruments provided by financial intermediaries; second, there were strict statutory distinctions concerning the scope of various financial businesses such as banking, securities, and trust businesses; and third, there existed exchange controls and other regulations which separated international and domestic financial markets (Suzuki (1984a, 1986), Korea Federation of Banks (1984)).

While it may be unnecessary to elaborate on the conflicts that occurred during the past decade between these four newly developing conditions and the three major characteristics of the old financial framework that lead to financial innovation, I will present a few examples to illustrate these conflicts. Conflicts between high and volatile interest rates and interest rate regulations have been the background for many innovative financial instruments with market-oriented interest rates. Also with technological progress in computers and telecommunications, many kinds of cash management services and retail banking services have been developing in order to circumvent the strict distinctions concerning the scope of various financial businesses. Further, the Euro-markets and the offshore markets have played an important role in solving the conflicts between the active movement of international funds and the statutory segmentation of international and domestic markets (Akhtar (1984), Suzuki (1984a)).

II. Common Features of Financial Innovation in Japan and the United States

Given the view point just expressed concerning the motivations for financial innovation, it seems quite natural that Japan's experience has more in common with the experience of the United States than with that of European countries. This is because Japan shares a more common statutory framework with the United States and her newly emerging conditions have a greater similarity with those of the United States than with European countries. For example, with respect to the statutory framework, Japan has regulations concerning interest rates on deposits which the United States also had, through Regulation Q, until quite recently. In contrast, European countries such as Germany and Britain deregulated interest rates on deposits more than a decade ago. The Securities and Exchange Law in Japan and the Glass-Steagall Act in the United States both define strict statutory distinctions

between the banking business and the securities business, whereas in Continental Europe (for example, Germany, Switzerland and Holland) a universal banking system prevails in which one financial institution can combine dealings in both the banking and securities business. With respect to the newly developing conditions, technical progress in computers and telecommunications is very rapid in Japan and the United States, and this technology has been more quickly applied in the financial sector in Japan and the United States than in Europe (Suzuki-Yomo (1986), Akhtar (1984), Cargill (1985)).

As a result, conflicts between high and volatile interest rates and interest rate regulations, and those between technical progress in computers and telecommunications and the strict statutory distinctions between banking and securities businesses are much more serious in Japan and the United States than in Europe. Therefore, both countries have experienced particularly similar processes of innovation in financial instruments and services when compared with other industrialized countries including these in Europe.

For instance, financial innovation in the securities business in Japan first took the form of Gensaki transactions and the medium-term Government Bond Fund which are just counterparts of Repurchase Agreements (RPs) and Money Market Mutual Funds (MMMF) in the United States. The counterattack from the banking business to overcome the resultant disintermediation was, in both countries, the creation of Certificates of Deposit (CDs) and Money Market Certificates (MMCs). Cash Management Accounts (CMA) connecting demand deposits in the banking business and investment trust funds in the securities business have also appeared in both countries (Cargill (1985, 1986), Cargill-Garcia (1982, 1985), Suzuki (1984a, 1986), Wenninger (1984)).

The common process of financial innovation in Japan and the United States has also resulted in the common consideration of deregulation of interest rates and deregulation of the scope of financial businesses.

III. Different Aspects of Financial Deregulation and Reform between Japan and the United States

However, the speed and spread of financial deregulation has been different between both countries. For example, the United States has completed deregulating interest rates except those on demand deposits, whereas Japan is still in the course of it. Japan has deregulated the statutory distinction between banking and securities businesses as far as government securities are concerned, while the United States has not yet made any significant steps towards deregulating either the statutory distinctions between financial business scopes or the prohibition on interstate banking activities.

1. Differences in the Objectives and Structure of Regulation

The different aspects of financial reforms seem to arise from the facts that, although the two countries share much more common conditions and statutory framework than with the Europeans, there also exist unique features of financial

regulation as well as economic conditions in each countries. These features have caused differences in the speed and spread of financial innovation, deregulation, and reform.

First of all, in spite of the superficial resemblance of regulatory and statutory framework, the philosophy, targets and structure of regulation are not necessarily the same. Regulation in the United States has been primarily designed to restrain competition in order to limit risk, especially among banks, though it is arguable whether it has actually functioned effectively. The competitive constraints were focused on intermediation finance, whereas direct markets in which competition was not restrained were closely monitored and a system of financial disclosure was enforced. The structure and objectives of regulation in the United States were strongly influenced by the collapse of the banking system during the Great Depression. At a later stage, regulation also came to be regarded as an important part of a social policy to support the housing sector through savings and loan associations (S&Ls) backed up by development of the mortgage market (Cargill-Garcia (1982, 1985)).

The structure of regulation in the United States also has a unique feature. There exists partly as a result of dualism, a multiplicity of U. S. financial regulators. 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, the Federal Deposit Insurance Corporation, the Federal Home Loan Bank Board, the Federal Savings and Loan Insurance Corporation (part of the Federal Home Loan Bank Board), the National Credit Union Administration and the Securities and Exchange Commission (Golembe-Holland (1983), Cargill (1986), Kane (1977, 1981)).

In the case of Japan, regulation appears as if it similarly constrained financial markets, but the nature of regulation differs in at least three ways. First, regulation was not designed to encourage mortgages or any type of consumer credit, but was more concerned with accommodating industrialization, and investment- and export-led high economic growth. Second, regulation was far more extensive, especially regulations over interest rate movements and restrictions designed to isolate domestic finance from the international financial system. Interest rates on not only intermediation finance, but also those on instruments in direct markets such as bonds and debentures in the primary market were regulated. The strict isolation from the international system was necessary to maintain such extensive regulations. Third, in Japan, there is a much simpler, unified regulatory structure. The Ministry of Finance and the Bank of Japan are the major regulators followed by the Ministry of Posts and Telecommunication which regulates only postal savings accounts. This distinction between Japan and the United States has an important bearing on the reform process in each country (Suzuki (1980, 1984b), The Bank of Japan (1973), Cargill (1985), Hamada-Horiuchi (1984), Horiuchi (1984)).

2. Different Structures of the Financial Systems

The contrasting nature of regulation in each country naturally resulted in different financial structures.

Firstly, securities markets in Japan are considerably underdeveloped compared

to those in the United States. The United States 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 main market participants are the government and the business sector. 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. On the contrary, Japan's long-term securities market has not developed until recently because interest rates in the primary market for bonds and debentures were regulated; and, until the early 1970s, government budgets were balanced or deficits were small. Therefore, there was no need to develop a securities market for government debt. As a result, corporations were not able to use the securities markets as a main source of funds. Short-term securities markets for Treasury bills (TBs) and commercial papers (CPs) do not exist or still remain small, and a market for bankers' acceptances (BAs) just started last year. The main short-term markets consist of the interbank market for call loans and commercial bills (similar to the federal funds market in the United States) organized before World War II, the gensaki market that emerged in the late 1960s, and the large bank CD market authorized in 1979. The one exception is that the secondary market in government bonds has grown dramatically since 1975 despite the limited development of the primary market in Japan (The Working Group of the Joint Japan-U. S. Ad hoc Group on Yen/Dollar Exchange Rate Issues (1984), Sakakibara-Kondoh (1984), Cargill (1985), Suzuki (1983a, b)).

Secondly, the counterpart of the underdeveloped direct markets in Japan is the more important role played by Japanese banks in intermediation finance when compared to the U. S. banks. Thus the high ratio of indirect to direct finance is one of the most significant differences between the Japanese and the U. S. financial systems. In 1973, 93.2% of the flow of funds was transferred through financial institutions compared to about 75.0% for the United States. A major outcome of liberalization since the early 1970s has been a continual decline in the importance of intermediation in Japan. In 1984, the intermediation share declined to 87.6%, which was, however, still higher than that for the United States (Suzuki (1983b, 1984a, b)).

One reason for this contrast is that Japanese intermediation markets are not influenced by the dualistic system of chartering, organization and regulation characteristic of the United States. Since the National Bank Act of 1864, dualism has been an important characteristic of intermediation finance in the United States and accounts for the presence of constraints against interstate banking, the variations in regulation over intrastate banking among states and the large number of major depository institutions. As of December 1983, private depository institutions alone in the United States included approximately 15,400 banks, 3,513 savings and loan associations (S&Ls), 534 mutual savings banks and 19,203 credit unions. In addition, there are large number of nondepository financial institutions (for example, finance companies, private pension funds, insurance companies and securities companies) as well as nonfinancial firms offering financial services such as Sears, Roebuck and Co. In contrast, the number of private financial institutions in Japan is considerably smaller. As of 1985, there were 87 banks (13 city banks, 64 regional banks, 3

long-term credit banks and 7 trust banks), 1,024 institutions for small businesses, 6,122 institutions for agriculture, forestry and fisheries, and several hundred other institutions (for example, insurance companies and securities companies) (The Bank of Japan (1973), Cargill (1985), Royama (1983-4), Suzuki (1980, 1984b, 1986)).

All these differences in the objectives and structure of regulation as well as the differences in the philosophies of the statutory framework between Japan and the United States, and the resultant dissimilarity in the financial systems are the essential reasons for the more rapid deregulation of interest rates and the slower deregulation of financial business scopes in the United States as compared to Japan.

3. Differences in Economic Environments

Another reason for the rapid and even abrupt deregulation in the United States and gradual deregulation in Japan with respect to interest rates can be seen on the side of the newly developing conditions. Although Japan and the United States have shared, as already stated, the four common economic and technical conditions which have emerged during the past decade as the main stimuli of financial innovation, the most influential one among the conditions differ between the two countries. In the United States, high and volatile inflation rates played an overwhelming role in forcing deregulation of interest rates, while in Japan increases in public sector deficits with the resulting developments in the bond market gave rise to the pressure for deregulation of interest rates (Suzuki (1984a, b), Korea Federation of Banks (1984), Cargill (1985)).

It is said in the United States that the Federal Reserve failed to achieve noninflationary monetary growth throughout the 1970s. As a result, inflation and expectations of future inflation generated high interest rates in the securities markets and rendered Regulation Q binding. Thrifts such as Savings and Loan Associations 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, this combined with their limited ability to diversify their portfolios caused problems in the thrift industry that threatened the stability of the entire financial system. Regulations on deposit rates, which had been functioning as a social policy measure to support the housing sector, became an obstacle to the provision of housing finance. Thus by the late 1970s the conflict between existing financial regulation and the failures of monetary policy generated intense pressure for rather abrupt deregulation of interest rates (Cargill-Garcia (1982, 1985)).

In the case of Japan, following the bitter experience in 1973-74 the inflation rate has been low and stable since 1977 and interest rates have not been as high nor as volatile as in the United States. The primary catalyst of financial reform was generated not by the inflation, but by the sudden end of the high growth period in 1973 and the impact that slower growth had on the flow of funds. The end of rapid growth reduced the role of the corporate sector as the primary deficit unit. Instead, the appearance of a significant increase in government deficits made the government the primary deficit unit (Suzuki (1983b, 1986)).

In order to smoothly issue government bonds on a large scale, the authorities were obliged to decide the interest rates on syndicate issues of long-term government bonds in line with market rates and to deregulate sales of government bonds by the syndicate members to the secondary market. In addition, the government started to issue medium-term government bonds through tender. These deregulations naturally resulted in the development of primary and secondary markets for government bonds, which in turn caused financial disintermediations since interest rates on intermediation instruments were still regulated. The pressure for deregulating deposit rates thus emerged in Japan (Suzuki (1984a, b, 1986)).

In both Japan and the United States, financial disintermediation created pressure for deposit rate deregulation, but the nature of pressures that were the catalysts of financial reform were different. Inflation in the United States made it inevitable that the authorities deregulate hastily, whereas in Japan extensive regulation of interest rates together with no inflation makes the liberalization process more gradual and cautious. Also, since 1975 the Japanese have been willing more than the U. S. authorities to keep regulated rates in line with market rates.

IV. Prospects for the Future Financial Reform in Japan

Although the process of financial reform in Japan has not been very rapid, it will further proceed steadily since the conflicts between the new economic and technical conditions, and the old statutory framework and regulation, mentioned in Chapter I, will continue to stimulate financial innovation. This will in turn make further financial deregulation and reform inevitable.

1. Interest Rate Deregulation

First of all, with respect to deposit rate deregulation, Japanese banks already provide some instruments with deregulated interest rates. These instruments are: CDs with maturities of 1 to 12 months and a minimum denomination of 100 million yen; MMCs with maturities of 1 to 12 months and a minimum denomination of 30 million yen; time deposits with maturities between 3 months and 2 years and a minimum denomination of 300 million yen; and deposits denominated in foreign currencies. Since the minimum denominations of MMCs and liberalized time deposits are to be reduced and the longest maturity of MMCs is to be lengthened to 2 years by next spring, the deposit rates which will remain regulated are: those on small denomination time deposits whose minimum denominations are smaller than the minimum denomination of MMCs; and those on demand deposits, or short-term deposits whose maturities are shorter than 3 months.

As regards small denomination deposits, small denomination MMCs with a minimum denomination of, say, several hundred thousand yen will be introduced within 2-3 years if the Ministry of Posts and Telecommunications agrees to the Ministry of Finance's proposal that the same rules should apply to banks and postal savings offices in determining the market-oriented rates and minimum denominations on small denomination MMCs. However, complete deregulation of small deposit rates cannot be foreseen because deposit rates on postal savings deposits

would not necessarily be determined on market principles since postal savings offices are public institutions whose objective is not profit maximization, but the supply of public goods. In the case of complete liberalization, deposit rates offered by postal savings offices on the basis of policy decisions by MPT would become the leading rate on small denomination deposits in the financial system because the postal savings offices are large enough to have an oligopolistic share of the market. This situation would distort fund allocation and would also hinder the effectiveness of monetary policy.

Deregulation of interest rates on demand or short-term deposits is not yet discussed openly. However, *de facto* cash management services for business firms and *Sogokoza* (demand deposits with overdraft facilities using time deposits as collateral) for individuals are functioning like demand deposits with higher interest rates provided by time deposits or investment trust funds. As was the case in the United States where cash management services or accounts were eventually replaced by money market deposit accounts (MMDAs) or super NOW accounts, it is not unlikely in Japan that demand deposits with market-oriented rates will finally be introduced in Japan in the future.

Since regulation has extended to the field of direct finance in Japan, there is, besides deposit rates, another possible area for interest rate deregulation. Treasury bills are issued at fixed low rates of interest so that almost all of them are bought by the Bank of Japan. The Bank then sells some of them at a loss to the private sector at market rates in order to create a TB market. However, this market still remains small. Deregulation of TB rates in the form of, say, tender issues is strongly desired because the resultant creation of a large TB market will become the core of open money markets and the focal point for the transmission of monetary policy (Suzuki (1984a, 1986)).

A commercial paper market is also another area of innovation that may evolve, but issuing CPs is not yet permitted. This is primarily due to the so called "collateral principle," which has been a unique feature of Japanese financial markets. It was used to limit risk and was established after a series of credit panics towards the end of the 1920s. Bank loans to customers, call loans in the inter-bank market, and bills and bonds issued by business firms are, in principle, all secured by collateral.

This can be contrasted to the case of the United States where financial transactions have been secured by a system of financial disclosure and rating, that was established following the bitter experience in 1929. In the case of Japan, the predominance of indirect finance by banks compensates for a lack of disclosure and rating system because financial information on borrowers are exclusively disclosed to lenders through a long-term customer relationship between "main" banks and client business firms. In the open market, the collateral principle limits risk instead of a disclosure and rating system.

However, interest rate deregulation followed by the development of direct markets for private securities and the internationalization of financial transactions are now pressing the Japanese financial system for an alteration of the collateral principle. Exceptions to the collateral principle have already been introduced with the emergence of Euro-yen bonds and domestic bonds issued by big businesses without collateral since 1984; and call loan transactions without collateral since 1985.

The quantity of financial transactions without collateral will continue to increase.

Thus, a system of meaningful financial disclosure is a necessary condition for the stability of the future financial system in Japan. It will cause the development of broad and deep corporate securities markets. Obviously, the financial system has to date functioned without a U. S. -style system of financial disclosure. However, this may no longer be possible if the result of liberalization and internationalization is to increase the role of direct finance for nongovernmental borrowers. 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. Also, market mechanisms for evaluating risk are likely to appear. Japanese finance cannot continue to rely exclusively on the collateral principle, customer relationships, main bank systems, or government administration to assess risks. If a more market-oriented financial system is the ultimate goal of liberalization, then an improved system of financial disclosure together with the emergence of reliable rating companies should become part of that goal (Cargill (1985)).

2. Deregulation of the Scopes of Financial Businesses

Deregulation of the scopes of financial businesses in Japan will not have to overcome as many serious barriers as in the United States.

This is partly because Japan does not have the multiplicity of financial regulators as in the United States. Owing to the non-existence of a multiple structure of regulators, Japanese financial intermediaries are smaller in number and more homogenous under a unified regulatory structure. For example, although the names are different, city banks, regional banks, mutual loan and savings banks (Sogo banks), credit unions (Shinkin banks) and credit cooperatives are functionally engaged in the same kind of deposit banking and have almost the same business scopes. Long-term credit banks and trust banks, which have their own special fields in long-term finance, are also engaged in the same short-term finance as deposit banks (The Bank of Japan (1973), Federation of Bankers Association of Japan (1984)).

Therefore, statutory distinctions between short- and long-term finance, and between banking and trust businesses are not so solid. Indeed, the former distinction is *de facto* disappearing on the asset side since all banks are now dealing in both short- and long-term lending.

However, the statutory distinction between short- and long-term finance on the liability side still remains. It has become a cause of mismatching between assets and liabilities accompanied by interest risk and liquidity risk. From the viewpoint of a sound banking system, deregulating the statutory distinction on the side of liabilities as well is desirable in order to eliminate this mismatching. In addition, if this deregulation is delayed, the statutory distinction on the liability side which is already circumvented by deposit banks accepting long-term deposits denominated in foreign currencies, will eventually be circumvented further in the course of deregulating international financial business such as issuing long-term CDs and borrowing long-term fund by deposit banks in the Euro-yen market.

The statutory distinction between banking and trust businesses in Japan is not so strict as in the United States because Japan has not erected "Chinese Walls" restricting exchanges of information and personnel within a bank. Besides, since the new entry to the trust business by foreign banks was permitted in 1985, the trust business market today is not a strictly segmented market, but has become a "contestable" market. Therefore, conflicts of interests will be more or less prevented by the surveillance and the selection of market participants.

Another reason why deregulation of financial business scopes in Japan will not be so hard as in the United States is that the relationship between Japanese banks and securities companies is already closer than in the United States. Although both Japan and the United States do not have a system of universal banking as in Europe, banks in Japan are allowed to operate closely with securities companies in forming syndicates to purchase government debt. Banks are also permitted, together with securities companies, to become dealers in the government bond market, and banks can hold corporate bonds and corporate equities in their investment portfolios. These activities exceed those permitted U. S. banks (Cargill (1985)).

In the future, it is quite likely that the distinctions between short- and long-term finance, and between banking and trust businesses will become blurred further, and all kinds of banks will become more homogenous. Accompanying a more homogenous banking sector will be a decline in the number of institutions through the process of affiliation and merger. Wholesale banking, retail banking or both will be selected as the main scope of business by each institution.

With respect to postal savings offices, whether they should be denationalized and divided into smaller groups will be examined. In the meantime, the final conclusion cannot be foreseen.

In the securities business, large banks will further expand their business in the government securities market and the securitization of loans will make the dividing line between banking business and the private securities business even more obscure.

One of the most important problems facing Japanese financial authorities in the course of deregulating the scope of financial businesses is how to maintain the stability of the payment system in which not only deposit banks, but also securities companies and other non-bank institutions are to be involved, and in which electronic fund transference is to prevail. The lucky conditions for Japan compared to the United States are a unified regulatory structure, a small number of financial institutions which are rather homogenous and less weak, and a stable macroeconomic performance limiting credit and other risks. Since too large a safety net would cause moral hazard risk to rise, effective supervision by the financial authorities as well as a stable macroeconomic performance will have to be the most essential measures and conditions for stability of the future payment system (Benston (1986), Corrigan (1982)).

3. Internationalization of the Japanese Financial System

The process of deregulation concerning interest rates and the scope of financial businesses mentioned above will be accompanied by internationalization of the Japanese financial system. This is because entry into the Japanese financial markets

will become easier for foreign financial institutions, and because the Japanese financial markets will become more integrated with overseas financial markets. The start of the offshore market in Tokyo this fall will enhance this trend.

Given the possibility that Japan through its accumulated current account surpluses will become the world's largest net lender, Tokyo will come to be one of the three major financial centers of the world, following London and New York. In addition to the common roles of international financial centers such as financing the balance of payments of other countries and providing financial facilities to the global activities of domestic, foreign and multi-national enterprises, Tokyo may further perform the function of financing the rapid economic growth of the Pacific Basin countries as well as providing markets for yen denominated borrowings and lendings. This will increase the role of the yen as an international currency.

The Tokyo market as an international financial center will become a mixture of both the London market which is mainly engaged in lending foreign currencies to non-residents, and the New York market which is specialized in providing dollar denominated financial facilities to non-residents.

The speed of internationalization of the Japanese financial system will depend crucially upon development of the securities market which has already been discussed in 1. of this Chapter.

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