CENTER ON JAPANESE ECONOMY AND BUSINESS

日本経済経営研究所

Working Paper Series

August 2008, No. 263

The Economics of Japan's Postal Services Privatization

Nobuyuki Kinoshita

The Economics of Japan's Postal Services Privatization

Nobuyuki Kinoshita

Ministry of Finance

Government of Japan

This draft

June 24, 2008

Abstract: Japan's privatization of its postal services - which includes one of the largest financial institutions in the world - is exceptional for its huge size and complex structure. This essay examines the economic background of these features, as well historical development, competitive environment, and lessons. The effect on management incentives of a soft budget is key in understanding the system's problems when it was operated as a government agency. The analysis suggests the privatized components should achieve higher profitability and greater efficiency, including recovering from the soft-budget problem.

Introduction

Many privatization programs have been undertaken by developed and developing countries since the 1970s. In Japan, three state owned enterprises (SOE) - Japan National Railway (JNR), Nippon Telegraph and Telephone (NTT), and Japan Tobacco - were privatized in the mid 1980s.

Japan Postal Services Privatization was the hottest topic in Japanese politics in 2005. Now, I believe it is time to discuss the matter in an economics context. Among privatizations throughout the world, this one is exceptional for the huge size of the business volume and the complex structure of the reorganization. In this essay, I would like to show the economic background of these features.

First, I examine the economic nature of the products Japan Postal Services Enterprise (JPSE) has provided. I show that the markets for the products are very competitive.

Then, I review the development of business volume and the financial structure of JPSE. JPSE has significantly expanded its business volume since the 1960s, under the fiscal control of the Postal Services Special Account (PSSA).

Third, I analyze the management discipline of JPSE from the viewpoint of soft-budget-constraint (SBC) theory. I find the postal service business has been relatively efficient, but still suffering from an SBC problem. As for the financial businesses, I describe the financial commitment problem combined with the Fiscal Investment and Loan Program (FILP).

The essay concludes with my assessment of the effect and lessons of the privatization. If several conditions are satisfied, the privatization will bring market discipline to every entity of the privatized JPSE and successful results.

1 The Economic Nature of JPSE Products

JPSE products fall into two categories: postal services and financial services. This section reviews each group, including its competitive environment.

1.1 Postal Services

Postal Services involve transportation and communication. As regards the communication aspect, it is quite obvious that telecommunication services have several advantages compared to the post. In particular e-mail is far cheaper and faster than traditional mail. However, many communications, especially legal ones, still require original documents. But, even in this area, "electronic signatures" are becoming more acceptable.

The transportation aspect can be subdivided into freight and letters. As to freight, it is clear that the services of other firms are substitutes for the parcel delivery services of JPSE.

As for letters, the competition structure is not straightforward. JPSE has a universal service obligation, and also quasi-monopoly status. Other firms must satisfy minimum standards such as having their own nation-wide network in order to acquire permission to provide letter delivery services. So far, no firm has entered this market to challenge JPSE.

However, comparing the Japanese case with the US one, we find the environment in Japan more competitive. In Japan, the postal service does not have exclusive use of the mail drops of private residences, as is the case in the United States. That is, legally, only items with proper postage can be put in a residence mail drop in the United States. This is true even though the residence must provide and maintain the drop.

Newspaper delivery companies have been strong competitors for local postal service business in Japan. They can legally deliver commercial leaflets into private mail drops, and thereby skim demand for direct mail.

In Japan, a letter is defined as "a document that presents an idea of a sender or informs a fact to a specific receiver". Letters can be delivered only by the JPSE or other permitted entities, of which there currently are none. Items outside of this definition can be delivered by any freight company as parcels regardless of the weight or delivery condition. Such a definition of letters is not practical from a regulatory standpoint.

Some freight companies provide "mail transport" service for light-weight documents that are not covered by the definition of letter. This service is expanding as an alternative to the postal service.

In the United States, documents with a weight below a certain threshold and without any specific delivery conditions are defined as letters that must be handled only by the US Postal Service. "Specific delivery conditions" are the key needed for FedEx, United Parcel Service, and DHL to be able offer their various time-specific services.

The market for postal services in Japan is very competitive. Because JPSE has few institutional advantages, erosion by competitors is inevitable. Further, the JPSE has a universal service obligation that its competitors do not have. This means the overall operating environment for JPSE is very harsh. The volume of mail handled by JPSE, measured in units, has been falling - by 13.5% for letters and 7.4% for total items from fiscal 2001 to fiscal 2005 (the year ended March 2006). During this period, competitors' "mail transport" services increased volume by 165.9%, and had a 7.7% market share in fiscal 2005.

1.2 Financial Services

JPSE provides savings and life insurance services. The products are basically the same as deposits or life insurance policies provided by private banks and life insurers, but the government guaranteed the postal products before privatization.

As for savings service, the guarantee ought to have been irrelevant for depositors, because all deposits at Japanese banks have been perfectly protected by the government, and the upper limit for individual postal savings was equal to the amount of deposit insurance coverage for private banks. Besides, the deposit insurance budget has been financed mainly by the government budget.

In any case, the advantage for the postal savings business is not supposed to be very essential. It did not have to pay any deposit insurance premium. However, on the asset side, the level of credit risk was restricted. That is, there were limits on lending and investing activities that might have brought higher returns but higher risks. The foregone returns are presumed to have roughly corresponded to the foregone risks.

Private bankers have criticized *teigaku* - "fixed amount postal savings". These are a unique product that has accounted for most postal savings - some 90% in March 1985. Critics insisted teigaku had an economically irrational characteristic. Namely, depositors enjoy a 10-year maturity with a guaranteed interest rate, compounded semi-annually, but can withdraw money without penalty after 6 months. This means that when rates fall, the depositor can simply leave the account in place, but if rates rise, the account can be closed without penalty and a new one opened. This was a common practice during periods of rising rates. In financial terms, depositors have a put option, with the postal savings system as the counter-party.

However, such characteristics can be achieved by private banks with option pricing techniques. Indeed, a *shinkin* bank in Tokyo offered a similar product in 1999. The critical point for depositors is the level of the option premium, rather than the option itself. (Shinkin specialize in financing small businesses. They are organized as non-profit cooperatives.)

Rather, the key point of the postal savings business is its abnormal structure as a financial enterprise. The business was a handicapped bank, which took deposits but was not able to extend loans. That is, postal savings did not have any information-creation function, which is the core competence of commercial banking.

This abnormal structure was related to the Fiscal Investment and Loan Program (FILP). Until April 2001, funds collected by government agencies, including the postal financial businesses and public pension system, became part of FILP. That is, the funds had to be passed on to the Fund Operation Special Account (FOSA) managed by the Trust Fund Bureau (TFB) within the Ministry of Finance (MOF). Under FILP, MOF then provided the funds to various public enterprises and local governments.

As for postal life insurance, the products are regulated under the basically same principles as other insurance policies. In general, life insurance policies in Japan are mixtures of saving vehicles and pure life insurance. For postal insurance policies, the saving elements are far larger than the pure life elements. Important characteristics of postal policies were a government guarantee, waiver of medical examination, and an upper limit on an individual policy amount.

The waiver of medical examination was an attractive feature for customers until the 1970s. However, it obliged the postal life insurance business to limit risk by constraining the size of death benefits for an individual policy holder, and to give more weight to the saving element.

Postal life insurance policies as saving vehicles were guaranteed by the government. This was supposed to influence the competitiveness of the policies, as pay-outs by private insurers had been reduced in cases of bankruptcy. However, the period during which Japanese life insurers were in serious danger of bankruptcy was relatively limited, lasting from 1997 to 2001.

The upper limit of the postal policy amount for an individual policy holder was decided by negotiation between MOF and JPSE, considering the government guarantee in the saving element and the weak examination structure for the insurance element.

Since the 1990s pure insurance products such as medical insurance have became more promising as Japan moves to an aging society. The waiver of medical examination has thus become a handicap. As the postal life insurance business did not develop a close relationship with the medical industry, it has had difficulty developing a pure insurance product. The products the postal life insurance business can provide have been restricted not only because of state ownership, but also because of weak business capability.

Until 2001, the postal life insurance business had to pass funds to FOSA, with a little room independent investment decisions.

2 Development of JPSE

2.1 Volume Expansion

The most remarkable feature of JPSE is sheer size and growth, particularly of financial services. The incredible extent to which postal savings had expanded at its peak is especially outstanding. In the mid 1960s the system had 3 trillion yen in deposits, representing about 15% of Japanese household saving. By 2000 deposits had grown to 260 trillion yen, close to 40% of household saving. Postal life insurance also expanded: at the peak in 2002 its share of policies for Japanese individuals exceeded 30%, and total assets were 124 trillion yen.

Basic postal service has not shown such an extraordinary expansion, but it achieved steady growth. The number of delivered items increased from 10 billion in the 1960s to nearly 27 billion in fiscal 2001, though volume has declined since then. From the 1960s to the present, the number of post offices increased by one-third (from some 18,000 to 24,600), and the number of mailboxes increased about 40% (from 115,000 to 160,000).

2.2 Fiscal Control

Postal service was established in 1871, postal savings in 1875, and postal life insurance in 1916. From their founding, they were run by a government ministry that also operated the telephone and telegraph systems until the end of World War II. The telephone and telegraph systems were privatized in the 1980s after a period as a public corporation.

The fiscal management system of JPSE was established in 1951 and continued until privatization. Under this system, all revenues and expenditures from the postal service, postal savings, and postal life insurance businesses were recorded in the Postal Service Special Account (PSSA), which is outside the regular budget - General Account - of the government. The cash balances of the account were managed as a single entity. The system could borrow from the government, but it was not necessary to do so.

PSSA had two sub-accounts, Postal Savings Special Account and Postal Life Insurance Special Account. These were fund-management accounts where revenue such as interest payments made by F0SA, and payments such as withdrawals by depositors and insurance payments made to policy holders, were initially recorded.

The financial and regular postal businesses shared ordinary costs such as personnel expenses according to allocation rules. This cost-sharing by sub-accounts was recorded as transfers from them to PSSA. The balances of the postal saving business and postal life insurance business were merely details for reference in PSSA, so that mutual subsidizations were left to management discretion.

JPSE was transformed from being an agency of the Ministry of Post to a public corporation in 2003. However, the fiscal control system remained basically same.

2.3 Development of PSSA

The fiscal balances of PSSA from 1947 until 1951 were continuously in deficit because of hyper-inflation. Although JPSE raised postal rates every year, it could not keep pace with rising costs, and PSSA had to accept subsidies from the General Account of the government. From 1952 until 1960 PSSA did not accept subsidies, but had to borrow from FOSA under a redemption plan that included severe cost cuts. In 1961 this fiscal difficulty was removed. The government relieved JPSE of the need to repay its accumulated debts, and raised the interest rate for deposits made by JPSE in FOSA.

Subsequently, increases in personnel expenses meant that by the latter half of 1960s the postal service business had again fallen into deficit. During the 1970s the deficits were temporally financed by funds collected by the postal saving business, and eventually covered by raises in postage rates. However, the situation entirely changed in 1981. The rate raise of that year reduced demand, and brought a decrease in revenue. This gave a strong incentive to undertake drastic restructuring. After several years of reform, the postal service business came back into surplus, and paid all accumulated debt in 1986.

The postal savings business continuously showed surplus until 1972. However, it operated at a deficit from 1973 until 1978 because of the sharp rise of interest rates. It recovered in 1980s, thanks to a relatively higher interest rate from FOSA.

In the 1990s the fiscal condition of PSSA had been getting worse over all. The postal service business showed deficits for 1998-2000 because of the recession. The savings business fell into the red as well, and the deficits were very large. The main reason was interest-rate mismatch.

Funds collected by the postal savings system were passed to FOSA for deposit contracts with a 7-year term and an interest rate at the level of the yield-at-issue of the contemporary 10-year government bond plus 20 basis points. Most savings deposits are in a product called teigaku. This has a nominal maturity of 10 years with a fixed interest rate in line with the yields for similar maturities of governmental bonds at the time the deposit was made. However, depositors can withdraw money without penalty after 6 months. This meant depositors can benefit from rising rates, but are protected from following rates.

The level of interest rates was very high in the last half of the 1980s, and then sharply declined in the beginning of the 1990s. Therefore, many depositors with teigaku from the late 1980s held the deposits to maturity, so that the interest payments by the postal savings business remained high. Meanwhile, in the early 1990s the interest revenue of the postal savings business declined as its deposit contracts with FOSA were renewed.

In the first half of the 2000s the fiscal condition of JPSE was getting better gradually, partly by the grace of the management effort of the newly established Japan Post Public Corporation.

The institutional framework of the Fiscal Investment and Loan Program (FILP) was totally reformed in 2001. As a result, postal savings are no longer deposited with FOSA, and outstanding deposits will have been repaid by the end of 2008. The postal financial businesses will no longer have an ensured spread between what they pay for funds and what it receives when investing those funds.

3 Management Discipline

3.1 Soft Budget Constraints

Privatization has been an interesting issue in economics. As a result, many scholars have built a vast literature on the subject. We find various arguments regarding market failure, incentive and agency problems, and the macroeconomic effects of privatization.

Arguments such as natural monopoly, externality, and public goods are not typically applicable to JPSE as a whole. This is because the markets for the products of JPSE are very competitive. The postal service might be classified as a quasi-public good, but postal financial services are not public by their nature. Besides, it was not claimed that postal services privatization would improve the public sectors' financial health. Therefore I want to concentrate my discussion on incentive and agency problems.

An important difference between a state-owned enterprise (SOE) and a private one is how financial distress is handled.

Under private ownership, an enterprise ordinarily is governed by shareholders, and the government's right to intervene is limited.   In the case of financial difficulty, creditors have more voice. Depending on the viability of the enterprise, creditors decide whether the enterprise should be reorganized or liquidated.

Under state ownership, the government retains rights of intervention in everyday operations, regardless of the financial situation. In financial difficulty, the decision to reorganize or liquidate depends on whether the policy assignment of the SOE is judged to still be essential for the government. In the case of reorganization, fiscal supports such as capital injections or subsidies can be provided by the government.

Management incentive structures contrast accordingly. At least in Japanese large enterprises, the managers of a private enterprise ought to bear personal responsibility in the case of distress. In bankruptcy, for example, they are normally obliged to give up their positions, and sometimes to compensate the failed enterprise.

In the case of a distressed SOE, managers do not have to take such personal responsibility. They have duties regarding both policy assignment and fiscal health. If deficits are regarded as inevitable under a particular policy assignment, the losses are not blamed on lax management.

Soft-budget constraint (SBC) theory is fundamental to analyzing the behavior of SOE. It was originally developed for the analysis of a centralized economy, but SBC problems are present in market economies. Kornai characterizes SBC as having two major features, ex post renegotiation of firms' financial plans and a close administrative relationship between firms and the center.

I believe SBC theory is the key to understand Japan Postal Services Privatization. Describing the SBC problems of JPSE as deriving from the absence of a bankruptcy threat is an over-simplification, but perhaps a useful one. The concrete symptoms vary between the postal service business and the postal financial service business. I want to examine the management discipline of JPSE from this point of view.

3.2 Management Discipline in the Postal Service

In the 1970s the postal service business was distressed, having accumulated a deficit. JPSE had raised postage rates 18 times since 1945 in order to cover its ever-increasing expenses. However, the 1981 increase failed to improve the fiscal balance. Instead, it actually discouraged demand and reduced turnover. The market structure had entirely changed, as competition with telecommunication and private freight services had become very fierce.

This gave a serious shock to JPSE management. They sent a document to all post office managers saying "We have no other choice than to provide better services which meet the changing needs of customers. Otherwise we would become a bottom dog in the competitive market. We can see the miserable examples of Japan National Railway." I believe this document was exceptionally arousing to the culture of the Japanese bureaucracy, where modest language is generally very preferred.

Indeed, JPSE management had a strong eagerness to perform a sweeping restructuring. The substances of the reforms are as follows.

> Switch the postal transport system from railway-oriented to truck-oriented.

> Start actively canvassing for postal services.

> Activate the postal parcel service by introducing new services, including hurusato kodutsumi (homeland packets) and yu-pack (postal standard freight service).

The outcome of these efforts was respectable. JPSE recovered from a cumulative deficit of 250 billion yen, and the budget became stable. The effort by JPSE should be given high marks as a government agency, showing a sharp contrast to Japan National Railways (JNR).

The key of the reform was the success of JPSE in persuading its labor union, which had been one of the most aggressive unions - along with the railway union - during the post-war period. The collapse of JNR and the way it was privatized might have given a strong incentive to employees of JPSE. JNR privatization included a division into seven regional enterprises, a strict business restructuring with abandonment of under-used local lines, and a drastic employment adjustment.

However, I must still point out symptoms of SBC in the behavior of JPSE in those days.

The first was the timing of the reform. The reform was started after three years of deficits. The accumulated deficit of 250 billion yen corresponded to one-third the turnover of the postal service business in that period. If JPSE had been a private enterprise, it would have suffered a cash shortage. The annual balance remained in the red until 1986, and it took six more years to settle the entire accumulated deficit. If JPSE had been private, it might have gone bankrupt before the reform showed significant effects.

The second symptom was the substances of the reform. The reform was reactive to the deficit, not proactive for future profit-making. The main contents of the reform were improvement in existing services. JPSE put the savings from the switch in the postal transportation system into the more-rapid delivery of standard mail, which made the advantage of the express service insignificant for customers. JPSE has developed neither a popular postal product, other than a new year's postcard, nor a menu of various services for local small post offices.

These problems might be partly attributable to institutional restrictions on the scope of business that could be undertaken as an SOE. However, I believe they were at least partly caused by the lack of market discipline in the postal service business. The postal service as operated by JPSE included the financial services businesses. There was no separate cost-accounting, let alone any profit and loss calculations, for various activities. As a result, profits from financial services off-set deficits in postal service business, but opaquely. There was no examination or monitoring by an external creditor.

If the postal service business had been a private enterprise, it could not have enjoyed a government guarantee. It would have had to give signals of financial soundness to creditors. The creditors would have examined and monitored the business, so that the management would have been obliged to keep the business profitable and the capital at an adequate level. In order to do that, it would have had to make business innovations constantly, and take prompt, proactive actions to avoid financial difficulty.

I believe that the JPSE postal service showed delayed and reactive action against the change of market structure because it was free from a hard budget constraint, and that the integration with financial service businesses brought remarkable SBC problems.

3.3 Management Discipline in the Postal Savings Service

The soft-budget constraint literature has not been limited to the public sector, including SOEs, but also addresses the banking sector. Market-discipline for the banking sector remains weak in Japan. In part this is because all deposits have been perfectly protected since the end of World War II. Especially until the 1980s, interest rates on deposits were strictly regulated by MOF, and the money market was rigidly controlled by Bank of Japan (BOJ). Banks have had no freedom to go bankrupt. In addition, corporate governance by shareholders did not functioned well until the end of the 1990s, as interlocking shareholdings was dominant in the Japanese capital market. Under these circumstances, an SBC problem in the standard context was not unique to the postal savings business.

We now examine the abnormal business structure of the postal savings business in order to consider the management discipline problem. The postal savings system collected funds nation-wide from depositors, but could not invest the funds itself. JPSE basically had to pass the funds to FOSA. Thus, the main revenue source was interest payments from FOSA.

The profit of the postal savings business mainly depended on the margin between the interest revenue from FOSA and the interest payments to depositors. The decision rules for the two rates were different. Revenue from FOSA was a compromise between the market and politics, mainly because this interest rate was also applied to funds collected by the public pension system. In contrast, the interest rates paid for postal savings were basically linked with market rates. Initially, these were fairly directly tied to the official discount rate of the BOJ. After rates were deregulated, the rates paid on private bank deposits were the benchmark.

In the decade after 1945, FOSA paid rates linked with the yield-at-issue of government bonds, while rates paid deposits were relatively high. JPSE suffered successive deficits.

The fiscal situation of JPSE was alleviated by measures taken in 1961. The Diet relieved JPSE of the obligation to repay its accumulated deficit. It also added 50 basis points to the interest rate being paid by FOSA. This was to compensate for the costs of the postal savings business. This was an ex-post bailout for JPSE and an ex-ante guarantee of subsidies proportional to the business volume of the postal savings. I believe the SBC problem of JPSE was created by this measure.

In 1973 the balance of the postal savings business again went into the red as interest payments to depositors increased substantially. The tight monetary policy associated with the global oil crisis meant a vast increase in the interest rates paid to savers. The rate of teigaku deposits was a "floating rate" that in effect could only rise, as depositors had the option of receiving a higher rate if rates changed. On the other hand, the revenue from FOSA did not increase, as the yield-at-issue on government bonds was relatively stable. The unfavorable balance lasted until the overall downturn of interest rates, when FOSA reduced interest payments moderately.

From the 1980s, interest rates fluctuated far more radically than earlier. Therefore, in 1987 the Diet authorized MOF to set the FOSA deposit rate under a particular criterion, without the need of a specific amendment to the Fiscal Operation Act. Under this criterion, the rate had to be set in consideration of two elements. The first was linkage with market rates, such as the yield-at-issue of government bonds. The second was an assurance of the fiscal condition of postal savings business, postal life insurance business, and the public pension system. In practice, MOF set the rate for 7-year deposits paid by FOSA at the level of the yield-at-issue of 10-year government bond plus 20 basis points to cover JPSE's costs.

The background of this scheme had two important elements. First, the FOSA deposit rate was crucial for calculation of the public pension budget. This meant MOF had to take account of its impact when preparing the annual budget of the General Account. In particular, a lower FOSA rate might result in a larger subsidy to the public pension system. JPSE profited from this situation. Although such an excessive premium to the market rate can be covered only at the expense of the General Account in later years, MOF had enough to do to pass the current budget every year.

Second, liberalization of interest rates was still going on. At that time, Japan had long-term credit banks. They raised funds via bonds with yields-at-issue linked to the yields of government bonds. In turn, the lending rate of these special banks, called the "long-term prime rate", was set at the level of the banks' cost of funds (that is, the interest paid on their bonds) plus a sufficient margin to afford sound administration. The long-term prime rate also was employed by government financial institutions (GFI) as a standard lending rate. This scheme was called the "interest rate hierarchy", and was managed by MOF to keep all participating entities sound and peaceful.

Actually, this hierarchy was already on the way to be broken up by market forces. Liberalization of deposit rates was completed in 1994. However, the budget authority was not fully aware of the market forces, so FOSA was segregated from the financial market principle to some extent. The FOSA deposit rate scheme remained basically the same until 2001, at which time the Fiscal Investment and Loan Program (FILP) was totally reformed.

3.4 The Effect of the Fiscal Investment and Loan Program

I believe the FOSA deposit-rate-setting system described above became fundamentally irrational in a free financial market, as it gave a high premium to financial products that did not have any additional risk. Under this system, it was quite natural for JPSE managements to swell the volume of postal savings. The larger volume brought JPSE proportionally more income, which could be distributed to its stake holders. Moreover, it was the only choice for JPSE, as an information-creation function was denied the postal savings business. Therefore it had extremely strong incentives to attract depositors with higher interest rates, and to engage in heavy canvassing activities through post offices.

At the same time, JPSE was an SOE that had to achieve both a policy assignment and the fiscal health of the enterprise. If deficits were regarded as inevitable under a particular policy assignment, JPSE would not be blamed. For JPSE, "encouragement of personal savings" was a policy assignment. Therefore, JPSE management felt secure in putting as many resources as possible into gathering personal depositors.

Indeed, JPSE has constantly tried to set the interest rates for postal savings as high as possible. This tendency was established in 1961 when the rescue measures were taken. From then on, JPSE has set the interest rates for postal savings higher than similar deposits of private banks.

JPSE negotiated with MOF very vigorously whenever regulated interest rates were revised during the 1970s. Every time, after tough and persistent negotiation, JPSE made postal savings more favorable to some extent. This continued during the 1980s as interest rates for private markets were liberalized. As a result, JPSE was able to maintain its advantages and increased the market share enormously. There was a term for it: "postal deposit shift".

The specific schemes show the extent to which JPSE would go to gain deposits. Thus, the calculation method of interest was manipulated in the 1990s. At the time, interest amounts smaller than 1 yen for a unit deposit were rounded up. Some employees of JPSE exploited this by dividing what could have been a single deposit into many deposits of the minimum amount in order to accrue rounded-up interest payments.

We can find a similar tendency in the postal life insurance business. JPSE made continuous efforts to set the assumed interest rate for policies higher than the private products. This could be regarded as one of the reasons for strong expansion of the postal life insurance business.

I believe the phenomenon discussed above is one of the distortions caused by FILP.

First, postal savings got into deficit because of the higher interest rates for postal savings deposits. Still, it was not a vital blow for JPSE management. The political reason was that the policy target of the business was "encouragement of personal savings", and the economic reason was that JPSE enjoyed a government guarantee and hence did not need to maintain capital adequacy, which other banks did.

Second, the higher interest rates for postal savings caused higher funding costs for FILP. This contradicted the policy target of the system, which should have given financial advantage to the public organizations borrowing funds. The contradiction was covered by dividend-free capital injection, subsidies, and loss-compensation for the public organizations from the government budget. The government was obliged to do so because any negative spread on the system's lending was the inevitable result of the government's own policy decisions.

Third, the FILP meant that the true burden of the government budget was obscured. Policy measures such as public works were often financed by borrowing from FILP, rather than by explicit budget expenditure. Japanese taxpayers might well have had the illusion these policy measures would be free from any future tax burden.

Moreover, this phenomenon might have had a harmful effect on innovation in Japanese financial markets. In the process of interest-rate liberalization, "market-rate linkage rules" were established for the interest rates of postal savings. The rules discouraged the private sector from designing new financial products, as a fixed menu of products was presumed in the rules.

4 Expected Effects of Privatization

4.1 The Law Privatizing Postal Services

Postal services privatization took place on 1 October 2007. Under the law for the privatization of the postal services, Japan Post Public Corporation was abolished, and each of its businesses was taken over by one of four companies under Japan Post Holdings Company, a holding company. The four are Japan Post Network, Japan Post Service, Japan Post Bank, and Japan Post Insurance.

Japan Post Network is the entity that operates most post offices. Its main business is being an agent for the three other companies, but it can engage in any business by itself based on its own management decisions.

The government's share in Japan Post Holdings must be reduced to one-third as soon as possible. Japan Post Holdings is obliged by the law to dispose of all of its shares in Japan Post Bank and Japan Post Insurance no later than 30 September 2017. However, Japan Post Service and Japan Post Network will remain perpetually as subsidiaries of Japan Post Holdings.

As for the specific schedule of share disposals, Japan Post Holdings plans in principle to list its own shares and those of the two financial subsidiaries three to four years after privatization, and to sell all shares in the two subsidiaries within five years of the listing. Thus, the privatization might be completed by 2014 or 2015.

4.2 Management Discipline in the Postal Service and Network Companies

For the postal service and network companies, privatization has decisive effects on their managements.

Separation of the financial companies was the key to establishing management discipline. The Post Bank is to assess and monitor in the same way as a regular commercial bank when it lends to the other postal companies. This creates an incentive to evaluate the business plans of the postal companies from an external point of view.

The postal financial companies are regulated under the banking act or insurance business act. This means their lending to the postal service and network companies must follow the regulations regarding limits on exposure and the arm's length rule. These prudential rules are not solely supervisory rules. They are also administrative. They bring to the postal service and network companies hard budget constraints by limiting fund availability.

Because Japan Post Holdings will list its share, the business model of the two perpetual subsidiaries will be evaluated by potential shareholders of Holdings. In addition, the postal service and network companies might raise new funds from the financial market. The market discipline will penetrate the companies and let them be aware of the importance of capital adequacy as a signaling measure to the market. The financial markets will give them incentives to build a future-oriented business plan and to make proactive innovations in their products.

4.3 Management Discipline in the Postal Financial Companies

Even before privatization, abolishment of the system of passing all deposits received to FOSA had had a remarkable influence on the postal financial businesses. Because JPSE now has to invest in standard financial products such as Japanese government bonds, it is no longer assured a positive spread on the deposits it takes in. This has had led to restraint on the resources devoted to collecting funds from the public. As a result, the amount of postal savings and postal life insurance has decreased steadily. In March 2008 postal savings deposits stood at 181 trillion yen, down almost 30% from the March 2000 peak of over 250 trillion yen.

The primary effect of privatization on the postal financial companies is from the loss of their government guarantee. This is particularly important for Japan Post Bank. The major part of its deposits (liabilities) is demandable after 6 months. Post Bank has a huge amount of long-term government bonds on the asset side. This term mis-match means the bank has two major risks.

First is interest-rate risk. Profits depend heavily on the yield curve and the tempo of interest rate change. Profits decline when the yield curve is flat or rates rise rapidly.

The second is liquidity risk. This is important from the viewpoint of management discipline. The bank has no debtor deposits or pool funds for commercial settlements. Most deposits are from individuals or small businesses and are effectively demandable. This means that as market conditions change, depositors can, and likely will, move funds to where they think they will earn more. But, on the asset side, the government bonds are substantially illiquid. The bank holds a large share of outstanding government bonds, and cannot liquidate quickly without having a large impact on the market. If it is known Post Bank wants to sell bonds urgently, the price would depreciate immediately and sharply. This risk is a very effective stimulant to Post Bank to establish determined discipline for risk and return management.

This risk structure is recognized by financial market participants. The bank must appeal to the market through the soundness of its management and adequate, credible disclosure of its financial condition. Capital adequacy is the key for Japan Post Bank, just like other banks, in order to retain the confidence of financial markets. Under this condition, the bank should not simply pursue expansion of its business volume, as the efficiency of the capital should be the most important target.

Ending capital ties with Japan Post Service and Japan Post Network is the most crucial requirement for the postal financial companies to acquire the confidence of financial markets. Generally, exclusion of non-financial business risk is the core concept for prudential regulation of banks and insurance companies. This separation is especially important for the postal financial companies, as they have a common history with the postal service and network companies, and inertia from the past will be a serious concern of market participants.

4.4 Method of Privatization

Globally, not all privatization projects have been successful. Rather, we find many cases where economic society fell into difficulty, as in the Czech Republic, or privatized companies became fertile soil for corruption, as in Russia. Privatization of banks is especially complex and difficult. The experiences of Chile in the 1970s and Mexico in the 1990s demonstrate the need for coordination with the regulatory framework.

A World Bank Policy Research article by Kikeri and Nellis (2002) points out several factors for successful privatization that relate to the Japan postal services case.

> Commitment

Privatization requires a strong political commitment. In addition, the building of widespread public understanding is essential.

> Ownership and competition

Ownership change is needed to make competition effective. But competitive markets are also important if privatized enterprises are to perform well. Additionally, financial sector reform and a competitive and commercially oriented banking system are important.

> Transparency

Lack of transparency in the privatization process leads to allegations of - if not actual - corruption. This provides ammunition to opponents, which creates backlash from investors and the public at large. A public offering of shares is widely regarded as the most transparent method.

In the case of Japan's postal services, the institution-designing and political decision-making processes fully satisfied these conditions. Moreover, the markets for the products of JPSE are very competitive, and a broader reform of financial markets is on-going.

Therefore, the last necessary condition for a successful privatization of JPSE is the early listing and disposal of shares of Japan Post Holdings, Japan Post Bank, and Japan Post Insurance. This is important for the commitment condition, because the listing of shares is the most definite commitment to investors. Also, listing is important for the transparency condition, because it reduces room for "self-dealing" and other corruption by establishing disclosure and internal control systems.

In particular, shares of the financial companies have to be totally disposed of. Early listing and full disposal are critical for successful privatization.

4.5 Expected Performance of the Privatized Companies

JPSE has been managed as an SOE with a restricted business scope for a long period. Therefore, it is not so easy for the newly privatized companies to transform themselves into excellent private enterprises. This section examines the possibility of JPSE success.

According to empirical studies of privatizations throughout the world between 1980 and 1997 surveyed by Sceshinski and Lopes-Calva (2003), the following findings emerge.

> Important efficiency gains should be expected from the change in ownership structure in competitive sectors.

> Fully privatized firms should perform better than those that have been only partially privatized, under otherwise same conditions.

> Publicly owned enterprises in competitive environments have not performed better than private companies in the same circumstances in terms of profitability.

These results are applicable to Japan's postal services privatization because the new firms are doing businesses in very competitive environments and because they are to be fully privatized.

A study by D'Souza and Megginson (1999) that examines the success of share-issue privatization programs during 1990-96 yields other insights. The authors analyzed data from the prospectus for the privatization and post-privatization annual reports for 85 companies. The following empirical results are obtained.

> Profitability Change

Return on sales and return on assets increased significantly, while the changes in return on equity were not significant.

> Efficiency

Privatization yielded significantly higher real output per worker, regardless of industry or stage of national development.

> Output

Real sales increased significantly after privatization.

> Leverage

A significant decline in leverage for the full sample of privatized companies was documented.

From these studies, I believe we can expect good results from Japan's privatized postal companies. That is, they should achieve higher profitability and greater efficiency, which includes recovering from the soft-budget problem. In particular, the postal financial companies are to be expected to establish an adequate capital base and achieve profitability, albeit with a streamlined business volume.

References

<English>

Berger, Allen N, Richard J Herring, and Giorgio P Szego. 1995. "The Role of Capital in Financial Institutions". Journal of Banking and Finance 19.

Calomiris, Charles W, and Charles M Kahn. 1991. "The Role of Demandable Debt in Structuring Optimal Banking Arrangements". NBER Working Paper 6892.

D'Souza, Juliet, and William L Megginson. 1999. "The Financial and Operating Performance of the Privatized Firms during the 1990s". Journal of Finance 54: 1397-438.

Kikeri, Sunita, and John Nellis. 2002. "Privatization in Competitive Sectors: The Record to Date". World Bank Policy Research Paper 2860.

Kornai, Janos, Eric Maskin, and Gerald Roland. 2003. "Understanding the Soft Budget Constraint". Journal of Economic Literature 41: 1095-1136 (Dec).

Maskin, Eric, and Chenggang Xu. 2001. "Soft Budget Constraint Theories: From Centralization to the Market". Economics of Transition 9:1 1-27.

Megginson, William L, and Jeffrey M Netter. 2001. "From State to Market: A Survey of Empirical Studies on Privatization". Journal of Economic Literature 39:2 321-89 (Jun.)

Sappington, David EM, and Joseph E Stiglitz. 1987. "Privatization, Information and Incentives". Journal of Policy Analysis and Management 6: 587-82 (Summer).

Schleifer, Andrei, and Robert W Vishny. 1997. "A Survey of Corporate Governance". Journal of Finance 52:2.

Sheshinski, Eytan, and Luis F Lopes-Calva. 2003. "Privatization and Its Benefits: Theory and Evidence". CESifo Economic Studies 49.

Yanagawa, Noriyuki. 2003. "Liquidity Demand of Corporate Sector and Soft Budget Constraint". Banking, Capital Market and Corporate Governance.

<Japanese>

Atoda, Naozumi, and Youiti Takahashi. 2005 May. "Yuusei-mineika seisaku-kin'yu-kaikaku shikin no nagare no henka nituite" [Expected Change of Flow of Funds Resulting from Japan's Postal Services Privatization and Policy Finance Reform]. Keio University Discussion Paper 0502.

Iemori, Nobuyosi, and Naruto Nisigaki. 2004. "Nihon no kouteki kin'yu - hidaikaron to kangyou no tokutenron no saikenshou" [Governmental Finance - Re-examination of the Literature on Expansion and Advantages of SOE]. Ministry of Finance, Financial Review (Jul).

Oka, Toshisada. 1990. "Asu no yuusei-jigyou wo kangaeru tameni" [Toward the Future Postal Services Business]. Daiiti Houki.

Kinoshita, Nobuyuki. 2006 Dec. "Ginkou no kinou to houseido no kenkyuu" [A Study of the Function and Institution of the Banking System]". Touyou Keizai.

Tohara, Tsuneko. 2001 Sep. "Kouteki-kin'yu no kaikaku - yuucho mondai no hensen to tenbou" [Development and Assessment of the Postal Saving Problem]. Nourin Toukei Kyoukai.

Yanagawa, Noriyuki. 2001 Jun. "Keiyaku to sosiki no keizaigaku" [Economics of Contracts and Organizations]. Touyou Keizai.

Yamaguchi, Osamu. 1977 Mar. "Yuubin chokin no 100-nen" [Postal Savings 100 Years]. Yuubin-chokin Shinkou-kai.

Yuuseishou Yuumukyoku Yuubin-Jigyou-Shi Hensanshitsu. 1991 Dec. Yuubin Sougyou 120 Nen no Rekishi [120-Year History Since Establishment of the Postal Service Business]. Gyousei.

Yuusei Kaikei Hourei Kenkyu-Kai. 1984 Feb. Chuukai Yuusei-Jigyou Tokubetsu Kaikei Hou [Comments on the Postal Service Special Account Act]. Gyousei.

CENTER ON JAPANESE ECONOMY AND BUSINESS
Working and Occasional Papers

(Papers can be downloaded free of charge at: http://academiccommons.columbia.edu*)*
Last update: August 19, 2008

WORKING PAPERS

2008

263 **Nobuyuki Kinoshita**, The Economics of Japan's Postal Services Privatization

262 **Keiko Ito and Sébastien Lechevalier**, The Evolution of the Productivity Dispersion of Firms – A Reevaluation of Its Determinants in the Case of Japan

261 **Terutomo Ozawa**, History Repeats Itself: Evolutionary Structural Change and TNCs' Involvement in Infrastructure Overseas, Flying-Geese Style

260 **Sanghoon Ahn, Kyoji Fukao, and Keiko Ito,** The Impact of Outsourcing on the Japanese and South Korean Labor Markets: International Outsourcing of Intermediate Inputs and Assembly in East Asia

259 **Keiko Ito, Moosup Jung, Young Gak Kim, and Tangjun Yuan**, A Comparative Analysis of Productivity Growth and Productivity Dispersion: Microeconomic Evidence Based on Listed Firms from Japan, Korea, and China

2007

258 **Yasushi Hamao, Takeo Hoshi, and Tetsuji Okazaki**, Listing Policy and Development of the Tokyo Stock Exchange in the Pre-War Period

257 **Ryuichi Nakagawa and Hirofumi Uchida**, Herd Behavior by Japanese Banks After Financial Deregulation in the 1980s

256 **Jie Gan**, Collateral, Debt Capacity, and Corporate Investment: Evidence from a Natural Experiment

255 **Jie Gan**, The Real Effects of Asset Market Bubbles: Loan- and Firm-Level Evidence of a Lending Channel

254 **Christian Broda, Nuno Limão, and David E. Weinstein**, Optimal Tariffs: The Evidence

253 **Hugh Patrick**, Japan's Economy: The Idiosyncratic Growth Continues

252 **Christian Broda and David E. Weinstein**, Defining Price Stability in Japan: A View from America

251 **Terutomo Ozawa**, Professor Kiyoshi Kojima's Contributions to FDI Theory: Trade, Structural Transformation, Growth, and Integration in East Asia

250 **Hiroki Yamakawa**, A Practical Analysis of Transfer Pricing Methodologies for Bilateral Advance Pricing Arrangements

2006

249 **Hugh Patrick**, Japan's Economy: Finally Finding Its Way to Full Employment and Sustained Growth

248 **Ulrike Schaede**, Competition for Corporate Control: Institutional Investors, Investment Funds, and Hostile Takeovers in Japan

247 **Ulrike Schaede**, The Strategic Logic of Japanese *Keiretsu*, Main Banks and Cross-Shareholdings, Revisited

246 **Ricardo Caballero, Takeo Hoshi and Anil K Kashyap,** Zombie Lending and Depressed Restructuring in Japan.

245 **Zekeriya Eser and Joe Peek,** Reciprocity and Network Coordination: Evidence from Japanese Banks.

244 **Hugh Patrick,** Japan: Another Economic Recovery, New Political Terrain.

243 **Ferenc A. Sanderson,** Characteristics of the Hedge Fund Industry in Japan.

2005

242 **Mariko Fujii and Makoto Takaoka**, Forecasting Skewness in Stock Returns: Evidence from Frim-Level Data in Tokyo Markets

241 **Robert A. Myers,** Challenges for Japanese Universities' Technology Licensing Offices—What Technology Transfer in the United States Can Tell Us

240 **Takatoshi Ito,** Political Economy of Competition Policy in Japan: Case of Airline Services

239 **Christina L. Ahmadjian,** Stability and Change in Embedded Relationships: Broken Ties in Japanese Automotive Keiretsu

238 **Nada Mora,** The Effect of Bank Credit on Asset Prices: Evidence from the Japanese Real Estate Boom during the 1980s

237 **Koichi Hamada and Asahi Noguchi,** The Role of Preconceived Ideas in Macroeconomic Policy: Japan's Experiences in the Two Deflationary Periods

236 **Takatoshi Ito,** Monetary Policy Beyond the Zero Interest Rate Policy Under Deflation

235 **Hiroyuki Chuma, Takao Kato and Isao Ohashi,** Worker Discontent, Voice, and EI Programs in Japan

234 **Masami Imai,** Market Discipline and Deposit Insurance Reform in Japan

233 **Takatoshi Ito and Hugh Patrick,** Problems and Prescriptions for the Japanese Economy: An Overview

232 **Franklin R. Edwards,** New Proposals to Regulate Hedge Funds: SEC Rule 203(b)(3)-2

231 **Takatoshi Ito and Frederic Mishkin,** Monetary Policy in Japan: Problems and Solutions

230 **Hugh Patrick,** The Japanese Recovery and Growth Not Yet Assured

2004

229 Takatoshi Ito, Interventions and Japanese Economic Recovery

228 Christian Broda and David E.Weinstein, Happy News from the Dismal Science: Reassessing Japanese Fiscal Policy and Sustainability

227 Robert A. Madsen, What Went Wrong Aggregate Demand, Structural Reform, and the Politics of 1990s Japan

226 **Michael Smitka,** Japanese Macroeconomic Dilemmas The Implications of Demographics for Growth and Stability

225 **Lee Branstetter**, Is Foreign Direct Investment a Channel of Knowledge Spillovers? Evidence from Japan's FDI in the United States

224 **Jie Gan,** Collateral Channel and Credit Cycle: Evidence from the Land Price Collapse in Japan

223 **Chung I. Wang,** The financial strategies of Japanese multinational enterprises and internal capital market

222 **Donald Davis and David Weinstein,** A Search for Multiple Equilibria in Urban Industrial Structure

2003

221 **Christina Ahmadjian and Jaeyong Song**, Corporate Governance Reform in Japan and South Korea

220 **Hugh Patrick**, Evolving Corporate Governance in Japan

219 **Minako Fujiki**, Inflation Targeting Discussions in Japan – unconventional monetary policy under deflation: How People Have Argued; Why the BoJ Opposes Adoption

218 **Adam Posen and Kenneth Kuttner**, The Difficulty of Discerning What's Too Tight: Taylor Rules and Japanese Monetary Policy

217 **Adam Posen,** It Takes More Than a Bubble to Become Japan

216 **Naotaka Kawakami,**The difference in taxation on financial transactions between Japan and the United States: Can the U.S. system and theory be the model?

215 **Naotaka Kawakami,** What Does the Consumption Tax Mean to Japanese and U.S. Society?

214 **Tokuo Iwaisako**, Stock Index Autocorrelation and Cross-autocorrelations of the Size-Sorted Portfolios in the Japanese Market

213 **Minoru Kobayashi, Takeshi Hiromatsu, Naoki Tsubone, Manabu Kurita, and Gosei Ohira,** Economical Impacts on IT to Industries in Japan

212 **William V. Rapp and Mazhar ul Islam,** Putting E-Commerce to Work: The Japanese Convenience Store Case

211 **Mark J. Scher,** Policy Challenges and the Reform of Postal Savings in Japan

210 **Takao Kato and Katsuyuki Kubo,** CEO Compensation and Firm Performance in Japan: Evidence from New Panel Data on Individual CEO Pay

2002

209 **Lee Branstetter and Yoshiaki Nakamura,** Has Japan's Innovative Capacity Declined?

208 **David O. Beim,** Japan's Internal Debt

207 **Kengo Inoue,** Choices for Japanese Fiscal Policy

206 **Takero Doi and Takeo Hoshi,** Paying for the FILP

205 **Terutomo Ozawa,** Pax-Americana-led Macro-Clustering and Flying-Geese Style Catch-Up in East Asia: Mechanisms of Regionalized Endogenous Growth

204 **Robert Dekle and Heajin Ryoo,** Exchange Rate Fluctuations, Financing Constraints, Hedging, and Exports: Evidence from Firm Level Data

203 **Christina Ahmadjian and Gregory Robbins**, A Clash of Capitalisms: Foreign Shareholders and Corporate Restructuring in 1990s Japan

202 **David Flath and Tatsuhiko Nariu,** Parallel Imports and the Japan Fair Trade Commission

201 **David Flath,** Taxicab Regulation in Japan

200 **David Flath,** The Japanese Distribution Sector in Economic Perspective: The Large Store Law and Retail Density

199 **David Flath,** Distribution Keiretsu, FDI and Import Penetration in Japan

198 **Yasushi Hamao, Jianping Mei, and Yexiao Xu,** Idiosyncratic Risk and Creative Destruction in Japan

197 **Hee-Joon Ahn, Jun Cai, Yasushi Hamao, and Richard Y.K. Ho,** The Components of the Bid-Ask Spread in a Limit-Order Market: Evidence from the Tokyo Stock Exchange

196 **Donald R. Davis and David E. Weinstein,** Technological Superiority and the Losses From Migration

195 **Linda Edwards and Margaret Pasquale,** Women's Higher Education in Japan: Family Background, Economic Factors, and the Equal Employment Opportunity Law

194 **Andrew Carverhill and Ronald Schramm,** International Market Segmentation, and the CME Quanto Nikkei Future

2001

193 **Terutomo Ozawa,** The hidden side of the flying geese catch-up model: Japan's dirigiste institutional setup and a deepening financial morass

192 **Donald Davis and David Weinstein,** Bones, Bombs and Break Points: The Geography of Economic Activity

191 **William V. Rapp,** Nationwide Financial Services

190 **Lee Branstetter**, Is Foreign Direct Investment a Channel of Knowledge Spillovers? Evidence from Japan's FDI in the U.S.

189 **Christina Ahmadjian and Patricia Robinson,** Downsizing and the Deinstitutionalization of Permanent Employment in Japan

188 **Christina Ahmadjian,** Changing Japanese Corporate Governance

187 **Kazuo Sato**, From Fast to Last: The Japanese Economy in the 1990s

186 **Hugh Patrick,** From Cozy Regulation to Competitive Markets: The Regime Shift of Japan's Financial System

185 **Takao Kato,** The End of Lifetime Employment in Japan? Evidence from National Surveys and Field Research

184 **Takao Kato**, The Recent Transformation of Participatory Employment Practices in Japan

183 **William Rapp,** Nomura Research Institute

182 **Robert Dekle,** Demographic Destiny, Per Capita Consumption, and the Japanese Saving-Investment Balance

2000

181 **Maria Vassalou**, The Fama-French factors as proxies for fundamental economic risks

180 **Yasushi Hamao and Jianping Mei,** Living With the "Enemy": An Analysis of Foreign Investment in the Japanese Equity Market

179 **Yasushi Hamao and Takeo Hoshi,** Bank Underwriting of Corporate Bonds: Evidence from Japan after the Financial System Reform of 1993.

178 **William Rapp,** International Retail Banking: The Citibank Group

177 **William Rapp,** Automobiles: Toyota Motor Corporation

176 Shingo Nakazawa, Corporate Investment in Japan: How Important are Financial Factors?
175 Nobuyoshi Yamori & Narunto Nishigaki, Electronic Money Projects in Japan
174 William Rapp, Steel: Nippon Steel, K.K.

1999

173 Nobuhiko Hibara, Food Retailing: Ito-Yokado Group
172 William V. Rapp, Steel: Tokyo Steel, K.K.
171 Yasushi Hamao, Frank Packer & Jay Ritter, Institutional Affiliation and the Role of Venture Capital: Evidence from Initial Public Offerings in Japan
170 William V. Rapp, Retail Banking: Sanwa Bank
169 William V. Rapp, Life Insurance: Meiji Life, K.K.
168 Robert Dekle & Koichi Yamada, On the Development of Rotating Credit Associations in Japan
167 Kazuo Sato, Japan at a Crossroads
166 Kazuo Sato, Japanese-Style Capitalism
165 David Weinstein and Robert Lawrence, Trade and Growth: Import-Led or Export-Led? Evidence from Japan and Korea
164 David Weinstein, Historical, Structural, and Macroeconomic Perspectives on the Japanese Economic Crisis
163 Hiroshi Amari, Pharmaceuticals: Takeda
162 Christos Cabolis, Semiconductors: NEC

1998

161 Hiroshi Amari, Pharmaceuticals: Merck
160 William V. Rapp, Gaining and Sustaining Long-Term Advantage Through Information Technology: The Emergence of Controlled Production
159 Mark Tilton, Antitrust Policy and Japan's International Steel Trade
158 Takao Kato, Participatory Employment Practices in Japan: Past, Present and Future
157 Ulrike Schaede, Self-Regulation and the Sanctuary Strategy: Competitive Advantage through Domestic Cooperation by Japanese Firms
156 Mariko Sakakibara, Knowledge Sharing in Cooperative Research and Development
155 Shigeru Asaba and Marvin Lieberman, Why Do Firms Behave Similarly? A Study on New Product Introduction in the Japanese Soft-Drink Industry
154 Hiroshi Ishida, Kuo-Hsien Su and Seymour Spilerman, Models of Career Progression in Japanese and U.S. Organizations
153 Hugh Patrick, Japan's Economic Misery: What Next?
152 David Flath, Japanese Technology Policy
151 David Flath, A Perspective on Japanese Trade Policy and Japan-US Trade Friction
150 David Flath, Japan's Labor Unions
149 David Flath & Tatsuhiko Nariu, Demand Uncertainty and Price Maintenance
148 Frederic S. Mishkin, Promoting Japanese Recovery
147 Hugh Patrick, Why I Expect Japan to Prevail: Ruminations on Morishima
146 Hugh Patrick, The Causes of Japan's Financial Crisis
145 Ryoichi Mikitani and Patricia Hagan Kuwayama, Japan's New Central Banking Law: A Critical View
144 Koichi Hamada, The Japanese Big Bang as a Unilateral Action
143 Ellie Okada, Financial Control through Japan's Main Bank System and the Japanese Accounting System
142 Edward J. Lincoln, Japan's Economic Mess
141 Hugh Patrick, The Development of Studies of the Japanese Economy in the United States: A Personal Odyssey

1997

140 Shigeyuki Goto, Study on the Interactive Approach between Insurance and Capital Markets for Catastrophe Risks
139 Patricia Hagan Kuwayama, Postal Banking in the United States and Japan: A Comparative Analysis
138 Christina L. Ahmadjian, Network Affiliation and Supplier Performance in the Japanese Automotive Industry
137 Christina L. Ahmadjian & James R. Lincoln, Changing Firm Boundaries in Japanese Auto Parts Supply Networks
136 Fumio Hayashi, The Main Banking System and Corporate Investment: An Empirical Reassessment
135 Yasushi Hamao & Takeo Hoshi, Bank Underwriting of Corporate Bonds: Evidence from Japan after 1994
134 Klaus Wallner, Implicit Contracts between Regulator and Firms: The Case of Japanese Casualty Insurance
133 Klaus Wallner, Commodity Bundling in Japanese Non-Life Insurance: Savings-Type Products as Self-Selection Mechanism
132 Patricia Hagan Kuwayama, Credit Channels and the Small Firm Sector in Japan
131 Terry A. Marsh & Jean-Michel Paul, BIS Capital Regulations and Japanese Bank's Bad Loan Problems
130 Yoshinobu Shiota, Update on Japanese Bad Debt Restructuring
129 Christina L. Ahmadjian, Japanese Auto Parts Supply Networks and the Governance of Interfirm Exchange
128 Takatoshi Ito, Richard K. Lyons & Michael T. Melvin, Is There Private Information in the FX Market? The Tokyo Experiment

1996

127 Yukiko Ohara, Japan's Banking: The Darkest Hour Before Dawn. The Future is in the Hands of MoF
126 Yasushi Hamao & Narasimhan Jegadeesh, An Analysis of Bidding in the Japanese Government Bond Auctions
125 Terry A. Marsh & Jean-Michel Paul, Japanese Banks' Bad Loans: What Happened?
124 Hirotaka Yamauchi & Takatoshi Ito, Air Transport Policy in Japan
123 Shinji Takagi, The Japanese System of Foreign Exchange and Trade Control, 1950-1964
122 David E. Weinstein, Foreign Direct Investment and Keiretsu: Rethinking US and Japanese Policy
121 Masatsugu Tsuji, Deregulation and Privatization of the Fiscal Investment and Loan Program
120 Koichi Hamada, Consumers, the Legal System and Product Liability Reform: A Comparative Perspective between Japan and the United States
119 David Flath, Japanese Regulation of Truck Transport
118 C.R. McKenzie, The Commercial Paper Market in Japan
117 Hideo Taki, The Gas Industry in Japan
116 Merit E. Janow, Policy Approaches to Economic Deregulation and Regulatory Reform
115 Arthur J. Alexander, Domestic Aviation in Japan: Responding to Market Forces Amid Regulatory Constraints
114 D. Eleanor Westney, The Japanese Business System: Key Features and Prospects for Change

113 **Robert Dekle,** Endaka and Japanese Employment Adjustment

112 **G. Andrew Karolyi & René M. Stulz**, Why do Markets Move Together? An Investigation of U.S.-Japan Stock Return Comovements

111 **Jun-Koo Kang & René M. Stulz**, Why is There a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan

110 **Takeo Hoshi**, Bank Organization and Screening Performance

109 **John W. Cooney, Jr., Kiyoshi Kato & James S. Schallheim,** Public Placements of Seasoned Equity Issues in Japan

108 **Jun Cai, K.C. Chan & Takeshi Yamada**, The Performance of Japanese Mutual Funds

107 **Jun-Koo Kang & Takeshi Yamada**, The Japanese Market for Corporate Control and Managerial Incentives

106 **Ravi Jagannathan, Keiichi Kubota & Hitoshi Takehara**, The CAPM with Human Capital: Evidence from Japan

105 **Schon Beechler, Michelle Najjar Kristen Stucker & Allan Bird**, Japanese-style versus American-style Human Resource Management Overseas: Examining Whether the Data Support the "Facts"

104 **Schon Beechler, Scott Shane & Sully Taylor**, Ware Ware Nihonjin But We're Not All Alike: How Japanese Managers Champion Innovation

103 **Schon Beechler & Michelle Krazmien**, The Relationship Between Expatriates, Parent Company-Affiliate Integration and HRM Control in Overseas Affiliates of Japanese and American MNCs

102 **Schon Beechler, Michelle Najjar, B.C. Ghosh, Sukiswo Dirdjosuparto & Sieh Mei Ling**, Influences on Affiliate HRM Systems in Japanese MNCs in Southeast Asia

101 **Schon Beechler, John Stephan, Vladimir Pucik & Nigel Campbell**, Decision Making Localization and Decentralization in Japanese MNCs: Are There Costs of Leaving Local Managers Out of the Loop?

1995

100 **Yasushi Hamao**, Living with the "Enemy": An Analysis of Foreign Investment in the Japanese Equity Market

99 **Yasushi Hamao**, Japanese Government Bond Auctions: The U.S. Experience

98 **Hugh Patrick**, Crumbling or Transforming? Japan's Economic Success and its Postwar Economic Institutions

97 **Peter Drysdale**, The Question of Access to Japanese Market

96 **Hugh Patrick**, Northeast Asia: The Role of International and Regional Economic Institutions and Regimes

95 **Kazuo Sato**, Bubbles in Japan's Stock Market: A Macroeconomic Analysis

94 **William V. Rapp**, Software Policies and Hardware Competition: The Impact of Government, Industry and Users on the Development of Japan's Software Industry

93 **David Flath**, The Keiretsu Puzzle

92 **Seymour Spilerman, Hiroshi Ishida & Kuo-Hsien Su**, Educational Credentials and Promotion Prospects in a Japanese and an American Organization

1994-1991

91 **Seymour Silerman, Hiroshi Ishida,** Stratification and Attainment in a Large Japanese Firm

90 **Yasushi Hamao & Joel Hasbruck**, Securities Trading In the Absence of Dealers

89 **Fumio Hayashi**, Japan's Saving Rate: An Update

88 **Frank Packer**, The Disposal of Bad Loans in Japan: A Review of Recent Policy Initiatives

87 **Anthony Iaquinto**, Can Winners be Losers? The Case of the Deming Prize for Quality and Performance among Large Japanese Manufacturing Firms

86 **C. Tait Ratcliffe**, Medium-Term Prospects for the Japanese Economy and for U.S.-Japan Relations

85 **Mark Scher & Schon Beechler**, Japanese Banking in the U.S.-From Transient Advantage to Strategic Failure

84 **Schon Beechler, Scott Shane & Sully Taylor**, Organizational Variation in Championship Behavior: The Case of Japanese Firms

83 **Schon Beechler & Tony Iaquinto**, A Longitudinal Study of Staffing Patterns in U.S. Affiliates of Japanese Multinational Corporations

82 **Takatoshi Ito,** Short-run and Long-run Expectations of Dollar/Yen Exchange Rate

81 **Edward Lincoln**, Fundamental Issues in the United States-Japan Economic Relationship

80 **Fumio Hayashi,** Is the Japanese Extended Family Altruistically Linked?

79 **Schon Beechler & Sheri Ranis**, The Prospects for Industrial Cooperation Between the United States and Japan

78 **Marcus Noland,** US – Japan Trade Friction

77 **Frank Packer,** The Role of Long-Term Credit Banks Within the Main Bank System

76 **John Campbell & Yasushi Hamao**, Changing Patterns in Corporate Financing and the Main Bank System in Japan

75 **Hugh Patrick,** The Relevance of Japanese Finance and its Main Bank System

74 **Michael Smitka**, Contracting Without Contracts: How the Japanese Manage Organizational Transactions

73 **Takatoshi Ito & Keiko Nosse Hirono,** The Efficiency of the Tokyo Housing Market

72 **David Flath & Tatsuhiko Mariu**, Is Japan's Retail Sector Truly Distinctive?

71 **Linda Edwards,** The Status of Women in Japan: Has the Equal Opportunity Law Made a Difference?

70 **David Flath,** Keiretsu Shareholding Ties: Antitrust Issues

69 **Yasushi Hamao & Joel Hasbrouck**, Securities Trading in the Absence of Dealers: Trades and Quotes on the Tokyo Stock Exchange

68 **Schon Beechler & Allan Bird,** The Transfer of Human Resource Management Overseas: An Exploratory Study of Japanese and American Maquiladoras

67 **Charles Hall, Yasushi Hamao, & Trevor Harris,** A Comparison of Relations Between Security Market Prices, Returns and Accounting Measure s in Japan and the US.

66 **Schon Beechler & Allan Bird**, The Best of Both Worlds? An Exploratory Study of Human Resource Management Practices in US Based Japanese Affiliates

65 **Michael Smitka**, The Decline of the Japanese Automobile Industry: Domestic and International Implications

64 **Hugh Patrick**, Comparisons, Contrasts, and Implications from the Financial Development of Japan, Korea and Taiwan

63 **Theodore C. Bestor**, Visible Hands: Auctions and Institutional Integration in the Tsukiji Wholesale Fish Market, Tokyo

62 **Frank Packer & Marc Ryser,** The Governance of Failure: An Anatomy of Corporate Bankruptcy in Japan
61 **William Rapp,** Japanese Multinationals: An Evolutionary Theory and Some Potential Global Political Implications for the 1990's
60 **David Flath & Tatsuhiko Nariu**, The Complexity of Wholesale Distribution Channels in Japan
59 **David Flath,** Indirect Shareholding Within Japan's Business Groups
58 **Tatsuo Hatta & Toru Ohkawara,** Commuting and Land Prices in the Tokyo Metropolitan Area.
57 **John Campbell & Yasushi Hamao,** Predictable Stock Returns in the United States and Japan: A Study of Long-Term Intergration
56 **Hugh Patrick**, Peace and Security on the Korean Peninsula: Reflections on the Economic Dimension
55 **Yasushi Hamao & Ronald Masulis,** The Effect of the 1987 Stock Crash on International Financial Integration
54 **Anthony L. Iaquinto**, Japanese Investment in the Border Region of the United States and Mexico
53 **John Campbell & Yasushi Hamao,** Monetary Policy and the Term Structure of Interest Rates in Japan
52 **Robert Dekle,** Alternative Estimates of Japanese Saving and Comparisons with the US
51 **Ellen R. Auster**, Penetration Without Dependence: A Network Analysis of Japanese Economic Activity in the U.S.
50 **Hugh Patrick**, Japan's Financial System and the Evolving Role of Main Banks
49 **Anthony L. Iaquinto & Schon L. Beechler**, The Performance Implications of Asset versus Transactional Advantages of MNEs

1990

48 **Ross Garnaut,** The Market and the State in Economic Development: Some Questions from East Asia and Australia
47 **Kazuo Sato,** Japan's Resource Imports
46 **Hugh Patrick,** Section 301 and the U.S. Japan Economic Relationship: Reflections on Kuroda
45 **Louis K.C. Chan, Yasushi Hamao & Josef Lakonishok,** Fundamentals and Stock Returns in Japan
44 **Peter Drysdale,** Change and Response in Japan's International Economic Policy
43 **David Flath,** Shareholding Interlocks in the Keiretsu, Japan's Financial Groups
42 **Edward J. Lincoln,** The Controversy Over Japan's Low Manufactured Imports
41 **Edward J. Lincoln,** Japan's Role in Asia Pacific Cooperation: Dimension, prospects, and Problems
40 **Ellen R. Auster,** Bringing a Network Perspective into Research on Technological Transfers and Other Interorganizational Relationships

1989

39 **Hong W. Tan & Atsushi Seike,** Pensions and Labor Turnover in Japan
38 **Maurice J. Wilkinson,** Inventory Behavior and Economic Instability in Japan
37 **Michael J. Smitka,** American Management: Reform or Revolution? The Transfer of Japanese Management Technology to the U.S.
36 **Koichi Hamada,** The Causes and Consequences of Japan's High Savings Ratio
35 **Ellen R. Auster,** The Relationship of Industry Evolution to Patterns of Technology Linkages, Joint Ventures, and Direct Investment Between the U.S. and Japan
34 **Masako N. Darrough & Trevor S. Harris,** Do Management Forecasts of Earnings Affect Stock Prices in Japan?
33 **Phillip A. Klein & Geoffrey H. Moore,** Analyzing Leading and Coincident Indicators for Pacific Basin Countries
32 **Geoffrey H. Moore & John P. Cullity,** Growth Cycle Signals as Inflation Indicators for Major Industrial Nations
31 **Takatoshi Ito,** Foreign Exchange Rate Expectations: Micro Survey Data
30 **Takatoshi Ito,** Is the Bank of Japan a Closet Monetarist?
29 **David Flath,** The Economic Rationality of the Japanese Distribution System
28 **Hugh Patrick,** Declining Industries, Mechanism of Structural Adjustment and Trade Policy in Pacific Basin Economics
27 **Susuma Fukuda,** The Fiscal Investment and Loan System
26 **Shoichi Saba,** The Japanese Cooperation and its Management
25 **Peter Drysdale & Ross Garnaut,** A Pacific Free Trade Area?
24 **James Moore Jr.,** The United States and Japan: Competition and Cooperation

1988

23 **Akio Mikuni,** Japan's Financial Power]
22 **Ariyoshi Okumura,** The Future Role of Tokyo's Financial Market
21 **Robert Dekle,** The Relationship Between Defense Spending and Economic Performance in Japan
20 **Hugh Patrick,** Explaining the Japanese Financial System: A Review of the Bank of Japan's Recent Volume
19 **Mototada Kikkawa**, Problems of the U.S. Trade Structure
18 **Hugh Patrick & Frances Rosenbluth,** Japan's Industrial Structure in Crisis: National Concerns and International Implications
17 **David Flath,** Why are There So Many Retail Stores in Japan?
16 **Richard Baldwin,** Some Empirical Evidence on Hysteresis in Aggregate U.S. Import Prices
15 **Frances Rosenbluth,** The Political Economy of Internationalizing the Japanese Financial System: The Case of the Bond Market
14 **Robert Dekle,** Do the Japanese Elderly Reduce Their Total Wealth?

1987

13 **Yoshio Higuchi,** A Comparative Study of Japanese Plants Operating in the U.S. and American Plants: Recruitment, Job Training, Wage Structure and Job Separation
12 **Jacob Mineer & Yoshio Higuchi,** Wage Structures and Labor Turnover in the U.S. and in Japan
11 **Fumio Hayashi & Takatoshi Ito,** Housing Finance Imperfections and Private Saving: A Comparative Simulation Analysis of the United States and Japan
10 **Hugh Patrick,** The Management of the United States-Japan Trade Relationship and its Implications for the Pacific Basin

9 **Michael Smitka,** Japanese Labor Market and Subcontracting
8 **Takatoshi Ito,** The Intra-Daily Exchange Rate Dynamics and Monetary Policies after the G5 Agreement
7 **Yoshio Higuchi,** Labor Force Withdrawal, Re-entry and Wages by Educational Attainment in Japanese Women
6 **Kazuo Sato,** Savings and Investment in Japan
5 **Koichi Hamada & Hugh Patrick,** Japan and the International Monetary Regime
4 **Kazuo Sato,** Econometric Models of the Japanese Economy
3 **Hugh Patrick & Thomas Rohlen,** Japan's Small-Scale Family Enterprises
2 **Richard Baldwin & Paul Krugman,** Market Access and International Competition: A Simulation Study of 16K Random Access Memories
1 **Hugh Patrick,** Japanese High Technology Industrial Policy in Comparative Context

1986

OCCASIONAL PAPERS

2004

56 **Shigeyuki Goto,** A Behavioral Risk Management System

2003

55 **Shigeyuki Goto & Hiroshi Hayakawa,** Building the corporate risk control system with some viewpoints on the risk psychology
54 **Ryozo Hayashi**, Economic Reform: View from METI

53 **Junji Narita,** The Economic Consequences of the 'Price Keeping Operation' in the Japanese Stock Markets
52 **Shigeyuki Goto,** Non-Life Insurance, E-Commerce, and the Importance of Proper Risk Communication
51 **Hugh Patrick**, Japan's Mediocre Economic Performance Persists and Fundamental Problems Remain Unresolved
50 **Takao Sase,** The Irresponsible Japanese Top Management Under the Cross-Shareholding Arrangement

2002

49 **Naotaka Kawakami,** The Impact of the Post Cold War Crises on the Political Economy of Japan
48 **Yasuhisa Shiozaki,** Can Japan's Ailing Banking System Be Cured?

2001

47 **Shigeyuki Goto,** E-Commerce in the Japanese Non-Life Insurance Market
46 **Yasushi Ueno,** Effectiveness and Importance of Leadership in the Changing Period

2000

45 **Yotaro Kobayashi,** Japan's Changing Corporate Structure

1999

44 **Shunji Fukukawa**, Japan's Challenge for Economic Revitalization
43 **Patricia Hagan Kuwayama,** Lessons from Bad Experience with Banking Systems: The United States and Japan

1998

42 **Junichi Ujiie**, Investment Banking in Japan
41 **Toyoo Gyohten**, The Japanese Financial System: Restructuring for the Future
40 **William E. Franklin**, Careers in International/Asia Pacific Business: Perspectives of an Experienced Japan Hand
39 **Jay W. Chai**, Wounded Asia vs. the IMF: Where do we go from here?
38 **Lawrence H. Summers**, The US-Japanese Stake in a Free and Open Asian Capital Market
37 **Yuichiro Nagatomi**, The Challenges Before Industrialized Countries
36 **Henry Kaufman**, The Yen, The Dollar and The Euro

35 **Yuji Suzuki**, Strategy Towards the "Big Bang" The Industrial Bank of Japan's Approach
34 **Maryann Keller**, International Automobile Production: How Will Firms Compete in the 21st Century?

1997

33 **Hugh Patrick**, How the Japanese Financial System and Its Main Bank System Have Dealt with Generic Issues of Financial Banking
32 **Patricia Hagan Kuwayama**, Comments on Japanese Economic Policy
31 **Roger M. Kubarych**, The Yen and the Dollar: Irrational Exuberance?
30 **Robert Pitofsky**, Competition Policy in Communications Industries: New Antitrust Approaches
29 **Masaya Miyoshi**, Japan's Capitalism in Systemic Transformation
28 **Yasuo Kanzaki**, Japan's "Super" Big Bang: Hashimoto's Make-or-Break Gamble

1996

27 **Sheldon Weinig**, Can an American Entrepreneur Work for a Japanese Company and Be Effective and Happy?
26 **Takeshi Nagano**, The History and Future of Japanese Management
25 **Isao Matsuura**, Japanese Banks in Transition: Problems and Prospects
24 **Max C. Chapman, Jr**., A Viable Strategy for Japanese Securities Firms in the United States

1995-1991

23 **Yotaro Kobayashi**, The Japanese Corporation in Transition: Current Challenges and Outlook
22 **Hideo Ishihara**, Re-evaluating the Japanese Corporate System

21 **Yoshitaka Fujitani**, Challenges Facing Japanese Steel in Today's Global Economy
20 **Kenichi Ohmae**, Japanese Corporate Strategy in Crisis
19 **Shijuro Ogata**, The Japanese Economy and the Aftermath of Its Unusual Recession
18 **Jeffrey Garten**, U.S.-Japan Relations: Accomplishments, Next Steps, Future Considerations
16 **Susumu Yoshida**, Agenda for Japanese Business in the Global Economy
15 **Saburo Okita**, Japan's Role in a Changing World Economy
14 **Takeo Siina**, Selling IBM in Japan, Selling Japan in IBM
13 **Hugh Patrick**, Some Thoughts on Japan's Financial Mess
12 **Yoshitoki Chino**, A Monologue on Japan's Financial Market
11 **Jeffrey Garten**, Thinking About World Order: America, Japan and Germany in the 1990's
10 **Nobuo Ohashi**, Innovation and Technical Development in the Japanese Steel Industry
9 **Yuzaburo Mogi**, Problems and Solutions to Japanese Investment Abroad
8 **Hugh Patrick**, One World, Two Worlds or Three? Reflections on the New International Economic Order
7 **Kensuke Hotta**, Deregulation of the Japanese Financial Markets and the Role of Japanese Banks
6 **Hironobu Shibuya**, Taking Responsibility: Japanese Companies and Corporate Citizenship
5 **Sam Kusumoto**, Going Global Without Going Broke

1990-1989

4 **Yuchichiro Nagatomi,** The Financial System and Global Socioeconomic Change
3 **Yoshio Terasawa,** The M.I.G.A. and its Mission
2 **Eiji Umene,** The United States-Japan Relationship in the Rapidly Changing World Environment
1 **Nobutoshi Akao & Joseph A. Massey,** Agenda for a Pacific Partnership: A Japanese-American Dialogue

CENTER ON JAPANESE ECONOMY AND BUSINESS

Working and Occasional Papers

Order Form

All of our Working & Occasional Papers are now available for you to download for free from http://digitalcommons.libraries.columbia.edu/japan/.

To order hard copies of working paper(s) and/or occasional paper(s), please fill out this form and return it to the address below **with** a check made payable to the **Columbia University**. Papers are $5 each.

Center on Japanese Economy and Business
Attn.: Jeff Lagomarsino
Columbia Business School
321 Uris Hall
3022 Broadway
New York, NY 10027

Title of paper(s) ordered:	(Paper #)	No. of copies
....	(#) x	
....	(#) x	
Total Cost:	$5 x	________ = $

Please provide the address to which the paper(s) should be mailed (please print):

Name: ....

Affiliation: ....

Address: ....

....

....

Tel: ....

Fax: ....