Very preliminary

The Fiscal Investment and Loan Program in Transition[*]

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Abstract

The Fiscal Investment and Loan Program (FILP) is an important part of financial activities performed by the Japanese government. This program had helped the postwar development of the Japanese economy, but in recent years there has been several criticisms. Since the size of the FILP relative to the economy has steadily increased, it is suspected that the FILP crowds out the private sector, or devotes resources to inefficient activities.

In the spring of 2001, the Japanese policymakers conducted a fundamental reform of the FILP. The postal savings, which had been a major source of funds, was disconnected from the FILP. This is a right action because the size of the FILP had to grow with the amount of postal savings. The reform also aimed at letting the capital market monitor FILP agencies, but it turned out not workable. More action in restructuring and downsizing the FILP is disparately called for.

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1. Introduction

The Fiscal Investment and Loan Program (FILP, *Zaisei Toyushi*) represents a common problem that the Japanese economy faces. A system that has worked very well in a post-war reconstruction period and a high growth era stumbled in the current time. The system has to be changed so that it fits the well-developed market economy.

FILP is a kind of government interventions to the financial sector. When the financial sector were not well developed, the role of FILP was significant. However, as the private financial activities has developed, the role of the government is supposed to be scaled down. Actually, the size of FILP had grown steadily. Table 1 shows the budget plan of FILP since the Fiscal Year 1953, when the first plan of FILP was assembled. At the peak of nominal values, FILP reached 52.9 trillion yen in 1999. The ratio to GDP had grown from 3.6 percent in 1960 to 10.7 percent in 1999.

[Insert Table 1 around here]

The size of FILP then declined dramatically. The prospective amount of FILP in FY 2002 is 29.8 trillion yen, which decreased by 44 percent from the level of 1999. This reversal of trends reflected recent criticisms towards FILP that was suspected to outgrow its policy purposes. The Japanese policy makers had conducted the "fundamental reform of FILP" in April 2001 that introduced a new scheme. This was a first step to the further reforms. In this year, the reform of special public institutions (*tokushu hojin*) is one of the most important policy issues tackled by the current administration. Since the majority of agencies that are affiliated with FILP are special government institutions, the shape of FILP will be influenced substantially by the reform plan, which is expected to be determined by the end of this year.

This paper outlines the recent reform movements surrounding FILP, and discusses the underlying economic ideas.[1] The main message of this paper is the following. FILP in the current time has grown excessively mainly due to the growth of postal savings, and it results in a considerable amount of welfare losses. Downsizing FILP is a right

[1] Other papers, which discuss recent issues of FILP, include Cargill and Yoshino (1999) and Ishi (2000, Chap. 12).

Table 1: Fiscal Investment and Loan Program, 1953-2002

Fiscal Year	(A) FILP (trillion yen)	(B) GDP (trillion yen)	(C) (A)/(B) (percent)
1953	0.3		
1960	0.6	16.7	3.6
1970	3.6	75.3	4.8
1980	18.2	245.5	7.4
1990	34.6	438.8	7.9
1999	52.9	493.9	10.7
2000	43.7	490.1	8.9
2001	32.5		
2002	29.8		

Notes: FILP is the planned amount. Numbers of 2002 is based on the budget requests as of September 11, 2001. GDP is based on 63SNA. Since the Japanese SNA has changed to 93SNA in 2000, currently no GDP series span the whole periods.

move, but it is difficult to answer how much because the existing researches have not determined the adequacy of policy purposes of each FILP activity. The welfare losses are difficult to evaluate, partially because of the same reason. There are, however, the sizable non-performing loan problems of government financial institutions. Finally, the largest part of costs will be derived by the future plan of highway construction, which is roughly estimated as more than 5 trillion yen.

2. FILP under the Trust Fund Bureau system

The term of "Fiscal Investment and Loan Program" first appeared on 1953 Budget. The postwar FILP system was based on two laws enacted in 1951. Since the center of FILP was the Trust Fund Bureau, we call it the Trust Fund Bureau system.

FILP is a big financial conglomerate operated by the public sector. While the actual system of FILP is quite complicated, Figure 1 illustrates a streamlined picture of the FILP system before the Fundamental Reform of 2001. On the top of the chart, the "entrance side" of FILP collects money from the private sector. The largest part is postal savings. Another important part is the public pension fund. Postal savings, pension funds and other special accounts are obliged to deposit their money in the Trust Fund Bureau of the Ministry of Finance[2].

[Insert Figure 1 around here]

The Trust Fund Bureau allocates its funds among a variety of special accounts and special public institutions. They are called FILP agencies. Table 2 lists the FILP agencies, and shows a prospective new borrowing from FILP in FY 2002.

[Insert Table 2 around here]

One type of FILP agencies is government financial institutions. They make a loan to the private sector that is difficult to borrow money from financial markets or intermediates. Targets of government financial institutions are very wide. The Government Housing Loan Corporation lends money to homeowners. National Life Finance Corporation, Japan Finance Corporation for Small Business, and the Shoko Chukin Bank lend money to small and medium businesses. Development Bank of Japan lends money to big projects. Agriculture, Forestry and Fisheries Finance Corporation specialize in the loan to farmers.

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[2] The Trust Fund Bureau was actually one of special accounts. There was no real organization named the Trust Fund Bureau in the Ministry of Finance. The Japanese government budget consists of the general account and special accounts.

Figure 1: The Trust Fund Bureau System (as of 1999)

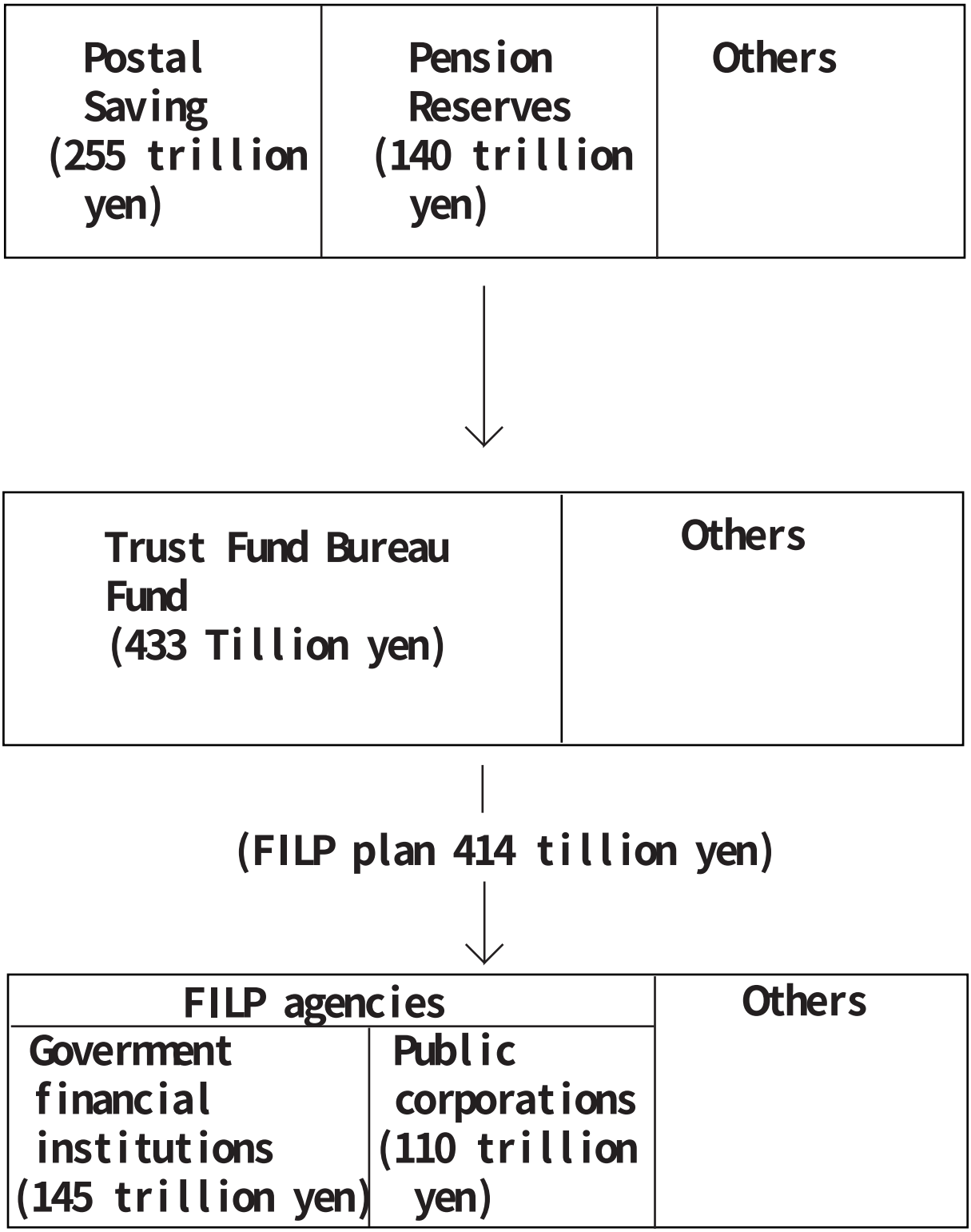


Table 2: Plan of Fiscal Investment and Loan Program (Fiscal Year 2002)[1)]

(billion yen)

	New lending	(Percent of total)[2)]	FILP agency bonds
（Special Accounts）			
Special Account for Landing Urban Development	10		
Special Account for Consolidation of Specific National Property	8		
Special Account for National Hospital	89		
Special Accoung for National School	66		
Special Account for Gevernment-Operated Land Improvement Project	47		
Special Account for Airport Development	55		
(Governmental Financial Institutions)			
The Government Housing Loan Corporation	6,936	(23.2)	400
National Life Finance Corporation	3,630	(12.2)	100
Japan Finance Corporation for Small Business	1,398	(4.7)	200
Agriculture, Forestry and Fisheries Finance Corporation of Japan	220		20
Japan Finance Corporation for Municipal Enterprises	1,662	(5.6)	200
The Okinawa Development Finance Corporation	209		10
Development Bank of Japan	1,010	(3.4)	200
Japan Bank for International Corporation	1,388	(4.7)	200
(Other Semi-government Bodies)			
Urban Development Corporation	938	(3.1)	50
Government Pension Investment Fund	107		
Japan Environment Corporation	21		6
Teito Rapid Transit Authority	16		68
Japan Regional Development Corporation	46		10
Japan Sewage Works Agency	2		
Social Welfare and Medical Service Corporation	376	(1.3)	10
The Organization for Pharmaceutical Safety and Research	2		
The Promotion and Mutual Aid Corporation for Private Schools of Japan	24		6
Japan Scholarship Foundation	219		56
Japan Green Resources Corporation	17		4
Bio-oriented Technology Research Advancement Institution	3		
Japan Highway Public Corporation	2,118	(7.1)	300
Metropolitan Expressway Public Corporation	462	(1.5)	10
Hanshin Expressway Public Corporation	358	(1.2)	10
Honshu-Shikoku Bridge Authority	192		
Japan Railway Construction Public Corporation	85		20
New Tokyo International Airport Authority	30		32
Corporation for Advanced Transport & Technology	38		20
Telecommunication Advancement Organization of Japan	13		
Water Pesources Development Public Corporation	56		13
Fund for the Promotion and Development of the Amami Islands	0		
Metal Mining Agency of Japan	1		
Japan National Oil Coporation	20		
Japan Science and Technology Corporation	4		
Information Technology Promotion Agency, Japan	1		
New Energy and Industrial Technology Development Organization	13		
(Local Governments)			
Local governments	7,790	(26.1)	
(Special Firms)			
The Shoko Chukin Bank	20		280
Kansai International Airport Co.Ltd	29		
Central Japan International Airport Co.Ltd	65		
Organization for Promoting Urban Development	1		
The Electric Power Development Company,Ltd	53		20
Total	29,846	(100)	2,245

Notes: 1) Based on budget requests as of September 11, 2001.
2) Numbers above 1 percent are listed.

The other type of FILP agencies perform a large scale of public works, such as highway construction (Japan Highway Public Corporation, Metropolitan Expressway Public Corporation, Hanshin Expressway Public Corporation), airports (Special Account for Airport Development, New Tokyo International Airport Authority, Kansai International Airport), water supply and sewers (Water Resources Development Public Corporation, Japan Sewage Works Agency) and regional development (Japan Regional Development Corporation) among others.

Governments of many countries are involved in some kinds of interventions to the financial sector. The United Kingdom has the National Loans Fund Account. The United States has the Federal Credit Program. South Korea imitated Japanese FILP. A unique feature of Japanese FILP is that it collected huge amount of money directly from the private sector through postal savings. This is a main reason that the Japanese government interventions in the financial sector rely heavily on direct loan through FILP.

3. The Fundamental Reform of 2001

3.1 Problems of the Trust Fund Bureau System.

The Fundamental Reform of 2001 addressed the following problems.

The first is the size of FILP. The Japanese financial system has achieved a significant progress since the launch of the Trust Fund Bureau. As the private activity is developed, the role of government intervention must be restrained. However, the size of FILP has actually grown as shown in Table 1. A main reason is the growth of postal savings. Since the entrance side of the former FILP and the exit side have a different policy purpose, their size should have been determined separately. However, the scheme of the former FIML connects the entrance side and the exit side directly. The size of the FILP agencies is determined partially by the size of postal savings. This fact has made the size of FILP agencies excessively large. The oversized public sector will be engaged in two harmful activities. One is an activity that the private sector can do; the public sector and the private sector compete each other. The other is an inefficient or wasteful activity.

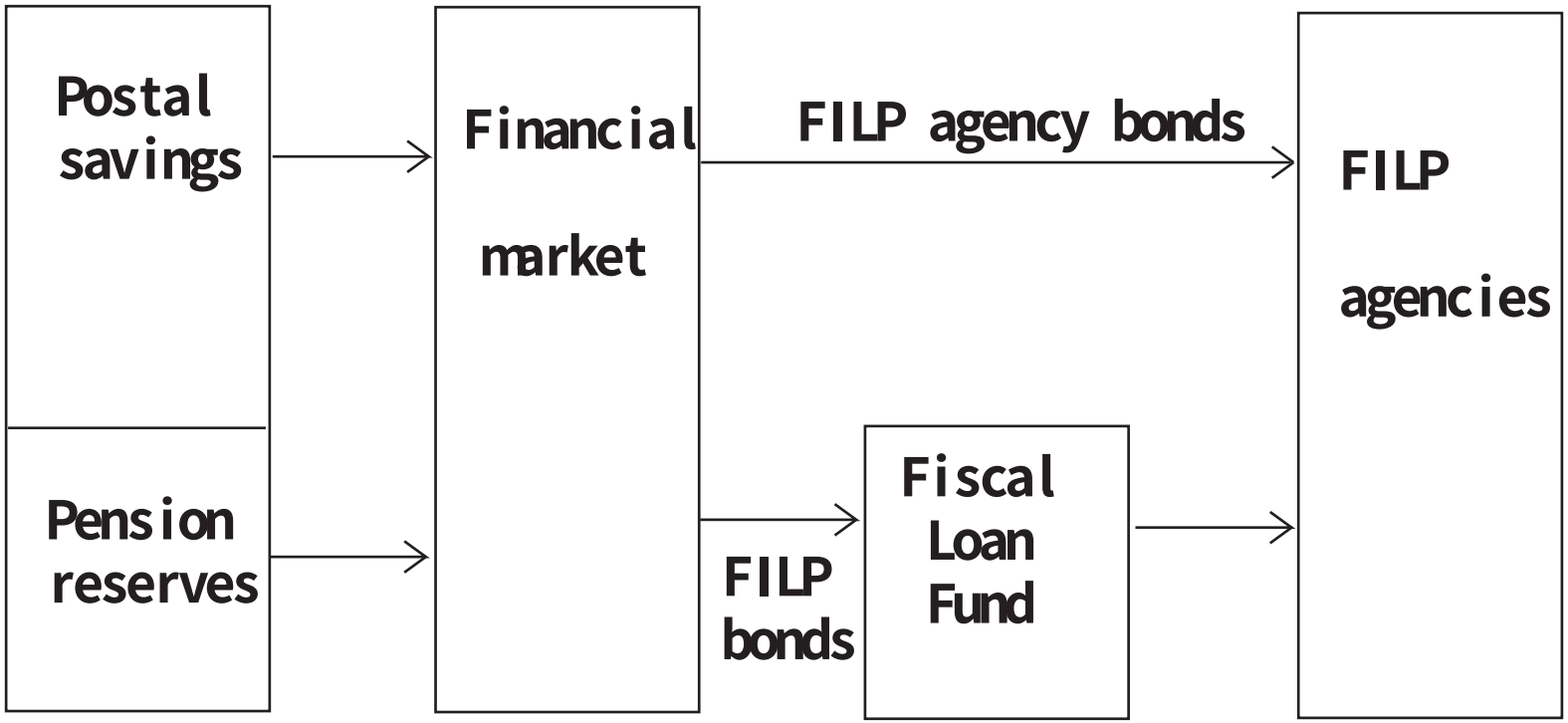
The second problem was that the huge money flowed from the entrance side into the exit side through inside the government. The government determined the interest rates faced by the entrance side and by the exit side, and there was no guarantee that they track the market interest rate. A discrepancy between the market interest rate and the FILP interest rate sometimes caused a serious problem. When the FILP interest rate is higher than the market interest rate, postal savings can collect money by offering a generous interest rate. Since the downward adjustments of the FILP interest rates tend to be slow, postal savings expanded when the market interest rate declined sharply. When the FILP interest rate is lower than the market interest rate, government financial institutes deprive private banks of good borrowers.

3.2 Nature of the 2001 Reform

The 2001 Reform derived three major changes in the Trust Fund Bureau system (Fifure 2).

[Insert Figure 2 around here]

Firure 2: The Post-Reform FILP System



(1) Disconnect the postal saving.

The first point of this reform is to disconnect the postal savings and pension reserves from FILP. By disconnecting postal savings from the exit side of FILP, the size of FILP agencies can be determined based on their own policy purposes.

(2) FILP agency bonds

The intensively debated issue in shaping the post-reform scheme of FILP was how to finance the funds that FILP agencies need. Since the entrance side of FILP is no longer a major supplier of funds, the exit side would finance money from the capital market. There are three options. One is the FILP bond. It is a bond that the newly formed Fiscal Loan Fund issues.[3] Since the government backs its redemption, investors think it is equivalent to the Japanese Government Bond. The second option is a government guarantee of loans or bonds. While their safety is the same as the government bond, it pays a small amount of liquidity premium. The last is FILP agency bonds that FILP agencies issue without a government guarantee. Hoping that FILP agency bonds help to governing FILP agencies, some economists strongly advocated introducing FILP agency bond. Since they contain a default risk, bondholders should monitor FILP agencies carefully.

At the first year of the launch of FILP agencies, FILP agencies actually plans to finance only 3.3 percent of the FILP size through FILP agency bonds. The actual finance through FILP agencies bond is projected to be much smaller. As shown in Table 2, in FY2002 Budget, the amount of FILP agencies bond is expected to be 2.2 trillion yen (7.7 percent of the FILP size).

Will the FILP agency bonds indeed help to discipline FILP agencies? A serious problem for the function of the FILP agency bonds is that if the government is expected to bail out a failed FILP agency, the monitoring of bondholders does not work well. While the bailing out is not explicitly stated, the government may have incentives to bail out a failed FILP agency ex post. No explicit efforts for the government to commit

[3] The Reform Act nominally abolished the Trust Fund Bureau, and created the Fiscal Loan Fund. But, it effectively only renamed the central part of FILP, because all assets and liabilities of the old Fund were transferred to the new Fund.

not to bail out were made until the FILP agency bonds launched. The FILP agency bonds so far get a high rating that is almost equivalent to that of Japanese Government Bond. This fact implies that the market expects an "implicit governmental guarantee." The initial intention of introducing the FILP agency bonds turned out to be less functioning.[4]

(3) Subsidy cost analysis

How much do inefficient activities of oversized FILP cost our economy? This question is very difficult to answer, firstly because the activities of FILP spans for a long time, and secondly because FILP contains a wide variety of activities. Nonetheless, the government made some attempts to quantify policy costs of FILP.

As one device, subsidy cost analysis was introduced in 1999. The subsidy cost analysis estimates the present discounted value of the future stream of the cash transfers by the government under the assumption that FILP agencies do not launch a new project. Table 3 shows the estimates of subsidy costs of large agencies. Japan Highway Public Corporation and Urban Development Corporation have a huge amount of subsidy costs, whose sum is 4.7 trillion yen.

[Insert Table 3 around here]

In 2001, Ministry of Finance began another attempt to further disclose the status of FILP agencies by requiring that special public institutions disclose richer content of financial statements that adhere recent developments of accounting standards.[5]

We are cautioned that budget expenses or policy costs do not result directly in a social waste if the subsidized activity creates enough social benefits. Another notable fact is that these numbers unfortunately do not capture the possible burdens of the future projects, which may be a significant part of the welfare costs of excessive FILP. Let us examine three types of welfare costs of inappropriate activities of FILP.

First, when the public sector substitutes the activities of the private sector and

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[4] See more discussion of FILP agency bonds, see Iwamoto (1998).

[5] However, in general, the reform of public sector accounting is still behind the trend in other developed countries.

Table 3: Impacts of the Proposal of Privatization of FILP Agencies

(billion yen)

	FILP (FY 2002)[1)]	Subsidies (FY 2002)[1)]	Policy Costs (FY 2000)	Subsidy Costs[2)] (FY 2001)
The Government Housing Loan Corporation	6,936	393	433	155
Urban Development Corporation	938	81	636	1,234
Teito Rapid Transit Authority	16	0		-11
Japan Highway Public Corporation	2,118	273	-294	3,462
Metropolitan Expressway Public Corporation	462	46	22	371
Hanshin Expressway Public Corporation	358	15	47	271
Honshu-Shikoku Bridge Authority	192	133	141	631
New Tokyo International Airport Authority	30	11	10	-62
The Shoko Chukin Bank	20	0		53
Kansai International Airport Co.Ltd	29	40		2
The Electric Power Development Company,Ltd	53	3		-152
Total	11,152	995	994	5,954

Notes: 1) Based on Budget Requests as of September 11, 2001.
2) Subsidy costs are the discounted present value of subsidies that are attributed to the existing activities of the FILP agencies. See section 3.2(3).

operates inefficiently, the inefficiency will be the welfare costs. Although many researchers compared the operation efficiency of government financial institutions with the private banks, they did not get secure evidence that the performance of the public sector is inferior (For example, see Yoshino, 1994). This is perhaps because the private banks operate inefficiently due to the fact that government policies restraint competition in the financial sector. It is, however, suspected that public works contain inefficiency. The government now tries to cut costs of public works.

The second type of welfare costs is a distortion caused by government subsidies. If the government subsidies remedy market failures or some distortions appropriately, they do not bear welfare losses. If the government subsidies are not based on a sound policy purpose, however, resources will be shifted to targeted activities, exceeding an appropriate level. To evaluate this type of dead weight loss, we need to know the adequacy of subsidies and the interest rate elasticity of demand for loans. Since the adequacy of subsidies is very difficult to determine, previous researches did not get a definite answer.

The third type of welfare costs is money lost by inefficient or inadequate activities. For government financial institutions, it is non-performing loans. For public works, it is unused or underutilized infrastructure. There was very little disclosure of non-performing loans of government financial institutions, while private banks did not disclose such information either. Hokkaido Tohoku Development Finance Corporation became insolvent due to the failure of a big development project. Since they were absorbed by Japan Development bank, the exact amount of losses was unknown. It is rumored that Japan National Oil Corporation is now insolvent.[6] The most serious part of welfare costs lies on highway construction, which will be estimated in Section 4.4.

[6] I will supplement some material of non-performing loans in a future version of this paper.

4. Remaining Problems

4.1 Reforms of Special Public Institutions[7]

The 2001 Reform did not solve all problems in FILP. Particularly, how to further discipline FILP agencies is an important remaining problem. A next step of the reform has to address how to reform the FILP agencies. Privatization is one possible option.

The Japanese government is now engaging the reform of special public institutions. The Cabinet set the Gist of Public Administration Reform in December 2000 The Administrative Reform Promotion Secretariat was created in January 2001, and is in charge of making the Action Plan of Special Public Institutions Reform by the end of 2001. Since many special public institutions borrow from FILP, this reform will give a significant impact on the future shape of FILP.

On October 5, the Administrative Reform Promotion Secretariat released a proposal of reforming organizations of special public institutions. This plan suggests 16 public corporations should be privatized. Among them, 11 are FILP agencies. Table 3 lists the 11 FILP agencies that the Secretariat considers a privatization.[8] Since FILP does not target private companies directly, a privatization implies a spin-off from FILP. If the 11 agencies leave the FY2001 FILP plan, its total size was decreased by 11.2 trillion yen (about 37 percent of the current FILP plan). Privatization of more agencies is expected to be proposed by the Secretariat. The impact of privatization on FILP can be much larger than Table 3 suggests. However, there are strong political pressures against the radical reforms of special public corporations. The final outcome is very difficult to predict at the writing of this paper.

4.2 Six Reasons of the Purpose of FILP.

To get a right reform of FILP agencies, we first have to examine why the public sector intervene in the financial sector. This subsection reviews six major reasons that have been pointed out in the existing literature. My assessment is the following; the first

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[7] This part will be revised when the reform plan of special government institution is finalized.

[8] Note that this is not a final decision. The Secretariat has not yet reached a conclusion for many governmental financial institutions. The government is expected to finalize the reform plan of the special public agencies by the end of 2001.

four is no longer valid under the well-developed financial system. The last two remains a valid reasons today. The working of FILP should be reexamined under the new economic conditions.

(1) creation of competition

Due to a heavily regulated environment, the Japanese financial institution was operated inefficiently. One of the reasons supporting the government financial institutions is that its presence gives a competitive pressure to the private institutions. As criticized by Ikeo (1998), however, a real problem is that the government fails to provide the competitive environment that promotes the efficiency of the private financial sector. Deregulation of the financial sector is a more appropriate policy choice.

(2) production of information

The information production of the financial intermediaries consists of screening (before giving a loan) and monitoring (after giving a loan). Since government financial institutions do not offer a cashing deposit account, they do not have advantage of monitoring. It is unconvincing to simply say that government financial intermediaries have a superior screening ability. Thus the information production role of government financial institutions is severely limited.

One possible exception is the story of Higano (1986) that the Japan Development Bank created some information because they have a strong tie with the policy makers, particularly, the Ministry of International Trade and Industry. This story loses a relevancy in the current Japanese economy, where the government no longer has advantage of finding leading industries. The role of the Japanese Development Bank is no longer important for the Japanese economy. They may be able to create useless information that the private sector cannot create.

(3) asset transformation

Providing long-term funds with a fixed interest rate has been a major purpose of government interventions. When private financial intermediaries cannot change short-term deposits to long-term loans, the government is supposed to be able to bear interest rate risks. However, officials at the Trust Fund Bureau states that they do not bear interest rate risks because they conduct a well functioning Asset Liability

Management.[9] If so, the current provision of long-term loan is a result of sophisticated asset management that is manageable by the private sector. Government interventions are unnecessary for this purpose.

(4) externality

When the investment project creates the return that is not collectable by the investor, underinvestment of such a project may occur. However, the direct remedy is to give subsidies to such a project. The government sector does not have to be involved further, like making a loan.

(5) risk bearing

A project with a quite large risk is not appropriate for the private sector to undertake. The government can bear the large risk that the private sector cannot, because the government can spread the risk over the whole taxpayers. FILP thus may be suitable for performing a large project whose risk is very large. However, we are cautioned that the ability of distributing burdens itself implies that it is very difficult for taxpayers to efficiently monitor the risk bearing behavior of government because a small pain of each taxpayer is not likely to exceed monitoring costs. How to govern the FILP activities is a serious issue, which is not still resolved.

(6) asymmetric information

The credit market is a typical example that a problem of asymmetric information prevails. Even if the government faces the same information constraint with the private sector, there is a possibility that the government can improve welfare (Mankiw, 1986). This story justifies government interventions in the credit market for small businesses, while we lacks enough empirical support for the current activities of the FILP agencies, like National Life Finance Corporation, Japan Finance Corporation for Small Business, and the Shoko Chukin Bank.

Some empirical studies examined whether there are rationing in the credit market. Matsuura, Mitsui and Kitagawa (1991) conducted an empirical test of credit rationing using a test of disequilibrium with an explicit consideration of government financial institutions. They found that while the market of general banking loan is disequilibrium, the market of small businesses and mortgage is in equilibrium. Since their framework does not focus on the credit market under the absence of government interventions, the

[9] Takahashi (1998) points out this fact.

role of government interventions cannot be examined. While the asymmetric information story suggests the possibility that the government may play an important role in small business loans, more careful researches will be needed.

4.3 Government Financial Institutions

The Administrative Reform Promotion Secretariat also scrutinizes the activities of special public institutions. This and next subsections will discuss the validity of activities.

What can government financial institutions do? One thing is to make a loan with the interest rate below the market rate. The gap is financed explicitly through subsidies and implicitly through government guarantee of liabilities. A point we have to examine carefully is whether subsidies to private institutions can do the same job. Why do we need an institution that is not private? A justification is given by some incompleteness of contracts.[10] When the government writes a contact that completely describes policy purposes, the government can delegate a necessary loan business to a private financial institution. When the policy purpose is very complicated to write down on a contract, a proper execution of public policy becomes difficult. Suppose that a private financial institution is in charge of making a loan for some policy purposes. When the government has a right to decide a loan, the private institution worries that the loan decision will be turned down by the government, and does not devote enough of their resources to making a loan. If the resultant inefficiency is serious, the government may prefer to own an institution that they can control directly. [11]

When these problems are small, the government does not have to rely on a governmental financial institution. Interest subsidies or a loan guarantee can perform a necessary job. The area that problems of incomplete contract are likely to be small is a housing loan. Since the number of housing loan is huge, the policy purpose cannot depend on individualistic factors. Since the securitization of mortgage has been developed in the US and other countries, information production and financing can be successfully separated in the area of mortgage loan. The role of Japan Housing Loan

[10] For general discussion of the choice between a government enterprise and a private firm, see Sappington and Stiglitz (1987) and Hart, Shleifer and Vishny (1997).

[11] Kaizuka (1981), Iwata (1988) and Ide and Hayashi (1992) discuss the necessity of direct loan by government financial institutions.

Company should be shifted to securitize their loans and promote the secondary market for mortgages. The necessity of direct loan became small.

4.4 Infrastructure Investment

The policy making process of infrastructure investment has been attacked by a lot of criticism in recent years. The basic strategy of infrastructure investment is that the level of infrastructure falls short of a necessary level and that more infrastructures should be formed as soon as possible. This approach has continued for more than 40 years. Are we still short of infrastructure after intensive investments in 40 years? When will it end?

Policy debates have been heated on highway constructions. Japan Highway Public Corporation builds and operates highways. Construction costs are borrowed from FILP, and are repaid by toll revenues. When the first highway opened in 1963, its construction costs were expected to be fully repaid in 30 years, and it would be made free. However, it never becomes free. The Japan Highway Public Corporation pools toll revenues of all roads, and repays their debt. Therefore, after an old highway finish to repay its full construction costs, it has to contribute to repay debt of newer lines.

The most serious problem in highway construction is that the newer lines have a very low rate of return. As shown in column (E) of Table 4, the rate of return of older lines are at an adequate level. However, the newer lines, which are listed in Panel (B), exhibit a very low level of the rate of return.

[Insert Table 4 around here]

The numbers reported in financial statements show that the current situation is pretty good. For example, net policy costs of Japan Highway Public Corporation are negative, as shown in Table 3. What are then real problems of highway construction? First, since the interest rate is currently very low in Japan, Japan Highway Public Corporation enjoys a lighter burden of interest payment. When the interest rate goes up in the future, they will suffer from the large hike of the interest payments. Secondly, the subsidization from the old, profitable lines to the new, unprofitable lines is not sustainable, because the share of unprofitable lines will grow steadily. Highway construction follows the rule of diminishing return; the newer the time of construction is,

Table 4: Rates of Return of Highways by Line (Fiscal Year 2000)

	(A) Length in operation (kilometer)	(B) Opening rate (percent)	(C) Book value of load (billion yen)	(D) Operating surplus (billion yen)	(E) (D)/(C) (percent)
(A)					
Tohoku Jukan	766	96	2,315	190	8.20
Kanetsu	449	100	2,583	107	4.13
Joban	200	64	1,151	69	5.98
Higashi Kanto	113	66	738	56	7.52
Chuo	632	100	2,749	252	9.17
Tomei	347	100	1,499	229	15.29
Hokuriku	487	100	1,681	64	3.83
Kinki	377	49	2,149	132	6.16
Chugoku Jukan	543	100	1,229	64	5.23
Sanyo	417	94	2,734	107	3.89
Kyushu Jukan	437	100	1,308	97	7.38
(B)					
Hokkaido Jukan	320	67	946	22	2.27
Hokkaido Odan	450	32	362	6	1.69
Tohoku Odan	323	87	1,514	17	1.15
Tokai Hokuriku	109	59	720	6	0.78
Chugoku Odan	178	46	529	7	1.36
Shikoku Jukan	190	86	966	12	1.22
Shikoku Odan	125	44	656	12	1.77
Kyushu Odan	246	88	1,046	32	3.07
Okinawa	57	100	211	6	2.89

Source: Author's caluclation from the Disclosure Infromation of Japan Highway Public Corporation.

the less the traffic of line is. The right decision is to stop building new highways.

Future construction of highways will create welfare losses, while it is difficult to quantify possible costs because they depend on many uncertain parameters. In Table 5, I tried to a back-of-the-envelop estimation by extrapolating from the current basic parameters. The construction cost of remaining loads is assumed to be uniform and 8,645 million yen per kilometer. This number is based on the projection of Ministry of Land, Infrastructure and Transportation, which estimates the construction cost of planned 2,383 kilometers is 20.6 trillion yen. The latest rate of return is applied to each line. This static assumption may cause biases to both directions. The traffic will be busier when the whole line is connected. On the other hand, new addition to a successful line will get a lower rate of return; this problem might be serious for Kinki Highway line, whose new line will run in a rural area. Since the standard social discount rate employed in Japan is 4 percent, I assume that when the rate of return of a project is less (more) than 4 percent, it bears the welfare costs (gains). From this step, 5.8 trillion yen turns out losses due to inefficient investment in highway construction. The future construction of underused highway is one of the largest welfare losses contained by FILP.

[Insert Table 5 around here]

4.5 Soft Budget Constraint

Another serious problem of FILP is that the failure of a FILP agency tends to be disastrous. Table 6 shows the history of outstanding debts of the two biggest failures in the history of FILP; Japan National Railway and National Forest Special Account. Japan National Railway used to go well earning a profit until 1963. Their profitability had declined because political pressures had forced them to build and operate new, inefficient railways. After 1964, they had never earned profit. The remarkable fact is that FILP continued to lend new money to Japan National Railway for 24 years by simply finance interest payments. During these periods, Japan National Railway made restructuring plans four times, but they were not effective in improving profitability. Finally Japan National Railway accumulated about 25 trillion yen in 1986, and was

Table 5: Rates of Return of Highways by Line (Fiscal Year 2000)

Lines	Length Planned (kilometer)	Remaining Length (kilometer)	Construction cost (billion yen)	Welfare Gains (billion yen)
(A)				
Tohoku Jukan	798	32	276	290
Kanetsu	449	0	0	0
Joban	313	113	973	482
Higashi Kanto	171	58	503	443
Chuo	632	0	0	0
Tomei	347	0	0	0
Hokuriku	487	0	0	0
Kinki	769	392	3,392	1,829
Chugoku Jukan	543	0	0	0
Sanyo	444	27	230	-6
Kyushu Jukan	437	0	0	0
(B)				
Hokkaido Jukan	478	158	1,362	-589
Hokkaido Odan	1,406	956	8,266	-4,780
Tohoku Odan	371	48	417	-297
Tokai Hokuriku	185	76	655	-528
Chugoku Odan	387	209	1,806	-1,191
Shikoku Jukan	221	31	267	-186
Shikoku Odan	284	159	1,375	-767
Kyushu Odan	280	34	290	-67
Okinawa	57	0	0	0
Total	9,058	2,292	19,814	-5,368

Source: Author's caluclation.

privatized.

[Insert Table 6 around here]

National Forest Special Account was also in a good business condition until 1974. As the import prices of wood became cheap, they lost competitiveness, and they accumulated losses. In 1973 and 1984, they changed a rule of depreciation so that they obtain a profit under a new scheme.

A notable fact in Table 6 is that FILP continued to lend money for more than 20 years and the resulting accumulated losses were tremendous.[12] Since the deficit problems of both agencies were a structural one, the remedy should have been taken earlier. Why was the FILP slow to stop borrowers to lose money? We see here an example of the soft budget constraint, which government organizations suffer from (Kornai, 1980). One reason why FILP is trapped by the soft budget constraint is that it is typically a single large debt holder of a failed agency. As Dewatripont and Maskin (1995) shows, the concentration of debt holders tends to cause a soft budget constraint phenomena. The second reason is that the lender cannot get tough with borrowers because both are inside the government. From these reasons, the corporate governance of FILP agencies has a serious problem.

4.5 Effect on Budget

Prime Minister Koizumi instructed that subsidies to special government institutions should be reduced by 1 trillion yen in the Budget FY2002. Since the subsidies in FY2001 budget are around 5 trillion yen, his instruction implies a severe cut of subsidies.

Table 3 shows subsidies to FILP agencies that were on the list of privatization proposal of October. Subsidies to the 11 agencies account about 1 trillion yen. The proposal has a significant magnitude in the budget and FILP, because the largest two agencies, Government Housing Loan Corporation and Japan Highway Public Corporation, are included in the list.

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[12] Not all of the accumulated losses were welfare costs because users benefited from an unprofitable price of failed agencies.

Table 6: Debt of Japan National Railway and National Forest Special Account

Japan National Railway			National Forest Special Account	
FY	Long-term debt (billion yen)	Debt relieved by general account (billion yen)	FY	Long-term debt (billion yen)
1964	831		1975	
1965	1,110		1976	40
1966	1,369		1977	123
1967	1,643		1978	223
1968	1,931		1979	340
1969	2,249		1980	468
1970	2,604		1981	595
1971	3,087		1982	744
1972	3,719		1983	919
1973	4,368		1984	1,103
1974	5,538		1985	1,277
1975	6,779		1986	1,442
1976	5,458	2,540	1987	1,618
1977	6,887	2,540	1988	1,803
1978	8,462	2,540	1989	1,987
1979	10,149	2,540	1990	2,164
1980	9,077	5,322	1991	2,375
1981	10,829	5,322	1992	2,578
1982	12,724	5,322	1993	2,829
1983	14,661	5,322	1994	3,034
1984	16,505	5,322	1995	3,208
1985	18,241	5,320	1996	3,385
1986	19,745	5,320	1997	3,511
1987				

Notes) Numbers are at the end of fiscal year.
Source) *Zaisei Kin-yu Tokei Geppo* (Zaisei Toyushi Tokushu), Ministry of Finance, each issue. *Nihon Kokuyu Tetsudo Kansa Hokokusho*, JNR Auditing Comitee. *Rin-ya Jigyo Tokeisho* (Forest Agency).

5. Conclusion

The current scheme of FILP was shaped in 1951, when the financial markets and private financial intermediates were not well developed. Since the long-term fund was not provided by the private sector, the government had played an important role in allocating resources in the capital market. At the same time, a quick development of the infrastructure was at a high priority. The role of FILP is considered to fit such a situation that may be typical in developing countries. Unless we believe Japan is still a developing country after 50 years, we have to feel strange that FILP continues to keep an original style.

We have to reexamine what is the role of government under a developed financial system. What is a suitable way of intervening the financial system? The fundamental reform of 2001 reform was not a final answer. We need another drastic reform of FILP. The reform of special public institutions is effectively the second step of the reform of FILP. The government is expected to make an action plan to reform special government institutions by the end of 2001. The privatization proposal was already released, but the political pressure of bureaucrats and politicians that want to preserve institutions has been strong enough to nullify the efforts of former reform actions. Whether we get an effective reform plan and a streamlined FILP is now at stake.

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