Private Finance Initiative

— Is PFI the Solution to Japan's Fiscal Crisis ? —

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PART 1:
JAPAN'S PERSISTENT FISCAL CRISIS HAS CHANGED ITS PUBLIC WORKS INVESTMENTS

(1) Critical Situation of Japan's Governmental Finances

a) *International Comparison Based on the EU's "Convergence Criteria"*

To improve the social infrastructure by using the capital and management capabilities of the private sector, the "Private Finance Initiative" (PFI) was first adopted in the UK in 1992 as a policy by the then Chancellor of the Exchequer, Norman LAMONT , of John Major's Cabinet, against the background of administrative reform initiated in 1979 by the conservative Thatcher government to halt the inflation of "big government" by the administration under the Labour Party. Also instrumental in leading to the UK's fiscal reform was the external factor of the "Convergence Criteria, EVG 109," of the Maastricht Treaty (officially the Treaty on the European Union, 1992) , a decisive factor for the European unification, which stipulated the qualifications for joining the monetary union by the base year of 1997, keeping fiscal deficits at 3 percent or less of GDP, with official liabilities at 60 percent or less of GDP. The UK's Conservative government had no choice but to give first preference to these fiscal disciplines, as a common policy target of the 15 countries of the EU (although the UK eventually chose not to join the European Monetary Union as a first entrant, due to domestic circumstances) .

The current fiscal status of Japan is shown in Table (1-a) , which compares in terms of the "Convergence Criteria" described above, to fiscal deficit and official liabilities of 6 and 140 percent of GDP, respectively, under the assumption of an approximately 500-trillion-yen GDP, a fiscal deficit of 30 trillion yen as a new issue ceiling of government bonds, and about 700 trillion yen in official liabilities. Understandably, this explains how critical Japan's fiscal status is, in light of an international comparison. The resulting fiscal situation cannot be separated from the conventional fiscal policy implemented after the collapse of the "bubble economy," which aimed at activating the economy through fiscal expenditures with an emphasis on public investment.

Table 1-a: International Comparison of Official Liabilities Balance (national and local, as a percent of GDP)

	1992	1997	2002	(2002 fiscal deficit)
Japan	63.5	92.0	142.7	(-8.2)
USA	74.1	71.4	60.7	(-4.6)
UK	49.2	60.5	50.8	(-1.4)
Germany	41.8	61.8	62.4	(-3.7)
France	44.7	68.2	66.7	(-2.7)
Italy	107.7	120.2	109.6	(-2.3)

Source: OECD Economic Outlook 2002

Of fiscal 2002's general account revenue of about 81 trillion yen, about 60 percent comes from taxes and stamp revenues, while the remaining approximately 30 trillion yen (about 40 percent) is dependent upon revenue from public bonds. In addition, there is an increasing latent debt not represented in the general account, and as such Japan's budgetary crisis has drawn international attention, eventually leading to a downgrading of Japanese government bonds by some US rating agencies.

The largest expenditure in the general account is social security benefits (about 18 trillion yen, or 22.5 percent) , caused mainly by the rapid aging of the population, followed by public works expenditures of 8.4 trillion yen (10.4 percent) . The public works covered by the general account budget are overwhelmed, in both amount and number of items, by those covered by regional budgets, which account for three-fifths of all pub-

lic works. (Conversely, the ratio is 3:2 for national and regional tax revenues.) Typical regional public works were subsidized by the central government until in the 1990s, when independent regional public works started to increase, financed by regional government bonds. During and toward the end of the "bubble period," many local communities competed for the building of town halls, public halls, and concert halls, mostly through the semi-public "Third Sector" entities, which have depressed regional fiscal position due to the low level of usage of such excessive investments and ensuing maintenance costs. Even though these investments cooperated with the economic measures of the central government, through public investment by local communities in response to increasing unemployment just after the bubble burst, what was left for local governments proved to be a huge amount of outstanding public bonds and debt-service expenditures. (See Table 1-b) It is still remembered that during this period many of the Third Sector entities established across Japan as projects encouraged by the "Private Participation Promotion Law" went bust toward the latter 1990s, leaving an enormous amount of debt. Projects by the Third Sector and the PFI which is the major subject of this thesis only appear to be alike, which will be elaborated in Part 4.

Table 1-b: Comparison of Outstanding Public Bonds, Debt-service Expenditures Between National and Local Governments (rough estimate for fiscal 2002, in trillion yen)

	Budget Size	Public Bonds Issued	Debt-service Expenditure	Outstanding Public Bonds
Local Governments (local budget)	87.6	12.6	13.4(3.8)	approx. 136
National Government (initial budget of general account)	81.2	30.0	16.7(9.6)	approx. 414

Source: Ministry of Finance, general account budget for fiscal 2002; debt-service expenditures in brackets are expenditures for interest payments

The debt service expenditure of 16.7 trillion yen in the above budget for fiscal 2002 occupies 20.5 percent of the general account expenditure, for which the interest payment is 9.6 trillion yen, or 11.8 percent. Due to the continued ultra-low interest rate, the expenditure for the interest payment has been leveling off in real figures since fiscal 1971, but outstanding public bonds already exceeded a crisis level, and it is self-evident that spending for public works in its current form cannot be continued.

In the fiscal 2002, the new issue of government bonds was also confined within a 30 trillion yen limit, as ordered specifically by Prime Minister Koizumi, but considering the rollovers of maturing government bonds, the issuance of government bonds is expected to be 99 trillion yen in total.

The changes of national and local fiscal deficits (outstanding long-term debts) and their respective ratio to GDP are as follows:

Table 1-c

	1992	1997	2002 (Budget)
National Government	224	357	528
of which, straight government bonds	178	258	414
Local Governments	79	150	195
Duplication Between National and Local Gov.	-2	-15	-30
Total of National and Local Governments	301	492	693
Ratio to GDP	62.2%	94.6%	139.6%

Source: Ministry of Finance Website

b) *Japan's Economic and Fiscal Crisis After the "Financial Euphoria"*

The rise of the bubble economy in Japan was represented by an unprecedented soaring of the prices of stocks, land, and other commodities, against the background of a reduced official discount rate and an economic boom supported by a stronger yen. John Kenneth Galbraith called this "financial euphoria." (1)

Alarmed by this financial euphoria, the monetary authorities took the measures of raising the official discount rate and regulating the total balance of loans to specified industries. This abrupt step of restricting the supply of funds led to plummeting stock prices in the late 1990s, and to the ensuing rapid decline in the prices of real estate (mainly land). As a result, the majority of financial institutions in Japan which used to compete for secured loans against ever-rising properties and stocks, were not only forced to suspend additional loans due to controls on total balance of loans, but also to see their outstanding loans turn into bad debts. (2)

Such an expansion and collapse of the bubble economy did immeasurable damage to all phases of the economy, including the shrinkage of personal property. In particular, increasing unemployment caused by the plummeting profit of industries, and the resulting decrease in tax revenue, as well as the restructuring for survival by companies (restructuring of over-capacity, excess liabilities, and excess staff), have been translated into an increasing social cost, side-by-side with the advance of the aging society.

While financial institutions in Japan took pains to reduce risk assets due to the capital adequacy requirements of the Bank for International Settlements, they were so afraid of the increase of bad loans that they applied a "credit crunch" to requests for new loans, mostly those by small and medium-sized industries, and even "forced repayments" of existing loans. As a result, a vicious circle has caused credit balances to shrink, capital investments to cool off, deflationary trends to advance, consumption to become stagnant, and bankruptcies to increase. Under these circumstances, in order to put the brakes on the vicious circle and revitalize the Japanese economy, we can no longer rely on the government finance which has been in critical condition.

(2) Solidifying Japan's Fiscal Situation - PFI as Possible Solution

a) *Making Japan's Money Recycling Sustainable*

Since the end-of-the-century euphoria in Japan died down, it has been a long time since voices were heard raised for the revitalization of the economy.

Although the monthly economic report of the government for May 2002 revised its basic economic stance upward, saying that "the economy is still in a difficult condition, but has bottomed out," against the background of some increase in export items and an advance in inventory adjustment. Yet there are number of items evidencing a stagnant economy, such as new housing starts for May showing the lowest level since 1983, at 1.17 million. This is probably indicative of the current difficulty in arranging mortgage loans, due to a three-year decline in the average annual income of the working population. (Source: Statement by the Minister for Land, Infrastructure and Transport.)

It has been three years since the writer made a specific proposal for revitalization in the "Research Society Monthly" of the International Economic Research Center, under the title, "Toward a Revitalization of Japanese Economy." That proposal was a businessman's appeal for the early securitization of assets including real estate ("ABS"), as well as for public works without dependence on government spending ("PFI"), both accompanied by specific and technical explanations. The appeal was based on the following points:

i. Asset-backed securitization (issuance of securities against underlying assets, or ABS). Above all, securitization of real estate is an effective method of encouraging a continuous recycling of funds in the Japanese economy.

ii. As a method of liquidizing assets (more specifically, securitizing), it is desirable to make use of omnivorous capital markets (i.e., the securities market), through which competitive pricing will become inevitable due to the spread of Internet deals.

iii. Following national and local-level fiscal tightness, and a tendency for more decentralization, the idea of "Value for Money" (benefits corresponding to taxes paid), which is the essence of British PFI, will enhance the national consciousness of tax payers for accountability in public works, and will become a major point at issue for public works. After three years, last year ABS for the first time exceeded in the amount of funds raised (amount securitized) the total amount of initial public offering and capital increase combined, proving its popularity. [3]

b) *Introduction of PFI into Japan*

Meanwhile, PFI is attracting attention in Tokyo, Fukuoka and some other prefectures, where local communities have their own PFI guidelines, even though its spread across the nation has been rather slow. It is said that there are currently about 300 cases of PFI nationwide, which are either being implemented or under study. Among those being implemented are the Constant Power Works of Kanamachi Filtration Plant; Improvement Work on A Block at Saitama New Industrial Site (SKIP City); Center for Comprehensive Disaster-Prevention, of Fujisawa City; Health and Medical Welfare University, of Kanagawa Prefecture; Public Facilities for Redevelopment of Buildings, of Matsunohama; Hibiki Container Terminal, in Kitakyushu City; Improvement Work for the Modern Art Museum, of Kanagawa Prefecture; Improvement Work for Maya Lodge, of Kobe City; and Improvement, Management and Maintenance of Chowa Primary School, of Chofu City. All of these are already well known projects, and are indicative of the efforts of PFI pioneers bearing fruit in Japan. In the meantime, new projects for urban redevelopment have been emerging just recently. The magnitude of these projects should be welcomed, in that their imminent impact on alleviating the burden on the national budget will be expected. It is by all means necessary to continue to arouse positive public opinion about PFI, while also avoiding confusion with work by the Third Sector.

c) *Strategic Governmental Measures for Economic Revitalization*

The Economic and Fiscal Inquiry Council prepared a basic strategy for the revitalization of the economy by the government at its 13th meeting, on May 21, 2002, as follows.

First, under the basic principle of leaving what the private sector can do to the private sector as much as possible, the nucleus of economic activities will be transferred from the "governmental" to "private," to expand private sector activities through privatization and deregulation.

Second, while changing the role of government from discretionary to after-the-fact monitoring, to avoid disturbing market activities, it will be necessary for the government to complement "market errors," and to further promote market competition, while also disclosing information and assessments so as to establish a society with diversified options based on consumers and users. These basic strategies will also be helpful to the promotion of markets for PFI and ABS.

The Economic and Fiscal Inquiry Council has cited correction of the high-cost structure through deregulation and improving efficiency of government activities, and has clearly promoted PFI, saying that the relative authorities will "make the most of PFI by outsourcing water supply and drainage, privatizing public gas supply business, and leaving nursing care, nurseries, and school services to PFI."

The section entitled "Expanding Private Sector Business without Sanctuary" referred to the promotion of high-quality, efficient services by the private sector in the regulated fields of medical treatment, nursing care,

nurseries, labor, and education, as well as encouragement of rationalizing bidding terms by eliminating excessive regional requirements to restrict competition in public investment and government procurement.

It is worth noting that in the section, "Strategy of Regional Power," the Economic and Fiscal Inquiry Council made a sharp distinction between "resuscitation of large cities with international competitiveness," and "resuscitation of local cities with specific features and revitalization of local industries," based on self-help and independence. This point has been included in the two proposals by the Federation of Economic Organizations (Keidanren) in which I had the pleasure of participating. The first was "For the Improvement of Social Capital to Produce Affluence and Vitality - A Proposal for Making Rules of Execution, Assessment and Review of Public Works" (December 1997), which admonished about the overinvestment in public works from the point of fiscal reform. The second was "For Realization of Local Public Finance Based on Self-help and Independence" (April 2000), which proposed to shift the slogan of "Balanced National Land Development," put up during periods of high growth to a principle of "Selection" and "Concentration" amid the international environment where individual and specific features are highly valued.

It is the responsibility of our generation to plan and improve social capital for the next generation and the generation after next, but what such public investments should be, and how to fund for them in this time of fiscal crisis, are the difficult questions put to us.

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1 John Kenneth Galbraith, A Short History of Financial Euphoria, trans. Tetsutaro Suzuki as The Bubble Story (Diamond, 1991).

2 Land prices have continuously declined since 1992. As of May 2002 the price of commercial area stands at 38 percent of the peak of 1991, and that of residential area at 64 percent. (Source: Distributed by Minister Ohgi, of the Land, Infrastructure and Transport Ministry, at the meeting of the Economic and Fiscal Inquiry Council on May 21, 2002.)

3 Details of Direct Funding among the Funds Raised by Companies in 2001:

Straight Bonds	8.2634 trillion yen	(year-to-year change + 3.6%)
Asset-Backed Securities (ABS)	3.5546 trillion yen	(year-to-year change + 25.4%)
Increase of Capital	2.5080 trillion yen	(year-to-year change − 14.8%)
Convertible Bond (CB)	0.8586 trillion yen	(year-to-year change + 31.7%)
Warrant Bond (WB)	0.0021 trillion yen	(year-to-year change − 87.6%)

(Japan Economic Journal, January 28, 2002, morning edition)

PART 2:
PRIORITY AND EFFICIENCY, BASIC POLICIES FOR JAPAN'S SOCIAL INFRASTRUCTURE

(1) Priority and Efficiency of Public Works Recommended by Keidanren

Japan's aging society and declining birth rate are producing several changes in the society. A decreasing working population, above all, will lead to declining economic growth, deteriorating tax-bearing capacity and decreasing the savings ratio. Before the problems of the aging society and falling birth rate get any worse, therefore, it is necessary to correct the high-cost structure of Japan, and to improve the social infrastructure enough to face international competition. So doing will create an economy led by domestic demand. Five years ago, in December 1997, the Planning Department of the Fiscal System Committee of the former Keidanren made a proposal to the government and local municipalities, on revising the process of public works and the methods of appraisal, emphasizing that further "priority" and "efficiency" are essential to public works in fiscal crisis. (4)

Another proposal was made in April 2000, in which the abolition of the local grant tax was maintained as a matter of principle, elaborating the importance of trying to achieve self-help and independent local finance by local communities bearing a majority share of public works, while also nurturing the cost consciousness of public works. (5)

(2) Seven Categories of Most Imminent Public Works

In Japan, where a basic social infrastructure has been achieved to a considerable degree, the categories of infrastructure that should be given priority are as follows:

i. Projects that directly serve the purpose of activating industries, reinforcing international competitiveness, and improving peoples' convenience, through reducing the distribution costs of goods, people, and information-namely, high-grade trunk roads, hub airports, hub sea ports, and other transport facilities.

ii. Planning and improving infrastructures which are directly connected with peoples' everyday life, equipped with amenities and environmentally friendly-namely, drainage, parks, and facilities for senior citizens.

Needless to say, the priority of seven categories that the Economic and Fiscal Inquiry Council of the Koizumi Cabinet clearly cited in the policy for budget compilation corresponds with the points of the proposal by Keidanren. As to the budget, only the figure of cutting the public investment by 10 percent was symbolically reported. Yet if looking into the details, it will be noticed that there are priority policies which have never been so specified in previous budget compilations, such as urban resuscitation (i.e., reinforcement of international competitiveness through improved distribution function of people and goods; about 2.4 trillion yen), individual activation of local communities, improvement of water supply and drainage, and creating safer towns (about 2 trillion yen), as well as such measures in response to the aging society as installing barrier-free facilities (about 5 trillion yen). (6)

(3) Suggestions for More Efficient Public Works

Making Rules for Examination, and Determining Priority Order, Execution, Assessment, and Review.

"Increased efficiency" of public works has become a most important policy issue, along with "more priority." While the policy of balanced land development has long been considered important in Japan, public works with a high-level ratio to GDP by international standards used to be implemented at the initiative of the central government, and the distribution of budgets by the relative authorities was extremely inflexible. As a result, the dependence

on the central government by local municipalities (represented by subsidies and transfers of local grant taxes) was ingrained in local communities. Thus, a distorted structure of the national budget dictating the local basis of economic existence had been well established. Such a leadership structure by the central government caused delays in establishing a system whereby local municipalities efficiently promote social infrastructure setup, reflecting the requests of residents, based on their authority and responsibility, and at their own expense.

One of the elements that has prevented public works from becoming more efficient was the diversified sources of investment funds. During the high-growth period after the Second World War, to rapidly establish networks of trunk roads for industrial and economic reconstruction, public works were financed not only by the general account, but also by mobilization of various special accounts and treasury investments and loans from postal savings. Serious problems were left behind as a result, such as inflated treasury investments and loans, inconsistent division of roles between the government and the private sector, easy charging to the general account when the economy had to be heated up, putting off the burden to future fiscal years, and increasing latent liabilities, while the absence of cost-consciousness by the entities responsible for public works, and random analysis of costs-versus-benefits, have long been disregarded. It was not until 1999 that the government decided to cut costs by 10 percent, at a cabinet meeting, in the "Guidelines for Cost Reduction Measures in Public Works."

In 1997 Keidanren made a proposal for improving the social infrastructure,[7] in which basic principles for reforming public works (after the British Private Finance Initiative) and establishing rules for examination, and determining priority order, execution, assessment, and review, were maintained, and took the initiative of propagating more efficient, priority-oriented public works and PFI. This proposal still retains the nucleus of the important issues of today.

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7 "For Improving Social Infrastructure Leading to Affluence and Vitality," dated December 11, 1997. According to the minutes of the Special Committee (Section 3, "Free Discussion," dated September 17, 1997), which drafted the proposal, the statement by Committee Member Hayase was: "With respect to public works, an organ free from any power or authorities is indispensable. Establish a committee organized by non-bureaucrats to report immediately to the cabinet for the control of public works. The priority order of public works will be decided by the prime minister; statesmanship will prevail. It is necessary to restore public investment to an appropriate level. We should avoid the one-sided view that public works are a deterrent to future social welfare, but rather discuss what an appropriate level of public works should be. Further, we should review the rate of distribution for the improvement of the economy." This proposal was made 5 years ago, but it was not until one year after the start of the Koizumi Cabinet that priority order was discussed at the Economic and Fiscal Inquiry Council, and the "third-party organ" was established for Highway Public Corporation management.

Table 1-d: Priority of Public Works Budget for Fiscal 2002 （7 Priority Categories）　*Unit: 100 million yen, %*

Priority Categories	FY2001 Budget	FY2002 Budget	Change
Total Amount Relative to Public Works	103,676	92,525	― 10.7
i. Measures for Environmental Issues（such as establishing recyclable economic society）	11,575	12,281	6.1
・Measures for exhaust control of dioxin and other harmful materials	1,128	1,088	― 3.5
・Promotion of public works which are symbiotic with nature	3,277	3,546	8.2
・Improvement of water quality, and establishment of water recycling facilities	3,822	3,976	4.0
・Environmental measures along highways and roads	651	722	10.9
・Promotion of recycling facilities	951	1,204	26.7
・Improving waste disposal facilities	940	855	― 9.0
ii. Measures for the Falling Birth Rate and Aging Society	5,024	5,149	2.5
・Installing barrier-free facilities in public buildings	2,262	2,560	13.1
・Improving nursing facilities（such as special nursing homes to meet with the rapid aging of the society）	544	570	4.9
・Increasing nursery schools, to eliminate waiting lists	73	156	114.4
・Supplying good-quality housing for senior citizens	209	248	18.7
・Promoting more barrier-free houses and other buildings	127	139	9.2
・Measures against disasters around facilities for the aged	330	337	1.9
iii. Revitalization of Individual Local Communities	21,687	20,516	― 5.4
・Foundations for local coordination and exchange	9,824	9,536	― 2.9
・Promoting individualistic producing districts and supporters	2,583	2,323	― 10.1
・Creating safe, revitalized local communities	3,433	3,443	0.3
・Assisting NPOs in cities, at local initiative	1,031	1,001	― 3.0
・Comprehensive redevelopment assistance planning	166	193	15.8
・Improving local quality of life（such as water supply and drainage）	3,629	3,185	― 12.2
iv. Urban Resuscitation-Attractiveness and International Competitiveness	25,266	24,445	― 3.3
・Roads ringing large cities（ordinary roads）	1,462	1,771	21.2
・Exchanges of people and goods, to make cities more competitive	5,106	5,136	0.6
・Hub airports and seaports around large cities	1,861	1,693	― 9.0
・Building disaster-resistant cities, by redevelopment of congested urban districts	6,962	6,695	― 3.8
・Redevelopment of urban districts and promotion of re-planning of town lots and streets	3,195	2,942	― 7.9
・Improvement of railway crossings	739	762	3.2
・Improved transport connections（such as railway stations）	436	523	19.9
・Burying of utilities cables	582	582	0.0
・Water circulation（such as combined sewers）	2,841	2,537	― 10.7
・Creation of budgets for urban resuscitation projects	0	150	―
・Measures for urban security	209	253	21.0
v. Promotion of Science and Technology（priority to four categories, including life sciences and other sciences）	984	1,129	14.7
・Research facilities for national universities and institutes	890	1,085	22.0
vi. Education of Human Resources	2,435	2,309	― 5.2
・Environment for study and instruction at schools and universities	2,064	1,891	― 8.4
・Museum facilities for culture and human resources	108	115	7.0
vii. Becoming the Most IT-advanced Country	2,303	2,096	― 9.0
・Highly information-oriented ITS / road traffic system	1,124	1,138	1.2
・Optical fiber for management	323	280	― 13.3
・Next generation air traffic security system	124	162	30.1
Total of the Seven Priority Categories	69,274	67,925	― 1.9

Source: Ministry of Finance; figures are preliminary. and may be subject to change.

(4) Basic Principles for Public Works Reform — Keidanren's Proposals for PFI Introduction and Against Appropriation of Local Subsidies

The points most emphasized Keidanren's proposal on "What the public works should be" (Chapter 2) were as follows:

i. Full explanation of clear priorities to the public (i.e., accountability).

ii. Advance analysis of costs and benefits in major projects, with full, prompt disclosure of materials and data, including the results of costs and benefits (i.e., cost-benefits analysis and disclosure).

iii. Transparent, democratic decisions on public works projects (i.e., transparency and democracy).

iv. Efficient execution of projects already decided (i.e., efficiency and incentives).

v. Periodic reviews during and after the implementation of projects, based on the cost-benefits analysis (i.e., periodic review).

If the points above were to be put into practice, a unified method of costs-and-benefits analysis would be established, presentation of alternative plans will be required, an across-the-board project system (such as beneficiary principle and private sector initiative) would be introduced, there would be reviews of burden-sharing between the government and local communities, priority order and inflexible distribution of budgets, and high cost savings. [8]

(5) Role and Burden Sharing Between Public and Private Sectors — Subsidies, Grant Tax, Transfer of Tax Source

a) Prime Minister Koizumi's "Trinitarian Methods"

The issue of role- and burden-sharing between the government and local communities depends upon whether the public works carried out by local communities are really beneficial to local residents, and also where the tax source lies. Communities carry out many of public works based on subsidies tied by the government to specific purposes. Compared with works carried out based on the funds raised through local bond issues, subsidized works tend to be random in cost-benefits analysis, both before and after, without any appropriate appraisal accompanying them.

Prime Minister Koizumi formed a reform plan for local administrative and fiscal systems by studying national outlays, local tax grants, and transfers of tax sources by "Trinitarian methods" over the course of a year. If a tax source is transferred, and public works are covered by taxes paid by local residents, only public works essential to local communities will be carried out, resulting in increased responsibility placed on communities and local-resident taxpayers, as well as a deeper understanding of cost-benefits analysis.

Keidanren's proposal maintained abolition of local grant taxes and transfer of tax sources to local communities, and has remained unchanged. It was not until recently, however, that many local communities started to look for opportunities to cut subsidies and local grant taxes, combined with a corresponding amount of tax-source transfers on occasions of local tax reforms. The Tokyo Metropolitan Tax Commission asks for a tax transfer of 7.2 trillion yen in the following manner: part of the national income tax to be transferred to local-resident taxes; part of the consumption tax to be transferred to a local consumption tax; and a part of the national portion of the tobacco tax to be cut to increase the local portion. [9]

Among the "Trinitarian methods" that the prime minister instructed to be studied, the most difficult reform is expected to be of the local grant tax system. The following are the approximate features of subsidies and grant taxes.

b) *Subsidies for Public Works*

Subsidies are national outlays to local governing bodies, for the promotion of specific government policy. These amounted to 12.7213 trillion yen in the budget for fiscal 2002 (2.7 percent less than previous fiscal year). Large-amount items included subsidies for construction work, obligatory education, social aid, and other expenses.

The ratio of outlays to subsidized public works is bound by a 50-50 rule between the government and local entities. Accordingly, any increase in national outlays will lead to an increased burden on municipalities, requiring local bond issues to make up for the shortage, further suppressing local finance.

Subsidies were once secured by central ministries, based on an annual budget distribution to local governments, but questions have been raised about the criteria for appropriation. For instance, in road planning for Kochi Prefecture, a trial calculation said that a two-lane road requires 84 years for completion, "but a 1.5-lane road with additional lanes for crossing will require only 27 years." The current system, however, requires two or more lanes to qualify for a national subsidy; a 1.5-lane road is out of the question. Kochi Prefecture had no choice but to go ahead with a 1.5-lane road on its own funding, but this is still a rare case.[10]

c) *Appropriation for Local Budgetary Deficits—Local Grant Tax*

Local grant tax is a system for distributing a percentage of five national taxes (on household income, corporate income, liquor, consumption, and tobacco) to municipalities. This means an outlay from the national general account for the amount of difference between "basic fiscal demand" (expenses of municipalities) and "basic fiscal revenue" (local tax revenue).

The grant tax for the fiscal 2002 budget was 17 trillion yen, amounting to 20 percent of the general account. Part of the grant tax is covered by borrowing from financial institutions, with aggregate outstanding debt of 46 trillion yen.

The initial object of local grant taxes was to equalize the differences in tax revenues among local governments. Such a horizontal adjustment of tax revenues was seen in post-war Germany, where an equalization of burdens was a method of economic management. Its application was very transparent there, and the economic reconstruction of the former East Germany is being implemented with a national consensus, under the principle of equalization. It is hoped that Japan will also maintain transparency, assist local self-help, and review the grant tax system or abolish it in a step-by-step process over a period of time. According to some newspaper reports, if local grant taxes are reformed in Japan, small municipalities that can expect to lose revenue are asking for a "forest tax" and a "water-source tax."[11]

The current system of subsidies and grant taxes, in which the relationship between benefits and burdens is unclear, is a hotbed of long-term interdependence between the government and local municipalities. It is expected that self-help and independence in local finance will be promoted under the leadership of the prime minister, so that the taxpayers and beneficiaries of public services may be better able to assess the "Value-for-Money" (i.e., benefits corresponding to taxes paid).

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4 Proposal by the Federation of Economic Organizations, "Social Infrastructure Leading to Affluence and Vitality," by its Fiscal System Committee, December 1997.

5 Proposal by the Federation of Economic Organizations, "To Realize Local Finance Based on Self-Help and Independence," by its Fiscal System Committee, April 2000.

6 See Table 1-d; data from the Ministry of Finance's Web site.

7 Cited previously.
8 "To Realize Local Finance Based on Self-Help and Independence," by Keidanren.
9 Japan Economic Journal, July 8, 2002 (morning edition).
10 Japan Economic Journal, July 11, 2002 (morning edition).
11 Ibid., and NHK's "Close-Up Gendai," broadcast July 9, 2002.

PART 3
BASIC PRINCIPLES AND KEY POINTS OF THE "PRIVATE FINANCE INITIATIVE"

(1) Three Basic Principles for PFI Implementation

PFI as started in UK was a natural result of the privatizing of state-owned companies by the Thatcher Administration, which intended to achieve fiscal reconstruction through introduction of a competitive element in the management of inefficient public works which had been run by an inflated governmental system.

The role of the government in public works used to be as purchaser of fixed assets, such as hospitals, infrastructure facilities for transportation, office buildings, schools, lodging facilities, and facilities for information and technology, as well as provider of such public services as welfare, education, and administration.

Under the Thatcher Administration's attempts to promote administrative and fiscal reform, however, it became evident that the previous way of managing budgets, expenses, and time needed to be reformed. This is why PFI was introduced as a new method for the procurement of public works. Its basic principles fall into three points, as described below.

a) Value for Money

Since public works investments disbursed from the government tax-based budget used to be directed to works selected by the government (central or local), users simply enjoyed the benefits without any payment for them, and were not in a position to understand an analysis of costs and benefits as taxpayers. As long as public works investments are covered, directly or indirectly, by users' tax burdens, however, it is only natural to ask whether such investments are valid.

Needless to say, it is a precondition of PFI introduced for fiscal reconstruction that it should be superior to previous types of public works in a cost-benefit analysis.

"Value for money" (VfM) is a common expression in the UK, meaning "a bargain" or "worth the money," and is neither economic nor bureaucratic jargon. The use of this expression by Prime Minister Major in the announcement of the "Citizen's Charter," in 1991, comparing the life-cycle cost of PFI works with the total cost of previous types of public works (Public Sector Comparator, or PSC), is indicative of how skillful the British government was in presenting a comparison and appraising new methods.

It is the basic idea of the PFI method of implementing public works to judge whether VfM is feasible, or whether the fiscal burden will be less than the former PSC, after quantitative analysis of respective shares by both the government and the private sector.

The selection of participants in previous public works was conducted by comparing the cost of hardware, but in PFI public works the key to the selection of participants will be the quality and cost of software necessary for the maintenance, administration, and management of the works throughout their life-cycles, since the cost of hardware construction is merely part of the total cost.[12]

Estimated Amount of Previous Types of Public Works

− Amount of Successful Bids by PFI Participants

= Effect of Introducing the PFI method (i.e., VfM)

b) *Public and Private Partnership for Procurement of Public Works*

The changing role of the British government in public works is as described above, and the role of the private sector was previously the construction of facilities in a way decided by the government. In most PFI works, however, the private sector has come to perform not only design and construction, but also to manage and administer facilities over a long period, making good use of their fund raising and management capabilities, with the same cost-consciousness as in company management, with the government purchasing such services with taxpayer money.

In addition to "purchasing service" PFI, there are "joint-venture" and "self-support accounting" types, in which the role of the government differs. In each of these cases, private involvement is much heavier than in old-style public works, although selection of public works, decisions on participants, and appraisal over works' life-cycle remain the responsibility of the government. There are documents which often use the word "initiative," from "Private Finance Initiative," as if to mean that the private sector has all the leadership. It should be pointed out that this comes from an incomplete understanding of what the word "initiative" means. In this respect, "Public-Private Partnership" (PPP), the term with which the Blair Administration has replaced the name "Private Finance Initiative," is a better expression.

c) *Fair Risk-sharing Between Public and Private Sectors*

The third basic principle of PFI is fair risk-sharing between public and private sectors. In most past public works, risks have been borne by the government, but the risks of PFI works in which many companies will take part will be manifold. Who will most efficiently bear risk will be decided on by those who are most informed on specific risks. It is desirable and efficient for design companies to bear the risk of facilities design, for construction companies to bear the risk of construction, and for facilities management companies to bear the risk of facilities management and administration.

The idea of PFI is not, however, to have all the risks be borne by the private sector. The government will have the role described in the section above, and will be obligated to extend "patronage" in accordance with the object of specific public works projects. Roles and risk-sharing discussed here will be specified as such in agreements, to be reciprocally checked and observed during the entire lifetime of a public works project.

A "partnership" between the government and the private sector cannot be established by a mere set of agreements, but without them it would not be possible to get projects started.

(2) Suitable Projects for the PFI Method, and Important Points

a) *Three Types of PFI Projects*

The three types of PFI as used in the UK, and also adopted by Japan's Economic Planning Agency, were as follows:

- **Service-purchasing Type:** Private sector companies design, construct, maintain, and administer public facilities, while the public sector purchases entities of the service. The private sector will recover the cost of the public works from the payment of services by the public sector. (In Japan this is also called the "public service-purchasing type.")
- **Self-support Accounting Type:** The public sector merely issues a permit for the work, while the private sector designs, constructs, maintains, and manages it, and recovers the costs from fees for use by the beneficiaries. (Also called the "fee-collecting type.")
- **Joint-venture Type:** Based mainly on subsidies, the private sector designs, constructs, maintains, and admin-

isters public facilities, and management is also led by the private sector. This is a different notion of joint-venture as used in Japan. (In Japan this is also called the "integrated-venture type.")

b) *Projects Suitable for the PFI Method*

In the UK, the service-purchasing type is applied to prisons, hospitals, roads, information systems, sports facilities, and many other public works, and comprises the majority of PFI public works.

The self-support accounting type is applied to toll roads and other public works which are similar to private works, and the joint-venture type is applied to public works which require more public patronage, such as urban redevelopment and construction of railways.

Japan's "PFI Act" cites the following works as qualified for PFI:

- **Public Facilities:** Railways, seaports, roads, water supply and drainage, water supply for industrial use, and parks.
- **Official Facilities:** Government buildings, official lodging.
- **Public-use Facilities:** Public housing, educational and cultural facilities, waste disposal facilities, medical facilities, social welfare facilities, parking facilities, underground market, etc.
- **Projects with More Private Sector Involvement:** Energy supply facilities, new energy facilities, information and telecommunications facilities, recycling facilities, sightseeing facilities, research facilities, etc.
- **Miscellaneous:** Facilities corresponding to the above, as designated by government ordinance.

c) *Different PFI Types, According to Property Ownership*

Development assistance for developing countries has led to a number of forms of public works, of which the most frequently used and generally accepted are called the "BOT formula." "BOT" is an acronym for "build, operate and transfer," and is a form of assistance by which governmental organizations, multinational financial institutions, or private sector companies of ODA suppliers themselves extend funds to developing countries, while private sector companies construct power station and toll road facilities which they will operate for a certain period. After recovering the funds extended, ownership of the facilities will be transferred to the aid-recipient country.

The following ownership forms may arise in PFI public works, according to the method of implementation. Depending on the form of ownership, cases where the ownership of a private sector entity may be restricted, or where an asymmetrical tax treatment of ownership of completed facilities by the public or private sector, could present some problems.

- **BOT:** Build, Operate & Transfer

  A method of public works where a group of private sector companies takes charge of fund raising, facilities or building design (according to each company's role), then operates them for a period (such as 20 years), and after recovering the funds outlay transfers the facilities to the public.

- **BTO:** Build, Transfer & Operate

  The same method as BOT up to the raising of funds and construction of facilities, but after completion ownership of the facilities is transferred to the public, while their operation is taken care of by the private sector.

- **BOO:** Build, Own & Operate

  The private sector builds, owns, and operates the facilities, and ownership will not be transferred to the public sector.

- **BLT:** Build, Lease & Transfer

  After raising funds and building the facilities, the private sector leases them to the public sector to recover the funds via the leasing fee. The private sector has the right to use them until the contract period expires, after which ownership is transferred to the public sector.

- **DBFO:** Design, Build, Finance & Operate

  A typical example of providing service after Britain's PFI style. The first eight toll roads constructed using the PFI method are said to be successful examples of the DBFO method, which realized a 15-percent cost reduction compared with the traditional procurement method. By this method design, construction, fund raising, and operation are all performed by the private sector, with the government paying a "shadow toll" on behalf of the users in accordance with estimated demand (such as traffic volume and providable service). A 10-percent cost reduction was noted in two early cases of PFI prison projects (Bridgent and Fazakerley Prisons), and there was a 60-percent cost reduction in the case of NIRS2 (system renewal for insurance recording).[13]

d) Key Points of PFI Management

- **"Output Specifications"**

  In the previous type of public works, the public sector specifies the framework, size, and materials needed, and private sector participants were asked to execute the work following those specifications. ("Input specification.")

  In PFI public works, the required level of services is important, i.e., their quality and quantity. Methods by which to build, maintain, manage, and operate the hardware to meet the required level depends on the management capability of the private sector. The public sector therefore needs only to specify the output to be provided by the facilities when placing an order with private sector participants; detailed specifications and materials are no longer necessary.

  The greatest advantage of output specification lies in the fact that cost-consciousness is at work everywhere within a syndicate of private entities, to avoid excess investment through technical innovation in construction, maintenance, and expertise.

  Keidanren's report on a survey of the PFI method in the UK cites the case of a prison constructed after output specification: i) the building was designed to maximize the number of solitary cells to be monitored from a central guard point; ii) electronically controlled door locks reduced the number of personnel required for the opening and closing of doors; and iii) installation of an alarm/detection system eliminated the need for unnecessarily robust buildings (such as those with very high external walls).[14]

- **Life Cycle Project Management**

  The life-cycles of public works generally take ten or more years to complete, and the participants in such works are bound by agreements stipulating how to share the roles and risks throughout the life-cycle. The success of a PFI project depends on how to minimize the cost of work while maximizing user satisfaction during the period. Whether quality and security of the facilities are maintained, whether large-scale repair costs diverge significantly from cash flow projections, and many other issues have to be managed within

the life-cycle. Needless to say, initial design and construction are important, but how to contain life-cycle costs while also improving the quality of services depends largely on the ingenuity of the private sector, and mostly that of facilities management companies.

One of the basic ideas of PFI project is to expressly stipulate in advance how to share the roles and risks between the public and private sectors. Risk management during the project cycle over a long period of time has to be performed based on an agreement.

(3) Importance and Usefulness of Project Finance in PFI Projects

a) Advantages of Project Finance and Government Encouragement

In view of this author's experiences in project finance in Australia and Europe, the over-emphasis in Japan on corporate finance is somewhat beyond comprehension, even with the "main bank" practices peculiar to Japan. This author is of the opinion that the most important cause of mounting bad debts comes from a lack of effort in constantly checking borrowers' project finance plans, and in checking the cash-flow of debt service sources by both the borrower and lender on a current-price basis, as well as in adjusting the method of financing where necessary. (This opinion was also referred to in the explanation of the real economy to the Comprehensive Economic and Social Research Institute of the Cabinet Office, in February 2001.)

Corporate finance used to consider the overall repayment capability of the borrower, with security and credit-worthiness as comprehensive repayment resources of a loan. Even if the purpose of a loan was supposed to be working capital for a specific project of a subsidiary, and the failure of that project resulted in a partial non-repayment of the loan after disposing of the remaining assets of the project, as a practice the lender did not ask for an immediate repayment or change in the terms of the loan as long as the remaining portion was repayable by other business earnings or disposal of other assets. This is a policy of "overall business consideration."

In contrast, in project finance the only resources for repayment of a loan are the cash flow generated from the project (organizationally a special-purpose company, or SPC, a separate entity from the subscribing parent company), assets belonging to the SPC, and other interests such as development rights. Unless otherwise specified, therefore, possible losses of the subscribing parent company will be limited within the amount of subscription, and the lender has no right of recourse to the subscriber unless a guarantee is obtained for the obligations of SPC.

As a matter of fact, however, in Australia it is more or less customary to see cases of limited recourse-such as "take-or-pay" terms, or the taking-back of natural resources-applied to the subscribing company in the project financing for resource development.

Project finance is generally applied to loans for works which will take a long time to complete. Accordingly, it is essential for both the lender and the borrower to specify the share of each one's responsibilities. Since the cash flow projection (i.e., the source of repayment) will cover a long period of time, it is necessary for both parties to agree in advance on ways of appraisal of investment returns, by obtaining the net present value by discounting at rates corresponding to the periods before completion (NPV method), and also on measures in case of divergence from the initial plan. This is exactly the finance method made available for PFI.

The "Emergency Economic Measures" which the Japanese government decided on April 6, 2001, included active use of PFI, as well as promotion of project finance, and further maintained that financial institutions are expected to activate loans emphasizing the profitability of relative work, such as project finance. The "Emergency Economic Measures" were expounded and accepted at the G7 meeting held immediately after, and are considered to be an international commitment. It is hoped that Japan's financial institutions will

actively and appropriately introduce project finance, by which to improve themselves as capable financiers while promoting PFI projects, and to upgrade their international competitiveness. (15)

b) *Project Finance Useful for PFI - PFI Fund Raising in the UK*

Due to the long-term life-cycle and large number of diverse participants, in PFI projects it is essential to specify each one's role and share of risk, to maintain at all times the transparency of its profitability and the objectivity of its appraisal. Further, in raising funds for PFI projects it would not be realistic for a parent company subscribing to an SPC to keep the invested equity fixed throughout the life-cycle of the project, because it might miss the opportunity of investing in another project.

As a matter of fact, in British PFI projects, following the mounting equity investments in PFI by leading general contractors (such as John Laing and Tarmac) at an early stage, the government at one time asked for securitization of equity in PFI and diversification of fund sources for PFI. (16)

In addition to the equity portions being traded within the construction and real estate sectors, the investment funds freely traded in the capital market now include in their portfolios not only equity portions, but also the portions of subordinated debt instruments. For example, the "Innisfree PFI Fund" and the "Innisfree PFI Fund 2" (of Innisfree Company) are both traded as investment funds. (17)

In raising funds for PFI in Japan, how to attract private sector funds from the market is a long-term problem. So that PFI may take root on Japanese soil, project finance must first prevail, by which financial transparency of the work will be available, breaking up the road by which individual investors invest not only in the equity portion of PFI, but also in the debt portion.

c) *Newly-Opened PFI Market in Osaka Stock Exchange*

After the enactment of the PFI Act in Japan, in February 2000 the Osaka Stock Exchange established the Market for Social Infrastructure (a PFI market) for the first time, to provide companies for social infrastructure works with means to raise funds and offer various financial products to investors. Qualified types of work are not limited to PFI projects, and so projects deemed to be for the social infrastructure may be listed, including wind power generation operated by general private companies. As an exception, preferred stocks (without voting rights) and corporate bonds may be issued without the listing of common stocks. This is presumably to eliminate the risk of common stocks with voting rights being bought up, and the rights of management being threatened by opponents of social infrastructure projects. It is not subscribing companies of equity, but rather SPCs implementing social infrastructure works that are to be examined for the listing. The criteria for examination emphasize financing by SPCs being based on project finance, SPC profitability projections, cash-flow analysis, and contract terms (such as risk-sharing).

(4) Evaluating VfM

Announced by the Japanese government in January 2001, the guidelines for the process of PFI projects implementation describe seven steps, among which the importance and methods of appraisal of value-for-money are referred to, in particular, as: quantitative appraisal; qualitative appraisal; equal footing for calculating life-cycle cost (with fair and appropriate adjustment); (18) and relationship between profitability and VfM

a) *Quantitative Appraisal of VfM*

Due to the very long life-cycle of PFI work, a comparison of its cash flow requires calculating the present value

(PV) by discounting at a certain rate (r), to eliminate distortion caused by the passage of time. For example, the present value of a fund amounting to 100 after n years is calculated as follows:

$$PV = \frac{100}{(1+r)^n}$$

The higher the rate of discount, naturally, the lower the present value.

This discount rate has a significant role in the appraisal of VfM, and varies from project to project, several elements affect each other: long-term interest rate (or yield on government bonds or other instruments); rate of inflation (or deflation); type of recovering fund (front-loaded or tail-heavy); risk of recovering funds; ratio of initial investment to total operating cost. The higher the discount rate, the lower the present value, so VfM of PFI work will be more easily available.

According to Britain's audit report on four PFI-based DBFO contracts, a comparison and examination of successful bidding prices of roads between the estimated price of former public works (PSC) and the contract price of PFI participants, revealed that the results were mostly satisfactory at a discount rate of 8 percent, but at a rate of 6 percent, two cases out of four showed PSCs to be more satisfactory. [19]

In Japan, an appropriate discount rate percentage will be frequently discussed over the next few years.

b) *Qualitative Appraisal of VfM*

Where quantitative indicators alone may not suffice in appraisal, qualitative appraisal of management expertise, and of innovation of private sector companies, will have a large impact on VfM. The most important item is the level of service, but as seen in recent examples of selecting participants in Japan, the impact of design on users' psychology, concern over the environment, consideration to the aging society (such as barrier-free design), and other factors will in some cases exceed the quantitative appraisal.

c) *Equal Footing in Comparative Evaluation of Life-cycle Costs*

To improve the fairness of appraisals of VfM, fair and appropriate adjustment of a variety of given conditions will be necessary in calculating life-cycle costs of PSCs and PFI projects, in addition to the points in the preceding paragraph.

Japan's guidelines refer to the method of adjustment in such cases as fiscal/financial assistance, tax revenue from private sector participants, other tax revenue, and any revenue generated between governmental ministries with respect to state projects. Under the current system, private sector companies tend to be in a more disadvantageous position, due to depreciation or tax reasons, which present a great challenge to the promotion of PFI.

d) *Project Profitability and VfM*

"Discounted Cash Flow" (DCF) analysis is a method by which a private sector company judges the profitability of long-term investment (such as in real estate), a method also used for appraising contract prices of PFI projects.

"Net Present Value" (NPV) is obtained by discounting the cash flow (amounts received and paid) of each fiscal year from the time of investment until its recovery, and then deducting the amount of investment from the preceding total. If this NPV is in the positive, project profitability is considered to be in the black. The formula is as follows:

CF: cash flow; r: discount rate; n: year for recovering investment

$$NPV = \frac{\text{First-year CF}}{(1+r)} + \frac{\text{Second-year CF}}{(1+r)^2} + \frac{\text{Third-year CF}}{(1+r)^3} + \ldots + \frac{\text{n-year CF}}{(1+r)^n} - \text{Amount of investment}$$

Although its method of calculation is the same as that of VfM in PFI projects, the above NPV cannot be treated equally in light of the basic principles of PFI introduction. In public works, even though profitability may be low, or no revenues are expected at all, there are some projects (such as service-purchasing types) that could qualify as PFI. If private sector entities can improve management efficiency through their expertise or technical innovations, and render higher-level services than the customary public services, it would then be worth adopting the PFI method because VfM might be achieved despite its lower profitability.

(5) Adam Smith, an Ancestor of the PFI Way of Thinking-Beneficiary Payment Principle

In the fifth volume of Wealth of Nations (1776), Adam Smith maintains that, while admitting diversity in the collecting charges for public works, tolls should be collected for canals, bridges, and roads, based on the beneficiary payment principle, as a source of revenue for their construction and maintenance, without relying on general revenue. Also with regard to specifications of roads, he maintained the necessity of "output specifications," as they are called today, showing his PFI way of thinking throughout his book.

About the relationship between the government and the private sector, Smith cites the example of canal maintenance in Europe:

> "In several different parts of Europe the toll or lock-duty upon a canal is the property of private persons, whose private interest obliges them to keep up the canal. If it is not kept in tolerable order, the navigation necessarily ceases altogether, and along with it the whole profit which they can make by the tolls. If those tolls were put under the management of commissioners, who had themselves no interest in them, they might be less attentive to the maintenance of the works which produced them."

This quotation is interesting, in that it describes Smith's fundamental idea that the management of public works should be left to the interests of property owners, and that human nature is more efficient without burden to government. Smith also remarks on how to manage public works according to their characteristics:

> "A high road, though entirely neglected, does not become altogether impassable, though a canal does. The proprietors of the tolls upon a high road, therefore, might neglect altogether the repair of the road, and yet continue to levy very nearly the same tolls. It is proper, therefore, that the tolls for the maintenance of such work should be put under the management of commissioners or trustees." (20)

(6) Useful Maxim for PFI Implementation

a) *Why PFI is Successful in the UK*

When asked about why PFI is successful in the UK, I always reply by introducing the following statements made by a British attorney at the "PFI Conference in Tokyo," held in February 1999, which I had the pleasure of presiding over.

- **Implement "Universal Testing":**

  To promote PFI, in 1994 John Major's Conservative administration obliged all public works initiators to examine whether the PFI method is applicable, starting with public works for the Health Ministry. It was

not until a public works project was proved by this "universal testing" as not applicable to PFI and further it was considered highly necessary that a public works budget was appropriated. PFI projects increased sharply as a result, but because of the enormous amount of time and energy spent on testing, it was abolished when the Blair Administration took office in May 1997. Notwithstanding, the impact of this system on the rapid spread of PFI in both public and private sectors is immeasurable.

- **"Deals, not rules!"**

  This holds true only in a country which practices Common Law. "Respect for market principles" and the "policy of small government," which the conservatives maintained during the Thatcher and Major administrations, have powerfully implemented PFI policy by "practice first," leading to today's successful results.

- **"Taxpayers are customers"**

  The satisfaction of the taxpayers as customers is at stake. This must have been a fresh turnabout of the British way of thinking, which had been used to government control since the Second World War.

- **"Best value for money"**

  Pursuit of the maximum VfM, by concluding agreements to transfer risk from the public to the private sector.

b) PFI must be "SMART"

"SMART" is a key acronym in successful PFI, learned from an executive of Price Waterhouse, Coopers, at its "PFI School."

S : Specific （clearly and specifically presented）

M: Measurable （with numerical targets）

A : Available （within the range of available funds）

R : Realistic （within one's ability）

T : Time-bound （always conscious of such deadlines as the term of a project, its delivery limit, and its cash flow）

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12 Jason Fox and Nicholas Tott, The PFI Handbook （Herbert Smith, 1999）, p. 28.

13 Ibid.

14 Federation of Economic Organizations, "Keidanren's Overseas Research Report on PFI" （March 1999）, p. 8.

15 Isamu Hayase, "New Tide in the International Finances-Financial Business Under the ICT Revolution and Japan's Financial Market," in Theses by Kanazawa University of Economics, Vol. 35, No. 1 (July 2001), Academic Society of Economics, Kanazawa University of Economics （currently Kanazawa Seiryo University）.

16 Private Finance Panel and HM Treasury's Private Finance Unit, "Transferability of Equity" （1996）, pp. 1-11.
HM Treasury Taskforce, Standardization of PFI Contracts （1999）, pp. I, 125-129.

17 Information Memoranda, "Innisfree PFI Fund, 29 Jan. 1996" and "Innisfree PFI Fund II, 11 June 1998."

18 Yumiko Noda et al, supervised by Fumio Nishino, Japanese Version of PFI-From Basics to Project Implementation (Sankaido, April 2001), Chapters 6 and 7.

19 Fumihiro Matsushita, Investment Analysis on Real Estate, Bad Debt and PFI （Toyo Keizai Shimposha, 1999）, p. 210.

20 Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations,Book V, Chapter I, Part Ⅲ, Article I "Of the Expence of public Works and public Institutions," 1776 （New York: Random House, The Modern Library）, pp.681-716.

PART 4
MEASURES TO PROMOTE PFI ALONG WITH PROJECT FINANCE

(1) Merits of PFI Compared with Unsuccessful Semi-public "Third Sector" Projects

In the UK the public may partly subsidize PFI public works, but will never subscribe to any equity portion (i.e., "joint-venture type" PFI project), unlike the case of the Third Sector in Japan. The public mostly plays a role in planning, appraisal, and monitoring of the work, and only looks forward to improved public services through the willing initiative of the private sector.

In Japan, public facilities were traditionally usually owned, managed, and operated by the public sector, and important public services were carried out by the state or public corporations (with the exception of some approved services). Only the relatively less important facilities and services were provided by the private sector, based on the "Private Participation Promotion Law." Under the "PFI Law," however, the private sector is allowed to participate in the core sectors of public works (described in Part 3), in marked contrast to cases by the Third Sector entities under the "Private Participation Promotion Law."

Among examples of the Third Sector projects in Japan there are a great number of bankruptcies, due mostly to equity participation and staff secondment by the public sector, leading to expectations of fiscal aid from the public or protection of the organization, without implementing market mechanisms as initially targeted by the "Private Participation Promotion Law." The problem was that projects were approved on the basis of examination of the hardware (such as construction and establishment of facilities), without paying heed to revenue management of the work or risk, or to the responsibility of the participants, which should be a point of reflection. This is also widely different from the appraisal of PFI projects as mentioned above.

It is also said that no competitive factors were at work in most cases of selection of participants in Third Sector projects. Further, approvals were given only to large-scale facilities, with the result that local residents had very little access to them, leading to a constant burden to local finances in the form of maintenance and management costs. On the other hand, PFI projects will ensure fairness and transparency of appraisal, through the competitive bidding explained above, and can be said to be superior in that economy of cost is ensured by output specifications, and the level of service and price are appraised throughout the life-cycle.

Although the idea of "Private Participation Promotion" was not wrong, per se, as mentioned above, it should be noted that there were many projects in which expectations exceeded realistic estimates of demand during the bubble period.

(2) PFI May Accelerate Japan's Reformative Trends

a) Conceptual Change of Contracts and Transparency of Public Works

Transparency in a fair sharing of roles and risks between the public and private sectors is the basic principle of PFI, and has historic meaning in that it clarified the accountability of public works to the taxpayers, while allowing to take root the concept of contracts in Japanese soil, where negotiations used to be the basis of resolving issues.

b) "Output Specification," Specification Based on Essential Capacity

By thoroughly implementing "output specification" in PFI projects, or if the public requires "quality and quantity of service" alone, instead of detailed specification, the creative efforts of cost-conscious and environment-

adaptable private companies will come up with improved of administration services. This, in turn, will make comprehensive the criteria of bidding examinations in every field; these criteria will include the "software," rather than a mere cost comparison of "hardware."

c) *Japan's Financial Rationalization: Necessary Conditions for Project Finance*

Since it is the most suitable financial method for the financing of PFI projects, introduction of project finance will lead to a complete rationalization of the way credit examination is conducted by all financial institutions in Japan, resulting in a conversion from lending based on overall business considerations under the lead-bank system, to tied lending with an emphasis on estimated project profitability and cash flow.

d) *Independence of Local Governments Based on Fiscal Autonomy*

In the fiscal year in which they are built, public works used to require of local governments a floating of bonds and other fund raising with which to make a large amount of public works investment. The introduction of the PFI method will only require them to purchase public services, without any large expenditures in the fiscal year of construction, with only an obligation to pay an nearly equalized amount of service charges based on agreements with private sector companies. The reduction and equalized amount of fiscal expenditures will contribute to a fiscal reconstruction of local governments, and lead, in turn, to their independence.

e) *Sustainable Economic Vitalization prior to Temporary Fiscal Stimulation*

The Tennessee Valley Authority (which started in 1935 under the New Deal) demonstrated that public works were the most effective means to provide an economic boost. Due to radical changes in the social environment of present-day Japan, however, the same kind of economic stimulus can no longer be expected. While labor-intensive industries have drastically changed in productivity, by reducing the terms of work and human craftsmanship with the rapid development of mechanization, IT, and construction management, Japan's land prices have risen sharply to such an unprecedented level that project appraisal of road and airport construction has made it difficult to conduct cost-effectiveness analysis.

Although construction of public halls, concert halls, and leisure facilities during the bubble period had some temporary economic impact, it had no lasting effect. Rather, the maintenance and management costs of such facilities have become a constant financial burden on local governments.

On the other hand, since PFI projects work on the assumption that cost-benefit analysis is based on the present value of life-cycle costs, and is used as calculation of VfM, local governments will gain no unexpected burden in later years, and may be able to secure revenue from PFI-related parties with an equalized amount of service expenditures for each year. Shifting the role and responsibility of public works to the private sector will not only improve the public sector's fiscal situation, it will also contribute to a continuous vitalization of the Japanese economy, through development of such new businesses as facilities management companies.

(3) Proposal to Adopt "Universal Testing" in Japan-Success of PFI in Japan Relies on the Domestic Banks' Adaptation to Project Finance

a) *The Nature of Project Finance is Financial Risk and Burden Sharing*

The essence of PFI lies in specifying in an agreement the risks and burden-sharing between the public and private sectors. In raising funds for PFI, the private sector will ask banks to share risk using the project

finance method. Since the basic concept of project finance is the sharing of financial risk between the borrower and the lender of funds, PFI and project finance are functionally united at this point.

For project finance applied to PFI projects, "direct agreements" will be concluded between the public sector and banks, and between banks and the private sector, specifying risk- and burden-sharing principles. If anything goes wrong during the long-term life-cycle of the project, these direct agreements can always be relied upon for negotiations or legal action.

b) *Global Standards of Project Finance Collateral*

In project finance, banks take as security the cash flow generated by the project itself, as well as the assets and rights relative to it. Accordingly, banks must always ensure that collateral is valid and liquid (i.e., cashable), and must be ready to recover funds in the event of a failure of business. Using as an example the receivables from sales proceeds (which are a form of cash flow): in many cases in Japan sales proceeds to be received from ministries or special corporations are attached with non-assignable clauses, so the prior understanding of the payer is required before pledging them.

Legal steps will also have to be taken so that "floating charges" (not yet familiar in Japan) or "escrow accounts" (accounts entrusted to a third party, for the purpose of repayment of debt; this has no legal protection in Japan) will be put to use as tools for project finance.

In pledging security for loans in Japan, it is customary that weighted collateral corresponding to a loan is chosen for pledging, which is registered when necessary. This is called a "fixed charge." The "floating charge," which is popular in the UK and the US, designates a wide range of collateral items used to cover loans in advance, and in the event of default each item will be specified. This applies to targeted collateral whose inventory fluctuates daily, such as the primary materials of a manufacturing plant.

Since the preceding example is self-explanatory, there is no denying that introduction of Western-style project financing into Japan may meet some obstacles. Yet the Japanese style of financing's excessive dependence on collateral comprised of land and securities has apparently reached its limit. (This is referred to in Part 3.)

c) *Proposal to Introduce "Universal Testing" into Japan's Public Works*

There are several factors for the successful introduction of the PFI method in the UK, as described in Part 3, but the most important was "universal testing." It is this author's opinion that for Japan, which is trying hard to escape from fiscal crisis, implementation of a system whereby PFI qualifications of public works can be checked in advance should be an emergency economic measure to expedite the spread of PFI, and to contribute to the revitalization of the economy. This system was abolished in the UK because too much time and energy were spent in screening all public works in terms of PFI, which stood in the way of their promotion. Nonetheless, it would still be possible for Japanese financial institutions to adopt the project finance method, and to support "universal testing."

In the distribution of human resources in Japan, financial institutions absorbed a large number of talented people after the high-growth period of the 1950s, and they have retained personnel redundancy even after the collapse of the bubble economy, and during the current credit contraction, consolidation, and closing of banks. Amid the trend toward privatizing special corporations, governmental financial institutions with capable staff are also forced to go through reconstruction of organization and function.

Although banks' credit examinations require a fair amount of expertise and experience, it would not be very difficult to train staff in project financing. It would be feasible to establish a Japanese version of universal testing with a social mission, to which to assign staff from governmental financial institutions as PFI examiners, although this may depend upon the willingness and ability of such people. This incidentally resembles the situation where newly established rating services in Japan started with staff seconded from Japanese banks and elsewhere. Although the EU's "Transfer of Undertakings (Protection of Employment)" regulations[21] may not be applicable to governmental financial institutions in Japan, a similar arrangement could be studied between governmental financial institutions and the recipients of seconded staff, in order to facilitate the transfer of qualified staff.

If by so doing an institute for financial examination could be established, and qualified to undertake the due diligence (i.e., multilateral examination of economic, legal, and physical factors affecting values of business and assets) essential to examination of the PFI qualification of public works, project finance, and real estate securitization, it would contribute a great deal not only to the spread of PFI, but also to the continued development of the Japanese economy, in terms of vitalizing market economy, regardless of its legal status as agency or joint stock company (as long as competitiveness and transparency are secured).

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21 N. Morrison and N. Owen, "Private Finance Initiative" (London: FT Law & Tax, 1996) a specially commissioned report, pp. 67-72.

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