Reforming the Fiscal Management System in Korea

2005

Young-Sun Koh

Korea Development Institute

Content

1. Introduction

The Korean government has maintained a strong fiscal discipline since the early 1980s, keeping its budget more or less in balance and its debt at low levels. The fiscal balance showed large deficits after the economic crisis of 1997, but returned to surplus in 2000 thanks to the buoyant economy and the resumed consolidation efforts. The surplus has continued since then.

At the same time, however, we are faced with various risk factors that can adversely affect the government finance. The aging population and the technological catch-up with the advanced economies imply a much slower economic growth in the decades ahead. While the revenue growth slows down, the demand for public expenditure is increasing rapidly. The financial sector restructuring in the wake of economic crisis has left irretrievable debts of 69 trillion won (9 percent of 2004 GDP) in the public sector, and the burden is expected to fall mostly on taxpayers. All public pension schemes have structural problems due to the imbalance between contributions and benefits. Some of them (those for civil servants and military personnel) are already in serious trouble. The economic cooperation with North Korea will demand more and more government support in the future. The spending on social welfare programs has increased substantially after the crisis, and is set to increase further.

The government expenditure as a percentage of GDP has stabilized since 2001 at around 25 percent after rising rapidly in the 1990s. But it may resume its growth and result in worsening fiscal balances when these risk factors materialize. The Korean government embarked on an ambitious reform agenda to cope with these challenges and to modernize its system of financial management.

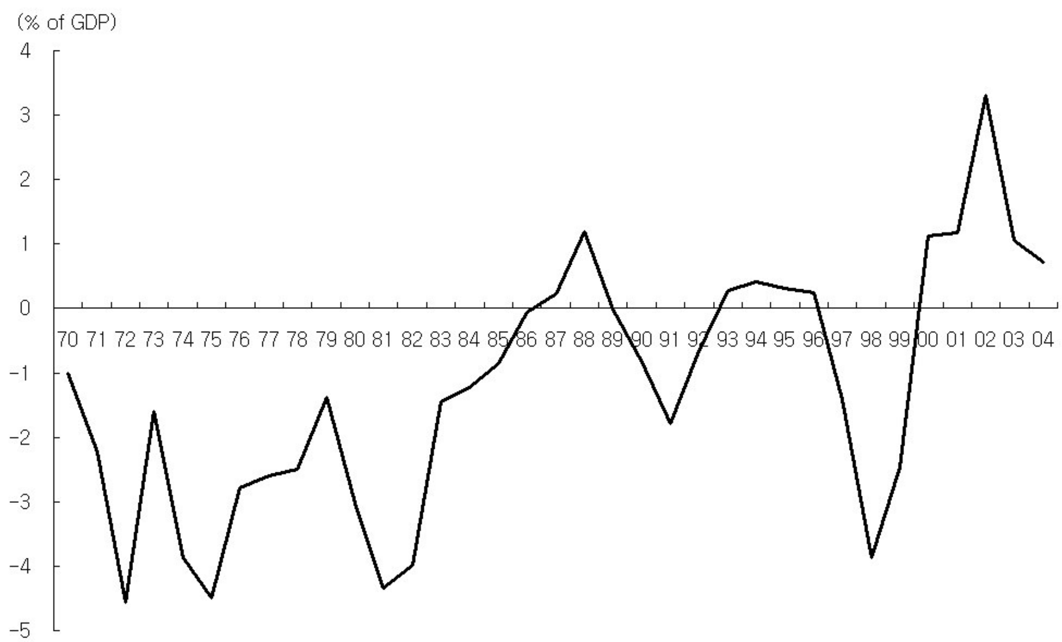
This paper aims to (1) overview the development of public finance in Korea since the 1970s; (2) analyze its current status; (3) explain the institutional setup and assess the recent reform efforts; and (4) propose directions for change to maintain financial health and maximize the productivity of public spending.

2. Public Finance in the Last Three Decades

Large Deficits in the 1970s

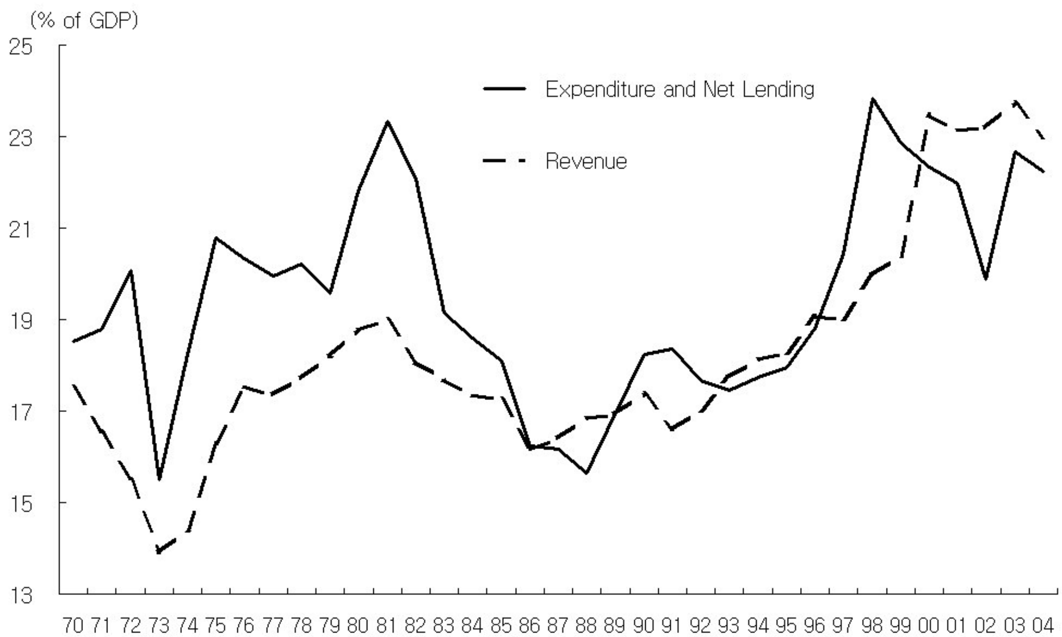
In the 1970s and into the early 1980s, the Korean government ran a persistent budget deficit (see Figure 1). The deficit of the consolidated central government averaged about 3 percent of GDP in this period. Income transfer to the agricultural sector, heavy investment in social infrastructure, and various subsidies to promote heavy and chemical industries required large amounts of public money. But rapid economic growth helped contain the spending at around 20 percent of GDP (see Figure 2).

[Figure 1] Budget Surplus/Deficit of the Central Government



Source: Ministry of Finance and Economy.

[Figure 2] Central Government Spending



Source: Ministry of Finance and Economy.

Fiscal Tightening in the 1980s

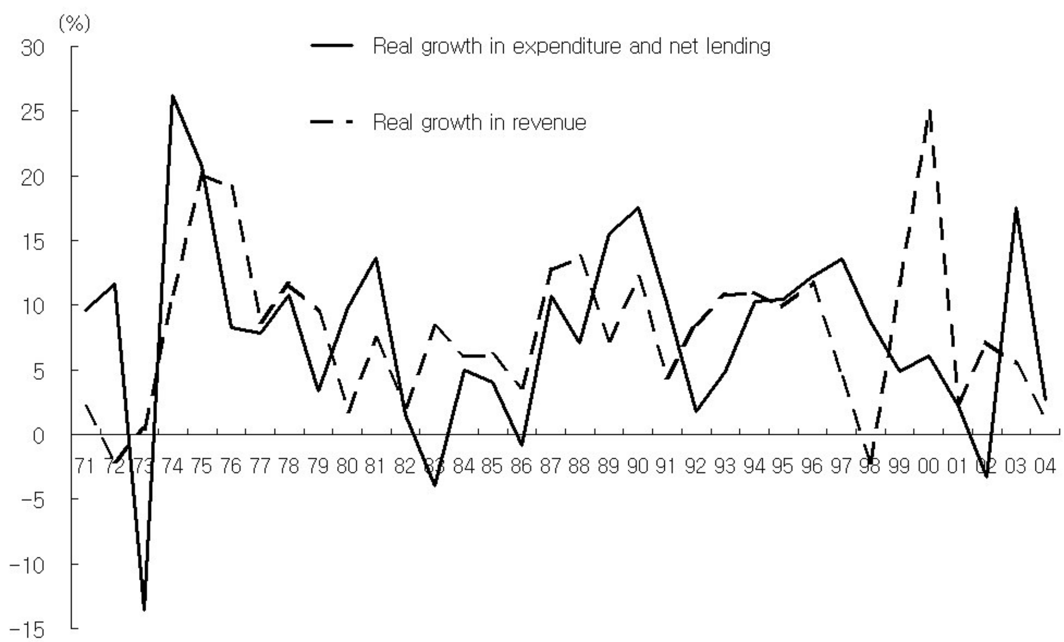
A major change in policy stance took place in the early 1980s. The second oil shock together with political instability left Korea with spiraling inflation and negative income growth in 1980. The new government that came into office in 1981 tightened monetary and fiscal policies rather drastically.[1)]

On the monetary front, the annual growth rate of M2 was halved by the middle of the

[1)] The new government recognized the intrinsic problems of the government-led growth strategy, especially those coming from the promotion of capital-intensive industries. This strategy distorted the efficient allocation of resources, helped the formation of large business conglomerates (the so-called *chaebol*), aggravated income inequalities, and produced macroeconomic instability. Consequently, the new government adopted "Liberalization and Stabilization" as its slogan for economic policy. While the stabilization policy was carried out successfully as explained in the text, the liberalization policy did not induce sufficient structural reforms in the economy. Many people think that this sowed the seed for the economic crisis of 1997.

1980s. On the fiscal front, consolidation took the form of reduced expenditure. The growth of real government spending was -3 percent in 1983, and remained at low levels until 1987 (see Figure 3). These changes coincided with a substantial reduction in inflation. Overall, the economy grew at a healthy pace up until the recent economic crisis (see Figure 4).

[Figure 3] Growth of Real Spending and Revenue of the Central Government

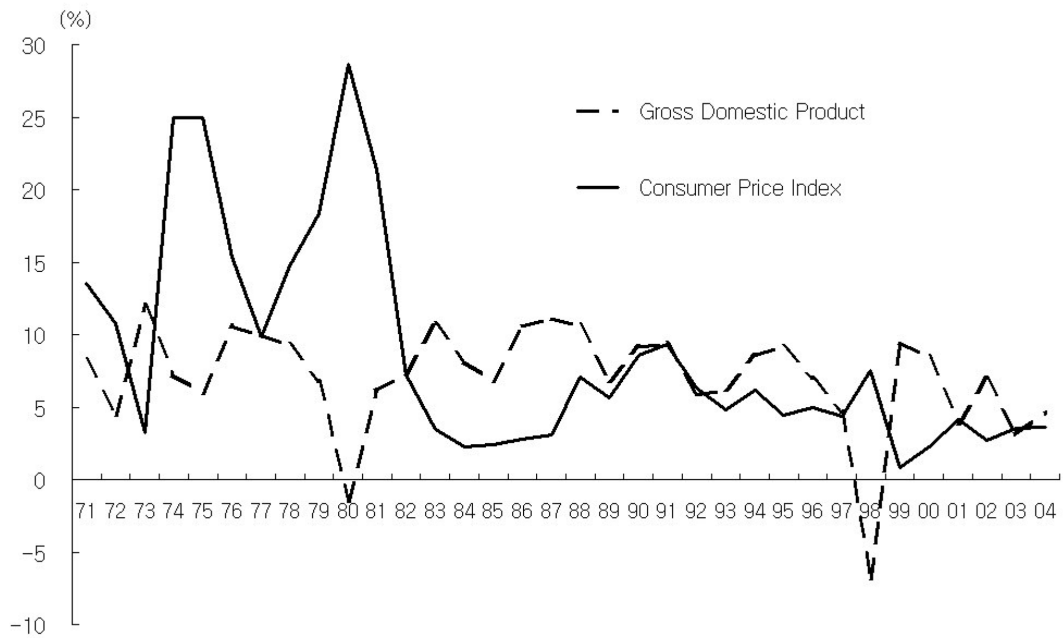


Note: Real values were obtained by deflating nominal values with GDP deflator.
Source: Ministry of Finance and Economy.

One important principle in fiscal management was established in this period. It was the principle of "Expenditure within Revenue," or the balanced budget principle. While not formalized in a law or a regulation, it acted as self-discipline imposed on the budget authorities against imprudent management of the budget.[2)]

[2)] One innovation during this period is worthy of note. The Budget Review Committee (BRC) was set up within the budget office in 1982 (Bahn, 2003). It is composed of senior management of the budget office. The recommendations of budget examiners regarding the ministerial budget requests are reviewed and then final decisions are made by the BRC as a group in sessions closed to outsiders. When faced with the lobby from line ministries and other interested parties, budget examiners find it convenient

[Figure 4] Output Growth and Inflation



Source: Bank of Korea.

In fact, the strong economic growth and the moderate-to-high inflation produced higher-than-expected tax revenues in most years. This in turn made it relatively easy to keep the budget in balance. The National Pension Scheme (NPS) that was introduced in 1988 also contributed to the total revenue by one to three percent of GDP each year.[3)]

The balanced budget principle kept the public debt to a minimal level. In 1996, the year before the crisis, the gross debt of the central government was less than 10 percent of GDP, and the net debt was negative; that is, the central government was a net creditor to the other sectors in the economy.[4)] The local governments were generally in good shape as well.

Of course, there were costs as well as benefits associated with the balanced budget

---

to pass the burden of budget cuts to the BRC. The BRC has been very effective in containing the spending increase and establishing fiscal discipline.

[3)] But the long-term prospect of the NPS is quite bleak. To finance the system, the contribution rate that stands currently at 9 percent will have to increase substantially in the future.

[4)] There are doubts, however, about the quality of government assets, which are mostly loans to principle. Some argue that the counter-cyclical role of fiscal policy was constrained, and essential investment in social infrastructure was often postponed to contain the overall spending growth. But the Korean economy was able to achieve strong growth without much cyclical fluctuation in the decades following the adoption of the balanced budget principle.[5)]

Most importantly, strict application of the principle enabled the Korean government to keep the size of the government debt at a manageable level, and provided it with room for maneuver when the crisis hit the economy. Without too much worry about the rapid explosion of the budget deficit and public debt, the Korean government could plan massive fiscal supports to troubled financial institutions. It also expanded the welfare programs for the poor and the unemployed substantially.

Economic Crisis and Ballooning Budget Deficit

The fiscal support to financial sector restructuring primarily took the form of loans to two public corporations – the Korea Deposit Insurance Corporation (KDIC) and the Korea Asset Management Corporation (KAMCO).[6)] The loans were spent on repaying the interest on the restructuring bonds issued by these corporations. The total outstanding stock of restructuring bonds stood at 102 trillion won (21 percent of 1998 GDP).

Social welfare expenditure also increased significantly after the crisis. The unemployment rate surged from less than 3 in 1997 percent to 7 percent in 1998, with an accompanying deterioration in income distribution and an increase in poverty (see Figures 5, 6, and 7). In response to these developments, public assistance to the poor was almost doubled.[7)]

---

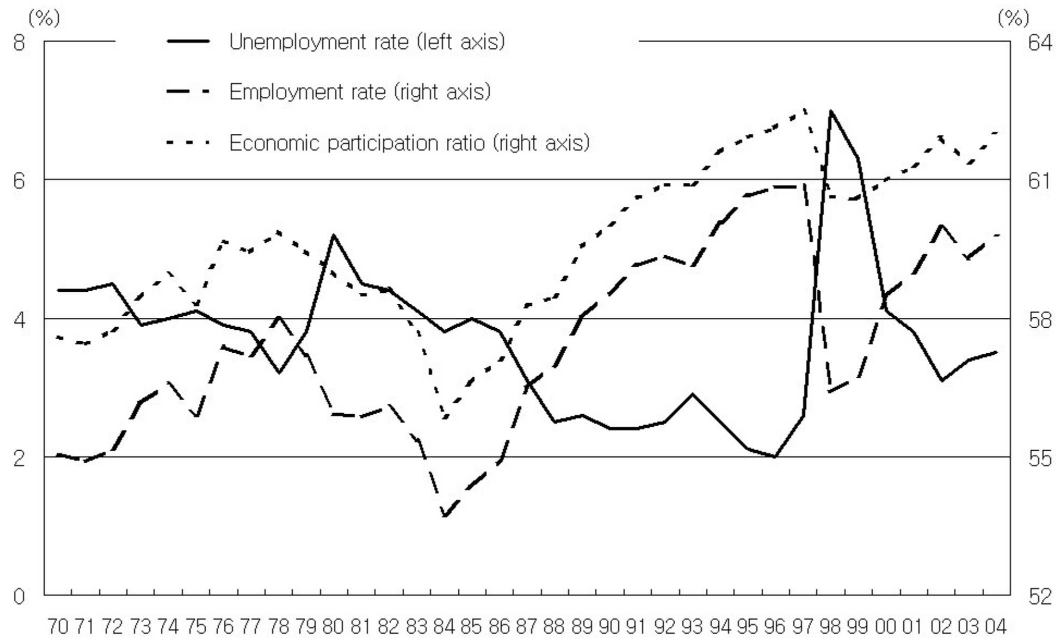
private entities and local governments.

[5)] Specifically, the average growth rate was 7.2 percent (with a standard deviation of 3.5 percent) during 1971-1982 and 7.0 percent (with a standard deviation of 3.9 percent) during 1983-2004. The growth performance does not appear fundamentally different in these two periods. In addition, following the estimation method suggested by Bayoumi and Eichengreen (1995), a formal test can be carried out to see whether the cyclical response of the fiscal policy was weakened in the latter period. I could find no evidence for such claims.

[6)] The KDIC was responsible for recapitalizing underfunded institutions and paying out the deposits in closed institutions. The KAMCO sold the assets purchased from troubled financial institutions in return for the KAMCO bonds.

[7)] But these expenditures still take up only a small portion of the total budget compared to western countries, as the social welfare system in Korea is in its early stage of development. In the future, however, The unemployment insurance scheme, which had been introduced in 1995, rapidly enlarged its coverage and increased its benefit level.

[Figure 5] Labor Market Indicators

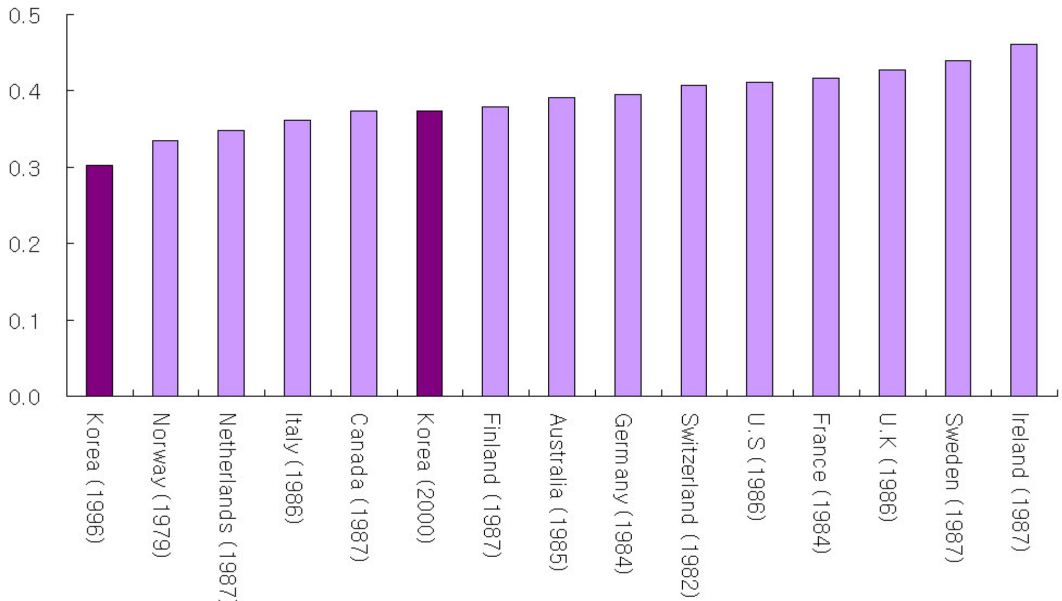


Note: The employment rate refers to the person aged 15 and over who are employed divided by the working age population.
Source: National Statistical Office.

These developments left an unmistakable mark on the government finance. The consolidated budget, which remained more or less in balance before the crisis, dipped into deficit in 1998 of 4 percent of GDP. The ratio of government debt to GDP rose from 8 percent in 1996 to 15 percent in 1998 (see Figure 8). When government debt-guarantees[8)] were included, the total public burden climbed to 30 percent of GDP. The bonds issued by KAMCO and KDIC constitute most of these government guarantees.

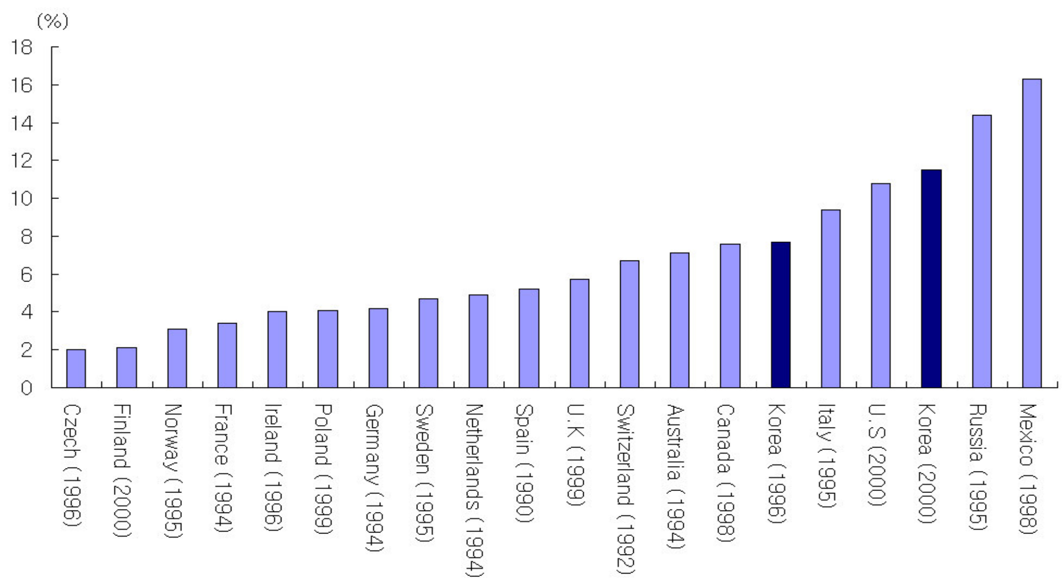
public pension benefits and other welfare spending are certain to drive up the social welfare expenditures to a level that is comparable to those in western countries.

[Figure 6] Gini Coefficient



Source: Yoo (2003).

[Figure 7] Relative Poverty

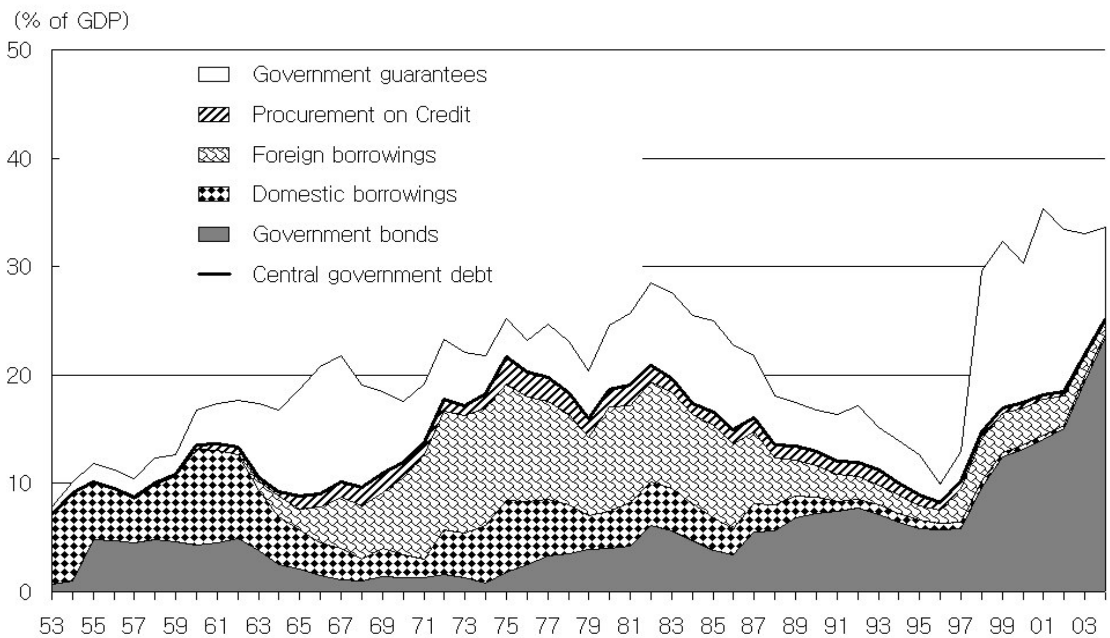


Note: The relative poverty refers to the households with incomes below 40 percent of the median

[8] The bonds issued by KAMCO and KDIC constitute most of these government guarantees.

household income divided by the total households.
Source: Yoo (2003).

[Figure 8] Debt / GDP Ratio

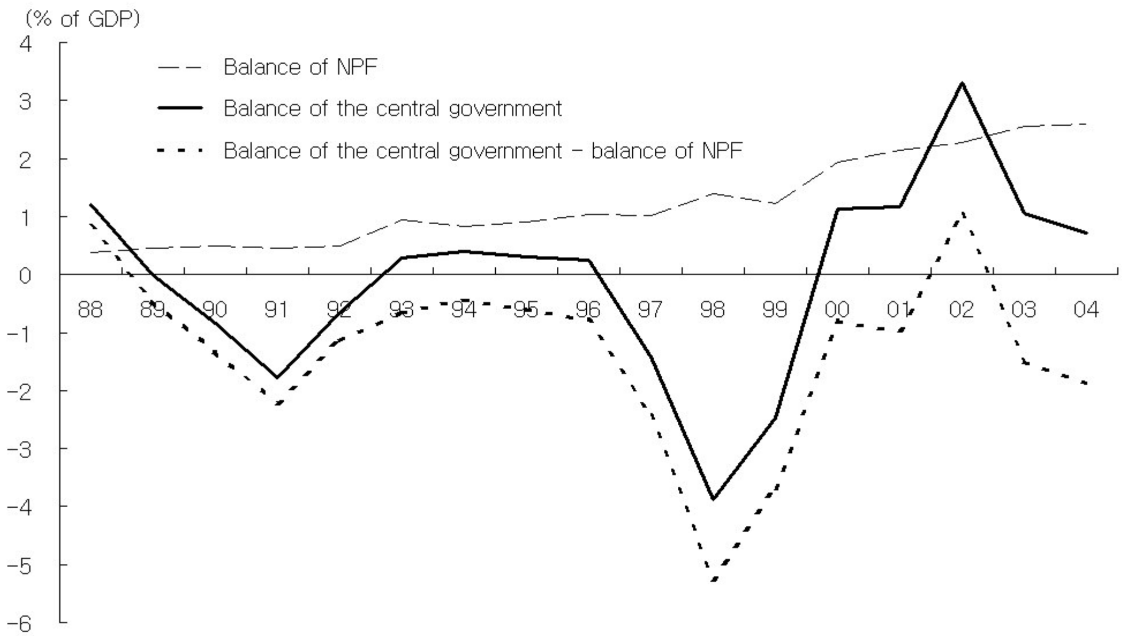


Source: 1953-90, Korea Development Institute (1991); 1991-2004, Ministry of Finance and Economy.

Beginning in 1999, the Korean government made consistent efforts to contain the expenditure growth (see Figures 1, 2, and 3). Aided by the dramatic rebound of the economy (see Figure 4) and the rapid growth in revenues, the budget recorded a surplus of 1.1 percent of GDP in 2000. It remained in surplus in following years.

On the other hand, the debt-to-GDP ratio kept rising despite surpluses since 2000. This anomaly is due to the fact that these surpluses came mostly from the National Pension Fund (NPF). The surplus in NPF was 2.6 percent of GDP in 2004. Most of the surpluses are used to buy assets in the financial market. These assets will be liquidated later to pay pension benefits to eligible retirees. When we exclude NPF from the consolidated budget, the government has consistently run budget deficits since 1989 except in 2002 (see Figure 9).

[Figure 9] Budget Balance Excluding the National Pension Fund



Source: Ministry of Finance and Economy.

3. Current State of the Public Finance

Financial Balance

As shown in Figure 9, the consolidated central government budget balance is over-stated due to the surpluses in the NPF. To better assess the financial soundness of the government, we need to exclude the NPF from the consolidated balance. There are two more factors to consider in addition to the NPF in this regard. One is the net lending and the other is the repayment of restructuring bonds by the government.

The large amount of net lending has been a major factor behind large deficits in 1998 and 1999. In fact, the government lending activity has been quite extensive since the early days of government-led economic growth (see Figure 10). The official statistics shows that the default rate on government loans is close to 0 percent.[9] If this is true, loans do not reflect any deterioration of the government asset position, and we should disregard the net lending when assessing the financial health of the government.[10]

[Figure 10] Central Government Loans

Source: Ministry of Finance and Economy.

One exception is the government loans made to the KDIC and KAMCO. In 2002, the government announced a plan to exempt the KDIC and KAMCO from repaying the loans to the government. This decision essentially converted the loans into direct spending in the years they were made. The total amount exempted was 22 trillion won. We include these loans in the consolidated budget balances in the following discussion.

---

[9] But it should be noted that the actual default rate may be higher. After all, the government has frequently introduced rescheduling programs for agricultural loans.

[10] To be precise, the subsidy cost of loans emerging from the disparity between market interest rates and concessional lending rates should be included in government expenditures. With no reliable estimates on the subsidy cost, however, I decided to simply ignore it.

In addition to the loan cancellation, the government is sharing with the KDIC and KAMCO the obligation on restructuring bonds. According to the government estimates, the irretrievable loss incurred during financial sector restructuring would amount to 69 trillion won. The government announced that it would take up a total of 49 trillion won of restructuring bonds, repaying their interest and principal. In 2003, 13 trillion won was spent on transforming part of these bonds into government bonds. The figure for 2004-2006 is 12 trillion won each year. But these expenditures mirror the results of past restructuring activities. We therefore exclude these expenditures from the consolidated balance in 2003-2006 and include them in 1997-2002.

Table 1 shows the results of these adjustments. The adjusted balance is close to the consolidated balance in 1998-2000 and much smaller in 2001-2005. For example, in 2004, the balance declines from 5.6 trillion (0.7 percent of GDP) to –1.1 trillion won (-0.2 percent of GDP) after the adjustment. But they have been within ±0.5 percent of GDP since 2001, and we can still say that the financial soundness of the government is not a very serious problem at this stage.

<Table 1> Consolidated Budget Balance and Its Adjustment

(Trillion won, %)

	1998	1999	2000	2001	2002	2003	2004	2005[1)]
Consolidated balance	-18.8	-13.1	6.5	7.3	22.7	7.6	5.6	5.6
(% of GDP)	(-3.9)	(-2.5)	(1.1)	(1.2)	(3.3)	(1.1)	(0.7)	(0.7)
NPF balance	6.7	6.5	11.2	13.3	15.6	18.5	20.2	24.4
(% of GDP)	(1.4)	(1.2)	(1.9)	(2.1)	(2.3)	(2.6)	(2.6)	(2.9)
Net lending	24.4	19.8	19.8	10.1	0.4	-2.5	1.4	6.4
Loans to KDIC and KAMCO	1.3	4.0	5.6	6.0	6.9			
Issuance of restructuring bonds[2)]	15.8	9.8	4.6	16.0	1.9			
Assumption of restructuring bonds						13.0	12.0	12.0
Adjusted balance[3)]	-18.2	-13.6	5.0	-18.0	-1.3	-0.4	- 1.1	0.3
(% of GDP)	(-3.8)	(-2.6)	(0.9)	(-2.9)	(-0.2)	(-0.1)	(-0.2)	(0.0)

Note: 1) The figures for 2005 are based on budget.
2) Issuance of restructuring bonds is based on the assumption that out of 49 trillion won, 2.1 percent was issued in 1997, 32.2 in 1998, 19.9 in 1999, 9.4 in 2000, 32.6 in 2001, and 3.8 in 2002, which were the actual shares of total restructuring bonds issued in 1997-2002.

3) Adjusted balance = consolidated balance – NPF balance + net lending – loans to KDIC and KAMCO – issuance of restructuring bonds + assumption of restructuring bonds.

Government Liabilities

Another indicator for the soundness of public finance is government liabilities. The debt to GDP ratio amounted to 25 percent at the end of 2004 (see Figure 5). When government guarantees are included, it rises to 34 percent. The transformation of restructuring bonds is reducing the amount of guarantees at the expense of direct liabilities. But with the "adjusted balance" remaining close to zero, the total public burden including direct liabilities and guarantees is stabilizing at 33-34 percent of GDP. If an appropriate amount of control is exercised on the spending growth, the total burden will remain at the current level in the years ahead.

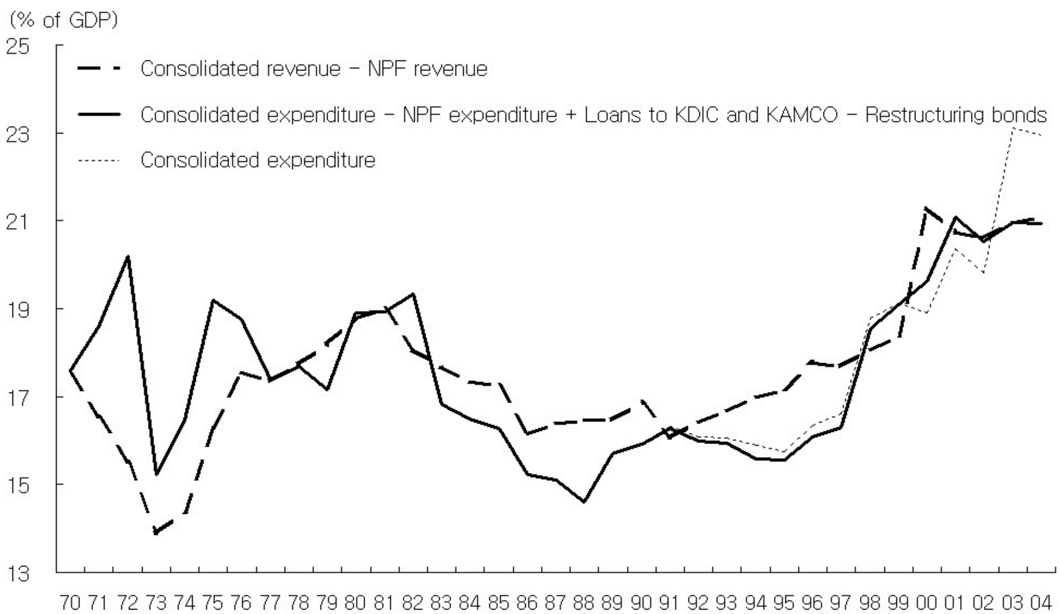
The Size of Government Expenditure

Of course, it is not certain at all whether we would be able to contain successfully the spending growth. Figure 11 shows the consolidated central government expenditure and the adjusted expenditure. Here the adjustment was made in the same way as in Table 1 (subtracting the NPF expenditure and the repayment of restructuring bonds and adding back the loans to the KDIC and KAMCO). The consolidated expenditure has been increasing rapidly since the mid-1990s. Unless conscious efforts are made to contain it, the spending growth is likely to produce persistent deficits and rising government liabilities in the future.

Of particular importance are the public pension schemes such as the National Pension Scheme (NPS), the Government Employees' Pension Scheme (GPES), the Private School Teachers' Pension Scheme (PSTPS), and the Military Personnel Pension Scheme (MPPS). These pension schemes share one common feature; i.e., too generous benefits in relation to contributions. With rapidly aging population (see Figure 12), this imbalance has produced and will continue to produce devastating effect on their finance.[11)]

[11)] The MPPS has been in deficits over 10 years and requires government supports of about 1 trillion won each year. The GPES entered into deficit in 2001, and the deficit is expected to grow exponentially in

[Figure 11] Adjusted Revenue and Expenditure

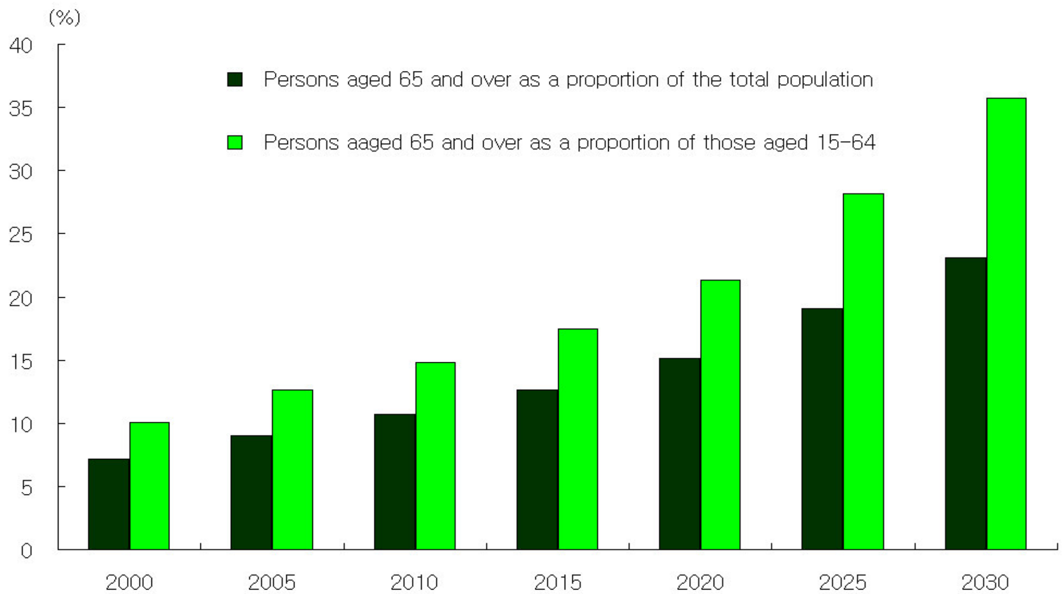


Source: Ministry of Finance and Economy.

[Figure 12] Population Aging

---

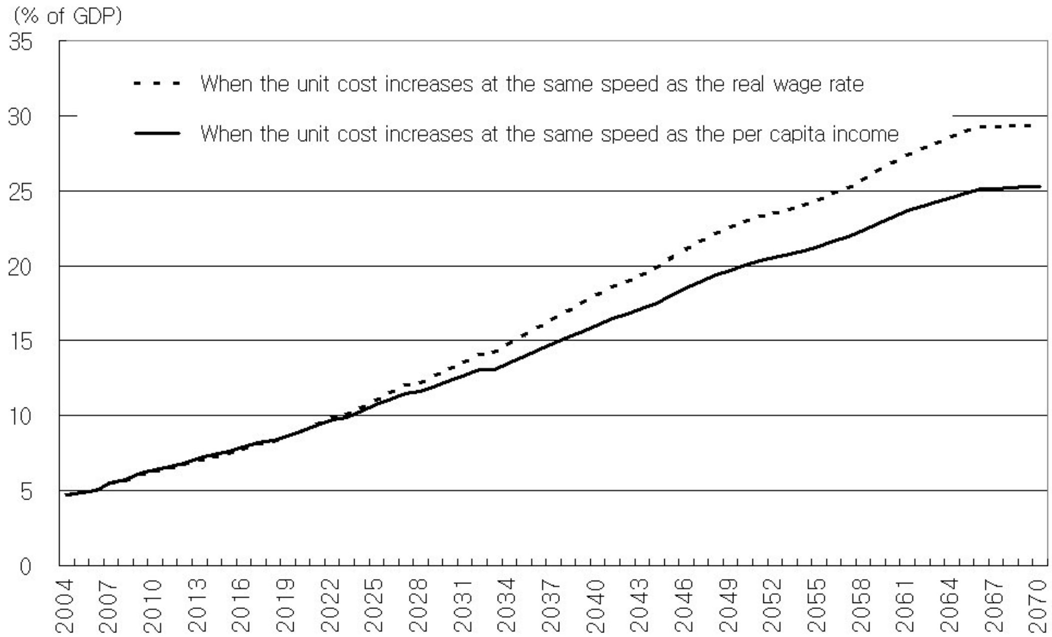
coming years. The PSTPS has basically the same problem but will experience difficulties in later years. The NPS, with its huge coverage, can become a major drain on government budget.



Source: National Statistical Office.

In addition to pensions, health spending will increase rapidly with the aging population. According to a projection by the Korea Institute of Public Finance, the age-related spending will rise form 5 percent of GDP in 2004 to 25-30 percent in 2070 (see Figure 13).

[Figure 13] Projected Age-Related Spending



Source: Korea Institute of Public Finance (2005).

Increased spending on pensions and other age-related spending will drive up the total size of government expenditure. Table 2 compares the general government spending across six countries including Korea. In 2000, the spending to GDP ratio was 23.0 percent in Korea and ranged between 30 and 50 percent in other countries. But when income transfers are excluded, the ratio declines to 19.4 percent in Korea and 20-30 percent in other countries. In particular, the U.S has a lower ratio than Korea. With the increase in age-related expenditures in Korea, the gap between Korea and other countries will diminish in the future.[12)]

<Table 2> General Government Expenditures

(% of GDP)

	U.S	Japan	Germany	France	U.K	Korea

[12)] It is interesting to note in Table 2 the relatively small size of government consumption in Korea. It stands at 10.1 percent of GDP. This seems mainly due to the small size of public employment in Korea. On the other hand, government investment as a percentage of GDP is larger in Korea than in other countries except Japan.

Consumption	15.1	16.8	19.0	23.3	19.4	10.1
Net capital outlays	0.9	6.0	3.0	3.3	2.2	8.3
Income transfers	13.7	10.0	18.9	17.8	13.7	3.6
Subsidies	0.5	0.9	1.6	1.2	0.5	0.3
Interest payments	3.4	3.3	3.3	3.2	2.4	0.7
Total	31.2	37.0	45.7	48.8	38.2	23.0
(Excluding income transfers)	(17.5)	(27.0)	(26.8)	(31.0)	(24.5)	(19.4)

Note: The data for Japan and Korea refer to year 2000. Others refer to year 2001.
Source: OECD, *OECD Economic Surveys: Korea*, Volume 2003/5-March.

Containing the spending growth is critical in attaining fiscal sustainability. Rising government expenditures not only damage the long-term stability of pubic finance but also pose a direct threat to the efficient functioning of the economy. Containing the total size of government expenditure will gain greater importance in the future as the growth potential of the Korean economy declines. Han and others (2002) forecasts the potential income to grow at a much slower rate in coming years (see Table 3). Its growth rate has declined from 7.7 percent in the 1970s to 5.6 percent in the 1990s, and will decline further to 5.1 percent in 2000-05 and to 4.2 percent in 2005-10, primarily due to the slower growth of labor force. In fact, the total population is expected to shrink in absolute number beginning in around 2030.

The slower economic growth will imply a slower growth in tax revenue. Expanding government expenditures at the same rate as in previous years is likely to produce persistent deficits, accelerate the decline in national saving, hamper the fixed capital formation, and further reduce the growth potential.

<Table 3> Forecasts of National Income

(%)

	1963-70	1970-79	1979-90	1990-00	2000-05	2005-10
Growth in national income	8.94	7.67	7.29	5.61	5.14	4.17
Contributions from						
Inputs	4.35	4.23	4.80	3.00	2.85	2.06
Labor	3.67	3.06	2.90	1.60	1.28	0.89
Workers	3.44	2.90	2.39	1.28	1.21	0.82
Capital	0.68	1.17	1.90	1.40	1.57	1.17
Total factor productivity	4.59	3.44	2.49	2.61	2.29	2.11

Source: Han and others (2002).

Functional Classification of Expenditures

Government expenditures can be classified in various ways. Table 4 shows the functional classification of the central government expenditure and net lending in Korea. Defense spending declined rapidly in the 1980s and 1990s and now corresponds to 11.4 percent of total spending. Education has traditionally taken up a large share (15-17 percent) in total spending, but an even larger share has been given to economic affairs (20-28 percent). Among the economic affairs, agriculture and transportation have been the major items of spending. On the other hand, social protection has received relatively little attention in budgetary spending though its share is growing rapidly in recent years.

The concentration of spending on economic affairs may reflect the less-developed-country status of Korea. Perhaps we still need large investment in roads, ports, and railways. Perhaps we still need to provide large government loans to the agricultural, manufacturing, and construction sectors because the financial market is not yet fully developed. But there are strong doubts about these assumptions.

<Table 4> Central Government Expenditure and Net Lending

	% of GDP	% of total spending

	1970	1980	1990	2000	2003	1970	1980	1990	2000	2003
General public services	3.9	0.8	0.7	1.1	1.4	23.1	4.0	4.2	5.2	6.7
Defense	3.8	6.1	3.6	2.5	2.5	22.7	30.6	20.0	11.4	11.4
Public order and safety	0.0	0.9	0.8	1.0	1.1	0.0	4.6	4.3	4.6	5.3
Education	2.8	2.9	3.0	3.3	3.3	16.7	14.6	17.0	15.3	15.0
Health	0.2	0.2	0.3	0.2	0.1	1.3	1.0	1.7	0.7	0.4
Social protection	0.8	1.1	1.4	3.3	2.9	4.9	5.7	8.1	15.3	13.5
Housing and Community Amenities	0.0	0.5	1.8	1.2	1.1	0.3	2.5	10.1	5.3	5.0
Recreation, culture, and religion	0.2	0.1	0.1	0.2	0.3	1.4	0.7	0.5	0.8	1.2
Economic affairs	4.6	5.1	3.6	5.5	6.2	27.4	26.0	20.4	25.2	28.7
Fuel and energy	0.6	0.4	0.1	0.1	0.4	3.8	2.1	0.6	0.7	1.8
Agriculture, forestry, fishing, and hunting	1.9	1.2	1.8	1.4	1.4	11.2	5.9	10.2	6.2	6.7
Mining, manufacturing, and construction	-0.5	1.5	0.4	0.6	1.0	-3.0	7.4	2.0	2.6	4.5
Transportation and Communication	1.3	1.3	1.1	2.2	2.0	7.9	6.7	6.1	9.9	9.3
Other economic affairs	1.3	0.8	0.2	1.3	1.4	7.5	3.9	1.4	5.8	6.5
Other expenditures	0.4	2.1	2.4	3.5	2.8	2.2	10.4	13.7	16.2	12.8
Total	17.0	19.8	17.8	21.9	21.7	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance and Economy.

First, the rapid increase in spending on social infrastructure during the 1990s need not be sustained in the future. Many (but certainly not all) experts in this area agree that, with the ever-stringent budget constraint and the completion of major road-building programs, it is time to reorganize the overall investment strategy. In particular, we should pay more attention to the demand-management (e.g. through an increased use of user-charging) and the proper maintenance of existing stocks of infrastructure.

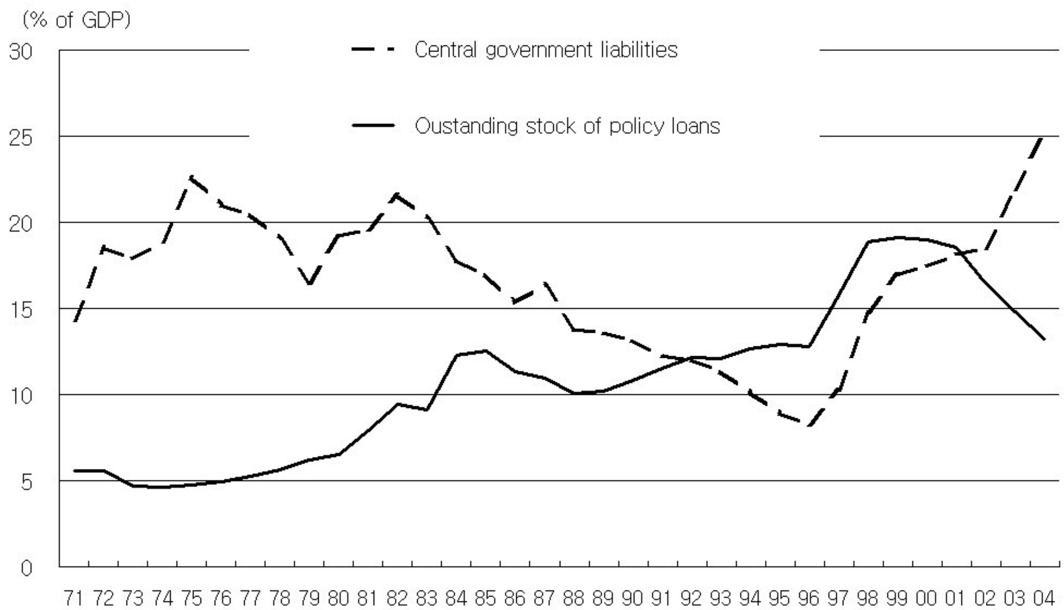
Second, the Korean financial market has undergone a rapid change since the 1980s and especially after the economic crisis. Banks are rapidly expanding their lending to households and small and medium-sized enterprises, and large corporations are turning ever more to capital (stock and bond) markets. The government appears to be playing a substitutive, rather than complementary, role to commercial banks in many cases. It is now generally believed that the government should reduce its role as a provider of financial resources for private enterprises. The reduced government role in this area will not only help restrain the growth of public spending but also promote the development of private financial markets and reduce the distortion in resource allocation.

On the other hand, the government should increase its effort in the provision of basic public service such as public security, fire-fighting, judicial services, promotion of competitive business practices, prudential regulation of financial institutions, statistical services, environmental protection, etc. These services vital in long-term economic growth and social development. Unfortunately, their importance has been generally understated to this day in Korea. For example, competition policy is still at its early stage of development. Statistical services also have large room for improvement, as illustrated by the lack of reliable data on gross regional product even though the government has historically emphasized the importance of mitigating regional disparities.

At the same time, more efforts are needed to reduce the outstanding stock of government loans. Figure 10 shows that in the post-crisis period, government loans grew by about the same amount as government liabilities. That is, the government issued bonds and other debt instruments and used the proceeds to extend loans to the private sector. The trend was reversed in recent years, but the outstanding stock of loans still stood at 13 percent of GDP at the end of 2004.

Government loans typically have maturity of 5 to 10 years while most of government bonds have maturity of less than 5 years. The interest rates on loans are lower than those on government bonds. Such difference in interest rates on loans extended over long periods will impose financial burden on the government in later years.

[Figure 14] Government Assets and Liabilities



Sources: Ministry of Finance and Economy.

4. Institutional Setup and Reform Efforts

The Structure of the Budget

1) General Accounts, Special Accounts, and Funds

The budget of the central government as voted on in the National Assembly is comprised of one general account and various special accounts. There were a total of 23 special accounts in the fiscal year 2005 budget (see Table 5). Revenue sources for the general account include general-purpose (not ear-marked) taxes and non-tax revenues. On the other hand, many special accounts have their own special ear-marked taxes or quasi-taxes (i.e., fees, charges, and other mandatory contributions). Transfers from the general account also make up a large portion of resources for special accounts.

<Table 5> Special Accounts

Name	Name
Fiscal Financing	Environmental Reconstruction
National Property Management	National Medical Center Management
Agriculture and Fisheries Structural Adjustment	Land Management and Balanced Regional Development
Rural Development Tax Management	Postal Insurance Service
Transportation Facilities	Automobile Traffic Management
Registration	Patent Management
Management of Funds Transferred to Local Governments	Balanced National Development
Prison Operation	Grain Management
Military Personnel Pension	Agency
Management of Funds Transferred to Local Educational Agencies	National Railroad
Energy and Resources	Communication Service
	Government Procurement

On a consolidated basis, the central government budget includes, in addition to the general and special accounts, numerous funds. There were 57 funds in 2005 including the National Pension Fund, the Employment Insurance Fund, and the Foreign Exchange Stabilization Fund. These funds were established much like special accounts to achieve specific policy objectives, and many of them have their own revenue sources including quasi-taxes.[13)]

The difference between the funds and the general and special accounts lies in the managerial flexibility allowed in the former. Ministries can freely change fund expenditures within 30 percent of the planned amount without notice to the budget authorities and the National Assembly (see Table 6). The line items in the operational plans of funds are much less detailed than those in the general and special accounts. Their cash flows are managed independently by line ministries and do not pass through the treasury single account held in the Bank of Korea.

<Table 6> Characteristics of the General Account, Special Accounts, and Funds

[13)] There were 101 quasi-taxes for special accounts and funds at the end of 2001 and their total revenue was estimated to be around 1 percent of GDP (OECD, 2003).

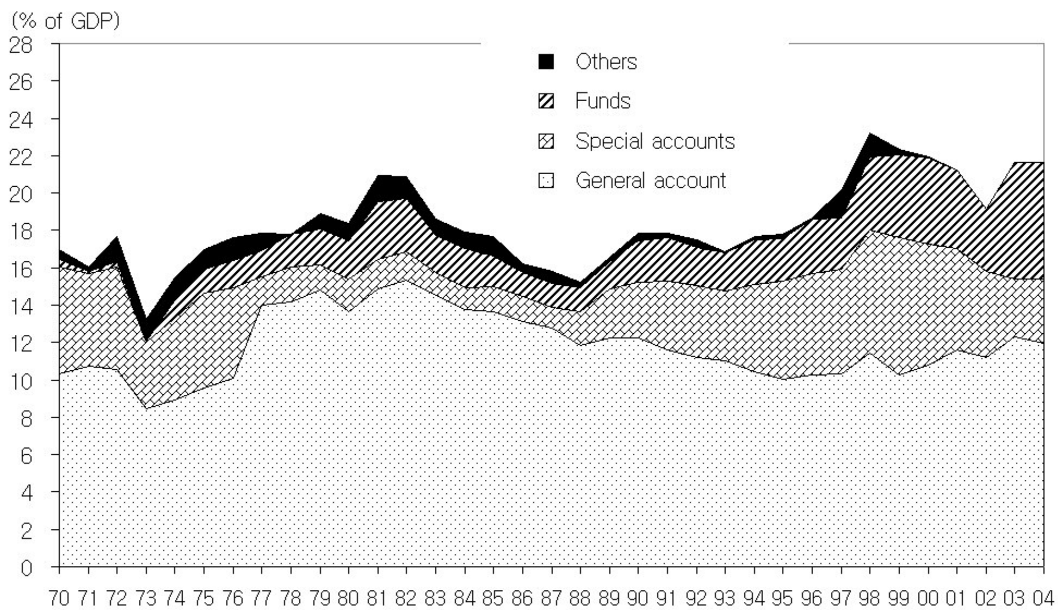
	General Account	Special Accounts	Funds
Objective	Supporting general fiscal activities.	Supporting specific programs.	Same as S/A.
Revenues	General-purpose taxes and non-tax revenues	Ear-marked taxes, mandatory contributions, transfers from other accounts and funds, etc.	Mandatory contributions, transfers from other accounts and funds, etc.
Expenditures	Unrequited expenditures.	Unrequited expenditures and loans	Unrequited expenditures and loans
Linkages Between revenues and expenditures	None.	Clear linkages.	Clear linkages.
Authorization and execution of expenditure plans	Voted on in the National Assembly. Controlled and monitored during execution as mandated by the Constitution.	Same as G/A.	Same as G/A but larger flexibility guaranteed in Implementation.[1)]

Note: 1) Ministries can change fund expenditures within 30 percent of the planned amount without notice to the budget authorities and the National Assembly. Cash flows are managed independently by the ministries in charge and do not go through the treasury single account held in the Bank of Korea. Unlimited carry-overs of unused cash are allowed.

The general account, special accounts, and funds form the consolidated central government budget (see Figure 15). The share of general account in the total consolidated expenditure and net lending stood at 55 percent in 2004, and those for special accounts and funds at 16 percent and 29 percent, respectively.[14)]

[Figure 15] Expenditure and Net Lending by Accounts and Funds

[14)] The U.S. federal government also has a large number of trust funds, special funds, and public enterprise funds in addition to the general fund (GAO, 2001). In 1999, the spending of the funds other than the general fund corresponded to around 55 percent of total federal spending. But most of them (33 out of 55 percent) represented "long-term commitments" such as social security. In case of Korea, "long-term commitments" occupy only about 10 percent of total spending.



Source: Ministry of Finance and Economy.

2) Drawbacks

The highly complex structure of the budget has been criticized in many aspects.[15)] First, it limits the ability of the budget authorities to centralize all national resources and then allocate them based on national priority. As mentioned above, special accounts and various funds have their own sources of revenue, which are not easily transferable to the general account or any other special accounts and funds in response to changing circumstances. This compartmentalization and fragmentation of resources reduces the allocative efficiency of the budget.

Second, fiscal transparency and program efficiency are also undermined by the complicated budget structure. Various accounts and funds are intricately interrelated through complicated flow of grants and loans. It is difficult to see how much funding is being allocated to various spending areas. The functional classification of spending is not reported for the

[15)] There is much similarity between the Korean and the Japanese budget system. See Bayoumi (1998) for the Japanese system.

consolidated budget, and it is reported only for the previous year's outturns with a considerable time-lag of more than a year. We can find many programs with similar policy objectives and tools but under different accounts and funds. Consolidating similar programs would contribute to greater allocative and technical efficiency with increased transparency.

3) Government Efforts

The government is making efforts to simplify the budget structure and strengthen transparency and accountability. The most important change occurred with the revision of the Fund Management Act and the National Assembly Act in 2001. Previously, there had been two types of funds – "public funds" and "other funds." The operational plans of "public funds" had been prepared by responsible ministries and reported to the National Assembly but had not required the latter's approval. Those of "other funds" had not been even reported to the National Assembly. In this sense, public and other funds had been off-budget accounts.

In 2001, they were regrouped into "funds" and "financial funds." "Funds" include all of the previous "public funds" and some of "other funds." "Funds" were moved from off-budget to on-budget: the operational plans of "funds" require the approval by the National Assembly and their financial reports are submitted to the latter, just like the general account and special accounts.[16)] In 2004, further changes were made to move "financial funds" from off-budget to on-budget and subject them to the same degree of control by the National Assembly.

The government also introduced a review process in the Fund Management Act to abolish obsolete funds and consolidate those with similar objectives. The first such review was conducted in 2004 and subsequent reviews are scheduled every three years in the future.[17)] In addition, a separate, *ad hoc* review was conducted on special accounts in 2004. The results of these two reviews were presented to the president in May 2005 in a combined report and

[16)] This change in typology produced discontinuity in the time series of fiscal data. Before 2001, the consolidated spending and revenue data included "public funds" and excluded "other funds." After 2001, they include "funds" and exclude "financial funds." As a result, several important funds such as the Teachers' Pension Fund are now included in the consolidated financial statistics. But no attempt has been made to revise previous data to eliminate discontinuity.

[17)] These reviews are called "Retention Reviews." Apart from the Retention Review, the government has also been conducting annual "Management Reviews" since 1999. Management Reviews look at the operational efficiency of funds, including the adequacy of their asset management practices.

received his approval. To implement the recommendations of the report, the government needs to revise various laws that provide legal bases for individual special accounts and funds. It remains to be seen how many of the recommendations will survive the opposition from diverse interest groups and succeed in the revision of relevant laws.

The past experience does not offer a very good prospect. The number of funds had been declining from 114 in 1994 to 53 in 2002 but since then has stayed at around 55 (see Table 7) despite the government's effort to reduce it further. A few special accounts were to be closed down in past years (in 2003 in case of the Transportation and the Registration Special Accounts and in 2004 in case of the Rural Development Tax Management Special Account). But the subsequent revisions of the relevant laws, mostly to accommodate the desire of interest groups, saved their lives and none have been closed down.[18]

<Table 7> Number of Funds[1)]

	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05
At the start of the year	114	106	99	76	75	76	75	62	53	58	59	57
Established during the year	6	4	4	3	3	2	2	1	8	3	2	
Closed during the year	-14	-11	-27	-4	-2	-3	-16	-8	-4	-2	-4	
At the end of the year	106	99	76	75	76	75	61	53	58	59	57	

Note: Includes public and other funds before 2002 and funds and financial funds since then.
Source: Ministry of Planning and Budget.

Major Players and the Fiscal Discipline

1) Major Players

Major players in the budget process include the Ministry of Planning and Budget (MPB), the Ministry of Finance and Economy (MOFE), and the Board of Audit and Inspection (BAI) (See Table 8). The MPB is responsible for preparing the draft budget with the help of the

[18] One favorable development is the series of new initiatives that are recently being introduced; the medium-term expenditure framework, top-down budgeting, performance management, and program budgeting. These initiatives are expected to reduce the line ministries' incentives to secure funding through special accounts and funds and to help the MPB in improving the allocative and operational efficiency of

Tax and Customs Office in the MOFE that provides revenue forecasts. When the budget is authorized by the National Assembly, the MPB prepares the quarterly budget implementation plan usually within a month and allocates funds to line ministries. The Treasury Bureau of the MOFE then prepares the monthly cash plan and releases cash to line ministries. The Treasury Bureau keeps track of cash flows into and from the treasury single account held in the Bank of Korea. It is also responsible for issuing government bonds and managing government assets and liabilities.

An important issue concerning the interplay among various players is that of fiscal discipline. The budget process in Korea has generally taken a highly centralized, strategic dominance-based approach in the terminology of von Hagen and Harden (1996). They distinguish between two approaches in budgeting. Under *a target-based approach*, the government collectively negotiates a set of binding, numerical targets for the budget. The budget process starts with negotiations among concerned parties over binding limits on the spending total or budget deficits. Once these limits have been agreed upon, they must be observed during the remainder of the budget process. On the other hand, under *a strategic dominance-based approach*, the budget process vests the budget authorities with special strategic powers. Often the main budgeting decisions are made in bilateral negotiations between the budget authorities and spending ministries.

2) The 1970s and 1980s

In the 1970s and 1980s, the Economic Planning Board (EPB) played a central role in budgeting as well as in preparing and implementing economic development plans. The EPB was the leading ministry within government, as reflected in the title of the head of the EPB as deputy prime minister. Negotiations over spending bids were conducted bilaterally between the deputy prime minister and spending ministers. Little reconciliation occurred in the cabinet regarding the draft budget prepared by the deputy prime minister.

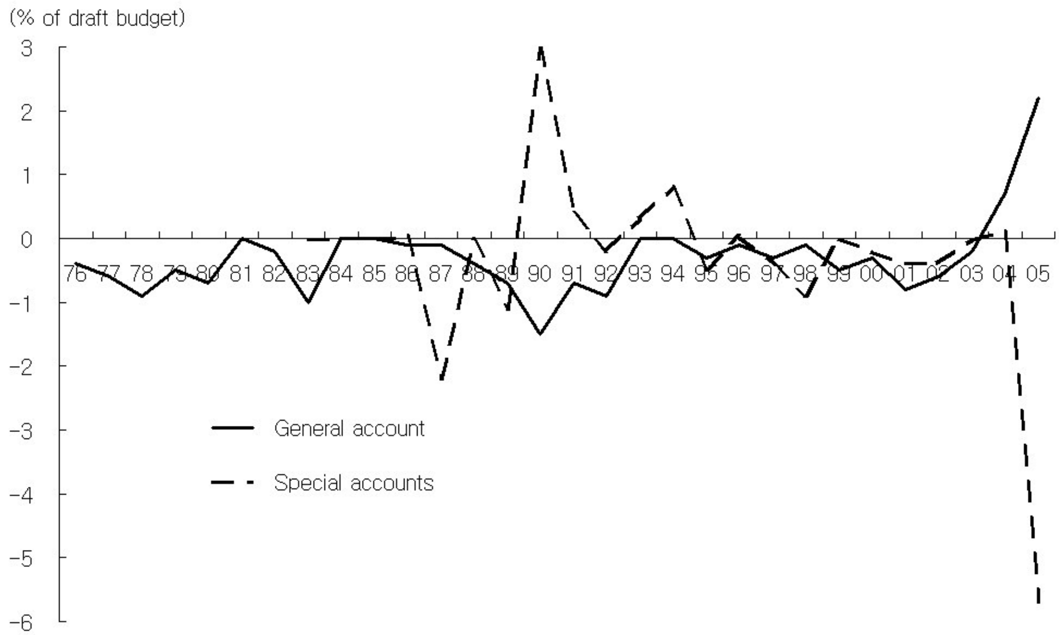
<Table 8> Major Players in Korea's Budget Process

spending. More will be discussed below on these initiatives.

Players	Roles
Ministry of Planning and Budget (MPB)	• Compiles budget bids and prepares the draft budget. • Allocates funds to spending ministries (apportionment). • Approves the transfers of funds between line items (virements).
Treasury Bureau of the Ministry of Finance and Economy (MOFE)	• Releases cash to spending ministries. • Manages the treasury single account held in the Bank of Korea. • Issues treasury bonds and manages assets and liabilities. Collects ministerial financial reports, prepares the whole-of-government financial reports, and sends them to the BAI. • Produces the government financial statistics.
Tax and Customs Office of the MOFE	• In charge of tax policy. • Prepares revenue forecasts. • Oversees the National Tax Service and the Customs Service.
Ministry of Government Administration and Home Affairs (MOGAHA)	• In charge of local government tax and spending polices. • Allocates the Local Shared Taxes (a formula-based block grant to local governments) across local governments. • Coordinates the central government subsidies to local governments. • Approves the borrowing by individual local governments.
Board of Audit and Inspection (BAI)	• The supreme audit institution in Korea, whose head is nominated by and reports to the president. The National Assembly can also request audits on specific issues to the BAI. • Checks the regularity of ministerial activities. • Prepares and tables the financial report to the National Assembly.
National Assembly	• Deliberates and votes on the budget. • Approves the transfers of funds between programs. • Reviews and approves audit reports.
Spending ministries	• Execute the budget and prepare financial reports.

The authoritarian nature of previous governments also limited the role of the National Assembly in the deliberation of draft budget. The National Assembly has been traditionally dominated by the party of the president. Insofar as the government had already consulted the ruling party before presenting the draft budget to the National Assembly, amendments typically entailed minor changes in the budget (see Figure 16). In addition, the Constitution prohibits the National Assembly from increasing the total spending or introducing new spending items unless agreed on by the government.

[Figure 16] Budget Amendments



Source: Ministry of Planning and Budget.

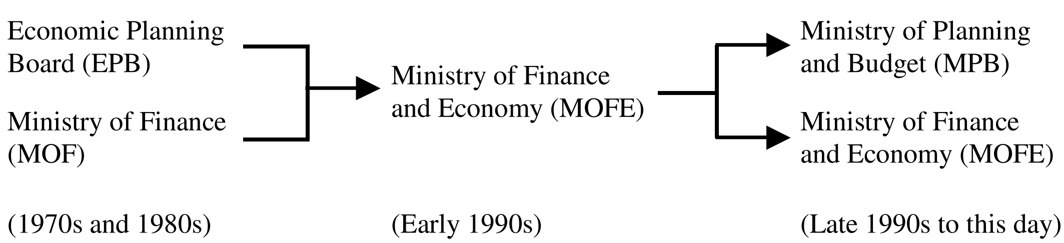
The EPB also exercised tight control on expenditures in the implementation stage. Ministries were required to spend within the limits set in the quarterly budget implementation plan. The EPB could postpone or block part of the expenditures (those classified as "discretionary allocation items") when deemed necessary. All limits on expenditures were imposed in cash terms. Transfers across appropriation accounts ("virements") were prohibited unless authorized by the National Assembly or by the EPB. In addition, supplementary budgets were normally introduced only once a year.

The Treasury Bureau of the MOFE also had a tight grip on cash outflow. All cash disbursements were made strictly within the limits set in the monthly cash plans. Before the crisis of 1997, it was not uncommon for the Treasury Bureau to delay disbursements to line ministries when there was not enough money left in the treasury account due to the seasonality in tax collection. This was in spite of the fact that they could issue short-term debt instruments within the limit set by the National Assembly to bridge the gap between tax collection and cash needs. In addition, the revenue forecasts prepared by the Tax and Customs Office were often very conservative with the actual tax collection overshooting the forecast by substantial margins.

3) The 1990s and after

Most of these characteristics carried over until recently. In the early 1990s, the EPB and the Ministry of Finance were merged into the Ministry of Finance and Economy (MOFE), and the deputy prime minister-ship was handed over to the head of MOFE. The latter exercised the same degree of centralizing power in budgeting as the head of the EPB (see Figure 17).

[Figure 17] Organizational Change in the Budgeting Function

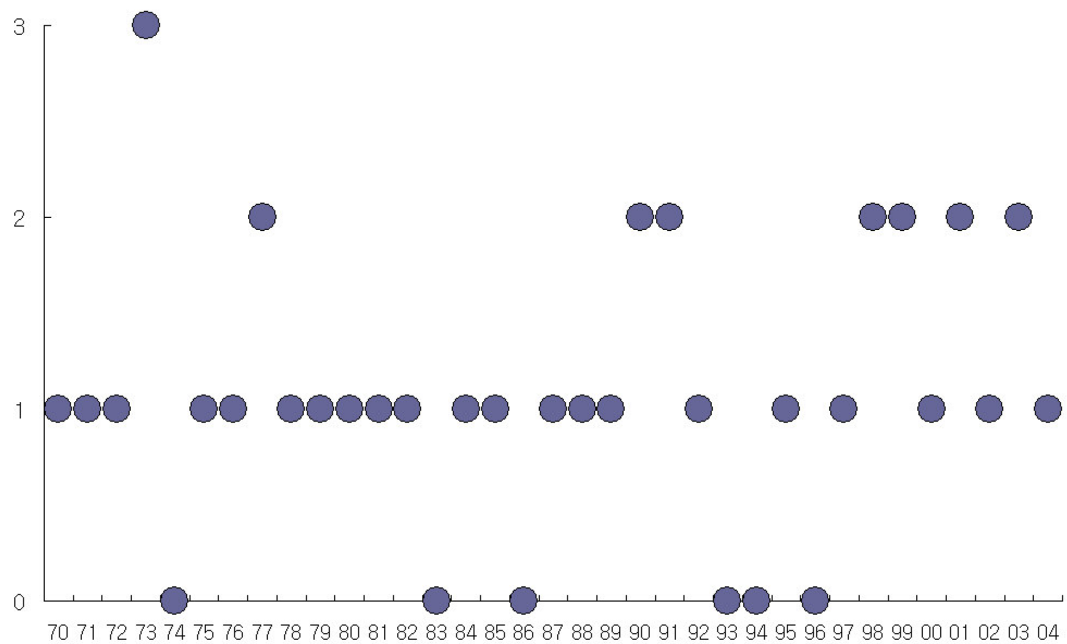


But the recent reorganization in government resulted in a subtle change in the budget process. The budgeting function was separated from the MOFE and moved to the MPB. Previously, the EPB and then the MOFE had the formal role in setting the overall agenda for government policy and coordinating conflicting priorities among ministries. After the reorganization, the coordination role together with the prime minister-ship has been kept in the MOFE, and the MPB devoid of such functions. All these factors can act to reduce the centralizing power of the MPB. In addition, the balance of power between the executive branch and the legislature is tipping toward the latter with the democratization of Korean politics.

4) Assessment

There is not yet a visible sign that these changes have weakened the centralizing power of the MPB and the fiscal discipline substantially. But the risk is increasing, as illustrated for example in the increasing number of supplementary budgets introduced during a year after the crisis (see Figure 18). In most cases, the supplementary budgets were aimed at stimulating the economy.

[Figure 18] Number of Supplementary Budgets Introduced



Source: Ministry of Planning and Budget.

We also observe some changes in the cash management and revenue forecast practices in the post-crisis period. Pressured to stimulate the economy, and in particular to back up the front-loading[19] of annual spending that has been popular since 1999, the MOFE is resorting more and more to short-term debt instruments to bridge the gap between tax collection and cash

[19] In front-loading exercises, the MPB would allocate more funds than usual to the first half of the year, and urge line ministries to spend the allocated funds as early as possible. When necessary, that is when the growth is slower than expected despite front-loading, the MPB would consider introducing

needs. The downward bias in revenue forecasts is also being reduced. In 2004, we actually had a large shortfall in tax collection, which was partly blamed on an overly optimistic assumption on the economic growth, which was in turn claimed by some to have been politically motivated.

Part of these changes look inevitable. The democratization of the Korean politics and the devolution of budgetary power to line ministries are an unavoidable trend. The separation of budgeting function from policy coordination function was a political choice, made in part to respond to the criticism that the concentration of powers in one large "dinosaur" ministry (Ministry of Finance and Economy) contributed to the outbreak of the financial crisis. Utilizing short-term debt instruments to neutralize the impact of seasonality in tax collection is in itself a desirable practice.

But it is also true that there is an increasing risk of overspending and weakened fiscal discipline. We would be better off with a new system of expenditure management that can cope with such a risk, for example by gradually moving away from strategic-dominance approach toward target-based approach. The medium-term expenditure framework (MTEF) is one such option. An MTEF can be defined as the practice of preparing annual budgets with a medium-term perspective in a top-down way. More will be discussed below on the MTEF.

The Budget Process

1) Before the Introduction of the MTEF

The budget process in the Korean central government is undergoing a significant change in recent years. The government introduced the MTEF together with a top-down budgeting in 2004 for fiscal year 2005.[20] The budget process before the change is summarized in Table 8.

---

supplementary in the latter half of the year.

[20] Potter and Diamond (1999), Schiavo-Campo and Tommasi (1999), and World Bank (1998) provide a useful guide on the reform in this direction.

<Table 8> Key Steps of the Budget Process before the Introduction of the MTEF

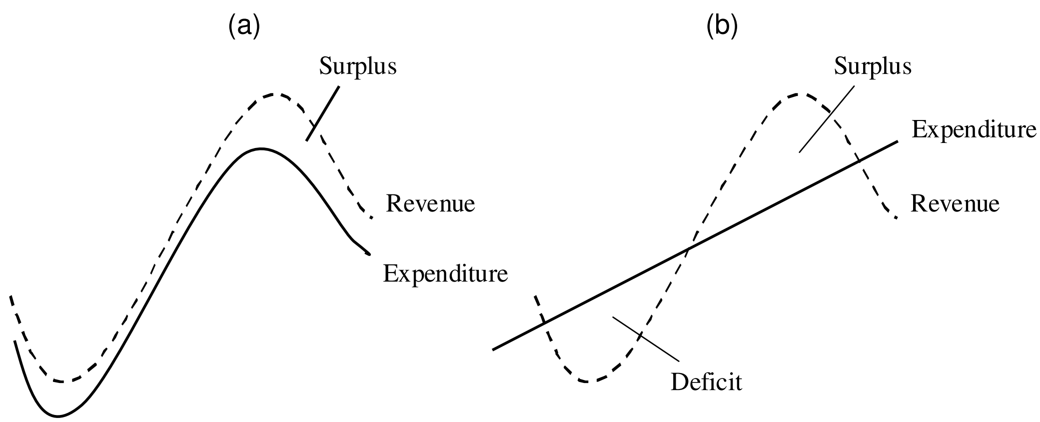
Month	Action
January	• The fiscal year starts on January 1st.
March	• The Ministry of Planning and Budget (MPB) sends the Guide to Budget Compilation to spending ministries.
May	• Ministries send budget bids to the MPB by the end of May.
June-July	• The MPB compiles the budget bids and prepares a preliminary budget proposal.
August-September	• The MPB goes through bilateral negotiations with spending ministries between mid-August and mid-September. • The MPB discusses the budget proposal with the ruling party.
October	• Authorized by the cabinet and the president, the draft budget is sent to the National Assembly by October 2nd. • In mid-October, the Committee on Budget and Accounts begins deliberation on the draft budget. Ministers are typically requested to testify at committee meetings. Meetings are normally open to the public.
December	• The draft budget is modified and approved by the Committee on Budget and Accounts and then by the National Assembly by December 2nd.

The recent reform was intended to address several defects found in the previous budgeting practice. First, prior to the introduction of the MTEF, budgeting was centered on the next single budget year, lacking a medium-term perspective. The MPB and the National Assembly gave little consideration to the out-years beyond the budget year. Line ministries had little information on how much resource would be available to them in the future, and their medium- to long-term planning function was severely limited. Limited planning function in turn reduced the effectiveness and efficiency of overall public spending.

It was also difficult for the MPB to identify and cope with the trend increase in spending. Without a long-term view on the appropriate level of tax burden, the MPB would simply allow an ever-increasing public spending to accommodate rising demands from various sectors. The focus on a single budget year also fostered gradualism in budgeting and hindered a strategic reprioritization of spending precisely when the strengthened control on the aggregate expenditure generated greater necessity for flexible reprioritization.

In addition, the counter-cyclical role of fiscal policy could be constrained when the attention was focused on a single year. The principle of "balanced budget in each year" had the potential to produce a pro-cyclical fluctuation in spending as illustrated in panel (a) of Figure 19. If, on the other hand, spending increases at a close-to-constant rate as in panel (b) and the balanced budget is pursued on average over the business cycle, the so-called "automatic stabilizer" can be strengthened.

[Figure 19] Management of Spending over the Business Cycles



Second, before the introduction of the top-down process, budgeting relied excessively on a bottom-up approach. At the initial stage of budget preparation, the MPB made rough estimates of the total size and the sectoral allocation of the next year's budget. But the estimates were not transmitted to line ministries and therefore could not guide line ministries in preparing their budget requests. When reviewing their budget requests, the MPB focused on the microscopic spending control of individual programs. The sectoral allocation and the total size of the budget were determined at the last stage of budget preparation by aggregating the expenditures on individual programs.

As a result, the control of inputs assumed a major significance in budget discussions and little attention was paid to outputs or outcomes. Absorbed in details, the MPB had little scope to review and analyze important policy directions, and the linkage between budgeting and policy-making was very weak. The budget negotiation between the MPB and line ministries was very time- and energy-consuming process for both parties. The accountability and autonomy of line ministries in preparing and managing their budget was also severely limited. Line ministries usually requested unrealistically large amount of budget, and massive cuts were inevitable.

A third characteristic of the previous budgeting practice was the central stage accorded to the general account. The MPB spent most of its time on reviewing and preparing the budget of the general account and paid less attention to special accounts and funds.

The previous approach had certain merits. The budget authorities had large discretion over the annual spending and used their power to contain the spending growth and adjust it to changing revenue conditions. To some degree, such short-termism was inevitable in Korea where the socio-economic environment changes quite rapidly and unexpectedly. In addition, by emphasizing the input control and the regularity of budget execution, the abuse or misuse of tax money could be minimized. But the growing size and complexity of budget is making it necessary for the MPB to deregulate the budgeting process, enhance autonomy and accountability of line ministries, and focus on the strategic management of public finance.

2) After the Introduction of the MTEF

With the introduction of the MTEF and the top-down budgeting, all these are changing. Now the annual budgeting exercise starts with a discussion on fiscal management over the next five years including the current year, the budget year, and three out-years. Following this discussion, the MPB transmits spending ceilings for sectors and programs to line ministries.[21)] These ceilings encompass the general and special accounts and funds. Line ministries are asked to prepare their budget requests within these ceilings. When reviewing the ministerial budget requests, the MPB places less emphasis on the microscopic control of line items and more on the strategic alignment of budget requests with overall policy directions.

[21)] Ceilings are set for 14 spending areas such as social infrastructure, agriculture, education, and environment and then disaggregated into 56 programs. For example, social infrastructure has 7 programs, including roads, railways, subways, ports, airports, housing, and water resources. Separate ceilings are also

<Table 9> Key Steps of the Budget Process after the Introduction of the MTEF

Month	Action
December	• The MPB sends to line ministries standard assumptions on macro-variables such as inflation, interest rates, exchange rates, etc. • Sectoral task forces are organized. They are composed of external experts and government officials from the MPB and relevant ministries.
January-April	• Line ministries submit to the MPB their estimates of spending needs over the next 5 years by the end of January. • Sectoral task forces discuss major policy issues and present their recommendations in a series of public hearings held in March and April. • By the end of April, the MPB prepares a draft National Fiscal Management Plan (NFMP) through discussions with line ministries. The draft NFMP contains major policy directions and fiscal aggregates (total spending, deficits, debts, etc.) for the next 5 years and tentative spending ceilings on sectors and programs for the budget year.
Cabinet meeting	• At the end of April, a cabinet meeting, chaired by the president, is held in a secluded place to discuss and finalize the ceilings. • Following the meeting, the ceilings are transmitted to line ministries in the Guide to Budget Preparation.
May-June	• Line ministries prepare their budget requests and send them to the MPB.
July-August	• The MPB prepares the draft budget. Less emphasis is placed on the microscopic control of line items and more on the strategic alignment of budget requests with overall policy directions.
August-December	• Goes through the same process as before the introduction of MTEF.

Key steps of the new budget process are explained in Table 9. The budget cycle starts in January, earlier than in previous years. The workload of budget examiners are accordingly spread out over a year rather than concentrated in July and August. This is deemed another merit of the new system.

set within each program for the general account and various special accounts and funds.

The new system is already producing tangible results. In fiscal year 2005, the budget requests by line ministries represented an increase of 11.7 percent over the previous year's budget. This was much smaller than the 30.8 percent increase in fiscal year 2004. Line ministries also voluntarily shuffled a larger portion of their spending across programs, cutting back 2.7 trillion won on existing ones and introducing new ones worth 3.0 trillion won. The corresponding figures for fiscal year 2004 were 1.6 and 1.5 trillion won, respectively.

3) Rooms to Improve

There are of course rooms to improve. The first three points explained below concern the behavioral changes that are needed in the MPB and line ministries over the medium term. The next seven points concern the changes in the budgetary system and MTEF that are called for immediately.

First, performance management in line ministries should be strengthened. In the discussion on policy directions and resource allocation, performance information provides a valuable guide. There have been efforts in this direction, but none of them have yet succeeded in instilling performance orientation in line ministries. Details on the current reform efforts will be given in the next subsection.

Second, the capacity for planning and prioritizing in line ministries should be enhanced. For example, line ministries should be required to publish long-term strategic plans, annual business plans, and annual performance reports as in other countries. And the planning and budget divisions of individual line ministries should now play a greater role in the coordination of ministerial policies and budget requests unlike in previous years when they would simply compile budget requests from program divisions and send them to the MPB with little modification.

Third, the role of the MPB should also be changed. As a central coordinator of government policies, the MPB should strengthen its capacity for policy analysis and long-term forecasts. It should stress less on input control and pay more attention to outputs and outcomes. It should act as a consultant for line ministries to enhance their program performance and strive to build mutual trust in a collective action game.

Fourth, the medium-term targets in the MTEF should be clarified. Presently, it is not clear which variable the government is targeting at in the medium term; the budget balance, the total spending, or the debt-to-GDP ratio. An ideal strategy would be targeting at a balanced budget over the business cycle.[22] In this strategy, deficits are allowed in a period of lower-than-expected growths. They are subsequently offset by surpluses in a period of higher-than-expected growths, and the accumulation of debt is held down over the cycle. The debt-to-GDP ratio declines slowly as the GDP expands. Examples of this strategy can be found in the Growth and Stability Pact (GSP) of the European Economic and Monetary Union (EMU), the "golden rule" of the British government, and the two-percent structural surplus rule of the Swedish government.[23)]

Fifth, it is necessary to set out the annual operational targets that can guarantee the achievement of the medium-term targets. There are two types of operational targets commonly employed, namely *budget balance* and *total spending*. A prime example of the former is the three-percent deficit rule set out in the Maastricht treaty of the EMU. In contrast, the Swedish government imposes an expenditure ceiling on each of the three years ahead. The ceilings for the first two years coincide with the last two of the previous year's three-year ceilings. The United Kingdom has adopted similar practices for expenditure control. The U.S. federal government experimented with both types of targets in the 1980s and 1990s (see Box).

22) Given the low level of debt-to-GDP ratio in Korea, it seems unnecessary to target at surpluses over the cycles.

23) The GSP commits the member countries to achieve and maintain a budget position of close to balance or in surplus over the cycle. The golden rule allows the British government to borrow only to invest and not to fund current spending over the cycle. The current Swedish government is targeting at an average surplus of 2 percent of GDP over the cycle (Gustafsson, 2004).

<Box> Experience of the U.S. Federal Government on Deficit Control

The United States experimented with both types of annual operational targets explained in the text. In the 1980s, targets were set up for budget deficits. The Gramm-Rudman-Hollings Act of 1985 (GRH Ⅰ) prescribed deficit ceilings in nominal dollars for the next five years. The strategy, however, did not work. The actual deficits exceeded the stipulated ceilings in all years covered by GRH Ⅰ. In 1987, GRH Ⅱ was enacted and the deficit ceilings were adjusted upward to accommodate this reality. But it did not take long before GRH Ⅱ also proved to be a failure.

In 1990, a new strategy was adopted with the enactment of the Budget Enforcement Act (BEA). Instead of setting limits on deficits, the congress introduced separate rules for discretionary spending and mandatory spending. On discretionary spending, cash limits were imposed for the next five years. Except in special circumstances, these limits were not to be breached. For mandatory spending (interest payments, social security benefits, etc.), which depend on exogenous variables such as interest rates and the number of the elderly, the so-called "pay-as-you-go (PAYGO)" principle was introduced. In PAYGO, any increase in deficits resulting from policy changes should be offset by corresponding changes in revenues or mandatory spending.

The new strategy worked well. It was renewed in 1993 and 1997. Actual spending on discretionary programs turned out to be larger than stipulated in the law every year except in 1996 (see Table 7). But the excess was always less than 1 percent of the stipulated amounts, and was mostly due to exceptional events such as the Gulf war and natural disasters.

Helped by the strong economy, the United States could attain budget surplus in 1999 for the first time since the mankind set foot on the moon. The unusually long period of boom in the 1990s boosted revenues above and contained the mandatory spending below the levels expected at the beginning. But it would be unfair to say that all surpluses were due to the strong economy. The rules introduced by BEA appear to have been quite effective in controlling expenditures and thereby reducing budget deficits.

First of all, these rules were aimed at controlling what could actually be controlled. Discretionary spending is by definition amenable to annual controls by the congress. Mandatory spending can also be controlled through the PAYGO rule by changing relevant laws. On the other hand, budget deficits are difficult to control because they are affected by the business cycles as well as by the government policy. When a target cannot be directly controlled by the authorities in charge, it is difficult to hold them responsible for the results, and we cannot be sure that they will make their best effort to achieve the target.

<Table 7> Expenditures and Revenues of the U. S. Federal Government

(billion dollars)

		1994	1995	1996	1997	1998
Total Spending	BEA estimates	1,523	1,578	1,645	1,745	1,843
	Actuals	1,462	1,516	1,561	1,601	1,653
Discretionary Spending	BEA limits	537	539	547	547	548
	Actuals	544	545	534	549	555
Mandatory Spending	BEA estimates	765	795	843	920	996
	Actuals	715	738	785	809	855
Revenues	BEA estimates	1,230	1,306	1,379	1,440	1,523
	Actuals	1,259	1,352	1,453	1,579	1,723
Deficits /Surpluses	BEA estimates	-270	-230	-266	-305	-320
	Actuals	-203	-164	-107	-22	70

Source: OECD (1999).

Between these types of targets, total spending is a superior choice because (1) it is less influenced by the cyclical position of the economy and therefore easier to control; and (2) it assists in a counter-cyclical management of fiscal policy by leaving the balance to fluctuate flexibly over the cycle. Presently, the Korean government intends to keep the annual spending totals unchanged in successive NFMPs, and thus appears to have the total spending as annual targets. But this point needs to be clearly communicated to the public.[24)]

Sixth, it is desirable to introduce various risk analyses in the National Fiscal Management Plan. Such analyses would address such issues as (1) the deviation of medium-term growth rates and other macroeconomic variables from the projected levels; (2) explicit and implicit contingent liabilities of the government coming from loan guarantees, public corporations, local governments, and others; and (3) population aging.

Seventh, a mechanism for "baseline" projections should be established. The MPB currently provides line ministries with standard assumptions on key macro-variables such as

[24)] With a fixed total spending, it may be difficult to cope with an unexpected surge of spending needs, for example in times of economic hardship. An escape clause may be needed that is not too lax to wage and price inflation. Based on these assumptions, line ministries project their spending needs for the next five years. But they should go further and distinguish between spending on existing programs ("baselines"), costs of new policy initiatives, and "savings options." The MPB would check the validity of ministerial projections and aggregate them to arrive at the government-wide baselines, costs of new policy initiatives, and savings options. Only then can the annual budgeting be closely linked with the National Fiscal Management Plan.

Eighth, a reconciliation process should be put in place to analyze the difference between projected revenue, spending, balance, and debt levels and the outturns. This is a critical step to secure accountability and transparency of macro-fiscal management. In case of the U.S. federal government, the deviation is decomposed into economic, policy, and technical factors.

Ninth, the internal auditing within line ministries and government agencies should be strengthened. An increased autonomy in financial management should be accompanied by an increased awareness of the possibility of fraud, waste, and abuse. In this regard, we can refer to the case of the U.S. federal government where the independence of internal auditors is guaranteed with the inspector general system and consider introducing a similar system.[25)]

Tenth, "program budgeting" needs to be introduced. The Korean government is currently redesigning the structure of its budget accounts around functions, administrations, and programs. The effort is spearheaded by the Budget and Accounting Reinvention Office (BARO).[26)] The resulting program structure will make it easier to allocate resources according to the national priorities and set ceilings on sectoral spending. "Programs" will also act as the basic units of

---

undermine fiscal discipline nor too stringent to accommodate reasonable demands for increased spending.

25) Under the Inspector General Act of 1978, the president appoints inspectors general (IGs) for certain specified federal establishments, by and with the consent of the Senate, without regard to political affiliation and solely on each individual's experience in specified areas. Under the Inspector General Amendments of 1988, the heads of designated federal entities appoint IGs, without the necessity of Senate confirmation. The IG Act identifies 26 federal establishments that are to have an IG appointed by the president with Senate confirmation and 30 designated federal entities that are to have an IG appointed by their agency heads. The IGs perform audits in accordance with generally accepted government auditing standards and report suspected violation of criminal law to the Attorney General. Each IG must prepare semiannual reports that summarize the IG's activities. The head of each agency transmits these reports unaltered to Congress and subsequently makes them available to the public (GAO, 1998).

26) The BARO is a special task force organized in 2004 to lead reforms in the area of program budgeting, financial reports and government financial statistics, and the IT system. It is composed of secondees from various organizations including the MPB, MOFE, MOGAHA, and BAI.

performance management in the future.

Performance Management

1) Overview

As noted above, budgeting in Korea has traditionally been focused on the *ex ante* control of inputs. The authorities have little experience in performance management through such methods as performance monitoring and program evaluation. There is no established feedback mechanism that supplies performance information to those in charge of budget preparation and execution, which partly explains the continuation of some ineffective and inefficient programs.

Performance management becomes more important with the introduction of the MTEF and top-down approach in budgeting. These changes will allow greater autonomy to line ministries and can lead to greater inefficiency unless complemented with a new mechanism to secure accountability in financial management.

In recent years, diverse efforts have been made to strengthen performance management in government. Some of them are listed in Table 10. Below, detailed explanation will be given on the Performance Management System (PMS), the Government Operations Assessment System (GOAS), and the Self-Assessment of Spending Programs (SASP).

<Table 10> Diverse Initiatives for Performance Management

Performance Management Initiatives	Organizations in Charge
Performance Management System (PMS)	MPB
Government Operations Assessment System (GOAS)	Office of Government Policy Coordination (OGPC)
Management by Objectives (MBO)	MOGAHA
Performance Audit	BAI
Self-Assessment of Spending Programs (SASP)	MPB

2) Performance Management System (PMS)

The PMS is led by the MPB. Its design follows the framework of the Government Performance and Results Act (GPRA) of the U.S. federal government. It is based on the pilot project on performance budgeting carried out in 1999-2002.[27)] It requires line ministries to (1) set up performance goals and indicators, (2) prepare annual performance plans and reports, and (3) submit them to the MPB at the start of the annual budget cycle.

A major drawback of the PMS lies in the fact that it covers only part of ministerial activities. Those activities not involving large sums of expenditure (such as pure policy-making) are excluded from performance monitoring. Also, activities for which the benefits of performance monitoring are expected to be small (such as wages and salaries, "basic program" expenditures, and general administrative expenses) are excluded as well. This has the potential to lead line ministries to disregard those activities that are critical in achieving their overall mission but involve small expenditures or only wages and salaries, and to lose sight of the linkage between the overall mission, strategies, and performance goals.

The PMS, like its pilot project, has not been very successful. There exists only a lukewarm support from the top management in the MPB. Line ministries are also showing little enthusiasm for the PMS. In most cases, performance indicators prepared by line ministries are not derived from ministerial missions in a systematic fashion. Most importantly, performance reports are not open to the public, giving little incentive for line ministries to think seriously about the exercise seriously.

3) Government Operations Assessment System (GOAS)

The GOAS is led by the Office for Government Policy Coordination (OGPC). It aims to assess the performance and organizational capacity of ministries and citizen satisfaction with them. It is composed of the assessments of (1) the central government ministries, (2) local

[27)] In 2001, 39 organizations participated in the pilot. A survey of the pilot (Jun and others, 2002) found that over half of the indicators proposed in the performance reports were based on outputs and only one-fifth were based on outcomes. The rest were input indicators. And about two-thirds of the indicators were non-quantitative ones. The survey also found that many indicators changed from one year to another, making it difficult to trace program performance consistently. It subsequently proposed the government to apply performance indicators only to major large-sized expenditure programs for which quantitative governments, (3) specific programs, etc. The assessment results are reported to the President in biannual cabinet meetings.

The GOAS has not been very successful either. Up to 2004, it did not require line ministries to set out a clear framework of mission and strategy. There was no systematic assessment of performance utilizing indicators, relying instead on subjective assessment by outside experts and in-house staff. In addition, there was no serious cooperation and coordination with the MPB.

An important change took place at the end of 2004. The OGPC now requires line ministries to establish performance indicators and announce target levels in annual business plans. Each ministry should report its annual business plan to the President in an open meeting held at the beginning of the year. From 2005 on, performance assessment by the OGPC will be based on these indicators.

After the introduction of new requirements, we observe a drastic change in the attitude of line ministries. They are making serious efforts to think through their missions and set out strategies and performance indicators. But the coordination with the MPB is still weak. Ministerial business plans are also poor in content, lacking, for example, a systematic linkage between planning and budgeting in most cases.

4) Self-Assessment of Spending Programs (SASP)

The SASP is currently under preparation by the MPB. It is being designed after the Program Assessment Rating Tool (PART) of the U.S. federal government. It requires line ministries to assess their own programs with spending levels above a certain threshold. The assessment is supposed to cover all ministerial programs in a cycle of 3 years. In the current preliminary set-up, the assessment will be based on 16 questions common to all types of programs and a few additional questions specific to different types of programs.[28)] Table 11 lists the common questions asked.

---

indicators are easy to construct.

[28)] Types of programs are infrastructure investment, procurement of large-scale facilities and equipment, provision of direct services, capital injection, subsidies to private entities, grants to local governments, and R&D.

Answers to the questions take the form of "yes (1)" or "no (0)." In case of the questions regarding the achievement of program objectives and the customer satisfaction, 4-scale answers (1.00, 0.67, 0.33, 0.00) will be given. A weight is assigned to each question and the overall assessment will be based on the weighted sum of the answers. Programs are then classified as "effective (85-100)," "moderately effective (70-84)," "adequate (50-69)," "not effective (0-50)," and "results not demonstrated." The MPB will review the results of ministerial self-assessments and take them into account when preparing annual draft budgets and the National Fiscal Management Plan.

<Table 11> Common Questions for the SASP

Areas	Common Questions
Program design	• Does the program have clear purposes and legal or other bases? • Can the government intervention be justified? • Is government spending necessary to achieve the objectives? • Is the program duplicative of other program? • Has the program been subjected to an objective feasibility study? • Is the proposed program design most cost-effective? • Are performance goals and indicators in place? • Do performance goals and indicators fully reflect program objectives? • Are the targets set at reasonable levels?
Program management	• Is the implementation being monitored regularly? • Is the program being implemented as planned? • Are efforts being made to reduce costs or increase efficiency?
Performance assessment and feedback	• Has an objective and comprehensive program evaluation been conducted? • Did the program achieve the intended objectives? • Are customers and stakeholders satisfied with the program performance? • Is the agency utilizing the assessment results for program improvement and budget planning?

5) Improvements Needed

There are several ways to improve the current efforts to strengthen performance management.

First, the diverse initiatives across various organizations (the MPB, OGPC, MOGAHA, and others) should be consolidated into an integrated system of performance management to minimize inefficiency and overlapping responsibilities. In this regard, a close cooperation between the OGPC and MPB looks essential, with the OGPC taking the lead and the MPB providing logistics.

Second, as in the case of MTEF, a sound system of planning and reporting should be established. It is a precondition for all kinds of good performance management. As a first step, we should consider requiring line ministries to prepare annual business plans and performance reports. The business plan would describe in detail the mission, the strategic and performance goals, the activities to attain the goals, and the associated resources. The performance report would review the performance results and discuss the future course of actions.

In the United States, federal agencies should prepare strategic plans, performance plans, and performance reports under the GPRA (Table 12). In Korea, line ministries are expected to prepare performance plans and reports under the PMS. More detailed requirements like those in GPRA would help enriching the plans and reports. The MPB can also compare them across different ministries and propose best practices. It can also rate their quality and publish the results on a web-site. Of course, line ministries should be given the freedom to determine the document formats and encouraged to experiment with different modes of presentation as long as they satisfy basic requirements.

<Table 12> Documents Required in the GPRA

Documents	Requirements
Strategic plans	• Should cover not less than 5 years, and should be updated at least 3 years. • Must contain: - A comprehensive mission statement for major functions and operations of the agency; - General and outcome-related goals; - A description of how the agency will achieve the goals and the operational process and resources required; - A description of how the goals relate to annual performance plan goals; - An identification of key factors external to, and beyond the control of, the agency that could significantly affect the achievement of goals; and - A description of program evaluations, with a schedule for future program evaluations.
Performance plans	• Should cover each program activity in the agency's budget. • Must: - Establish goals that define the level of performance to be achieved by a program activity; - Express goals in an objective, quantifiable, and measurable form unless an alternative form is approved by OMB; - Describe the operational processes and resources required to achieve goals; - Establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity; - Provide a basis for comparing actual results with the established goals; and - Describe the means to be used to verify and validate measured values.

Performance reports	• Should include actual program performance results for the 3 preceding fiscal years. • Must; - Review how successfully performance goals were achieved; - Evaluate the performance for the current year relative to the performance goals achieved during the fiscal year(s) covered by the reports; - Where goals are not met, explain and describe (a) why the goals were not met, (b) plans and schedules for achieving the goals, and (c) if the goals are impractical or infeasible, why that is the case and what action is recommended; - Describe the use and assess the effectiveness in achieving performance goals of any waiver under 31 U.S.C section 9703; and - Include the summary findings of program evaluation completed during the fiscal year.

Source : GAO (1998).

Third, a greater emphasis on program evaluation is being called for. There is increasing awareness among many countries that performance monitoring and evaluation can provide complementary information on performance (Perrin, 2002). An effective performance management system requires both monitoring and evaluation. Evaluation has the potential to identify what actually has happened as a result of a program or initiative, whether planned or not, including unintended outcomes and effects that often may be more significant than the stated objectives. In particular, evaluation has the potential to identify why and how outcomes have come about. This is essential information in order to be able to attribute effects to program activities. It is also critical information in order to make decisions about future policies and programs, to assist in program improvement, and to be able to generalize what has happened from a single setting to elsewhere.

In a country like Korea which has little experience in evaluation, a formal strategy to introduce the evaluation practice seems desirable. The Australian Ministry of Finance, for example, imposed the following four requirements on line ministries in mid-1980s (Mackay, 2003):

- Every program should be evaluated every 3-5 years.
- Each portfolio (i.e., comprising a line ministry plus other agencies) should prepare an annual portfolio evaluation plan, with a 3-5 year forward coverage, and submit it to the Department of Finance – these plans comprise major program evaluations with substantial resource or policy implications.
- Ministers' new policy proposals should include a statement of proposed arrangements for future evaluations; and
- Completed evaluation reports should normally be published, unless there exist important policy sensitivity, national security, or commercial-in-confidence considerations, and the budget documents which ministries table in parliament each year should also report major evaluation findings.

This strategy had significant influence in spreading the evaluation practice among line ministries in subsequent years. MPB should consider adopting a similar strategy.

Fourth, when a performance-orientation has been reasonably established in the government, a greater use of performance contracts can be encouraged. A minister and his senior managers would agree on a set of performance targets, review the progress, and discuss problems. Similar practices can be introduced between managers at all levels and their staff and between ministries and their agencies.

Under the current system in Korea, performance cannot significantly influence the annual salaries of individual employees because they are determined in most part by the years of service and rank of the individual. One may therefore doubt the usefulness of performance contracts, but performance agreements do not require performance-based monetary rewards to be effective. They provide for "relational contracts" (Schick, 2003) and help enhance performance by spurring the parties to the contract to focus on results.

But it should be remembered that the introduction of performance contracts presupposes a reasonably working performance management framework. Otherwise, they can generate discontent and lower the morale among the employees. It is important to build trust in the public sector in general and in the performance management system in particular before utilizing performance information for accountability purposes.

Government Financial Statistics

Another problem with the current public management system is the limited scope of the government financial statistics. As explained above, the consolidated central government covers the general and special accounts and funds. But it excludes some important fiscal activities of the government. For example, the National Health Insurance is excluded from the consolidated government even though it is a social insurance program that covers over 90 percent of the population. Also excluded are various quasi-government organizations and research institutions (such as KDI) which are mainly financed and whose activities are closely supervised by the government.

Even within the central government, the revenue and expenditure statistics on one hand and the government asset and liability statistics on the other hand have different coverage. The latter excludes some funds that are included in the former, with possible under-reporting of the true size of government assets and liabilities. In addition, government assets are reported separately for credits (e.g., government loans), properties (e.g., securities and premises), cash holdings (e.g., deposits at the central bank), and supplies, making it impossible to get the overall picture of financial and non-financial assets.

Logical consistency is compromised also in the treatment of treasury bonds held by the National Pension Fund and other funds. These bond holdings are recorded simultaneously as government assets (as they are held by funds) and liabilities (as they are issued by the government). Ideally, such bond holdings should be netted out, and the asset and liability statistics should only reflect the net transactions between the government and the private sector.

The consolidated central government also shows large discrepancies with the National Accounts in its coverage. The latter includes the National Health Insurance in the government sector but excludes some activities such as the credit programs of the National Housing Fund (NHF). As a result, the amount of government liabilities differs significantly between two statistical systems.

We have similar problems in the data for public financial and non-financial corporations. Together with the general government (the central and local governments and social security funds), public corporations constitute the public sector. However, in Korea, there does not exist a consistent definition of public corporations. For example, various financial funds such as the credit guarantee funds are not included in the public sector even though they have every aspect of public financial corporations. The government does not publish a comprehensive review on the financial status of individual public corporations, let alone consolidated financial statements.

This practice makes it difficult to assess the financial health of the public sector in general, and the implicit fiscal burden incurred through quasi-fiscal activities of financial funds in particular. Of particular concern are credit guarantee funds[29)] that significantly expanded their activities after the recent economic crisis. At the end of 2003, the outstanding stock of guarantees amounted to 11 percent of GDP, far higher than in other countries where the public guarantees are usually less than 1 percent of GDP. Yet no reports exist that explain the future risks these funds may impose on the government finance.

As a first step to address this problem, we need to redefine the scope of the public sector and find ways to produce comprehensive, accurate, and timely information on its financial status. The starting point will be the revised 2001 Government Finance Statistics Manual of IMF. But the revised Manual provides only a general guide on the scope of the general government and the public sector, and there are a lot of questions to be answered before applying it to the Korean case.

For example, should the National Housing Fund (NHF) be included in the central government or in the wider public sector? So long as the NHF is funded mainly through the issuance of NHF bonds and treasury bonds which requires an annual parliamentary approval as part of the budget, it should be included in the government. But the lending activities by the NHF are mostly carried out on a commercial basis though at concessional rates, and for this reason, the National Accounts includes the NHF in the public corporations sector and excludes

---

29) These are the Infrastructure Credit Guarantee Fund, the Korea Technology Credit Guarantee Fund, the Credit Guarantee Fund for Agriculture, Forestry, and Fishery, the Korea Credit Guarantee Fund,

its bond issuance from government liabilities. Similar questions arise in the case of “enterprise special accounts” such as the National Railroad, the Communication Service, and the Government Procurement Special Accounts.

A reform is underway to redefine the public sector and to introduce accrual accounting in financial reports. The effort is led by the Budget and Accounting Reinvention Office (BARO). When their work is completed by 2007, big improvements will have been made in this regard.

5. Conclusion: Roads Ahead

The period after the crisis of 1997 witnessed many efforts to modernize the fiscal management system in Korea. Unlike in other developing countries where such efforts are often imposed by international organizations as a string attached to the aids provided, the Korean government began the reform process on their own initiatives. This feature entails both assets and liabilities for the design and implementation of reform.

On one hand, the “ownership” of reform can be secured and genuine efforts guaranteed. The reform can have a better footing when designed by “insiders” who have better knowledge on the institutional background. On the other hand, the lack of external expert help may make it difficult to draw a well-designed blueprint for reform. And without an external pressure, the reform drive may soon lose its momentum.

There are many improvements to be made in the current fiscal management system. The complicated budget structure needs to be streamlined. It is necessary to strengthen fiscal discipline in a target-based approach with the help of the MTEF. The MTEF itself should be improved in many aspects as explained in the text. Various initiatives to introduce performance management should be integrated and embodied in departmental planning and reporting. The scope of the government needs to be redefined and the financial reporting upgraded.

All these remain challenges to be tackled in coming years. Reflecting on the past experience, none of them look easy. But major moves have been already made, and there seems no way back.

---

and the Housing Finance Credit Guarantee Fund.

References

Bank of Korea, *National Accounts*, 2001.

Bahn, Jahng Shick, *A Study on the Determinants of Korea's Fiscal Soundness*, Department of Public Administration, Graduate School, Korea University, 2003 (in Korean with an English summary).

Bayoumi, Tamim, "The Japanese Fiscal System and Fiscal Transparency," in (eds.) Bijan B. Aghevli, Tamim Bayoumi, and Guy Meredith, *Structural Change in Japan: Macroeconomic Impact and Policy Challenges*, 1998, Washington D.C.: International Monetary Fund.

________ and Barry Eichengreen, "Restraining Yourself: The Implications of Fiscal Rules for Economic Stabilization," *IMF Staff Papers*, Vol. 42, No. 1, March 1995, pp. 32-48.

Gustafsson, Allan, "MTEF in Sweden," in Youngsun Koh (ed.), *Reforming the Public Expenditure Management System: Medium-Term Expenditure Framework, Performance Management, and Fiscal Transparency*, Korea Development Institute, 2004.

Han, Jin-hee, Kyung-soo Choi, Dong-seok Kim, and Kyung-mook Lim, *The Potential Growth Rate of the Korean Economy: 2003-2012*, Korea Development Institute (in Korean), 2002.

International Monetary Fund, *Government Finance Statistics Yearbook*, 2002.

Jun, Taek-seung and Ki-paik Park, *Review of Pilot Studies on Performance-Based Budgeting*, 2002, Korea Institute of Public Finance (in Korean).

Korea Development Institute, *Forty Years of Korean Fiscal Policy*, 1991 (in Korean).

Mackay, Keith, "The Two Generations of Performance Evaluation and Management System in Australia," in *Performance Evaluation System and Guidelines with Application to Large-Scale Construction, R&D, and Job Training Investments*, the World Bank and Korea Development Institute Conference Proceedings, Korea Development Institute, July 2003, pp.45-60.

Ministry of Finance and Economy, *Government Finance Statistics in Korea*, various issues.

Ministry of Planning and Budget, *Annex to Summary of 2005 Budget*, 2005.

OECD, *Budgeting in a Surplus Environment*, PUMA/SBO(99)3/FINAL, July 1999.

________, *Economic Surveys: Korea*, 2003.

Perrin, Burt, "Implementing the Vision: Addressing Challenges to Results-focused Management and Budgeting," OECD, 2002.

Potter, Barry H. and Jack Diamond, *Guidelines for Public Expenditure Management*, International Monetary Fund, 1999.

Schiavo-Campo, Salvatore and Daniel Tommasi, *Managing Government Expenditure*, Asia Development Bank, 1999.

Schick, Allan, "The Performing State: Reflection on an Idea Whose Time Has Come But Whose Implementation Has Not," GOV/PUMA/SBO(2003)17, OECD, May 2, 2003.

U.S. GAO, "Federal Trust and Other Earmarked Funds: Answers to Frequently Asked Questions," GAO-01-199SP, January 2001.

________, "Managing for Results: The Statutory Framework for Performance-based Management and Accountability," GAO/GGD/AIMD-98-52, January 1998.

Von Hagen, Jurgen and Ian Harden, "Budget Processes and Commitment to Fiscal Discipline," IMF Working Paper WP/96/78, July 1996.

World Bank, *Public Expenditure Management Handbook*, 1998.

Yoo, Gyeongjoon, "International Comparison of the Income Distribution," *KDI Journal of Economic Policy*, 2003. II, pp. 55-88 (in Korean).