

# Budget Formulation and Implementation in Korea: A Macroeconomic Perspective

He, Dong

International Monetary Fund

March 2003

Online at https://mpra.ub.uni-muenchen.de/9756/ MPRA Paper No. 9756, posted 29 Jul 2008 01:48 UTC

## II. BUDGET FORMULATION AND IMPLEMENTATION IN KOREA: A MACROECONOMIC PERSPECTIVE<sup>1</sup>

#### A. Introduction

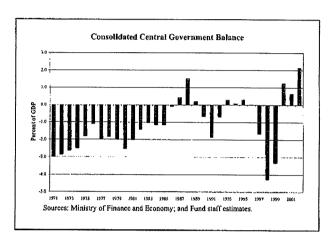
- 1. Korea has an admirable tradition of fiscal conservatism, with a deep-rooted resistance to incurring fiscal deficits and public debt. On the eve of the financial crisis that erupted in late 1997, gross public debt was below 10 percent of GDP as a result of near balanced budget outcomes in the preceding decade. The fiscal accounts, however, have not been very transparent: the budget structure is unnecessarily complicated and fragmented; and weaknesses in budget formulation and implementation make the budget a poor indicator of the overall fiscal stance and reduce its efficiency as a tool of macroeconomic policy.
- 2. In recent years the government has introduced a medium-term plan for fiscal consolidation and initiated reform measures to improve fiscal transparency. A special law on fiscal soundness was submitted to the National Assembly in 2001 that aims to achieve a balanced budget and ensure prudent debt management. There is a political consensus in Korea on the need to reduce public debt, which, although low by OECD standards, is at historically high levels as a result of the financial crisis in the late 1990s. There are also plans to revise the Budget and Account Law to adopt performance-based budget preparation and implementation and to ensure better provision of information on fiscal operations to the public. These reform measures notwithstanding, more consideration needs to be given to the role of fiscal policy in macroeconomic management. In particular, there is a need to formulate fiscal policy in a medium-term framework so that the fiscal stance is appropriate to developments in the business cycle.
- 3. Fiscal policy as a tool of macroeconomic management is hampered by two factors. First, the automatic fiscal stabilizers are relatively weak in Korea. The weakness of the automatic stabilizers reflects the small size of government and the small social welfare system, which means that expenditures are relatively insensitive to fluctuations in economic activity. Second, there is a relatively high degree of uncertainty about fiscal outcomes in Korea, with actual budget outturns often deviating from the budget plans by a large margin. Thus, the impact of fiscal policy in any given year is often different from what was initially intended or considered desirable, with the risk that it becomes destabilizing. In particular, large systematic expenditure shortfalls and overshooting of revenues tend to make the fiscal stance pro-cyclical during an economic downturn.
- 4. This chapter describes the main features of the Korean fiscal system from a macroeconomic perspective. It discusses why fiscal outturns tend to differ from the budget and makes suggestions to improve budget formulation and implementation. It also discusses how medium-term fiscal objectives such as maintaining a balanced budget and reducing public debt can be reconciled with the short-term objective of avoiding procyclical fiscal impulses in a downturn.

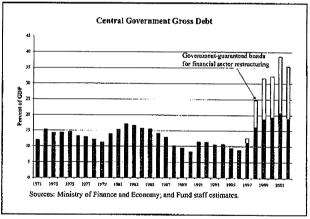
<sup>&</sup>lt;sup>1</sup> This paper was prepared by Dong He (APD).

5. The following section describes the main characteristics of the revenue and expenditure structures and analyzes how such characteristics affect the size of automatic fiscal stabilizers in Korea. Section C describes patterns of deviations of budget outturns from budget plans and analyzes the causes for such deviations. Section D discusses the impact of the budget on aggregate demand. Section E presents recommendations about the role of a medium-term fiscal framework in strengthening the budget as a tool of macroeconomic management. Section F concludes.

#### B. Main Features of Government Expenditure and Revenue

6. Since the mid-1980s, the Korean government implemented conservative fiscal policies that contributed to low gross public debt on the eve of the 1997–98 financial crisis.<sup>2</sup> The principle of "expenditure within revenue," which was adopted in the mid-1980s, limited spending commitments to anticipated revenues, even though no formal fiscal rules were imposed by the constitution or by legislation. The breakout of the financial crisis in late 1997 marked a major shift in the stance of fiscal policy. Instead of balanced budgets during a period of high growth, the government ran large deficits during the crisis, reflecting the sharp contraction of tax receipts in the economic downturn as well as discretionary fiscal support to demand. In addition, the government incurred large contingent liabilities by guaranteeing bonds issued by the Deposit Insurance Fund and the Nonperforming Assets Management Fund in the context of financial sector restructuring.





<sup>&</sup>lt;sup>2</sup> Korea was one of the few OECD countries where net public debt was negative; that is, the central government was a net creditor to the other sectors in the economy. There are doubts, however, about the quality of government assets, which are mostly loans to local governments and private entities (Koh, 2000).

- 7. Another defining characteristic of Korean fiscal conservatism is the relatively small size of government. On a general government basis, total public expenditure in 2000 amounted to 23 percent of GDP, the lowest except for Mexico among OECD countries (OECD, forthcoming). While this was partly due to Korea's level of economic development, Greece, Portugal, and several central European countries with comparable or lower income levels have far higher spending levels.
- 8. Moreover, the composition of government expenditures by economic classification differs substantially from most OECD countries. Three major factors underlie the comparatively low public spending level in Korea. First, income transfers are limited by the relatively small size of the social safety net. At 3.6 percent of GDP, such spending is a quarter of the OECD average, although it is higher than in Mexico. Second, government consumption, at around 10 percent of

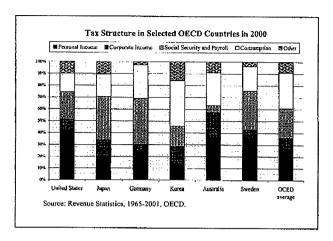
|               | Income<br>Transfers | Subsidies | Interest<br>Payments | Consumption | Net Capital<br>Outlays | Total<br>Outlays |
|---------------|---------------------|-----------|----------------------|-------------|------------------------|------------------|
| Korca (2000)  | 3.6                 | 0.3       | 0.7                  | 10,1        | 8.3                    | 23.0             |
| Australia     | 8.9                 | 1.1       | 2.0                  | 18.5        | 2.2                    | 32.7             |
| Germany       | 18.9                | 1.6       | 3.3                  | 19.0        | 3.0                    | 45.7             |
| Greece (2000) | 16.3                | 0.2       | 7.1                  | 15.5        | 4.9                    | 44.0             |
| Japan         | 10.0                | 0.9       | 3.3                  | 16.7        | 5.9                    | 36.8             |
| Mexico (2000) | 1.7                 | 0.3       | 3.6                  | 11.1        | 5.3                    | 21.8             |
| Portugal      | 12.5                | 1.4       | 3.1                  | 20.7        | 4.4                    | 42.1             |
| Sweden        | 18.1                | 1.5       | 3.4                  | 26.7        | 2.5                    | 52.2             |
| United States | 11.4                | 0.5       | 3.4                  | 15.1        | 0.9                    | 31.2             |
| OECD total    | 12.8                | 0.9       | 3.5                  | 17.3        | 2,8                    | 37.3             |

|               | Defence | General<br>Public<br>Services | Public<br>Order and<br>Safety | Education | Health | Social<br>Protection | Economic<br>Affairs |
|---------------|---------|-------------------------------|-------------------------------|-----------|--------|----------------------|---------------------|
| Kores         |         |                               |                               |           |        |                      |                     |
| 1990          | 3.9     | 2.5                           | 1.2                           | 3.4       | 1.7    | 2.5                  | 3,8                 |
| 1998          | 3.1     | 3.2                           | 1.5                           | 4.1       | 2.4    | 3.9                  | 5.6                 |
| Germany       | 1.2     | 3.9                           | 1.6                           | 4.3       | 6.3    | 21.9                 | 4.2                 |
| Greece        | 3.3     | 10.0                          | 1.3                           | 4.2       | 3.9    | 19.6                 | 0.2                 |
| Japan         | 1.0     | 2.9                           | 1.5                           | 4.2       | 6.2    | 10,7                 | 4.7                 |
| Portugal      | 1.7     | 6.4                           | 2.0                           | 6.9       | 6.4    | 13.0                 | 5.8                 |
| Sweden        | 2.2     | 10.2                          | 1.3                           | 6.9       | 6.3    | 24.5                 | 4.0                 |
| United States | 3.3     | 4.2                           | 1.9                           | 4.8       | 5.0    | 6.5                  | 1.9                 |
| Average       | 2,3     | 5.8                           | 1.6                           | 5.1       | 5.2    | 14.3                 | 3.8                 |

GDP, is well below the OECD average of 17 percent. Third, relatively low public debt translates into modest interest payments as a share of GDP. In contrast, public investment is exceptionally high, with net capital outlays exceeding 8 percent of GDP. The structure of public expenditure classified by function also shows large differences with other OECD countries. Publicly provided social protection is significantly lower in Korea. On the other hand, defense spending, at around 3 percent of GDP, is double the OECD average, reflecting continued security concerns in the Korean peninsula.

9. The Korean tax system is characterized by a low overall tax burden and limited labor market distortions (OECD, 2000). Total government revenue, at 23 percent of GDP, were among the lowest in the OECD. The low tax burden in Korea reflects a combination of narrow tax bases and relatively low marginal effective tax rates. The tax mix in Korea relies

more heavily on consumption and property taxes than many other OECD countries. The 38 percent share of consumption taxes in total revenues is substantially higher than in countries such as Japan and the United States, despite a sharp fall in recent years. In addition, taxation of labor (as measured by average effective tax rates) is much lower in Korea than elsewhere in the OECD, while average taxation of consumption and capital appear to be close to the OECD average.



- 10. These characteristics of government expenditure and revenue render the automatic fiscal stabilizers weak in Korea. As indicated by van den Noord (2000), the most important factor determining the cyclical sensitivity of the fiscal position is the size of the general government sector: the larger the share of government expenditure in domestic output, the greater is the sensitivity of the fiscal position to fluctuations in economic activity. The progressivity of taxes, the generosity of unemployment benefits and the cyclical sensitivity of various tax bases are also significant factors in determining the cyclical sensitivity of the fiscal position. In future, the automatic stabilizers in Korea may be strengthened as a result of expected changes in the size and structure of government spending and tax reforms discussed below.
- 11. The size and structure of government expenditure and revenue in Korea are likely to experience significant changes over the medium term. Social welfare spending increased as the social safety net was expanded after the 1997–98 financial crisis. Subsequently, the government launched the "productive welfare" system in October 2000 to ensure minimum subsistence standards, which made social benefits under the Basic Livelihood Protection Program a right

|                                 | 1997   | 1998   | 1999       | 2000      | 2001   | 2002   |  |  |
|---------------------------------|--------|--------|------------|-----------|--------|--------|--|--|
| Total (in billion won)          | 10,148 | 14,921 | 20,526     | 17,509    | 22,993 | 23,980 |  |  |
| (in percent of GDP)             | 2.2    | 3.4    | 4.3        | 3.4       | 4.2    | 4.0    |  |  |
| Of which:                       |        | (1     | in percent | of total) |        |        |  |  |
| Unemployment insurance          | 1.7    | 8.0    | 8.3        | 6.5       | 7,5    | 8.8    |  |  |
| Support for minimum living cost | 9.4    | 7.6    | 8.7        | 13.7      | 14,5   | 14.5   |  |  |
| Occupational accident insurance | 1.5    | 9.7    | 6.2        | 8.3       | 7.8    | 7.9    |  |  |
| National Health Insurance       | 57.3   | 46.1   | 38.6       | 51.6      | 57.6   | 55.6   |  |  |
| National Pension 2              | 14.8   | 16.3   | 19.0       | 9.1       | 6.8    | 9.4    |  |  |

for those who qualify. The newly elected government of President Roh, Moo-hyun may

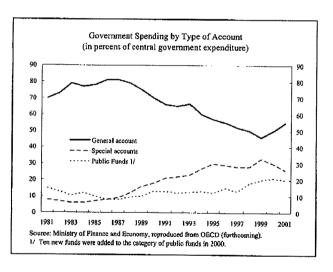
<sup>&</sup>lt;sup>3</sup> The share of taxes on goods and services in total tax revenue was 60 percent in 1985 and 43 percent in 1995. A lower share of indirect taxes will tend to increase the progressivity of the tax system.

further expand the safety net. Over the longer term, spending pressure are likely to accelerate as a result of population ageing and the consequent demands on social spending, notably on pensions and health care. In addition, Korea faces the uncertain cost of potential unification with North Korea.

12. The overall tax burden is also likely to rise to finance the higher spending pressures noted above and because tax revenue will probably grow faster than income, reflecting a progressive income tax system in an environment of fast economic growth. The government has initiated reform measures to address the weaknesses of the tax system, which include generous allowances and loopholes for individuals, large-scale and wide-ranging tax preferences for enterprises, and an inappropriate taxation of property (OECD, 2000). The aim is to create an attractive business environment and improve equity and efficiency by broadening the tax base, lowering tax rates, and making the system more transparent and easier to understand. These reform measures will likely change the tax mix significantly, raising the share of direct taxes relative to indirect taxes, and the share of individual income taxes relative to corporation taxes.

### C. Budget Structure, Formulation, and Implementation

13. Even though fiscal discipline has been maintained at the aggregate level. fiscal management in Korea suffers from important weaknesses. Insufficient transparency of the budget reflects its highly complicated and fragmented structure (Box II.1). The extensive use of special accounts and public funds, with earmarking of revenue resources, weakens fiscal planning because the budget authorities have little control over a significant share of public spending. The fragmented structure prevents a holistic view in determining priorities for the use of government



resources, or even risks overlapping expenditures from different accounts or funds to serve the same policy objective.

14. From a macroeconomic perspective, the fragmented budget structure makes it difficult to form a meaningful view of the budget in economic terms. The use of a number of different budget concepts risks misunderstanding or confusion about both the policy stance and policy intentions. Given uncertainty about spending out of the public funds, the total level of expenditure on a consolidated basis is unknown when a new budget is prepared and approved by the parliament. Such uncertainty reduces the usefulness of the budget as a tool of macroeconomic policy since the impact of government expenditure on private sector demand also becomes uncertain.

#### Box II.1. The Budget Structure and Budget Concepts

There are four different types of accounts or funds in the Korean budgetary system: one General Account (GA), 22 special accounts, 47 public funds, and more than ten "other" funds. The GA comprises about half of central government spending on a consolidated basis. The proliferation of special accounts and public funds reflects the legacy of the economic policies of the 1960s and 1970s when a range of earmarked taxes and so-called quasi-taxes were created to finance public investments and loans to achieve specific policy objectives. While these accounts and funds have separate budgets and are managed independently, there are very complicated financial transfers among them, thus reducing transparency and masking accountability.

- The GA includes all transactions not classified by law as being undertaken by special accounts or funds. It is used to carry out the general purposes of government and its constituent ministries rather than being restricted by law to a specific program.
- Special accounts were introduced for certain government activities. These accounts can be divided into four categories:

  (i) business-like activities such as railway, telecommunications, and grain management, which would typically be nonfinancial public enterprises in other countries; (ii) special funds using earmarked sources of revenue, such as taxes, fees, and charges for particular government activities (e.g., toll roads, energy and resources, rural tax, and agriculture and fisheries structural adjustment); (iii) financing funds, such as those for fiscal lending and shared taxes to local governments; and (iv) miscellaneous smaller funds, such as that for prison operations. Special accounts are usually managed by the relevant line ministry, although responsibility for some special funds is shared by several ministries.
- Public funds were introduced for major government activities involving the receipt and disbursement of funds. They can be divided into six categories: (i) the largest are the pension, unemployment, and health insurance funds, which are typically trust funds in many countries; (ii) the public money management fund collects the proceeds from government borrowing and channels it to the GA, the Fiscal Lending Special Account, and other public funds; (iii) classic revolving funds such as for the aid budget; (iv) earmarked funds; (v) various industry funds, lending from which is below market rates; and (vi) a large national housing fund that supports low-income households.
- "Other" funds are established under laws pertaining to the non-government sector and are not managed by line ministries. However, ministry officials are often appointed as board members, allowing them to exert indirect control. Some "other" funds have been established to deal with financial sector restructuring (the Nonperforming Assets Management Fund, and the Deposit Insurance Fund); and there are also some guarantee funds and earmarked funds.

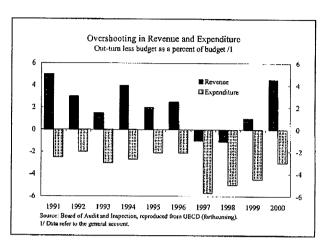
The annual provisions in the budget for the GA and the special accounts need to be approved by the National Assembly (NA). The budgets and accounts of public funds are presented to the NA for information, but the decision on the financial balances to be achieved by the funds is determined by the relevant ministries, in consultation with the Ministry of Planning and Budget. However, revisions to the Fund Management Act in December 2001 require that the public funds be subject to parliamentary approval beginning with the 2003 budget. This reform also increased the coverage of public funds by transforming a number of "other" funds into public funds. The balances of "other" funds are not subject to approval by the NA; nor is information on their balances required by the NA.

The authorities use four different budget concepts for the central government in budget documents:

- The narrowest budget concept covers only the GA. The detailed information by the functional, economic, and organizational classifications is only provided for this budget concept.
- A second budget concept covers the GA and the Fiscal Lending Special Account, netting out internal transfers. This is the
  total amount of "the budget," and it is the rate of increase in this aggregate that is announced by the government in its public
  presentation of the budget.
- A third and broader budget concept covers the GA and all 22 special accounts. It is the official budget, as defined in the Budget and Accounts Act, that is proposed by the government and approved by the NA. Detained information on sector amounts and their main programs are published together for this budget concept.
- The broadest budget concept is the consolidated budget, which covers the GA, all 22 special accounts, and all public funds. It is compiled and calculated according to the GFS rules (but excluding the "other" funds), specifying the financing and netting out internal transfers. When the authorities refer to the fiscal balance, this is the budget concept used.

The consolidated government budget suffers from weaknesses in its coverage and methodology. First, the GFS accounts do not include local governments, which hampers budget planning and monitoring at the general government level. Second, the budget is recorded on a cash-basis, which fails to deliver a fair and accurate picture of the impact of government activities on its overall financial position. In addition, fiscal data are typically published in highly aggregated form; and including privatization receipts above the line obscures underlying developments. Some of these problems are being addressed. The authorities currently plan to include local governments in the consolidated budget starting in 2003 and to move by 2005 at the latest from the present cash-based accounting to accrual accounting standards, a change that is in line with the new GFS standards.

15. Budget formulation also suffers from incentives that adversely affect the behavior of government officials. Whether for historical or cultural reasons, "overperformance"—in the sense of conservative revenue estimates and underspending by ministries resulting in better-than-expected budget balance outturns—was encouraged. There appears to be a view among government officials that "the larger the surplus the better." This approach fostered a tradition of deliberately conservative revenue forecasting, leading to a tendency for



overshooting in revenues; and of implicit encouragement to line ministries to plan for a cushion so that spending did not exceed the budgeted amount, leading to systematic expenditure shortfalls.<sup>5</sup> (Table II.1)

16. Weaknesses in budget implementation also contribute to large deviations between budget plans and outturns. Arrangements for regular in-year monitoring and reporting on expenditure and revenue developments, with an analysis of causes of deviations from plans, are not well developed. Monitoring spending from the public funds is the responsibility of the line ministries concerned, rather than the MPB or the MOFE. This mitigates against clear analysis of the development of the overall fiscal balance during the year, or of the most economical cash management techniques to balance shortfalls and surpluses in individual accounts. Most fundamentally, there is no provision for a comprehensive mid-year review of the budget, using updated forecasts of the economy and expected fiscal outturns, which would provide a clear basis for decisions about needed fiscal measures such as supplementary expenditure provisions or other in-year measures, and give a firm framework for the following year's budget proposals.

<sup>&</sup>lt;sup>4</sup> For example, officials of the Ministry of Finance and Economy have described fiscal performance in 1999–2001 as follows: "Fiscal policy and public debt management have been exemplary, with the fiscal balance showing better results than budgeted figures for three consecutive years."

<sup>&</sup>lt;sup>5</sup> Non-interest expenditure was 1.3 percentage points of GDP lower than budgeted in 2000, 0.9 percentage points lower in 2001, and estimated 0.6 percentage points lower in 2002. The shortfall in 2002 would have been larger were it not for the supplementary budget of W 4.1 trillion (0.7 percent of GDP) approved in September 2002 to finance typhoon-related reconstruction.

Table II.1. Consolidated Central Government Operations, 2000-02

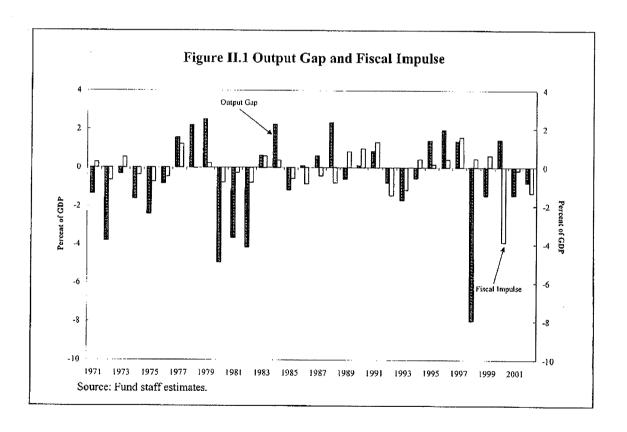
|                                       | 2000   |                     | 2001          |         | 2002   |       |  |  |
|---------------------------------------|--------|---------------------|---------------|---------|--------|-------|--|--|
|                                       | Budget | Actual              | Budget 1/     | Actual  | Budget | Est.  |  |  |
|                                       |        |                     | (in trillions | of won) | 4.4    |       |  |  |
| Revenue                               | 120.8  | 135.8               | 142.7         | 144.0   | 154.4  | 156.5 |  |  |
| Tax revenue                           | 79.7   | 92.9                | 95.9          | 95.8    | 103.6  | 104.1 |  |  |
| Social security contributions         | 17.5   | 14.8                | 16.0          | 17.5    | 18.2   | 19.1  |  |  |
| Nontax and capital revenue            | 23.6   | 28.1                | 30.8          | 30.7    | 32.6   | 33.4  |  |  |
| Expenditure and net lending           | 136.2  | 129.3               | 150.2         | 140.5   | 153.8  | 144.0 |  |  |
| Current expenditure                   | 101.1  | 92.8                | 107.0         | 107.8   | 118.9  | 113.5 |  |  |
| Interest                              | 14.1   | 12.5                | 7.6           | 13.3    | 15.5   | 13.4  |  |  |
| Non-interest                          | 87.0   | 80.3                | 99.4          | 94.5    | 103.4  | 100.2 |  |  |
| Capital expenditure                   | 23.1   | 22.3                | 25.7          | 24.9    | 26.4   | 25.6  |  |  |
| Net lending                           | 12.0   | 14.2                | 17.5          | 7.7     | 8.5    | 4.9   |  |  |
| Balance                               | -15.4  | 6.5                 | -7.6          | 3.6     | 0.6    | 12.5  |  |  |
| Financing                             | 15.4   | -6.5                | 7.6           | -3.6    | -0.6   | -12.5 |  |  |
| Domestic financing                    | 15.6   | -6.1                | 7.9           | -3.2    | -0.1   | -12.0 |  |  |
| of which: Privatization               | 3.5    | 0.0                 | 3.0           | 3.7     | 5.4    | 6.7   |  |  |
| External Financing                    | -0.2   | -0.4                | -0.3          | -0.4    | -0.5   | -0.5  |  |  |
|                                       |        | (in percent of GDP) |               |         |        |       |  |  |
| Revenue                               | 23.1   | 26.0                | 26.2          | 26.4    | 26.6   | 26.9  |  |  |
| Tax revenue                           | 15.3   | 17.8                | 17.6          | 17.6    | 17.8   | 17.9  |  |  |
| Social security contributions         | 3.4    | 2.8                 | 2.9           | 3.2     | 3.1    | 3.3   |  |  |
| Nontax and capital revenue            | 4.5    | 5.4                 | 5.6           | 5.6     | 5.6    | 5.7   |  |  |
| Expenditure and net lending           | 26.1   | 24.8                | 27.6          | 25.8    | 26.5   | 24.8  |  |  |
| Current expenditure                   | 19.4   | 17.8                | 19.6          | 19.8    | 20.5   | 19.5  |  |  |
| Interest                              | 2.7    | 2.4                 | 1.4           | 2.4     | 2.7    | 2.3   |  |  |
| Non-interest                          | 16.7   | 15.4                | 18.2          | 17.3    | 17.8   | 17.2  |  |  |
| Capital expenditure                   | 4.4    | 4.3                 | 4.7           | 4.6     | 4.5    | 4.4   |  |  |
| Net lending                           | 2.3    | 2.7                 | 3.2           | 1.4     | 1.5    | 0.8   |  |  |
| Balance                               | -2.9   | 1.3                 | -1.4          | 0.7     | 0.1    | 2.2   |  |  |
| Primary balance                       | -0.2   | 3.6                 | 0.0           | 3.1     | 2.8    | 4.5   |  |  |
| Memorandum items                      | ,      |                     |               |         |        |       |  |  |
| Overall balance (incl. privatization) | -18.9  | 6.5                 | -4.6          | 7.3     | 6.0    | 19.2  |  |  |
| (as percent of GDP)                   | -3.6   | 1.3                 | -0.8          | 1.3     | 1.0    | 3.3   |  |  |
| Nominal GDP (trillion won)            | 522.0  | 522.0               | 545.0         | 545.0   | 581.2  | 581.2 |  |  |

Sources: Ministry of Planning and Budget; and Fund staff estimates.

<sup>1/</sup> Including supplementary budgets.

#### D. The Budget as a Tool of Macroeconomic Policy

17. The tendency for systematically larger-than-budgeted surpluses (or smaller deficits) implies a systematic contractionary bias in fiscal policy that reduces its effectiveness as a tool of macroeconomic management. This bias is particularly damaging during an economic downturn because it means that fiscal policy tends to be inappropriately procyclical. As shown in Figure II.1, since 1971, fiscal policy was contractionary in 12 of the 18 years when the output gap was negative, i.e., when actual output was below potential output. In other words, fiscal policy was supportive of growth only in six out of those 18 years. Two of the six years of supportive fiscal policies were during the 1997–98 financial crisis. In strong economic upturns, the contractionary bias in fiscal policies may result in a welcome stronger-than-budgeted counter cyclical fiscal stance, as in 2000.



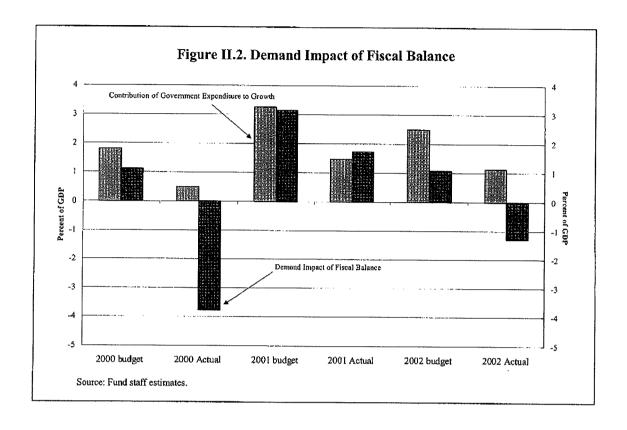
<sup>&</sup>lt;sup>6</sup> The fiscal impulse is defined as the change in the cyclically adjusted fiscal balance. A positive fiscal impulse implies that the fiscal stance is "looser" or more expansionary than the previous year, a negative impulse implies a "tighter" or a more contractionary fiscal stance, and a zero impulse implies a "neutral" fiscal stance.

18. The effectiveness of the budget as a tool of macroeconomic policy is also blunted by the way the macroeconomic effects of fiscal policy are described and presented to the public. The Korean authorities traditionally focus on the contribution of government expenditure to real GDP growth when describing the stance of fiscal policy, which, not surprisingly, is almost always "expansionary." This is misleading since it omits the negative impact on aggregate demand from taxes that reduces the disposable income of the private sector. In a world of imperfect competition, the fiscal stimulus to aggregate demand, expressed as a percentage of GDP, is given by (Chalk, 2002):

$$\Delta Y_t/Y_t = \beta^* \Delta G_t/Y_t - \mu^* \Delta R_t/Y_t$$

where  $\Delta Y_t = Y_t - Y_{t-1}$ ,  $\beta$  is the expenditure multiplier, and  $\mu$  is the revenue multiplier. Thus, the stimulus provided by the fiscal position to aggregate demand is given by the change in real expenditure and real tax revenues weighted by their respective multipliers. Accordingly, the positive contribution to GDP of higher real government expenditure alone is not a proper measure of the demand effect of the government budget, since it ignores the negative contribution to GDP of higher real government revenue.

- 19. Figure II.2 shows the evolution of the demand impact measure in Korea for both the budget and the outturn in 2000–02, as well as the contribution of real government expenditure to GDP, calculated as the change in real government expenditure from year t-1 to year t as a proportion of real GDP in year t. The multipliers for current expenditure, capital expenditure, and revenue, which are derived from simulations using the BOK macroeconomic model, are 1.5, 1.2, and -0.9, respectively. The multiplier for net lending is assumed to be 0.7, considering that private sector investment is unlikely to change by the same magnitude as the change in government net lending. The contribution of real government expenditure was always positive and typically overstated the impact of the fiscal position on domestic demand. This was most obvious in 2000, when fiscal policy was significantly contractionary and had a fairly large negative impact on domestic demand.
- 20. An important debate in Korea is whether surpluses from social security funds should be excluded from the overall balance when assessing the fiscal policy stance. Some argue on Ricardian grounds that social security contributions should not reduce private sector demand because such contributions are regarded as perfect substitutes for private savings. However, even if full Ricardian equivalence is assumed for social security contributions, these are a relatively small part of total government revenue (12 percent in 2001), and the negative demand impact of other government revenue needs to be taken into account in assessing the stance of fiscal policy.



#### E. The Role of a Medium-Term Fiscal Framework

21. A special law on fiscal soundness was submitted to the National Assembly in 2001 that aims to achieve a balanced budget in the medium term and ensure prudent debt management. It would require that a medium-term fiscal plan be presented to the National Assembly along with the annual budget bill. Since the consolidated central government balance has been in surplus since 2000, the objective of achieving a balanced budget presumably means a balanced budget excluding surpluses of the social security funds (SSF), an objective estimated to have been achieved in 2002.

<sup>&</sup>lt;sup>7</sup> Yet another interpretation of the balanced budget target is to treat the additional outlays of absorbing part of the cost of financial sector restructuring as spending. In the four year period of 2003–06, the government plans to convert W 49 trillion of maturing government-guaranteed bonds issued by the Deposit Insurance Fund and the Nonperforming Assets Management Fund into treasury bonds. The target can then be interpreted as achieving a balanced budget by 2007, by which time the bond conversion exercise will have been completed. However, such debt conversions are below-the-line transactions and should not be considered as sources of deficit.

- 22. While the introduction of a medium-term goal of a balanced budget may be appropriate, the connection between the objective and the annual budgeting process is unclear. It is particularly important to clarify that the medium-term objective implies an annual balanced budget on a cyclically-adjusted basis. Although the principle of "expenditure within revenue" has the merit of fiscal prudence when applied over the business cycle, it is unnecessarily restrictive as a guide to annual budgets in an advanced economy such as Korea. Most economic policymakers in advanced economies have long accepted the importance of focusing on the underlying structural budget balance rather than the actual balance, which reflects the stage of the business cycle. In a period of economic downturn, the government should accommodate the higher fiscal deficit and not seek to achieve annual balance budget targets that may risk being pro-cyclical. In other words, the objective of maintaining a balanced budget should be achieved over the course of a business cycle rather than in every year irrespective of the cycle.<sup>8</sup>
- 23. Cyclical deviations from the balanced budget norm could come from both the effects of "letting automatic stabilizers work" and the use of discretionary revenue and expenditure policies. While there are important arguments against active use of discretionary fiscal policy, particularly where automatic stabilizers are large, a judicious use of temporary and fast-acting policy measures to support aggregate demand is appropriate in the face of a significant negative output gap, particularly if the automatic stabilizers are weak, as in Korea.
- 24. A medium-term fiscal framework can be used to reconcile short-term and longer-term fiscal objectives. Under such a framework, temporary deviations from the balanced budget objective would be allowed so long as the medium-term fiscal path is acceptable. In the meantime, transparency and accountability would ensure that any short-term build up of public debt will be unwound in the medium term. In this regard, the government could usefully prepare and submit to the parliament, together with the budget bill, an annual fiscal strategy statement that sets out the government's medium-term fiscal objectives (for example, to reduce debt levels to a stated level), and any temporary fiscal policy actions needed to moderate cyclical fluctuations in economic activity, as well as plans for their reversal.
- 25. If and when the automatic fiscal stabilizers are strengthened, a useful approach to the adoption of a medium-term fiscal framework that is consistent with fiscal prudence is to set aggregate expenditure policy according to medium-term targets, while allowing revenues to fluctuate with the level of economic activity. Such an approach would avoid expenditures that are significantly higher in a downturn or substantially lower in a boom, and would also address the concern that higher expenditures may be more difficult to trim once an economy slows (Heller, 2002).

<sup>&</sup>lt;sup>8</sup> Cyclically adjusting the budget balance is not a straightforward exercise since it is an inherently judgmental exercise to estimate the output gap. However, such difficulties do not obviate the need to form a view of the cyclical positions of the economy.

#### F. Concluding Remarks

- 26. To improve the effectiveness of the budget as a tool of macroeconomic management, the Korean authorities should strengthen their macroeconomic and revenue forecasting capabilities. They should also improve their analysis of the demand impact of the budget, pay greater attention to the cyclical effects of the budget, and reduce the uncertainty in budgetary outturns. A more transparent and accountable budgetary system will be essential to the success of such efforts. One of the reform priorities should be to streamline the budget structure by consolidating special accounts and public funds so as to reduce drastically their number as well as their share of expenditure.
- 27. Budget implementation should be improved by enhancing fiscal monitoring and reporting. Formal arrangements should be put in place for regular in-year monitoring and reporting on budget implementation centered on a mid-year review. Such a review should enable the authorities to revisit the economic assumptions underlying the budget on the basis of the latest macroeconomic forecasts; to examine the actual course of revenue and expenditure in relation to budget plans, and examine the reasons for any significant variations; to consider the need for any in-year adjustments and to ensure that such adjustments will be implemented in good time; and to provide a firm basis for decisions on the budget for the following year and for rolling forward the medium-term expenditure plans.

#### REFERENCES

- Chalk, Nigel A., 2002, "Structural Balances and All That: Which Indicators to Use in Assessing Fiscal Policy," IMF Working Paper WP/02/101 (Washington, D.C.: International Monetary Fund).
- Heller, Peter S., 2002, "Considering the IMF's Perspective on a Sound Fiscal Policy," IMF Policy Discussion Paper PDP/02/8 (Washington, D.C.: International Monetary Fund).
- International Monetary Fund, 2001, "Republic of Korea—Report on Observance of Standards and Codes—Fiscal Transparency Module."
- Jun, Joosung, 2002, "Fiscal Policy During and After the Crisis in Korea," processed, Ewha University, Seoul, Korea.
- Koh, Young-Sun, 2000, "Budget Structure, Budget Process, and Fiscal Consolidation in Korea," Korea Development Institute.
- Organization for Economic Cooperation and Development (OECD), forthcoming, *OECD Economic Surveys: Korea*.
- Organization for Economic Cooperation and Development (OECD), 2000, OECD Economic Surveys: Korea.
- Van den Nord, Paul, 2000, "The Size and Role of Automatic Fiscal Stabilizers in the 1990s and Beyond," OECD Economics Department Working Paper No. 230.