

DRAFT

**THE ARCHITECTURE OF
PROGRAM BUDGETING**

KOREA

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Table of Contents

Chapter 1

Introduction.....	2
The Medium-Term Expenditure Framework (MTEF)	5
Macrobudgetary Projections.....	7
National Fiscal Management Plan (NFMP).....	9
Top-Down Budgeting	11
The Performance Management System (PMS).....	12
The Annual Budget.....	15
The Program Budget.....	17
Fitting the Pieces Together	19
Figure 1: The Medium-Term Expenditure Framework (MTEF).....	21
Figure 2: The Program Structure	21
Figure 3: Information Flows in the MTEF	22

Chapter 1

Introduction

1. **Successful reform requires a framework that integrates the various elements.** The Government has initiated numerous innovations in fiscal management, including a medium-term expenditure framework (MTEF), top-down budgeting, program budgeting, a fiscal management plan, a performance management system, and an integrated financial information system (IFIS). Other reforms, such as the accrual basis and cost accounting, are under consideration, and it is probable that as budgeting evolves in the years ahead, still other reforms will be launched. From the perspective of the Ministry of Planning and Budgeting (MPB), all the initiatives are necessary to bolster fiscal discipline and improve the allocation of public resources. But from the vantage point of line ministries, they may appear to be a confusing jumble of disconnected or redundant reforms, each with its own vocabulary and procedures. Because fiscal management depends on the understanding and cooperation of spending units, it is essential that the many elements be welded together in a cohesive structure that links the many parts and show how they feed into one another. Without a comprehensive architecture, Korea will have many reforms, but fiscal management will not be reformed.
2. This chapter integrates the various elements through the MTEF, which should not be viewed as a separate reform, but as the structure which melds the many innovations together. MTEF has several strengths as an integrating device, the most important of

which is that it has already been introduced. There is no need, therefore, to add yet another component to the stockpile of reforms. Moreover, the basic purpose of MTEF is to link the policy and planning functions of government to the allocation of resources. As diagrammed in Figure 1, MTEF shows how one element builds on or contributes to others. For example, the ceilings in top-down budgeting derive from the fiscal management plan and frame the annual budget. Within this structure, top-down budgeting is not an end in itself but serves the other elements, all of which comprise the MTEF.

3. The MTEF consists of five interconnected processes, each of which is described in this chapter. (1) Macroeconomic forecasts of the Government's future revenue, expenditure, deficit or surplus, and debt; (2) a fiscal management plan that sets the Government's policies and priorities for the medium-term; (3) top-down budgeting that translates the macroeconomic projections and fiscal management plan into specific expenditure ceilings and guidelines of reach ministry and agency; (4) a performance management system that targets and reports on expected or actual results for the previous or forthcoming fiscal year; and (5) the annual budget details the Government's spending plans for the next year.

4. The framework clearly indicates that the budget is not a free-standing process, but is an integral part of MTEF. Many, perhaps most, countries that have tried to introduce an MTEF have failed because they treat the annual budget as a separate process. Thinking of reform this way means that the government has two budgets: the MTEF and the annual

document. Of course, a government can have only one authoritative budget, that is, only one set of decisions for allocating and spending public funds. If the budget is separate, the MTEF will come to be regarded as irrelevant as a technical exercise that has no bearing on how spending is regulated.

5. Figure 1 shows that while the five components are integrated in MTEF, each has its own accounting basis and decisions. These are arrayed from the most to the least aggregated. Thus, macro-budgetary projections, the first step in the framework, pertain to spending totals, while the annual budget, which is the final step, deals with specific activities. There is a corresponding progression, from the most to the least aggregated, in the type of decisions that flow from each process.
6. **Program budgeting links IFIS and MTEF.** To operate effectively, MTEF and its subsystems need timely and reliable data on government finances. Toward this end, the Government is moving to build an integrated financial information system (IFIS) that would merge the separate accounting frameworks currently operated by MOFE and MEP and modernize the accounting structure. IFIS is designed to serve both MTEF and the broad array of financial management tasks involved in implementing the budget and operating government departments and agencies. Congruence of MTEF and IFIS will be achieved through the program structure of the budget and accounting system. Both will be on a program basis, but each will be supplemented with some of its own features. Programs will be the basis for the “core” accounting system of government, and will be used both in allocating resources and in reporting financial results. Spending

departments would maintain additional accounts – for example, by inputs and sub-organizational units – that are essential for ongoing operations. However, these sub-accounts will not be used in allocating resources at the center of government.

7. As envisioned here, some contemplated innovations are outside the basic architecture, though they may be introduced at later stages of reform. Neither the accrual basis nor cost accounting are essential for restructuring the budget system. This does not mean they are undesirable: both would significantly enhance the management of public finances. But adding them to the current *tranche* of reforms would likely overload the capacity of spending units and would increase the risk of failure. Few governments have accrual accounting and budgeting systems, and hardly any have robust cost accounting processes. Once the basis structure outlined in this chapter has been successfully operationalized, it may be prudent to move forward on additional reforms.
8. The remainder of this chapter briefly describes each element of the MTEF-centered system, and how they connect to one another. It discusses IFIS only to the extent that the accounting system is defined by the program structure.

The Medium-Term Expenditure Framework (MTEF)

9. **MTEF enhances the capacity of government to allocate resources within a firm expenditure constraint.** MTEF recognizes that the one-year time horizon of the annual budget process is too short to enable the government to assess current spending decisions

in the light of future claims on resources. Budgeting's short-term perspective encourages incremental decisions, where the next budget is built on the previous one, with only marginal adjustments. This short-term outlook has led, many observers believe, to a progressive increase in public spending as a share of GDP. MTEF seeks to counter this tendency by extending the time horizon to the medium-term (typically, 3-5 years) and imposing a fixed constraint on expenditures before line ministries bid for resources. It makes the budget the first year of a rolling plan that is updated each year to accommodate new economic forecasts and policy initiatives. The MTEF encourages spending ministries to reallocate resources within sectoral ceilings, and reorients budget negotiations within government from the details of expenditures to policy changes. Korea's version differs in one important feature from the MTEF applied in some other countries in that it focuses on all expenditure claims, not just those that deviate from baseline levels. Inasmuch as Korea's MTEF structures the entire resource allocation process and encompasses the five subsystems shown in Figure 1, it is appropriate to cover all expenditures, not just marginal adjustments. Korea's MTEF also has a somewhat longer time frame than comparable systems in most countries, but this comports with the 5-year planning cycle.

10. Several conditions are important for successful implementation of MTEF. One, already mentioned, is that it subsumes the regular budget process and is not independent of it. Another is that resource allocation at the center of government be purged of detailed expenditure review. It is not practicable to retain line item control of inputs while adding a policy focus. Not only will budget makers at both political and official levels be

overloaded, but attention to the details will drive out consideration of policy. For MTEF to work, the resource allocation processes have to be reengineered by devolving decisions on details to spending units. Finally, MTEF can succeed only when policy makers at the top of government invest it with importance and use it as a vehicle for providing guidance to ministries on national priorities and spending initiatives. If politicians treat MTEF as a technical exercise, then others in government will view it as just another chore to get them through the budget cycle.

Macro-Budgetary Projections

11. **The reengineered budget system begins with macroeconomic projections that establish the fiscal framework within which policy changes are initiated and resources allocated.** These projections are the only part of the framework that are MOFE's responsibility; all other components are implemented or controlled by MPB. It is essential, therefore, that the two ministries continue to closely coordinate their fiscal work, and that (as contemplated by IFIS) their fiscal information systems be fully integrated. Macroeconomic projections are the most developed component of MTEF (other than the annual budget process) and the one least likely to be affected by the new structure. Although the quality of these projections has not been evaluated for this report, they appear to be grounded on reliable data and careful analysis, and are made available in a timely manner. It would be highly desirable, however, to have an early warning system that alerts government to fundamental changes in economic conditions before it is too late to take corrective action. The East Asia financial crisis that unfolded in the

1990s suggests that there were some advance indications of trouble ahead. Nevertheless, it is difficult to distill trend data on terms of trade, capital flows, debt burdens and other economic measures into budgetary projections.

12. The 5-year frame of these projections may introduce an optimistic bias into budgeting and contribute to a rise in the expenditure/GDP ratio. It is much easier to project future economic improvement than decline, and much easier to spend projected fiscal dividends than to save them. In setting the medium-term fiscal framework, it would be prudent to err on the side of caution, either by reserving some funds for future allocation or by conservatively estimating future growth. At the least, the Government should be guarded in locking itself into future spending commitments that rely on revenues that have not yet materialized.
13. To be useful, macro-budgetary projections have to be comprehensive. Ideally, they should cover special accounts, public funds and explicit contingent liabilities, such as those generated in the bailout of distressed financial institutions. Korea's low public debt/GDP ratio demonstrates the Government's prudent management of the country's finances. The new fiscal framework should encourage it to continue on a prudent course in the future.

National Fiscal Management Plan (NFMP)

14. **NFMP establishes the policy framework for budget allocations.** The macro-budgetary projections provide the informational basis for the Government expenditure envelope for each of the next several years. But MTEF also requires policy inputs, that is, decisions by Government on program changes and spending priorities. These have to be inputted early in the MTEF cycle, because if they are not, there is a strong probability that spending demands by line ministries will claim available resources. Moreover, the Government needs to consider policy options in order to allocate spending ceilings among ministries and agencies. Without prior policy decisions, the ceilings are likely to be perceived as arbitrary (as they have been by some ministries in the fiscal 2005 cycle) or as arithmetic exercises (for example, fixed percentage increases).

15. To operationalize NFMP, it would be useful to split the MTEF process into two distinct phases. The first phase, establishing the fiscal and policy framework, would encompass the macro-budgetary projections, the fiscal management plan, and top-down budgeting; the second phase, several months later, would focus on the annual performance plan and budget. A critical step in the framework stage would be for the Government to decide medium-term policy changes and priorities through its fiscal management plan. These should be debated and decided by Cabinet, and should involve consideration of alternative programs. Ideally, the process would produce a plan that expresses substantive objectives for the next five years that would be based on evaluations of existing programs and analysis of the extent to which proposed programs contribute to

the specified objectives. In practice, however, fiscal management planning is likely to fall short of this ideal, at least in the early years of the new system, because of deficiencies in program evaluation and performance measures. But even lacking these useful tools, fiscal planning can boost the Government's capacity to allocate resources on the basis of policy objectives.

16. To be effective, NFMP must be less than a budget, but more than a fiscal target. It lacks the spending and operational details that go into the budget, and is indicative rather than authoritative. The NFMP should be structured by sectors and (where appropriate) sub-sectors. The introduction of NFMP should provide opportunity to rationalize the sectoral structure so as to reflect the responsibilities and objectives of Government. (Wages and salaries should not be a sector; these costs should be allocated among the sectors to which they pertain.) Although the plan should not delve into program details, it will be appropriate to highlight those program initiatives that are national priorities.

17. NFMP is not just a fiscal target; it is foremost a statement by government of its medium-term policies. To be this, NFMP must get into substantive matters, such as the quality of air and water, the number of students enrolled in secondary or tertiary education programs, housing programs for families, and so on. It does not have to be a comprehensive plan that covers every area of public activity, but it should concentrate on priorities, and it should show how spending is to be distributed by sectors.

Top-Down Budgeting

18. **As applied thus far, top-down budgeting refers to the assignment of spending ceilings to ministries and agencies before they prepare annual budget requests.** The term can be thought to cover the NFMP as well, but the two elements are separated here to clarify what each entails. As already noted, the first tranche of ceilings, for the 2005 fiscal year, has been regarded as arbitrary by some ministries because it was not supported by the policy decisions that would emerge from a fully operational NFMP. Some countries, such as Australia, that have successfully implemented a medium-term framework do not rely on a planning process to set spending ceilings. Rather they begin with baseline (or forward) estimates that are drawn from previously approved policies. In these countries, the ceilings and subsequent budget action represent marginal changes in policy, as measured against the baseline. In Korea's model, however, spending ceilings are supposed to derive from a full policy review. This requires a substantial planning capacity, but given its roots as a planning agency, MPB may have the skills, information and perspective required to undertake a comprehensive policy review. Nevertheless, it would serve MPB to invest in the data bases and cost analyses used in baseline-driven budgeting. In addition, MPB might consider putting its fiscal management plan on a 2-3 year cycle, along the lines of Britain's public expenditure review. The longer interval between planning cycles would permit a fuller review of policy options and program effectiveness. Even on a rolling basis, it may be too burdensome and politically difficult to draft a new fiscal plan every year. The process risks become a rote exercise if it is done annually.

19. In implementing top-down budgeting, MPB has to decide whether to give a single ceiling to each ministry, or to disaggregate the total among bureaus, programs, activities, or some other category. This is a practical question that will define relations between line ministries and MPB, as well as perceptions of the new budget system. Neither alternative may suffice for Korea: a single ceiling would not assure that line ministries give priority to the Government's policies in their budgets; multiple sub-ceilings would convey the message that the new budget system is as control-oriented as the old. A middle ground that allows the Government to set sub-ceilings for key priorities and initiatives may be appropriate, especially in ministries that have a diverse portfolio of responsibilities. In introducing program budgeting, it also may be appropriate to provide ceilings for each program. Ministries would have considerably more latitude than the traditional budget system gave them, and MPB would reinforce the new program structure by basing spending decisions on it. Moreover, this approach would strengthen the program classification as the link between resources and results. It would be imprudent to give spending ministries broad flexibility unless the performance management system is in place. When spending discretion is decoupled from accountability, line ministries get more operating freedom, but the Government might not get better results.

The Performance Management System (PMS)

20. **The performance measurement system links fiscal planning and annual budgeting.**
Performance is the common focus of the fiscal management plan and the restructured budget process. Ideally, the plan should be based on the objectives of government, and

these should be expressed in ways that enable progress in achieving them to be measured. Ideally, also, resources should be allocated on the basis of expected or actual results. Thus, implementation of PMS is vital to both fiscal planning and annual budgeting. It is essential for reorienting budget decisions from inputs (such as travel expenses, personnel costs, supplies, and rentals) to outputs and outcomes. Doing this has been a challenging task in other countries; it will not succeed in Korea without sustained commitment and support at the top of Government.

21. In the Korean model, program budgeting is the building block for linking resources and results. Programs are the units by which performance is to be defined and measured, and resources are to be allocated and evaluated. As shown in Figure 1, programs are the basis of decisions in PMS. Orienting PMS to this level of aggregation should encourage a focus on outputs, the social impacts of government policy, rather than only outputs, the volume of services provided. It is likely, however, that outputs will be the primary unit of measurement in the early years of PMS. Rather than regarding this as a failure or second-best option, it would be sensible to base budget allocations on outputs. Doing so would be a truly significant gain, even if it falls short of outcome management.
22. Basing the fiscal management plan on PMS should not require that every program is accounted for in the plan. Doing so would almost certainly diminish the plan's focus on the objectives and priorities of Government. Instead, it would be appropriate for the plan to highlight those programs for which major policy initiatives are contemplated. In these

cases, the plan should provide measurable indicators of progress, where these are available.

23. PMS, however, should account for all programs, including those for which quantifiable measures are not currently available. As already noted, relying on output measures would be appropriate. These measures would facilitate linking PMS and the annual budget, but the extent to which they should be integrated is a difficult question. There are an array of possible options, ranging from tightly to loosely integrated:
 - a. Tight integration would aim for the Government to link each increment in resources with an increment in results
 - b. Moderate integration would display performance data in the budget, but without explicitly stating the amounts allocated to each output or outcome.
 - c. Minimum integration would use the same program structure in PMS and the budget, but the two processes would be separate. Performance plans and reports would not appear in the budget. They would be published in a separate report.

Tight integration is likely to be too challenging and would require data and analysis that are not currently available. It also would inject tension and misunderstanding into the new performance system. Moderate integration is the path taken by a number of countries that have moved to a performance orientation. Britain's public service and service delivery agreements moderately integrate budget and performance decisions. It, too, however, may extend beyond MPB's

current capacity. This leaves minimum integration as the likely option, at least in the years immediately ahead.

24. The minimum option leaves open the question of publishing performance data generated by PMS. The quandary here is that these data should be published only if they are reliable and relevant; but the incentive to assure that they are reliable and relevant diminishes if they are not published. Judging from the experiences of other countries, PMS will be useful only if key indicators are available to the public.

The Annual Budget

25. Enough has been said thus far to indicate that successful implementation of MTEF requires that (a) the annual budget be treated as the first year of MTEF, and not as a separate exercise, (b) the budget should be reformatted along program lines, (c) input data/classifications should be consolidated or removed from the budget, (d) the budget should be based on policies set in the fiscal management plan, including the top-down ceilings, and (e) the budget should be informed by planned or actual results reported in the PMS. These changes would make the budget into an integral part of the overall MTEF, and link it to the other elements in the system. Budgeting would be transformed from being the driver of government policy into the financial means of implementing and adjusting policies already made. This is a transformation that few countries have managed successfully; most that have tried it, seek to hold on to the traditional budget system while adding other processes, such as the medium-term perspective.

26. A precondition for transforming the budget is to purge detailed items of expenditure as the basic unit of decision and control. There is a place for input classifications in public management; they are essential for managing programs and agencies, for operating the personnel and procurement systems, and for other administrative purposes. On occasion, input data may provide insight into how well an entity is managed or its cost structure. But when a budget classification descends as many as eight layers into sub details, it is the small items that capture attention, not policy questions.

27. The program classification would replace the inputs as the primary basis of budgeting. In the scheme contemplated here, programs in the budget would be divided into activities, the specific tasks or projects that would be financed in the year ahead. In some cases, it may also be appropriate to divide programs into subprograms, corresponding either to organizational units (such as bureaus) or key policy initiatives (such as a new project that has been accorded priority). Defining activities to cover both investment and operating expenditure enables the Government to decide both types together but to account for them separately.

28. One cannot specify the appropriate number of activities without a careful review of government responsibilities and discussion with line ministries. The total should be significantly fewer than the 6,000 subunits specified in the current budget. But, as already discussed, spending units may wish to breakdown activities into smaller sub-classifications for internal purposes.

29. Transforming the budget process and integrating it with other elements of MTEF entail not only changes in budget preparation, but also in implementing the authorized budget. It is important that the budget be executed on the same basis as it is prepared, using the program structure to control no lower than the activity levels through MOFE and MPB allotments. Other changes in budget execution to align it with MTEF are discussed in the assessment chapter.

The Program Budget

30. **The program structure links the accounting and budget systems and should be the basis for IFIS.** As envisioned in Korea, the program structure will not cross organizational lines. All programs will be within ministries or agencies. In some cases, however, more than one organizational unit will participate in the same program. In these situations, it would be advisable to split the program into subprograms, each of which would be in a single organization.
31. Conforming programs to organizational boundaries simplifies the program structure, but diminishes the Government's capacity to analyze and coordinate objectives that are shared by two or more ministries. Nevertheless, this is a practical compromise that will make it much easier to design and implement the program budget. Korea's approach gives due recognition to the reality that organizations manage programs and are accountable for results.

32. The new accounting system must code each program by sector and organization. Doing so would facilitate the aggregation of program data in multiple ways to serve the diverse needs of government. But sectors should not be regarded as a level of budget or accounting control. Instead the first level of the program structure will be the organization, the second will be programs, the third will be activities, and the lowest level will be cost elements, such as personnel expenses, other operating expenses, and investment expenditure. Bureau affiliation can be inserted into the accounting structure to provide additional information, but it should not be a separate level of control. As mentioned earlier, subprograms should be added when a program is the responsibility of two or more organizations.
33. A program classification adds value only when it compiles data that would not be available in traditional budget classifications. The key additional data pertain to program costs and results that are, to the resources consumed in performing public activities. It is contemplated that data on results will be generated by the new performance management system, which should be structured by programs. It may be difficult, however, to develop reliable cost data because the current budget system disperses program costs among various units and subunits. For example, salaries and related expenses are accounted for separately and are not charged to the program or activity to which government employees are assigned.
34. This deficiency has led to suggestions that the Government shift financial reports and the budget to the accrual basis, and that it introduce a cost accounting system. It would be a

good idea to start along the path toward the accrual basis, limiting initial efforts to financial reports and keeping the budget itself on a cash basis. Few governments have converted to accrual budgeting; those that have are among the most advanced. Even on a cash basis, however, it would be prudent to recognize certain liabilities, such as guarantees for assisting financial institutions, in the budget.

35. No national government has a fully operational cost accounting system, and trying to devise one for Korea would impede progress on other vital reforms. The Government can move ahead with program budgeting by allocating direct costs to the programs that incur them. Thus, wages and salaries, pensions and health benefits of public employees, IT services, and other direct costs should be charged to programs. At this point, it would be counterproductive to allocate indirect and overhead costs. Doing so would have the effect of charging managers for costs they do not control. It may be useful to explore the feasibility of applying activity based costing; this can be done on a trial basis for activities that are most amenable to this type of analysis.

Fitting the Pieces Together

36. **MTEF should be implemented in an integrated manner, not as a series of disconnected reforms.** It is not sufficient that the various elements described in this chapter be combined in a comprehensive blueprint; it also is necessary that these elements be perceived as a single reform. It is essential that line managers understand the logic of reform and the interdependence of its many pieces. If they don't, managers will

be confused and fatigued, overwhelmed by the multiple, seemingly redundant tasks imposed by the new system.

37. Figure 2 shows how each part feeds into or is supported by other elements in the overall framework. It is a restatement of the framework displayed in Figure 1, but is drawn to emphasize the flow of data or decisions from one part of the framework to the next. This interdependence leads to the conclusion that all the reforms should move ahead concurrently. Arguably, however, the program structure should be accorded priority because it is needed in fiscal planning, the performance measurement system, the annual budget, and possibly in top-down budgeting as well. Some countries have spent years searching for the ideal program structure. This would not be a wise course for Korea. Having resolved that the program structure will conform to organizational boundaries, the Government should be able to move ahead quickly, defining programs and activities and reformatting the budget along program lines. Once it is in place, the program structure can be adjusted to accommodate new information and improve understanding of governmental objectives.
38. Several elements are already partly or fully operational. Macro-budgetary projections, top-down budgeting and the annual budget are already in use; it is important that their linkages to other elements be understood and that each is adjusted to produce the information or decisions needed by other components.

39. This chapter has dealt with the design or architecture of reform. This is the easier task; the harder one is to implement reform in ways that enhance the prospect of success. This is the subject of the next chapter.

FIGURE 1

THE MEDIUM-TERM EXPENDITURE FRAMEWORK (MTEF)

	Macro-Projections	Medium-Term Plan	Top-Down Budgeting	Performance Management	Budget
Accounting Basis	Aggregates	Sectors	Ministries	Programs	Programs & Activities
Product	Fiscal Framework	Policies & Priorities	Ceilings & Guidelines	Indicators	Spending Allocations

FIGURE 2

THE PROGRAM STRUCTURE

Level 1	Ministries	
Level 2	Programs	(coded by sector, which is not a separate level)
Level 2A	Sub-Programs	(only for programs in two or more ministries)
Level 3	Activities	(both recurrent and investment, coded separately)
Level 4	Cost Elements	(personal services, other operating expenses, projects, subsidies, and transfers)

FIGURE 3

INFORMATION FLOWS IN THE MTEF

