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**Information Flow Successful  
MTEF Operation and its Implication to  
the Korean Government**

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*Session 3-1 : Transparency in Public Expenditure Management*  
**PRESENTERS**

# **Information Flow For Successful MTEF Operation And its Implication to the Korean Government**

by  
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## **1. Introduction**

The Korean government is now preparing to introduce a medium-term expenditure framework (MTEF) and other public expenditure reforms. These reforms are intended to increase efficacy and transparency of the way public resources are allocated and spent in Korea. Among the many challenges for the Korean government to succeed with these reforms and generate anticipated benefits is to have its financial management information system (FMIS) updated to meet the new, additional information needed to operate MTEF.

Usually, MTEF requires significant, wide-ranging changes in the way a country allocates public resources. As a fundamental component to a country's decision-making process, the FMIS must provide the necessary financial and performance information if MTEF reform is to succeed. A successful MTEF will clearly define multi years' total spending and sectoral ceilings, delegate more budgetary discretion to line ministries and, in return, hold them accountable for their performance. For this to occur, the government's financial information system must supply necessary and timely information throughout the budgetary process on macro-forecasting, sectoral expenditure analysis, and costing and performance management of programs/projects.

Because of its fragmented networks between ministries and low utilization rates for high-level decision-making, the existing Korean FMIS is inadequate to meet the new challenges of MTEF due to the fragmented networks between ministries and low level of utilization for high-level decision-making. Also, the underlying Korean regulatory framework, including budget classification, coverage and chart of accounts is not suitable for MTEF operation, and needs substantial changes as well. Finally, to minimize reform fatigue, the Korea government should pay careful attention to sequencing and pacing of its efforts to introduce MTEF and the updated FMIS, and carefully consider the institutional, organizational and cultural elements impacted by the reform.

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This paper consists of five sections. Following the Introduction in Section One, Section Two explains how successful reform of MTEF and FMIS also depends closely on other public sector reforms, and introduces the Korean MTEF framework that is the basis for subsequent FMIS analysis. Section Three introduces a stylized chart that illustrates the preferred information flow between the central budget office and line ministries for MTEF operation. Section Four evaluates the adequacy of the existing Korean FMIS to meet the information needs identified above in Section Three. Finally, Section Five proposes an implementation strategy to improve FMIS and MTEF that will minimize internal resistance and avoid reform fatigue.

## **2. MTEF, FMIS and Other Public Expenditure Reforms**

### **A. Medium-term Expenditure Framework**

During the 1990s, many countries, both developed and developing, have introduced medium-term expenditure framework (MTEF). Most OECD countries have adopted the full plethora of features of MTEF: 73 percent have multi-year expenditure estimates incorporated into their budgets and 67 percent have a medium-term fiscal framework with ceilings for expenditures, deficits and revenues over multiple years as part of their budget<sup>2</sup>. MTEF also widely spread out to many middle and low-income countries including 19 African countries.<sup>3</sup>

However, specific framework of MTEF significantly differs among countries and it reflects different purposes of MTEF and country's unique environment. While MTEF is meant to improve all three goals of public expenditure management<sup>4</sup>; a) maintaining fiscal sustainability by controlling aggregate, b) linking budget allocation with national policy priorities, c) improving efficiency of public service delivery, specific framework of each country differs according to its focus among three objectives. For example, Sweden adopted MTEF to contain and reduce fiscal deficit; since the introduction of MTEF, fiscal balance has improved from the deficit of 10.8% of GDP in 1994 to the surplus of 4.8% in 2001.<sup>5</sup> On the other hand, U.K. intended to increase public investment that continued to decrease; through MTEF, public investment has increased from 20 UK billion pound in 1997 to 31 UK billion pound in 2003<sup>6</sup>.

**Strengthening the linkage between budgetary allocation with national policy priorities is the main purpose for the Korean government to introduce MTEF.** According to 'National Resource Allocation Improvement Plan,' the Korean government's main purpose of MTEF is to change a rigid expenditure allocation structure, meeting social demands that have changed significantly since the 1970s. It is self-diagnosed by the MPB that current budgeting process is in effect unable to change swiftly sectoral allocation according to changing environment.

### **B. Financial Management Information System.**

Financial management information system (FMIS) is a basic foundation for country's public expenditure management. Information system provides public sector managers a

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<sup>2</sup> World Bank/OECD Survey on Budget Practices and Procedures, 2003. Available at: <http://ecde.dyndns.org>. As of December 2003, 27 (of 30 total) OECD and 17 developing countries are included in the database

<sup>3</sup> Benin, Burkina Faso, Chad, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Malawi, Mali, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda and Zambia.

<sup>4</sup> The Changing Roles of Central Budget Office, Allen Schick, OECD, 199%

<sup>5</sup> Swedish Ministry of Finance, *Budget Statement 2003*, p. 7.

<sup>6</sup> The number is expressed in nominal term. Liz Passman, *Presentation on Public Expenditure Planning and Control*, UK Treasury, November 2003, p.4.

modern set of tools to assist them in performing a variety of tasks including a) designing fiscal and monetary policies in responding to changing macroeconomic conditions, b) conducting policy analysis to effectively allocate resource among sectors, and c) delivering service with efficiency and accountability.

Integrating central budget offices' FMIS with those of line ministries can more effectively provide the types of information that MTEF requires. Integration of public financial management means that the core functions of a financial management system like budgeting, accounting, cash/debt management, and auditing/reporting need to work as one entity even though it consists of multiple organizations with geographical distribution<sup>7</sup>. Under the integrated system, the information outflow from one component is inflow to all other related components so all components share a common financial evaluation and measurement basis. This consistent information flows and linkage among various components in financial management increase public administrations' overall efficiency.

### **C. MTEF and Other Public Sector Reforms; Performance Management and Fiscal Decentralization**

**Line ministries performance on projects/programs must be regularly fed into central budget office; it allows central budget office to monitor the progress and serves as an accountability mechanism as MTEF delegates more budgetary discretion to line ministries.** In order for performance management to work successfully, ministries and agencies need to monitor their performance indicators very closely and central budget office must have access to the performance information. The types of information and frequency of reporting, however, vary by country, depending on a country's regulatory framework.

**As a country becomes more fiscally decentralized, FMIS's coverage under MTEF must be expanded to include expenditure spent by sub-national governments.** Fiscal decentralization indicates that more expenditure is channeled through subnational governments. Managing only central government's expenditure shows only fraction of nation's overall expenditure and MTEF's function of maintaining nation's fiscal sustainability is seriously impeded. Thus, a country's FMIS should encompass sub-national level expenditure by linking local governments and municipalities' information system with central budget office's FMIS.

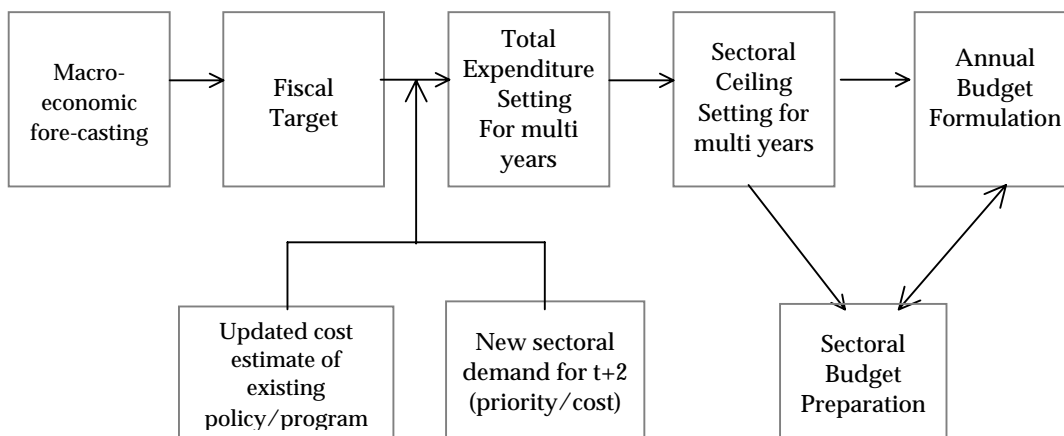
### **D. MTEF Framework in Korea**

**To draw the list of information requirements and implementation strategy, this paper is based on the MTEF framework designed by the MPB.** While final plan of Korean MTEF framework is yet to be finalized by the MPB, this paper bases its analysis upon the document, "National Resource Allocation Improvement Plan" prepared by National Resource Allocation Improvement Team of MPB. The stylized chart below shows overall process that MPB is preparing. For more detail, please see the Annex 1.

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<sup>7</sup> p5, Information Systems for Government Fiscal Management, Ali Hashim and Bill Allan, World Bank, Washington, D.C., 2002

Stylized Chart for Korean MTEF Process



### 3. NEW INFORMATION NEEDS FOR MTEF OPERATION

#### A. MTEF, New Paradigm for Budgeting Process

As medium-term expenditure framework expands horizontal budgetary coverage and strengthens top-down approach, decision makers' information needs change at all stages of budgetary process. Providing necessary information to decision makers is the essential prerequisite for successful MTEF operation in a timely manner. Integration of financial information systems operated by each ministry is essential for MTEF to link nation-wide policy with budgetary allocation and to ensure timely feedback of performance for accountability. Also, for information provided by FMIS to be useful and relevant for MTEF, underlying framework of budgetary classification, and coverage, chart of accounts must be aligned with MTEF framework. The following provides types and flow of information needed for each stage of budgetary process.

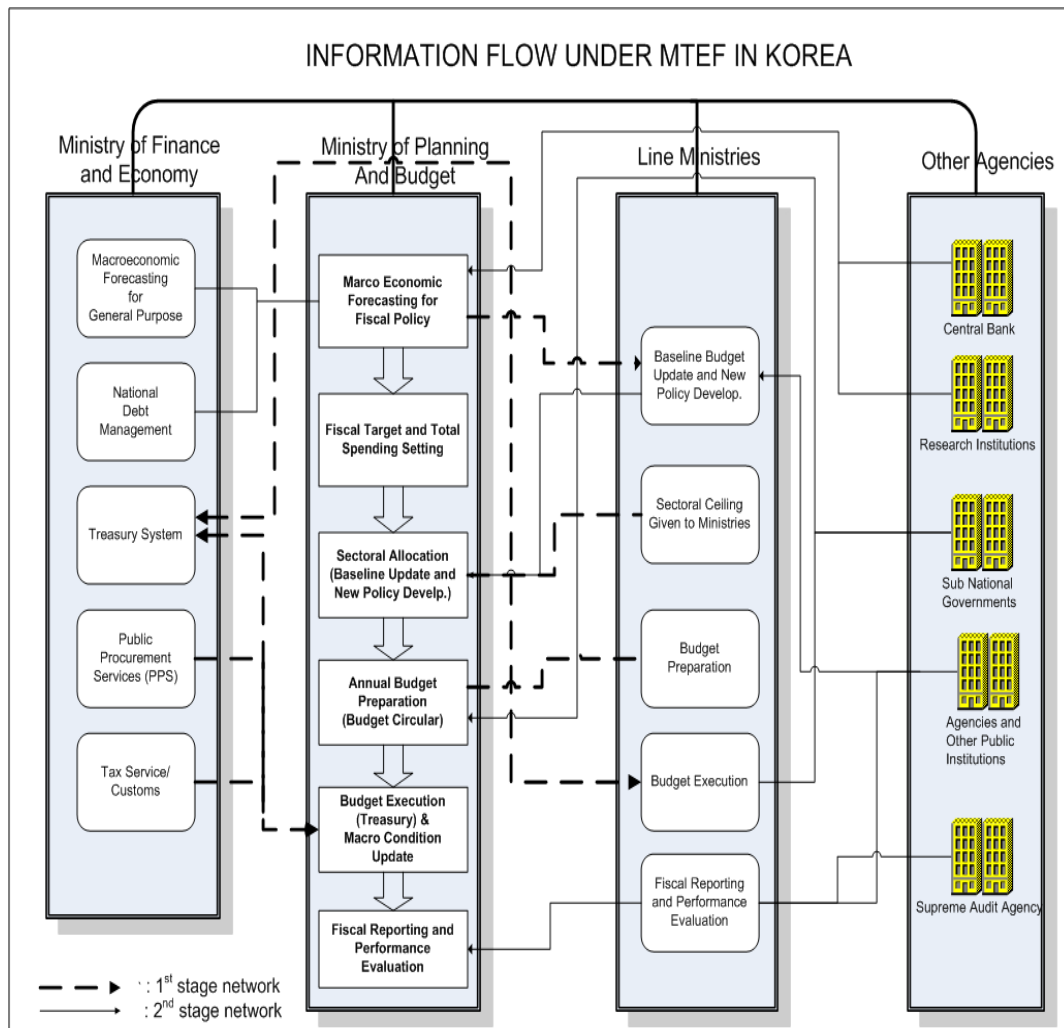
#### B. Information Needs for Budget Formulation

##### *a. Macroeconomic Forecasting*

**The development of macroeconomic framework needs to be seen as a continuous process with the framework updated frequently.** According to the Korean MPB's plan, MPB will prepare a 'Long-Term National Fiscal Management Plan' to draw a country's long-term sectoral allocation strategy and this Plan will be updated every year, which will necessitate updating macroeconomic framework every year. However, more frequent update will be necessary for preparing supplementary budget and cash management.

**Macroeconomic framework needs to be linked with other systems, including debt management system, treasury system and national accounts data in order to frequent update.** As a country's macro economy is intricately affected by numerous variables – national debt level, cash balance, foreign reserve, interest and exchange rate among others – and these variables are managed by different agencies and ministries, predicting macroeconomic condition involves linking relevant information systems so that data from each system flows in and out of the rest of systems on a timely basis.

**Central budget office needs to formulate a separate, conservative macroeconomic forecast by a) combining multiple sources of forecasts and b) creating pre-determined mechanism to lower economic growth rate to ensure fiscal sustainability.** Countries often conservatively modify general-purpose macro economic forecasting for budgeting-purpose forecasting<sup>8</sup>. It seems to be a prudent exercise for central budget office to base its revenue estimate and other budgetary decision on a conservatively set assumption. For this purpose, central budget office should have access to necessary macroeconomic information as well as technical capacity to analyze the results of macro forecasts presented by other institutions, such as central bank, private and public research institute, and then come up with its own version.



<sup>8</sup> For example, the Canadian Department of Finance systematically revises the private sector forecasts downwards as a further measure of prudence. This takes the form of the government adding 50-100 basis points (0.5-1.0 percentage points) to the average private sector economic forecasts for interest rates and then feeding this through its entire econometric model, thus producing lower forecast economic activity. This provides a buffer in order to maintain the government's fiscal objectives. OECD, *Budgeting in Canada*, 1999, p. 9.

### *b. Fiscal Target and Total Expenditure Setting for Multi-Years*

**Setting fiscal target and total expenditure ceiling involves both economic and political consideration.** Interpreting the status of current economy within economic cycle is very important, for the fact that the economy is viewed as in its downturn of economic cycle more easily justifies central budget office to create fiscal deficit to boost up consumption and investment. However, precise and accurate interpretation of economic cycle is extremely difficult and often vulnerable to non-economic factors.

**To maintain fiscal sustainability, therefore, central budget office needs to design a decision-making mechanism based on objective and quantifiable indicators and multiple scenario analysis.** Reducing room for central budget office's capricious intervention on macro economy can actually increase the automatic stabilizing effect of public expenditure and increase the credibility and integrity of central budget office. Also, central budget office needs to develop several scenario analysis, optimistic, pessimistic, and medium, regarding economic growth and other macro indicators and then decide which scenario to take through a committee that consists of well-known scholars and policy makers.

### *c. Sectoral Ceiling Setting for Multi-Years*

**While countries allocate resource to sectors/ministries using various processes, this paper bases its analysis on the Korean government's proposal outlined in the 'National National Resource Allocation Improvement Plan.'** According to the MPB's plan, sectoral allocation is done in three stages; Stage I is setting national strategic management and sectoral priority; Stage II is reviewing line ministries' expenditure update<sup>9</sup>, and Stage III is allocating resource to sectors based on three levels prioritization. The following analyzes each stage in terms of the role of FMIS and the degree of computerization of FMIS.

**Stage I may not need to be computerized as it involves political and strategic process.** Central budget office consults with the President's Office to incorporate the President's policy priorities. Also, central budget office comes up with its own policy analysis to prioritize public spending for the coming three years. As the Korean MTEF covers three to five years' span, this analysis needs to have medium-term perspective and be agreed by sector ministers and ruling political party.

**Stage II, on the other hand, requires significant level of computerization as it involves massive amount of information coming to central budget office from all line ministries.** An extensive information network between central budget office and all ministries and agencies need to be set up so that line ministries' expenditure update is transferred through the network. Central budget office needs to provide standardized template to line ministries so that line ministries can easily aggregate and analyze all the updates submitted. The template also needs to fix all the macro indicators to be used for updating line ministries' cost estimate so that all line ministries apply the same indicators to their calculation.

**In addition to data transfer capacity, central budget office's FMIS should provide in-depth analytical tools to verify the reasonableness of line ministries' expenditure forecast.** Given the massive amount of information submitted and the limited resource

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<sup>9</sup> Expenditure update usually consist of a) cost estimate of existing programs/projects for year t and t+1, using updated indicators such as price index, unemployment rates, estimated number of students by grade, and b) new policy proposal for year t+2 and its cost estimate.

and time within central budget office, a computerized analysis system is a critical prerequisite to this task. Given that, under MTEF, more autonomy will be given to line ministries once sectoral ceiling is agreed, central budget office's critical review at this stage becomes more important.

**Stage III can be done using a simple set of linked spreadsheets until sophisticated software is developed.** Once national policy priority is set and the line ministries' budget update is analyzed, central budget office begins to categorize all expenditure in terms of priority. First, calculating all statutory spending and highest priority spending then to move down to next priority level spending until the sum of expenditure reaches pre-determined total aggregate ceiling for ensuring accountability of public spending.

**For this task, codifying each expenditure account by priority, functional/programmatic classification<sup>10</sup>, and netting out all internal transfers will be a prerequisite.** Especially, it will be important to clarify and simplify the flow of expenditure among general account, special accounts and extra budgetary funds within a sector. In many countries, program expenditure usually consists of direct spending as well as transfer to other accounts or institutions and these transfers are often counted twice by both giving and receiving institutions. In order to make the sum of all sectoral spending is equal to total aggregate ceiling, netting out all the internal transfers within a sector should be readily available from the FMIS.

#### *d. Annual Budget Formulating*

**This section assumes that total expenditure aggregate and sectoral/ministerial allocation is already finalized.** Detailed information on decision-making process can be found in MPB's National Resource Allocation Improvement Plan.

**Central budget office prepares an electronic Budget Circular template that prefixes sectoral allocation and major macroeconomic indicators and line ministries submit their budget request on line.** Preferably, electronic Budget Circular has an easy-to-use template with macro variables fixed so that line ministry can easily fill in. Line ministries prepare their own budget within the provided ceiling for upcoming three years. As mentioned above, the FMIS should have a function to categorize requested expenditure by function or programs and netting out internal transfers.

**The FMIS should allow central budget office to detect any request that exceeds prefixed ceiling or any uses of different assumptions by line ministries to calculate budget request.** If a country's sectoral allocation is hard constraint, the FMIS can be set in a way that prohibits line ministries from putting more than the ceiling. Alternatively, if a country allows some kinds of adjustment and negotiation on sectoral ceiling, the FMIS can be set to detect and signal all the requests that exceed the ceiling.

**In addition to financial information, a FMIS under MTEF should have capacity to record and monitor cost and performance information of major, if not all, programs and projects.** MTEF, in return for allowing line ministries greater budgetary decision power, needs to establish an accountability mechanism. While manual, separate follow-up on performance may be one option as MTEF starts to operate, country's FMIS should eventually capture performance and cost information. In particular, cost information for major programs and projects is an essential element for performance evaluation and is in effect feasible to trace only with well-developed computerized cost accounting system.<sup>11</sup>

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<sup>10</sup> According to OECD Guidelines, functional or programmatic classification is most suitable for sectoral allocation under MTEF.

<sup>11</sup> However, costing in public sector is recognized to be more difficult due to complex overhead cost sharing and unclear valuation of government assets.

**Central budget office's FMIS should be linked to treasury system and other execution system.** Once the National Assembly approves the draft executive budget, the approved budget needs to be automatically registered in treasury system. In this integrated network, if situations such as low revenue collection, cash shortage, natural disasters arise so initial disbursement plan needs to change – in terms of both amount and timing of allocation -, central budget office can immediately effect this change by restricting line ministries' spending authority through FMIS, which is necessary control mechanism in a fiscally emergency situation.

### **C. Information Needs for Budget Execution and Reporting**

**While effective budget execution and fiscal reporting requires many types of information, what's needed under MTEF is not much different from the existing system.** Thus, this paper deals with only information that needs to change or add under MTEF. For more detailed information regarding the role and working mechanism for execution process, please refer the Hashim and Moon (2004).<sup>12</sup>

**Even though MTEF allows more discretion to line ministries in operating their budget within ceiling, central budget office should have access to detailed accounts of line ministries throughout a fiscal year, not just at the end of fiscal year.** The fact that central budget office has access to what and where line ministries are spending serves as a check-and-balance system for line ministries' increased budgetary power. However, line ministries are very likely to resist sharing information with central budget office. Therefore, legal mandate and political support is a critical element for central budget office's accessibility to these information.

**As maintaining fiscal sustainability is one of the objectives of MTEF, an FMIS should cover expenditure spent not just by central ministries but also by agencies and sub-national governments.** This is particularly important, for many countries now delegate spending decision into local government and central ministries' spending is often made through agencies and local governments. While integrating local government information system into central FMIS is the most desirable setting, manual data transfer may be the initial step to feed local government spending information into central FMIS.

**More important action than the network integration is the integration of budget classification and chart of accounts between central and local governments.** For central budget office to effectively monitor and control sub-national level expenditure, it is very important to ensure local governments use same classification and chart of accounts as those of central government. Otherwise, central budget office will have great difficulty aggregating and analyzing them.

### **4. Inadequacy of Current Fmis to Support MTEF**

**The current FMIS in the MPB and other ministries is not appropriate to provide necessary information in a timely basis due to three major reasons, a) fragmented system among ministries and agencies, b) inappropriate regulatory environments, and c) low utilization for policy-level decision making.**

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<sup>12</sup> Treasury Diagnostic Toolkit, World Bank Working Paper No.19, Ali Hashim and Allister J. Moon, 2004, the World Bank, Washington, D.C.

## **A. Fragmented Systems Among Ministries, Agencies, and Sub-national Governments**

**The MPB, a central budget office, and Ministry of Finance and Economy (MoFE), a treasury, have two separate information systems and they are not sufficiently integrated.** Currently, the MoFE is in charge of macroeconomic and treasury management, and the MPB is in charge of budget formulation and execution. For an effective public expenditure control, two systems need to be integrated so that central budget office can regularly monitor budget execution progress, cash balances, and other important indicators and enact any changes on spending amount and schedule, if necessary.

**An information system that ministries use to submit their budget request is different from the one that ministries use for budget execution such as allotment, commitment, and cash rationing.** Within the MPB, two separate software are used for line ministries' budget submission and budget execution. There is hardly any justification to operate two systems for budget formulation and execution other than that two software were developed separately in different period. With two separate systems, line ministries tend to care more on formulation software and less on execution and this can potentially lead to brakeage and inconsistency when transferring budget information from one to another.

**e-Procurement system in the Public Procurement Service (PPS) needs to be linked with MoFE and MPB system to reduce opportunity cost from idle cash.** The PPS has its own eProcurement system<sup>13</sup>, a very advanced features for effective and transparent public procurement, but it is not sufficiently linked with neither MoFE's network nor MPB's network. For example, e-payment function of PPS's eProcurement system is not linked with treasury system so that PPS needs to keep large amount of cash in its account to ensure sufficient fund to pay goods and services it purchases, which incurs significant opportunity costs from idle cash balance. If PPS's network is linked with treasury, PPS doesn't need to keep cash in its account.

**Internal Tax Office, and Customs use separate and stand-alone information system.** These systems need to be linked with central budget office's system to give updated cash inflow information, which are critical element for effective cash management and budget execution.

**Financial information system for sub-national governments does not exist and is now prepared by Ministry of Home Affairs, with little consideration of integrating with MPB's information system.** While developing an information system that overarches all local government spending is worth pursuing in long run, it is very important to ensure local FMIS is compatible, if not integrated, with central government's FMIS to ease the burden of aggregation and consolidation. MTEF's function of maintaining fiscal sustainability doesn't work well if significant amount of public expenditure is spent on sub-national level and central budget office has very poor handle on it.

## **B. Low Utilization for Policy-Level Budgetary Decision Making**

**It is usually acknowledged that senior-level officials make little use of FMIS to make policy-level decision.**<sup>14</sup> While MPB's FMIS has strength in transferring

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<sup>13</sup> It is called 'Narajangtu' which means national market ([://www.g2b.go.kr/index.html](http://www.g2b.go.kr/index.html))

<sup>14</sup> The author visited the Ministry of Planning and Budget in October 2003. During the visit, both senior officials and information specialists mentioned that MPB's FMIS doesn't have enough functions for policy analysis.

information between ministries on line so that most of paper works get eliminated, its analytical features are still underdeveloped and inadequate for sectoral and other aggregate-level spending analysis even though FMIS can potentially equip central budget office with strong analytical tools.

**Both senior officials' lack of interest and understanding of FMIS and FMIS' inability to provide aggregate analysis information attribute to the low utilization of FMIS.** Like a vicious circle, lack of analytical tools in FMIS disinterests senior officials from using FMIS and, in turn, lack of interest of senior officials make it hard for information specialists to gather inputs and feedback from senior officials to strengthen FMIS' analytical features.

**National debt management system is not integrated with MPB's information system.** The Korean government expects national debt level to increase significantly in the coming decades due to rapidly aging population and potential unification costs. Effective debt management requires accurate forecasting and prudent management on macroeconomics, cash balance, and capital market monitoring. Current MPB's debt management system is, however, far from comprehensive and integrated, thus needs much work in this area.

### **C. Lack of Capacity to Record and Monitor Costing and Performance Information**

**The FMIS currently doesn't to produce any performance information, output or outcome of each program/project, on which decision-makers need to base their judgment to make in-year and out year budgetary adjustment.** Past efforts of the Korean government to implement performance budgeting has been mixed<sup>15</sup>. A few selected ministries and agencies prepared and submitted performance reports manually only at the end of fiscal year. During the fiscal period, however, central budget office doesn't have any control over line ministries' performance. Also, central budget office hardly makes any budgetary decision based on the performance report. As a system is as strong as the weakest link, the lack of performance information feedback to budgetary process can considerably weaken the MTEF's overall trustworthiness.

**Also, the FMIS doesn't have built-in functions to calculate costs of major, if not all, projects or programs so MPB staff has to manually compute the costs.** Accurate and timely cost information for major projects/program is an indispensable source for performance evaluation. Korean government expenditure system has extremely complicated accounting structure and flows of fund between accounts and special funds. Manually sorting out all the internal transfers and double accounting is in effect prohibitive, therefore, computerized FMIS is the prerequisite for cost accounting in a modern government expenditure system.

### **D. Inappropriate regulatory framework**

#### *a. Complex Budget Classification and Chart of Accounts*

**Current Korean accounting system doesn't provide a functional (or programmatic) classification, which is the appropriate classification for MTEF's sectoral allocation.** Classifying expenditures is important for policy and budget formulation and measuring

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<sup>15</sup> P36, Public Expenditure Management in Korea, Young-Sun Koh, Korea Development Institute, Seoul, Korea, 2003

the allocation of resources among sectors. According to OECD (2001)<sup>16</sup>, functional or programmatic classification is appropriate for efficient allocation of resource, which is the primary purpose of Korean MTEF. In this regard, the UN Classification of the Functions of Government (COFOG) can be one benchmark for Korea to introduce functional classification.<sup>17</sup>

**Government accounts are too detailed and rigid and there exist complicated internal transfers between general accounts, special accounts, and extra budgetary funds.** Currently, more than 6,000 accounts exist in public expenditure system, and this excessively detailed accounts make expenditure very rigid. It leaves very little room for line ministries to manage funds flexibly to meet unexpected situations. Also, extremely complicated internal transfers between accounts and funds make it difficult to categorize expenditure by sector<sup>18</sup>. For effective MTEF operation, central budget office's span of control needs to be moved upward to a more aggregate level of chart of accounts.

### *b. Insufficient Budget Coverage*

**Current Budget Law does not include in the budget, which requires parliamentary approval, special accounts and extra-budgetary funds (EBF), which amount to 47.8 % of national spending,<sup>19</sup> and often excluded from statistical analysis.** For purpose of fiscal control and efficient allocation of resources, which are core objectives of MTEF, the coverage of the budget should be comprehensive. The fact that almost half the public expenditure are in special accounts and extra budgetary funds and not included in statistical analysis can be a serious drawback to fiscal control as well as a block to the task of aggregating and analyzing expenditure by sector.

**Also, expenditure by certain institutions, which has defining characteristics of public sector, is not included in the budget at this moment.** For example, Korea Development Institute (KDI), whose funding are 100% tax revenue and whose staff enjoys the status of civil servant, fits the GFS' non-financial public corporation, one component of 'general government'<sup>20</sup>. However, KDI doesn't count as a public sector in Korean budget. While acknowledging some shadowy areas exist in defining public sector, Korean public sector is defined too narrowly<sup>21</sup>. In principle, all expenditure spent by all institutions that fit a general definition of public sector needs to be brought into consolidated financial account for both comprehensiveness and transparency purposes.

### *c. Inappropriate Government Statistics*

**Currently summing up all expenditure allocated to each sector in the budget document far exceeds the government total spending due to the practice of double accounting of program/project expenditure affecting multi sectors.** One of the

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<sup>16</sup> P121, *Managing Public Expenditure*, OECD, 2001, Paris, France

<sup>17</sup> For more information, please refer to Annex 2.

<sup>18</sup> For more information, please refer to Annex 3.

<sup>19</sup> Korean Ministry of Finance and Economy, Government Finance Statistics, 1999

<sup>20</sup> According to IMF's GFS (p 15), 'public sector' consists of general government and public corporation. General government includes central, state and local governments, and public corporation includes financial public corporations, non-financial public corporation, monetary public corporations, including the central bank, and nonmonetary financial public corporations.

<sup>21</sup> International Monetary Fund, Korea: Further Reforms in Fiscal Management, Washington, D.C., 2001

reasons for this double accounting is the pressure to inflate spending on certain sectors so spending on certain program/project counts twice depending programs' sectoral coverage. While the complicated accounting structure and classification have in effect prohibited anyone outside the MPB from detecting this flaw, introducing MTEF will require the sum of all the sectoral spending equals to total aggregate, especially to draw the table below as identified in the MPB's Plan.

#### Analysis of Budget Composition

	2005
By Function Education Health Defense .....	Total = 100
By Policy Wage/benefit IT Investment R&D .....	Total < 100 (only major programs)
By Organization Ministry of Education Ministry of Construction .....	Total = 100

### 5. Implementation Strategy for Improving FMIS and MTEF

**Both introducing MTEF and integrating and improving FMIS require significant amount of information flowing frequently between central budget office and line ministries.** Thus, it is critical to engage all the relevant stakeholders during the implementation process. Unless stakeholders have the sense of ownership through this process, new FMIS will have very little use and impact and unable to provide necessary information to support MTEF's smooth operation.

**Both introducing MTEF and integrating and improving FMIS require considerable time and resource, and should be viewed as a long-term process.** As evidenced from the World Bank-supported projects, average project duration to introduce FMIS is 6.7 years.<sup>22</sup> Also, changing budgetary process must be carefully approached in order not to impede annual budgeting process as budgeting is a continuous process and can't afford any stop or break. At the same time, integrating FMIS can be successful only after underlying business process is reviewed and updated to fit into a newly integrated environment. Many ICT-oriented government reforms have been unsuccessful because they ignored or skipped business process reengineering and

<sup>22</sup>World Bank's Experience With Financial Management Information System (FMIS) Project, William Dorotinsky and Junghun Cho, 2004, World Bank, Washington, D.C.

just computerized old, and often flawed, process.<sup>23</sup>

**Therefore, a modular approach would be more appropriate since some elements of information needs for MTEF are available in existing system and, more importantly, Korean government needs to update related laws and regulation to improve budget classification and coverage, charts of accounts, and statistical methodology.**

**The following is a list of factors to which deserves close attention in introducing MTEF and improving FMIS in Korea.** While this list is not comprehensive, it may raise awareness to reformers that more often than not projects with good intention and design fail when implementation strategy is not well thought out.

## **A. Leadership and Management Support**

**Continued commitment and support at the highest levels to improve and make better use of FMIS is a primary success factor for successful change.** This is arguably 'the' most important success factor for any public sector reforms. Any trial without continued commitment and support is in effect most likely to fail. While it is likely that MTEF reform gets sufficient supports from the highest level in MPB<sup>24</sup> and the Office of the President, the importance of improving FMIS to successfully implement MTEF seems to be less appreciated within the government. The fact that current FMIS suffers from low utilization for policy-level budgetary decision-making reinstates this concern.

**One way to increase the support for FMIS reform is to piggyback with national e-government initiative that the President puts high priority during his term.** Good example of the effectiveness of piggybacking strategy is eProcurement reform, which was one of the eight e-government reforms that Korean government initiated since 2001<sup>25</sup>. As one of the President's high priority policy, eProcurement reform received lots of media attention and political support during the reform and champion of this reform was rewarded after the reform<sup>26</sup>. Today, it is generally agreed that eProcurement system in Korea is one of the most successful one in the world<sup>27</sup>. Likewise, FMIS reform, framed as a national issue, not a MPB's, has a better chance to get much needed support from line ministries.

## **B. Inter-Agency Coordination**

**Successfully integrating network of information systems between MPB and line ministries to provide necessary information for MTEF is crucially dependent on cooperation of diverse users in ministries and agencies.** While MPB may initiate to introduce MTEF and take lead in rolling out its plan, MPB should engage all levels of players in implementing MTEF and FMIS. However, the idea of setting sectoral ceiling in advance can be seen as a mere return to the old control regime under Economic Planning Board during 1961 to 1994, with an empty promise of autonomy within the ceiling. To overcome this suspicion and reluctance, various types of awareness building efforts including training, seminar, and on-the-job training, needs to be provided to line ministries from the early stage of implementation. Also, strong support from the

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<sup>23</sup> p 29, Good practice in developing sustainable information systems, Department for International Development (DFID), London, UK, 1997

<sup>24</sup> For MTEF, a Vice-minister of MPB is a champion of reform and he makes a strong drive to introduce MTEF into Korean Government.

<sup>25</sup> PPS started to computerized procurement in 1998 but it becomes nation-wide project in 2001.

<sup>26</sup> Ok-Kyu Kwon, then an Administrator of PPS during eProcurement reform, is now chief economy policy advisor to the President, which is a ministerial-level position.

<sup>27</sup> It receives UN's Public Service Award (PSA) in 2003, "[http://www.unpan.org/dpepa\\_psaward.asp](http://www.unpan.org/dpepa_psaward.asp)"

President and political parties can increase interest and participation from line ministries.

**In particular, a careful coordination and collaboration between MPB and MoFE is necessary.** The organizational evolution between MPB and MoFE - once one institution and now divided into two separate institutions, create the sense of both cooperation and competition<sup>28</sup>. Thus, MPB needs to be particularly careful in designing macroeconomic forecasting function in MTEF, for MoFE can perceive the proposal of creating macroeconomic forecasting function within MPB as an intrusion of its territory and hold back any information generated by its treasury system and other information systems.

### C. Institutional Mindset

**While the Korean public sector seems to have technical capacity and infrastructure sufficient to manage sophisticated information system, cultural bias against technology specialists needs deliberate efforts and time to overcome.** As evidenced by the lack of FMIS usage among senior officials, Korean public sector seems to have imbedded bias against technical specialist over generalist. This issue has a long historical root and is unlikely to change over night. However, efforts should be made to bring deeper understanding and appreciation for technical specialist. Getting rid of separate job grading between generalist and specialist positions and rotating all staff between budget department and information system department may gradually diminish the bias.

### D. Avoiding Reform Fatigue

**Careful sequencing and phasing of reforms, using a modular approach, will reduce the risk of reform fatigue from simultaneous implementation of MTEF and FMIS.** The MPB and other line ministries often complain that they lack resources, mostly staff, to exclusively commit to reform agenda while keeping up with heavy daily routines. Also, so many reforms have been tried out since late 1990s without much success or recognition, which creates somewhat cynical sentiment among public servants and poses big challenge to MTEF and FMIS reforms. Therefore, careful sequencing and phasing, using a modular approach seems the most feasible and desirable way to mitigate this challenge.

**First step should be getting the basic right; improving budget classification, coverage, charts of accounts, and statistical mythology.** As Allen Schick rightly pointed out<sup>29</sup>, getting the basics right should be the beginning of any advanced public expenditure reforms. This is more so to the types of reforms as comprehensive as MTEF. Classifying expenditure by program, aggregating the chart of accounts, and netting out all internal transfers within the same sector and within public sector boundary should be the first actions to be taken and require significant amount of time and resource.

**Second step is to review and reform budgetary process itself (Business Reengineering).** This step includes identifying shortcomings of current budgetary process and draws a blueprint for new budgetary process under MTEF, including cabinet budget meeting, sectoral ceiling setting, and performance information feedback. The MPB may initially implement only parts of complete blueprint of MTEF, but

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<sup>28</sup> For historical evolution of two ministries, please refer to Annex 4.

<sup>29</sup> P 8, Public Expenditure Management Handbook, The World Bank, Washington, DC, 1998

having a master plan from the onset of reforming process will keep MPB focused and directed. This process will involve extensive consultation with other stakeholders, especially the Office of the President, which shouldn't be bypassed for the argument of time-saving.

**Simultaneously, MPB can initiate to integrate various information systems located in multiple ministries and agencies to provide information necessary for MTEF operation.** As new budgetary process is being drawn, MPB can initiate reviewing technical aspects of FMIS and incorporate new information needs identified from the MPB's master plan. Once all the information needs and new budgetary process is finalized, MPB can update its system by adding new functions, and integrate its network with other ministries' network

**Finally, having these prerequisites met, a new budgetary process can be introduced more smoothly by building confidence among MPB staff and creating learning curve effect.** As pointed out before, introducing MTEF usually takes several years before fully operated. As Dong Yeon Kim points out<sup>30</sup>, MPB and line ministries staff can, through this modular approach, build understanding and confidence of the new system as well as benefiting from learning curve effect. As budgeting can't afford any halt and MPB is currently short of its staff, gradual approach seems to be more acceptable and desirable to Korean government.

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<sup>30</sup> Key Issues for Introducing MTEF and Top-down Budgeting in Korea, Dong Yeon Kim, World Bank, Washington DC, 2004

## ANNEX 1. THE KOREAN BUDETARY PROCESS COMPARISION

Before MTEF	Month	After MTEF
Estimate of new and on-going projects spending request - no line ministry's input	12	MPB provides Guideline for long-term fiscal plan  Line ministries' submit of long-term spending plan and major project exp. plan MPB draft total/sectoral ceiling for three years
	1	
	2	
MPB provides Budget Circular for this year's formulation	3	Cabinet Budget Meeting a)total aggregate, b) sectoral ceiling for 3 years, c) major program spending plan  MPB provides Budget Circular for this year's formulation
MPB reports to N.A. and party	4	MPB reports to N.A. and major parties
Ministries submit budget	4-5	Ministries prepare budget request
Budget formulation - review of individual projects	6-8	MPB reviews proposals sectoral/ministerial overview update of March's macro conditions
Consultation with ruling party	8	Consultation with ruling party 2 <sup>nd</sup> Cabinet Budget Meeting - finalize next year's budget
MPB submits draft budget and coming three years'	10	MPB submits draft budget and coming three years' total/sectoral ceiling to N.A
	11	MPB Updates long-term fiscal management plan

## **ANNEX 2. COFOG: BREAKDOWN BY DIVISION AND GROUP**

### ***01. GENERAL PUBLIC SERVICES***

- 01.1 Executive and legislative organs, financial and fiscal affairs, external affairs
- 01.2 Foreign economic aid
- 01.3 General services
- 01.4 Basic research
- 01.5 R&D general public services
- 01.6 Other general public services
- 01.7 Public debt transactions
- 01.8 Transfers of a general character between different levels of government

### ***02. DEFENCE***

- 02.1 Military defence
- 02.2 Civil defence
- 02.3 Foreign military aid
- 02.4 R&D defence
- 02.5 Other

### ***03. PUBLIC ORDER AND SAFETY***

- 03.1 Police services
- 03.2 Fire-protection services
- 03.3 Law courts
- 03.4 Prisons
- 03.5 R&D public order and safety
- 03.6 Other

### ***04. ECONOMIC AFFAIRS***

- 04.1 General economic, commercial and labour affairs
- 04.2 Agriculture, forestry, fishing and hunting
- 04.3 Fuel and energy
- 04.4 Mining, manufacturing and construction
- 04.5 Transport
- 04.6 Communication
- 04.7 Other industries
- 04.8 R&D economic affairs
- 04.9 Other

### ***05. ENVIRONMENTAL PROTECTION***

- 05.1 Waste management
- 05.2 Waste water management
- 05.3 Pollution abatement
- 05.4 Protection of biodiversity and landscape
- 05.5 R&D environmental protection
- 05.6 Other

### ***06. HOUSING AND COMMUNITY AMENITIES***

- 06.1 Housing development
- 06.2 Community development
- 06.3 Water supply
- 06.4 Street lighting
- 06.5 R&D housing and community amenities
- 06.6 Other

### ***07. HEALTH***

- 07.1 Medical products, appliances and equipment
- 07.2 Out-patient services
- 07.3 Hospital services
- 07.4 Public health services
- 07.5 R&D health
- 07.6 Other

### ***08. RECREATION, CULTURE AND RELIGION***

- 08.1 Recreational and sporting services
- 08.2 Cultural services
- 08.3 Broadcasting and publishing services
- 08.4 Religious and other community services
- 08.5 R&D recreation, culture and religion
- 08.6 Other

### ***09. EDUCATION***

- 09.1 Pre-primary and primary education
- 09.2 Secondary education
- 09.3 Post-secondary non-tertiary education
- 09.4 Tertiary education
- 09.5 Education not definable by level
- 09.6 Subsidiary services to education
- 09.7 R&D education
- 09.8 Other

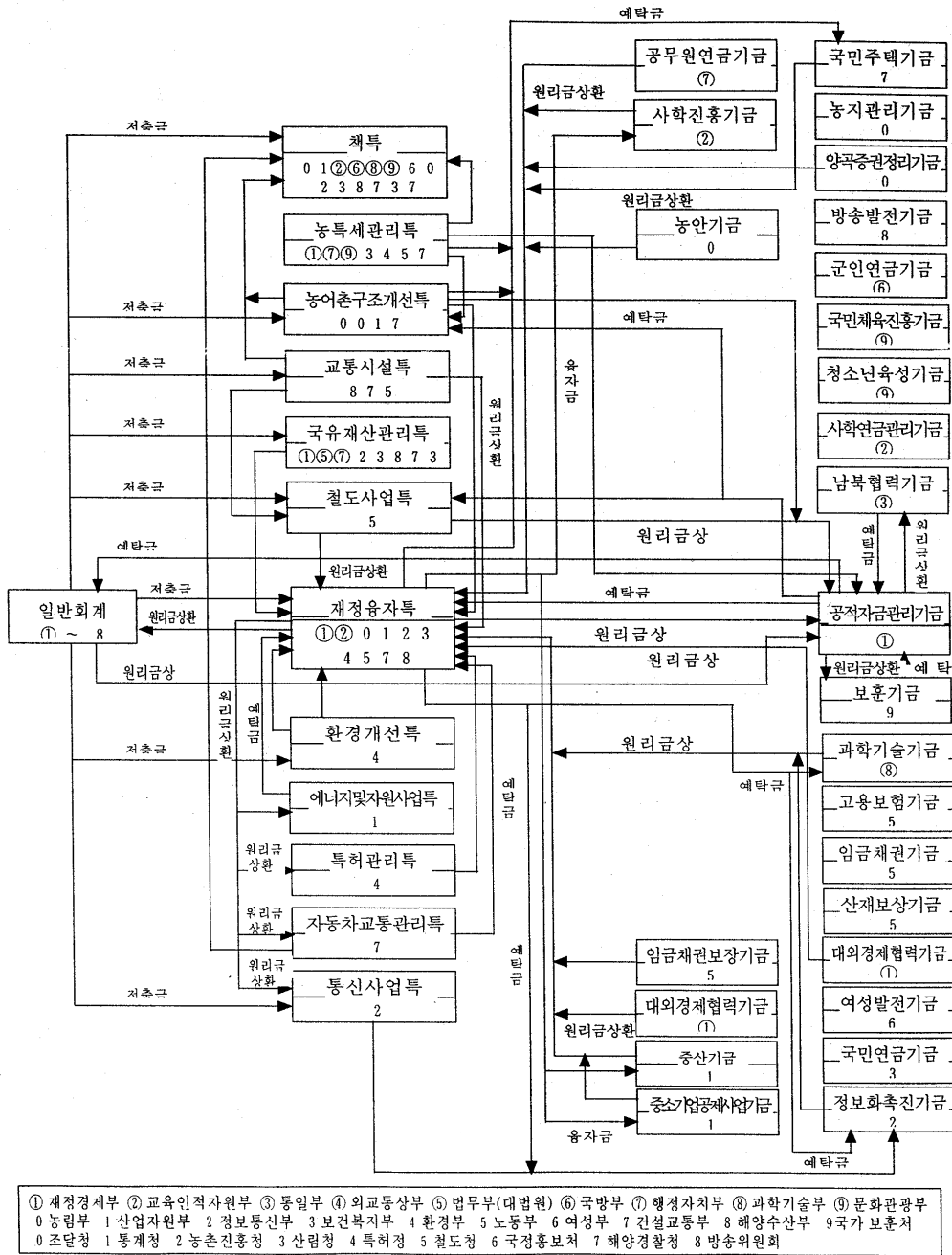
### ***10. SOCIAL PROTECTION***

- 10.1 Sickness and disability
- 10.2 Old age
- 10.3 Survivors
- 10.4 Family and children
- 10.5 Unemployment
- 10.6 Housing
- 10.7 Social exclusion
- 10.8 R&D social protection
- 10.9 Other

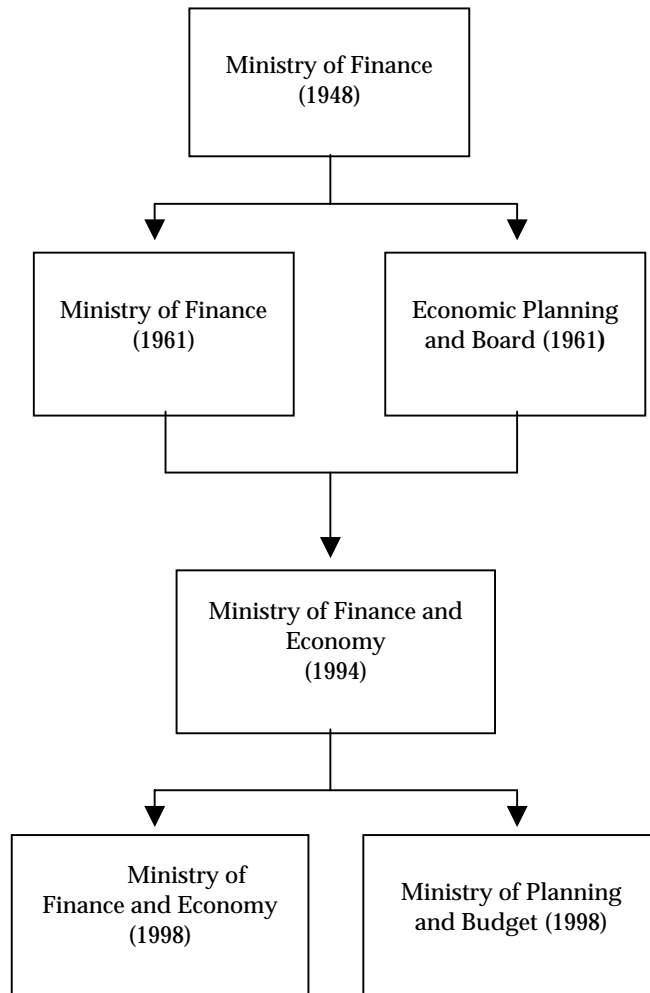
Source : *United Nations. (2000). Classifications of Expenditure According to Purpose. ST/ESA/STAT/SER.M/84. New York.*

### ANNEX 3. EXAMPLE of INTERNAL TRANSFER WITHIN ACCOUNTS AND FUNDS

참고 재정자금 흐름도



**ANNEX 4. Organizational Evolution Between the Ministry of Planning and Budget and the Ministry of Finance and Economy**



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