

ANNEXES

Annex I

Code of Good Practices on Fiscal Transparency

CLARITY OF ROLES AND RESPONSIBILITIES

1. The government sector should be clearly distinguished from the rest of the economy, and policy and management roles within government should be well defined.

- The boundary between the government sector and the rest of the economy should be clearly defined and widely understood. The government sector should correspond to the general government, which comprises the central government and lower levels of government, including extrabudgetary operations.
- Government involvement in the rest of the economy (e.g., through regulation and equity ownership) should be conducted in an open and public manner on the basis of clear rules and procedures, which are applied in a nondiscriminatory way.
- The allocation of responsibilities between different levels of government, and between the executive branch, the legislative branch, and the judiciary, should be clearly defined.
- Clear mechanisms for the coordination and management of budgetary and extra-budgetary activities should be established, and well-defined arrangements vis-à-vis other government entities (e.g., the central bank, and state-controlled financial and nonfinancial enterprises) should be specified.

2. There should be a clear legal and administrative framework for fiscal management.

- Fiscal management should be governed by comprehensive laws and administrative rules applying to budgetary and extrabudgetary activities. Any commitment or expenditure of government funds should have a legal authority.
- Taxes, duties, fees, and charges should have an explicit legal basis. Tax laws and regulations should be easily accessible and understandable, and clear criteria should guide any administrative discretion in their application.
- Ethical standards of behavior for public servants should be clear and well publicized.

From International Monetary Fund, *Draft Manual on Fiscal Transparency*, October 1998.

PUBLIC AVAILABILITY OF INFORMATION

1. The public should be provided with full information on the past, current, and projected fiscal activity of government.

- The annual budget should cover all central government operations in detail and should also provide information on central government extrabudgetary operations. In addition, sufficient information should be provided on the revenue and expenditure of lower levels of government to allow a consolidated financial position for the general government should be presented.
- Information comparable to that in the annual budget should be provided for the outturns of the two preceding fiscal years, together with forecasts of key budget aggregates for the two years following the budget.
- Statements should be published with the annual budget giving a description of the nature and fiscal significance of contingent liabilities, tax expenditures, and quasi-fiscal activities.
- The central government should regularly publish information on the level and composition of its debt and financial assets.

2. A public commitment should be made to the timely publication of fiscal information.

- Specific commitments should be made to the publication of fiscal information (e.g., in a budget law).
- Advance release date calendars for fiscal reporting to the public should be announced.

OPEN BUDGET PREPARATION, EXECUTION, AND REPORTING

1. Budget documentation should specify fiscal policy objectives, the macroeconomic framework, the policy basis for the budget, and identifiable major fiscal risks.

- A statement of fiscal policy objectives and an assessment of sustainable fiscal policy should provide the framework for the annual budget.
- Any fiscal rules that have been adopted (e.g., a balanced budget requirement and borrowing limits for lower levels of government) should be clearly specified.
- The annual budget should be presented within a comprehensive and consistent quantitative macroeconomic framework, and the economic assumptions and key parameters (e.g., effective tax rates) underlying budget estimates should be provided.
- Existing commitments should be distinguished from new policies included in the annual budget.
- Major risks to the annual budget should be identified and quantified where possible, including variations in economic assumptions and the uncertain costs of specific expenditure commitments (e.g., financial restructuring).

2. Budget estimates should be classified and presented in a way that facilitates policy analysis and promotes accountability.

- Government transactions should be on a gross basis, distinguishing revenue, expenditure, and financing, and classifying expenditures on an economic and functional basis. In addition, expenditure should be classified by administrative category. Data on extrabudgetary operations should be similarly classified. Budget data should be presented in a way that allows international comparisons.
- A statement of objectives to be achieved by major budget programs (e.g., improvement in relevant social indicators) should be provided.
- The overall balance of the general government should be a standard summary indicator of the government's financial position. It should be supplemented by other fiscal indicators (e.g., operational balance, structural balance, and primary balance) when economic circumstances make it inappropriate to base judgments about fiscal policy stance on the overall deficit alone.
- The annual budget and final accounts should include a statement of the accounting basis (i.e., cash or accrual) and standards used in the preparation and presentation of budget data.

3. Procedures for the execution and monitoring of approved expenditures should be clearly specified.

- A comprehensive, integrated accounting system should be established. It should provide a reliable basis for assessing payments arrears.
- Procedures for procurement and employment should be standardized and accessible to all interested parties.
- Budget execution should be internally audited, and audit procedures should be open to review.

4. Fiscal reporting should be timely, comprehensive, and reliable, and should identify deviations from the budget.

- During the year, there should be regular, timely reporting of budget and extrabudgetary outturns, which should be compared with original estimates. In the absence of detailed information on lower levels of government, available indicators of their financial position (e.g., bank borrowing and bond issues) should be provided.
- Timely, comprehensive, and audited final accounts of budget operations, together with full information on extrabudgetary accounts, should be presented to the legislature.
- Results achieved relative to the objectives of major budget programs should be reported to the legislature.

INDEPENDENT ASSURANCES OF INTEGRITY

1. The integrity of fiscal information should be subject to public and independent scrutiny.

- A national audit body, or equivalent organization, should be appointed by the legislature, with the responsibility to provide timely reports to the legislature and public on the financial integrity of government accounts.
- Macroeconomic forecasts (including underlying assumptions) should be available for scrutiny by independent experts.
- The integrity of fiscal statistics should be enhanced by providing the national statistics office with institutional independence.

Annex II

The “New Public Management”

As mentioned in box 12 (chapter 3), the set of public administration and budgeting practices collectively known as the “New Public Management,” has figured prominently, for over a decade, in the debate on improving public-sector efficiency and effectiveness. Although the New Public Management is hardly “new” anymore, and many of the NPM innovations have become commonplace in several developed countries (and is sometimes, and inaccurately, identified with “the New Zealand Model”), NPM is still a “new” thing in many developing countries and in some developed countries of continental Europe and East Asia. Because of its far-reaching implications for public expenditure management, it is useful to summarize here its core components as well as the major arguments in favor of and against the introduction of NPM.

NPM has alternately been sanctified or demonized. Its strongest proponents argue that NPM is fully applicable everywhere. Indeed, some even argue that it is applicable everywhere only if it is applied in *all* of its elements—and that the only implementation requirement is to “just do it” (in the well-known slogan of an apparel company). This position can be explained by the fact that the NPM construct possesses extraordinary internal consistency; each element is logically related to the others. At the opposite end of the debate, some critics argue that *none* of the NPM elements has any relevance to developing-country conditions, and that even in developed countries its applicability is partial and limited to countries with an “Anglo-Saxon” tradition. (The NPM has been primarily developed and implemented in Australia, Canada, New Zealand, the U.K., and—partly—the U.S. and Singapore.) In keeping with the pragmatic approach of this book, we believe that a more constructive assessment of NPM should be somewhere between those two extremes. Some elements of the approach are *likely* to work well everywhere; others are suitable mainly to developed countries; still others are appropriate only in countries with an Anglo-Saxon tradition; and, finally, some elements of NPM (e.g., a rigid “firewall” between service policy and service delivery) are unlikely to work well anywhere. Regrettably, the “all-or-nothing” insistence of some of the more ardent proponents of the approach has understandably led countries to rejecting the approach in its entirety—thereby losing the efficiency and effectiveness benefits which some of the innovations can make possible. Hence, the need for this summary.

Table AII.1 summarizes the key components of NPM,¹ and is followed by verbatim excerpts from two articulate views, one critical and the other positive, by Donald J. Savoie and Sandford Borins, respectively.² Readers will judge for themselves. But recall that, in considering whether or not to adopt a specific budgetary innovation, there is no substitute for a thorough and realistic assessment of its costs and benefits in the light of the objectives and realities of the specific country.

Table AII.1 Doctrinal Components of New Public Management

No.	Doctrine	Meaning	Typical justification
1	<i>"Hands-on professional management" in the public sector</i>	Active, visible, discretionary control of organizations from named persons at the top, "free to manage"	Accountability requires clear assignment of responsibility for action, not diffusion of power
2	<i>Explicit standards and measures of performance</i>	Definition of goals, targets, indicators of success, preferably expressed in quantitative terms, especially for professional services (cf. Day and Klein 1987; Carter 1989)	Accountability requires clear statement of goals; efficiency requires "hard look" at objectives
3	Greater emphasis on <i>output controls</i>	Resource allocation and rewards linked to measured performance; breakup of centralized bureaucracy-wide personnel management	Need to stress <i>results</i> rather than <i>procedures</i>
4	Shift to <i>disaggregation</i> of units in the public sector	Break up of formerly "monolithic" units, unbundling of U-form management systems into corporatized units, around products, operating on decentralized "on-line" budgets and dealing with one another on an "arm's-length" basis	Need to cite "manageable" units, separate <i>provision</i> and <i>production</i> interests, gain efficiency advantages of use of contract or franchise arrangements <i>inside</i> as well as outside the public sector
5	Shift to greater <i>competition</i> in the public sector	Move to term contracts and public tendering procedures	<i>Rivalry</i> is the key to lower costs and better standards
6	Stress on <i>private-sector styles of management practices</i>	Move away from military-style "public service ethic"; greater flexibility in hiring and rewards; greater use of PR techniques	Need to use "proven" private sector management tools in the public sector
7	Stress on greater <i>discipline</i> and <i>parsimony</i> in resource use	Cutting direct costs, raising labor discipline, resisting union demands, limiting "compliance costs" to business	Need to check resource demands of public sector and "do more with less"

Our own view is as follows. Stewart and Ranson (1988) consider the essence of the "new public management" to be a shift from the traditional model of "probity and propriety" to a new paradigm of "policy and performance." In these terms, we see the challenge not as one of choosing between these two paradigms, but of finding ways to combine "policy" with "propriety" and "probity" with "performance." For example, in law enforcement, the probity model corresponds loosely to "due process"; the performance model corresponds loosely to crime control. There is a natural tension between these two objectives, and continuing public debate, but the analytical and policy issue is not to jettison one in favor of the other, but to find ways of reconciling them in practice. It is the same with the "traditional" and the "new" paradigms of public sector management. Indeed, as we have stressed throughout this volume, all good policy rests on the reconciliation of multiple objectives.

"Con" (Donald J. Savoie)

- "The new public management philosophy . . . is rooted in the conviction that private sector management is superior to public administration. The solution, therefore, is to transfer government activities to the private sector through privatization and contracting out. Given that all government activities can hardly be transferred to the private sector, the next best solution is to transfer business management practices to government operations. . . . The very word 'management' implies decisiveness, a dynamic mindset and a bias for action. . .
- The new public management is basically flawed. By its very nature, the public administration field does not lend itself to Big Answers because private sector management practices very rarely apply to government operations. . . . Public administration operates in a political environment that is always on the lookout for 'errors' and that exhibits an extremely low tolerance for mistakes . . . in business it does not matter if you get it wrong 10 percent of the time as long as you turn a profit at the end of the year. In government, it does not much matter if you get it right 90 percent of the time because the focus will be on the 10 percent of the time you get it wrong. . .
- The new public management has yet to deal head on with accountability in government. . . . There is also a world of difference between citizens and clients. . . . Clients can turn to the market to depend their interests or walk away. . . . Citizens on the other hand, . . . hold politicians accountable through the requirements of political institutions and through exposure via the media. Politicians, meanwhile, hold public servants accountable through the application of centrally prescribed rules and regulations. . .
- The success of the business executive is much easier to assess than that of the government manager. There is also much less fuss over due process in the private sector than in government. . . . The new public management gives short shrift to these considerations: it simply ignores them. Rather than tangle with these fundamental issues, the disciples of the new public management employ a new highly value-laden lexicon to disarm would-be questioners. . . . reinventing, reengineering, empowering. . .
- If the problem with bureaucracy is one of insensitivity . . . we all too often forget that

one person's red tape is another's due process. The solution lies in fixing our political institutions. . . .

- The new public management has been with us for over ten years and it has very little to show for itself. To be sure, management consultants have profited extensively. . .
- The basic premise is that private sector management practices are superior to those found in government. . . . The implication is that public service has no intrinsic value. It also belittles the noble side of the public service profession: public servants became public servants because they wanted to serve their country. If they had wanted to become entrepreneurs, they would have joined the private sector or started their own businesses. . . . But the real damage . . . is that . . . we have been diverted from confronting substantial issues of governance and public administration. . . .
- The new public management has also overlooked important problems. . . . The policy side of government and the ability of bureaucracy to be innovative and self-questioning needed more fixing than did the machine or production-like agencies. The new public management has very little to offer on policy. Instead, . . . it speaks to the need for more 'doers' and fewer 'thinkers'. . .
- The new public management . . . may well be making matters worse, given its call for decentralized and empowered machinery of government. . . . [that] will make it more difficult to promote coherence in government policy and . . . for the political leadership to secure the necessary information to focus on the broad picture. Improvements in administration are also necessary. The solution, however, lies not in searching for the Big Answer: government will not be reinvented nor are we finally about to get it right. . . . Improvements in the administration of government will be made: . . . full use of new information technology to strengthen their capacity to provide services, . . . new partnership with other government departments to coordinate services. . . .
- Innovative thinking in government did not start with the new public management movement. Yet, one senses that anything significant taking place to strengthen the public sector tends to be attributed to the new public management by its advocates. . . . However, improvements are the results of new circumstances whether it is a tighter budget, new development in computer technology or old-fashioned common sense. The point to bear in mind is that the solutions that work are practical, rooted in the political and legal realities of government. They should not be expected to represent anything more than gradual and incremental improvements to public administration."

"Pro" (Sandford Borins)

- "The new public management is not a simplistic Big Answer. Rather, it is a normative reconceptualization of public administration consisting of several inter-related components. . . .
- The new public management came about in response to a number of environmental forces. . . . First, large and expensive public sectors were created during earlier periods of strong economic growth . . . [such that it became imperative to get] the debt problem under control. . . . Second, [there was] rapid development of information technology. Third, the ready availability of information . . . is destroying the tradi-

tional 'economies of scale' rationale for concentration of production in large organizations. Fourth, people . . . are demanding quality and service from both public and private sector producers. . . . Fifth, employees [look for] opportunities for personal growth and fulfillment. . . .

- The new public management is not slavishly following private sector ideas. . . . Rather, it acknowledges that both the public and private sectors are confronting similar forces, and it is receptive to learning about how the private sector has responded and, where appropriate, adapting private sector learning to the public sector.
- A second influence of private sector ideas is that the new public management is suspicious of all monopolies. Two mutually reinforcing remedies for monopoly are introducing competition and providing performance information to service recipients. The new public management advocates schemes such as Britain's market testing, which opens up the provision of some services to the public or within government to private sector competition. . . . There are impressive savings. . . .
- The new public management starts with the assumption that the world is at least partially decomposable. . . . For those functions that can stand alone, the obvious prescription is greater managerial autonomy. . . .
- The new public management has thought about the question of accountability. . . . In the past, when public servants acted as policy advisers, it was . . . similar to the privileged relationship between solicitor and client. The new public management has not ignored the role of public servants in policy development; rather it presents a new model. Increasingly, policy development is being done in open consultation among the general public, policy communities, and the public service. . . .
- The new public management does speak in normative tones, and it does use active verbs. The enthusiasm and the active verbs are an attempt to challenge the accountability-concealing passive voice and the overall greyness and grimness of tone. . . .
- One of the arguments often made is that the political context of the public sector has an extremely low tolerance for 'errors'. . . . The new public management's emphasis on continuous improvement is aimed at eliminating such errors. Of course this is similar to the use of TQM methods in the private sector to achieve goal like six sigma quality (that is, no more than one error per million). . . .
- There is a 'disbelief culture' found in government concerning management reforms. Part of the reason for the disbelief culture is that the proponents of these reforms, particularly the consultants, have tended to oversell their products. Academics, too, have often played a role in the disbelief culture, namely that of debunking the excessive claims of the proponents. . . . Some of us sense that the current wave of innovation and ferment in the public service is different in both scope and significance from the reform efforts of the past. . . . The public management community is characterized by strong initial beliefs but there is little agreement on what constitutes evidence. . . . [It] does not seem to have given enough thought to how we could determine if public management reforms are successful. . . .
- Ultimately, public management scholars should be contributing to the development of good governance. We will do that more effectively if we tone down our rhetoric, take off the shelf the social scientific research skills that we learned in graduate school, and concentrate on the challenging but *essential* task of evaluating the new public management."

NOTES

- ¹ From Christopher Hood, "A public management for all seasons," *Public Administration*, vol. 69, Spring 1991, p. 3. Reproduced by permission.
- ² "What Is Wrong with the New Public Management?" and "The New Public Management Is Here to Stay," both in *Canadian Public Administration*, vol. 38, no.1, Spring 1995. Reproduced by permission.

Annex III

Anti-Corruption Policy of the Asian Development Bank

The problem of corruption, here defined as the misuse of public or private office for personal gain, is an ancient one that can be found in every government. It can also be found in the private sector, and in the interactions between the public and private sectors. A balanced approach to combating corruption must address both sides of the equation, and make it more difficult and risky for those who would give bribes as well as those who would receive them.

Recently, a powerful combination of factors has emerged in donor and recipient countries that is providing momentum to the global anticorruption effort. At the same time, the latest empirical analysis is demonstrating that although the effects of corruption are complex and varied, it clearly exerts a negative impact upon development. As a result, the environment in which multilateral development banks (MDBs) operate has changed. Pressure for more active measures against bribery and graft is no longer likely to be isolated and sporadic, but will remain an important element of the broader debate over good governance and sound development management.

As a major multilateral development institution and one of the leading sources of development funding in the Asian and Pacific Region, the Asian Development Bank (ADB) welcomes this emphasis on anticorruption initiatives as part of its broader work on governance issues. The Bank's Board paper, "Governance: Sound Development Management," recognizes the importance of accountability for public officials, and transparency and predictability in government operations—critical principles in the fight against corruption.¹

At the broadest level, the Bank's anticorruption policy is intended to reduce the burden that widespread, systemic corruption imposes upon the governments and economies of the region. More specifically, the Bank's policy is centered upon three objectives:

- Supporting competitive markets, and efficient, effective, accountable, and transparent public administration as part of the Bank's broader work in governance and capacity building;
- Supporting promising anticorruption efforts on a case-to-case basis and improving the quality of the Bank's dialogue with its developing member countries (DMCs) on a range of governance issues, including corruption; and
- Ensuring that the Bank's projects and staff adhere to the highest ethical standards.

ADB, R89-98: "Anticorruption Policy," 11 June 1998 (Executive Summary).

The bulk of the Bank's effort will be directed toward broader measures to improve the quality of governance in the DMCs. This effort will have two components. The first will seek to reduce the scope of direct government intervention in the economy, in the belief that markets should be efficient and competitive, and have as few barriers to entry and exit as possible. This will reduce the opportunity for firms or officials to take advantage of artificially restricted markets or suboptimal pricing to demand monopoly rents.

The second component will focus upon supporting improvements in public administration and public sector management. Efforts to strengthen management information systems, for example, should enhance transparency and accountability, and strengthen the capacity of governments to monitor their expenditures. Measures to strengthen audit functions or to ensure adequate control over disbursements can play the dual role of helping to improve performance while making theft and embezzlement more easily detected. Procurement reform, which the Bank is already pursuing in a number of the DMCs, can reduce costs while making fraud and abuse more difficult to perpetrate. Steps to strengthen civil service establishment management will help to eliminate "ghost employees," and efforts to decompress pay scales and improve employment conditions will lower the incentive for illicit behavior. Measures to improve procedures for recruitment and promotion should help avoid abuse of patronage, nepotism, and favoritism, and help foster the creation of an independent, meritocratic civil service. The reengineering and streamlining of business processes can improve the efficiency and effectiveness of the public sector while simultaneously reducing opportunities for corruption.

In advancing such initiatives, the Bank affirms its desire to adopt a proactive and not a reactive stance. Most priority governance initiatives will have significant positive externalities that will make corrupt behavior more difficult to engage in and more readily detected once it occurs. Over the longer term, the Bank is likely to be much more effective if it focuses its anticorruption efforts upon measures for prevention and not on short-term efforts aimed at prosecution.

The Bank may also be called upon to assist the DMCs in pursuing an explicit anticorruption program. Bank assistance will be guided by three considerations: (i) the extent to which Bank assistance is requested by the DMC; (ii) the degree to which the request is consistent with the Bank's broader country operational strategy and ongoing efforts in the field of governance and capacity building; and (iii) the extent to which the request falls in an area where the Bank has expertise. Under this element of the policy, the Bank may also support regional anticorruption initiatives or anticorruption-related research.

ADB staff should exercise caution in addressing several sets of initiatives that will typically remain beyond the Bank's scope of involvement. They include efforts to influence the domestic debate within the DMCs regarding an anticorruption strategy or set of anticorruption initiatives; anticorruption programs that are highly politicized in nature and targeted at a particular individual or political party; and initiatives that are largely cosmetic and designed to foster the illusion of progress without the substance. To ensure consistency with the Bank's Charter, any anticorruption initiatives supported by the Bank must be apolitical in nature and motivated solely by essential economic considerations or concerns about the probity of Bank operations.

The Bank has several mechanisms for engaging in dialogue with the DMCs on issues of governance (including corruption), ranging from the country operational strategy and

the country assistance program discussions, to country portfolio review missions, to project appraisal, implementation, and review missions. Bank staff charged with country strategy and program formulation, including the drafting of the country operational strategy and country assistance program documents, as well as staff responsible for loan or TA projects, should address corruption in the context of broader governance and capacity-building issues. They should be knowledgeable about issues of corruption and its impact within their particular geographic and/or sectoral sphere of operations. They will use these mechanisms to discuss and recommend ways in which the Bank can help advance the principles of sound development management, including measures that would help to combat corruption, in any country where corruption affects Bank projects and the country's general prospects for economic growth.

Country portfolio review missions and project review missions may provide a useful venue for discussing the policies and practices that impede the efficient implementation of Bank projects. Under most circumstances, staff who suspect that corruption may have occurred or may be occurring within a given Bank project should follow the procedures outlined in paragraph 64 of this document and report the matter to the Office of the General Auditor, who will determine the optimal course of action. In rare cases where rapid follow-up actions may be needed, staff can address such issues explicitly with the relevant company, executing agency, or appropriate investigative agencies after clearance from their director and, the Office of the General Counsel (OGC). Any discussion with a given firm or government agencies should, however, be limited to a specific Bank operation or set of operations.

If the Bank's efforts to reduce illicit behavior among its DMCs are to be credible, it is essential that Bank staff be beyond reproach and the Bank's internal regulations and procedures support the highest ethical standards. Toward this end, the third pillar of the Bank's anticorruption policy calls for more robust internal measures to enhance the integrity of Bank operations along five dimensions: (i) maintaining the integrity of Bank lending and TA operations; (ii) strengthening the Bank's procurement policy; (iii) updating the Bank's Code of Conduct and creating independent internal reporting mechanisms to address allegations of corruption among Bank staff or within Bank operations; (iv) improving the quality of oversight for Bank loans and TA grants; and (v) ensuring that all Bank staff are familiar with the anticorruption policy and act in a manner consistent with both the letter and the spirit of the policy.

If there is credible evidence of corruption in a Bank-financed loan or TA grant, the Bank will address the issue in a dialogue with the DMC. Breaches of specific loan regulations or covenants could result in a decision by Management to blacklist the firm involved, suspend disbursements, or cancel the loan.

In keeping with the evolving practice of IMF and the World Bank, Management and staff will consider issues of corruption more explicitly in the formulation of the country operational strategy and the country assistance program. Cases may occur in which corruption has reached such proportions that it poses a significant impediment to the probity of Bank operations or the attainment of a country's fundamental development objectives. Under such circumstances, Management could elect to lower or suspend Bank lending and TA operations to that country after consultation with the country and the Board.

Conversely, situations may also exist where a given country has made significant progress in improving the efficiency, effectiveness and integrity of its public and private

sectors. Under such circumstances, Management may elect to accelerate the lending program or provide additional TA resources to ensure sustainability for the reforms.

In the light of the complex and highly differentiated nature of corruption, it is important that Bank Management and staff be granted some degree of flexibility in dealing with individual cases within the parameters laid out in this policy. While acknowledging the need for fairness and consistency in its operations, and strongly affirming the importance of a "zero-tolerance" policy when credible evidence of corruption exists among Bank staff or projects, the Bank notes that different types of corruption will require different responses. There is a need for careful judgment based on accurate information and the specifics of the situation. The Bank's anticorruption effort will place particular emphasis upon the implementation of practical and cost-effective prevention control measures, in a fashion consistent with the Charter principle of "economy and efficiency."

An Anticorruption Task Force under the leadership of the Project Coordination and Procurement Division was recently convened to examine Bank procurement policy. Having taken into account the advantages of harmonizing the anticorruption effort among the MDBs with regard to procurement and the engagement of consultants, the Bank will introduce anticorruption provisions effectively identical to those adopted by the World Bank in respect of rejection of proposals, loan cancellation, declaration of ineligibility, and inspection rights. The Bank will also introduce an optional "no-bribery pledge" in the bid form that will be similar to that of the World Bank. It will also introduce a mandatory clause that, when the contract is to be financed wholly or partly by the Bank, the contract documents shall include an undertaking by the contractor that no fees, gratuities, rebates, gifts, commissions, or other payments, other than those shown in the bid, have been given or received in connection with the procurement process or in the contract execution. Following the adoption of the anticorruption policy paper by the Board, provisions to this effect will be incorporated in the Bank's "Guidelines for Procurement" and the "Guidelines on the Use of Consultants by the Asian Development Bank and its Borrowers" and submitted to the Board for approval. The "Guidelines" will be supplemented by provisions in the Bank's loan regulations allowing the Bank to cancel loans where there is evidence of corruption or fraud in connection with the award of a contract being financed by the Bank.²

With regard to the Bank's internal policies and procedures, several measures are necessary to ensure that they are consistent with those of other MDBs and evolving best practice. Currently, there are no independent channels whereby Bank staff can report possible incidents of corruption and have them investigated. Under this policy, OGA will serve as the initial point of contact for allegations of fraud and corruption among Bank projects or staff. In consultation with the Strategy and Policy Office (SPO), OGC, the Budget, Personnel, and Management Systems Department (BPMSD), Central Operations Services Office (COSO), and other relevant departments, OGA will consider appropriate measures to be adopted under this policy to ensure that all Bank staff and projects adhere to the highest standards of ethical conduct.

In May 1998, Management approved revisions to Administrative Order No. 2.02, Section 4, which contains the Code of Conduct outlining staff ethical duties, rights, and responsibilities in greater detail than was previously the case.

The Bank will undertake a number of measures to improve the quality of project monitoring and audit. The capacity of OGA will be strengthened to enable it to address

anticorruption issues effectively. Specialized training in forensic accounting and other investigative techniques will be provided, which will also be extended to select financial analysts and project implementation officers. Ongoing OGA efforts to streamline internal work procedures to free up greater resources for audits of high-risk and high-impact areas will continue. OGA will devote more time to conducting audits of project procurement—related activities, which will help prevent and detect corruption or other forms of fraud. OGA will strengthen its exchange of information with supreme audit institutions in the DMCs, and—working in collaboration with other Bank departments—it will play an active role in assessing the need to upgrade the audit capability of such institutions.

The relevant sections in the “Project Administration Instructions” and the *Loan Disbursement Handbook* will be revised to require that qualified accountant(s) be recruited by the executing or implementing agency, and that robust internal control systems and accounting systems be in place for a project before loan disbursement can be made. Greater resources will be made available for upgrading the quality of project monitoring and implementation missions. Consideration will be given to the design of appropriate efficiency indicators, which will be utilized in monitoring financial and physical progress on a quarterly basis. The quality of the Bank’s management information systems will be enhanced to provide managers with more timely information for monitoring project processing, loan administration, and the status of mission budget utilization.

These measures will be ineffective if Bank staff are unfamiliar with the provisions of the Bank’s anticorruption policy and Code of Conduct or fail to exercise due diligence in the performance of their duties. While it is not the intention of this policy to turn Bank staff into “police officers”, or to make the objective of reducing corruption paramount over other development goals, all departments and staff have a strong obligation to ensure the integrity of Bank operations within their respective areas of responsibility. Bank staff should familiarize themselves with the content of this policy and staff guidelines, and be prepared to respond appropriately as required.

In conclusion, this paper recommends a number of concrete actions to establish the Bank’s anticorruption policy. These measures can be broken down along three lines: recommended revisions of Bank policy and staff guidelines, new programming initiatives, and administrative changes.

NOTES

¹ ADB, R151-95: “Governance: Sound Development Management,” 17 August 1995.

² Office of the General Counsel, ADB, “Ordinary Operations Loan Regulations,” 1986.

³ Office of the General Counsel, ADB, “Special Operations Loan Regulations,” 1982.

Annex IV

Principles for Managing Ethics in the Public Service

On 23 April 1998, the Council of the OECD adopted a set of principles and recommended that Member countries take action to ensure well-functioning institutions and systems to promote ethical conduct in the public service.

High standards of conduct in the public service have become a critical issue for governments in OECD Member countries. Public management reforms involving greater devolution of responsibility and discretion for public servants, budgetary pressures and new forms of delivery of public services have challenged traditional values in the public service. Globalization and the further development of international economic relations, including trade and investment, demand high recognizable standards of conduct in the public service. Preventing misconduct is as complex as the phenomenon of misconduct itself, and a range of integrated mechanisms are needed for success, including sound ethics management systems. Increased concern about decline of confidence in government and corruption has prompted governments to review their approaches to ethical conduct.

In response to the above-mentioned challenges, the attached principles have been developed by the Member countries. The twelve principles are designed to help countries review the institutions, systems and mechanisms they have for promoting public service ethics. They identify the functions of guidance, management or control against which public ethics management systems may be checked. These principles distil the experience of OECD countries, and reflect shared views of sound ethics management. Member countries will find their own ways of balancing the various aspirational and compliance elements to arrive at an effective framework to suit their own circumstances.

The following principles may be used by management across national and sub-national levels of government. Political leaders may use them to review ethics management regimes and evaluate the extent to which ethics is operationalized throughout government. The principles are intended to be an instrument for countries to adapt to national conditions. They are not sufficient in themselves—they should be seen as a way of integrating ethics management with the broader public management environment.

1. Ethical standards for public service should be clear.

Public servants need to know the basic principles and standards they are expected to apply to their work and where the boundaries of acceptable behavior lie. A concise, well-

Source: Policy Brief No. 4, Public Management Service, OECD, May 1998.

publicized statement of core ethical standards and principles that guide public service, for example in the form of a code of conduct, can accomplish this by creating a shared understanding across government and within the broader community.

2. Ethical standards should be reflected in the legal framework.

The legal framework is the basis for communicating the minimum obligatory standards and principles of behavior for every public servant. Laws and regulations could state the fundamental values of public service and should provide the framework for guidance, investigation, disciplinary action and prosecution.

3. Ethical guidance should be available to public servants.

Professional socialization should contribute to the development of the necessary judgement and skills enabling public servants to apply ethical principles in concrete circumstances. Training facilitates ethics awareness and can develop essential skills for ethical analysis and moral reasoning. Impartial advice can help create an environment in which public servants are more willing to confront and resolve ethical tensions and problems. Guidance and internal consultation mechanisms should be made available to help public servants apply basic ethical standards in the workplace.

4. Public servants should know their rights and obligations when exposing wrongdoing.

Public servants need to know what their rights and obligations are in terms of exposing actual or suspected wrongdoing within the public service. These should include clear rules and procedures for officials to follow, and a formal chain of responsibility. Public servants also need to know what protection will be available to them in cases of exposing wrongdoing.

5. Political commitment to ethics should reinforce the ethical conduct of public servants.

Political leaders are responsible for maintaining a high standard of propriety in the discharge of their official duties. Their commitment is demonstrated by example and by taking action that is only available at the political level, for instance by creating legislative and institutional arrangements that reinforce ethical behavior and create sanctions against wrongdoing, by providing adequate support and resources for ethics-related activities throughout government and by avoiding the exploitation of ethics rules and laws for political purposes.

6. The decision-making process should be transparent and open to scrutiny.

The public has a right to know how public institutions apply the power and resources entrusted to them. Public scrutiny should be facilitated by transparent and democratic processes, oversight by the legislature and access to public information. Transparency should be further enhanced by measures such as disclosure systems and recognition of the role of an active and independent media.

7. There should be clear guidelines for interaction between the public and private sectors.

Clear rules defining ethical standards should guide the behavior of public servants in dealing with the private sector, for example regarding public procurement, outsourcing or public employment conditions. Increasing interaction between the public and private sectors demands that more attention should be placed on public service values and requiring external partners to respect those same values.

8. Managers should demonstrate and promote ethical conduct.

An organizational environment where high standards of conduct are encouraged by providing appropriate incentives for ethical behavior, such as adequate working conditions and effective performance assessment, has a direct impact on the daily practice of public service values and ethical standards. Managers have an important role in this regard by providing consistent leadership and serving as role models in terms of ethics and conduct in their professional relationship with political leaders, other public servants and citizens.

9. Management policies, procedures and practices should promote ethical conduct.

Management policies and practices should demonstrate an organization's commitment to ethical standards. It is not sufficient for governments to have only rule-based or compliance-based structures. Compliance systems alone can inadvertently encourage some public servants simply to function on the edge of misconduct, arguing that if they are not violating the law they are acting ethically. Government policy should not only delineate the minimal standards below which a government official's actions will not be tolerated, but also clearly articulate a set of public service values that employees should aspire to.

10. Public service conditions and management of human resources should promote ethical conduct.

Public service employment conditions, such as career prospects, personal development, adequate remuneration and human resource management policies should create an environment conducive to ethical behavior. Using basic principles, such as merit, consistently in the daily process of recruitment and promotion helps operationalize integrity in the public service.

11. Adequate accountability mechanisms should be in place within the public service.

Public servants should be accountable for their actions to their superiors and, more broadly, to the public. Accountability should focus both on compliance with rules and ethical principles and on achievement of results. Accountability mechanisms can be internal to an agency as well as government-wide, or can be provided by civil society. Mechanisms promoting accountability can be designed to provide adequate controls while allowing for appropriately flexible management.

12. Appropriate procedures and sanctions should exist to deal with misconduct.

Mechanisms for the detection and independent investigation of wrongdoing such as corruption are a necessary part of an ethics infrastructure. It is necessary to have reliable procedures and resources for monitoring, reporting and investigating breaches of public service rules, as well as commensurate administrative or disciplinary sanctions to discourage misconduct. Managers should exercise appropriate judgement in using these mechanisms when actions need to be taken.

Annex V

The IMF Monetary Model: A Hardy Perennial

Jacques J. Polak

From the day in 1947 when the International Monetary Fund opened its doors for business and member countries came to it seeking credit to help them meet deficits in their balances of payments, the IMF had to have an understanding of the causes of such deficits and, both qualitatively and quantitatively, of the policy measures necessary to overcome them. Only then could it come to a judgment on whether a country's policies would be sufficient to restore balance and, if they were not, to insist on a strengthened policy package as a condition for IMF credit.

The model that the IMF introduced in the 1950s to meet this need is still very much alive today. IMF Stand-By Arrangements and other financial support continue to be designed around monetary targets serving as "performance criteria" for the release of successive amounts of financial assistance or as "benchmarks" that play a major role in the reviews of such arrangements.

The Case for a Simple Model

One key characteristic of the model is its simplicity. There were two good reasons for this. First, at the analytical level, simplicity was inevitable in view of the paucity of basic economic data such as national income in the early postwar years for many of the Fund's member countries, the total absence of econometric models to describe their economies, and indeed, the probability that this situation would not be remedied for decades ahead. Hence the choice of a model that needed as inputs only two sets of statistics that were generally available—banking data and trade data. Second, and even more important, simplicity kept the model focused on the key variable that governments could control domestic credit creation—that was seen as crucial to the correction of the balance of payments problems for which IMF assistance had been invoked.

The limitations on statistical data have to a considerable extent subsided, but there are still many IMF customers, both in the developing world and among the transition econo-

Finance and Development, December 1997. Reproduced by permission. This article draws on the author's paper, *The IMF Monetary Model at Forty*, IMF Working Paper 97/49 (Washington, April 1997). Jacques Polak was Director of the IMF's Research Department from 1958 to 1979. He is considered to be the "founding father" of the IMF monetary model. Both within and outside the IMF, the model is usually referred to as the "Polak model."

mies, for which constructing an empirical model suitable for inferences about policy choices and outcomes would be a questionable undertaking. For program design as well as control, the IMF has continued to need a simple model, with a very limited number of standard variables, subject to elaboration on an ad hoc basis.

The Model

The model was designed to study the effects on both income formation and the balance of payments of the two most important exogenous variables (variables determined outside the model) operating on the economies of the great majority of countries in the early postwar period: autonomous changes in exports and the creation of domestic bank credit; or, in monetary terms, foreign and domestic autonomous additions to a country's money supply. To handle the effects of these two variables required a model that explicitly recognized a demand-for-money function. The evidence from many countries suggested that the simplest form of such a function—namely, assuming that the demand for money is proportional to income—would be a reasonable approximation. As a second behavioral equation, the model contained a function for the demand for imports. The full model appears, in its simplest form, in the box.

The dynamic character of this model derives from the fact that it contains both income and the change in income. Solving the model gives us values for the variables that are determined by the model, such as income and the change in foreign reserves, as weighted averages of the values for the current and past years of exports, capital inflows of the nonbank sector, and the change in the domestic credit of the banking system.

We made a large effort to test the validity of this proposition. For those interested in the never-ending debate between Keynesians and monetarists, it may come as a surprise that the simple assumptions of the model make it both Keynesian (a multiplier model with a marginal propensity to spend of 1) and monetary (based on a constant velocity of circulation). The dynamic nature of the IMF model, in contrast to most of the academic monetary models of the balance of payments, yields not only the final equilibrium value of the endogenous variables but also the time path toward these values. It was essential to be able to derive these short-term effects if the model was to be used in analyzing current policy problems and finding their solutions.

The set of four equations in the model constitutes the logical core of the IMF's programming exercise, which is known as "financial programming". Since the early 1950s, it has been the centerpiece of the analysis leading to IMF conditionality—the policy actions that a borrowing country must take to have access to IMF credit.

The Model over Time

Although the IMF has continued to use essentially the same model as the foundation of its credit arrangements, these arrangements themselves have continued to broaden and deepen over the years. Thus, the analytically neutral variable "credit creation" was split into credit to the private sector (usually to be encouraged) and credit to the government sector

(usually to be discouraged). In a further specification, the IMF moved toward advice on specific types of taxes (with some taxes judged more acceptable than others) and on various types of expenditure, endorsing social safety nets and education (especially primary, but not necessarily tertiary, education) and frowning on military and other nonproductive expenditures.

Beyond filling in with ever-increasing precision the credit creation component of its conditionality, it also added further specifics of a nonmonetary character, relying on a wide spectrum of policy instruments, many of them in fields where the World Bank was also active.

Many IMF-supported programs in recent years have contained major policy understandings on structural adjustment, price and trade liberalization, and many other policies. But, since none of these could conveniently be captured in econometric equations, no attempt was made to build them into the model. Thus, while financial programming and the simple model underlying it continued to provide the packaging for the IMF's lending arrangements, the contents of the packages became increasingly complex over the years. Over time, a number of changes to the model have been considered, in particular with respect to the exchange rate, medium-term growth, and control over inflation.

The Exchange Rate

The design of the model in the early postwar years reflected two characteristics of the world economy at that time: the par value regime of fixed exchange rates and a dominant upward trend in world demand. Balance of payments problems that brought countries to seek the assistance of the IMF were typically due to bursts of excessive domestic expansion and could usually be cured by the introduction of financial restraint. If the expansion has festered long enough to raise the domestic price level above that of the rest of the world, there would be a need for a compensating change in the par value. And, in the limited number of countries subject to chronic inflation, it might even be necessary to include a regular dose of compensating depreciation in IMF-supported programs. In an age when the world was broadly on a full-employment path, there was, unlike the situation in the 1930s, little incentive for countries to resort to currency depreciation to raise their real incomes, quite apart from the fact that the IMF's founding charter, its Articles of Agreement, banned competitive depreciation.

As the par value system unraveled, provisions about the exchange rate became a frequent

The IMF Monetary Model

$$\Delta MO = k\Delta Y \quad (1)$$

The change in a country's money supply (ΔMO) is proportional to the change in its income (ΔY) by the factor k , which is the inverse of the velocity of circulation of money (Y/MO); thus, $k = MO/Y$.

$$M = mY \quad (2)$$

The demand for imports (M) is a function of a country's income (Y), where m is the country's marginal propensity to import.

$$\Delta MO = \Delta R + \Delta D \quad (3)$$

The change in money supply (ΔMO) is by definition equal to the change in a country's foreign reserves (ΔR) plus the change in a country's foreign reserves (ΔR) plus the change in the domestic credit of the banking system (ΔD).

$$\Delta R = X - M + K \quad (4)$$

The change in foreign reserves (ΔR) is by definition equal to exports (X) minus imports, plus net capital inflows of the non bank sector (K).

component of IMF Stand-By Arrangements. But this did not require a radical change in the model. Exports already entered the model as an exogenous variable, and forecasting them, with or without the exchange rate as one of the determining variables, was in any event performed outside the model. To the import equation (determined within the model) an exchange rate term could readily be added. Effects on prices, output, government finance, and (if they could be ascertained) on capital movements, had, of course, also to be taken into account. Since, as noted, it is in any event not feasible to design a complete set of structural equations for most of the economies with which the IMF works, the addition of the exchange rate as a variable merely had the effect of making the process of iteration more laborious rather than changing it in a fundamental way. It also made it possible to address explicitly two policy objectives: maintaining a healthy balance of payments and the pursuit of full use of the country's productive capacity.

To ensure that a country's exchange rate would remain sufficiently competitive during the period of a Stand-By Arrangement, the IMF normally includes in such an arrangement a provision that a country must hold a minimum level of net international assets to be able to draw successive installments of its stand-by credit, the idea being that the instrument by which countries would ensure the observation of this limit would be the exchange rate. The standard IMF conditionality thus evolved toward the inclusion of a double monetary prescription: setting a ceiling on the expansion of the domestic assets of the central bank to achieve an acceptable balance of payments result (a flow concept) and a floor under the central bank's holdings of net foreign assets (a stock concept) to bring about a satisfactory level of foreign reserves, and to ensure that the central bank would not use excessive intervention to counter market pressures for a more depreciated exchange rate.

Medium-Term Growth

As the strongly expansionary trends that had characterized the world economy in the third quarter of the twentieth century came to an end, the IMF and its members became increasingly concerned about the impact of IMF programs on the growth prospects of the countries that needed to borrow under them. Growth, in this context, meant two different things, which were not always sufficiently distinguished in the policy discussions, namely: (i) the increase in real GDP especially after a country had experienced a negative shock—that could be achieved with the country's existing productive capacity; and (ii) the increase in output over the medium or long term that could be achieved through the growth of productive capacity.

I mentioned earlier the potential impact of a change in the real exchange rate on capacity utilization. With respect to the second dimension, it is curious that for their medium-term macroeconomic projections both the IMF and the World Bank continue to rely on highly mechanical growth models of the Harrod-Domar family, first developed in the late 1940s. In these models there is no place for what the two institutions themselves consider the most important factors determining the growth of developing countries, such as outward orientation, realistic prices, privatization, reform of the financial sector, and, in general, government attitudes toward the economy.

Rather than expanding its model, the IMF has pursued the double objective of stabilization with growth by appraising the different items entering its existing model on the basis of their potential contributions to growth. The first step in this direction, the introduction of a sub-ceiling on credit to the government, served the purpose of ensuring an adequate supply of credit to the private sector. The further refinement of the entries on both the taxation and the expenditure sides of "net credit to the government," referred to earlier, reflected an increasing desire on the part of the IMF that the understandings reached with member countries on short-term stabilization would, at the same time, contribute to medium-term growth.

Inflation Concerns

Limits on credit creation can ensure a minimum balance of payments outturn, but they do not provide protection against deviations from the program in the opposite direction. Exceeding the foreign reserve target is often followed by a larger increase in the money supply than had been assumed in the program. It is probably fair to say that up to the 1970s, this possible outcome did not cause much concern; it might rather be seen as a welcome development that might lead to early repayment of IMF credit. But developments in the 1980s, and even more strikingly in the 1990s, have shown how such overperformance might also lead to shockingly high inflation, both in countries that had been afflicted by the 1980s debt crisis and in many of the IMF's new members in Eastern Europe, the Baltics, and the Commonwealth of Independent States (CIS). In all these countries, controlling inflation became the first order of business, often ahead of dealing with potential balance of payments problems. The IMF thus had to face the question of how this objective was to be integrated into its model. Changes in three directions seemed to be necessary:

- The flexibility of international capital movements makes the treatment of that variable as exogenous no longer tenable; their dependence, at least in part, on both the domestic interest rate and exchange rate expectations would need to be allowed for. Bearing in mind that an important component of international capital flows nowadays may be the outflow or the return flow of domestic flight capital, this change in the model alone would present a major challenge.
- Allowance would have to be made for the fact that the domestic interest rate, which does not even appear in the simple model, may be strongly affected by the size of the government deficit, whether that deficit is financed from the banking system or in a nascent domestic capital market.
- The exchange rate would need to find a place in the model, not only in terms of its effect on trade flows but also with respect to inflation expectations, since governments have to face the choice between two possible exchange rate policies: a floating rate to block the inflationary impact of an oversupply of "money of foreign origin"; or a fixed (or crawling) exchange rate to provide a psychological anchor to the price level, even though that might cause a competitive disadvantage if there remained some inertial inflation in the economy.

In a formal sense, it would not be particularly difficult to introduce these three extensions into the model. But that would be essentially useless unless it were also possible to obtain some order of magnitude of the coefficients for the variables in the newly introduced equations. And that, unfortunately, is not possible. In this setting, the IMF has had to forgo the comfort of its old model and base its conditionality on a set of ad hoc instruments that seemed plausible in the circumstances.

With respect to government finance, the IMF has found it necessary in recent years to go behind ceilings on bank credit to the government and introduce direct restrictions on government deficits. Even if financed in a noninflationary way in the domestic capital market, such deficits crowd out investment by the private sector. Indeed, in the IMF's relations with many countries (Argentina, Pakistan, and Russia, to name a few), agreed limits on the budget deficit as a percent of GDP have become the most prominent feature of adjustment programs.

To stave off imported inflation caused by an expansion in the money supply owing to higher foreign inflows, the IMF has favored a free (upward) float in many of the CIS countries, taking comfort from the fact that the currencies of many of these countries were so deeply undervalued that a measure of appreciation would not undermine their competitiveness, in particular since they were also experiencing a rapid increase in labor productivity.

While the prevention of excessive domestic credit creation and the targeting of a desired increase in foreign reserves are relatively straightforward, the avoidance of an excessive increase in the money supply raises more questions. In the first place, the normal effect of a successful stabilization after a period of high inflation is an increase in the demand for money. An inflow of money from abroad to meet this demand—and the corresponding overshooting of the foreign reserve target—are entirely desirable, and to frustrate this demand by either floating the exchange rate or (with a fixed exchange rate) putting a ceiling on the money supply would needlessly depress the economy, as Brazil found out in 1994. Putting a ceiling on base money (currency held outside banks plus banks' claims on the central bank) would imply that the central bank would have to engage in open-market sales of government paper at high domestic interest rates, which could be extremely costly. In addition, the resulting rise in domestic interest rates could attract more money from abroad, thus setting up a vicious circle.

Finding itself without much of a model to go by, the IMF has in recent years tended to adopt an "all risk" policy, furnishing its arrangements with CIS countries and with the Baltic states with a triple set of keys: a ceiling on domestic credit, a floor under net international assets, and an indicative target for base money, in addition to using the occasions of periodic Executive Board reviews under Stand-By Arrangements to judge the need for additional action.

The exceptional situation in these countries may be expected to subside as and when inflation comes down and the exchange rate stabilizes at something closer to an equilibrium level. In that new situation, the concerns about inflation may to some extent have abated, but concerns about the payments position can no longer be safely disregarded. Increasingly, then, the CIS countries will find themselves in the position where the prescription offered by the simple version of the monetary model suffices: a ceiling on net domestic credit to protect the balance of payments, plus a floor under foreign reserves to ensure that

governments do not overreach themselves in defending the value of their currencies. At some stage, confidence in the currency and the banks, which is still painfully low in these countries, will rise and the resulting increase in the demand for money will pull in foreign reserves. When that occurs, it will be possible to rejoice over the increase in reserves without feeling qualms about the rise in the money supply.

For an entirely different group of countries, however, namely those that are part of a monetary union, the model would seem definitely to have lost most, if not all, of its applicability. In such countries there is no meaningful concept of a national money supply, and government finance, in particular the government's domestic borrowing requirement, becomes the only way to influence the level of demand. The IMF has had to figure this out in its dealings with the African countries of the CFA Sync area. Perhaps it will some day get an opportunity to apply this knowledge in Europe if a member of the future European Economic and Monetary Union finds it necessary to avail itself of the IMF's balance of payments support.

Annex VI

The Medium-Range Forecast in Hong Kong, China

The *Medium-Range Forecast (MRF)* is a projection of expenditure and revenue for the forecast period based on specific forecasting assumptions and budgetary criteria outlined below.

General Economic Assumptions

Growth in Gross Domestic Product (GDP)

There is a clear link between many of the government's major revenue sources and economic growth. For planning purposes the medium-range assumption as to annual GDP growth for the current MRF has been set at 5 percent in real terms.

Inflation

Over the forecast period the average year on year inflation is assumed to be 7.5 percent. It is emphasized that this is a trend assumption related to the GDP deflator.

Detailed Assumptions

A wide range of detailed assumptions relating to developing expenditure and revenue patterns over the forecast period are taken into account. These include:

- Estimated cash flow of capital projects;
- Forecast completion dates of these capital projects and their related recurrent consequences in terms of staffing and running costs;
- Estimated cash flow arising from new commitments resulting from policy initiatives;
- The expected pattern of demand for individual services;
- The trend in yield from individual revenue sources;
- New revenue measures in 1998–1999.

Excerpted from the Internet, September 1998. The full MRF presentation includes a number of diagrams derived from the tables, which are very useful for public understanding of the fiscal position.

Budgetary Criteria

In addition to the above forecasting assumptions there are a number of criteria against which the results of forecasts are tested for overall acceptability in terms of budgetary policy. Any significant breach of these parameters results in a review of the underlying programs and adjustments where necessary and appropriate.

The following are the more important budgetary criteria:

- *Total cash flow surplus/deficit.* The government aims to maintain adequate reserves in the long term.
- *Total expenditure growth.* It is intended that, over time, expenditure growth should not exceed the GDP growth *trend*.
- *Capital expenditure growth.* By its nature some fluctuations in the level of capital expenditure are to be expected. However, over a period the aim is to contain capital expenditure growth within overall expenditure guidelines, i.e., within the GDP growth *trend* but allowance is made for unavoidable expenditure on exceptional projects. Allowance is also made for a number of major projects due to start in the forecast period. In planning the size of the capital program the recurrent consequences of capital works (staffing, maintenance, etc.) are taken into account.
- *Revenue Policy.* The projections reflect the revenue measures introduced in this year's budget. Account is taken of the need to maintain over time the real yield from fees and charges, fixed duties, etc., and to review periodically the various tax thresholds in the light of inflation.

THE MRF FOR 1997–1998 TO 2001–2002

The current MRF is summarized in the following three tables which indicate the forecast operating position, capital cash flow, and consolidated reserves (*note a*).

It is emphasized that the forecasts are based on *trends* and, therefore, the actual results of any individual year may vary from the *trend* assumption.

Notes on the Medium-Range Forecast

(a) *Accounting policies*

- The Medium-Range Forecast, like the government's accounts, is prepared on a cash basis and reflects forecast receipts and payments, whether or not they relate to recurrent or capital transactions.
- The Medium-Range Forecast includes the General Revenue Account and the Funds (the Capital Works Reserve Fund, the Loan Fund, the Capital Investment Fund, the Disaster Relief Fund, and the Civil Service Pension Reserve Fund).

Table AVI.1 Operating Statement (General Revenue Account)

	Revised	1998–1999	Forecast		2001–2002
	Estimate		1999–2000	2000–2001	
	1997–1998	\$m	\$m	\$m	\$m
Revenue (<i>notes b and j</i>)	200,350	192,680	211,390	242,900	271,330
Less: Expenditure	161,770	182,480	200,740	227,830	258,570
Operating surplus for the year	38,580	10,200	10,650	15,070	12,760

Table AVI.2 Capital Financing Statement (The Funds)

	Revised	1998–1999	Forecast		2001–2002
	Estimate		1999–2000	2000–2001	
	1997–1998	\$m	\$m	\$m	\$m
Opening balances of the Funds	46,990	61,660	50,210	55,030	63,390
Add: Revenue (<i>note d</i>)	56,410	66,310	72,790	85,520	101,250
Add: Transfers from/to General Revenue Account (<i>note e</i>)	-5,840	-11,990	1,000	-2,000	-12,000
Less: Expenditure on capital projects (<i>note f</i>)	31,570	34,110	39,610	46,130	53,740
Less: Loans and Investments (<i>notes g and h</i>)	4,320	31,660	29,360	29,030	29,350
Less: Aid for disaster relief (<i>note i</i>)	10				
Closing balance of the Funds	61,660	50,210	55,030	63,390	69,550

Table AVI.3 Consolidated Reserves

	Revised	1998–1999	Forecast		2001–2002
	Estimate		1999–2000	2000–2001	
	1997–1998	\$m	\$m	\$m	\$m
General Revenue Account					
Opening balance	126,620	383,910	406,100	415,750	432,820
Operating surplus (per table AVI.1)	38,580	10,200	10,650	15,070	12,760
Land Revenue (<i>note j</i>)	17,870	-	-	-	-
Transfer from/to the Funds (per table AVI.2) (<i>note e</i>)	5,840	11,990	-1,000	2,000	12,000
Closing balance	188,910	406,100	415,750	432,820	457,580
The Funds – closing balances (per table AVI.2)					
	61,660	50,210	55,030	63,390	69,550
Fiscal Reserves at 31 March (<i>note k</i>)					
	250,570	456,310	470,780	496,210	527,130
Land Fund – opening balance (<i>note l</i>)	197,070				
	- 2,070				
- change in net worth					
Total	527,130				

- The Suspense Account of the Capital Works Reserve Fund is excluded from the Medium-Range Forecast the net revenue of which, to 30 June 1997, was subject to sharing between the government's account and the then Hong Kong Special Administrative Region Land Fund.

(b) General Revenue Account – Revenue

This comprises all receipts to be credited to any of the following revenue heads (except Transfers from Funds and revenue from Land Transactions), namely:

- Duties
- General Rates
- Internal Revenue
- Motor Vehicle Taxes
- Fines, Forfeitures, and Penalties
- Royalties and Concessions
- Properties and Investments
- Loans, Reimbursements, Contributions, and Other Receipts (excluding transfers from Funds)
- Utilities
- Fees and Charges

(c) General Revenue Account – Expenditure

This comprises all expenditure to be charged to the General Revenue Account in accordance with the Appropriation Ordinance, with the exception of the Transfers to Funds. It includes the day-to-day operational expenses of government departments together with minor capital purchases of a routine nature.

(d) Funds – Revenue

This comprises all revenue receivable by the Funds except transfers from the General Revenue Account.

(e) Transfers between General Revenue Account and the Funds

The transfers between General Revenue Account and the Funds are assessed with regard to the commitments of the Funds and their forecast cash flow requirements.

(f) Expenditure on capital projects

This comprises expenditure chargeable to the Capital Works Reserve Fund with respect to the Public Works Program (including land acquisition), capital subventions, major systems and equipment, and computerization.

(g) Loans

These comprise loans made from the Loan Fund, including loans to the Hong Kong Housing Society, schools, teachers, students, as well as housing loans for the Home Starter scheme and to civil servants.

(h) Investments

These comprise mainly advances and equity investments made from the Capital Investment Fund to trading funds and statutory bodies.

(i) Aid for disaster relief

This is actual expenditure made from the Disaster Relief Fund for providing relief to disasters that occur outside Hong Kong. Because of the unpredictable nature of disasters, no estimate of future expenditure is made for the forecasting period.

(j) Land revenue

In 1997–1998, revenue from land transactions of \$17,870 million was credited to the General Revenue Account before the enactment of a revised Capital Works Reserve Fund resolution effective from 1 January 1998.

(k) Fiscal reserves

The fiscal reserves represent the accumulated balances of the General Revenue Account and the Funds. The movement in the fiscal reserves from one year to the next year represents the estimated surplus/deficit for the year.

(l) Land Fund

For the purpose of the MRF, the balance of the Land Fund has been merged with the General Revenue Account from 1 April 1998 and its investment earnings are included under the revenue of the General Revenue Account effective on that date.

COMMENTARY ON THE MRF

Expenditure Growth

To demonstrate that expenditure growth over time does not exceed the trend growth rate in the economy, government spending plans should be compared with the budgetary guidelines. For monitoring purposes, government expenditure is consolidated with the expenditure of some other public bodies such as the Municipal Councils in order to compare total public expenditure with the size of the economy. The results are set out in table AVI.4.

Table AVI.4 Public Expenditure in the Context of the Economy¹

	Estimate		Forecast		
	1997–1998	1998–1999	1999–2000	2000–2001	2001–2002
	\$m	\$m	\$m	\$m	\$m
Opening expenditure	159,620	180,130	198,090	224,840	255,190
Capital expenditure	37,890	52,900	55,260	62,720	71,320
Total government expenditure	197,510	233,030	253,350	287,560	326,510
Add: Other public sector bodies	46,400	55,860	62,480	66,500	67,470
Total public expenditure	243,910	288,890	315,830	354,060	393,980
Gross Domestic Product					
(calendar year)	1,327,030	1,497,880	315,830	1,908,420	2,154,130
Growth in GDP					
Money terms	11.3	12.9	12.9	12.9	12.9
Real terms	5.2	5.0	5.0	5.0	5.0
Growth in public expenditure					
Money terms	15.5	8.4	9.3	12.1	11.3
Real terms	8.2	11.2	1.2	3.6	3.0
Public expenditure as a percentage of GDP	18.4	19.3	18.7	18.6	18.3

1 Public expenditure comprises expenditure by the trading funds, the Hong Kong Housing Authority, the Provisional Urban Council and the Provisional Regional Council, expenditure financed by the government's statutory funds and all expenditure charged to the General Revenue Account. Expenditure by institutions in the private or quasi-private sector is included to the extent of their subventions. The payments of government departments which are wholly or partly financed by charges raised on a commercial basis are also included (e.g., airport, waterworks). But not included is expenditure by those organizations, including statutory organizations, in which the government has only an equity position, such as the Mass Transit Railway Corporation and the Kowloon-Canton Railway Corporation. Similarly, advances and equity investments from the capital Investment Fund are excluded as they do not reflect the actual consumption of resources by the government.

Table AVI.5 shows the sum to be appropriated in the 1998–1999 budget analyzed between operating and capital expenditure and, after including expenditure from the various funds and other public-sector bodies, shows the derivation of public expenditure for 1998–1999 given in table AVI.4. The table also illustrates the effect of the budget revenue measures on the overall surplus/deficit position for 1998–1999.

Table AVI.5 Relationship Between Government Expenditure and Public Expenditure, 1998-1999

Components of Expenditure and Revenue	Government Expenditure and Revenue		
	Operating	Capital	Total
Taxation	144,335	1,420	145,755
Other revenue	45,280	3,550	48,830
	189,615	4,970	194,585
Increase in net worth of Land Fund	11,700	–	11,700
Capital Works Reserve Fund	–	52,960	52,960
Capital Investment	–	6,125	6,125
Civil Service Pension Reserve Fund	–	560	560
Disaster Relief Fund	–	5	5
Load Fund	–	6,660	6,660
Total	<u>201,315</u>	<u>71,280</u>	<u>272,595</u>
Cash surplus before budget revenue measures	21,190	18,375	39,565
Less: Effect of budget revenue measures	–13,515	–90	–13,605
Cash surplus after budget revenue measures	7,675	18,285	25,960

Annex VII

The Functions of a Ministry of Finance: The Example of Canada

Functions

The Ministry of Finance is the federal department primarily responsible for providing the government with analysis and advice on the broad economic and financial affairs of Canada. Its responsibilities include preparing the federal budget; preparing tax and tariff legislation; managing federal borrowing on financial markets; administering major federal transfers to provinces and territories; developing regulatory policy for the financial sector; and representing Canada within international financial institutions.

To fulfill the department's role, Finance officials monitor and research the performance of the Canadian economy in all important aspects—output and growth, employment and income, price stability and monetary policy, and long-term structural change. The department is also vitally concerned with trade, monetary affairs and other aspects of the global economy that impact on Canada's domestic performance.

Finance interacts with other government departments to encourage coordination and harmony among all federal initiatives which have an impact on the economy. As well, the departments constantly work toward improved cooperation, especially on fiscal and taxation issues between the federal and provincial governments.

In recent years, Finance has placed more emphasis on public consultation regarding policy directions and options. The department believes that a more open, accessible budget process can play an important role in assisting more effective, responsive decision-making.

The main objective of the department is to assist the government, the Minister of Finance and the Secretary of State (for international financial institutions) in developing and implementing fiscal and other economic policies that support Canada's economic and social goals. Specific activities include:

- Analyzing the economic and fiscal situation and prospects for Canada and other countries important to the economy;
- Recommending measures in the areas of expenditure, taxation, borrowing and cash management to meet the goals of government;
- Providing advice regarding the balance of payments, exchange reserves, international monetary and financial arrangements, coinage and related matters;

- Participating in international negotiations and meetings related to trade, finance, taxation and economic development. The department also provides the Canadian funding for international financial institutions such as the World Bank;
- Advising on federal-provincial fiscal and economic relations, and undertaking liaison and negotiation with the department's provincial counterparts. Finance is also responsible for determining and funding federal transfer payments to the provinces and territories under programs such as Equalization, the Canada Health and Social Transfer (CHST) and Territorial Formula Financing Agreements;
- Providing for advice, developing policies and coordinating with regulatory agencies regarding the future direction of the financial sector, particularly as it relates to banking and insurance in Canada;
- Communicating to Canadians the economic and fiscal objectives of the government.

General Organization

The Department of Finance reports to the Minister through its Deputy Minister, assisted by two Associate Deputy Ministers and a Senior Assistant Deputy Minister.

Ongoing economic analysis and policy development takes place in seven policy branches, one of them on a joint basis with the Treasury Board Secretariat. The department also includes branches responsible for legal services, consultations and communications, and corporate services (jointly with the Treasury Board Secretariat). Branches are headed by assistant deputy ministers; divisions within branches are headed by directors.

In addition to the role as head of the Department of Finance, the Minister of Finance reports to Parliament on the activities of a number of other agencies, such as the Bank of Canada and the Office of the Superintendent of Financial Institutions (OSFI).

Economic and Fiscal Policy Branch

The branch analyzes the economic and fiscal situation of the country, and advises the Minister of Finance on the government's fiscal framework—including revenues, expenditures and debt requirements—as well as on monetary policy. It also provides analytical support for, and advice to, the Minister of Finance on a wide range of economic and financial issues related to the microeconomic policies of the government.

Monthly fiscal and quarterly economic reports are prepared, and there is continuous monitoring of fiscal developments at all levels of government as well as in major trading partners. It has three divisions as well as a secretariat for economic development policy:

Fiscal Policy Division

This division plays the primary role in analyzing the financial requirements of the government and tracking the developing fiscal positions of other levels of government. It also has lead responsibility for analysis and advice on the government's fiscal framework and coordinating the department's advice to the Minister on overall spending priorities. The division plays a key role in the budgetary process and drafting of budgetary papers. It also

reviews the form and content of the Public Accounts and other statements for which the Minister has responsibility under the Financial Administration Act.

Economic Studies and Policy Analysis Division

This division carries out policy-focused applied research—current and medium-term—on major economic and fiscal issues. Its work is undertaken within three sections—Structural Analysis, Macro Analysis, and Policy Analysis.

Economic Analysis and Forecasting Division

This division tracks, evaluates and forecasts Canada's economic performance. Activity is undertaken by two groups: the Economic Analysis Group which provides regular assessment of current economic conditions; and the Forecasting and Model Development Group which prepares the quarterly economic forecast and maintains close contacts with leading private-sector forecasters as well as provincial governments.

Economic Development and Corporate Finance Branch

The branch provides advice on a wide range of policies and issues relating to key sectors of the economy and regions. Its work focuses on three main objectives: assessing and developing initiatives and framework policies favoring economic growth and job creation across key sectors such as small business, science and technology, agriculture and fisheries, regional development as well as the government's approach to the environment and the economy, and energy and resource policy; furthering the government's agenda in the areas of commercialization and privatization; and ensuring that expenditure proposals and contingent liabilities are managed within the government's fiscal parameters and financial management structure.

Social Policy Branch

The branch provides advice on policy and financial management of federal social programs, and liaises with federal departments responsible for the development and administration of social programs.

The programs and policy areas include income security, pensions (public and private), employment and labor market issues, employment insurance, training, immigration, education, health, housing, communications, culture and the arts, aboriginal peoples, women's issues, child care, and social policy aspects of the Charter of Rights and Freedoms and other legal issues.

Tax Policy Branch

The branch is responsible for the development and evaluation of federal taxation policies and legislation. However, the actual collection of taxes and interpretation of tax law are the responsibility of Revenue Canada, a completely separate government department.

The branch consists of four divisions and an Intergovernmental Tax Policy group focused on specific aspects of taxation. However, many of the responsibility areas for policy development are shared and projects may involve officers from more than one division or group.

Law Branch

The branch prepares legislation and regulations in its areas of responsibility, which can range from taxation to financial institutions, budget implementation and trade issues.

International Trade and Finance Branch

The branch participates in international economic matters. These include the department's lead responsibility within the government for international financial institutions (the IMF, the World Bank group and the European Bank for Reconstruction and Development), import policy, foreign investment and tariff policy, and for participation in the G-7 industrial countries' economic policy coordination exercises.

Financial Sector Policy Branch

The branch provides policy analysis and advice regarding Canada's financial sector and the regulation of federally chartered financial institutions (banks, trust companies, insurance firms). It also manages the federal government's borrowing program, and provides evaluation and support to the Minister of Finance regarding Crown corporation borrowing, and financial market and exchange rate policy. This branch also provides information relevant to the investment decision-making process in a Canadian context for investors and potential investors in Government of Canada securities as well as for other financial markets participants.

Federal-Provincial Relations

The branch is responsible for the administration of the major federal transfers to provinces and territories and provides advice on all matters pertaining to federal-provincial fiscal arrangements and federal-provincial financial relations in general. The branch has policy and program responsibilities for the two main federal transfer payments to provinces—Equalization and the Canada Health and Social Transfer—as well as Territorial Formula Financing Agreements.

Annex VIII

A Model Organic Budget Law

GENERAL PROVISIONS

A budget law should deal clearly with objectives and matters of principle. It would be beneficial if the objectives were also to include a reference to “the achievement of efficient, effective, economical and moral (ethical) performance in the management of the state’s financial resources.” By including these as part of the budget law’s objectives, the sections in the law relating to legal responsibilities and obligations can, and should, then include a complementary requirement that the heads of agencies must manage the resources made available to their organizations through the budget in ways to ensure that the law’s objectives are met. This would expressly strengthen the process of calling them to account for their performance as financial resource managers and, in turn, the performance of their employees who are accountable to them. This would be a key concept in raising the awareness for better financial management over budget resource use. Key technical definitions should be stated explicitly in the budget law. It should in its introductory section identify the main actors responsible for implementing the budget law and then state specific responsibilities in following sections. Any breach of these responsibilities should incur a penalty.

DEFINITION OF THE BUDGET DEFICIT

To ensure that both government and the legislature focus on a clear analytical definition of the budget deficit, the definition of the deficit should be included in the budget law.

Table AVIII.1 shows that, from a sample of OECD countries, the budget law identifies the main actors (and especially the Ministry of Finance) responsible for the administration of the law. A technical definition of the budget, however, is not always included in the budget law. For example, France, Portugal, and the United Kingdom do not include any explicit provisions on the budget.

To promote macroeconomic management focus, the budget law should include a clear analytical definition of the budget deficit (or surplus) that excludes borrowings and use of bank balances from receipts and repayment of principal from expenditure and is equal to net financing. While macroeconomic analysis can be applied to the components of budgets

From Ahmad, Qiang, and Vito Tanzi, *Reforming China’s Public Finances*, IMF, 1995; and William Allan, “Toward a Framework for a Budget Law for Economies in Transition,” IMF Working Paper, 1994.

Table A.VIII.1 Provisions of Organic Budget Laws in Selected OECD Countries

Country	Technical Definition of Budget Deficit	Agencies Administering the Budget Law	Extrabudgetary Funds
Australia	Deficit defined in accordance with IMF accounting. No explicit provisions on definitions on revenue and expenditure (AA).	Executive Council; Department of the Prime Minister and the Cabinet Officer; Minister of Finance and his Secretary of State; Treasury Department; and Auditor General.	There are funds that do not go through the annual appropriation process (needs a special instruction).
France	Organic budget law contains no explicit provisions on technical definitions.	The Council of Minister; Minister of Finance and the Secretary of the Budget; Planning Commission; The National Institute of Statistics; and, the Office of Regional Development (LDF).	There are no funds that do not go through the annual appropriation process (needs a special instruction). All funds are presented in the annual estimates (LDB sec. 4).
Germany	Deficit defined in accordance with IMF accounting. The law includes provisions defining revenue and expenditure (LBP par. 38, FBC par. 25, 81).	The Federal Council; Financial Planning Council; Budget Committees; Federal Minister of Finance; The Federal Revenue (LBF, FBC).	There are funds that do not go through the annual appropriation process. All funds are presented in the annual estimates (C par. 12, FBC par. 37–39).
New Zealand	The law contains no explicit provision on technical definitions on budget deficit. Revenue and expenditure is defined (PFA par. 2).	The Executive Council; Minister of Finance; and the Treasury (PFA).	There are funds that do not go through the annual appropriation process. All funds are presented in the annual estimates (FPA par. 8, 9–12).
Portugal	Organic budget law contains no explicit provision on technical definitions.	The Plenary of the Republic; Minister of Finance and ministers of departments; and the Audit Court (AL par. 21, 22).	There are funds that do not go through the annual appropriation process. All funds are presented in the annual estimates (AL par. 3.)
Sweden	Deficit defined in accordance with IMF accounting. No explicit provisions on definitions on revenue and expenditure (GAG).	The Minister of Finance; Secretary of the Budget and the Budget Department; National Debt Authority (Treasury); and the National Audit Office.	There are no funds that do not go through the annual appropriation process. All funds are presented in the annual estimates (C chapter 9).
United Kingdom	The law contains no explicit provision on technical definitions.	The Treasury and Chief Secretary to the Treasurer; Treasury Officer of Accounts; Management and Personnel Office.; Paymaster General,s Office; Principal Finance Officer; and the National Audit Office (GAG sec. D, E).	There are no funds that do not go through the annual appropriation process. Not all funds are presented in the annual estimates (GAG section A, B).
United States	Deficit defined in accordance with IMF accounting. The law includes provisions defining revenue and expenditure (BSC page 32–34, CBP section 3).	The Congressional Budget Office; Treasury and its Secretary; Office of Management and Budget; heads of departments and agencies; and the Comptroller General (BSC page 2–4).	There are no funds that do not go through the annual appropriation process. All funds are presented in the annual estimates (BSC page 3–4).

independently of any legal definition, such a concept should facilitate communications between government and parliament in the context of transitional economies with relatively inexperienced administrations and legislatures.

As shown in the table, few OECD countries include an explicit technical definition of the budget deficit in their budget management law—or if included, the deficit is defined simply as the difference between gross expenditure and receipts. These countries have well-developed administrative mechanisms for dealing with the budget in the context of macroeconomic policy, so a precise legal definition has not been generally seen as necessary. For many developing countries and economies in transition, however, the budget law can play an important role in ensuring that both government and the legislature focus on a clear analytical definition of the budget deficit during the budget preparation, approval, and execution processes. Therefore, it is recommended that budget laws in these countries incorporate the following:

- Definitions of the main elements of receipts and expenditures that are to be included in the estimates—for instance, distinguishing “revenue” (tax and nontax), “grants,” “borrowing,” and “repayment of debt principal”;
- An analytical definition of the budget deficit or surplus (which excludes borrowings and use of bank balances from receipts and repayment of principal from expenditures).

APPROPRIATION AND OTHER PROVISIONS

A central feature of a budget law, as a control mechanism, is its specification of the way in which the use of public money is to be authorized. The budget law should stipulate that no money is to be spent unless there is an appropriation (an authorization to spend monies received in the public account, specifying both the amount and the purpose of the spending). Such provision will be the basis for ensuring control over all money and limiting the possibility of establishing funds not subject to budget laws or any misuse of funds. Thus, a formal budget amendment is needed to authorize expenditures in excess of the initial appropriation.

The budget law should in this area also include provisions that appropriations under any law, other than the annual appropriation law, shall be included in the budget estimates presented to Parliament and accounted for in the same manner. Any earmarking should be clearly specified. The law should also specify the basis on which transactions are recorded—for example, on a cash or accrual basis.

The government’s legal rights to collect revenues (taxes, fines, various levies, etc.) should be authorized by various law intended to apply equally to all persons and enterprises. The budget law should contain a provision to ensure that such obligations to the government shall not be waived or forgiven by officials without the express or delegated authority of the minister of finance, and in accordance with conditions that the minister may impose.

The budget law should legally define the difference between those bodies that carry out the functions of government (also known as agencies), and those that function in their

own right (defined as entities)—even if they are government-owned or -controlled. This distinction relates to the scope of the budget, which would deal with the receipts and appropriations only for the functions of government. In most market-oriented countries, entities such as state-owned enterprises pay dividends to the government, as well as taxes, which are both included in the budget. The budget also includes appropriations for the working capital and subsidies paid to the state-owned enterprises by the government. The day-to-day receipts and payments of enterprises as they undertake their business operations are not included in the state budget.

In defining or refining a system of budget law, the ability to classify each government body properly and consistently according to its status as well as the correct classification of budget receipts and payments and their consequent control and management is an issue of the greatest importance. Under the conventions of Government Finance Statistics, cash operating surpluses of state-owned enterprises are shown as nontax revenues, whereas losses are treated as subsidies.

POWERS OVER BUDGET MANAGEMENT

The way in which power over the budget is shared between the executive and legislative branches and within the executive is a reflection of political forces. Budget legislation may, in the process of debating the issues, help shape the way these issues are resolved, but it is unlikely that legislation aimed at creating strong executive powers can be successfully enacted unless the political environment is conducive to this result. Because of the relative weakness of the ministry of finance and the need for effective fiscal control in most developing countries and transition economies, however, it is recommended that sufficient authority to the executive be given—and particularly to the Ministry of Finance—to manage the budget as an effective instrument of macroeconomic policy.

Relative Powers of the Executive and Legislative Branches

The legislature must, of course, oversee the budget process, and OECD countries have few explicit constraints on the extent to which the legislature can modify the budget. As discussed in length in chapter 5, in most countries, however, there are practical limitations to legislative power in this regard, and it is generally recognized as being unnecessarily divisive and potentially counterproductive for the legislature to be involved in reshaping the executive budget proposals outside the discipline of an agreed macroeconomic framework. The budget law should clearly specify the limits of legislative authority.

Authority of the Ministry of Finance

The budget law, as stated above, should specify the central government role of the Ministry of Finance.

- Responsibility for supervising the preparation of the annual budget estimates for presentation to parliament, all government bank accounts, receipt and disbursement of funds, and all central government assets and liabilities, and be the signatory for all borrowing and lending by the government;
- The authority to require reports on any public accounts that are set up outside the budget framework;
- The responsibility for ensuring that expenditures and use of credit are controlled within the deficit limit specified in the annual appropriation law; and
- Authority for regulating local governments borrowings and reporting requirements.

BUDGET PREPARATION AND APPROVAL

The budget law should contain a section that specifies the principles and outlines the process whereby the expenditure plans of the government are prepared, presented to the legislature for review and approval, and appropriated by the legislature. In this area, the law should specifically cover the proposed macroeconomic strategy for the budget period and periods in the future. Estimates should be prepared for each annual appropriation law, providing details of the amounts to be drafted to each head of expenditure, the purpose of each head and performance to be achieved during the budget year. The budget law should specify the role of the Minister of Finance in supervising budget preparation, as well as the calendar for legislative action and the form and content of the budget presentation and the budget appropriations bill.

EXECUTION AND ADJUSTMENT OF THE BUDGET

The powers of the executive and the Ministry of Finance to control budget execution are crucial to enabling the government to adjust quickly to changing economic circumstances. To ensure such powers, the budget law should specify that no expenditure shall be undertaken by any spending ministry without a warrant (i.e., an authority issued by the minister to commit funds for certain purposes in a specified time) from the Ministry of Finance. Moreover, the minister of finance shall ensure that funds are authorized by law before issuing a warrant; that transfers between budget heads shall require supplementary appropriation laws; but that the minister of finance may approve transfer of funds between chapters within the same head and may issue regulations in this area.

Adjustment of the budget during the course of the year is a common problem in most countries. The budget law may permit the budget of each year to contain an appropriation line item that allows an identifiable amount to be spent on urgent and unforeseen expenditures, on the authority of the minister of finance. Such expenditures should be reported and should be subject to audit by the independent auditor-general.

The Ministry of Finance also exercises varying levels of authority over the rights of the ministries to move funds from one type of expenditure to another (virement) and to shift

spending from one budget period to another. In general, as discussed in chapter 16, OECD countries have streamlined controls in this area with a view to giving maximum flexibility to managers to allocate resources to achieve the required results. In Australia, Sweden and the United Kingdom, for instance, departments are given substantial freedom to reallocate resources for departmental running costs. In New Zealand, departments and agencies have the freedom to reallocate resources within the amounts appropriated to produce a certain class of outputs; other movement needs approval of the Governor-General or the Parliament. These provisions may or may not apply to a developing country, but should always be covered in a budget law.

GOVERNMENT BORROWINGS AND ISSUE OF GUARANTEES

In general, the power of the central government to borrow is vested in a single authority—the minister of finance is the appropriate authority in the government. Other ministers should not be permitted to negotiate loans. Some countries (e.g., Australia) require the authority of a law before borrowing. In New Zealand, however, the budget law gives blanket approval for the minister of finance to borrow if “necessary or expedient in the public interest.” As a rule, borrowing provisions do not restrict the instruments that can be used by the government nor discriminate among holders of government debt.

Most countries likewise allow the minister of finance to issue guarantees for loans contracted by public enterprises or other bodies. As discussed in chapter 2, this area of financial management presents many potential dangers and it is important that the issue of such guarantees be effectively monitored.

The main provisions suggested for this section of the budget law should cover: borrowing by the central government; authority to raise loans to finance the approved deficit to the limits specified by law; and regulations concerning the issue guarantees.

BANKING AND FINANCIAL ASSETS

In some countries, specifically the U.K., the budget legislation gives the minister of finance authority over all government banking arrangements and allows the minister discretion to deposit unused bank balances in commercial banks to ensure control over the use of funds and efficient cash management. In other countries, it is required that all government deposits are to be held by the central bank. The general practice in most OECD countries is that the Ministry of Finance or Treasury is responsible for government bank accounts. In this aspect, it is desirable to separate central banking from government functions. Prohibiting the central bank from receiving government deposits will strengthen the separation of central bank from government by giving its sole control over base money but it will weaken the role of the central bank as a fiscal agent of government.

Another aspect of financial management that may be treated in this section of the budget law is the establishment of bank accounts and accounting services for third parties

or for handling funds in transit to the consolidated fund account. It may be necessary for the government to hold funds in trust for a private citizen or organization or to establish suspense accounts for receipt of certain funds while awaiting processing and crediting to the consolidated fund.

FINANCIAL REPORTING AND AUDIT OF ACCOUNTS

Vital to the budget law are the requirements that the minister of finance should prepare appropriate reports and submit financial documents to an external auditor. The text discusses requirements in detail (see chapter 11). The budget law should specify the timing and types of reports required and the organizational responsibilities.

ACCOUNTABILITY

The budget law would require that accounts are prepared and audited. The form of accounting must be prescribed by regulations under the authority of the minister of finance. These would ensure that each and every operation is recorded in an accurate manner, to provide a continuously updated picture of government operations, with clear advantages for management. Hence, proper definition and implementation of the government accounting framework and methods are essential for budget management. Some of the main principles of government accounting methods include universality (all transactions should be subject to an accounting operation) and double-entry accounting, to ensure better control. The accounting plan must be structured to ensure the availability of an appropriate account (or subaccount) for each and every operation. The lack of accounts for recording operations, such as the setting of limits on commitments or payments, would hinder the monitoring and control of the operations. A proper definition of accounting schemes is important to ensure that each stage, in any given operation, is recorded in the appropriate account of the accounting plan. Inadequate definitions of accounting schemes may result in lack of information needed for monitoring and control of government operations.

Annex IX

An Illustration of Financial Reporting: Singapore

Statement of Assets and Liabilities As at 31st March 1994

Statement	31st March 1994 (\$ million)	31st March 1993 (\$ million)
ASSETS		
CASH		
At Banks	31,251.6	26,647.7
With Agencies	1.0	1.2
Imprests	16.2	14.3
In Singapore Municipal Provident Fund	0.1	0.1
In Skills Development Fund	8.2	11.0
	31,277.1	26,674.3
INVESTMENTS		
Government Stocks (Market value 31st March 1994-\$41,411.6)	40,938.0	43,355.7
Other Investments (Market value 31st March 1994-\$56,472.4)	57,712.3	39,320.6
Other Investments-Unquoted	17,245.3	13,755.2
Deposits With Investment Agents	1,857.6	1,246.4
Investments Held For Singapore Municipal Provident Fund- Quoted \$7.9 (Market value 31st March 1994-\$8.5) Unquoted \$17.9	25.9	25.0
Investments Held For Skills Development Fund-Unquoted	409.7	440.3
	118,188.9	98,143.2
OTHERS		
Securities Held as Statutory Deposits – Trust Companies	1.1	1.1
Funds for Hedging Currencies	900.7	1,296.4
LIABILITIES	150,367.7	126,115.0
CONSOLIDATED REVENUE ACCOUNT	38,269.0	23,956.5
CONSOLIDATED LOAN ACCOUNT	5,017.8	4,691.0
SPECIFIC FUNDS		
Development Fund	44,430.6	47,238.2
Sinking Funds	20,193.9	18,334.6
Revolving Fund	559.8	687.8
Contingencies Fund	1,000.0	1,000.0
Development Contingencies Fund	1,000.0	1,000.0
Government Securities Fund	31,653.3	26,077.2
Edusave Endowment Fund	2,537.5	1,523.0
Medical Endowment Fund	205.1	-
Singapore Municipal Provident Fund	25.9	25.1
Skills Development Fund	417.9	451.3
	102,024.0	96,337.2
DEPOSIT ACCOUNTS	5,056.9	1,130.4
	150,367.7	126,115.0

From the Report of the Auditor-General, Republic of Singapore, October 1994.

Notes:

(a) This statement does not include the following:

- (i) Government securities of \$35,891.9 million issued under the Development Loan Acts and \$30.0 million in external loans, details of which are shown in the "Statement of Government Securities, External Loans and Sinking Funds as at 31st March 1994";
- (ii) Loans repayable to government amounting to \$21,901.1 million, details of which are shown in the "Statement of Loans Repayable to Government for the year ended 31st March 1994"; and
- (iii) Funds administered by organs of state and ministries totaling \$639.1 million, details of which are shown in the "Statement of Public Funds Administered by Organs of State and Ministries for the year ended 31st March 1994."

**Statement of Consolidated Revenue Account
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Balance as at 1st April	23,956.5	17,722.5
Add:		
Operating Revenue	19,733.1	16,689.9
Investment Income	1,273.2	844.9
Loan Repayments	0.3	0.3
Capital Receipts	8,357.6	5,200.6
Investment Adjustments	465.6	205.6
	53,786.3	40,663.8
Deduct:		
Operating Expenditure and Other Outlays	10,638.5	10,639.1
Inter-Fund Transfers	4,878.8	6,068.3
Contingencies Fund	-	500.0
Edusave Endowment Fund	1,000.0	1,500.0
Medical Endowment Fund	200.0	-
Revolving Fund	(220.0)	-
Sinking Funds	3,898.8	4,068.3
Balance as at 31st March	38,269.0	23,956.5

**Statement of Consolidated Loan Account
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Balance as at 1st April	4,691.0	3,861.1
Add:		
Treasury Bills Issued	16,850.7	14,136.5
	21,541.7	17,997.6
Deduct:		
Treasury Bills Redeemed	16,523.9	13,306.7
Balance as at 31st April	5,017.8	4,691.0

Notes:

- (a) The balance as at March 1994 represents the net proceeds from outstanding Treasury bills with par value of \$5,050 million.
- (b) No loans were raised for Development Fund purposes in the financial year 1993/94. Loans raised under the Government Securities Act 1992 are shown in the Statement of Government Securities Fund.

**Statement of Development Fund
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Balance as at 1st April	47,238.2	48,677.3
Add:		
Recovery of Overpayment	250.0	168.8
Interest on Loans	672.5	913.6
Investment Income	2,019.3	1,781.6
Investment Adjustments	740.3	435.4
	50,920.3	51,976.8
Deduct:		
Development Expenditure	3,894.8	3,649.1
Net Lending	2,594.9	589.5
Loans	3,965.5	2,226.0
Less: Loan Repayments	1,370.6	1,636.5
Transfer to Development Contingencies Fund	-	500.0
Balance as at 31st March	44,430.6	47,238.2

**Statement of Sinking Funds
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Balance as at 1st April	18,334.6	16,551.3
Add:		
Investment Income	767.5	598.6
Investment Adjustments	281.4	146.5
Transfer from Consolidated Revenue Account	3,898.8	4,068.3
	23,282.3	21,364.6
Deduct:		
Registered Stock Redeemed	3,088.5	3,030.0
Balance as at 31st March	20,193.9	18,334.6

**Statement of Revolving Fund
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Balance as at 1st April	687.8	625.0
Add:		
Advances Repaid	238.3	205.5
	926.1	830.5
Deduct:		
Advances Given	146.2	142.7
Transfer to Consolidated Revenue Account	220.0	-
Balance as at 31st March	559.8	687.8

Note: The total provision of the Revolving Fund as at 31st March 1994 is \$1,160.8 million. This is represented by \$600.9 million outstanding advances and \$559.8 million unutilized provision. During the year, an amount of \$220.0 million was returned to the Consolidated Revenue Account.

**Combined Government Revenue and Expenditure
For The Year Ended 31st March 1994**

	1993/94 \$ million	1992/93 \$ million
Operating Revenue	20,655.5	17,772.4
Tax Revenue	16,223.7	14,237.1
Fees and Charges	3,393.6	2,377.0
Others	1,038.2	1,158.3
Less:		
Operating Expenditure	9,001.2	8,512.3
Expenditure on Manpower	2,179.8	2,054.8
Other Operating Expenditure	4,632.4	4,460.0
Grants-in-Aid	1,871.1	1,698.0
Pensions	318.0	299.5
Less:		
Development Expenditure	3,894.8	3,649.1
Government Development	1,999.7	1,748.1
Capital Grants	1,357.2	1,394.9
Public Housing	537.9	506.2
Surplus/Deficit (-)	7,759.5	5,611.0
Less:		
Contribution to Edusave Endowment Fund	1,000.0	1,500.0
Contribution to Medical Endowment Fund	200.0	-
CPF Share Ownership Top-UP Scheme	242.4	-
Budget Surplus/Deficit (-)	6,317.1	4,111.0
Add:		
Net Investment Income	2,722.2	1,157.9
Investment Income	4,060.1	3,225.1
Less: Debt Servicing	1,231.2	1,980.2
Expenses on Investments	106.7	87.0
Less:		
Net Lending	2,594.6	589.2
Loans	3,965.5	2,226.0
Less: Loan Repayments	1,370.9	1,636.8
Add:		
Net Capital Receipts	8,315.0	5,155.6
Capital Receipts	8,357.6	5,200.6
Land Sales	5,476.7	4,021.8
Other Capital Sales	2,880.9	1,178.8
Less: Agency Fees on Land Sales	42.6	44.9
Add:		
Investment Adjustments	1,487.3	787.5
Excess of Receipts Over Outlays	16,247.0	10,622.8

Notes:

- (a) Excludes investment income apportioned to Government Securities Fund, Edusave Endowment Fund, and Medical Endowment Fund.
- (b) Excludes investment adjustments apportioned to Government Securities Fund.

Annex X

Information Systems for Fiscal Management

By Ali Hashim and William Allan

INTRODUCTION

As countries that were part of the former Soviet Union and Eastern Europe move from centrally planned to market economies, and as other developing countries proceed to open up their economies and free them from regulatory controls, public-sector managers in these countries are required to perform a new set of functions, such as: (i) designing appropriate fiscal and monetary responses to changing macroeconomic conditions; (ii) ensuring transparency and accountability in the deployment and use of public resources; (iii) improving the effectiveness and efficiency of public expenditure programs; (iv) mobilizing domestic resources and managing external resources (foreign aid and loans); and (v) decentralizing operations with adequate controls. In the new environment, increased scrutiny of governmental actions, accountability, and the ability to exercise financial controls are not only a domestic requirement but also important factors in determining international creditworthiness by multinational agencies and by the international investment community in general, in the context of global investment choices. Ready access to accurate and timely information for decision making is a paramount requirement to function effectively in this environment.

The information used by public-sector managers is generated as the agencies responsible for government financial management processes perform their functions, such as budget preparation, execution of budgetary expenditures, collection of revenues, etc. Since many of these functional processes require the processing of a large number of transactions, in limited periods of time, across a countrywide network of offices, the process of retrieving information from manual records and reclassifying it in a format or classification scheme appropriate for management decision making can be extremely time-consuming and labor-intensive. In such an environment, in the absence of some degree of automation, the basic data required for economic management may simply not be available with the required

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degree of timeliness and accuracy. Computer-based information systems provide public-sector managers with a set of tools to access reliable and timely information for decision making in an environment that requires consolidation of large amounts of data across dispersed locations. Thus, such systems enable rapid compilation and consolidation of data from across a countrywide network of Treasury or tax offices at the central Ministry of Finance. Data in the system databases can be presented in a variety of formats in accordance with management requirements.

Furthermore, many of the functional processes in the fiscal management area are repetitive in nature and follow a prescribed set of rules. For example, the rules for processing expenditures, or those for calculating taxes and duties can be explicitly stated. In these cases, computer-based systems present public-sector managers with unique opportunities to process business transactions efficiently, apply necessary controls, and simultaneously gather timely and accurate information required for decision making. Two aspects are particularly important:

- Computer-based information systems make it possible to integrate transaction classification and posting with transaction processing. This means that as a transaction is processed, e.g., as a payment is made, it can be simultaneously classified and posted to the relevant account. This ensures that all transaction data are promptly and correctly included in system databases.
- Use of computer-based systems enables automation of many controls and procedures. As the transaction is processed the system can apply the necessary controls, e.g., ensure that a proper budget allocation exists prior to making a commitment or approving a payment. Manual intervention is required only in cases that require an exception to the procedures. In these cases, the system would keep an appropriate audit trail that would include details regarding the authorization for the exception.

Despite their advantages, the implementation of information systems for the automation of financial management processes in the public sector poses a number of major design and implementation challenges. First, the investments required are very sizable and can easily span several years. Investments in such systems in moderate-sized countries could easily range from US\$10 million to US\$50 million over a five-year period. Secondly, the implementation of these systems generally requires substantial reform in existing institutional arrangements. Thirdly, different information flows among different elements of the system have to be closely integrated to achieve the full advantages of computerization. It is vital that the second and third of these problems be tackled effectively in systems design and implementation to realize the benefits of improved efficiency and better fiscal decision making.

It is essential, therefore, to assess carefully the costs and benefits of information system for financial management in light of the data will, administrative and institutional landscape of the specific country in question, before embarking on the introduction of such systems. The last section identifies and discusses the critical factors without which such systems cannot be successful.

It is only too common, particularly where substantial reforms in the underlying management process are required, for systems to be implemented piecemeal without significant

reform and little attention paid to critical flows of information between system components. The end result is often a set of partial information systems with overlapping and/or conflicting functionality, and a resulting lack of integrity in the overall fiscal databases. For design and implementation of effective government fiscal management information systems, it is essential therefore, that (i) required reforms in the underlying financial management processes be clearly agreed and understood as the basis for systems design; and (ii) functional and technical specifications for system design be based on these processes, and (iii) provide clear guidelines for integrating all of the subsystems needed to support government fiscal management (GFM).

To assist in the process of design of government fiscal management systems, this paper starts with a discussion of the essential characteristics of integrated systems giving some emphasis to the need to identify core and noncore elements of the overall GFM systems network. It describes a methodology that could assist in the design of an integrated network of systems. It goes on to discuss briefly the key functional processes of government fiscal management, and the main characteristics of the information systems required to support these processes. It uses the information on GFM functional processes and systems to develop a framework that identifies the various elements of a GFM information systems network and describes critical interlinkages. In view of their central place in the financial management process, the paper then discusses the functional processes, information flows, and information systems for budget execution, accounting, and fiscal reporting in some detail. Finally, it closes with a discussion of some of the factors that determine the choice of technology for the component modules of the GFM systems network and the prerequisites for successful implementation of integrated financial management systems.

CHARACTERISTICS OF INTEGRATED SYSTEMS

Integrated systems are not monolithic. For practical system implementation it is essential that system elements be developed in a modular way. These modules are integrated in the sense that they can exchange data and that there is a single secure point of entry for commonly used data. Modules in an integrated system can be distinguished as core modules and noncore modules. Core modules are those that are essential to the operation of the system and that define standards for data exchange for other system components. Noncore modules, by contrast, perform an ancillary function and should provide data in the form required by the core system or use data in a way that be reconciled with core system data. As will be discussed in more detail later, the general ledger system¹ (GLS), which maintains the data base for GFM, and accounts payable and receivable, which are the main transaction processing systems, would generally be considered to be the core of most GFM systems. Other systems such as debt management or tax and customs administration, though of vital importance to GFM, must be seen as supportive of the core system by (i) adhering to the data exchange standards of the core and (ii) reconciling data and reports with core data and reports.

A basic underlying principle for the design of integrated systems is that they be structured along functional rather than organizational lines. A number of organizational units

and agencies are closely involved with different aspects of GFM and they need to share information among themselves. A particular GFM system module should provide support to a functional area across all these organizations. This approach enables the creation of systems and data bases in which the primary responsibility for the timely provision of a particular subset of data resides with the organization responsible for that function. However, data in the system data bases should be accessible to all other relevant organizations (subject to appropriate security controls). Adherence to this design principle eliminates duplicative data gathering and, more importantly, enables all agencies responsible for specific GFM functions to work with the same set of data, thereby eliminating risks of data inconsistencies, which are inevitable in separately gathered data.

The *first step* toward achieving integration is to develop a framework that provides an overview of the systems network required to support GFM. This framework would address questions such as:

- What are the different information systems modules that are required to support GFM functional processes?
- What is the scope, scale, and type of a particular systems component?
- How do these systems modules interrelate in terms of their information flows?

This framework is developed by analyzing the basic functional processes associated with GFM, the overall regulatory framework that underpins these processes, their information requirements, functional responsibilities of agencies commonly responsible for the processes, information flows between the processes, the nature, volume, and frequency of these flows, and the data characteristics of the information used and created by the processes.

The framework would consist of:

- A *systems architecture* that identifies the major component modules of the systems network required to support GFM, the type of information maintained by each systems module and the information flows between various modules; and,
- A *technology architecture* that identifies the appropriate technology choices for the hardware and software to set up the various modules.

Once the initial framework has been set up and the pre-requisites and criteria for integration have been spelled out and incorporated in the implementation plan, the actual implementation and integration of systems modules is a goal that can be phased over time.

GFM FUNCTIONAL PROCESSES AND INFORMATION SYSTEMS ARCHITECTURE

This section describes in brief the major functional processes associated with government fiscal management. The information systems architecture required to support these processes, showing the core elements of a GFM systems network required to support GFM functional processes and the main information flows between elements, is available on request from

the authors. The functional processes associated with government fiscal management and the information requirements for these processes have been documented, inter alia, by Davies, Hashim, and Talero (1994), and Hashim and Allan (1994). A description of the major functional processes and the associated information systems for GFM is given in table AX.1.

INFORMATION SYSTEMS FOR BUDGET EXECUTION, ACCOUNTING, AND FISCAL REPORTING: THE TREASURY LEDGER SYSTEM

As stressed in the text, the main objectives of public expenditure management are expenditure control, strategic resource allocation, and good operational management. GFM systems provide decision makers and public sector managers with a set of tools to support these objectives. The architecture of the information systems network is determined by the basic functional processes that public sector managers employ to achieve these objectives and the overall regulatory framework that underpins these processes. The overall regulatory framework consists of the following elements: (i) the control structure; (ii) the accounts classification; and (iii) the reporting requirements. The information systems will need to incorporate features to ensure that they abide by the requirements of this framework. Therefore, *the regulatory framework needs to be in place—possibly, reviewed and modified—before productive work can commence on the design of computer systems to support fiscal management.* A full discussion of the overall regulatory framework is in the text and will not be repeated here.

The information systems for budget execution, accounting, and fiscal reporting—or the Treasury Ledger System (TLS) as they are often called—are the centerpiece of the GFM systems network and constitute the core of the government's financial management information system. The TLS would normally be used by:

- the Treasury and its regional offices, to perform the basic accounting functions and to undertake budget implementation;
- the Budget Department of the MOF, to obtain the status of actual expenditures and perform the processes associated with budget preparation and monitoring;
- the Cash Management Department of the Treasury, to provide the information it requires for cash management and implementation of cash limits;
- line agencies, to cater to their accounting and financial information needs; and
- the government auditing organization, to access financial transaction data for auditing purposes.

In a fully automated accounting system, as it exists in most developed countries and several middle-income countries, the basic accounting processes are automated and data captured only once as an accounting transaction progresses through the system. Such a system, introduced along with a modern budget classification system and an appropriate chart of accounts, would enable expenditures and revenues to be recorded at a very detailed level and related to specific programs and projects. Data recorded at this level can be directly used for program and project management. These data would also easily be amenable to cross-classification in other ways as required for financial analyses. In the

Table AX.1 Government Fiscal Management Processes and Information Systems

Government Fiscal Management Processes	Information Systems Support
<p><i>Macroeconomic Forecasting</i></p> <p>This process assists expenditure and resource planning by developing a macroeconomic framework linking the growth of national income, savings, investment, and balance of payments to public expenditures and revenues. The process helps in the development of: aggregates in the budget, notably revenues, expenditures, and the overall fiscal deficit and its financing; the balance between the capital and recurrent components of the budget; composition of expenditures by the main sector spending agencies; revenue forecasts consistent with macroeconomic assumptions; forecasts of nontax revenues based on macroeconomic projections; estimates of resources available from domestic and external borrowings; projections of current expenditure.</p>	<p><i>Information Systems to Support Macroeconomic Forecasting</i></p> <p>This group of systems assist the MOF with macro fiscal forecasting and the development of the macroeconomic framework. This is in turn used by the MOF to advise the Cabinet on aggregate budget parameters and guidelines for budget agencies to submit budget estimates. These systems require data from external economic data bases, and the assumptions regarding GNP, inflation rates, and the central government deficit. Additionally they require information on programs and projects the government intends to implement over the period of the MTEF, data on estimates of tax and nontax revenues, data on domestic and external borrowings, etc., maintained by other components of the GFM systems network, the manpower component, maintenance, and other operating expenses.</p>
<p><i>Budget Preparation</i></p> <p>The process of budget preparation starts with the development of a budget circular indicating economic prospects, broad policy objectives and how the budget is expected to attain them, and sectoral allocations/ceilings consistent with the macroeconomic framework. The next step is the preparation and analysis of line agency expenditure proposals and revenue forecasts and their consolidation into an annual budget document after a series of discussions at the Cabinet level, between line ministries, the MOF, and budgetary committees of Parliament and approval by the legislature. These discussions focus on how the budget proposals would meet the policy objectives outlined in the budget circular, on priorities of the various proposals, the validity of the resource requirements contained in these proposals, and how they can best be accommodated in the overall budgetary envelope.</p>	<p><i>Information Systems to Assist in Budget Preparation and Approval</i></p> <p>The budget preparation systems receive details of ongoing and planned programs and projects from the various line agencies, consolidate them, and produce from them the documents that form the basis of the negotiations between the line agencies and central agencies (MOF). After the budget is finalized by the Cabinet, the systems produce the approved budget estimates. The systems record and maintain the budgetary proposals and income estimates of all government agencies and record any changes during the budget preparation, approval, and amendment processes. To assist in the evaluation of the budget proposals, the system should be able to access and generate the baseline data on the manpower component, maintenance, and</p>

Table AX.1 (continued)

Government Fiscal Management Processes	Information Systems Support
<p><i>Budget Execution, Accounting, and Fiscal Reporting</i></p>	<p>other operating expenses from the relevant past-year databases. Examination of the capital expenditures requires data on the status (physical and financial) of government-approved projects, (both locally and foreign-funded). The budget preparation systems need to be supplemented with tools (such as those for cost-benefit analysis evaluation and performance measurement) that assist the sector and core agencies in deciding between alternative program proposals.</p>
<p>This set of processes cover the functions associated with implementing the budget, including the procurement of goods and services in accordance with budget estimates, the recording and accounting of all government transactions and development of periodic reports to monitor the overall flow of spending or use of appropriations, over the course of the year, highlighting major deviations from the planned budget and suggesting corrective measures.</p>	<p><i>Information Systems for Budget Execution, Accounting, and Fiscal Reporting</i></p> <p>These systems are the centerpiece of the GFM systems network and are the primary repository of financial data and serve as the basis of the government’s Financial Management Information System (FMIS). These systems are used to perform the processes associated with budget execution, monitoring, and control, to obtain the status of actual expenditures on ongoing projects. These systems also monitor and evaluate the overall budget implementation processes and produce the necessary fiscal reports. In addition, these systems would provide useful financial information to the line ministries, and spending units (in their respective areas) to enable them to better manage their work programs.</p> <p>Systems support is focused on four main systems (i) budget and warrant control; (ii) accounts payable; (iii) accounts receivable; and (iv) the treasury general ledger system (TLS) or the financial general ledger (FLS) system, and together they constitute the government’s Core Accounting System (CAS). The first of these is concerned with maintaining data on spending authority. These systems maintain data on approved budgeted appropriations (both capital and recurrent), sources of financing for programs and projects, budget transfers, supplementary</p>

Continued next page

Table AX.1 (continued)

Government Fiscal Management Processes	Information Systems Support
<p><i>Cash Management</i></p> <p>This includes the processes of developing agency and central cash flow forecasts, the release of funds to spending agencies, the monitoring of cash flows and expected cash requirements, the issue and redemption of government securities for financing government programs.</p>	<p>allocations, and fund releases (warrants) against budgetary allocations over the course of the year. The second and third groups of systems are used to process transactions as soon as possible after they occur, and record data on commitments and actual expenditures against budgeted allocations. The TLS/FLS is used for the compilation of summary records for control and analysis.</p>
<p><i>Debt Management</i></p> <p>This process defines the tasks associated with maintenance of records on all contracted public debt on an individual loan basis and classified according to source and type of loan. This process also assists in economic and policy analysis by determining, for example, the debt implications of different fiscal and deficit financing policies by preparing projections of debt service commitments under existing and anticipated contracts.</p>	<p><i>Cash Management System</i></p> <p>The Cash Management System assists the government in maintaining an up-to-date picture of the government's liquidity position and cash requirements. It obtains information on actual agency expenditures and cash balances in government (including agency) accounts from the general ledger. Revenue inflows, borrowing, loan disbursements, Treasury bills, government bonds, and cash deposit maturities are obtained either from the general ledger or from the specific systems for these areas, for example, the debt management system. Using this information, the government can decide on (i) budget ceilings and fund releases to line agencies; and (ii) the timing of the issues and redemptions of government securities, to provide short-term financing for shortfalls.</p> <p><i>Debt Management System</i></p> <p>This system maintains information on public domestic and external borrowings. This includes information contained in loan documents and transactions and issues of government securities. In addition to accounting information, this system also provides important information required in the formulation of fiscal policy, such as forecasts of drawdown and debt servicing liabilities and debt implications of different fiscal and deficit financing policies. Payment related to government borrowings are carried out by the central system based on the data in the debt management system.</p>

Table AX.1 (continued)

Government Fiscal Management Processes	Information Systems Support
<p><i>Revenue Administration</i></p> <p>The process deals with the administration of tax policies and covers the actual levy and collection of revenues including taxes and duties as laid down in these policies, and the valuation and collection of non-tax revenues, such as stamp duties, user fees, charges for services.</p>	<p>Loan receipts recorded in government accounts are processed by the central accounting system and then used to update the debt data base maintained by the debt management system.</p>
<p><i>Personnel Administration</i></p> <p>Activities associated with the development and maintenance of the government's human resource policies including manpower planing, complement control, civil service pay and pension polices, and the fiscal impact of these policies and their administration.</p>	<p><i>Systems for Revenue Administration</i></p> <p>This group of systems assists the government in, first, the processes associated with the formulation of tax and tariff policies, and then, the collection of tax and non-tax revenue. A number of separate systems are involved in this group: for example, those supporting the administration and collection of income taxes, customs duties, or VAT, and those supporting the collection of various types of non-tax revenues, such as stamp duties. The revenue administration systems provide summary information on revenue collections to the Core Accounting System. Revenues collected by the tax and customs administration departments would be recorded at an aggregate level in the FLS, and would be reconciled with deposits made in the banking system.</p>
<p><i>Auditing</i></p> <p>The process deals with the analysis and scrutiny of public, financial, and other transactions to ensure compliance with government policies and procedures and to ensure cost-effective use of public funds in accordance with overall government priorities.</p>	<p><i>Systems to Assist in Fiscal Aspects of Personnel Management</i></p> <p>The aspects of personnel management that are relevant for GFM are those processes associated with post management and complement control and with payroll and pension payments. The corresponding systems modules therefore form important elements in the GFM network of information systems. The payroll, pensions, and employee advances systems post summaries to the central system periodically.</p>
	<p><i>Systems to Support Auditing</i></p> <p>Auditing takes place at two levels; internal audit at line ministries during the course of the fiscal year, and external audit by the Auditor General through random checks and on the final accounts for the FY. These systems assist the internal and external audit agencies in their functions.</p>

absence of an automated accounting system, data recording would not be at as detailed a level. More important, cross-classification of data to other schema would be very cumbersome and therefore seldom carried out. The introduction of an automated accounting system would ensure completeness of data capture (that is, no transaction would be processed outside the system) and rigorous application of appropriate financial controls to all transactions processed by the system.

The information contained in the system databases would provide the MOF and other core financial agencies with comprehensive management information related to the country's financial resources. In addition, the system would provide useful financial information to the ministries and other spending units (in their respective areas) to enable them to better manage their work programs.

Policy Framework and Institutional Reforms

As mentioned earlier, the institutional and policy framework associated with budget preparation and execution needs to be in place—possibly, reviewed and modified—before productive work can commence on the design of computer systems to support budget execution, accounting, and fiscal reporting. The international financial institutions have been extensively involved in advising governments developing policy and institutional reforms to enable the systems for budgeting and accounting to be set up and function in accordance with international best practices. These reforms are especially important in transition economies where the legal and institutional infrastructure needs to be set up *ab initio*. Some of the key actions and policy reforms that need to be undertaken prior to the implementation of the actual computer systems for budgeting and accounting, are discussed at length in the text and are only mentioned below. However, the discussion below of budget execution using the Treasury Ledger System is much more detailed than in chapter 8, and the reader should find it useful as the underpinning of the information system itself:

- Development of a comprehensive budget law;
- Adoption of a budget classification system consistent with the IMF's GFS methodology, and final design of a Treasury chart of accounts embodying this classification system for implementation;
- Centralization of all government payments through the Treasury and consolidation of bank accounts to a single account at the CB;
- Development of detailed regulations and operating manuals on budget execution.

Key Characteristics of the Treasury Ledger System (TLS)

The TLS is normally implemented at the Treasury head offices and at each of the regional and district branches of the Treasury to process and control central government payments in their respective areas. Local government payments are not normally part of the system. Nevertheless, the implementation of the Treasury system would not preclude the installation of a similar system for local governments.

The system encompasses the functional requirements for the budget implementation and accounting processes and would normally cover the appropriation, commitment, funds allocation, and payment processes for both the investment and current budgets. The details of the functionality of the TLS are given below.

The Treasury Ledger System would have the capability to:

- record initial budgets and distribute the budget appropriations as approved by the legislature, to spending ministries and keep a record of initial budgets, revised budgets, and budget transfers, for a typical government spending unit.
- distribute appropriation and commitment authorizations to spending units and record commitments incurred by a spending unit against the approved limits and the appropriation during the course of a year.
- distribute fund allocations to spending units and keep a record of the amounts of funds allocations against the appropriations and any changes thereto.
- record expenditure against commitments and fund allocations (e.g., due to purchase orders, or other payments). The system will have facilities to check availability of appropriation, commitment, and funds allocation prior to approving a payment.
- print consolidated payment instructions for action by the banking system.
- record revenue and other receipts against appropriate account heads.
- if required, print checks against payment instructions and/or make arrangements for the electronic transfer of payment information to an external paying entity (e.g., a bank).
- consolidate data from all ministries and regional offices, as necessary. The system will have good report-writing facilities and enable easy retrieval and reporting on data in the system data bases, in a variety of formats. The system would be able to produce the commonly required accounting and management reports.
- restrict access only to duly authorized staff.

Implementation of the Treasury Ledger System: Activities and Tasks

As mentioned earlier, implementation programs for information systems to support budget execution government-wide must be sequenced carefully starting with the specification and design of appropriate financial management processes and organizational arrangements to support these processes. This should be followed by the development of functional and technical specifications for the information system to support these processes and then finally by the acquisition and implementation of the hardware and software. Quite often, government agencies will require the assistance of external consultants in managing systems implementation.

Budget Execution Using the Treasury Ledger System

Specific details of how the various government agencies involved in budget execution would use the related information systems in the performance of their duties as they relate to the execution of the budget are described in this section.

- *Budget appropriations.* The process begins with the recording of the approved budget (and any amendments thereto) by the Ministry of Finance (MOF) in the Treasury Ledger System (TLS), by individual appropriation item or revenue estimate. The Budget Department of the MOF prepares and registers in the TLS the detailed allocation of budgetary appropriations by ministry, and advises ministries accordingly. This should be done within the limits of appropriation approved by the Parliament.
- *Cash requirements forecast.* At the start of the year, financial plans detailing projected outlays and receipts are entered into the cash management system. As the year progresses sector agencies prepare quarterly/monthly requests for funds by category of spending. These are also input into the system.
- *Commitment limits.* It may be appropriate for the Treasury to propose commitment limits against spending unit expenditure items. The Treasury does this after taking into account the balance in the CB accounts and the balance in ministries' expenditure items by accessing the system.
- *Fund allocations (warrants).* The Treasury would then make fund allocations to ministries for each category of spending. Under ideal circumstances, the fund allocations would be consistent with the proposed commitment limits communicated to the ministries earlier. Both proposed and actual cash allocation quarterly limits would also be consistent with the commitment levels and budget appropriations. The degree of consistency in the process will largely depend on the quality of the budget initially prepared, the initial financial planning process, and the revenue collection outcome.
- *Ministries inform spending units.* The ministries would then notify their respective spending units of the budgetary appropriations commitment limits and fund allocations. These limits would be entered into the system. The advance knowledge of indicative cash limits, as well as of quarterly commitments limits, will allow agencies to make the best arrangements and to set priorities in a situation of scarce resources, so that any necessary cuts in expenditures by agencies can be made in a more orderly, rational, and effective way.
- *Requests for expenditure and actual commitment transactions.* As the year progresses, sectoral ministries will process requests for expenditure. After verifying the appropriateness of the expenditure and availability of budget appropriation and funds, actual commitments would be recorded in the system. If the ministries and spending units are directly linked to the system, they will record the commitment themselves. If they are not, they will advise the Treasury of these commitments. The Treasury will then record the commitments in the system. In the case of spending units (SUs) located outside the center, the transactions will be recorded in a parallel system through a Regional Treasury Unit (RTU).
- *Verification of receipt of goods and payment orders.* Following the verification for a given expenditure, ministries directly linked to the system would record the corresponding payment order in the system. The system would automatically check that the order falls within the funds allocation limit set for that ministry. The outlying spending units would process a payment order through the RTU. The latter would check the payment order issued by the SU and register it in the TLS. In the verification stage, once all the requirements for a particular obligation have been met, the ministry or spending unit should confirm that the commitment is ready for payment.

- *Payment processing.* At the same time as payment orders are registered in the TLS, the banking system must be advised to make the necessary payment (that is, to transfer funds from a central government account to the creditor). In a fully developed system this can be done automatically. At the end of each day, the TLS would structure a file with complete information on the creditors and payments to be made, as advised by ministries and spending units. This file would be sent to the CB or by the RTU to the regional branch of the CB that holds the government account. The applicable bank would transmit the relevant information (and funds) to each commercial bank, to credit to the appropriate account and debit the government account. The appropriate bank would confirm to the TLS (through the RTU) the debits in the government account. Alternatively, the applicable Accounting Office could forward to the appropriate bank a consolidated listing of the registered payment orders requiring payment. Action by the banking system would be as described earlier, but confirmation to the Accounting Office would be manual.

It should be noted that the process outlined above can be simplified for certain types of expenditure, either administratively or by automated procedures in the TLS. Some of these cases are discussed below.

- *Commitments for civil service salaries.* Salary commitments may be advised only once a year on an estimated basis and adjusted as necessary during the year.
- *Payment of civil service salaries.* In theory, each payment of each civil servant could be treated as a discrete payment and processed in the manner already described. However, given the number of individual payments involved, the similar structure of each payment, the regular occurrence of payments, and the additional personnel issues that need to be considered, it is preferable to develop a separate subsystem for processing salary payments—the payroll system—in a manner compatible with the overall expenditure process.
- *Small expenditures.* The commitment (and verification) of small expenditures (up to a predetermined limit) can be entered into the system simultaneously with the order for their payment. However, the system must know in advance which appropriation items allow such simplification, to prevent misuse.
- *Commitments for the investment component of the budget.* Commitment control for the current component of the budget can be operated satisfactorily on a within-year basis, primarily as an aid to sound cash management activities. However, in the case of the Investment component, where many projects have a financial life of more than one year, it is often useful to maintain an accurate record of the forward expenditure commitment generated by undertaking the project. If this is done, the government has a better understanding of the flexibility available to it for future investment decisions. This process can be accommodated in the FLS by extending the commitment control field against each investment appropriation line item to cover two years beyond the budget year. As long-term commitments are entered, the financial impact is recorded, for budget and outyears. Tracking the implementation of capital projects normally requires separate subsystems at the agency levels. For these, it is important to maintain data on both the financial and physical status of projects, including historical data.

- *Receipts.* Government receipts (such as taxes and duties) are often paid into accounts set up by the corresponding revenue collection agency in commercial banks. They are then transferred to the TSA at the CB. A periodic report from the CB informs the Treasury and the appropriate revenue collection of the details of the collections.

Alternative Institutional Arrangements for Expenditure Processing

Responsibility for payment processing

The previous sections describe the commonly occurring institutional setting in which: (i) all payments from line agencies are channeled through the Treasury; (ii) the Treasury is responsible for making payments from the Treasury Single Account (TSA) which is held at the CB; and, (iii) the CB is responsible for the retail banking operations associated with government payments and receipts.

However, in those countries where the institution of the Treasury and the necessary legal framework for budget preparation and execution is in place and the need for financial discipline is recognized government-wide, several alternative institutional arrangements are often put in place for managing the payment process. The first variation on the standard institutional setting is that in some countries the spending ministries/ spending units are directly responsible for making payments from the TSA instead of the payments being channeled through the Treasury. The TSA is nevertheless still held at the CB and the latter continues to be responsible for retail banking operations related to government payments and receipts. This system may result in a quicker response time for payment transactions since the payment authority resides in the agency itself. In this case, the responsibility to ensure compliance with budget execution limits and procedures is delegated to the agency. For this system to be successful, the MOF needs to ensure that necessary controls are adhered to by the agency prior to making a payment. The budget control responsibility can be exercised by officers from the central Treasury who are outposted to the line agency, or by line agency finance and accounting staff.

It may be mentioned that if a computer-based system is used for controlling budget execution and for processing payment transactions and the system design incorporates the necessary controls, the location of the payment authority is not as important as it would be in a manual system. Prior to allowing a payment, the accounting system software would normally ensure that a budget appropriation exists, a warrant allocation (cash) is available, and a prior commitment has been made (in those cases where commitment accounting has been implemented). Manual intervention would normally only be required to override some of these restrictions. In these cases the system would keep a log of the event including the date, time, amount involved and the name of the authorizing officer. This will ensure that the controls prescribed for budget execution are adhered to.

In a manual system, the finance personnel located at the spending agency or the Treasury would need to ensure that these controls are applied in each case. In a spending agency-based payment system, if the spending agency finance personnel are functionally and administratively responsible to the head of the spending agency, they may be subject to pressures to process payment transactions that do not comply with specified procedures. It may

therefore become more difficult to ensure that prescribed controls and procedures are adhered to in a decentralized system as compared with a Treasury-based central system.

Banking arrangements

A further variation that is often implemented is that the retail banking operations are delegated to one or more fiscal agents (normally authorized commercial banks) by the CB. This model is put in place in those cases where the CB does not have an adequate network of provincial/regional branches or does not have the capacity to handle the large volume of transactions associated with government payments and receipts. In these cases, the fiscal agent(s) makes payments on behalf of the Treasury, the CB recoups all payments made by the fiscal agent(s) for government operations and the fiscal agent(s) makes daily deposits of all government revenues to the TSA in the CB. This model can be used in both situations described above, namely, in the case where the payments are channeled through the Treasury or where the agencies are directly responsible for authorizing payments. The arrangement has the advantage of more expeditious payments to government creditors in view of the greater capacity of commercial banks to process these transactions. Three aspects are important for the efficient functioning of this system. First, the float of all payments to be transferred to the TSA should be as small as possible. Secondly, the bank accounts should continue to be under the control of the Treasury even though they may be operated by the agencies. Finally, their balances should be cleared to the TSA periodically to ensure that government has an accurate idea of the total amount of cash available in the system so that it can optimize its borrowing strategies.

The necessary mechanisms to ensure that the Ministry of Finance has the necessary information on bank accounts can be implemented more easily in an information technology-based environment. However, it is necessary to note that mere existence of an electronic connection is not sufficient. For the necessary controls to be implemented, the bank accounts would need to be under the control of the Ministry of Finance/Treasury so that it can obtain data on balances in these accounts and make transfers from them independently of the spending agencies.

The centralized payment processing through Treasury offices is implemented by the United Kingdom, Canada, France and Australia amongst other advanced countries. The government of New Zealand has put in place a decentralized payment system in which agencies directly process expenditure transactions and have direct access to bank accounts. Systems to ensure accountability are important to assess the readiness of a country to move from a centralized to a decentralized system. Table AX.2 lists the institutional arrangements adopted by several countries for payment processing.

TECHNOLOGY ARCHITECTURE

The technology architecture defines the nature of the hardware, software, and communications technology required to support the information and systems architectures. The elements of a technology architecture include descriptions of:

Table AX.2 Examples of Institutional Arrangements for Payment Processing

Country	Payment Transactions Processed by	Treasury Single Account Held at	Government Payment Transactions Processed by	Remarks
Hungary	Spending units send expenditure transactions to Treasury units for processing	National Bank of Hungary	National Bank of Hungary makes payments to government creditors	Prior to the establishment of the Treasury and setting up the TSA, MOF transferred cash directly to spending unit accounts. Government did not have access to accurate and timely information on the cash available in agency bank accounts. This led to generation of idle balances. There was little control on whether expenditures followed budget appropriations. To remove these problems, under IMF advice, the government has set up treasury/ TSA based payment arrangements.
Kazakhstan	Spending units send expenditure transactions to Treasury units for processing	National Bank of Kazakhstan	National Bank of Kazakhstan makes payments to government creditors at the center and oblasts. At rayons, banking operations are handled by designated commercial banks	Kazakhstan has, at the advice of the IMF, moved from a decentralized payment system to one in which government monies are located in the central bank and payments are processed by Treasury units at the center, oblasts, and rayons. This has enabled the government to implement more efficient cash management practices and exercise better control on expenditures.
Ukraine	Spending units send expenditure transactions to Treasury units for processing	National Bank of Ukraine	National Bank of Ukraine makes payments to government creditors at the center and oblast headquarters. At rayons, retail banking operations are handled by designated commercial banks	Ukraine is also in the process of implementing a centralized payment system under IMF advice.

Table AX.2 (continued)

Country	Payment Transactions Processed by	Treasury Single Account Held at	Government Payment Transactions Processed by	Remarks
Turkey	Spending units send expenditure transactions to accountancies managed by MOF/ General Directorate of Public Accounts, for processing.	Central Bank of Turkey	At the center payments are made by the central bank. In the regions/provinces by Ziarat Bank, a designated commercial bank	Government payments are handled by the central bank at the center. In the regions, the Ziarat Bank acts as the government's fiscal agent.
Pakistan	Spending units send expenditure transactions to the offices of the Accountant General for processing	State Bank of Pakistan	National Bank, a government owned commercial bank	In Pakistan government payments are processed by offices of the Accountant General. However, the central bank has designated the National Bank to act as its fiscal agent. The Accountant General has an account in the National Bank (NB), which is a government-owned commercial bank. The NB performs the retail banking operations on behalf of the central bank. This enables the government to maintain central control but at the same time take advantage of the large network of National Bank branches to facilitate payment to government creditors.
New Zealand	Spending units process expenditure transactions directly	Central bank	Designated private banks	New Zealand operates a decentralized system. However, agencies are held responsible for ensuring that all budgetary expenditures are in accordance with the approved budget. Moreover, agency bank accounts are cleared every night to enable the Treasury to get an idea of the total cash available in the system.
Jamaica	Spending units process expenditure transactions directly	Bank of Jamaica	Designated private banks	Jamaica has opted for a decentralized system. The government would like to give full freedom to line agencies to implement their programs and projects as approved by the parliament. However, the agency bank accounts are not cleared on a daily basis. This can cause buildup of idle balances.

- the nature, size, and distribution of the computer processing facilities and associated workstations;
- the nature of the communications interconnections between the computer processing facilities; and
- the nature and type of applications development and systems software, database management systems software (DBMS), office support systems software, special-purpose software to support analytical capabilities, text management, desktop publishing, etc.

The definition of the technology architecture provides the basis for:

- selecting appropriate technology to support the systems architecture;
- guiding the acquisition of hardware, software, and communication facilities; and
- ensuring integration and compatibility of component elements of the architecture.

The different elements of the technology architecture will be country- and application-specific. This paper therefore restricts itself to a discussion of the factors that need to be kept in mind while making technology choices.

Application-Specific Factors

The technological requirements for the various systems modules described in the foregoing sections could vary quite significantly. Some of the application-specific factors that determine the choice of information technology are:

- The volume of data to be handled and the sizes of the data bases required to be maintained;
- The volumes and rates of the transactions that take place against the data bases and the numbers of concurrent users of the system;
- The volumes and frequency of the information flows between component parts of the system or with other systems modules;
- Whether the information processing requirements are centralized at a single location or are distributed to a number of widely separated locations, and if the latter, how frequently the information maintained by the system is required to be aggregated at the center or referred to by other agencies of government;
- The type of data handled by the system: whether it is primarily alphanumeric or textual, and whether it pertains to a given time slice or requires time series;
- The nature of output facilities required by the system: desktop publishing, graphics, report writing, and imaging;
- The nature of analytical facilities required, e.g., modeling, statistical analysis tools.

The systems characteristics identified in table AX.3 broadly define the information technology requirements of the systems modules. In general, the data volumes and transaction rates determine the computing power requirements at a particular node of the system and

the degree of sophistication required in the data base management software used. High-transaction-rate systems with a large number of concurrent users require sophisticated data base management software.

The data distribution profiles and the nature and frequency of information flows between component modules of the system or with other modules of the PFM network determine the nature of the telecommunications facilities that will be required. The frequency of information flows between the nodes of the network determines whether the telecom link needs to be active all the time or whether information transfer at periodic intervals would suffice. Thus, for example, information systems to support tax administration would ideally have distributed processing facilities available at all important taxation centers, which would be connected with each other and with the center by telecommunications facilities. On the other hand, systems for macroeconomic forecasting or debt management, which are primarily operated by the MOF, would need only limited telecommunications access to other systems in the network.

Systems that handle large quantities of text information, as opposed to straight alphanumeric information, require special text-management software. Similarly, systems that require image processing capabilities have special hardware/software requirements. Systems that require special analytical or modeling tools, graphics, desktop publishing, or report writing capabilities require the use of appropriate software for this purpose.

Requirement for a Multitiered Network

Several elements of the GFM systems network such as those for budgeting and accounting and for tax administration, require systems modules at the line agency and central levels with facilities for generating, storing, and processing data at each level and for exchanging data between levels. The data volumes encountered can vary widely across the nodes of the network. These systems require a multitiered network. This could consist of stand-alone microcomputers, local area networks (LANs), or minicomputers, located at the nodes (MOF, other core agencies, the line agencies, and subordinate/regional Treasury and tax offices) and connected by telecommunication lines.

The transaction processing and data base management at each node are carried out by the local computers. The summary or detailed data required for the applications are transmitted to the computer in the agency responsible for that system (e.g., to the MOF's Budget Division for the budget system, to the Treasury for the accounting and cash management systems). This configuration is often preferred because (i) computing power is distributed commensurate with node requirements, making this system less vulnerable to malfunctions at the central site; and (ii) end-users at the line agencies have more control over their technological and data resources, which inculcates a sense of ownership in the systems. In the absence of good telecommunication facilities, the data transfer between the nodes and the center could be periodic (say, daily, weekly, or monthly, depending on the application system) in an off-line/batch mode. The size of each node's computers would depend on the amount of its data and the number of its transactions. They could be stand-alone microcomputers, microcomputers connected by a local area network (LAN), or fairly large-capacity minicomputers at the center and larger line agencies.

Table AX.3 Technological Requirements for GFM Information Systems

Systems for	Relative Data Volumes and Transaction Rates	Requirement for Distributed Processing, Data Transfer, and Access Facilities	Analytical Processing, Modeling, and Statistical Analysis Facilities	Text Management Facilities	Report Writing, Desktop Publishing Facilities	Availability of Off-the-Shelf Package Software Solutions
Macroeconomic forecasting	Low	Operated by the core agencies at the center.	Economic modeling and statistical analysis	Some	Good report-writing and graphics facilities	
Budget preparation	Moderate; involves annual submission of budget proposals from line agencies to MOF	Some; budget proposals are prepared at line agency offices and need to be transferred to the MOF at the center	Some analytical capabilities are required to perform cost-benefit analysis during budget preparation and development of alternative scenarios	Budget proposals normally contain descriptions of agency programs and outputs/outcomes.	Good desktop publishing facilities. The systems should prepare a camera-ready version of the budget that is ready for printing after approval by Parliament.	Some financial packages have facilities to assist in budget preparation.
Budget execution, accounting, and fiscal reporting	Very high; all budget transfer, commitment, verification, and payment transactions need to be processed	Major requirement; budget execution transactions are processed at line agencies and/or regional/district Treasury offices. Information needs to be transferred to the center periodically	Mainly a transaction processing system. Some analytical facilities to determine expenditure trends, etc.		Good report-writing and some graphics facilities are required	A number of financial packages are available to implement the general ledger, accounts payable, receivable, and procurement, modules. Examples are: packages offered by SAP, ORACLE, PEOPLE SOFT, J.D. EDWARDS, AGRESSO, NAVISION, etc.
Cash management	Moderate; cash requirements from agencies, and cash allocations to them are processed by system	Some; cash requirements are received from line agencies and warrants allocations are distributed to them	Some analytical capabilities to forecast cash requirements.		Good report-writing and some graphics facilities are required	Financial application packages can assist in this area.

Table AX.3 (continued)

Systems for	Relative Data Volumes and Transaction Rates	Requirement for Distributed Processing, Data Transfer, and Access Facilities	Analytical Processing, Modeling, and Statistical Analysis Facilities	Text Management Facilities	Report Writing, Desktop Publishing Facilities	Availability of Off-the-Shelf Package Software Solutions
Debt management	Moderate; all loan receipt and payment transactions need to be processed. For a large loan portfolio this number could be substantial	Some; agencies need to inform the center of debt utilization information	Some analytical capabilities to analyze debt and borrowing strategies		Good report-writing and some graphics facilities are required	UNCTAD and the Commonwealth Secretariat have developed debt management systems. These systems are in use in a number of countries
Revenue administration	High; all transactions relating to assessment/ payments of various types of taxes need to be handled by the systems.	Major requirement; revenue collection transactions take place at a network of offices. Information needs to be transferred to the center periodically	Mainly a transaction processing system. Some analytical facilities to determine tax policy options		Good report-writing and some graphics facilities are required	ASYCUDA developed by UNCTAD and SOFIX developed by the French government are examples of systems for customs administration. In use in a number of countries
Personnel management	High; all personnel actions need to be handled by these systems	Some; these systems are normally operated by line agencies. Information needs to be transferred to the center	Mainly a transaction processing system		Good report-writing and some graphics facilities are required	A number of application packages are available
Auditing	Moderate; these systems obtain sample transaction data from other GFM systems for analysis.	Some; auditing systems need access to other transaction processing systems of the GFM network.	Specialized transaction sampling facilities		Good report-writing and some graphics facilities are required	Several packages are available in the market to help in computer-assisted auditing.

Systems Portability and Scalability

A key consideration while designing such systems is that for systems modules that are to be implemented at multiple levels, the software should be similar at each node and scaleable—that is, able to be run on small or large computers without major changes. These properties can be achieved by choosing compatible computers offered by a single vendor that offers multiple size configurations. However, this would restrict further additions to the network to this vendor and line of computers. To avoid these restrictions, the application systems should be developed using tools and DBMS software that can operate on machines of different sizes offered by several vendors. This feature is called software portability.

To ensure vertical and horizontal portability, and scalability, the hardware should be an open system—assembled from components that conform to generally (though not universally) accepted standards. The hardware and software would therefore be interchangeable, providing greater flexibility. It will be some time before there is a full set of products on the market that truly conforms to *open systems* standards; at present, the UNIX environment comes the closest. Most vendors now offer a version of UNIX. Since UNIX versions vary slightly with the vendor, some application changes may be required before a version can be used on a different vendor's machine; however, time and effort involved in making these changes would be small compared with entirely rewriting the applications.

Another consideration in choosing the application development environment is that certain tools, such as fourth-generation languages (4GLs), RDBMs, and graphic user interfaces (GUIs) make it easy to add or change application features, including changes in data base structures, associated programs, and report formats. The use of these tools increases application development productivity and therefore reduces development time. These tools also enable end-users to access the data bases themselves and to program simple reports.

Off-the-Shelf Application Software

It is important to choose an appropriate software strategy during project implementation. In-house development of application software often appears more attractive in terms of the resources required for developing a core or a prototype application. However, such systems can provide only the most basic functionality, and efforts to enhance them to a full-functionality system usually turn out to be very time-consuming and expensive. In general, it is advisable to opt for packaged software solutions where feasible. Packaged software can be acquired for systems with relatively standardized requirements. Off-the-shelf application software packages that were originally designed for the corporate environment are now becoming increasingly popular in the public sector in areas such as financial management, accounting and personnel management. A few packages are also available for use in more specialized areas such as customs administration and debt management. Though they may initially appear to be more expensive when compared with a modest in-house prototype, the adoption of such packages could result in significant savings in both time and money in the long run. The use of off-the-shelf software would enable faster implementation of a full-function system, continuing software support with periodic upgrades and good documentation. It is therefore suggested that possibilities of using such packages be explored

before embarking on an exercise of in-house development. However, systems with country-specific requirements may need to be custom-developed. The cost and risks associated with such projects are higher.

While conducting a review of software packages the project team will need to ensure that: (i) the software package provides the required functionality; (ii) local support is available for the package and it is possible to obtain and install upgrades and/or changes in the packages in-country as they become available; (iii) the vendor for the package provides customization assistance as may be required; (iv) the costs associated with any customization are identified clearly in the total cost; (v) the package runs on a range of hardware and operating software which is compliant with the hardware/software strategy proposed for the systems; (vi) adequate documentation is available to enable package installation and use, and (vii) potential licensing arrangements can accommodate the use of the package at multiple sites in the country.

CRITICAL SUCCESS FACTORS

Government Commitment and Management Support

Improving the quality of fiscal management systems would introduce transparency in the fiscal and resource allocation processes. This would adversely affect those who benefit from the current weaknesses. These interests may act to delay project actions or divert the project from its objectives. *Continued government commitment to the reform of the public sector and to strengthening the basic financial management institutions is therefore a primary critical success factor for successful project implementation.*

Introduction of a new institutional structure for budget execution would require reorganization and realignment of the roles and responsibilities of related government agencies, such as the MOF, the Central Bank, and the Treasury and their relationships to the line ministries, and fundamental reforms of the functional processes that these agencies perform. Computer-based information systems should be viewed as a means of assisting in implementation of reengineered business processes and procedures. Implementation of these changes would *need government support at the highest levels* to ensure that the change process is completed smoothly. A phased and gradual introduction of new policies and procedures and a broad appreciation program, for public-sector managers, in the advantages offered by the new systems and processes would allow a wider appreciation of benefits and would enhance ownership.

At the project level, ensuring sponsorship at the highest levels of the functional areas involved in the project and participation from the widest range of users, is necessary. Steps taken to involve users in the design and implementation phases also ensure that the project is owned and adopted by the users once it is completed. Senior functional management input is particularly important during the earlier planning and design phases of the project. The main skill requirements for these phases are an in-depth knowledge of the functional area and a managerial capacity to ensure that the project is accepted by users within the functional area. The technical aspects become important only during the later implementation phases.

Interagency Coordination

Successful implementation of an integrated network of information systems, such as defined here, is crucially dependent on cooperation between diverse users. Project preparation and implementation is complex as it is done in a multiagency environment. Forming a *steering group with representatives from all major stakeholders* would ensure that all participant agencies' needs are taken into account during systems design so that the agencies do not have to resort to independent and duplicative initiatives. In this context, the active participation and involvement of line agencies in the design and implementation of systems is especially important. It would also establish systematic data-sharing arrangements, protocols, and schedules between the various systems so that all agencies have access to financial data as required. The lead responsibility for the different component modules of the overall system should rest with the organizations directly responsible for the corresponding functional process. This committee would also be a vehicle to provide user input to the technical team responsible for implementing the project.

Organizational Capacity and Skills

Systems reform projects may need to cope with the organizational capacities of the agencies responsible for implementation of reforms and the management of project implementation. The numbers and skill levels of finance and technical staff required to set up such systems are considerable. To ensure sustainability, the project may need to supplement existing skills and provide for financing and hiring of project implementation specialists, fiscal management specialists, and other technical skills as required. The government may need to review salary scales of staff in key areas to retain them within the civil service and to explore other modes of employment and avenues for hiring staff, for example, hiring staff for specific assignments from the private sector and outsourcing the technical maintenance and operation of some systems. In any case an ongoing policy of training would need to be adopted to cope with the significant attrition rates that can be expected.

On the technical side, an information systems organization should be established or existing organizational units strengthened, to *incorporate and retain* the skills and to manage the systems planning, development, and operation. The following skills are required: (i) high-level project design and planning skills; (ii) project management skills; (iii) technical implementation skills, to operate and use the hardware and software; (iv) user support skills, to develop user and technical documentation, to train end-users, and to set up a hotline as well as more formal training for end-users.

Setting Priorities for Systems Implementation

The systems for budgeting, accounting, revenue administration, payroll, and personnel management, constitute the basic transaction processing systems in the overall network required to support GFM. They are the repositories of most of the data that are required by the other modules of the network and form the foundation for modules of the network that

support fiscal planning and provide the decision support mechanisms. These systems are characterized by high data volumes, and several of them require distributed processing facilities. The order of magnitude of effort involved in their implementation is much higher than that for the other systems in the network. The nature of the business processes involved in these functions, the high data volumes and transaction rates associated with these systems make them primary candidates for computerization. As a matter of fact, in the absence of some form of automation, these areas are liable to generate severe backlogs of data, which can result in major gaps in the information required for fiscal management. These areas therefore present the major opportunities for automation. In view of their size, however, they also represent the systems most likely to encounter problems if the implementation process has not been planned carefully. The development of an overall framework outlining the nature and scope of the different modules of the information systems network and the interconnections between these modules would enable the project to be put in proper perspective. It will focus attention on the specific parts of the systems network that are included in the scope of the project, and what other modules these systems would need to interface with.

Formal Project Planning

The implementation of government-wide computer systems to support GFM process is a substantial undertaking. It is very important that agencies involved in the exercise be aware of its dimensions. Formal project planning methodologies should be used to design, implement, and monitor the systems. When such methodologies are appropriate and cost-effective in the specific country context, it is advisable to implement such projects in a phased manner so that they can be put in place and adequately monitored in a controlled environment. A phased implementation also ensures that they do not exceed the absorptive capacities of the organizations where they are implemented.

Systems and Data Administration

Information system support would normally be distributed among several agencies across government. Therefore, coordinating mechanisms should be created to ensure that a common set of policies, procedures, and standards is put in place for *managing data and systems across government*. The standards should, inter alia, cover the protocols for communications, data entry, editing, and updating screen input and output formats, back-up and recovery, security, contingency and disaster planning, and technical and user documentation.

Local Technical Support

It is imperative that the hardware and software chosen be supported locally. The vendors must have a local presence to be able to provide training and technical support during the life of the system.

Management of Change

Implementation of computer-based systems to support GFM requires an understanding not only of the business processes and information requirements, but also of the social, cultural, and political environment of the organization and the country within which they are being implemented (Walsham, Symons, and Waema 1988). It has been argued that computer-based systems are social systems in which technology is only one of the elements. The organizational arrangements required to ensure a social fit therefore take on increasing importance.

Implementation of information systems is intimately connected with, and normally has a direct impact on, the way people do their day-to-day work. It is imperative that appropriate change management procedures are also instituted, in addition to formal training programs, to ensure that staff feel comfortable in their new work environment and in particular do not feel insecure on account of misplaced fears of job redundancy, etc.

At a more complex level, information systems may lead to redefinition of the relative authority and power relationships of individuals and groups within organizations. The change management exercise would need to address these aspects also.

As an example of the types of issues involved, in the case of implementation of taxation systems, staff responsible for the processing of business transactions will need to learn a new way of doing their work. In view of the efficiencies in transaction processing mode possible by automated systems, the numbers of staff required to process routine business transactions may go down generating fears of redundancy. A parallel program of retraining and redeploying excess staff may be required. At the management level, officials who are responsible for ensuring that all transactions pertaining to their areas are processed speedily and recorded in their books would normally encourage the installation of computer-based information systems to make their jobs easier. However, installation of computer-based information systems would also add transparency and thus accountability to government operations. In fact, installation of these systems can provide the systemic underpinnings for and give a major boost to anticorruption efforts. (Recall, however, that new possibilities for corruption will be opened up at the same time for those with a good understanding of the new technology.) For these very reasons such projects could encounter resistance in project implementation. This is another reason why such projects would need a sponsor at the highest levels who could overcome the social and political constraints and pilot the project through the initial stages.

NOTES

¹ In traditional government accounting, the ledger is the summary book of account used to control each item of expenditure under heads and subheads of appropriation for each government fund.

Annex XI

Questionnaire for the Assessment of Public Expenditure Management Systems

By Lawrence J. O'Toole

This questionnaire is designed to help evaluate of the efficiency of budget systems, especially in developing countries and transition economies. It can be used informally to help think about the problems; it can be used as the basis for a formal review of the budget system; or individual sections can be used in analyzing specific budgeting sub-systems. (Some redundancy of the questions among sections is deliberate, to facilitate the third purpose.)

Questions demand a “yes or no” answer, and a negative answer suggests that action could be considered, **if appropriate**, to produce the situation described in the question. The questionnaire may appear too prescriptive, in attempting to reflect “good practice”. Readers are asked, therefore, to note that many questions describe specific elements which may be desirable but not essential in the specific country; others describe elements to be considered for later implementation after the basic foundations are in place, and yet others describe elements which may be inappropriate for the specific country. In most developing countries, therefore, several of these questions will not be relevant. National experts are best suited to make the judgement of whether one or another element is desirable and timely in their own country, provided that they take the trouble to review the lessons of international experience, as summarized in this book or elsewhere. Finally, note that this questionnaire is illustrative rather than exhaustive: a large number of possible questions are not included, partly from space limitations and partly because they would not be sufficiently general in relevance to various countries. However, the questionnaire does follow the key priorities of good budgeting, as discussed at length in the text. It should be used in conjunction with the text and with the Glossary.

This questionnaire relies upon the work of many organizations and individuals, both academics and practitioners. A particularly rich source was the *Public Expenditure Management Handbook* of the World Bank, 1998. The questionnaire was edited for the purposes of this book. Lawrence J. O'Toole is a consultant in public management.

INSTITUTIONAL AND LEGAL FRAMEWORK

Organic Budget Law

The legal framework for budgeting includes the constitution and the organic budget law (OBL). In many countries, the constitution deals with three principles: the requirement that all public money be paid into designated accounts and that these funds can be spent only under the authority of the legislative; the definition of the state's financial relations with subnational governments; and the relative powers of the legislature and the executive government in public finance. Where they are not stated in the constitution, these key principles should be dealt with in the organic budget law. Depending on legal traditions, some countries have less detail in the OBL and more in secondary legislation and administrative policies. Others do the opposite. It is generally preferable to limit the OBL to key provisions of lasting importance, and define other rules in lower-level legislation which can be amended more easily when circumstances change. As noted, this questionnaire should always be interpreted in the light of specific national practices.

Does the OBL (or lower-level legislation, as appropriate):

- provide a clear and comprehensive definition of public money and determine that all of it is to be managed in accordance with this law?
- authorize the government accounts into which all public money must be paid and from which expenditures are made only by appropriation of the legislature?
- limit the creation of extrabudgetary funds to special cases, authorized by separate statute?
- ensure that the finances of statutory funds are included in the overall fiscal position reflected in the budget?
- ensure that activities of statutory funds are reported to government and legislature with the same regularity as other government entities?
- ensure that the Ministry of Finance (MoF) regulates financial management of statutory funds?
- require that the budget deal comprehensively with all revenues and expenditures of the state?
- require that asset and liability transactions involving public money be included appropriately in the budget?
- define authority for issuing and reporting on loans and guarantees?
- define the different classes of budgetary institutions, agencies and enterprises, the authority for creating and dissolving such entities, and the rules by which entities in each class are linked to the budget?
- define the principles of intergovernmental fiscal relationships, while leaving the allocation of powers and responsibilities among subnational governments to separate local government laws?
- provide that subnational governments are allowed to borrow only from the central government? Or that their borrowing is subject to approval by MoF?
- provide that subnational governments are required to report monthly on total revenues, expenditures and bank balances, including for local extrabudgetary funds?

- define the schedule for presentation of the budget by government and for its consideration and approval by the parliament?
- provide for interim funding to continue normal government business when parliament has not approved the Budget in time for the start of the fiscal year?
- establish restrictive conditions on the use of reserve funds and emergency spending, such as requiring approval by minister of finance and full reporting to parliament?
- define the authorities at each level of the administration to transfer credits among headings and between appropriations in the approved Budget?
- provide clear criteria, and disclosure standards, for all tax and customs remissions and for the write-off of other debts due to the government?
- bind all persons responsible for spending public money to observe the principles of efficiency and effectiveness and to implement management control practices?
- establish sanctions for overspending and/or program and project performance?
- provide authority for Ministry of Finance (MoF) to make regulations in all areas of Budget preparation and execution, accounting and reporting, fees and charges, financial management, management control, internal audit, cash and debt management, public procurement etc.?

Legislative/Executive Relationships

These relationships are determined by the Constitution, by the OBL and other laws, by parliamentary rules of procedure, and by customary practice. Does one or more of these sources provide:

- defined limits on the powers of the legislature to amend the draft budget bill?
- time limits and/or remedies for the legislature's delay in voting on the budget?
- an opportunity for the legislature to approve the fiscal framework targets in advance of the detailed budget estimates?
- conditions and limits for handling draft legislation which has budgetary consequences not foreseen in the current budget?
- for the mandatory presentation by government of the essential minimum of budget documentation to specify fiscal policy objectives, the macroeconomic framework, the policy basis for the budget, and major identifiable fiscal risks?
- the timetable for reporting to the legislature during the year and in the Final Account, an accounting basis for reports which is consistent with that of the budget, and arrangements for external audit?
- for an external auditor in the form of a supreme audit institution which is independent of the executive government and reports to the parliament?
- a special parliamentary committee to study the Final Account and external audit reports?
- a procedure by which the legislature votes discharge?

Scope of the Government Budget

Does the budget include:

- all funds or financial mechanisms except as specifically exempted by statute?
- complete information on financial plans and operations of statutory extrabudgetary funds, and on their transactions with the budget?
- all spending under permanent appropriations as well as those to be annually voted?
- all fiscal transfers to subnational governments for general and special purposes?
- information on investments, transfers, or other transactions between the Budget and state-owned enterprises?
- a statement of contingent liabilities resulting from state guarantees of third-party debts, and an estimate of payments likely to be required under those guarantees during the budget year?

BUDGET PREPARATION

Setting the Framework

Macroeconomic and expenditure forecasting

- Is this responsibility assigned to MoF or, if divided between agencies, are roles precisely defined?
- Are economic forecasts produced at specified intervals?
- Are internal forecasts validated by systematic comparison to economic forecasts from public and private sources?
- Do the expenditure forecasts include both permanently appropriated and annually voted funds?
- Are the forecasts used to formulate revenue and expenditure assumptions and a framework of fiscal targets for approval by Council of Ministers?
- Are the same economic assumptions required to be used in the budget estimates submissions by ministries?
- Are systematic forecasts of expenditures mandatory with all new policy proposals?

Ministry envelopes/ceilings

- Are budget ceilings for aggregate spending and for sector ministries recommended by MoF and approved by the Council of Ministers?
- Do they cover both recurrent and capital components of the budget?
- Are they communicated prior to the preparation of the sector estimates submissions?
- Are sector ministers able to re-allocate among their agencies within the sector ceiling?

Multi-year perspective

- Are there medium-term projections of aggregate expenditure, consistent with the macroeconomic targets? How are they formulated?
- Are the projections used to frame the annual budget process? How?
- Are the expenditure projections and fiscal targets made public and widely disseminated?
- Are the projection and fiscal targets updated annually?
- Are policy decisions linked to the annual budget process?
- Are conflicts between resource needs and availability referred to a higher level (e.g., Council of Ministers) for resolution?

Process

- Is there a well defined, and widely understood, sequence of steps in the budget process, and does it allow practical intervals for the work at each stage?
- Does MoF issue an annual budget circular or regulation and does it provide a clear set of rules for the budget process and the main forms to be used in sectoral budget requests?
- Does the budget circular include sectoral spending limits, or clear rules for determining them?
- Are sectoral budget requests required to separate the funding of existing policies from requests for funding of new proposals?
- Are sectoral budget requests consistent with government policies and priorities?
- Are sectoral budget requests consistent with the macroeconomic assumptions and budget ceilings?
- Is all donor-financed expenditure incorporated in the budget?
- Is there a well-defined procedure for obtaining decisions on new policy proposals?
- Is there a clear role for MoF in analyzing and assessing sectoral budget requests prior to inclusion in the draft Budget?
- Are there established rules or practices to guide MoF negotiations with spending units?
- Are there clear rules for arbitration, by the appropriate higher levels (e.g., Prime Minister or Council of Ministers) of remaining differences between MoF and spending units?

Public investments

- Does the process for selecting and approving public investments assure consistency with policy, good sense and national economic profitability?
- Are all investments included for the budget year fully financed from assured sources?
- Are all investments financed both by the budget and by official external donors included?

- Are there sufficient local currency provisions in the budget to complement foreign funding for projects?
- Are the recurrent cost implications of investments estimated, and the results incorporated in the annual budget and expenditure projections?
- Is there sufficient coordination between investment programming and the annual budget process to ensure (i) consistency with overall policy; (ii) financial consistency between capital and current expenditure; (iii) consistency with the medium-term estimates?

Presentation to the Legislature

Does the draft budget reveal:

- the minimum documentation required by the OBL?
- a clear and comprehensive plan for all public spending, both that which continues under existing statutes and that which must be annually appropriated?
- the linkage of expenditures to specific organizations, objectives, and activities?
- funding that relates to new initiatives?
- the hierarchy of accountability among persons and organizations entrusted with public funds?
- clearly defined appropriations to be voted?
- format and language accessible to citizens and media as well as to legislators?

BUDGET EXECUTION AND MONITORING

Laws, Regulations, or Policies

Do the laws, regulations, and policies:

- define the authorities at each level of the administration to transfer credits among headings and between appropriations in the approved budget?
- provide clear criteria, and disclosure standards, for all tax and customs remissions and for the write-off of other debts due to the government?
- define procedures for mid-course review and amendment of the budget?
- establish sanctions for overspending?

Distribution of Responsibilities

Is the MoF empowered to:

- issue (normally through the Treasury) the warrants, or equivalent, which authorize spending units to begin spending their budget appropriations?
- reduce authorizations below the level of parliamentary appropriations if revenues fall below expectations?

- give prior approval for transfers of funds (virement) between chapters within the same budget heading, and set rules for transfers between items within chapters?
- demand the fulfillment of specific conditions before releasing certain appropriations such as major investments?
- control the release of investment funds from official donors and obtain reports on execution?
- issue regulations and standards for accounting and reporting, financial management, management control, and internal audit throughout the government sector?
- require reports from spending units on financial and task performance?
- demand access to supporting documentation from spending units as required?
- report, through the Council of Ministers, to the legislature on budget execution at least twice a year and whenever there are major changes in the forecast outturns?

Are spending agencies required to:

- have installed standard accounting and control systems and trained staff to use them?
- make forecasts of monthly cash flows for the budget year and submit these for MoF approval?
- make regular reports to MoF (or the Treasury) on spending in comparison to budget and cash flows in comparison to forecast?
- review, approve, and monitor direct disbursement programs by official donors in their sector?
- receive expenditure statements from aid agencies, and record the expenditures in the government accounts?
- maintain a budget planning and control framework which links spending to detailed functions (activities)?
- supervise subordinate agencies and state-owned enterprises in accordance with government-wide rules?
- develop and maintain systems of management control throughout their own and subordinate organizations?
- maintain a program of internal audit that meets MoF standards?
- be subject to formal rules that guard against overspending relative to budgeted amounts (e.g., central agencies, chief accountants, or banks having the authority to refuse expenditures if there are insufficient funds in the ministerial account)?

Do the legislature and Council of Ministers have appropriate responsibilities for:

- reviewing periodic reports on financial performance relative to the budget?
- revising targets and/or policies as required by the changed circumstances?
- blocking expenditures and amending laws as required by changed economic circumstances?
- defining national emergencies and approving spending changes to deal with them?

Cash Management and Treasury Function

- Are all public revenues deposited in the Treasury Single Account under control of MoF (Treasury department)? **OR** by spending units, to their separate subaccounts of a state Treasury system? **OR** by geographically remote spending units, to separate bank accounts operated by means of imprest advances, whereby a new advance is provided upon receipt of an accounting for the use of the previous one?
- If separate bank accounts are permitted, is MoF responsible for opening, closing, and either directly operating them or monitoring their operation?
- Are payments made through the central Treasury which authorizes and processes payment orders from spending units? **OR** by spending units, from their subaccounts within the financial limits authorized by MoF for the subaccounts?
- Are budget credits released to separated accounts only at the rate required for payments?
- Is information on actual expenditure available to MoF (or the Treasury) in time for effective monitoring?
- Does MoF (or the Treasury) control cash balances daily relative to borrowings?
- Do agencies have a system of commitment accounting that ensures expenditures do not exceed budget?
- Are there are sanctions for overspending?
- Are there clear and limited provisions for carry-over of expenditure?

Public Procurement

Is public procurement conducted:

- under laws and regulations which conform to international good practice?
- under the guidance of a control government office?
- with exemptions subject to decision only at appropriate senior levels?
- with regular reporting to the office of supervision?
- subject to a transparent dispute resolution system?
- subject to swift and certain penalties for fraud and abuse?
- with the right balance between protection and efficiency?

Accounting and Reporting

- Are all accounting and budgeting classification or coding schemes fully integrated into a single common classification under regulation by MoF (or the Treasury)?
- Does the classification scheme include both economic and functional categories conforming to IMF/GFS standards?
- Does the system provide for recording commitments as well as cash transactions?
- Are physical assets inventoried and policies on valuation and accrual accounting (if any) established?
- Are there manuals setting out the procedures and regulations for the accounting system?

- Are liabilities (such as those for civil service pensions) determined in accordance with generally accepted principles?
- Are financial statements/final accounts prepared in accordance with a recognized set of accounting standards?
- Are expenditure statements produced during the fiscal year and presented to the legislature?
- Are the Final Accounts produced, audited, and presented to the legislature shortly after the end of the fiscal year?
- Do the accounts include expenditures undertaken directly by aid agencies?

Management Control

- Is the managers' responsibility for management control defined in laws or regulations?
- Are organizational structures, competencies, policies, and procedures designed to prevent errors and to detect and correct errors that have occurred?
- Are control systems integrated with line management reporting systems and with budget planning system?
- Do the internal audit units in spending organizations review management control arrangements and recommend improvements to top executives?
- Is there a central office of control in MoF or elsewhere which issues standards, provides technical advice, and monitors performance?
- Are international comparisons taken into account when standards are established?
- Are computerized information systems designed to management control standards and verified by specialized audit staff?

AUDIT

Internal Audit

- Are internal audit units directly responsible to the head of agency to ensure their independence from operating units?
- Do internal audit units have capacity, or access to outside expertise, for audit of computerized systems?
- Are the knowledge and skill qualifications for internal auditors established and monitored by the central office of control?
- Are the internal audit reports directed to the top management and a copy provided to the external auditor?
- Are internal audit units expected to coordinate audit plans with those of the external auditor?
- Is a code of conduct for internal auditors enforced?

External Audit

- Is there an external auditor (“supreme audit institution,” or SAI), established by law with independence from the government and reporting to the legislature?
- Does the SAI cooperate with the SAIs in other countries and the international audit associations?
- Is the supreme audit institution empowered to audit the management control systems and permitted the discretion to use sample audits of individual transactions?
- Does the SAI inspect the management control systems and recommend improvements as opposed to using most resources for the audit of individual transactions?
- Does the SAI coordinate auditing plans with internal audit units and does it make use of internal audit reports to avoid duplication of effort?
- Are the SAI’s reports made public?
- Does the legislature have a special committee and/or procedure for reviewing SAI reports?
- Does the government have procedures for following up and responding to SAI recommendations?
- Does the SAI use a manual of audit practices consistent with international standards?
- Does the SAI have the capacity, or access to outside expertise, to audit computerized systems?

EVALUATION

- Is there a requirement for carrying out evaluations of programs/projects?
- Is there a requirement for evaluation of a certain percentage of programs/projects each year? Or for every government operation to be evaluated at a specified fixed interval?
- Does MoF or another appropriate authority establish policies and standards for evaluation?
- Are the results of evaluations published?
- Are the results used in budget decision making?

PERFORMANCE MONITORING

- Does the government foster an environment that supports and demands performance?
- Is there a clear understanding of the differences and limitations of input, output, outcome, and process indicators?
- Is there a clear understanding of when to use, and when not to use, performance indicators?
- Are appropriate quality safeguards in place?

- Is the combination of indicators suitable to the specific sector, circumstances, and capacity?
- Are the performance indicators (i) clear, (ii) relevant, (iii) cost-effective, (iv) adequate, and (v) monitorable?
- Do managers have clear short- and long-term performance targets?
- Are there sufficient safeguards and reviews of the probable impact of introducing performance indicators on relevant variables?
- Are there feedback mechanisms from the users and the public at large to supply data on performance?
- Are there provisions for systematic periodic dialogue with managers on the problems and successes of their units?
- Are there swift and predictable consequences for nonperformance?
- Is there a systematic collection, analysis, and reporting of performance information to verify compliance with strategic goals and to provide a sound basis for future policymaking and implementation?
- Do agencies use benchmarking (using good practices, processes, or results in organizations with similar challenges against which to compare their own performance)?
- Does MoF as well as sector ministries have “kick-the-tires” groups to test the realism and problems of the specific performance indicators?