# DESIGNING AND ESTABLISHING FISCAL POLICY ANALYSIS UNITS

## A PRACTICAL GUIDE

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# Designing and Establishing Fiscal Policy Analysis Units

## A Practical Guide

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# Acronyms

| | |
|---|---|
| BAO | Budget Analysis and Oversight Office (El Salvador) |
| BAMU | Budget Analysis and Monitoring Unit (Bangladesh) |
| CBO | Congressional Budget Office (U.S.) |
| CFP | Center for Fiscal Policy (Russian Federation) |
| DAC | Decentralization Analysis Cell (Karnataka, India) |
| DIMC | Debt and Investment Management Cell (Karnataka, India) |
| DGP | Directorate of Budget (Nicaragua) |
| FPAC | Fiscal Policy Analysis Cell (India) |
| FPU | Fiscal Policy Analysis Unit |
| FPI | Fiscal Policy Institute (Karnataka, India) |
| MHCP | Ministry of Finance and Public Credit (Nicaragua) |
| OAFE | Office of Fiscal and Economic Affairs (Nicaragua) |
| OTA | Office of Tax Policy (U.S.) |
| OMB | Office of Management and Budget (U.S.) |
| PAU | Policy Analysis Unit (Kenya) |
| RPPD | Research, Policy and Planning Department (Tanzania) |
| TRA | Tanzania Revenue Authority |
| UDAPE | Unidad de Análisis de Políticas Sociales y Económicas (Bolivia) |

# Executive Summary

Objective, accurate and timely analysis of the budget, intergovernmental finance, and revenue and expenditure trends is essential to the smooth functioning of government. The establishment of a fiscal policy analysis unit (FPU) or equivalent capability is often a key component of efforts to build the capacity within governments to carry out sound fiscal policy analysis and improve the quality of government planning and policy formulation.

In developed countries such as Australia, Canada, New Zealand and the United States, FPUs of various forms have been central in shaping the analysis and the debates over how public finances are secured and used. This approach has been replicated by many subnational governments in these countries, where one can also find well-established analytic units. Many developing and transition countries are moving towards establishing such fiscal analysis units or strengthening existing ones. This study draws from experience in setting up FPUs around the world, including in El Salvador, Nicaragua, Bangladesh, Russia, India, and Tanzania. The goal is to draw lessons and provide guidance on establishing FPUs, including the choices concerning the type of unit, its structure and organization, functions and staffing, as well as guidelines on indicators for assessing FPU performance and capacity.

**Why are FPUs important?**

Basic principles of good governance dictate that public expenditures should be allocated to maximize welfare, revenues should be collected fairly and efficiently, and the public should have access to a wide range of public services. Sound fiscal management provides the foundation for good economic governance, which in turn requires effective communication and coordination among key government departments and institutions.

FPUs can play a central role in facilitating this cooperation by making available essential data, objective analysis, and evaluation of potential outcomes of different policy options. The potential benefits of creating an FPU include, among others: budget discipline, informed policy debate, ongoing monitoring of government programs, provision of benchmarks for assessing policy performance, improved data reporting, and longer term perspectives in policy formulation.

**What is an FPU?**

An FPU is an entity, formed either inside or outside of government that assists the government in fiscal planning by providing quantitative fiscal reports and analyses and advising decision makers on achieving broad policy goals. FPUs can provide short-term and long-term economic and budget outlooks comparing outcomes under current and proposed law, provide economic and legal analysis for domestic and international fiscal policy decisions, and can serve as liaison between different government agencies in furthering the debate on fiscal issues.

FPUs can be instrumental in disseminating useful information through a variety of regular and periodic reports. FPUs commonly publish a Monthly Bulletin that includes monthly data on taxes, outlays, and other significant economic series, as well as an Annual Review/Report that summarizes the fiscal and economic events that took place over the year.

Despite the many areas of analysis that FPUs can perform, international experience points toward an initial basic organization around five core functions (USAID, 2008a): (i) Macroeconomic Analysis; (ii) Tax Policy Analysis and Tax Administration; (iii) Revenue Forecasting; (iv) Expenditure Planning and Analysis; and (v) Debt Management. An FPU may take on additional functions as its resource and analytic capacity expands, including in areas such as: intergovernmental fiscal relations; treasury cash management; audit and controls; and, management, business and information technology. Considering the budgetary implications of policy changes for subnational as well as national governments, establishing capacity to analyze intergovernmental financial arrangements may well become a very early priority.

**Models for Establishing an FPU**

For the sake of simplicity, FPUs can be divided into four basic categories:

1. *Governmental vs. non-governmental FPUs*

An FPU may be established and institutionalized as a governmental institution, financed and directed by government, and with government as its sole client. FPUs are commonly established within a government agency, such as the Ministry of Finance or the Ministry of Economy, as is the case in Spain with the Instituto de Estudios Fiscales (Institute for Fiscal Studies). Governmental FPUs are often established as part of the executive branch of government, such as the President's office, the Prime Minister's Office, or, at the subnational level, the Governor's Office. For example, the Office of Management and Budget (OMB) in the U.S. serves the President in the preparation and supervision of the federal government's budget.

Alternatively, an FPU may be established outside of government to perform analysis for the government on a contract basis. Non-governmental FPUs typically seek their own funding and perform fiscal and economic analysis for various clients, both inside and outside government. This may be a viable alternative when the government is unable to sustain a fully functioning FPU on its own. While many such units are initially set up with external financial and technical assistance, in the long run, they are expected to become self-sustaining through contract work with a broad clientele. For instance, the Center for Fiscal Policy (CFP) in Russia, a non-governmental organization established with USAID support in 2000, has become a renowned fiscal policy think-thank in its part of the world. As of 2008, more than half of CFP's funding came from sources generated by the Center itself (USAID, 2008a).

2. *Central vs. subnational government FPUs*

FPUs may be established at various levels of government. Generally, in federally structured countries, there are FPUs that specialize in providing fiscal analysis for federal budget issues, while at the same time state or provincial governments have their own FPUs to provide fiscal analysis on subnational budget issues.

FPUs can be a critical resource for developing and refining fiscal policies at the subnational level. In India, for instance, USAID's State Fiscal Management Reform (REFORM) Project recently helped establish a Fiscal Policy Analysis Cell (FPAC) in the southern state of Karnataka. FPAC is playing an integral role in supporting ongoing reforms aimed at improving state fiscal discipline, and in promoting inter-departmental dialogue over budget allocations and investments. Indeed, several state department secretaries have already used FPAC to undertake important studies on policy priorities.

3. *Comprehensive vs. specialized FPUs*

FPUs can also be categorized by the scope of their analytic work. In some cases, a single FPU may be responsible for providing economic and policy analysis in multiple areas of government planning and policy. At one end of the spectrum, Bolivia's Unidad de Análisis de Políticas Sociales y Económicas (UDAPE), established with USAID assistance in 1983, has a strong reputation for professional and technical expertise and represents a central (and perhaps the sole) governmental institution providing technical economic analysis and policy advice across several branches of government (UDAPE website; Hilderbrand and Grindle, 1994). In contrast, specialized FPUs tend to have a narrower portfolio, such as those covering only tax or budget issues, and other entities focusing on areas such as macroeconomic policies.

In general, there are advantages to having fiscal analysis units in both the legislative and executive branches of government, including units specialized in specific areas such as tax policy analysis. This allows for checks and balances that can enhance the public debate on fiscal issues and lead to higher quality analysis overall. For instance, a World Bank-funded program for the Government of Nicaragua assisted in establishing the Office of Fiscal and Economic Affairs (OAFE) in the Ministry of Finance and Public Credit (MHCP) with a mandate to coordinate its work with that of the Directorate of Budget (DGP), another FPU already existing within the MHCP. OAFE and DGP have achieved a large degree of coordination and complementarity, although sustainability is an issue as OAFE remains 100 percent externally financed (Gallagher, 1998; Dorotinsky et al., 2008).

Specialized FPUs, such as those that perform tax analysis, have the advantage of being able to invest their resources to develop deep analytic capacity in specific areas. For instance, Tanzania's Research, Policy and Planning Department (RPPD) represents a specialized unit within Tanzania's Tax Revenue Authority (TRA). Established in 1996 with USAID assistance, RPPD has gained great influence both within TRA, as well as in Parliament and government ministries. USAID's technical assistance program enabled the RPPD to become an influential and effective leader in setting the tax policy agenda in the country. RPPD has developed the tools that permit the TRA to better plan, monitor and evaluate revenue performance in Tanzania (USAID, 2003). Other examples of specialized FPUs include the Fiscal Research and Statistics Department within the Federal Board of Revenue in Pakistan and the Tax Policy Unit of the National Treasury of South Africa.

*4. Congressional/Parliamentary Budget Analysis Units*

These FPUs serve the specific purpose of strengthening the capacity of parliaments to engage the executive branch of government in constructive and more effective policy dialogue. A prime example of this approach is the U.S. Congressional Budget Office (CBO), which provides Congress with the ability to assess independently the President's annual budget submission and to evaluate the cost of congressional proposals to alter budget items.

Several examples of this approach are present, too, in developing and transition countries. The Budget Analysis and Oversight Office (BAO) of the Legislative Assembly of El Salvador, established in 1998 with USAID assistance, provides the Legislative Assembly of El Salvador with analysis and oversight of the fiscal system (Gallagher, 2000). Ukraine's Fiscal Analysis Unit attached to the Supreme Rada (national parliament), which has been supported by USAID since the mid-1990s, is yet another example of a successful FPU; this unit played a decisive role in putting together and getting approval for Ukraine's highly praised Budget Code in 2001 (Martinez-Vazquez and Thirsk, forthcoming). More recently, in 2008 Bangladesh's Parliament launched its Budget Analysis and Monitoring Unit (BAMU) with USAID assistance; its success is still to be evaluated (Gallagher, 2008).

**Staffing Requirements**

FPU staff should include trained technicians with specialized skills and knowledge that can be developed and strengthened over time. To be truly effective, the staff should be completely apolitical in its work, although this may not always be the case. To assure continuity, all positions should be permanent so that they are routinely funded through the regular funding process.

An FPU's leadership includes the Director, whose role is typically to advise the Minister of Finance, other senior government officials, and parliamentarians on a broad array of fiscal concerns, including macroeconomic issues, tax policy, revenue estimation and forecasting, and other related issues. The Director oversees the development of regular publications and must be up to date with any tax and budget policy changes in order to advise senior leadership accordingly. In addition to assisting the Director with the above responsibilities, the Deputy Director oversees development of analytic models, manages day-to-day operations, and establishes capacity building programs. Both the Director and Deputy Director must have strong managerial skills.

Below the FPU management, each function that the FPU performs is assigned to a team consisting of a Senior Technician and a Technician. Within each function, the Senior Technician is required to have extensive knowledge of the derivation of the input data that the team uses, relevant tax laws, the analytic techniques that are relevant to fiscal policy issues, and the appropriate outputs for presentation of results to the finance minister and other audiences. The Technician, on the other hand, is expected to perform more basic tasks, such as running the models under the guidance of the senior member, gathering raw data from other agencies, performing the more routine analytics, and preparing drafts of memoranda.

**Indicators of Performance and Capacity**

Performance indicators should be developed and used to regularly assess and improve the performance and capacity of the FPU. Indicators can focus on areas such as timeliness of FPU outputs; sophistication and accuracy of analysis; and, accessibility, both in terms of ease of obtaining analysis and its digestibility for a broad audience.

**Guidelines to Success**

Experience with establishing and implementing FPUs around the world has provided a number of lessons that can benefit governments and assistance programs in institutionalizing similar fiscal analysis units. Success factors can be divided into three broad categories (Gallagher 1997, 1998; USAID 2003; USAID 2008): (i) Prerequisite factors, (ii) Ongoing implementation factors, and (iii) Sustainability factors.

***Prerequisite Factors***

| | |
|---|---|
| • Right timing with political buy-in<br>• Establish one-year work plans<br>• Insulation from unfair and partisan influence<br>• Strategic physical location<br>• Clear mandate, roles and responsibilities | • Selection of the right leadership and assurance of continuity<br>• Qualified expert staff with knowledge of best practice tools and techniques<br>• Strategic planning capability<br>• Integrated systems and information networks |

***Ongoing Implementation Factors***

| | |
|---|---|
| • Incentive structures for retaining staff<br>• Internal guidance and mentoring<br>• Strong rapport with other units<br>• Reporting and accountability | • Access to continuous upgrading of expertise (i.e., training, mentorship, professional networks/societies)<br>• Ability to contract out work |

***Sustainability Factors***

| | |
|---|---|
| • Financial sustainability<br>• Opportunities for professional/career advancement<br>• Flexibility and adaptation to client needs; no single correct model | • Opportunities for expansion and specialization<br>• Regular performance reviews |

Donor agencies, such as USAID, can play an important role in advocating for and providing financial and technical assistance to the host country in the design, implementation and development of an FPU. This can include assistance in designing and making the FPU operational; developing and delivering capacity-building programs; and, financial support to get the FPU off the ground during the initial startup period.

International donors could contribute more broadly to improvements in fiscal management and economic governance worldwide by not only assisting in setting up new fiscal policy analysis units, but also by providing broader assistance to strengthen existing FPUs in developing and transition countries. There is generally considerable room for improving and expanding the use of modern fiscal analysis practices in those countries. This study could be considered part of that broader agenda.

# Designing and Establishing Fiscal Policy Analysis Units
# A Practical Guide

## 1. Introduction

In all countries, fiscal policy analysis—the objective, accurate and timely analysis of the budget, intergovernmental relations, and revenue and expenditure trends—is essential to the smooth functioning of government. The establishment of a fiscal policy analysis unit (FPU) or equivalent capability is often a key component of efforts to build the capacity within governments to carry out sound fiscal policy analysis. Although they can take various forms, FPUs can help expand the coverage, accuracy and timeliness of monitoring and forecasting on a variety of fiscal variables while helping governments manage and align expenditure and revenue flows. FPUs, thus, become key contributors to the policymaking process, improving the quality of government planning and policy formulation through the evaluation of the impact of proposed fiscal changes on the economy.

Despite the obvious importance of FPUs to economic policymaking, relatively little literature exists on this topic. The main goal of this study is to pool together the current knowledge on establishing FPUs, the choices available in the type of units, their structure and organization, functions and staffing, and country experiences with establishing such units. This study also provides guidelines on how to evaluate FPUs based on indicators of performance and institutional capacity. The study concludes with lessons learned and specific recommendations for how USAID and other development agencies can support the establishment and strengthening of FPUs in various countries.

### 1.1 What is a Fiscal Policy Analysis Unit?

Fiscal Policy Analysis Unit (FPU) is a term used to refer to any type of entity (inside or outside of government) that provides analyses of the government's budget, revenues, expenditures, and intergovernmental finances and evaluations of proposed legislative changes in these areas. FPUs also often perform evaluations of economic, financial and legal issues pertaining to broader government planning and policy formulation.

Many national governments, and often state or regional governments, have a central analytic unit or agency that advises the government on the overall conduct of its fiscal planning and management. These units normally have the capacity to perform analysis on various areas, including macroeconomic analysis, revenue estimation, tax policy analysis, debt management, budget planning, and program evaluation.

In some developed countries, such as Australia, Canada, New Zealand and the United States, FPUs have played a central role in strengthening the federal government's fiscal analysis capabilities. (See Table 1) This approach has been replicated by many subnational governments in these countries, where one can also find well-established analytic units.

**Table 1. Sample of Analytical Units in Countries Around the World**

| | | Core Functions in Fiscal Management | | | |
|---|---|---|---|---|---|
| **Government** | **Organizational Unit** | ***Macroeconomic Analysis*** | ***Revenue Estimation*** | ***Expenditure Budget Development*** | ***Debt Management*** |
| | **National level** | | | | |
| Ontario, Canada | Dept. of Finance | √ | √ | √ | √ |
| New Zealand | Treasury Ministry | √ | √ | √ | √ |
| United States | Treasury Dept. | √ | √ | | √ |
| United States | Congress, Congressional Budget Office | √ | √ | √ | √ |
| Pakistan | Fiscal Research and Statistics, Federal Board of Revenue | √ | √ | | |
| Russia | CFP (Center for Fiscal Policy), non-partisan | √ | | √ | |
| El Salvador | Legislative Assembly, BAO (Budget Analysis and Oversight Office) | √ | | √ | |
| United States | Congressional Budget Office | √ | √ | √ | √ |
| Tanzania | Tax Revenue Authority; RPPD (Research, Policy and Planning Department) | √ | √ | | |
| Nicaragua | Ministry of Finance, OAFE (Office of Fiscal and Economic Affairs) and DGB (General Directorate of Budget) | √ | √ | √ | √ |
| Bolivia | UDAPE (Unidad de Análisis de Políticas Sociales y Económicas) | √ | √ | | √ |
| Bolivia | UPF (Unidad de Programación Fiscal) | | √ | √ | √ |
| | **Subnational level** | | | | |
| California, USA | Dept. of Finance | √ | √ | √ | |
| Georgia, USA | Fiscal Research Center, non-partisan, academic | | √ | √ | |
| New South Wales, Australia | Treasury, Office of Financial Management | √ | √ | √ | √ |
| Karnataka, India | Government of Karnataka, Fiscal Policy Analysis Cell | | √ | √ | √ |

*Source*: Adapted from USAID (2008).

Fiscal policy analysis units are generally located near the locus of decision making for fiscal issues. They operate commonly as an organizational component within a Ministry of Finance or Finance Department, sometimes embedded within the Budget or Tax Department, or even as special divisions within Chief Executive offices. Some FPUs are set up as independent or semi-independent units of the government administration. Table 1 presents the organizational structure of FPUs in selected countries. As can be observed, various organizations can house an FPU, and these units can take on varying responsibilities in support of fiscal planning and management. Many FPUs assume other responsibilities beyond the ones presented in the table, but for brevity, only four core functions are presented.

The fact that governments, both national and subnational, organize their analytical units so differently makes it challenging to generalize about the role and functions of a fiscal policy analysis unit. In fact, it is very unlikely that one would find two identically structured units, even within the same country and across government levels. Nevertheless, in all cases, the mission of an FPU should be to provide objective, accurate, and timely fiscal analysis and policy advice to decision makers.

Given the variety of FPU models around the world, finding the ideal FPU may not be as productive as determining how the specific FPU should be designed to meet the needs and goals of the government institutions that will rely on it. In this report we evaluate different models of FPUs, highlighting the different options that may be selected and adapted to suit the particular country and circumstances.

## 1.2 Importance of FPUs to Fiscal Management and Economic Governance

Good governance entails many elements and processes, but a sound fiscal management structure provides the foundation for good economic governance in any country. Fiscal management is the function concerned with the efficient allocation and effective use of the public sector's financial resources. Budgeting, accounting, and other fiscal infrastructure, including accurate and timely reporting systems, are valuable means for providing decision makers with the necessary, objective analysis and evaluation of current and prospective programs and activities (Shah, 2005).

The elements of a good Fiscal Framework that can translate into good policy include the following:

- Revenue (Internal and External) Policy;
- Revenue (Tax and Customs) Administration;
- Budget, expenditure levels and structure;
- Intergovernmental fiscal relations; and,
- Audit (Internal and External) and controls.

Good economic governance implies that public expenditures are allocated to maximize welfare, revenues are collected fairly and efficiently, and the public has access to basic public services, such as water and sanitation, roads and other infrastructure, education and health. Sound fiscal management provides the foundation for good economic governance, which in turn requires effective communication and coordination among key government departments and institutions.

A well established FPU can play a pivotal role in facilitating this cooperation by making available essential data, objective analysis, and evaluation of potential outcomes of different policy options. The capacity within an FPU to perform systematic and accurate analysis on the impact of fiscal policy on government revenues and budgets has become a necessity in all countries.

The benefits of allocating the necessary resources for creating an FPU can be summarized as follows (Nester, 1992):

- *Budget Discipline.* By its very existence, the FPU adds discipline to the budget process. The ability to present information, however preliminary, on the implications of current receipts and spending experience during the course of budget discussions, imposes discipline on the entire process. The information and analysis generated by the FPU staff becomes an essential input to the fiscal planning process.

- *Informed Policy Debate.* By pulling together information on the operation of the tax system and budget process in one central analytic unit, the FPU provides much needed analysis of the functioning of the current and alternative tax and budget systems.

- *Ongoing Monitoring of Government Programs.* A significant benefit of the FPU is that the ongoing monitoring of tax collections and expenditure flows can provide early warnings to decision makers. Events such as turning points in the economy, altered patterns of consumption, inadequacies of the tax system, or administrative delays in recording collections, may be identified much earlier. These issues can become the focus of discussion and debate, replacing the guesswork and uninformed judgments that are otherwise likely to dominate policy debates. FPUs can facilitate timely and more targeted remedial action by officials.

- *Benchmarks for Assessing Policy and Subsequent Events.* Detailed forecasts and other information produced by the FPU provide benchmarks that can be used for control purposes. Significant deviations from the totals provided by the FPU become “red flags” indicating the possible need for remedial action, for example, in assessing compliance with the tax laws.

- *Data Reporting Improvements.* Meeting the data requirements of the FPU will enhance the operation of other agencies, such as the tax administration, in several ways. One result is improved consistency of reporting across agencies. Another result is the systematic description of existing methods for collecting and reporting data. In the process of developing models and monitoring receipts and expenditures, the FPU is also likely to identify possible gaps in the existing collection, accounting and information transmittal system. For example, one function of the Fiscal Programming Unit (UPF in Portuguese) in the Angolan Finance Ministry’s Office of International Economic Studies and Relations (GEREI) is to compile, report, analyze, and disseminate government finance data and statistics that it gathers from different government sources. UPF is significantly helping to improve government finance data and statistics in Angola. A performance monitoring report in 2008 indicates that since its establishment in mid-2006, the government finance statistics, as reported by UPF/GEREI, demonstrate fewer discrepancies (USAID, 2007; USAID, 2008b).

- *Longer Term Perspective in Policy Formulation.* An FPU will not only analyze current issues with receipts and expenditures, but it can also act as a "think tank" providing decision makers with analysis of alternative scenarios and implications of long-term reforms.

## 1.3 Constraints to the realization of good fiscal policy analysis units

For all the benefits that FPUs can offer, there are still countries around the world where such units do not exist. Even in some countries where they do exist, FPUs have become unsustainable or they remain weak agencies with little analytic capacity beyond basic extrapolations in revenue forecasting. In many cases, revenue projections are simply a matter of adding a certain percentage increase to the previous year's collections, without regard for inflation, elasticities, or other variables. In fact, according to Kyobe and Danninger (2005), who conducted a survey of revenue forecasting practices in 34 low-income countries, 31 of these countries have one single agency responsible for revenue forecasting, and 81 percent of the time, these agencies use basic extrapolations as the main forecasting method. Therefore, there is a clear need to address the constraints (human and financial) that many low-income and transition countries face in the establishment of viable and operational FPUs.

Two important sets of factors are usually recognized as the main constraints to establishing effective, sustainable FPUs:

- *Political and social constraints*

  When governments are experiencing political conflict and social upheaval it is much harder to focus on the need for analytic capacity. Such conditions can limit the effectiveness of financial and human resources available to even well-intentioned and stable governments.

  Ultimately, a country's ability to build sustainable public sector capacity depends largely on the promotion of broad-based economic growth strategies, on adequate investment in human capital, and on the development of stable and legitimate political institutions that are effective in mediating economic and social conflict (Grindle, 1997).

- *Budget and institutional constraints*

  Lack of adequate funding is the second most significant constraint to the development of viable FPUs. Case studies show quite clearly that inadequate budgetary support affects capacity primarily through its impact on both public sector salary levels and funding for operating expenses and investment (Grindle, 1997).

In addition, electronically available data, computers and software, and well-trained and experienced analysts are needed to achieve a well functioning FPU. The inadequacies in the areas of computerization and software can be handled relatively easily if the necessary resources are made available, while the development of databases can be more problematic (Wallace, 1999).

## 1.4 Structure of this study

In line with the overarching goal of this study—to bring together the current state of knowledge on designing and setting up successful FPUs—the remainder of the report is structured along three main themes: (i) how to set up an FPU; (ii) how to strengthen an existing FPU; and (iii) the basic guidelines to be followed by USAID and other international donors in designing and implementing assistance programs for the development of FPUs.

Section II describes in more detail various models and structures of FPUs around the world. This section also includes a discussion of the roles and functions of FPUs, staffing requirements, capacity building exercises, and the different methodological tools available to FPUs to fulfill their mission. The section ends with an implementation roadmap providing a step-by-step guide to establishing and making operational an FPU.

Section III concentrates on how to improve the operations of existing FPUs by developing indicators of performance and capacity, putting emphasis on output-based indicators of FPU performance.

Section IV draws practical lessons from the two preceding sections and identifies specific steps that can be taken by donors and other international institutions to provide assistance programs that result in well-functioning FPUs capable of supporting and promoting sound fiscal management and good economic governance.

# 2. Structure of a Fiscal Policy Analysis Unit

This section begins by describing various models of FPUs found in different countries and weighing the advantages and disadvantages associated with each type of FPU. The section also suggests which options and features might be most appropriate for particular country contexts.

## 2.1 Models for establishing a Fiscal Policy Analysis Unit

FPUs have been established and institutionalized in different ways around the world and the differences in scope and capabilities can be vast.

For example, in some low-income countries, fiscal analysis is confined to a single or very few institutions, restricting opportunities for healthy policy debates. In Morocco, for instance, only one department within the Ministry of Finance (Directorate of Budget and Economic and Financial Forecasting) initiates the budget preparation using what has been described as very weak methodologies (Zemrani, 2008). In industrialized countries, in contrast, the analysis of budgets, taxes, and expenditure programs typically involves various government agencies to ensure formality, accuracy and transparency in the estimates and evaluation results. In the United States, for instance, the federal government receives economic analysis from the Congressional Budget Office, the Office of Tax Analysis of the U.S. Treasury, and the Office of Management and Budget, to name just the most prominent; state and local governments also have their own budget and tax analysis units.

Models for establishing an FPU are numerous but broadly can be divided into four basic categories:

1. Governmental vs. non-governmental FPUs;
2. Central vs. subnational government FPUs;
3. Comprehensive vs. specialized FPUs; and,
4. Congressional/Parliamentary Budget Analysis Units.

Each category is discussed in turn below.

***1. Governmental vs. non-governmental FPUs***

An FPU can be established and institutionalized as a government entity, financed and directed by government, and whose primary or only client is the government. Governmental FPUs are very common around the world. Generally, it is another government agency that takes the initiative to establish it, in many instances the Ministry of Finance or the Ministry of Economy, which is the case with the Instituto de Estudios Fiscales (Institute for Fiscal Studies) in Spain. In some cases, this type of FPU may be part of the executive branch of government, such as the Office of the President, the Prime Minister or, at the subnational level, the Governor. For example, the Office of Management and Budget (OMB) in the United States serves the President in the preparation and supervision of the federal government's budget. Another example is the Strategic Policy

Analysis Unit that serves the Office of the President and Cabinet Office in the Republic of Kenya.

In other cases, the FPU may be part of the legislative branch of government, such as is the case with the U.S. Congressional Budget Office (CBO), whose mandate is to provide the Congress with separate independent analyses of the impact of economic and budgetary decisions on the wide array of programs covered by the federal budget. This type of FPU is discussed further as the fourth model in this section.

Alternatively, an FPU may be established outside of government as a private entity that performs analysis on a contract basis. This type of FPU seeks its own funding and performs fiscal and economic analysis for different clients, including those both inside and outside of government. A non-governmental FPU may be advantageous when resources are not available to sustain a fully operational fiscal analysis unit within government. Non-governmental FPUs may be established with assistance from the government or donor agencies, which may initially finance the costs of set up and assist with capacity building. In the long run, these units may become self-financed through contracts with a combination of public and private sector clients. One such unit is the Center for Fiscal Policy in Russia (Box 1), a non-governmental organization established with USAID support in April 2000, which has become a renowned center for fiscal policy in its part of the world (USAID 2008).

**Box 1. Russia – Center for Fiscal Policy (CFP)**

The Center for Fiscal Policy (CFP) was established in April 2000 with financial and capacity building assistance from USAID. CFP was established to help address Russia's needs at the time in the areas of fiscal policy and decentralization reform, and to elevate the fiscal policy debate with incisive and timely analysis. USAID, with support from U.S. academic institutions, assisted a select group of Russian local experts to organize as a fiscal policy center capable of providing objective, high quality, nonpartisan policy advice on fiscal issues to government policy-makers, informing the policy debate and becoming a critical tool for long- and short-term fiscal analysis in Russia.

During the nine years since its establishment, CFP has grown from 14 to 35 staff members. It provides technical assistance to various clients, including: Russian Federal Ministries, services and other government agencies; USAID; World Bank; European Commission; UNDP; and others. CFP's vast experience in the development of fundamental principles and implementation of budget reforms has attracted clients from other countries in transition, especially FSU countries including Kazakhstan, Kyrgyzstan, Tajikistan and Moldova. Apart from FSU countries, the Center has provided assistance to Lao PDR, and has given lectures and made presentations in the U.S., Canada, Great Britain, Netherlands, Australia, India, Indonesia, China, Brazil, Guatemala and other countries.

Source: Based on information from CFP's website at http://english.fpcenter.ru/ and USAID (2008).

### *2. Central vs. Subnational Government FPUs.*

FPUs may be established at different levels of government. Generally, in federally structured countries, there are FPUs that specialize in providing fiscal analysis for federal budget issues, while at the same time state or provincial governments have their own FPUs to provide fiscal analysis of subnational budget issues. For example, in the United States and Canada, much of the fiscal analysis at the federal level is conducted independently from the state and provincial governments; the latter invest in their own fiscal analysis units, which have their own methods of analysis, but rely on the federal government for some data. Similar arrangements can be observed in unitary states that are substantially decentralized; in general, the interdependence between central and subnational FPUs is more pronounced in unitary countries.

FPUs attached to the central government should include in their analyses subnational budgets and how changes in the various institutional arrangements, such as expenditure assignments, revenue assignments, and grant formulas, would affect the budgetary position of the national and subnational governments. Clearly, it is desirable for subnational governments to also have the capacity to estimate the impacts of changes in tax laws and revenue-sharing arrangements on their budgets, or at least have the ability to check the forecasts and estimates of the central government. These and other issues provide justification for the development of FPUs not only at the central government level, but also at the subnational level (Wallace 1999).

For example, in the U.S. State of Georgia, there are multiple agencies providing fiscal analysis for the State. One of these is the Georgia Senate Budget and Evaluation Office which provides support to the Senate in developing the annual state budget and evaluating the programs proposed therein. Concurrently, the Fiscal Research Center, established at Georgia State University, provides nonpartisan research, technical assistance and education in the evaluation and design of state and local fiscal and economic policies, including both tax and expenditure issues. In addition, the State of Georgia Governor’s Office appoints a State fiscal economist (currently housed also at Georgia State University) responsible for developing the annual tax revenue forecast for the state's budget and advising the Governor's office on economic and other policy issues.

In India, the need for state (subnational) level fiscal analysis is also being recognized. The state of Karnataka is one of a few states which have recently established a Fiscal Policy Analysis Cell (FPAC) (Box 2). Set up with support from USAID, Karnataka’s FPAC is playing an integral role in supporting ongoing reforms aimed at improving fiscal discipline, and in promoting inter-departmental dialogue over budget allocations and investments. Indeed, several state department secretaries have already used FPAC to undertake important studies on policy priorities.

### *3. Comprehensive vs. Specialized FPUs*

FPUs can also be classified according to the areas of analysis they perform. In some cases, a single FPU may be responsible for providing economic and policy analysis in multiple areas of government planning and policy. For instance, Bolivia’s Unidad de Análisis de Políticas Sociales y Económicas (UDAPE), established with USAID assistance in 1983, has a strong reputation for professional and technical expertise and its role in providing technical analysis of economic policy is central to the work of multiple branches of government (UDAPE website; Hilderbrand and Grindle, 1994).[1]

**Box 2. State of Karnataka, India – Fiscal Policy and Analysis Cell (FPAC)**

The Government of Karnataka (GOK) has taken various initiatives and introduced a number of reforms to improve the fiscal health of the state. These reforms include the creation of a Fiscal Policy Analysis Cell (FPAC), developed under the USAID/India-funded State Fiscal Management Reform Project (REFORM). The FPAC is supported by a team of trained staff whose role it is to apply analytic tools and techniques to evaluating the implications of policy, procedural, and regulatory decisions for the fiscal health of the state.

The establishment of the FPAC has catalyzed GOK to establish separately a Fiscal Policy Institute (FPI) that will serve as the nodal agency for all training and policy advice on fiscal issues in the state. The REFORM project also assisted in the design of a Debt and Investment Management Cell (DIMC) located in the FPAC, responsible for analyzing, evaluating, monitoring and managing GOK's debt, investments and guarantees (contingent liabilities). Additionally, a Decentralization Analysis Cell (DAC) is under development in the Finance Department to assist the state in its decentralized management and planning. The DAC will analyze the fiscal performance of local governments and be in charge of developing formulas for fiscal transfers from the state to local governments based on their performance on fiscal and social indicators.

The FPAC has been successful mainly due to the strong interest shown by the state government, exemplified by assured office space and staffing financed through dedicated and fully-funded state budget provisions. Importantly, the FPAC has become relevant in shaping policy debates in Karnataka. Since its inception, several GOK departmental secretaries have commissioned the FPAC to undertake important studies on matters of government priority (e.g., mining royalties). As a result, the FPAC has grown into a robust fiscal "think tank," with the capacity to serve the GOK for years to come. When the FPAC is subsumed into the FPI in 2009, it will be able to continue its think-tank status with assurance of additional facilities and staff. Over time, the FPAC is expected to expand its analytic scope to include budget analysis, capital budgeting and programming to be able to provide more comprehensive support to state decision makers.

*Source:* Based on information from State of Karnataka (2006) and USAID (2008).

Comprehensive FPUs may perform a wide array of analyses, including analysis of budgets, analysis of taxes and spending programs, macroeconomic analysis, analysis of intergovernmental financial arrangements, as well as many other areas. In contrast, specialized FPUs tend to have a

[1] Bolivia's Ministry of Finance and Economy also houses a department called Unidad de Programacion Fiscal (Fiscal Programming Unit), which compiles and publishes fiscal statistics, including revenue estimates and budget planning. Although UDAPE and UPF coordinate their activities, UDAPE is still the only agency providing evaluative analysis and policy advice for the government.

narrower portfolio, such as those covering only tax or budget issues, and others focusing on other issues such as macroeconomic policies.

In general, there are advantages to having more than one FPU perform fiscal policy analysis in the country. For instance, it is advantageous to have fiscal analysis units in both the legislative and executive branches of government, including units specialized in specific areas such as tax policy analysis. This allows for checks and balances that can enhance the public debate on fiscal issues and lead to higher quality analysis across all issues.

The recent experience of Nicaragua provides a useful example in this regard. A World Bank-funded program for the Government of Nicaragua assisted in establishing the Office of Fiscal and Economic Affairs (OAFE) in the Ministry of Finance and Public Credit (MHCP). The assistance program aimed at defining the roles and functions of the newly established OAFE and its links with the Directorate of Budget (DGP), another FPU already operating within the MHCP. OAFE and DGP currently work jointly in preparing, monitoring and evaluating macroeconomic programs. DGP coordinates budget forecasts for government institutions, while OAFE evaluates the impact of the budget on different sectors and on the macro economy. DGP prepares annual expenditure and investment planning, while OAFE prepares recommendations related to expenditures and revenues in the medium term. The case of OAFE in Nicaragua illustrates well the specialized functions of two different types of FPU within a single government organization, their differences, their complementarities, and the synergy that these two analytic units can create in furthering economic governance in a country (Gallagher, 1998). One challenge for OAFE is the fact that it is still 100 percent externally financed. Fortunately, the MHCP has already recognized that this is a threat to the sustainability of the agency and is now moving towards making OAFE a permanent organizational structure. This would bring OAFE’s staff on to the MHCP’s permanent payroll, assuring OAFE’s long-term sustainability (Dorotinsky et al, 2008).

Specialized FPUs, such as those that perform tax analysis, have the advantage of investing their resources to develop their capacity for the analysis of quite specific areas. This allows for the development of expertise and, if well designed, may allow for the application of state of the art methodologies in the analysis of those specialized areas. This is the case, for example, with the Office of Tax Analysis within the United States Treasury Department (Box 3). This Office advises and assists in the development, analysis, and implementation of tax policies and programs and provides economic and policy research concerning Administration as well as Congressional tax proposals.

Some other countries follow the U.S. model by establishing a separate tax policy analysis unit, generally within their revenue authority agency. These specialized units are created to further the public debate on tax issues, but most importantly to produce fiscal research and analysis on revenue impacts, revenue projections and policy recommendations on different revenue sources in the country. For instance, Tanzania’s Research, Policy and Planning Department (RPPD) represents a specialized unit within Tanzania’s Tax Revenue Authority (TRA). Established in 1995 with USAID assistance, RPPD was designed to be the analytic backbone of the TRA. When RPPD became a department within TRA in 2002, it gained greater influence both within TRA, as well as across other government ministries and Parliament. RPPD has the principal responsibility for making tax policy recommendations for the TRA to pass on to the Ministry of Finance. The creation of the RPPD led to a comprehensive, home-grown, and ongoing tax reform in Tanzania. USAID's technical assistance program enabled the RPPD to become an influential and effective leader in setting the tax policy agenda in the country. Additionally, the RPPD is known for developing the tools that permit the TRA to better plan, monitor and evaluate revenue performance (USAID, 2003).

Other examples of specialized FPUs include the case of the Fiscal Research and Statistics Department within the Federal Board of Revenue in Pakistan and the Tax Policy Unit of the National Treasury of South Africa. These units carry out studies to inform government policy on the economic, administrative and legislative implications of alternative tax policy measures.

**Box 3. Office of Tax Policy Analysis of the United States Treasury**

The U.S. Treasury's Office of Tax Analysis (OTA) is an example of an FPU that specializes in the development, analysis, and implementation of tax policies and programs. OTA advises and assists the U.S. Treasury's Assistant Secretary for Tax Policy and her deputies on the effects of existing tax laws and alternative tax programs. Additionally, OTA is the Administration's official estimator of all Federal receipts included in the President's Budget. OTA regularly provides the administration with analysis of the potential revenue effects of proposed legislative changes. Each year, OTA's publications include background papers, position papers, policy memoranda, and analytical reports on economic aspects of domestic and international tax policy.

OTA makes use of modern analytic tools, including several major microsimulation models, and it maintains large statistical databases to analyze the economic, distributional, and revenue effects of alternative tax proposals. Additionally, OTA contributes to the improvement of tax administration by assisting the Internal Revenue Service (IRS), the tax administration and enforcement arm of the Treasury Department, in developing studies of tax compliance and taxpayer compliance costs, developing and revising tax forms, and working with the Tax Legislative Counsel and Benefits Tax Counsel staffs in the formulation and review of tax regulations.

The Secretary of the Treasury has had at least one economist providing analysis and advice on tax policy since the introduction of the federal income tax in 1913 (Bradford, 1995). Today, after nearly 100 years in operation, the OTA is a key player in the tax policy process in the United States and it serves as a model in the provision of tax policy analysis and advice for other countries.

*Source:* Based on information from the Office of Tax Analysis website at http://www.ustreas.gov/offices/tax-policy/offices/ota.shtml

### *4. Congressional/Parliamentary Budget Analysis Units.*

Congressional or parliamentary FPUs work exclusively to provide the legislative branch of government with assistance in evaluating budget proposals and monitoring the implementation of annual budgets for all major functions of government. In the United States, the Congressional Budget Office (CBO) serves as the "scorekeeper" for Congress (Box 4). CBO provides Congress with the ability to assess separately and independently the President's annual budget submission and to evaluate the cost of congressional proposals to alter budget items.

CBO, as is also the case with similar FPUs in other countries, prepares several budget projections, performs studies of budgetary issues, and provides estimates of the costs or revenues that might result from implementing any new program or policy. It also updates the cost of existing programs in light of changing economic conditions. Its reports provide objective and impartial analysis containing no specific policy recommendations. These are delivered to all interested parties simultaneously. Much of CBO's work is widely available to Members of Congress, their staff and the public.

**Box 4. The United States' Congressional Budget Office (CBO)**

CBO's mission is to provide Congress with the objective, timely, non-partisan analysis needed for economic and budget decisions and the information and estimates required for the congressional budget process.

The agency provides budget-related information to all committees of both Houses of Congress—the Senate and the House of Representatives—with priority given to the needs of the committees on the budget, appropriations, ways and means, and finance. On occasion, work may also be initiated in response to a request for information by an individual representative or senator.

CBO's work cycle begins with an independent estimate of what the budget would be if the current programs were allowed to continue with adjustments to revenues and expenditures affected by general economic conditions such as unemployment and inflation. This estimate, the budget baseline, allows Congress to determine the effect of any new budget proposal, including those put forward by the president. This "re-estimate" of the budget is delivered by CBO to Congress approximately one month after the President submits his budget.

CBO's work is reviewed by a panel of economic advisers composed of CBO's previous directors and eminent economists who serve two-year terms. They comment on CBO'S preliminary forecasts of the economy's performance and provide advice to further enhance the reliability, professional quality, and transparency of CBO's work.

*Source:* Based on information from the Congressional Budget Office's website at http://www.cbo.gov/

Notable examples of congressional/parliamentary budget analysis units in countries other than the U.S. include those in El Salvador and in Ukraine, both established with USAID assistance.

The Budget Analysis and Oversight Office (BAO) of the Legislative Assembly of El Salvador was established in 1998 to provide the Legislative Assembly of El Salvador with analysis and oversight of the fiscal system. BAO is called upon by the Legislative Assembly's Finance and Budget Committee and other committees to provide analysis on a variety of fiscal issues. BAO produces datasets, provides analysis of the overall budget position of the government as well as the budgetary aspects of particular budgetary entities. Initially, BAO was financed partly by USAID, but has since become fully funded under the national budget (Gallagher, 2000).

Ukraine's Fiscal Analysis Unit, attached to the Supreme Rada (national parliament), has been operational since the mid-1990s. Among its achievements, the unit played a decisive role in developing and securing approval for Ukraine's highly praised Budget Code in 2001. Particularly, the unit was instrumental in developing the different drafts of the Budget Code as well as educating policymakers in the Supreme Rada and the Executive Branch of government. Ukraine's equalization transfer approach and other aspects of decentralization policy contained in the Budget Code have been replicated in other transition and developing countries (Martinez-Vazquez and Thirsk, 2009).

More recently, in 2008 the Bangladesh Parliament established a Budget Analysis and Monitoring Unit (BAMU) with assistance from USAID's Promoting Governance, Accountability, Transparency and Integrity (PROGATI) program. Still in its infancy, the success of the BAMU in promoting effective analysis and oversight of public sector budgets in Bangladesh remains to be evaluated.

## 2.2 Roles and Functions of a Fiscal Policy Analysis Unit

Clearly, there is no single model for an FPU that best suits all circumstances, and the design of any FPU must take account of the objectives and constraints faced by its clients, whether government or otherwise. Considering that the role of an FPU may differ according to its structure and mandate, it is useful to list here the main roles an FPU can play:

- Assist governments in budget planning by providing quantitative fiscal reports and analyses.
- Operate with a comprehensive view of government and advise decision makers on how to achieve broad policy goals, particularly those related to the management of government finances.
- Provide short-term and long-term economic and budget outlooks under current law, incorporating new economic forecasts for proposed and newly enacted legislation.
- Provide economic and legal analysis for domestic and, when required, international fiscal policy decisions.
- Serve as liaison between different government agencies in furthering the debate on fiscal issues.

In addition, the ongoing operations of an FPU cover a wide range of responsibilities including extending and updating existing tax and expenditure models, designing and building new models, producing written and statistical analyses of the tax and budget systems, and monitoring tax collections and outlays. These activities provide decision makers with critical assessments of the state of the economy, the tax system, the budget process, and the functioning of tax administration and other budget agencies. The focus of much of the work of the FPU will be on issues of immediate concern to the finance minister, tax officials, and budget officials. Specific responsibilities may include (Nester, 1992):

- running the analytic models (Box 5);
- analyzing options (proposed by the finance ministry or other agencies);
- generating baseline budget totals for budget preparation;
- understanding the appropriateness, strengths, and weaknesses of current data sources, and recommending changes as needed;
- monitoring current receipts and expenditures and advising on implications for future receipts and expenditures, for the FPU modelers and for the national accounts data;
- analyzing the current tax system and making recommendations for the future;
- preparing position papers on tax issues for the finance minister;
- publishing a Monthly Bulletin and an Annual Review;
- anticipating and planning for future needs; and,
- developing agendas for ex-post analysis of existing programs.

**Box 5. Common Tools/Methodologies for Policy Analysis**

Most FPUs should aim to have the capacity to employ the following types of analytic models and methodologies:

a. *Tax Microsimulation models:* These are inherently tools for simulating the impact of policy changes on revenue proceeds, distributions by income group of tax burdens, and identification of “winners” and “losers” associated with policy changes. These tools use micro-level data (for example, individual tax returns and household expenditure survey data) to analyze the effects of current and alternative tax policies on taxpayers and revenue receipts.

b. *Tax incidence models:* These models attempt to identify who ultimately bears the burden of a particular tax, computed with the assistance of microsimulation data.

c. *Estimation of Marginal Effective Tax Rates (METRs):* The METR measures the (dis-) incentives to invest in particular types of assets arising from the application of current tax laws in a country. The METR is typically measured as the percentage reduction in the assumed gross rate of return to investment in different assets after all relevant taxes have been applied and after accounting for the effects of measurement and timing of income (see, for example, Fullerton, 1999). METRs are particularly useful in assessing the impact of corporate income tax provisions on businesses’ investment decisions, but their computation also takes into account the impact of other taxes on capital income, such as local property taxes.

d. *Tax Gap Analysis:* Quantification of the overall level of tax evasion and avoidance in the tax system. This type of analysis allows for the impact of compliance and exemptions on the tax yield by type of tax and by economic sector.

e. *Tax Expenditure Analysis:* Quantification of revenue losses attributable to various exclusions, exemptions, deductions, nonrefundable credits, deferrals, and preferential rates in the tax code.

f. *Revenue Forecasting Models*: Quantitative methods used to predict receipts over the budget period, or to predict revenues on the basis of current law vs. proposed law changes. Revenue forecasts are typically undertaken annually by governments.

g. *General Equilibrium Models:* Abstract representation of an economy into models of actual economies than can be used to conduct policy evaluations with real world data. These models have economy-wide application which takes into account the behavior of all the economic agents as primary responders; or because of feedback or secondary effects, using widely-accepted principles of optimization and choice.

***Publications***

An important task of an FPU is to publish the results from the analytic models it develops. Publications should contain objective and impartial analysis and should be helpful in guiding broad policy debates. As the FPU accumulates experience and expands its tools and databases, and as individual staff become more knowledgeable concerning tax, expenditure, income, and other data in their areas of expertise, this knowledge should be shared with peers and the policy community for discussion and feedback. Regular compilation and publication of data is an important responsibility of the FPU serving two broad purposes: first, ensuring that important data are made available to a broad range of users; and, second, enabling FPU staff to further develop their skills and analytic capabilities through the discipline of writing and publication.

In order to enhance the usefulness of the FPU's outputs in the policy debate, Gallagher (1997) suggests (in the context of USAID's assistance in establishing the RPPD in Tanzania) that in developing research work, the FPU should follow certain guidelines, especially when research projects make specific policy recommendations. For instance, final reports must consider the impact of alternative policies on economic efficiency, simplicity, enforceability, equity aspects on stakeholders, and expected outcomes on the economy. Economic efficiency aspects should be analyzed to the extent that recommendations eliminate distortions in the economy and/or compensate for important externalities, such as pollution. Simplicity should be considered from the perspective of its legal application as well as implementation. Lastly, the policy analysis should identity all affected stakeholders, whether winners or losers, due to the recommended policy change.

In general, an FPU should publish at least two types of report on a regular basis. The first is a Monthly Bulletin that includes monthly data on taxes, outlays, and other significant economic series. The Bulletin may also include papers written by the FPU staff (and at times others) on specialized topics within their areas of expertise. Much of the material for the publications can be developed within the FPU. However, in some instances the FPU may need to consider contracting out to get an external perspective on the issue or simply because of lack of internal expertise to perform the work. The FPU should also be responsible for working with other government agencies that collect and produce data to jointly develop the information in a useful format so that it can then be published in the Bulletin.

The second type of publication is an Annual Review/Report. Common practice in almost all FPUs, the Annual Review can summarize the fiscal and economic events that took place over the year. It can also include summary statistics, trends, and analysis for the past several years. The Review may also include articles of a more general nature, such as one on the functioning of the tax system over the year and the effectiveness of particular spending programs.

### *FPU's Core Functions*

Previously in this report we discussed the potential different models that FPUs may adopt (government vs. non-government, comprehensive vs. specialized, etc). Depending on the model that an FPU adopts and who they serve, FPUs can have different core functions. International experience points toward five core functions that an FPU may undertake in its initial stage of operation. An FPU, whether within government or non-governmental, may be organized around a combination of the following five core functions (USAID, 2008a):

1. Macroeconomic Analysis and Policy
2. Tax Policy Analysis and Tax Administration
3. Revenue Forecasting
4. Expenditure Planning and Analysis, including Medium Term Expenditure Frameworks (MTEFs)
5. Debt Management Analysis

Additionally, an FPU may consolidate several of these functions into one. For instance, the debt management analysis function may be consolidated into the macroeconomic analysis function, or it may be kept as a separate function (as is currently done, for example, by the FPUs in some states of India).

### *1. Macroeconomic Analysis*

The Macroeconomic Analysis function is responsible for analysis, forecasting, and research regarding the government's economic activity, inflation, and labor markets. This group assesses current economic developments and prepares forecasts and supporting analyses for the short-term and long-term economic outlooks. This group may also conduct research on fundamental macroeconomic variables including consumption and saving, housing, business investment in equipment, structures, and inventories, labor supply, productivity, wage- and price-setting, and business cycles. Furthermore, this section also conducts analysis on issues related to international trade, such as trade negotiations, setting of tariffs and analysis of the expected impact of new trade proposals on export competitiveness and domestic competition.

It has become generally accepted that good macroeconomic planning practice requires that every country should prepare a medium-term macroeconomic framework (MTMF) to assess the fiscal sustainability of government's policies (see, for example, Allen and Tommasi, 2001). Accordingly, the FPU's macroeconomic division may engage in the development of MTMFs which should include projections of the main government accounts, the balance of payments, the monetary accounts and the non-government sector. A macroeconomic framework should be prepared at the beginning of the budget preparation cycle (and updated frequently) in order to providing adequate guidelines to all government agencies. The MTMF includes typically a medium-term fiscal framework (MTFF) covering the financial transactions of all government entities and projections for aggregate revenues and expenditure over three to five year periods. The MTFF is considered a necessary condition for sound budgeting as it provides a broad framework for preparing the annual budget. MTMFs and MTFFs may be supplemented by a medium-term budget framework (MTBF) and a medium-term expenditure framework (MTEF). These latter two may be responsibilities of the expenditure planning and analysis function of the FPU, which have to work closely with the macroeconomic analysis function of the FPU to integrate all medium-term macroeconomic frameworks in the country.

### *2. Tax Policy Analysis and Tax Administration*

Tax policy analysis involves the identification and evaluation of the effects of existing and proposed tax laws on the economy, economic behavior, labor demand and other concerns. This group evaluates current tax policy and the effects of proposed changes in tax policy, including those related to trade policy, such as setting tariffs and their impact on competitiveness. This section needs to focus on the dynamics of the economy as it relates to tax policy changes; this will require a close relationship with the macroeconomic analysis section and the revenue forecasting section of the FPU (see below). Tax policy issues include changes in tax rates, tax base, the introduction and elimination of taxes, as well as the efficiency and equity effects of the tax system.

Tax policies cannot be effective without the support of a modern tax administration. Following this principle, many countries have undertaken tax administration reform programs that aim to encourage voluntary compliance, maximize revenue from current laws, reduce compliance and administrative burdens, make it easier to pay taxes, and improve customer service. Thus, this section of the FPU should understand the principles of sound tax administration and should also conduct research and analysis on how to improve and modernize current practices in tax administration, risk analysis, and promoting voluntary compliance.

### *3. Revenue Forecasting*

Revenue forecasting refers to the projection of budget revenues under a given tax structure, as set forth by law. Such forecasts are generally used in the budgetary process to determine future budget balances, constraints on expenditure, requirements for debt financing, and revenue-sharing allocations (Wallace, 1999). Revenue forecasts should be reliable; thus, there should be strong capability in this section to perform modern modeling techniques with the available data to produce forecasts with a high degree of confidence. This section (along with the tax policy analysis section) may also perform revenue estimation, which traditionally refers to the estimation of how a change in the tax structure (tax laws) would affect the amount of government revenues. Preferably, economic forecasts in a country should be provided by public and private FPUs and validated by the systematic comparison and evaluation of differences in the forecasts.

### *4. Expenditure Planning and Analysis*

One of the principle objectives of government spending programs is to provide and improve service delivery to the public. The function of this section in the FPU is to provide analysis to improve control and management of government resources. Many countries around the world are moving toward performance-based budgeting practices where the focus of budgets is no longer on outlays but on outcomes of government services. This section of the FPU is responsible for conducting evaluations of programs, schemes, budget allocations, and other expenditure policies, including analyses of alternative budget allocations. Additionally, this section should have the ability to formulate recommendations for more efficient budget allocations and assure that programs are providing the desired outcomes, especially if a performance-based budgeting system is in place.

This section of the FPU works closely together with the macroeconomic analysis section in developing medium-term macroeconomic frameworks. More specifically, this section would be involved in developing a medium-term budget framework (MTBF) and a medium-term expenditure framework (MTEF) which supplement the medium-term macroeconomic framework. An MTBF helps to assess continuing expenditure commitments and it covers at least the central government' aggregate expenditures by function. An MTEF is the public expenditure component of the MTBF (see Allen and Tommasi, 2001, for further discussion).

### *5. Debt Management Analysis*

Governments should ensure that both the level and rate of growth in their public debt is fundamentally sustainable, and can be serviced under a wide range of circumstances while meeting cost and risk objectives. This section of the FPU should be concerned with ensuring that public sector indebtedness remains on a sustainable path, that a credible strategy is in place to reduce or avoid excessive levels of debt, and that fiscal authorities are aware of the impact of government financing requirements and debt levels on borrowing costs. This group should perform a mix of research, analysis and due diligence with respect to the government's debt management portfolio position. This function may be a separate division of the FPU or it may be consolidated within the macroeconomic analysis division.

Several debt market crises have highlighted the importance of sound debt management practices and the need for efficient and sound capital markets. The staff of this section should at least be able to (USAID, 2008a):

- Establish a cost and risk management framework for the government's debt portfolio;
- Produce reliable cash flow projections regarding debt service; and
- Develop an effective database of all budget and off-budget obligations.

Organizing an FPU around the above-mentioned five core areas might initially require approximately 12 staff members, of which at least 7 must be highly qualified analysts. (Staffing requirements for the FPU are discussed in the next section). However, the size of the unit depends on resource and staffing constraints faced by the funding entity. In many instances, an FPU may be initially established with strong linkages to academic institutions or other policy-level analytic resources that may exist in the region, such as was the case, discussed above, with the establishment of the Center for Fiscal Policy in Russia. These outside resources could significantly enhance the effectiveness of the FPU.

Also important in the FPU's early development is ensuring capacity-building programs in order to undertake modern modeling techniques. There are opportunities for technical training to be delivered in-country from experts in these state-of-the-art modeling techniques. Alternatively, there are short term capacity-building programs specially designed for government officials offered by academic institutions that can help in developing FPU staffs' capacities in modern analytic modeling.

Once an FPU has been established, institutionalized and provided the resources to expand, the unit may take on additional functions beyond the core functions described above. Some of these additional functions could include:

1. Intergovernmental Fiscal Relations, and
2. Research policy and development in a number of budgeting areas, such as cash management issues and auditing and controls.

Of course, there are different views on what constitute core and non-core functions for the FPU. For example, the analysis of intergovernmental fiscal relations may be considered in some circumstances crucial to the functioning of the tax system or the effectiveness of certain expenditure programs, such as health, education and infrastructure. Considering the importance of analyzing and understanding how changes in institutional and financial arrangements affect the budgetary position of national and subnational governments, such as expenditure assignments, revenue assignments, grant formulas, and subnational borrowing, the need to establish a section for analysis of intergovernmental relations may become a very early priority.

## 2.3 Staffing Requirements

The staff of the FPU must include trained technicians with specialized skills and knowledge that can be acquired and strengthened over time (often over several years). For most FPU analysts, on-the-job training may be the only route to developing and deepening the necessary skills. Therefore, a solid university-level education in economics, statistics and other related disciplines must be considered a necessary condition for the entering staff of the FPU.

In general, finding the appropriate qualified staff will be one of the biggest challenges facing the creation of the FPU. USAID's experience in selected countries provides a range of options for attracting qualified staff and for strengthening the capacity of existing staff. For example, in

Tanzania, a USAID advisor worked with counterparts to prepare the job descriptions and professional requirements for all RPPD staff. Job announcements were published in several newspapers and posted in places such as the University of Dar es Salaam. Based on responses to the announcement, TRA staff and the USAID advisor prepared separately their own short lists from which candidates were selected for interviews. A panel, including TRA management and HR personnel, along with representatives from the Ministry of Finance, the Planning Commission, and others from outside of government, as well as the USAID advisor, interviewed all short-listed candidates. The best were then selected and offered positions (Gallagher 1997).

In the case of the Center for Fiscal Policy in Russia, the recruited staff had been trained previously as part of a multi-year, USAID-supported fiscal reform project in the country. By contrast, one of the biggest constraints in establishing the FPAC in the State of Jharkhand in India has been finding qualified staff, especially given the loss of officers in the reshuffling of government personnel following its separation from the State of Bihar. As a temporary solution, the Government of Jharkhand decided to recruit part-time resource persons from economics departments of relevant local institutions based in neighboring Ranchi (e.g., Ranchi University, Birla Agricultural University, and other academic institutions).

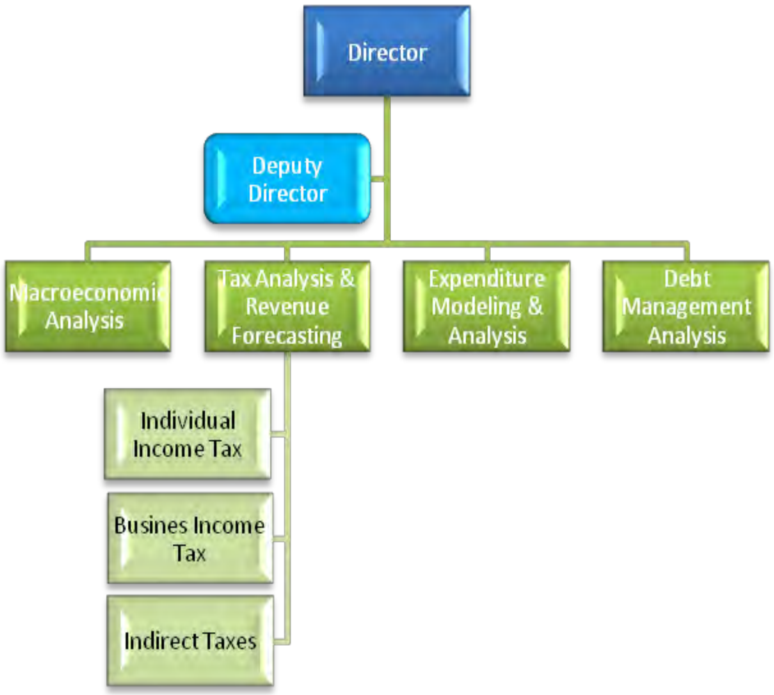
In the case of governmental FPUs, losing qualified staff is always a risk, as the newly trained staff members may have a variety of incentives, including higher salaries, to move on to jobs outside of government. Moreover, the accumulated skills and knowledge of staff should be nurtured and should not be replaced with each change in top leadership in the ministry or entity to which it belongs. To be an effective organization, the FPU must have a measure of staff continuity from year to year. Furthermore, the staff should be completely apolitical in its work or it will risk losing the confidence of both the Minister and its broader audience. At the same time, staff must also be responsive to the Minister's wishes and points of view (Nester, 1992). In FPUs established outside of government the issue of staff continuity and political independence are generally less of a concern because there is more flexibility in tailoring incentives.

In governmental FPUs, meeting these conflicting goals requires careful balancing of the need for retaining personnel over time with the need for assuring that the Minister's programs will receive the appropriate emphasis within the FPU. The first requirement to avoid politicizing the unit, and to ensure the needed continuity, is that all staff members be government employees in permanent positions that are routinely funded through the regular funding process. The second requirement for ensuring that the needs of each Minister are met is that the Minister has the option of appointing a new FPU Director.

In the absence of other FPU leadership, the role of the Deputy Director is crucial to its ability to perform satisfactorily. This position could be made appointive. However, if the Deputy Director is replaced each time there is a new Director, this will also entail a break in continuity. In part, this will occur because few new appointees will have the extensive fiscal policy background that the serving Deputy Director will have developed after a year or more in the position. It will also occur because the staff of the FPU is not composed of area specialists who will normally have the general managerial skill or the breadth of economic knowledge needed to assure that the operations of the FPU continue uninterrupted. The recommended solution is that the position of Deputy Director also be made a regular position in government. As an option, it could be made appointive for a fixed number of years (e.g., six years).

Figure 1 presents an illustrative organizational chart to be followed during the initial stages of establishing the FPU. It could be the case that the FPU has fewer units at the outset, but if at all possible, a comprehensive FPU should include the following structures.

**Figure 1. Initial FPU Organizational Structure**




***Leadership of the FPU: The Director and Deputy Director***

In the case of a governmental FPU, the Director should be appointed by the Minister of Finance (assuming that the FPU is established under the Ministry of Finance), and will serve at his/her pleasure. This will give the Minister confidence that the programs s/he wishes to explore will receive the necessary priority. It would also mean that the Director is more likely to be aware of the issues and policy directions of the administration and to have lines of communication to senior administration officials. In the case of a non-governmental FPU, the leadership positions should be announced publicly, and applicants should be procured through an open qualifications competition.

As noted above, the FPU will only operate effectively if there is some continuity in leadership. Therefore, it is recommended and assumed in the following discussion that the position of Deputy Director is a permanent one, subject to the regular rules covering government employment in the case of a governmental FPU. The responsibilities of the Director and Deputy Director are written very generally and are intended to encompass a wide range of technical and administrative details.

In governmental FPUs, the Director's role is to advise the Minister and other senior government officials on broad areas of fiscal responsibilities, including macroeconomic issues, tax policy, revenue estimation and forecasting, and other related issues. In both government and non-governmental FPUs, the Director oversees the development of regular publications and must be up-to-date with any tax and budget policy changes in order to advise senior leadership accordingly. In addition to assisting the Director with the above responsibilities, the Deputy Director oversees development of analytic models, manages day-to-day operations, and establishes capacity-building programs.

Additionally, both Director and Deputy Director must have strong managerial skills. They must be able to determine when it is preferable to contract out work, especially where the scope of analysis is beyond the FPU's capabilities. Furthermore, both individuals must be adept at strategic planning to align FPU programs and capacity with evolving and future demands on its staff.

Other than the leadership positions (Director and Deputy Director), each function that the FPU performs should be assigned to a team consisting of a Senior Technician and a Technician. The basic proposition is that each team be fully responsible for obtaining or developing the inputs that it needs to respond to requests for data and analysis in its area of responsibility. This responsibility includes interacting with suppliers of input data, modifying and running the models, and generating the appropriate analysis. In effect, the teams are vertically integrated; each is responsible for developing its own inputs and each is held accountable for its outputs (Nester, 1992).

Within each function, the Senior Technician is expected to supervise the Technician in performing all of the necessary basic tasks required of the team. The Senior Technician is also expected to perform a more in-depth role in the team's analysis, a role requiring extensive knowledge of the derivation of the input data that the team uses, relevant tax laws, the analytic techniques that are relevant to fiscal policy issues, and the appropriate outputs for presentation of results to the Minister and other officials. The Senior Technician is responsible for integrating all of the outputs of the models (along with other data), preparing the analysis, and producing the final reports of the team. The Senior Technician is also expected to have the ability to effectively communicate complex issues to non-technical audiences.

The Technician, on the other hand, is expected to perform more basic tasks, such as running the models under the guidance of the senior member, gathering raw data from other agencies, performing the more routine analytics, and preparing drafts of memoranda.

Based on Nester (1992), following is an attempt to summarize the specific roles of a Senior Technician, Technician, and other staff within each of the sections in the FPU. The functions presented here follow the five basic core functions described earlier in this study.

***Function: Analysis of the Macro Economy***

The Senior Technician in this area needs to remain constantly familiar with the structure and content of macroeconomic statistics, including income aggregates and other macroeconomic indicators. S/he works with all providers of statistics (central banks, national statistics office, and other government agencies) to obtain and update data. The Senior Technician also writes periodic reports on the evolution of the main macroeconomic indicators and the extent to which they differ from forecasts used by other models, and provides possible explanations for this divergence. S/he is always up to date with details of proposed tax and tariff changes, and the extent to which they might affect competitiveness and the economy. The Senior Technician not only provides timely support to the FPU Director and the Minister (in the case of a governmental FPU) on economic issues related to the macro economy, but also interacts with staff in all other related functions.

The Macro-Economy Technician supports the Senior Technician in updating and running analytic models, including Computed General Equilibrium (CGE) modeling. The Technician generates tables periodically showing significant indicators of each provision under consideration. Additionally, s/he interacts with all other modelers within the FPU by receiving inputs from other models and supplying new totals and targets for other models. This collaboration between divisions in the FPU is especially important when developing inter-related models and tools, such as the medium-term macroeconomic frameworks. The Technician should be experienced with the use of statistical packages and data manipulation.

***Function: Tax Analysis & Revenue Forecasting***

The purpose of this section within the FPU is to identify and evaluate the effects of current tax laws and proposed changes to the tax system. Concurrently, this section analyzes the effectiveness of tax administration and provides revenue forecasts. As such, this section includes Senior Technicians and Technicians for each major tax in the economy, including individual income tax, business income tax and indirect taxes, as well as a Revenue Analyst and possibly a Tax Administration Analyst.

The Senior Tax Technician for each major tax is responsible for working jointly with data providers on regular publication of basic data. These technicians write periodic reports for senior officials on each major tax and are always familiar with any changes that impact these taxes. They also design and develop tables showing significant elements of each tax provision under consideration.

The Tax Technicians for each of the major tax classifications assist the Senior Technicians in updating and running tax models, creating periodic tabulations of tax return and other tax data. They also update databases and modify models as needed.

The Revenue Analyst monitors revenue collections, analyzes revenue and macroeconomic indicators, trends and tax expenditures, and runs receipts forecasting and monitoring models. S/he prepares periodic memos for officials on tax collections, remains current on enacted changes in all tax laws, and advises officials and FPU staff on their likely impact on collections. S/he also coordinates with other Senior Technicians in the tax analysis and revenue forecasting section. The Revenue Analyst prepares complex analyses for use in planning and decision making, ensuring that results from other sections are integrated with outputs from other models.

S/he presents analyses and final reports to decision makers and nontechnical audiences. The Revenue Analyst should be familiar with and up to date on all the tax laws and analytic techniques that are applicable to tax and fiscal analysis.

This section may benefit from the inclusion of one additional analyst who facilitates coordination between tax sections and the revenue analyst(s), as well as provides coverage of tax administration issues for the entire tax system. S/he might be responsible for performing analysis on tax compliance, tax gaps, and evaluating options for encouraging and facilitating voluntary compliance, maximizing revenue from current laws, and modernizing tax administration systems and practices.

***Function: Expenditure Modeling and Analysis***

The Senior Technician in this area develops comprehensive understanding of programmatic and fiscal operations, examining and analyzing departmental budgets, financial structures, expenditure trends and budget estimates. The Senior Technician performs fiscal, statistical, and other studies of key aspects of departmental budgets, analyzing sources and uses of various government funds. Additionally, the Senior Technician prepares and transmits estimates of expenditures under alternative economic scenarios to senior officials during formation of the annual budget; makes informed recommendations and provides technical assistance on budget estimates for departments and programs, taking into account government priorities, availability of resources, and impact on programs. There is continuous consultation with all other functions in the FPU on tax collections and liabilities and implications for the future and joint work with the head of the Debt Management Analysis section. Extensive knowledge and experience with budgeting concepts and procedures used in preparing and analyzing government budgets and government legislation is a must. Additionally, familiarity or experience with MTBFs and MTEFs would be desirable.

The technician in this area assists the Senior Technician in running budget forecasting models during budget preparation in the Ministry of Finance. The Technician runs models to convert tax year liability totals (the output of the micro models) to tax collections; generates the control totals based on collections data that are used as targets for extrapolating the micro models and the CGE model; and collects and assesses basic input data. The Technician coordinates with other members of the FPU and raises any relevant issues from his findings.

***Function: Debt Management Analysis***

The debt management analyst is expected to have close links with the expenditure analysis unit of the FPU. The head of the Debt Management Analysis section should have the capacity to fully participate in the planning stage of the budgetary process since the size of the debt and interest payments is a key determinant of the size of the budget deficit. The debt management analysis unit itself can make a unique contribution to expenditure planning and the overall budget process. As such, this unit may also be set up as part of the Expenditure Modeling and Analysis unit of the FPU.

The Senior Technician in this wing advises senior leadership on debt policy and other related economic issues, maintaining close links between the budget office and the treasury to assess current and future borrowing needs and appraise financial flows relating to debt operations. The Senior Technician also oversees the development of debt/risk management models and analytic materials and reports on medium- and long-term consequences of government debt, liabilities, and interest payments under current fiscal policy. Lastly, this expert is responsible for calculating different outlooks for debt sustainability under different fiscal policy scenarios.

The Technician, as in other sections, is responsible for running debt/risk management models and preparing analytical materials; generating a database with budget and off-budget liabilities of the government; and collecting and assessing basic input data. The Technician also coordinates with other members of the FPU and raises any issues from his findings.

As part of USAID's fiscal reform projects in the Indian states of Karnataka, Jharkhand, and Uttarakhand, a Debt and Investment Management Cell (DIMC) was established in each state. In all three states, DIMC staff are generating reports on debts and guarantees, sharing then with the State's Finance Department and with the Reserve Bank of India, the country's central bank. Uttarakhand already has a consolidated debt management process, and the Twelfth Finance Commission, the central body charged with recommending policies concerning intergovernmental fiscal arrangements in India, has recommended Uttarakhand as being well positioned to start market borrowings in 2010 (USAID, 2008a).

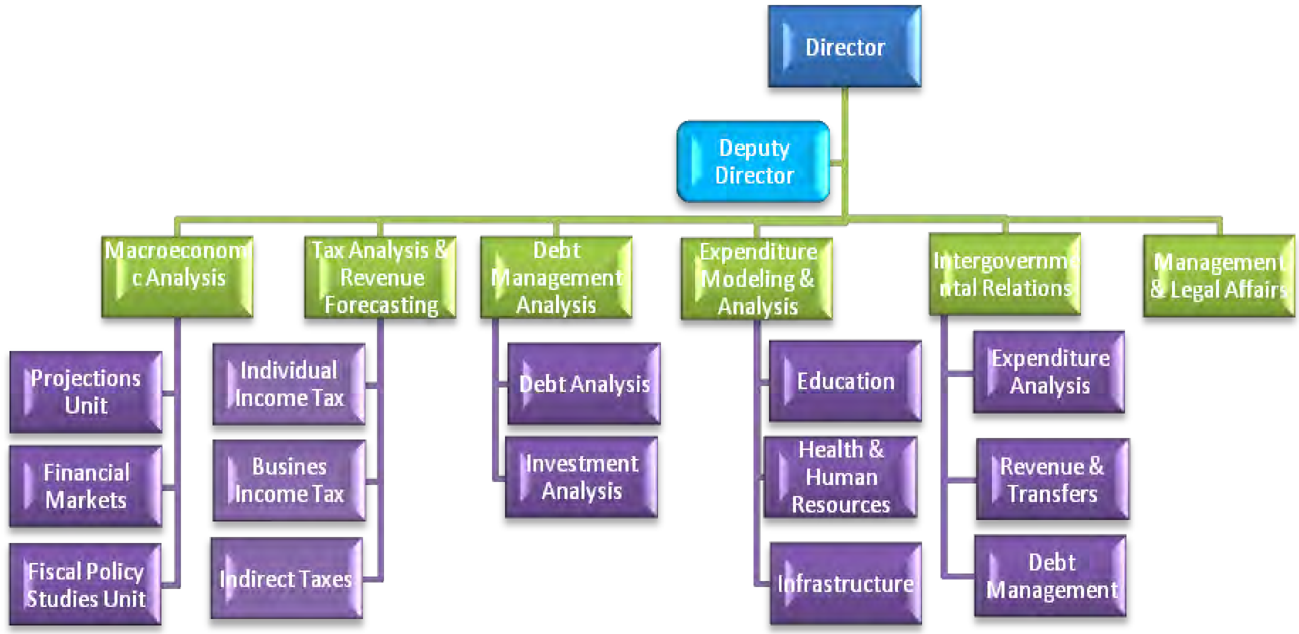
### *Other Administrative Support Staff*

In addition to an administrative assistant(s) that performs secretarial duties, a support person in information technology is desirable. This person may work with other analysts to enhance efficiency by automating the data gathering, data entry, and data analysis processes. The information technician may make recommendations for additional software to enhance FPU operations, and can serve as a technical advisor on IT-related issues. This person may also oversee the maintenance and upgrading of FPU hardware and software.

## Long-Term Organizational Structure

Figure 2 presents an illustrative model of how the FPU might look after having matured with time and experience. It is important that as the FPU expands, new sections of analysis be institutionalized in the organizational structure. It may be the case that as these sections of analysis become more specialized, they branch off from the original FPU and become separate units serving different clientele. This is the case in some developed countries such as the United States, where several government agencies (executive and legislative) have institutionalized specialized units of fiscal policy analysis.

**Figure 2. Long-Term FPU Organizational Structure**




## 2.4 Implementation Roadmap

Thus far, this study has presented all of the major pieces necessary to establish a well-functioning FPU. These include the FPU's model and structure, its role and functions, and staffing requirements. In order to guide the establishment and implementation of the FPU, we now consider the following implementation roadmap. The roadmap provides a series of logical steps that may be taken in establishing a fiscal policy analysis unit and making it operational. This roadmap is based on USAID's experience with establishing FPUs around the world (USAID, 2008a).

***Importance of Political Buy-in and Timing***

International experience shows that successful interventions in the fiscal area, such as initiating an FPU, require the understanding and support of many decision-makers and officials in government. Finance officials generally recognize that the failure to implement many reforms is due to a lack of analytic information regarding the policy proposals and a lack of involvement of line agencies in the process. Thus, the first step in establishing an FPU is to involve as many government officials and line agencies as possible. Many of the recommendations produced by the FPU will have significant effects on line departments who need to understand the changes because they will be intimately involved in implementing the resulting policies. Therefore, political buy-in is essential.

Another consideration is timing the implementation of the FPU. Since one of the core functions of the FPU may be to provide assistance in the development of the annual budget, the finance ministry should consider the advantages of phasing in the budget-related components of the unit so that the staff could work into their new duties as the budget process unfolds. Successful timing in implementation means that FPU staff is able to observe and learn as much as possible during budget development. Although the new FPU staff may not be fully trained in time to participate to the full extent in the first year's budget cycle, it would, nevertheless, be valuable for them to view the process from the vantage point of their new role in the FPU. As the staff becomes familiar with the budget process, they would play a more significant role in the budget process the following year.

***Physical Plant***

Another consideration when establishing the FPU is to strategically choose the physical location of the FPU office. This is extremely important to the FPU's success as a resource to be used by the Minister. The office would ideally be located on the same floor as, and as close as possible to, the Minister's office. In this way, the Minister would have immediate access to the FPU Director and staff. A major benefit of this access will be more rapid response to his requests. In turn, this ease of access will increase the Minister's confidence in the staff and in the quality of the work of the unit. Ultimately, it will lead the Minister to a better understanding of the nature and scope of the work performed by the staff, and to greater use of the skills and tools of fiscal analysis that are available in the FPU.

***Initial Steps***

Based on USAID's experience in initiating FPU activities, the following 12 initial steps are recommended (USAID, 2008a):

| **Table 2. Implementation Roadmap** |
|---|
| **Step 1: Pre-implementation Planning**<br>• Define the FPU's mission and vision.<br>• Obtain consensus of key decision makers in the FPU's host agency. Political buy-in is critical.<br>• Define the functions of the unit (what analytical sections will be included).<br>• Determine conditions for the operation of the FPU. Institutionalization of the unit and the job postings.<br>• Choose the physical office location.<br>• Develop a first year work agenda |
| **Step 2: Institutionalization of the FPU**<br>• Obtain government order to establish the FPU, including any special conditions for FPU creation.<br>• Appoint the FPU Director.<br>• Finalize job descriptions and position qualifications. |
| **Step 3: Staffing Activities**<br>• Develop strategies for hiring. These may include a list of specific government agencies and organizations from which to source recruits, including public agencies, academia, and the private sector.<br>• Develop a timetable for staffing the FPU. |

| Table 2. Implementation Roadmap |
|---|
| • Establish job contracts including appointments outside government. |
| **Step 4: Set up Networks**<br>• Identify academic institutions/professional associations that can collaborate in FPU research activities.<br>• Invite organizations selected above and nominate members to serve as FPU resource persons/advisors.<br>• Determine compensation packages for resource persons. |
| **Step 5: Initial Training**<br>• Assess needs and develop training for FPU, for each section, and each employee.<br>• Select training facilities and schedule trainings according to needs and training plan. |
| **Step 6: Prepare Assignments for FPU staff**<br>• Develop overall workplan for the FPU for the first year of operation.<br>• Prepare specific assignments for each FPU section: Macroeconomic Analysis, Revenue and Tax Analysis, Expenditure and Budget Analysis, etc.<br>• Prepare appointments for the FPU resource people. |
| **Step 7: Formal Government Order Issued**<br>• Define the scope of the FPU.<br>• Define the relationship with other agencies in government.<br>• Officially appoint the Director and Deputy Director.<br>• Develop internal protocol and procedures.<br>• Allocate budget line, offices, equipment, etc. |
| **Step 8: Launch the FPU**<br>• Prepare FPU "inauguration ceremony" to officially start operations.<br>• Ensure regular reporting to the relevant executive and legislative branches of government. |
| **Step 9: Hold regular meetings**<br>• Hold an initial FPU meeting.<br>• Establish a regular internal meeting schedule and protocol.<br>• Schedule regular meetings of FPU senior leadership with the Finance Secretary and other relevant senior government officers. |
| **Step 10: Prepare Regular Reports**<br>• Establish report format and periodicity (e.g., bi-annual, annual, etc.).<br>• Determine report recipients.<br>• Post reports on the website (if one is available). |
| **Step 11: Publish Completed Studies/Reports**<br>• Establish publication format and periodicity.<br>• Establish a working paper series.<br>• Determine circulation list, including the Finance Minister, his cabinet, principal secretaries from different departments, and legislators.<br>• Post all publications on the website. |
| **Step 12: Establish Ongoing Capacity Building Programs and Training**<br>• Establish capacity building programs and training as needed.<br>• Capacity building programs include: management leadership training; strategic planning and project planning training; capacity building on developing analytic methodologies, manuals, job descriptions, and work processes. |

*Source:* Adapted from USAID (2008a)

*The Transition Period Following FPU Establishment*

The full analytic capability of the new FPU will be heavily dependent on the existence of an extensive historic database covering tax payments, tax collections, forms of payment, and other data. Clearly, the appropriate databases will be built up over time as the FPU extends its programs. In the interim, analysis and estimates will be produced through a combination of models, regressions, assumed statutory rules for payment of taxes, expert judgment by knowledgeable professionals familiar with the current system, and other inputs. However, estimates, recommendations, and conclusions based on existing data will be more subject to revision than will be the case once these are more firmly grounded in experience.

Ongoing capacity-building programs can also help strengthen the technical and analytic capabilities as well as the managerial skills of FPU staff. These programs may be short term or longer term depending on the needs of the FPU. Regular capacity-building initiatives also help to improve staff motivation, encouraging them to perform better, and providing them with systematic development of skills for job advancement. Designing training programs also fosters staff retention by conferring credentials not easily marketable outside government.

**Potential Capacity Building Programs**

FPU capacity building can take a variety of forms, including (Gallagher 1997):

1. Internal staff seminars.
2. Short courses (approximately two weeks in length or as appropriate) presented by experts.
3. Learning by doing.
4. Training workshops.
5. Long-term overseas training.

1. ***Internal Staff Seminars:*** These seminars may be organized weekly, biweekly or monthly, where each staff member has an opportunity to present his/her own work to the rest of the unit. Each staff member may present on a particular issue or analysis that he/she is undertaking. This is an opportunity to present and explain specific models and tools of analysis and receive feedback which not only benefits the presenter, but also the audience as a whole. It may also be beneficial to invite a member from academia that works locally on similar issues.

2. ***Short Courses:*** These courses can be developed and delivered in-country by donor-funded or otherwise available experts. Certificates can be awarded for participation and successful completion of each course. These may require an examination at the end of the course. Additionally, many short courses are offered internationally, such as in the United States, where regular courses are specifically designed for government officials from developing and transition countries, including courses on fiscal analysis and revenue forecasting; public budgeting and fiscal management; fiscal decentralization

(intergovernmental fiscal relations); education policy and development; and, macroeconomic analysis for development.

3. ***Learning by doing:*** Each staff member undertakes his own research project. In the initial stages of establishing the FPU, the technician may be assigned to work with a donor-funded advisor. Through this collaboration, the technician will gain critical knowledge and experience and will gradually be able to undertake projects on his/her own.

4. ***Training workshops:*** Training workshops may be organized as one-day or even half-day events. These workshops might focus on strengthening modeling techniques and software skills (for instance, a series of short workshops on E-views, SAS, or other software packages used within the FPU). There can also be short workshops on modeling methods, such as time series analysis and forecasting methods, which could be delivered by a local advisor or member of local academia. Capacity building workshops may also focus on improving staff skills in developing methodologies, manuals, job descriptions, and work processes.

5. ***Long-term overseas training:*** The FPU should consider developing a long-term overseas training plan. In general, Ph.D. level qualifications or at least a Master's level education in Economics or Public Policy are necessary for the long-run viability of the analytic unit. Hence, after establishment of the FPU and after the unit becomes fully staffed, it might be necessary to begin planning opportunities for advanced degree training overseas. Assistance programs through donor agencies should be explored for funding to Ph.D. programs in universities overseas. These overseas training programs should be well designed to provide sufficient incentives for staff to return to the unit after study abroad.

# 3. Developing FPU Performance Indicators

Performance indicators are essential and useful in evaluating FPU output and capacity, and in identifying problems that may impede achievement of the unit's goal s and objectives. They also provide guidance for developing and refining assistance programs.

There is urgent need to establish well-functioning FPUs and strengthen existing ones in low-income countries. Kyobe and Danninger (2005) analyze revenue forecasting practices in 34 countries, 80 percent of which are low-income countries. They find that, for the most part, the soundness of methodologies used is very weak. Timeliness and accuracy are also major challenges. Their findings, therefore, call for improvement of these characteristics in FPU practices.

Table 3 presents a selected list of output-based indicators for evaluating the performance and capacity of an FPU. "Output" denotes the analytic reports and policy recommendations that the FPU produces. For each indicator or performance measure, the FPU should have a target performance level or benchmark against which to compare actual performance.

**Table 3. FPU Performance Indicators**

| PERFORMANCE MEASURE: | ACTUAL PRACTICE | TARGET PERFORMANCE |
|---|---|---|
| **Timeliness:**<br>Percentage of reports submitted on time | Based on individual FPU evaluation | 100% timeliness |
| **Accuracy:**<br>Percentage of revenue and budget estimates correct (within some bound) | Based on individual FPU evaluation | 85% correct estimates |
| **Formality:**<br>Use of formal economic modeling and econometric methods | Based on individual FPU evaluation | Make use of formal econometric methods |
| **Qualitative assessment & review of technical quality and merit using peer review:**<br>Number of peer-reviewed technical publications produced | Based on individual FPU evaluation | Have at least one annual peer reviewed publication |
| **Relevance:**<br>Client satisfaction with the quality of reports and services | Based on individual FPU evaluation | 100% satisfaction. Develop client satisfaction survey at least every three years. |
| **Availability of reports in areas of:** | | |
| Tax Analysis | Based on individual FPU evaluation | Have one report for each area of study within the FPU |
| Budget Analysis | Based on individual FPU evaluation | Have one report for each area of study within the FPU |
| Proposed Legislative changes | Based on individual FPU evaluation | Have one report for each area of study within the FPU |
| Subnational governments | Based on individual FPU evaluation | Have one report for each area of study within the FPU |

| PERFORMANCE MEASURE: | ACTUAL PRACTICE | TARGET PERFORMANCE |
|---|---|---|
| **Timeliness:**<br>Percentage of reports submitted on time | Based on individual FPU evaluation | 100% timeliness |
| **Accuracy:**<br>Percentage of revenue and budget estimates correct (within some bound) | Based on individual FPU evaluation | 85% correct estimates |
| **Formality:**<br>Use of formal economic modeling and econometric methods | Based on individual FPU evaluation | Make use of formal econometric methods |
| **Qualitative assessment & review of technical quality and merit using peer review:**<br>Number of peer-reviewed technical publications produced | Based on individual FPU evaluation | Have at least one annual peer reviewed publication |
| **Relevance:**<br>Client satisfaction with the quality of reports and services | Based on individual FPU evaluation | 100% satisfaction. Develop client satisfaction survey at least every three years. |
| **Availability of reports in areas of:** | | |
| Tax Analysis | Based on individual FPU evaluation | Have one report for each area of study within the FPU |
| Budget Analysis | Based on individual FPU evaluation | Have one report for each area of study within the FPU |
| **Availability of information:** | | |
| Reports easily accessible by government agencies, the legislature and citizens? | Based on individual FPU evaluation | Information should be easily accessible by the Public |
| Website established? (Optional) | Based on individual FPU evaluation | Have a comprehensive website regularly updated |
| Website views per research publications | Based on individual FPU evaluation | Increase dissemination of reports |
| Information published outside budget document | Based on individual FPU evaluation | Information should be made publicly available |
| Production of unbiased estimates | Based on individual FPU evaluation | Estimates should be unbiased and apolitical |
| Maintenance of updated databases | Based on individual FPU evaluation | Have databases up-to-date with latest available time series |

Evaluators can use a scale (e.g., 1 to 10) to assess actual performance and thereby determine where and how intensively to target improvements. For example:

- Scores 1 to 3: Very weak; need significant improvement.
- Score 4 to 6: Average; some areas require improvement.
- Scores 7 and 8: Good; strategically identify weaker points for continuing improvement.
- Score 9 and 10: Very good; the FPU is successfully servicing its clients and meeting its goal. Identify any opportunities for expansion and specialization.

# 4. Conclusions and Lessons

International experience with designing and establishing FPUs has provided a number of lessons that can benefit governments and assistance programs in institutionalizing similar units. We divide these success factors into three categories, drawing heavily on USAID's own experience and others discussed in this report in implementing FPUs around the world (Gallagher, 1997, 1998; USAID, 2003; USAID 2008a):

- Prerequisite factors
- Implementation factors
- Sustainability factors

Each is discussed in turn below.

***Prerequisite Factors***

Certain prerequisites should be in place prior to establishing an FPU. These include:

- **Political buy-in:** Establishing an FPU requires broad-based support from decision makers and officials throughout government. Furthermore, the host institution, whether it be the finance ministry or other agency, must fully understand the importance of the FPU and be willing to collaborate with FPU staff.

- **Right timing:** Implementers need to take advantage of windows of opportunity when establishing an FPU. For instance, in the State of Karnataka in India, USAID and the state government were able to get the FPAC proposal on to the fiscal reform agenda at a time when the state was under severe fiscal distress and was facing pressure from the central government to improve fiscal discipline. Other states in India are following Karnataka's example and are initiating their own FPUs to help face similar challenges.

- **Insulation from political influence:** Establishing an FPU can be an important step in bolstering citizens' confidence in government, but this is only possible when the FPU is seen as independent and objective. FPU analysts must have the ability to provide analytic guidance and recommendations to decision makers in an unimpeded and straightforward manner. Their reports and publications should be fair and honest, but still mindful of political realities. Not all of the FPU's reports and memos need be available to the public.

- **Strategic physical location:** The physical location of the FPU can be extremely important, especially when serving the finance minister or similar high-level government manager. Having close proximity to the minister's office gives him immediate access to FPU Directors and staff. The FPU, thus, will be able to respond swiftly to the minister's requests and over time will become a critical resource for executing his own responsibilities.

- **Clear mandate, roles and responsibilities:** The FPU's mandate and its roles and responsibilities must be laid out clearly from the outset. All staff should have clear job descriptions inclusive of reporting and research outputs. Additionally, there should be an internal protocol for completing and finalizing research findings and suggestions. In the development of the Tanzanian RPPD, mandates, mission, vision, role and responsibilities were included in the organizational plan. This plan was fully vetted with authorities at higher levels, but also with counterparts in other ministries and in civil society.

- **First-year workplan.** A workplan will lay out the exact work that needs to be undertaken in the first year of operation. The new FPU team and its management should know from Day One their roles, what they need to produce, and deadlines. Having a clear plan in place will also demonstrate the seriousness and relevance of the FPU to government managers and political leadership. Much of the success of Tanzania's RPPD was due to the careful planning of specific activities and the careful development of the initial research agenda under the guidance of USAID's technical assistance team (USAID 1997).

- **Leadership and continuity:** Selecting the right leadership is critical to the FPU's success. FPU Directors should be analytically minded and experienced in the debates and dialogue on fiscal and broader economic policy issues. To the extent possible they should also be independent and apolitical, although they should understand and honor their role in advancing government (or other clients') priorities. Continuity is also important to ensure that FPU analytic capacity and focus is sustained even with changes in government. Thus, if the Director is an appointed position, then the Deputy Director should be a permanent position to ensure some degree of continuity in the direction of the unit.

- **Highly qualified staff:** Ideally, the FPU should have experts in each of the core functions established for the unit. Expert staff should have academic background/training in their specific areas of analysis coupled with experience with fiscal system in government. Staff should have access to modern tools and techniques and, if necessary, should be introduced to these tools and their application through various capacity-building programs. If expertise is not locally available, the FPU could build a network of collaboration with academic institutions, professional associations, and others who could support research activities until the FPU is able to attract the right staff or develop the necessary capacity. For example, a USAID advisor assisted the RPPD in Tanzania in developing job descriptions and in developing strategies for hiring qualified staff. By contrast, the CFP in Russia was formed by Russian local experts with support from U.S. academic institutions, under USAID assistance.

- **Strategic planning capability:** FPU leadership should have knowledge of strategic planning techniques, including setting goals; identifying and understanding the interests of stakeholders; assessing strengths, opportunities and weaknesses; and, leading the FPU and its members toward common goals and objectives that are aligned with those of department leadership.

- **Integrated systems and information networks:** Access to current treasury information, expenditure plans, budget execution, macroeconomic and socioeconomic databases, and analytic modeling programs is essential. The unit must have internet connectivity and secure access to government databases and portals. The FPU should also have a website or webpage providing easy access to its reports, databases and other information.

### *Ongoing Implementation Factors*

Once established, certain conditions must be in place to maximize the impact of FPU activities and ensure its sustainability. These include:

- **Incentive structures for retaining staff:** Staff appointments should be on a full-time basis so that analysts can focus on their core analytic duties. When staff are hired on a part-time basis, the unit is more vulnerable to losing staff to full-time opportunities elsewhere. There should also be a tenure system in place to retain qualified staff. While many of the new employees will need significant training and mentoring, ongoing certificate training and perquisites should be instituted to incentivize staff to improve performance and advance their careers. Overseas training opportunities are often a great option for achieving this.

- **Internal guidance and mentoring:** Senior analysts in the unit should serve as mentors to junior staff. A good mentoring strategy greatly inspires other employees to upgrade their skills and performance. Experience with USAID assistance programs has shown that having new staff work directly with donor consultants or academic counterparts greatly enhances performance and capabilities. This was the case with Nicaragua's OAFE and Tanzania's RPPD.

  For instance, in the early stages of Tanzania's RPPD, each RPPD staff member undertook research projects working directly with international advisors. This exercise led to the successful production of the first analysis and reports by RPPD. Additionally, with guidance from these advisors, RPPD's staff developed a Tax Revenue Projection Model, which represented the first profile of Tanzanian taxpayers ever developed. The RPPD now plays a significant role in the formulation of Tanzania's tax policy, especially in the context of international trade negotiations (USAID 2003).

- **Strong rapport with other units:** The FPU should build and nurture working relationships with staff in other agencies that are key components to the development of strong analyses and reports. The World Bank-funded OAFE in Nicaragua, for instance, has achieved a great level of collaboration with its sister agency DGP (another analytical unit within the ministry) in preparing, monitoring and evaluating macroeconomic programs and coordinating budget forecasts. OAFE not only works closely with DGP, but also with other institutions such as the central bank (Gallagher 1998).

- **Continuous upgrading of expertise:** The FPU should keep up to date on international trends, innovations and practices in fiscal management and strive to apply these in its work.

- **Constant capacity building:** Capacity building should not be equated to training alone. Capacity building also includes enhancing staff skills in developing methodologies, manuals, job descriptions, and work processes. This requires relevant databases, integrated information systems, appropriate protocols, organization systems and structures, and sometimes even legal amendments, to make the effort effective. However, training is a major, if not the key, component of any capacity-building exercise. In most capacity-building programs, around 70 percent of the effort and resources go toward training. Ideally, baselines should be established prior to the beginning of a training program to be able to gauge effectiveness and efficiency gains. Care must be taken to ensure that the most appropriate candidates are selected and committed for the entire duration of the program. Comprehensive capacity-building exercises were developed when establishing RPPD in Tanzania, BAO in El Salvador, and OAFE in Nicaragua.

- **Reporting and accountability:** To garner confidence in its operations, the FPU must ensure that reports meet the following three criteria: (1) timeliness; (2) accuracy; and (3) relevance. To achieve this, the FPU should establish report format and periodicity (e.g., monthly, annual, bi-annual, etc.); determine report recipients; and, ensure use of accurate data and appropriate modeling techniques. Additionally, the unit should determine the circulation list, which should include the finance minister, his cabinet, principal secretaries from different departments, and legislators. Lastly, all publications should be posted to an accessible website.

- **Contracting out work:** FPU management must be able to design scopes of work and procure contracts for externally produced work. This is especially important when an external expert's view is desired or simply when the FPU lacks in-house expertise in a specific area.

### *Sustainability Factors*

- **Ensure financial sustainability:** If the FPU is a non-governmental organization, then it should work towards generating its own finances to allow it some degree of independence and to help insulate its work from bias and political pressures. If the FPU is part of the government then it will inherently be dependent on the government's budget and there is no need for the FPU to seek its own funding unless required to do so. Donor agencies are well advised to set a timeline for scaling down and ultimately ceasing financial support to the FPU's operation. Roughly a decade after it was launched, Nicaragua's OAFE is still financed externally, which has raised questions about its long-term viability. The Government of Nicaragua is now seeking to shift the OAFE staff on to the permanent payroll (Dorotinsky et al 2008).

- **Ensure academic training advancement opportunities:** Options should be explored for funding Masters Level and Ph.D. programs for FPU staff at universities overseas. It may even be possible to obtain donor assistance for financing such training. Short-term trainings are also available from a number of organizations around the world. Ideal training might include sending participants to the IMF's sessions on Public Finance, Macroeconomics, and Financial Programming.

- **Expand and specialize as needed:** The FPU should constantly explore opportunities to extend into new service areas and products to meet the evolving needs of its clientele. Over time, there may even be justification to split the FPU into multiple different units as a certain degree of specialization is achieved. This has been the case with most analytic units serving the federal government in the United States.

- **Carry out regular performance checks:** The FPU should undergo regular performance checks. Performance assessments can help in identifying key issues within the organization and in developing strategies for correcting weaknesses. This will ensure future sustainability and growth by not only addressing internal staff needs, but also clients' expectations.

## 4.1 Final Thoughts

There is no one model for establishing an FPU, but international experience provides us with lessons about how to implement a well functioning FPU that meets the needs and circumstances in specific country contexts. Furthermore, donor agencies such as USAID can play an important role in advocating for and providing financial and technical assistance to the host country in the design, implementation and development of an FPU. This can include assistance in designing and making the FPU operational; developing and delivering capacity-building programs; and, financial support to get the FPU off the ground during the initial startup period.

International donors could contribute more broadly to improvements in fiscal management and economic governance worldwide by not only assisting in setting up new fiscal policy analysis units, but also by examining and drawing lessons for the experiences of existing analytic units, and by providing broader assistance to developing and transition countries to improve and expand use of modern fiscal analysis practices. This study could be considered part of that broader agenda.

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