WP/15/232

IMF Working Paper

The Evolving Functions and Organization of Finance Ministries

by Richard Allen, Yasemin Hurcan, Peter Murphy, Maximilien Queyranne, and Sami Yläoutinen

INTERNATIONAL MONETARY FUND

 WP/15/232

IMF Working Paper

Fiscal Affairs Department

The Evolving Functions and Organization of Finance Ministries

Prepared by Richard Allen, Yasemin Hurcan, Peter Murphy, Maximilien Queyranne, and Sami Ylaoutinen

Authorized for distribution by Richard Hughes

November 2015

Abstract

There is relatively little literature that analyses the role, functions, and organization of finance ministries. The purpose of this working paper is to review international experiences in this area, in an effort to formulate guiding principles of organizational design and the allocation of functions, while recognizing the crucial importance of each country's history and institutional context. Over the past 30 years many finance ministries have moved from a "traditional" to an "emerging" model of organizational design in which there is greater openness and transparency, more flexible management practices, and a broader focus on strategic policy issues. In addition, many operational functions have been devolved to arm's–length agencies or line ministries. The paper describes the challenges facing developing countries in strengthening their finance ministries, and the principles, approaches, and strategies that can be applied.

JEL Classification Numbers: H83

Keywords: Public administration, finance ministry, finance function, public financial management

Authors E-Mail Address: RAllen@imf.org; YHurcan@imf.org; MQueyranne@imf.org

Contents **Page**

I. INTRODUCTION[1]

In most countries, the finance ministry is responsible for formulating and implementing the core financial functions of government, and is at the center of economic and fiscal policy-making. Current design and reform prescriptions for fiscal policy and financial management tend to focus on strengthening the legal framework and business processes based on what is perceived as best practice (Andrews, 2013). Another approach aims at analyzing political and other drivers within finance ministries in order to get traction for technical reforms.[2]

Despite the extensive literature on public financial management (PFM), however—see, for example, Allen, Hemming, and Potter (2013); and Cangiano, Curristine, and Lazare (2013)—the literature on the functions and organizational structure of finance ministries is relatively slim.[3] In this respect, more has been written on the organization of private sector companies and semi-government entities such as state enterprises and health services (for an overview, see Senior and Fleming, 2006). There is also a substantial literature on the semi-independent agencies and regulatory bodies that undertake functions on behalf of the government (see Baldwin, Cave, and Lodge, 2010).

It is important to note that, in addition to finance ministries, several other public entities of government share responsibility for carrying out the government's financial functions. These include ministries and agencies responsible for macroeconomic and fiscal forecasting, national development planning, collection of government revenues, public procurement and debt management, as well as the central bank. These ministries and agencies, together with the finance ministry, have sometimes been described collectively as forming a country's "central finance agency" (CFA)—see Allen and Grigoli, 2012, Allen and Krause, 2013, and World Bank, 2013. In order to simplify the discussion, however, this paper focuses mainly on the role and organization of the finance ministry, which is by far the most important of the entities comprising the CFA group.

---

[1] The authors are grateful to Rachel Wang for her research assistance, and to Marco Cangiano, Richard Hughes, Torben Hansen and other FAD colleagues, as well as Salvatore Schiavo-Campo and Philipp Krause (Overseas Development Institute, London) for their helpful comments on an earlier version of the paper.

[2] For a similar approach, see World Bank, 2012. *The World Bank's Approach to Public Sector Management, 2011–20: Better Results from Public Sector Institutions,* (Washington DC: World Bank).

[3] See in particular Allen and Krause (2013), Allen and Grigoli (2012), Allen and Kohnert (2012), and World Bank (2013). There is also some literature on the role of the central budget office—which is of course a narrower concept than that of a finance ministry or central finance agency—see, for example, Schick (2001a), and Wanna, Jensen, and de Vries (2003).

In a narrow and popular sense, the idea of an "organization" is often thought of as a set of formal arrangements including the structure of its departments, divisions, and other operational units; the processes used by the organization to transform its inputs of human resources and information systems into business outputs; and the rules and procedures that define how decisions are made by its senior managers. Organization theory tells us, however, that organizations are, in reality, broad social constructs that operate within an often volatile political, socio-economic and technical environment, and that historical, cultural, legal, and administrative context is crucial in understanding how organizations develop and function (see, for example, Senior and Fleming, 2006 and Pollitt, 2013).

There is also an important relationship between work on organizations and the study of political economy or behavioral economics, as well as the related field of public choice economics.[4] The behavior of government organizations (including finance ministries) can only be properly understood by analyzing the behavior of politicians, senior officials, other government bureaucrats, voters/taxpayers, civil society organizations, financial institutions, and other participants in the decision-making processes that determine the level and allocation of public expenditure and revenues. The size of the public sector (and the role and size of the finance ministry) is determined by both demand-side and supply-side pressures which in turn are influenced by the interplay of the above-mentioned players, through the government's internal decision-making processes and wider public debate and voting procedures.

The purpose of this paper is to review international experiences related to the various functions and organizational models of finance ministries and their application in various countries in an effort to formulate guiding principles.[5] Such principles may be helpful to countries in strengthening the role and organization of their finance ministries, while recognizing that the history and institutional context of each country are critical determinants of an organization. International models and norms can only assist to a certain degree.

The paper draws heavily on the knowledge of staff and experts of the Fiscal Affairs Department (FAD) of the IMF about the role and organization of finance ministries in advanced and middle-income countries such as Australia, Canada, Finland, France,

---

[4] Sir Alan Peacock includes an excellent discussion of these issues in his Mattioli Lectures (Peacock, 1992); see also the commentary by Giardina on the "Economic Analysis of State Bureaucracy" in the same volume (pages 154–59).

[5] The paper does not explicitly discuss functional and organizational arrangements in federal countries between the central and state/provincial governments. See Cottarelli and Guerguil, M. (eds.), 2014. *Designing a European Fiscal Union: Lessons from the Experience of Fiscal Federations*, (Routledge Studies in the European Economy).

New Zealand,[6] South Africa, Sweden, Turkey, the United Kingdom, and the United States[7] where substantial reforms of both PFM systems and the organization of finance functions have taken place in the past 20 years. It also draws on technical assistance provided by the IMF on the functions and organization of finance ministries in a dozen countries, and on the academic literature, which is especially rich for the U.K.[8]

The paper is organized as follows. Section II discusses the role and functions of a finance ministry, and the concept and characteristics of its organization and staffing. Section III analyses traditional and emerging approaches to the role and culture of a finance ministry, and reviews why and how finance ministries have evolved over time. Section IV proposes some guiding principles of good organizational design, reviews the challenges facing developing countries and emerging markets in reorganizing their finance ministries, and describes the approaches that can facilitate the process of reform. Finally, Section V offers some conclusions. Another paper would be required to analyze the empirical relationship between changes in organizational structure and improved fiscal performance.

II. THE FINANCE MINISTRY AND ITS FUNCTIONS

There is no entirely satisfactory definition of a finance ministry except a circular or tautological one, namely a ministry that carries out finance functions. But what are finance functions? This section provides a definition of these functions, dividing them into policy-related, regulatory, and transactional or operational functions. Organizational models and the characteristics of a finance ministry are also discussed.

The role of the finance ministry has expanded enormously over the last century with the expansion of the state's involvement in public finance. Tanzi, for example, notes that public expenditure as a share of national income grew massively in many industrial countries from about 10 percent of GDP in the early 1900s to around 40 percent in recent years, and even higher levels in some European countries.[9] A large part of this growth came after World

---

[6] M. McKinnon, 2003. *Treasury: The New Zealand Treasury 1940–2000*, (Auckland: Auckland University Press).

[7] See, for example, S.L. Tomkin, 1998. *Inside OMB: Politics and Process in the President's Budget Office*.

[8] See, for example, N. Deakin and R. Parry, 1999, *The Treasury and Social Policy: the Contest for the Control of Welfare Strategy*, (New York: St. Martin's Press); H. Heclo, and A. Wildavsky, 1974, *The Private Governance of Public Money: Community and Practice inside British Politics*; D. Lipsey, 2000, *The Secret Treasury*; E. Roll, 1997, "The Treasury and the Art of the Possible." *The Political Quarterly*, Volume 68, No. 1; H. Roseveare, 1969, *The Treasury: The Evolution of a British Institution*; and C. Thain, and M. Wright, 1995, *The Treasury and Whitehall: The Planning and Control of Public Expenditure, 1976-93*.

[9] See Vito Tanzi, 2010. *Government versus Markets: the Changing Economic Role of the State*, (Cambridge: Cambridge University Press).

War II, and especially after 1960. Most of the expansion comprised additional subsidies and transfers from the budget in areas such as public pensions, health services, education, public housing, support for the unemployed and families, subsidies to public and private enterprises, as well as assistance to the old, the very young and the handicapped. Public spending on these activities had been almost nonexistent at the beginning of the 20th century. In most advanced economies, citizens came to regard their governments' new role as normal and essential. In promoting this expanded role, governments needed to find new sources of revenue, and tax levels went up sharply to finance higher expenditure.

This huge expansion in the role of the state had important implications for the functions and organization of the finance ministry. First, there was the sheer scale of the increase in the size of public expenditure and taxation which required both an expansion of the role (and size) of budget and accounting/treasury offices as well as the development of new techniques of policy analysis, and the exercise of stronger control over public spending and off-budget transactions such as the newly established social security funds. Second, there was a large increase in the breadth and volume of state activities in which the finance ministry was involved, in particular the area of welfare policies, industrial policies, and policies regarding state enterprises (which also hardly existed at the turn of 20th century in most countries). Additional areas of expansion include international finance, local government finance, and later, policies on commercialization and privatization. Some finance ministers have taken the view that their ministry has to take responsibility for, or at least a strong interest in, activities of the state across the board, since all such activities have fiscal implications of one sort or another which the finance ministry cannot afford to ignore.[10]

The power of the finance ministry to fulfill these functions is a notion that is hard to define or measure, and varies substantially among countries. Such powers may be vested in formal provisions of the constitution or finance laws regarding the role and responsibilities of the finance minister or ministry, or from the powers assigned informally by the prime minister or president of the country.[11] Powers can also accrue to the finance ministry as a result of its technical mastery or superior knowledge of economic and financial issues, and of the detailed operations and spending programs of other ministries. The implications for the present paper are that the role and responsibilities of the finance ministry is strongly influenced by institutional factors of a formal or informal nature (see Section IID below), as well as by

[10] See, for example, Nigel Lawson. 1992. *The View from No. 10: Memoirs of a Tory Radical*. Lawson was the British Chancellor of the Exchequer (Finance Minister) from 1983 to 1989.

[11] An example is the powers assigned by President Museveni of Uganda to his finance ministry during the turbulent period of political and economic crisis in the 1990s. See F. Kuteesa, E. Tumusiime-Mutebile, A. Whitworth, and T. Williamson. 2010. *Uganda's Economic Reforms: Insider Accounts* (Oxford: Oxford University Press).

economic or political influences of varying kinds. The variations to be observed among countries are substantial and not necessarily stable over time.

A. Policy, Regulatory, and Transactional Functions

Governments are responsible for performing a wide range of fiscal and financial functions, which may be carried out by the finance ministry or other governmental agencies. It is useful to divide these functions into the following broad categories (examples are shown in Table 1):[12]

- First, there are *policy functions* such as setting fiscal policy rules or targets, managing fiscal risks, developing a debt strategy, formulating the annual budget and the medium-term budget framework, and providing advice on alternative tax policy options. Such functions are at the core of a finance ministry's work, and occupy a substantial part of the time of its senior officials and ministers.

- Second, there are *regulatory functions*, which are usually carried out by the finance ministry or an arms'-length agency of the ministry. These functions (sometimes called supervisory functions) fall into three main categories: (i) ensuring that the legal framework for budgeting and public finance is respected and enforced by the line ministries and agencies that are responsible for implementing it; (ii) supervision of banks and other financial institutions (e.g., banking regulation and supervision agencies, the stock exchange, insurance companies and pension funds); and (iii) supervision of specific economic sectors (e.g., electricity, telecommunications, water) to ensure effective competition, prevent the formation of cartels, and protect the interests of consumers. These functions are often shared with, or carried out by, the central bank or independent regulatory bodies.

- Third, there are *transactional (or operational) functions* such as the processing of budgetary payments, the exercise of internal control, the issuing of government securities, and the collection of taxes and other government revenues. Many transactional functions are highly automated, whereas policy functions are not. In most developed countries transactional functions such as treasury operations have been outsourced or devolved either to line ministries or to agencies operating at arm's-length to the finance ministry.

[12] This is not an exhaustive list of central finance functions. In some countries, there are other functions, e.g., the provision of national economic and financial statistics, and the issuance of notes and coins, which are also viewed as a core responsibility of the ministry of finance. External audit, though an important finance function, is not included in the list above because it is not a function that is (normally) carried out independently of the executive branch of government.

- Finally, *some functions combine both a policy and a transactional element*. For example, the government's debt strategy is implemented through operations in the T-bill and bond markets by a debt management department within the finance ministry, or by an arm's-length agency, or in some cases by the central bank acting as the government's agent.

The distinction between these broad categories of finance function draws on an important strand of thinking in the literature on public management, namely that public managers prefer to focus on policy issues and delegate operational work to lower levels of the bureaucracy (Dunleavy 1992). In general, it makes sense to separate policy and transactional functions since specialization tends to improve the efficiency and effectiveness with which those functions are carried out. The process of decentralizing finance functions is further discussed in Section IIB below.

Nevertheless, specialization is not the same as isolation. Efficient decision-making requires that there is adequate coordination and communication between units working on policy functions and the implementation of these policies. For example, in the U.K., after the O'Donnell review[13] in 2004, tax policy was concentrated in the Treasury, while the Inland Revenue and Customs and Excise Departments were merged to form an independent agency. It has been argued by Alt, Preston, and Sibieta (2010) that this reform disconnected policy-making from the real world experience of tax administration, and increased the exposure of policymakers to lobbying from business corporations and other interest groups, issues that were subsequently addressed by the Treasury in a further reorganization. Hence, in countries that have separated responsibility for revenue collection from the analysis of tax policy issues—or have made a similar separation of policy and operational functions in other areas—it is important that policymakers in the finance ministry are able to consult staff in the revenue-collecting agencies about the practical implications of implementing new tax policy proposals.

In addition, many governments have put in place arrangements that prevent conflicts of interest from arising. Such safeguards are particularly important where policy and transactional functions are not separated within an organization. In France, for example, the division responsible for tax policy is integrated in the directorate for tax and accounting, but reports directly to the director-general of the finance ministry. Similarly, in many countries, work on debt management is divided into a front, middle, and back office that are responsible for the various policy and transactional functions[14] with Chinese walls separating each office (Williams, 2013).

[13] H.M. Treasury, *Review of the Revenue Departments*—see http://webarchive.nationalarchives.gov.uk/+/hm-treasury.gov.uk/budget/budget_04/associated_documents/bud_bud04_odonnell_index.cfm.

[14] *Front office*—design and execution of debt transactions; *middle office*—design of the public debt strategy; *back office*—operational and administrative functions, such as payments, accounting and reporting.

Table 1. Taxonomy of Central Finance Functions

Policy Functions	Regulatory Functions	Transactional Functions
1. Fiscal Policy		
Fiscal policy analysis and formulation, fiscal rules	Monitoring compliance with rules, spending ceilings and performance targets	Macro-fiscal forecasting
Debt management strategy	Regulation of debt markets	Debt issuance and registry functions
Policy on taxation and other government revenues	Enforcement of tax laws	Collection of taxes, customs / excise duties, and other revenues
Policy on and management of fiscal risks, guarantees, etc.	Monitoring implementation of risk management policies	Issuance of guarantees
2. Budget Management		
Formulation of the medium-term budget framework / annual budget	Coordination of budget cycle	Estimation of budget costings
Public investment strategy and planning, policies and guidelines	Monitoring policy implementation, gateway reviews	Execution of policies and guidelines, including investment appraisal
Budget execution – policies, guidelines, instructions	Monitoring/oversight of budget execution, compliance with regulations	Execution of budget by spending agencies
Cash forecasting/liquidity management /TSA	Monitoring through Cash Management Committee	TSA managed by central bank under government supervision
Policies on public procurement and PPPs	Monitoring of policy implementation, gateway reviews	Execution of procurement contracts and PPPs
3. Accounting and Reporting Policies, Internal Control and Audit		
Development of accounting policies, rules and guidelines	Coordination/monitoring compliance with accounting standards	Compilation of financial reports
Application of international standards (IPSAS, GFS)	Provision of internationally comparable fiscal data and statistics	Standardized recording of transactions, assets, and liabilities of public sector
Policies on internal control and internal audit	Monitoring compliance with standards	Execution of internal controls and internal audit
4. Other Central Finance Functions		
Policies on intergovernmental fiscal relations	Monitoring compliance with local government budget / finance policies and laws	Execution of local government budget / finance policies and laws
Management of government assets and liabilities	Monitoring implementation of management framework	Provision of data by spending agencies, etc.
Policies on the financial management of SOEs	Monitoring implementation of policy framework	Provision of data by line ministries and SOEs
Relations with international finance organizations	Monitoring compliance with international obligations and standards	Processing of international financial transactions

Source. Adapted from Allen and Krause (2013).

The ministry of finance's role in relation to the above-mentioned functions varies widely from country to country. Table 2 provides a comparison of how responsibility for selected core finance functions (namely, macroeconomic forecasting, long-term fiscal projections, tax policy, budget formulation, accounting policies, and the regulation of banks and other financial institutions) is allocated within the governments of: (i) the 34 OECD countries; and (ii) a sample of 25 emerging markets and developing countries. The table shows four possible forms of allocation, namely that the function is the sole or primary responsibility of: (i) the finance ministry; (ii) another ministry of the government (for example, the ministry responsible for economic affairs or development planning); (iii) an independent agency, regulatory body or fiscal council; or (iv) that the responsibility is shared among two or more ministries or agencies.

Table 2. Allocation of Responsibilities for Selected Finance Functions (percent)

Finance Function	Ministry of Finance	Other Ministry	Independent Agency	Shared Responsibility	Total
A. OECD Countries (34)					
Macroeconomic forecasting	47	38	11	4	100
Long-term fiscal projections	55	33	12	-	100
Tax policy	82	12	6	-	100
Formulation of the budget	91	9	-	-	100
Public investment planning	50	50	-	-	100
Standards and policies on accounting	47	-	41	12	100
Regulation of financial institutions	15	6	56	23	100
B. Selected Developing Countries (25) 1/					
Macroeconomic forecasting	60	24	16	-	100
Tax policy	48	8	44	-	100
Formulation of the budget	48	8	-	44	100
Public investment planning	24	60	16	-	100
Accounting policies	84	8	8	-	100
Regulation of financial institutions	-	-	45	55	100

Source. Authors' calculations and OECD (2014).
1/ Benin, Brazil, Cambodia, Colombia, China, Cyprus, Egypt, Ghana, Indonesia, Jordan, Kenya, Kyrgyz Republic, Malaysia, Mongolia, Moldova, Mozambique, Nicaragua, Panama, Peru, Philippines, Rwanda, South Africa, Togo, Yemen, and Zambia.

The following conclusions emerge from this analysis.

In the case of advanced countries, there are surprisingly mixed results: the finance ministry is the dominant player for functions such as budget preparation and tax policy, but is much less dominant in other areas, for example the regulation of financial institutions and accounting policies (in which many advanced countries have established an independent standard-setting body). Another trend, especially in Europe, has been the establishment of independent fiscal councils which, in some cases, has removed or diluted the role of the finance ministry in the area of macroeconomic and fiscal forecasting, and the preparation of long-term fiscal projections. According to a recent survey (OECD, 2014), 14 OECD countries had established such a council by 2012. The same survey shows that 48 percent of OECD countries had established a dedicated public-private partnership (PPP) unit but in nearly half of these countries, the unit is located in a ministry other than the finance ministry.

It follows that there is not an exact correspondence between the core finance functions of government and the organizational structure of the finance ministry. In some countries (e.g., Australia, Brazil, Canada, Ireland, France, the Philippines, Turkey, and the United States) central finance functions have been divided among two or three ministries,[15] often for political reasons—to reduce the perceived power of the finance minister, or in coalition governments to share power among the political parties (Allen and Kohnert, 2012).[16] In Finland, by contrast, the reverse situation applies: since the mid-1990s the Minister of Finance has also assumed the role of Deputy Prime Minister and has a “super-minister” status (Tiihonen, 2012). The finance ministry in some countries is responsible for non-finance issues such as civil service personnel management and local government administration, as in Finland.[17] In some countries, the collection and dissemination of national statistics is under the authority of the finance ministry, though the international trend is for such agencies to be made independent of the executive branch.[18]

[15] For example, in Australia, the Treasury is responsible for economic and fiscal policy and budget preparation, and the Department of Finance is responsible for budget execution and control. In Turkey, the Ministry of Finance is responsible for budget preparation, tax policy and revenue administration, whereas the Treasury is responsible for cash and debt management, and oversight of state enterprises. In addition, the Ministry of Development is responsible for macro-fiscal forecasting and the capital budget. Although the Treasury is not a Ministry, it is under the Prime Minister’s Office and reports to the Deputy Prime Minister for Economic Affairs.

[16] Some commentators have argued recently that the British Treasury has accumulated too much power and should be split along similar lines, with responsibility for budgeting being transferred to the Prime Minister’s Office, and microeconomic and financial policy transferred to a new Department for Growth. See Giles Wilkes and Stian Westlake, “The End of the Treasury,” *Nesta: Provocation 15*, September 2014.

[17] The finance ministry has two ministers: the Minister of Finance (and Deputy Prime Minister) and the Minister of Public Administration and Local Government (Tiihonen, 2012). In addition, since 2011, the Minister of Economic Affairs has assumed responsibility for most issues related to financial markets and the Minister of European Affairs and Foreign Trade has handled issues related to the Budget Council of the EU.

[18] In the EU, for example, EU Regulation 223/2009 requires member states to establish independent statistical agencies.

In the case of developing countries, Table 2 also displays a wide dispersion of results but it should be noted that in some of these countries the functions analyzed have only been developed in a rudimentary way. Given the shortage of capacity in many finance ministries, the analysis of tax policy issues, for example, is often carried out (*de facto* if not *de jure*) by the department or agency responsible for revenue collection. Similarly, in many developing countries, the financial sector is under-developed and its oversight and supervision managed largely through the central bank. In addition, the ministry of planning (or equivalent) frequently assumes responsibility for the preparation of the capital investment budget, with the result that in nearly one-half of the countries surveyed, overall responsibility for budget formulation is shared with the finance ministry. Further, there are many countries where macroeconomic forecasts are prepared both by a central agency (usually the finance ministry) and the central bank, often working cooperatively.[19]

It should also be noted that there are differences in the organization of core finance functions between Anglophone and Francophone countries, as well as countries with other models of governance,[20] though such differences may be lessening over time (Chevauchez, 2014). These differences have implications for the organization of the finance ministry. For example, in many Francophone countries, elements of the budget process are centrally controlled by the finance ministry,[21] and responsibility for accounting and cash management functions, as well as tax policy and revenue administration, are also centralized within the ministry of finance. In France, however, since the enactment of the new organic budget law in 2001[22] the organization of the finance ministry has changed substantially; some powers of budget execution have been devolved to line ministries, and arms-length structures created within the finance ministry. Some of these changes resemble those in countries such as Australia, Canada, New Zealand, Sweden, and the U.K., albeit with a Gallic twist. In addition, the relationship between the finance ministry, the legislature and the supreme audit institution differs substantially among countries with different models of public administration. Germany is one of the few Continental European countries whose organizational structure has largely retained its traditional form over the last 30 years (Allen and Kohnert, 2012). This classical organization may have helped Germany withstand the

[19] The central bank often focuses on preparing macro forecasts that are related to its core mandate, e.g., projections of inflation and the balance of payments.

[20] For example, the Nordic (or Scandinavian), Spanish, and Portuguese models.

[21] Mainly in French-speaking Africa, a heritage of the French colonial state (where the Governor was solely responsible for controlling and executing the budget). In France itself, however, the devolution of powers for authorizing payments has been in place for over 75 years. Nevertheless, financial controllers from the finance ministry are placed in line ministries to execute ex ante and ex post controls of their spending decisions.

[22] Loi organique relative aux lois de finances (LOLF).

impact of the global financial crisis better than countries with a more fragmented and diversified structure.

Finally, to further complicate the picture, it should be emphasized that the central bank used to have an important fiscal role, and still does in many countries. As a fiscal agent for the government, central banks have traditionally run bond and treasury bills auctions, but also influenced the government financing policies, and even directly financed the government's cash requirements.[23] They have also provided a range of services to the government such as managing the government's bank accounts, processing payments, or supplying a registry and records-keeping service for managing public debt. Since the 1980s, good practice calls for a stricter separation between fiscal and monetary policies, thus limiting the fiscal role of central banks in many countries to operations such as providing banking services to the government. But central banks still have a cashier function in former Belgium colonies (Burundi, Democratic Republic of Congo), control and collect tax revenue, as well as make budget payments (Haïti), and play an important role in debt management for some countries in South America (for example, Colombia and Uruguay). In Yemen, most treasury functions are provided by the Central Bank of Yemen. In addition, the central bank still performs quasi-fiscal activities in some countries to support the government's fiscal policy goals, such as providing interest rate subsidies to state enterprises and the private sector.

To summarize, what is important to stress is that the functions and organizational structure of a finance ministry are not static and develop over time in response to changes in the economic, financial, and political environment, as well as the evolving characteristics of the finance functions themselves.[24] Given the importance of local context, it is not surprising that no simple pattern can be discerned among countries in the allocation of roles and responsibilities for core fiscal functions.

[23] See M. Pessoa, and M. Williams, 2012. "Government Cash Management: Relationship between the Treasury and the Central Bank." *IMF Technical Notes and Manuals*, TNM/12/02 (Washington DC: International Monetary Fund).

[24] For a history of developments in Germany and the U.K., see P. Krause, 2013. "The Development of Executive Spending Control: An Evolutionary Account Based on the History of Britain and Germany," *ODI Working Paper*.

B. Centralization vs. Devolution of Functions

Two major trends have emerged in the last 30 years in the role and functions of finance ministries. First, in many countries there has been a progressive move from the centralization of functions within the finance ministry to a broad-based devolution of transactional or operational functions to line ministries and agencies.[25] Second, the role of finance ministries has shifted strongly in the direction of greater emphasis on policy-making functions. These trends are interrelated, and have had an impact on the staffing of finance ministries, with less numerous and more specialized staff being employed. To some extent the trends reflect the influence of the New Public Management (NPM) theories of the 1990s (Hood, 1991; Dunleavy and Hood, 1994), but these theories are being reconsidered in light of new fiscal challenges arising from the recent economic and financial crisis, including the need to better monitor fiscal risks and consolidate public sector financial operations.[26]

The transfer of responsibility for transactional functions from finance ministries to line ministries reflects an important change of emphasis in budgetary practices from controlling inputs to managing systems, outputs, and outcomes. Budget entities are allowed greater flexibility in deciding the resource mix they want to deploy in producing their outputs. This arrangement begins to resemble the "network" organization discussed below, in which mechanisms for exchanging reliable and timely financial information among the various stakeholders in the budget process are strengthened. The development of such networks assumes that the finance ministry's main role becomes one of regulating financial systems and information, and monitoring the performance of the agencies responsible for delivering public services.

[25] This paper does not discuss the impact of decentralization of revenue and spending to sub-national governments, as this trend appears to have a relatively small impact on finance ministries' role and organization. In terms of revenue collection, financial decentralization was broadly stable during the period 1998 to 2008, except for some countries in Eastern Europe that underwent a transition to a market economy (see C. Dziobek, C. Gutierrez Mangas, and P. Kuffa, 2010. *Measuring Fiscal Decentralization – Exploring the IMF's databases*, IMF Working Paper, 11/126). Evidence suggests that spending decentralization has improved the fiscal position of the general government, through resource rationing by the central government. Nevertheless, finance ministries have to organize themselves to monitor fiscal risks arising from the activities of sub-national governments, and to provide advice on issues such as expenditure assignments, fiscal equalization, and transfers from the central government budget (see J. Escolano, L. Eyraud, M. Moreno Badia, J. Sarnes, and A. Tuladhar, 2012, *Fiscal Performance, Institutional Design and Decentralization in European Countries*, IMF Working Paper, 12/45).

[26] According to Hood (1991), the major NPM doctrines include: cutting public sector costs and increasing labor productivity and the efficiency of resource use; introducing private sector management practices to increase flexibility and decision-making; introducing competition in the public sector through term contracts and tendering; shifting controls from inputs to outputs, supported by explicit standards and performance measures; stressing results and accountability rather than procedures; and empowering managers to strengthen accountability for results.

In addition, many countries have established autonomous or semi-autonomous agencies to which some of the (mainly transactional) functions and powers of finance ministries are transferred. These functions include macro-fiscal forecasting, debt management, revenue collection and public procurement, together with the direct delivery of public services such as payment of social welfare benefits. The establishment of agencies has been a particularly strong trend since the 1970s in countries such as Australia, Canada, New Zealand, and the United Kingdom, as well as the Nordic region.[27] Examples include the executive (or "Next Steps") agencies created in the U.K. and the special operating agencies (SOAs) in Canada (Wanna, Jensen, and de Vries, 2003; Halligan, 2013). In Finland, similarly, many administrative units were under the control of the finance ministry in 1980 but 30 years later had been converted into companies or state enterprises and then privatized (Tiihonen, 2012).

A similar trend can be observed with the devolution of regulatory responsibilities by the finance ministry to independent agencies in charge of overseeing specific sectors. Starting in the early 1970s, governments have progressively withdrawn from regulating certain sectors, to avoid being considered as "both judge and jury."[28] Instead, they have put in place independent agencies for regulating financial markets, energy, telecommunications, and public transportation. Some governments have also created specific agencies with sanctioning powers, for enforcing European competition policies, for example. In the EU, a new institutional framework for regulating banks and non-bank financial institutions was created after the global financial crisis,[29] with member states required to establish national supervisory bodies to implement the new legislation.

The potential efficiency gains and other microeconomic benefits of establishing agencies (closeness to users of public services, responsiveness of decision-making, etc.) can be contrasted with potentially negative fiscal implications. There is a tension between transferring more powers to arms-length agencies, and the need to strengthen central control of spending and other fiscal aggregates, and to consolidate the collection of fiscal data. In countries that face challenges in terms of bringing their fiscal policies and management of

[27] There is a large volume of literature that compares and contrasts the various forms and characteristics of agency that have been established in different countries. The impact and overall effectiveness of these various models remains open to debate. See, for example, Pollitt, Talbot, Caulfield, and Smullen (2004).

[28] The creation of the US Securities and Exchange Commission in 1934 is a precursor of this movement.

[29] The European System of Financial Supervision (ESFS). Under this umbrella organization are three separate European regulatory authorities covering, respectively, banks (EBA), insurance and pension funds (EIOPA), and securities and investment funds (ESA).

fiscal risks under greater control, the fragmentation of central finance functions that result from the creation of agencies and other forms of fiscal devolution[30] can be dangerous. The global financial crisis may have weakened governments' confidence in the robustness of their budget institutions, and in some countries, steps have been taken to recentralize control in the hands of the finance ministry, partially reversing a trend that started in the 1980s.[31] A recent survey of 33 OECD countries (OECD, 2014), for example, indicates a sharpening of the central controls exercised by finance ministries between 2007 and 2012 in relation, for example, to the approval of in-year reallocations of budget appropriations by line ministries and the end-year carryover of unspent appropriations.

At the same time, many governments have renewed their commitment to sustainable public finances. Public interest in the impact and effectiveness of fiscal policy decisions taken by the executive branch has also grown. Reflecting these trends, public agencies known as "fiscal councils" have been established in many countries, especially in the EU.[32] Fiscal councils are independent public institutions aimed at promoting sustainable public finances through various functions, including public assessments of fiscal plans and performance, and the evaluation (and sometimes the production) of macroeconomic and budgetary forecasts. However, while many fiscal councils have the discretion to review the performance of fiscal policy, the setting of fiscal policy goals and targets and the execution of fiscal policy remain core functions of the executive branch. For example, the U.K.'s Office for Budget Responsibility (OBR) has the responsibility to make projections of macroeconomic and fiscal indicators, but the finance ministry (H.M. Treasury) has retained a unit working on different macro-fiscal policy scenarios.

A case study of devolution: treasury functions

An interesting example of how ministries of finance have taken decisions on devolution in respect of so-called treasury functions in member states of the European Union (EU) is provided in Box 1. These decisions balance the need for the finance ministry to retain control of core policy functions, against the need for line ministries to exercise management control of their programs and resources, and to be held accountable for these resources. Application

---

[30] The decentralization of functions and budgets from the central government to local authorities is another strong trend in Africa and other regions.

[31] In the U.K., for example, proposals have been announced that would establish a second permanent secretary position in H.M. Treasury responsible for overseeing financial management across all government departments; and creating a new agency—also reporting to the Treasury—that would be responsible for conducting internal audits on behalf of the line ministries (H.M. Treasury, 2013). In Estonia, some accounting functions previously carried out by line ministries have been centralized in the State Support Services Agency (SSSA), in light of concerns that the ministries did not have sufficient capacity to undertake the functions efficiently.

[32] In the EU, each member state is required by law to establish a fiscal council. For a useful review of the work of fiscal councils, see Hemming (2013).

of this general principle, however, varies widely from country to country. Several different sub-regional models may be distinguished within the EU, as well as variations within these sub-regions themselves. The number of staff employed by these national treasuries also differs widely, from less than 20 in some small countries to many thousands in others.

Box 1. A Comparison of Treasury Systems across the EU

The Treasury comprises an important sub-set of public finance functions that includes the preparation of accounts ("book-keeping"), the setting of accounting standards and policies, the application of internal controls and the processing of payments on behalf of the government, the forecasting and management of the government's cash requirement, the preparation of annual financial statements, oversight of the government's bank accounts, and the management of public assets, liabilities and guarantees.

There is no single model of "the Treasury" that applies universally across the EU, rather a wide diversity of practices and organizational structures. These practices and structures reflect factors including the country's size, together with its administrative culture and institutional arrangements. The design of a country's Treasury is determined by the range of functions it carries out, the control framework, the degree of centralization and decentralization, and whether it is organized as a directorate or department of the finance ministry or as an arms'-length agency with operational independence from the finance ministry but often subject to its oversight and supervision. The trend in much of Europe over the past twenty-thirty years has been: (i) to decentralize most operational functions of the Treasury (e.g., internal control and payment processing); and (ii) to establish autonomous agencies to manage the remaining centralized functions.

Within the EU, several sub-regional variations of the Treasury system can be distinguished, in particular:

The *British/Irish/Scandinavian system*—in which payment and control functions are decentralized to line ministries but where central policy and oversight functions are located either in the finance ministry or an arms'-length agency (e.g., the Treasury Management Agency, NTMA, in Ireland).

The *Francophone system*—in which payment and control functions were heavily centralized in the finance ministry, whose controls extend down even into local governments and state enterprises. Many processing functions have been transferred to line ministries under the modernizing LOLF of 2001, and a specialized agency set up to pay public service salaries.

The *Belgian system*—a variant of the French model in which the central bank plays and important role, especially for payments.

The *Spanish /Portuguese system*—which is also similar to the Francophone model but less centralized; in the case of Spain, an autonomous treasury agency is responsible for the processing of payments and managing the treasury single account (TSA).

The *former Yugoslav system*—which retains the characteristic of a powerful, centralized Treasury agency, largely independent of the finance ministry, but also includes more decentralized versions of this model (e.g., Bulgaria).

Within each of these broad categories, there are substantial country-by-country variations. The Swedish National Financial Management Authority (ESV), for example, an independent agency, in addition to setting accounting policies and rules and producing the government's annual financial statements, also compiles ratings of the financial management performance of spending agencies for publication, and prepares forecasts of government spending. In Cyprus, the Accountant General's Department is also responsible for policy on public procurement, an issue that in other EU countries is usually managed by the finance ministry or an arm's-length procurement agency. What is important is not so much the specific organizational design of the Treasury but to ensure that all of its core functions are: (i) assigned to some specific directorate or agency to manage on behalf of the government, and (ii) are carried our efficiently and effectively.

It is also interesting to map the degree of devolution of treasury functions against the organizational structure of the finance ministry. In Table 3, four levels of decentralization are shown: a *centralized model* where all treasury functions are retained by the finance ministry; a *deconcentrated model* in which some functions are devolved to line ministries but operated by officials of the finance ministry posted to the line ministry (as in France, for example, through the financial controllers); *a decentralized model* in which controls are fully delegated to the line ministries; and a *hybrid model* representing a mixture of deconcentrated and decentralized characteristics. Various organizational arrangements for the central ministry may be combined with these models, as illustrated in the table. In some countries, treasury functions are assigned to a department or directorate within the ministry of finance, and in other countries to a separate ministry. In a few countries with highly decentralized arrangements, virtually all treasury functions have been devolved out of the central ministry, leaving only a residual monitoring role for the budget department of the finance ministry.

Which of the various models described in the table is the most efficient in terms of delivering good fiscal outcomes? There is no simple answer to this question, which depends both on policy trade-offs and country context. The centralized and deconcentrated models are likely to be effective in achieving overall financial control by the ministry of finance, and consolidating fiscal information. The deconcentrated model, however, tends to be heavy on staff resources. Decentralized models are the most efficient in terms of promoting efficient business processes and accountability at the spending agency level, but may weaken control by the finance ministry and increase a country's exposure to fiscal risk.

Table 3. Treasury Models and Organizational Structures−Country Examples

Treasury Models	**Organizational Structure of the Ministry of Finance**			
	Separate Ministry	Department or Directorate of Finance Ministry	Division of Budget Department	Autonomous Agency under Finance Ministry
Centralized	China, Philippines, Turkey	Egypt, Iceland, Kenya, Malaysia,		
Deconcentrated		France, Indonesia, India, Iran, Russia, Serbia		Cyprus
Decentralized	Australia	South Africa	New Zealand, Ireland, U.K.	Finland, Sweden
Hybrid	Brazil	Belgium		Estonia, Spain

C. Organizational Structure of Ministries of Finance

Important forms of organizational structure include a hierarchical bureaucracy, a matrix organization, a structure comprising project units or teams, an organic structure built around a network of linked organizations, or a mixture of these forms. A useful summary of the literature on organizational structures is provided by Mintzberg (1979). Traditionally, finance ministries have a bureaucratic structure, in the sense defined in Figure 1. In such a structure, work is divided among well-defined and specialized roles, and a hierarchical structure of departments, divisions and units is established. Separate cadres of managers, administrators, specialists and support staff are defined. Variations of the bureaucratic structure may be found across countries, with varying degrees of flexibility and cross-cutting arrangements to enhance vertical and horizontal cooperation within the organization. These variations (examples of which can be found in many advanced countries) are illustrated in Figure 1, models 2 and 3. Allen (2013) provides an example from the U.K. of how the organization of the finance ministry (H.M. Treasury) has evolved from a traditional bureaucracy in the 1980s to a much more organic and flexible structure. As in other countries, for example, the Treasury has introduced a senior management board (sometimes including non-executive directors from outside government) to coordinate the ministry's overall strategy, set work priorities, and manage external relations.

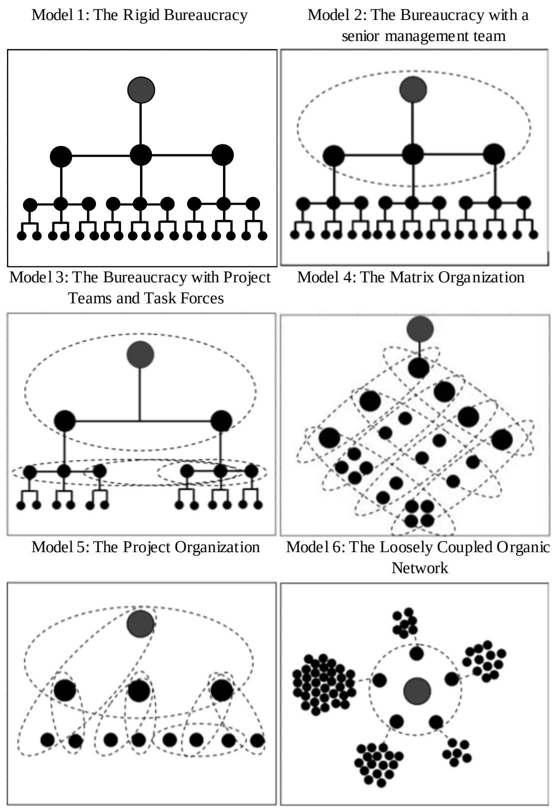
Other organizational models seem less relevant for finance ministries. They include: (i) a matrix organization, which is defined as a set of departments or units superimposed horizontally across a traditional hierarchically-organized structure; (ii) a project organization, in which activities are broken down into projects that are carried out by individual teams;[33] and (iii) a network organization, in which the "parent" entity creates "businesses within a business" which operate independently or at arm's length, but are still owned by the parent entity. Some aspects of a network organization may be added to the traditional bureaucratic structure of a finance ministry—for example, arms'-length agencies that operate on a semi-autonomous basis. In addition, finance ministries sometimes create stand-alone departments or units to manage specific areas of government business on a time-limited basis, as in the "project organization." An example from France was the temporary department set up in the finance ministry to support implementation of the new organic budget law in the early 2000s. In addition, project management units based in the finance ministry are used extensively in emerging and developing countries to pursue their PFM reform agenda.

Finally, formal linkages and communications, both horizontal and vertical, among the various divisions and units comprising the organization have been strengthened in many countries, using IT systems as a facilitator together with the creation of cross-cutting committees and task forces. Initiatives such as these can be seen as an attempt to break down the "silo" culture that is present in many finance ministries by working toward achieving

[33] Such structures are characteristic of consultancy businesses. Overall management structures are light, and the organization is characterized by relatively few formal rules or standardized routines.

common goals, communicating these goals across the organization, and encouraging divisions and units to share information and knowledge.

Figure 1. Alternative Models of an Organizational Structure



Source: Adapted from Senior and Fleming (2006).

D. Formal and Informal Rules of Behavior within an Organization

Organizations comprise both "formal" aspects such as laws, regulations, operational manuals and IT systems, and the "informal" rules, procedures and incentives (or internal organizational culture) that determine the behavior of the politicians, staff and other stakeholders who make up the organization. This important distinction originates from the pioneering work of North and Williamson, linked to the development of the New Institutional Economics (see, for example, North, 1990; Williamson, 1975). Andrews (2013) has argued that informal rules are the most important determinant of the overall behavior and performance of an organization; the formal rules thus representing the tip of an iceberg in French and Bell's (1999) striking metaphor (see also Schiavo-Campo, 1999 who draws on the image of the sinking Titanic). Practitioners, however, tend to focus primarily on the formal rules because, by definition, they are more visible and quantifiable. But the efficiency of an organization depends on both kinds of rule.

Formal rules and procedures that are highly rigid can reduce the efficiency of a finance ministry's operations. For example, inflexible or highly centralized human resource management and remuneration systems are familiar in many countries.[34] A central agency (such as a public service commission or civil service ministry) determines the overall staffing complement of each ministry and government agency, the number of employees in each professional grade or cadre, each ministry's organizational structure, the hiring, firing, and promotion of individual staff members, and the salary and other benefits of staff. In such circumstances, individual ministries and agencies may have limited flexibility to determine their own organizational structure and staffing needs. When facing competition in the jobs market, it may be difficult for the finance ministry to recruit and retain staff with requisite professional skills in critically important areas such as economics, accountancy, law and finance by varying the terms and conditions of employment.

The informal or "soft" aspects of organizational behavior, on the other hand, can also affect the efficiency of services delivered by a finance ministry, either in a positive or negative direction. Thus, efficiency may increase if effective channels of communication and coordination are established linking together departments or units that previously were isolated. On the other hand, inefficiencies may be created if the recruitment system is subject to patronage; if there is an absence of effective leadership within the organization; if elite or vested interests that capture revenue mobilization and resource allocation mechanisms are present; or if there are poor communications both vertically and horizontally that prevent the efficient transmission of information among managers and staff. Such informal rules tend to be strongly associated with the prevailing national culture. Heclo and Wildavsky (1974), for example, provide a classic account of how these relationships (described by the authors in anthropological terms—the "village culture") have developed and work in the case of the British Treasury, particularly in relation to the control of public spending.

E. Staffing of Finance Ministries

The number of staff employed by the finance ministry is influenced by many other factors including the mandate and role of the ministry, economic performance, historic and cultural influences, as well as the size of the country. Political structure is also an important factor: for example, a federal country would be expected to have a higher degree of regional budgetary autonomy and, therefore, relatively less staff in the federal finance ministry compared to a country that is politically centralized. Although the data set out in Table 4 and Box 2, Figures 2–4 suggests there is no simple relationship between the size of a finance ministry and its capability or performance,[35] it indicates that in many advanced and middle-

[34] For example, in Continental Europe, Latin America, and many developing countries.

[35] It would be informative to carry out a similar analysis of the staffing and performance of specific finance functions such as the macro-fiscal forecasting, budget preparation and execution, and debt management. However, data for a sufficient number of countries were not available to enable this work to be done.

income countries, for example, the move to more policy-oriented functions has progressively reduced the overall staffing level while increasing the number of specialized staff, in particular economists, lawyers, and accountants. In the case of core finance policy functions, little comparative data are available but a provisional analysis of EU member states indicates a broad range of staff numbers (Table 5). There also appears to be a correlation between the number of employees in these functions and the size of a country and its civil service.

Table 4. Number of Staff Employed by Finance Ministries in Selected Countries

Size of Finance Ministry	Advanced Countries	Emerging Markets and Low-Income Countries
Less than 200	Estonia, Iceland	Mongolia, Rwanda, Swaziland
201-500	Cyprus, Denmark, Finland, Sweden, Ireland, Latvia, New Zealand, Norway, Slovenia	Chile, Maldives, Moldova, Nicaragua, Solomon Islands
501-1,000	Australia,* Canada	Ghana, Jamaica, Mozambique, Uganda
1,001-2,000	U.K., Germany, Japan	Cambodia, Kenya, Niger, South Africa, Tajikistan
2,001-5,000	U.S.A**	Chad, Mauritania, Mexico, Philippines, Poland, Togo
Greater than 5,000	France,**** Spain	Brazil, India, Indonesia, Turkey,*** Yemen

Source. FAD staff. Figures exclude revenue collection and customs authorities.
* Comprising the Treasury and Department of Finance
**Comprising the Treasury Department and the Office of Management and Budget.
***Comprising three entities—the Ministry of Finance, the Ministry of Development, and the Treasury.
**** Comprising the Accounting and Tax General Directorate, and the Customs General Directorate.

Technological developments, especially computerization, reduce or eliminate the need for manual procedures to carry out bulk transactions such as the processing of payments or payroll and the application of internal controls. As a consequence, the number of staff required to manage these transactions falls substantially. Computerization has also had a major effect on the staffing of the finance ministry by replacing the need for large, centralized transactional functions.[36] Many finance ministries in less developed countries have not fully reaped the benefit of IT and software management, and the ratio of staff engaged in policymaking functions is typically smaller.[37]

Many Continental European and Francophone countries employ significantly larger numbers of staff because PFM functions are both more centralized within the finance ministry and the work has a strong legal and regulatory form. A general conclusion is also that in most countries ministries of finance are large or small depending on whether the overall number of public servants is large or small. For example, the public service in many Middle Eastern and Central Asian countries has become bloated (partly to provide jobs as a surrogate for social insurance), and finance ministries are correspondingly large (Box 2).

Table 5. Estimated Staff Numbers for Selected Functions, EU Member States

Function	Small Countries	Medium Countries	Large Countries
Macro-fiscal analysis and forecasting	3-15	20-50	c. 100
Tax policy	3-20	30-80	150-200
Budget preparation	7-20	30-80	c. 200

Source: FAD staff.

[36] In France, the staffing of the General Accounting and Tax Directorate was reduced annually by 0.9 percent from 2001 to 2005, and by 1.8 percent from 2006 to 2010, as a result of natural attrition.

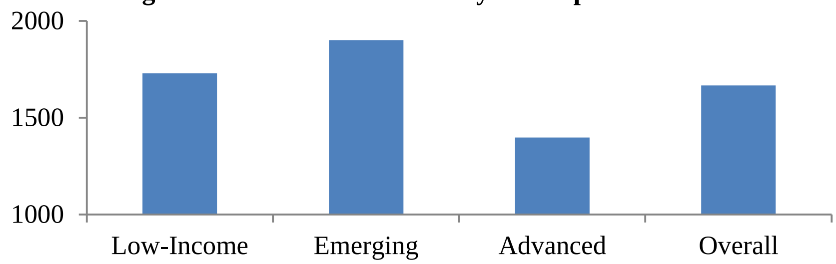
[37] In France, for example, this ratio is about 50 percent, in the U.K. about 70 percent, but in Kenya only 12 percent.

Box 2. Comparative Size of Central Finance Agencies by Income and Region

A database was compiled including the number of employees of the central finance agency (CFA) in 43 countries, which was used as a proxy for the size of finance ministries. The functions of collecting taxes and customs duties were excluded. The size of finance ministries varied widely. The average size of the finance ministry was between 1,600 and 1,700 employees.

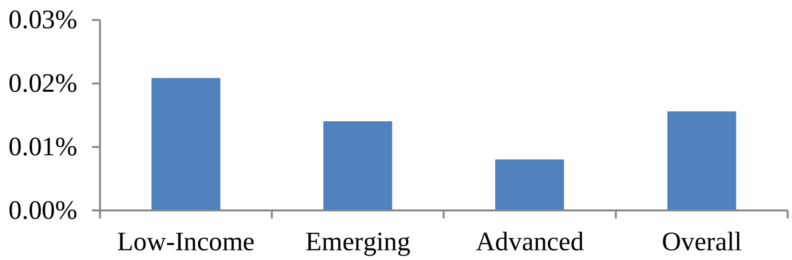
There is some evidence that the size of finance ministries tends to expand as countries move from low-income to emerging status, then decreases as countries achieve advanced income status. See Figure 2, which shows the size of finance ministry by different income groups.

Figure 2. CFA Staff Numbers by Development Status



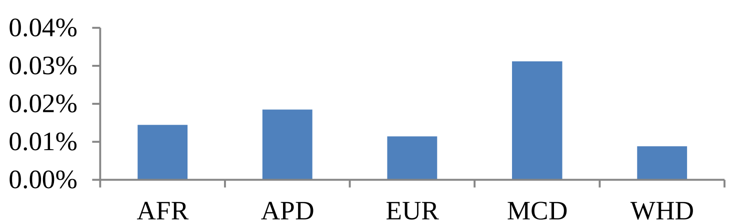
To account for population, the size of each country's finance ministry was also calculated as a percentage of population. Figure 3 shows that the size of the ministries relative to population decreases as a country achieves higher income status.

Figure 3. Size of CFA by Development Status
(Percent of Population)



Regional differences also emerge. Figure 4 shows that on average, Middle Eastern and Central Asian countries have larger finance ministries than African and Asian countries. Countries in Europe and the Western Hemisphere (North America, Latin America, etc.) have the smallest as a percent of population.

Figure 4. Size of CFA by Region
(Percent of Population)



Source: Database described in World Bank (2013), government websites, and FAD TA reports.

III. EMERGING TRENDS OF FINANCE MINISTRIES' FUNCTIONS AND ORGANIZATION

The institutional and organizational characteristics of finance ministries described in Section II are not static, and are strongly influenced by their political, socio-economic, and technical environment. Any significant changes in these "environments" can act as a trigger for organizational change. In this section, we discuss how these changes can take place and what constitute the important drivers of organizational change.

A. Traditional vs. Emerging Models of Finance Ministries

Box 3 sets out two models (or states) of the organization of a finance ministry: the "traditional" model and the "emerging" model. Krause has described a similar approach to the macro and micro control of public spending.[38] These two models or states represent opposite ends of a spectrum, and most countries occupy a position somewhere in the middle ground. The important point to emphasize is that the direction of change is almost invariably from left to right in the diagram, and only rarely in the opposite direction. It is also important to note that the process of transition from one state to another is not linear and may be complicated by policy trade-offs: the transparency of fiscal reporting, for example, may be diminished at the same time as controls on spending are decentralized.

The traditional model of a finance ministry is still found in many developing countries, and some advanced economies. The evolution from the traditional model to the emerging model can take many years. A large literature has developed describing the characteristics of the two models, and how the change between one model and the other can be managed (see, for example, Dunphy, and Stace, 1983; Kanter, Stein, and Jick, 1992; and By, 2005).

[38] P. Krause, 2009, "A Leaner, Meaner Guardian? A Qualitative Comparative Analysis of Executive Control over Public Spending." *GDI Discussion Paper* 22/2009; and P. Krause, 2009, "Patterns of Executive Control over Public Spending." *Paper presented at the "Emerging Research in Political Economy and Public Policy" Conference*, London School of Economics.

Box 3. Emerging Role and Culture of Finance Ministries

Traditional Model	Emerging Model
Segmentalist culture Hierarchical, organizational silos	**Integrative culture** Horizontal coordination mechanisms, devolution of decision making
Closed, introspective (budget secrecy) Low accountability and transparency	**Open, communicative and consultative** More accountability and transparency
Inward-looking	**Outward-looking, inter-ministerial**
Centralized control environment Direct control of expenditure, rules based organization	**Decentralized control environment** Monitoring of fiscal developments and risks Risk-based and performance oriented control systems
Narrow strategic perspective Primary focus on central government Short-term perspective to policymaking	**Broad strategic perspective** Holistic view of public finances Medium-term perspective to policymaking
Process oriented Centralization of functions within the finance ministry	**Policy oriented** Many tasks devolved to line ministries and spending agencies
Multiple and non-integrated financial information systems Each function/agency has its own system, with limited interfaces	**Integrated financial information system (IFMIS)** Coverage of core financial functions and agencies, interfaced with other noncore IT systems (e.g., payroll management, procurement)

The main differences between the traditional and emerging models may be summarized as follows.

- First, traditional structures tend to be "segmentalist," namely that the organizational culture is characterized by the segregation or compartmentalization of functions and weak horizontal and vertical coordination (Kanter, 1983). Finance ministries with a segmentalist culture generally have a short-term perspective in their approach to strategic development and business planning. Managers tend to be cautious, resistant to change and risk averse, demonstrating "inertia without accountability" (Peterson, 2015).[39] In contrast, finance ministries with an "integrative" culture tend to encourage

[39] According to Landau "the modern bureaucracy devotes inordinate amounts of energy to the construction of barriers to review and account. And we can often observe that it masks itself with symbols of knowledge when no such knowledge in fact exists." See M. Landau, 1973 "On the Concept of a Self-Correcting Organization." *Public Administration Review*, Vol. 33, No. 6. Quoted in Peterson (2015), page 291.

cooperation among organizational units and staff, and have flexible business processes that strive for solutions to problems rather than emphasizing the importance of adherence to formal rules and procedures. Such ministries also give importance to improving the efficiency and effectiveness with which services are delivered, establishing frameworks for monitoring and evaluating the impact of policies, and developing strategies for managing and mitigating risks.

- Second, finance ministries designed according to the traditional model tend to be inward-looking, secretive, and display a narrow tactical perspective and short-term time horizon. Many traditional finance ministries are large transactions-based organizations with a narrow strategic perspective that focus mainly on the operations of the central government, taking little account of the activities of local governments and public enterprises, and of the fiscal risks generated by off-budget spending, contingent liabilities, and quasi-fiscal activities. In contrast, the emerging model for finance ministries tends to be more open and communicative, smaller in size, with a focus on policy functions with a wider public sector perspective, a medium- to long-term orientation, and substantial delegation of financial management powers to line ministries and agencies that deliver public services. These finance ministries place a strong emphasis on the accountability and transparency of policies and procedures, realization of desired economic and social outcomes, and the development of analytical tools and skills to understand the most efficient means of delivering those outcomes.

As countries develop, it has been argued that the concentration of central finance functions is likely to exhibit an inverted-U shape pattern (Allen and Grigoli, 2011; World Bank, 2013). According to this theory, finance ministries start small, expand in size as they reach middle-income status, and then contract again as further development takes place. There is some empirical support for this proposition (see also Box 2, Figure 3). Dispersed manual systems of accounting, reporting, and budgeting tend to reinforce this phenomenon in developing countries. As countries move from middle-income to advanced development status, it is further argued that PFM reforms may lead to less concentration and a broader distribution of functions as part of a growing demand for organizational autonomy, and further computerization of PFM processes, thus allowing many transactional functions to be transferred to line ministries or agencies.

Table 6 presents evidence of the institutional and cultural characteristics of finance ministries in selected countries, based on the models discussed above. The countries selected are representative of the OECD region, together with a middle-income country (South Africa) that has adopted many of the organizational characteristics of more advanced countries.

Table 6. Institutional and Cultural Characteristics of Finance Ministries in Selected Countries

Institutional characteristics	Finland	France	Spain	South Africa	Turkey	U.K.	U.S.A.
Number of ministries	Single	Multiple	Multiple	Single	Multiple	Single	Multiple
Form of bureaucracy [1/]	Mixed	Mixed	Mixed	Mixed	Traditional	Flexible	Mixed
Open/communicative culture [2/]	High	High	Medium	High	Medium	High	High
Use of integrated ICT systems [3/]	High	High	High	High	High	Low	Low
Decentralize controls of budget expenditure [4/]	High	Medium	Medium	Medium	Low	High	High
Broad strategic perspective [5/]	High	High	Medium	Medium	Medium	High	High
Coverage of core policy functions	High	High	Low	High	Medium	High	Medium
Devolution of transactional functions [6/]	High	Medium	Low	High	Medium	High	Medium

1/ The scoring is derived from the models of organizational structure shown in Figure 1, based on analysis of the organizational chart of each country's finance ministry: "flexible" = a project- or network-based organization; "traditional = a bureaucratic structure; and "mixed" = some combination of these elements.

2/ Source for scoring: 2012 Open Budget Index (score on a 0 to 100 scale, ranking of 100 countries): France (Score: 83, ranking: 5), Spain (score: 63, ranking: 19), South Africa (score: 90, ranking: 2), Turkey (score: 50, ranking: 45), U.K. (88, ranking: 3), U.S.A. (score: 79, ranking: 7).

3/ Source for scoring: France: Court of Accounts. *Public Report on the Chorus System*, 2011.Turkey: *The World Bank, 2011. FMIS – 25 years of World Bank Experience*. U.K.: National Audit Office, 2011. *Information and Communications Technology in Government, Landscape Review*. U.S.A.: Government Accountability Office, 14/671T, 2014. *Information Technology. Reform Initiatives Can Help Improve Efficiency and Effectiveness*.

4/ Source of scoring: IMF, *G-20 Budget Institutions Board Paper*, 2014, IMF; and *Budget Practices and Procedures Survey*, OECD, 2014.

5/ Source of scoring: IMF, *G-20 Budget Institutions Board Paper*, 2014, IMF; and *Budget Practices and Procedures Survey*, OECD, 2014.

6/ France: Devolution of budget execution authority to line ministries; accounting, cash management and revenue administration centralized within the finance ministry; U.K.: devolution of budget execution, accounting to line ministries, and revenue administration to an autonomous agency; Turkey: Accounting is decentralized in line ministries, cash management belongs to the Treasury and revenue administration is managed by an autonomous agency.

However, as noted earlier these institutional and cultural characteristics of finance ministries are not static, and strongly influenced by their political, socio-economic, and technical environment. Countries may also be influenced by developments elsewhere in their region or in countries that are regarded as benchmarks of good practice in public administration. For example, some countries have adapted their constitutions and legal frameworks to the U.S. model of governance which has implications for the design of their PFM practices and the organization of their finance ministry—examples include Korea, Liberia, Nigeria, and the Philippines. The recently adopted Constitution in Kenya (2011) also adopts aspects of the American system of financial governance, for example, by creating a parliamentary budget office, a National Treasury, and ministries headed by Cabinet Secretaries appointed by the President.

B. Reorganizing Ministries of Finance

Organizational restructuring may take a variety of forms (Dunphy and Stace, 1993; Kanter, Stein, and Jack, 1992), including the following:

- *Fine tuning*: Organizational change that is a continuing process characterized by fine tuning of the "fit" or match between an organization's functions and its structure, staffing and business processes. Such a change process is typically applied at the level of individual departments, divisions, or units rather than across the organization as a whole.

- *Incremental adjustment*: Change that is characterized by progressive adjustments of limited scope to align business strategies, structures, and management processes to new procedures and technologies, or modifications to the external political and economic environment.

- *Modular transformation*: Change that is characterized by a major realignment of one or more departments/divisions.

- *Corporate transformation*: Change that involves the whole of the organization and is characterized by substantial shifts in the business strategy, together with major adjustments to the structure of departments and other business units, decision-making procedures, senior management alignments, human resource management practices and organization-wide IT systems.

In practice, countries follow a mixture of these approaches, as illustrated in Box 4.

Box 4. Changes in the Organization of the CFA in U.K., France, and Turkey

In **France**:

- *Fine-tuning***—**at all times.

- *Incremental adjustment*—creation of a legal department (1988), an arm's length agency for debt management (2001), a budget reform directorate (2001–05), and an agency to oversee state-owned enterprises (2004)

- *Modular transformation*—creation of a Secretary General in charge of cross-cutting and support functions; merger of economic, financial, international relations and treasury administration (2004), merger of accounting and tax administrations (2008)

In **Turkey**:

- *Fine-tuning***—**at all times.
- *Incremental adjustment*—establishment of regulatory authorities to strengthen the market economy, after economic crises of 1980, 1994, and 2001; establishment of risk management office in the Treasury; separation of tax policy and tax administration functions (2005)
- *Modular transformation*—separation of Undersecretariats of Treasury and Foreign Trade (1994); reorganization of the Undersecretariat of Foreign Trade as Ministry of Economy and the Undersecretariat of State Planning as the Ministry of Development (2011)
- *Corporate transformation*—creation of an Undersecretariat responsible for capital budgeting (1960), separation of the Treasury from the MoF and establishment of the Undersecretariat of Treasury and Foreign Trade (1983)

In the **U.K**:

- *Fine-tuning***—**at all times

- *Incremental adjustment*—multi-year budgeting (199-2000s), resource accounting and budgeting (1990s-2000s)

- *Modular transformation*—reorganization and strengthening of single departments in the 1980s (local government finance, privatization), PPPs (1990s), accrual accounting (1990s) and financial regulation (following 2008 crisis)

- *Corporate transformation*—Bank of England independence and establishment of Financial Stability Authority (1997), establishment of Office for Budget Responsibility (2010)

Source. FAD staff

Important drivers of organizational change in finance ministries include the following:

Changes in the political or constitutional environment

Organizational changes may arise as a result of the election of a new government or the emergence of a powerful political leader with strong views about civil service structures and the machinery of government.[40] An example of a large political shift occurred during Margaret Thatcher's premiership in the U.K. The *Financial Management Initiative*, launched in the early 1980s, and the subsequent *Next Steps Initiative,* established a new structure of semi-autonomous executive agencies that operated at arm's-length to their policymaking parent ministries, had their own governance arrangements, were given substantial flexibility to manage their resources, but were set performance targets by the British Treasury, and were held accountable to parliament for improvements in their performance.[41] The Treasury initially resisted the establishment of executive agencies, because of the risks they created for the control of public spending, but eventually acquiesced in their creation on the condition that agencies submit to a rigorous system of financial controls and reporting (Allen, 2013).

Similar changes occurred in the United States, through the Clinton-Gore *National Partnership for Reinventing Government* (NPR) of 1993 whose goal was to "invent government that puts people first, by: serving its customers, empowering its employees, and fostering excellence."[42] In order to achieve this, the objectives of the NPR were to "create a clear sense of mission; delegate authority and responsibility; replace regulations with incentives; develop budget-based outcomes; and measure [our] success by customer satisfaction." Some 20 years later, many elements of the U.S. reform remain in place but, as in Australia, Canada, New Zealand, where variants of the U.K. approach to establishing agencies were applied, the overall benefits of these reforms continue to be debated (Halligan, 2013).

Another example comes from Turkey, where changes in the political environment also had a strong influence on the organization of the country's central finance functions. In the 1980s, following a long history of deep-rooted bureaucratic regimes stretching back to the Ottoman Empire, the finance ministry was seen by the Ozal governments as an obstacle in implementing policies to transform the centrally-controlled, largely state-driven Turkish economy into a market-oriented one. The government separated the Treasury from the

---

[40] This is consistent with Hallerberg's view that the constitutional environment (single party government versus coalitions; predictable and competitive elections versus the opposite) are the main determinants of the organizational strength of the finance ministry. See Hallerberg, 2004.

[41] In the first ten years of the Next Steps initiative, 75 percent of staff in the British home civil service were transferred to the new agencies (Halligan, 2013).

[42] The idea of reinventing government is not new, however. Similar exercises in the U.S.A. include the Brownlow Commission of 1937, the Hoover Commissions of 1947–49 and 1953–55, and the Grace Commission of 1982-83.

ministry, reorganizing it as a unit reporting directly to the prime minister. Subsequent reforms in Turkey, also politically driven, further fragmented central finance functions by creating a separate ministry of economy.

A reorganization of the finance ministry can also originate from extreme political or constitutional changes. In South Africa, for example, a new constitution came into effect in 1997 after the country's first non-racial elections, and led to significant changes to the organization and responsibilities of government agencies, including a National Treasury with a broad mandate for managing national and inter-governmental financial affairs. Similarly, following the enactment of Kenya's new Constitution, the number of ministries was reduced by two-thirds, a new National Treasury created, and the local government sector completely reformed.

Impact of economic and financial crisis

It has been argued that Western governments adopted business-like management techniques to improve their effectiveness in delivering public services during periods of economic and financial stress (Hood, 1995). Examples of such events, which include changes in the organization of finance ministries and the machinery of government more broadly, include the following:

- The *financial crisis that New Zealand experienced in the 1970s* led to widespread reforms of the public sector, including in the organization of the Treasury, financial accounting and reporting based on accrual principles, devolved management of the budget, the development of performance agreements between ministers and their departments, and the establishment of an independent central bank. The ultimate goal of these reforms—under the umbrella of the New Public Management—was to improve the responsiveness and accountability of public servants, especially senior officials (Halligan, 2013).[43] The reforms, however, have been criticized for not fully meeting their objectives (Schick, 2001b).

- Similarly, the *2001 financial crisis in Turkey* led to widespread reforms in PFM, financial sector oversight and debt management. Organizational structures were influenced by these reforms. For example, the Banking Regulation and Supervision Agency was established to take responsibility for oversight of the banking sector; a risk management department was set up in the Treasury to analyze market risks, credit risks and operational risks; and the collection of government revenues was separated from the general directorate of revenue policy in the Ministry of Finance.

[43] The reforms in New Zealand resemble those implemented some years earlier by the Thatcher government in the U.K. Indeed, there obviously can be several overlapping and simultaneous drivers for organizational change, such as change in political power and sluggish economic conditions (which, in turn, can also be interlinked).

- As previously noted, the *global financial crisis* triggered in 2008 required emergency action to be taken by finance ministries and central banks in countries most affected, in order to support failing banks and other financial institutions, and to support demand in the weakened economies. Of the three classic pillars of good financial management, the first pillar—which focuses on the achievement of overall fiscal discipline through the application of high-level fiscal targets and rules, and overall budget ceilings—assumed more importance (IMF, 2014).[44] This change resulted in a shift of the finance ministries' traditional focus on financial compliance and control, toward an emphasis on macro-fiscal analysis and policy making in order to achieve fiscal sustainability. Substantial changes in the organizational structure of finance ministries and central banks, as well as to agencies that regulate the financial sector, were made in order to implement the necessary changes. For example, the number and skills of staff working on financial supervision were increased sharply in countries most affected by the global crisis (the U.K. experience is described by Allen, 2013).

- Finally, the process of establishing a *regional economic union* can spur organizational reform in the member countries, including for the finance ministry.[45] In the case of the EU, for example, new treaty obligations have been established to enforce overall fiscal sustainability under the EU's Fiscal Compact,[46] together with specific directives and regulations in areas such as internal control and public procurement, as well as the supervision of financial institutions. Fiscal councils have been established in many EU Member States as a result of such legislation. Similar challenges are facing countries in Africa that are entering the West African Economic and Monetary Union (WAEMU) and the East African Community (EAC).

Pressures to increase accountability and transparency

Pressure from international financial institutions (IFIs), rating agencies, parliaments, or civil society organizations to make fiscal policy more transparent and policymakers more accountable may lead finance ministries to review functions such as accounting and fiscal reporting, as well as macroeconomic forecasting and macro-fiscal analysis. In EU Member

---

[44] The other two pillars relate to the allocation of resources to sectors, line ministries and other government agencies through the MTBF and the annual budget process; and the allocation of resources at the sector level to purchase goods and services and to fulfill the ministries' other detailed operational needs. See E. Campos and S. Pradhan, 1999, *Budgetary Institutions and Expenditure Outcomes: Binding Governments to Fiscal Performance* (Washington DC: World Bank).

[45] Hallerberg (2004), by contrast, has argued that the EU has had no real impact on the fiscal governance of EU member states.

[46] This strengthening has taken place as a result of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (known as the "Fiscal Compact") of 2012, and associated legislation—the "six-pack" and, together with the proposed "two-pack"—aimed at strengthening economic and financial governance.

States, for example, macro-fiscal functions have been outsourced to independent fiscal councils. The establishment in 2010 of the Office for Budget Responsibility in the U.K. for example, resulted in the Treasury being stripped of its responsibility for producing official macroeconomic and fiscal forecasts (Allen, 2013). As noted earlier, a similar trend among EU countries has been to establish government statistics offices that are independent of the executive branch.

Changes in institutions and business processes

The modernization of PFM laws and processes can be another important driver of organizational change. In Sweden, for example, the massive fiscal reforms that took place in the 1990s affected the balance of power within the political system; required bodies responsible for economic and fiscal policy in the executive branch and the parliament to be strengthened; and also led to changes in the organization of the finance ministry (Molander and Holmquist, 2013). In Finland, the introduction of program budgeting and results-based management has been an important trend since the late 1980s (Tiihonen, 2012).

IV. Principles and Challenges in Reorganizing a Finance Ministry

This section (i) presents some guiding principles on the role, functions, and organization of a finance ministry, based on the earlier sections of this paper; (ii) discusses the challenges faced by finance ministries, especially in developing countries, in modernizing their functions and organization in light of these principles; and (iii) outlines the approaches and technical tools that finance ministries might find useful in reorganizing their finance ministries. The section draws on technical assistance provided by the IMF on the functions and organization of finance ministries in countries such as Cyprus, The Gambia, Kenya, Libya, the Maldives, Malaysia, Malta, Myanmar, Nicaragua, Peru, Senegal, and Togo. Another important source of information is a World Bank study that included case studies of central finance agencies in ten developing countries (World Bank, 2013).[47] The section focuses mainly on developing countries, but the issues discussed are also relevant for emerging markets and some advanced countries that are considering the reform of their finance ministries.

A. Principles for Reorganizing a Finance Ministry

Box 5 presents seven general principles of organizational structure that may serve as broad guidelines for countries seeking to modernize their finance ministries, adapted to the local cultural, administrative, and political context. These guidelines are derived from the "emerging model" discussed earlier in this paper (Box 3), together with FAD's experience of

[47] Benin, Cameroon, Chad, Ghana, Mongolia, Nicaragua, Rwanda, Sierra Leone, Tonga, and Yemen.

providing technical assistance to improve the efficiency and effectiveness of finance ministries' operations in a range of countries.

In considering these principles, two important caveats should be borne in mind. First, the "emerging model" describes historic trends or patterns of development. It does not imply that the organizational structure of a finance ministry depicted by the emerging model necessarily produces "better" fiscal and budgetary outputs or outcomes than the "traditional" model. Such outcomes provide the ultimate test of whether the finance ministry as an organization is effective or capable (see Andrews, Cangiano, de Renzio, Krause, and Seligmann, 2014). This argument should not be taken to mean that comparing organizational structures between countries is a meaningless activity. Much useful information and guidance can be derived from such comparisons, but the information needs to be properly contextualized, and adapted to the local circumstances.

Second, there is some evidence that fiscal performance is enhanced if modern budgetary institutions are put in place (IMF, 2014) and if budgetary procedures give a strong role to the prime minister or finance minister (von Hagen, 1992, and von Hagen and Harden, 1994). These results do not suggest, however, any particular organizational form for the finance ministry, but rather that the government's capacity and capability needs to be developed in functional areas such as macro-fiscal forecasting,[48] debt management, and budget preparation. Similarly, the available empirical evidence that the establishment of government agencies leads to improved performance in carrying our finance functions or delivering public services is also inconclusive (Baldwin, Cave, and Lodge, 2010; Pollitt, Talbot, Caulfield, and Smullen, 2004).

The principles set out below may nevertheless be helpful as benchmarks in guiding the organizational restructuring of finance ministries in the medium term or long term, and improving their operational efficiency and effectiveness. In the short term, however, second-best solutions may lead to better fiscal results. For example, a merger of the finance ministry and the planning commission in a developing country may be impracticable for constitutional or political reasons, at least in the short term. Nevertheless, it may be possible to achieve valuable improvements in fiscal and developmental outcomes by strengthening cooperation between the two agencies, building a common platform of methodologies and timelines for preparing the national development plan and the budget, and enhancing technical skills and databases in these two areas.

[48] An interesting recent study assesses the organizational structure of macroeconomic policy and forecasting units in the countries comprising the Eastern Caribbean Currency Union (ECCU). See IMF, Caribbean Regional Technical Assistance Center, July 2014, *ECCU Macroeconomic Policy Unit Review*.

Box 5. Guiding Principles for the Organization of a Finance Ministry

Principle 1: Unitary finance ministry
There should be a single finance ministry that is responsible for performing central finance functions. Where for political or institutional reasons it is necessary to divide such functions among two or more ministries or agencies, arrangements should be put in place to ensure effective coordination and cooperation among the ministries concerned.

Principle 2: Flexible bureaucracy
Finance ministries should develop a flexible bureaucratic structure that permits: (i) efficient decision-making cascading through different levels of the organization; (ii) effective and timely communications and coordination both vertically and horizontally within the organization; (iii) effective and timely communications and coordination with other parts of the government, and external stakeholders.

Principle 3: Agencies to manage specialized finance functions
Specialized finance functions such as revenue collection and debt management should be devolved to arms'-length agencies, whose operations and performance are monitored closely by the finance ministry. A precondition for establishing these agencies is that appropriate controls be in place to ensure that the financial management and performance of such agencies (internal controls, accounting and reporting, procurement, audit) are robust. Senior management of the finance ministry should have access to regular reports that monitor the agencies' operations and performance, enabling them to respond immediately to any issues that require the ministry's attention.

Principle 4: Devolution of transactional functions to line ministries
Finance ministries should progressively delegate responsibility for routine transactional functions such as payment processing, internal control and procurement to line ministries. As such devolution occurs, the finance ministry's role should switch to monitoring the line ministries' operations and performance, and taking action where necessary to deal with unforeseen developments. Finance ministries should not devolve functions to line ministries until they are satisfied that the ministries concerned have sufficient capacity to undertake such tasks. Initially the finance ministry may also want to exercise control over the appointment of financial managers and accountants to positions in the line ministries.

Principle 5: Focus on core policy and regulatory functions
The corollary of Principles 3 and 4 is that finance ministries should build capability in the policy areas that are central to their mandate. Policy functions that are not related to public finance should generally be dealt with by other ministries. Communications and coordination between the finance ministry and specialized agencies should be reinforced to ensure that staff engaged in operational tasks can inform the policy decision-making process, and vice versa.

Principle 6: Exercise a strong role in agenda setting and shaping policy across the government
The finance ministry should build knowledge and skills to analyze cross-cutting policy issues relating to all sectors of the economy, e.g., agriculture, education, energy, environment, health, etc. This is essential if the ministry is to provide well-informed advice to the cabinet on the cost of new policy proposals, and the allocation of budget resources to the respective ministries. More generally, the ministry should play a key role in agenda setting and shaping policy across the government.

Principle 7: Consolidate new functions with existing departments
The finance ministry should refrain from creating specific structures outside existing departments to manage emerging issues (e.g., MTBFs, the management of PPPs, macro-fiscal forecasting, fiscal risks monitoring). New policy functions should be consolidated in existing departments to maximize synergies and communication within the organization.

B. Challenges and Risks of Reorganizing Finance Functions

The reorganization of finance ministries creates challenges and risks that may be sub-divided into several categories which are discussed below. Lessons learned from advanced countries are summarized in Box 6.

Political and institutional constraints

Issue: In many developing countries opportunities for reorganizing the finance ministry may be heavily constrained by the political environment. Political, ethnic and other dominant groups may prevail, and the finance minister may have an insufficiently strong power base to drive through desired changes in his ministry. The president may seek to balance power among his ministers, ethnic leaders and other elites, even when budgetary outcomes and the capability of the finance ministry are weakened. State treasury organizations may operate in practice as centers of patronage, rent-seeking, and money laundering. As a result, even seemingly technical reforms such as the introduction of a computerized financial management information system (FMIS) or a TSA may meet strong resistance at the political level, a situation that is commonly observed in many developing countries.

Proposal: *Embarking on a reorganization of the finance ministry in a developing country can be problematic, as modular and corporate transformation solutions (discussed earlier) are risky and politically sensitive. Hence, a more effective solution may be for reform to proceed in an incremental, piecemeal way, focusing on specific functions or units of the finance ministry rather than the whole organizational structure.*

Organizational segmentation

Issue: A common feature in developing countries, particularly as specialization increases, is the tendency to disperse and fragment functions across the finance ministry rather than retaining or consolidating them within a limited number of departments. An example would be the creation of new units responsible for providing advice on specialized topics such as macro-fiscal forecasting, fiscal risk analysis, debt strategy, policy related to taxes and other government revenues, local government finance, the management of state enterprises, or public-private partnerships. This type of incremental change in the organization of a finance ministry has commonly developed more by historical accident than design. Ministries of finance become characterized by a multiplicity of structures and administrative layers, resulting from the progressive addition of new functions, without consideration being given to the need for prior reorganization. These structures usually enjoy some autonomy from existing core departments and units of the ministry, and often report directly to top management, thus increasing their relative political influence. Such organizational segmentation makes it more difficult to integrate functions and balance interests. It also tends to lengthen and complicate business processes, and increase inefficiencies and staffing costs.

Proposal: *Possible solutions to reduce segmentation include the integration of new functions and units into existing departments of the finance ministry, and the establishment of cross-cutting teams with representatives from departments/units such as macro-fiscal analysis, the budget office, and debt management.*

Box 6. Trends in Advanced Country Restructuring of Core Finance Functions

Budget preparation and execution. Some countries (e.g., France, U.K.) have reorganized their central budget office, by strengthening and separating the budget overview units, and the sector-by-sector units. The budget overview units are responsible for preparing medium-term fiscal forecasts, formulating the government's overall fiscal strategy and annual budget targets, and coordinating the budget preparation process. In parallel, units are established for "shadowing" the budgets of line ministries and the entities supervised by or attached to them, for both budget preparation and execution.

Debt management. International good practices call first for a consolidated approach to the government's overall portfolio of debts and liabilities, with a debt office in charge of managing all debts. It also requires the organization of the debt office into a front-, middle-, and back-office. During the 1990s and 2000s, many countries have established an integrated debt management office either within the finance ministry, or through an arm-length agency (e.g., Netherlands, Sweden, the U.K. and the U.S.A.).

Revenue policy and administration. The separation of revenue policy and revenue administration functions is becoming common in many countries. Designing a tax system, formulating policy, drafting tax legislation and estimating its impact on the economy is a core function of the finance ministry. Administration of taxes requires different skills, and can be segregated from tax policy, while maintaining the ability for the revenue agency to provide technical advice as required. This separation can take the form of an autonomous revenue agency as in many Anglophone countries, or functional segregation within the finance ministry as in France.

Government statistics. There is a strong case for establishing a government statistical agency that is independent of the day-to-day business of government and is free of political influence. Countries have used a variety of approaches in implementing the concept of independence. In the EU, independence of the government statistics office is mandated by legislation.

Fiscal risk analysis and management. The importance of building a finance ministry's capability to assess and manage fiscal risks has been emphasized in recent IMF board papers and other documents, including the IMF's extensively revised Fiscal Transparency Code. In addition to risks arising from macroeconomic developments, other main sources of fiscal risk include PPPs. Units for managing the risks associated with PPPs have been established in many advanced countries and some emerging markets.

SOEs oversight and monitoring. Many governments have centralized SOEs' oversight in a single specialized entity, to manage state assets to protect the government shareholder value, while segregating if from its policy-making and regulatory functions. This function can take the form of a department or unit within the finance ministry (such as in France and South Africa), another ministry (U.K.), or an autonomous agency (China, Chile).

Weak coordination within government

Issue: Finance ministries usually exert substantial power within the government, as they formulate fiscal policies and largely control budget allocations. In many countries they also exert a strong influence on the government's decisions in other areas of economic policy, since most new policy proposals put forward by ministers have fiscal and financial implications. Examples include policies on the environment, social welfare, national defense, local government finance, and the management of state enterprises, where typically powerful line ministries lead the policy dialogue. Most advanced countries have developed mechanisms for coordinating policy decisions between the finance ministry and these other ministries,[49] and ensuring that the financial costs and benefits of such policies are fully appraised and approved by the finance ministry. In some countries, the office of the president or prime minister (or the cabinet office in the U.K.) plays an important role in coordinating the inter-ministerial policy dialogue and (where necessary) acting as a mediator between the line ministries and the finance ministry, or as a decision-maker when they are unable to agree.[50] In Ireland, the breaking up of the finance ministry[51] in 2012 led to the creation of a high-level council, chaired by the prime minister (*Taoiseach*), to coordinate the work of the two departments on overall management of the economy, tax policy, and the budget.

Such coordination mechanisms tend to be much weaker in developing and middle-income countries since the role of the cabinet as a collective decision-making body is underdeveloped, as is the coordinating role of the president or prime minister. The involvement of the ministry of finance in the legislative process may similarly be constrained in many developing countries by the absence of a central structure responsible for managing the preparation and approval of laws and regulations, and sometimes their drafting.[52] For example, in some countries, finance ministries have difficulties preventing and limiting tax exemptions created by legislation pertaining to the mining or electricity sectors, or to investment incentives.

---

[49] In Turkey, the Economic Coordination Council was established in 2009 to strengthen coordination among ministries. The Council comprises the Deputy Prime Minister for Economic Affairs, together with the Ministers responsible for Finance, Development, Customs and Trade, Science, Industry and Technology, Labor and Social Security and Economy. The Treasury acts as the secretariat of the Council.

[50] For example, the *Secretariat général du gouvernement* in the Prime Minister's Office in France and the Cabinet Office in the United Kingdom.

[51] Two departments were created: the Department of Finance, responsible for macro-fiscal forecasting, fiscal and tax policy, international economic relations and preparing the annual budget; and the Department of Public Expenditure and Reform, responsible for public expenditure policy, improving the performance of government, and a range of other issues such as public procurement and personnel management.

[52] Such as the *Secretariat général du gouvernement* in France and the Office of the Parliamentary Counsel in the United Kingdom.

Proposal: *In countries where the ministry of finance has insufficient traction in the dialogue on policy initiatives with significant fiscal implications, it may be helpful to strengthen the role of the center of government by establishing a small-size specialized body for managing ministerial discussions.*

Lack of capability to deliver common services

Issue: In the finance ministries of many developing countries, limited resources are devoted to provide common services to core departments and units, such as facilities management, mail services, and effective IT systems. Many developing countries display severe weaknesses in areas such as the adequacy of staff records, poor systems for recruiting and retaining staff, and ineffective performance management of staff (World Bank, 2013). The provision of training to upgrade staff expertise, particularly for developing policy functions that require more analytical skills, may also be insufficient. As a consequence, human resource management systems may not be sufficiently robust and flexible to support a major reorganization of the finance ministry, or to allow for an increase in staff mobility. For example, in French and Spanish speaking countries, relatively high salaries are paid to professional staff in finance ministries in comparison to line ministries, which limits the mobility of professional staff within the government.[53] Such rigidities may also arise among the departments and units of the finance ministry, some of them offer higher salaries and benefits to certain categories of staff (tax collectors or debt managers, for example).

Proposal: *Finance ministries should focus on improving human resource management and training capabilities. In countries with centralized human resource and payroll management systems, possible solutions include a progressive devolution of recruitment procedures, while maintaining centralized control of the government's overall payroll. Policies may also need to be developed to strengthen the mobility of staff across government departments, and create more flexible salary structures to attract specialized or scarce skills such as accountants, economists, financial managers, lawyers and IT specialists, as well as "soft" skills in management and human resource development.*

Coordination and managerial responsibilities within the finance ministry

Issue: In many developing countries, the internal operations of finance ministries are characterized by highly compartmentalized departments and inadequate mechanisms to transfer information across the organization. Departments often function as organizational silos within which both horizontal and vertical communications tend to be weak. For example, in many countries, the budget department and the accounting department are largely disconnected, and their IT systems are not fully integrated, disrupting the flow of

[53] In addition, central banks, external audit offices and other autonomous or semi-autonomous agencies of government commonly have higher salary scales than finance ministries.

information on budget execution, and hindering reliable financial reporting. Weak communications are likely to result in breakdowns in the decision-making process and a fragmented approach to implementing certain tasks, to the detriment of the organization's overall efficiency. The respective role of the political and technical levels is also often blurred: in some countries virtually all decisions, however small, require the finance minister's personal approval. As a result, top management is overwhelmed by technical decisions and unable to focus on strategic prioritization, while departments are stripped of their decision-making responsibilities. In addition, genuine coordination requires a concrete change in individual responsibilities and incentives, and not just organizational "solutions," in order to empower line managers.

Proposal: *In some countries, it may be appropriate to establish a senior management board, or a secretary general function, to facilitate the sharing of information and decision-making on cross-cutting issues. A larger devolution of responsibilities to line managers can also empower departments, and ensure that top management focuses on strategic decision. Improving internal communications, including IT and email systems, can also improve coordination within the finance ministry.*

Managing risks and sequencing reforms

Issue: In countries in which finance ministries are the backbone of public management, there is a risk of destabilizing key functions of the government (budget allocations, the collection of revenues). Finance ministries are mandated to produce various outputs such as economic and fiscal forecasts, budget analysis and projections, or financial statements that are critical in monitoring a country's financial performance. These outputs are based on a large quantity of data, produced by the finance ministry or by other public institutions or private groups. Therefore, organizational arrangements are not the sole source of poor performance; other factors such as the design and implementation of business processes, or staffing levels, qualifications and skills, play an important role. Reorganizing departments within a finance ministry may be counterproductive if weaknesses originate from inadequate processes or weak capabilities. Improvements in performance may require an overhaul of these business processes and organizational culture, and not only a change in the organizational chart.

In addition, organizations that are going through a restructuring process tend to become more inward-looking, hence delaying other structural reforms and expected outputs. As a result, changes in organizational structure or business processes must take into account the degree of change that an organization is able to absorb. There is a risk that the finance ministry will be overwhelmed by too much reform, and that changes take place too quickly. Also, many reforms of finance ministries directly affect spending ministries, and these ministries' capacity to absorb change must be taken into account. Thus, an overhaul of a finance ministry's structure is a complex and risky endeavor, and its benefits and costs should be carefully assessed.

Restructuring a finance ministry is not an isolated exercise, but should be conducted in parallel to other reforms in financial management, and the introduction of new ICT systems. Inefficiencies and bottlenecks in the organization of the ministry, shortages of necessary skills, lack of clarity in decision-making, and weak and uncoordinated leadership can quickly derail a PFM reform strategy. The sequencing of change is therefore a critical factor.

Proposal: *A change management strategy should be put in place to manage the various risks that are associated with restructuring finance ministries in developing countries. In particular, challenges and risks should be identified alongside possible measures to mitigate them prior to undertaking such an ambitious reform. The reorganization should take place in parallel to reforms in business processes and ICT systems, and be appropriately sequenced.*

Strengthening organizational "capabilities"

Issue: The ultimate objective of reorganizing a finance ministry is to increase its ability to perform functions efficiently and effectively. The literature makes an important distinction between the *capacity* of a finance ministry to perform its functions—defined as the volume of the inputs such as human resources and IT systems that it uses—and its *capability*—defined as the transformation of these inputs into the operational decisions and policies that determine a country's economic and fiscal performance (Allen, 2013; Allen and Krause, 2013; Whiteman, 2013). Difficulties are likely to arise in measuring capacity and capability in practice. For example, civil servants may provide first rate advice on economic policy issues but the advice may be disregarded or overturned by ministers for political reasons. The fact that policy advice prepared by officials of the finance ministry is submitted to ministers on a confidential basis, and is not readily available for external scrutiny, also makes it difficult to conduct an objective and balanced assessment of the relevance, timeliness and analytical quality of such advice, and hence of the ministry's capability. These difficulties notwithstanding, some governments have attempted to establish a quantitative framework for measuring the capability of their finance ministries which may serve as useful models for other countries.[54]

Proposal: *In reorganizing a finance ministry, it may be helpful to develop quantitative indicators of its capacity and capability.*

[54] An example is the *Capability Reviews* launched in 2007 by the U.K. Cabinet Office which reviewed all the departments of government, not only the Treasury. The reviews are carried out by a team of external reviewers drawn from the private sector, and senior officials in other government departments and the wider public sector. The review of the Treasury was released in December 2007, a progress report issued at the end of 2009, and a revised action plan released in April 2012. The reviews of departments are guided by a capability model that is common to all departments. The model focuses on capability in three dimensions (leadership, strategy, and delivery) using a "traffic light" methodology for assessing progress in these areas. See *Capability Review of HM Treasury*, December 2007; *HM Treasury: Progress and Next Steps*, December 2009; and *HM Treasury: Capability Action Plan*, April 2012.

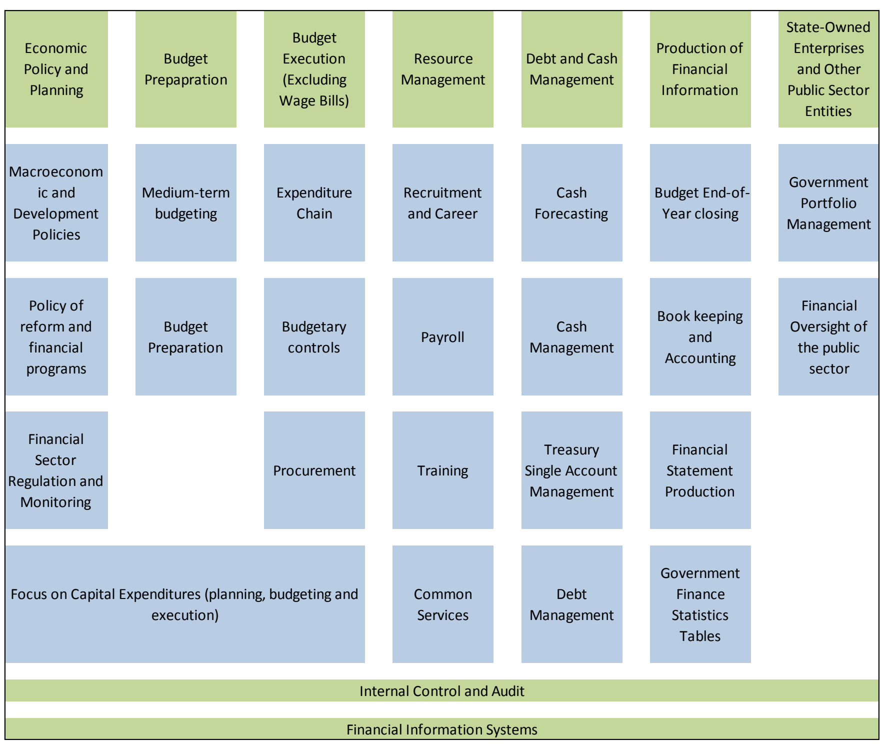
C. Approaches and Tools for Reorganizing a Finance Ministry

A range of survey techniques and other tools have been developed to help finance prepare for and implement an organizational restructuring. These tools are summarized below.

Functional reviews

A functional review may be carried out to assess: (i) whether the finance ministry is conducting all relevant finance functions (as defined in Table 1); and (ii) whether any of the functions it carries out are not essential to its mandate and could be transferred to another agency of government, or outsourced to the private sector. A functional chart should be prepared so that discussions can be arranged with all the departments and units that participate in these functions. Figure 5 provides an example for a hypothetical developing country. A further step should be to consider how there functions could be grouped together in a way that maximizes synergies and communication within the organization, and to prepare a new organizational chart. Key functions that support the policy-making role of the finance ministry—in particular, human resource management, preparing and executing the finance ministry's own budget, and the organization's IT systems, as well as legal advice and communications strategy (internal and external)—should also be defined and adequately resourced within the new structure.

Figure 5. Functional Chart of a Finance Ministry



External stakeholder analysis

An assessment of the views of internal and external stakeholders should be carried out to assess the level of ownership and commitment to the reorganization of the ministry, and identify reform champions, as well as opponents. Such analysis will facilitate an assessment of whether there is sufficient internal and external support to change the finance ministry's organization, or whether the reform should be postponed, or a more limited set of changes be introduced, e.g., reorganizing only a few selected units or sub-units of the finance ministry rather than the complete organization.

Business process reengineering (BPR)

A further important step would be to undertake a detailed review of the finance ministry's business processes with a view to redesigning them. Processes are particularly important for finance ministries that consolidate and gather information on operations across a wide range of sectors, both for budget planning and allocation purpose, as well as for fiscal reporting. Another benefit of the BPR approach is to help manage change associating the various departments and business units that take part in the reorganization. BPR helps identify bottlenecks and constraints, rather than focusing only on restructuring issues. Such discussions can possibly include line ministries (or at least a selection of them) for processes in which they have important responsibilities, for example, in countries where budget execution and accounting is highly decentralized.

Review of staffing and skills

A review of business processes will provide useful information for redefining job descriptions and staffing requirements across the finance ministry. The new job requirements should be matched against an audit of the existing skills and staffing of the finance ministry. In some countries, the reorganization of functions and business processes has been combined with a streamlining of the grades and salary structures of the organization.[55] This analysis also provides the basis for carrying out an assessment of training needs, and the preparation of a medium-term plan for developing the human resources of the finance ministry. An assessment should also be made of the need for external consultants/experts to support the change management process, e.g., to assist staff whose employment in the finance ministry has been terminated following the reorganization to find new positions in the public service or private sector.

---

[55] For example, in the U.K. the number of grades in H.M. Treasury was reduced from over 20 in the early 1990s to about 12 in 2012. See Allen (2013).

V. Conclusions

This working paper suggests that there is no single set of functions or organizational models of a finance ministry that has universal relevance or applicability. The allocation of responsibility for core finance functions to the finance ministry, or alternatively to some other government ministry or agency, varies widely, both in advanced countries and in emerging markets and developing countries. The implication of this finding is that it is generally more difficult to identify a model for reorganizing a finance ministry *as a complete entity* as opposed to reorganizing *specific functions or departments* of that entity, such as macro-fiscal forecasting, the central budget office, debt management or revenue administration.

Nevertheless, the international experience discussed in the paper leads to certain guiding principles that may be helpful to countries in strengthening the role and functions of their finance ministry and its organizational structure.

The five main conclusions of the paper are as follows:

First, the role and culture of finance ministries in many advanced countries has evolved over a period of years from what we have termed the “traditional” model to the “emerging” model, characterized by greater openness, more flexible management practices, broader strategic focus. This evolution has been accompanied by a change from a rigid bureaucratic regime into a more flexible structure, with fewer organizational silos, stronger linkages with external stakeholders, and better communications.

Second, it is noticeable that as countries develop, finance ministries transfer responsibility for many of their transactional and operational functions (for payment processing, internal control, etc.) to line ministries. In addition, many countries have established arms’-length agencies to manage specialized areas of public finance such as revenue collection, public procurement and debt management. In parallel to these developments, finance ministries have increased their capability to oversee and monitor the operations and performance of these new agencies. At the same time, they have also strengthened and in some cases expanded their policymaking role to better cover government activities in the various sectors.

Third, organizational restructuring of finance ministries should be considered as a means of improving their capability in performing key policy functions, and for strengthening fiscal performance more generally. Analysis of the functions should come first, followed by consideration of an appropriate organizational structure.

Fourth, in emerging and advanced countries, the organizational structure of the finance ministry has evolved continuously over time (incremental change), taking on new forms that meet new political circumstances and economic and financial conditions. More radical reforms (corporate transformation) are more likely to be feasible in countries with strong political leadership, or are facing an economic and financial crisis that requires a major restructuring of government institutions. The institutional and political fragmentation, and the high level of rent-seeking that exists in many developing countries can be a powerful deterrent to reorganizing the finance ministry, and it may be appropriate for the authorities to consider more gradual reform initiatives.

Finally, while countries undergoing a reorganization of their finance ministries can benefit greatly from the practices and experience of other countries, local context and institutions are extremely important in informing and constraining such reforms. Key issues to take into account might include, for example: the strength of the political leadership; cultural resistance to ideas or norms imposed from outside; the power of civil service unions and limits on the flexibility of the public service and job mobility; the dominance of the informal organization over the formal one; and a decision-making culture that gives greater weight to political factors than to economic and financial analysis. It is important that countries recognize such characteristics and constraints, and focus on changes that are likely to improve incentives and behavior rather than on mirroring practices and models that work well in some advanced countries but may have limited local tractability.

Selected References

Allen, R. 2013, "Evaluating the Capability of the U.K. Treasury, 1990-2013," *OECD Journal on Budgeting*, Vol. 13, No. 3.

Allen, R., and F. Grigoli. 2012, "Enhancing the Capability of Central Finance Agencies," *Economic Premise*, No. 73. (Washington: World Bank).

Allen, R., and P. Kohnert. 2012, "Anatomy of a Finance Ministry," Mimeo. (Washington: International Monetary Fund).

Allen, R., and P. Krause, 2013, "Role, Responsibilities, Structure and Evolution of Central Finance Agencies," in Chapter 5, *The International Handbook of Public Financial Management,* ed. by Allen, Hemming, and Potter (New York: Palgrave Macmillan).

Allen, R., R. Hemming, and B. H. Potter (eds.) 2013, *The International Handbook of Public Financial Management* (New York: Palgrave Macmillan).

Alt, J., I. Preston, and L. Sibieta, 2010, "The Political Economy of Tax Policy," in *Dimensions of Tax Design: The Mirrlees Review,* ed. by J. Mirrlees, and others (Oxford: Oxford University Press).

Andrews, M., 2013, *The Limits of Institutional Reform in Development: Changing Rules for Realistic Solutions* (Cambridge: Cambridge University Press).

Andrews, M., and others, 2014, "This is PFM," *Center for International Development at Harvard University, Working Paper No. 285*.

Aucoin, P., 2008, "New Public Management and the Quality of Government: Coping with the New Political Governance in Canada," Conference on New Public Management and the Quality of Government, University of Gothenburg, November 13–15.

Baldwin, R., M. Cave, and M. Lodge, (eds.) 2010, *The Oxford Handbook of Regulation*. (Oxford: Oxford University Press).

By, R.T., 2005, "Organizational Change Management: A Critical Review," *Journal of Change Management*. Vol. 5, No. 4.

Cangiano, M., T. Curristine, and M. Lazare, (eds.) 2013, *Public Financial Management and its Emerging Architecture* (Washington: International Monetary Fund.

Chevauchez, B., 2014, "Towards a PFM Taxonomy," *IMF PFM Blog*, January 28, 2014.

Dunleavy, P., 1992, *Democracy, Bureaucracy, and Public Choice* (New York: Prentice Hall).

Dunleavy, P., and C. Hood. 1994, "From Old Public Administration to New Public Management," *Public Money and Management*, Vol.14, No. 3.

Dunphy, D., and D. Stace, 1993, "The Strategic Management of Corporate Change," *Human Relations*, Vol. 46, No. 8.

Dziobek, C., C. Gutierrez Mangas, and P. Kufa, 2010, "Measuring Fiscal Decentralization – Exploring the IMF's Databases," IMF Working Paper No. 11/126. (Washington: International Monetary Fund).

Escolano, J., and others, 2012, "Fiscal Performance, Institutional Design and Decentralization in European Countries," (IMF Working Paper No. 12/45 (Washington: International Monetary Fund).

French, W.L., and C.H. Bell, 1999, *Organization Development* (Englewood Cliffs, New Jersey: Prentice All).

Grieves, J., 2010, *Organizational Change* (Oxford: Oxford University Press).

von Hagen, J., 1992, "Budgeting Procedures and Fiscal Performance in the European Communities," *European Economy—Economic Paper*s, Vol. 96.

von Hagen, J. and I. Harden, 1996, "Budget Processes and Commitment to Fiscal Discipline," IMF Working Paper No.96/78 (Washington: International Monetary Fund).

Hallerberg, M., 2004. *Domestic Budgets in a United Europe: Fiscal Governance from the End of Bretton Woods to EMU.* Ithaca: Cornell University Press.

Halligan, J., 2013, "The Role and Significance of Context in Comparing Country Systems", in Pollitt, C. (ed.) *Context in Public Policy and Management*. Cheltenham, U.K.: Edward Elgar.

Heclo, H., and A. Wildavsky, 1974, *The Private Government of Public Money: Community and Practice inside British Politics* (London: Macmillan).

Hemming, R., 2013, "Fiscal Councils," Chapter 35 in Allen, Hemming, and Potter (eds.) *The International Handbook of Public Financial Management* (New York: Palgrave Macmillan.

H.M. Treasury, December 2013, *Review of Financial Management in Government*.

Hood, C., 1991, "A Public Management for all Seasons," *Public Administration*, Volume 69, No. 1.

Hood, C., 1995, “The New Public Management in the 1980s: Variations on a Theme,” *Accounting, Organizations and Society*, Vol. 20.

International Monetary Fund, 2014, *Budget Institutions in G-20 Countries: An Update.*

Kanter, R.M., 1983, *The Change Masters: Corporate Entrepreneurs at Work* (London: International Thomson Business Press).

Kanter, R.M., B.A. Stein, and T.D. Jick, 1992, *The Challenge of Organizational Change* (New York: The Free Press).

Mintzberg, H., 1979, *The Structuring of Organizations*, Upper Saddle River (New Jersey: Prentice-Hall).

Molander, P. and J. Holmquist, 2013, “Reforming Sweden’s Budgetary Institutions—Background, Design and Experiences,” Rapport till Finanspolitiska rådet, 2013/1.

North, D., 1990. *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press).

OECD, 2014, *Budget Practices and Procedures in OECD Countries* (Paris: Organization for Economic Cooperation and Development).

Peacock, A., 1992, *Public Choice Analysis in Historical Perspective* (Cambridge: Cambridge University Press).

Peterson, S., 2015, *Public Finance and Economic Growth in Developing Countries: Lessons from Ethiopia’s Reforms* (New York: Routledge)

Pollitt, C., (ed.) 2013, *Context in Public Policy and Management*, Cheltenham (U.K.: Edward Elgar).

Pollitt, C., C. Talbot, J. Caulfield, and A. Smullen, 2004, *Agencies: How Governments do Things Through Semi-Autonomous Organizations*, Basingstoke (U.K.: Palgrave Macmillan).

Senior, B., and J. Fleming, 2006, *Organizational Change*, 3rd Edition (New York: Prentice Hall).

Schiavo-Campo, S., “Performance in the Public Sector,” *Asian Journal of Political Science.* Vol. 7. No. 2.

Schick, A., 2001a, “The Changing Role of the Budget Office,” *OECD Journal on Budgeting*, Vol. 1, No. 1.

________, 2001b, *Reflections on the New Zealand Model*, Lecture to the New Zealand Treasury, August 2001.

Tiihonen, S. 2012, *The Ministry of Finance: Two Hundred Years of State-Building, Nation-Building and Crisis Management in Finland* (Helsinki: Suomalaison Kirjallisuuden Seura).

Wanna, J., L. Jensen, and J. de Vries (eds.) 2003, *Controlling Public Expenditure: The Changing Role of Central Budget Agencies—Better Guardians?* Cheltenham (U.K.: Edward Elgar).

Whiteman, J., 2013, "Measuring the Capacity and Capability of Public Financial Management Systems," *International Public Management Review*, Vol. 14, Issue 2.

Wildavsky, A., 1988, *The New Politics of the Budgetary Process (*Glenview, Ill: Scott Foresman & Co.).

Williams, M., 2013, "Debt and Cash Management", in Chapter 31 in *The International Handbook of Public Financial Management,* ed. by Allen, Hemming, and Potter (New York: Palgrave Macmillan).

Williamson, O., 1975, *Markets and Hierarchies, Analysis and Antitrust Implications: A Study in the Economics of Internal Organization* (New York, NY: Free Press).

World Bank, 2013, *Transforming Central Finance Agencies in Poor Countries: A Political Economy Approach*, (Washington: World Bank).

_________, 2014, *Corporate Governance of State-Owned Enterprises, a Toolkit*, (Washington: World Bank.