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The processes of accounting changes as emerging from public and fiscal reforms

An interpretive study

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Abstract

Purpose – The purpose of this paper is to explain the emergence processes of accounting change in the Jordanian Ministry of Finance as well as the Jordanian public sector within its socio-economic contexts, as brought about by public and fiscal reforms. The study explains the ways in which accounting change dynamics can emerge on the basis of interaction between "external" origins and "internal" accounts; which identifies that accounting is both shaped by, and shaping, wider socio-economic and political processes.

Design/methodology/approach – The paper uses an interpretive case study approach. The study adopts institutional and structuration theory as a theoretical lens and uses triangulation in data collection, including interviews, observations and documents and archival records.

Findings – The paper concludes that the new budgeting systems together with the Results-Based Management emerged as a result of interaction between "external" origins and "internal" accounts. It also highlights the interaction between these levels from one side, and the accounting and organizational change from the other side. The study confirms that factors other than economic may also play an influential role in the emergence of accounting change. It also concludes that there is a radical change of accounting systems in the case study (Ministry of Finance), which is not only a cosmetic change in accounting but is also represented in the actual working practices. The study also confirms that accounting is not a static phenomenon, but one that changes over time to reflect new systems and practices.

Research limitations/implications – The paper has important implications for institutional research on accounting change and public sector reforms in responding to recent calls to bridge the gap between the extra- and intra-organizational levels of analysis. Hence, it has essential implications for the way in which successful change can be defined in accounting and organizational change literature. It also identifies that management accounting is both shaped by, and shapes, wider socio-economic and political processes, which has important implications for the methods of studying management accounting change.

Originality/value – The paper is one of the few case studies in the accounting literature to analyze the practical issues organizations face when changing their method of budgeting as influenced by public sector and fiscal reforms. The study contributes to both accounting literature and institutional theory by providing further understanding and "thick explanation" of the dynamics of accounting change in the public sector.

Keywords Public sector, Accounting change, Accounting systems, Fiscal reforms, Government Financial Management Information System, Results-Based Budgeting

Paper type Research paper

1. Introduction

Prominent accounting scholars, in particular Anthony Hopwood, have been arguing for at least three decades that attention should be paid to the organizational, economic and social contexts in which accounting operates (see, Hopwood, 1976, 1978, 1983, 1987, 1990; Hopwood and Miller, 1994). They have also argued that we should attend to the "external" origins of "internal" accounts; that we should see "context" as something that moves across organizations, and accounting as both shaped by, and shaping, wider social, economic and political processes (see, Burchell *et al.*, 1980, 1985; Hopwood, 1983; Andon *et al.*, 2007; Chapman *et al.*, 2009). This research has explained such concepts. This broad sensitivity to the nature of accounting has important implications for the methods of

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studying accounting change. Hopwood (1987) claimed that very little was known about accounting change. Hence, this paper is connected to this wider scholarly inquiry of accounting change. Hopwood (1987, p. 207), in calling for further scholarly inquiry into accounting change, argued that:

> […] very little is known about accounting change. As of now, we have only a limited understanding of the conditions which provide the possibility for particular conceptions of the accounting craft, the forces that put accounting into motion, the processes accompanying accounting elaboration and diffusion, and the varied human, organizational and social consequences that can stem from changing accounting regimes.

Following Hopwood (1987), this paper adheres much more closely to the same way of thinking, and is a direct contribution to the research volume. The broad sensitivity to the nature of accounting and its implications for the methods of studying, understanding and denominating in accounting institutions can be observed in all sections of the study. Accounting scholars are being asked to refocus their efforts on a better understanding of how accounting influences, and/or is influenced by, a "multiplicity of agents, agencies, institutions and processes" (Miller, 1994, p. 1; Dillard *et al.*, 2004). The objective of the current study is to explain the processes of accounting change in the MOF that have emerged through public and fiscal reforms. The main research question is as follows:

RQ1. How have the processes of accounting changes emerged in the MOF after public and fiscal reforms?

This study has moved forward toward this objective by explaining the emergence of accounting systems as a result of interaction between the Jordanian political and economic environment and the government environment. The study has important implications for the ways in which change dynamics can emerge at different levels of institutional analysis. It provides new perspectives based on institutional structuration theory to study these dynamics based on an intensive and holistic view of an interpretive case study in accordance with qualitative research-based "Convincingness Criteria." It also explains the interaction between macro- and micro-levels, which can identify that accounting is both shaped by and shapes wider socio-economic and political processes. The study in hand contributes to both accounting literature based on the integration of structuration, and institutional theories by providing further understanding and "thorough explanation" about the emergence dynamics of accounting change in the Jordanian public sector. The paper also contributes to the accounting research by identifying factors beyond accounting changes as well as circumstances that resist the practical implementation of accounting changes at organizational field level. Since the aim of this paper is to explain the emergence processes of accounting changes as produced by the public and fiscal reforms, the qualitative research takes the form of an interpretive case study to follow different paths of change and their consequences over time (Brignall and Modell, 2000).

In doing so, the paper proceeds as follows: Section 2 reviews the relevant literature, Section 3 presents the theoretical framework, and Section 4 shows the methodological underpinnings. Section 5 is divided into two parts. Part one discusses the characteristics and challenges of the Jordanian political and economic environment, and describes the reform initiatives that affect the political and economic contexts; especially public sector and fiscal reforms. Part two focuses on the government environment and its orientation toward New Public Management (NPM) ideas, and discusses the Results-Based Management (RBM) approach. Section 6 explains the emergence of accounting systems, especially budgeting systems (namely; Results-Based Budgeting (RBB) and Government Financial Management Information System (GFMIS)). The discussion is concluded by recognizing the interaction process between these dynamic environments.

2. Literature review

2.1 Accounting changes and institutional theory

This section reviews the accounting studies that have been using institutional theory. Institutional theory starts from structuration theory as a way to extend the theoretical domain of accounting theory into the social realm. It also attempts to identify how theory can be grounded in empirical case studies (Macintosh and Scapens, 1991). One such commendable development has been an institutional theory that is built on OIE and evolutionary economics (Scapens, 1984, 1985, 1990, 1994). This development emerged in response to the recognition of the apparent gap between accounting theory and practice (Scapens, 1984). Scapens (1984) concluded that most UK and US organizations did not use the more advanced mathematical decision-making models available, which were developed from the neoclassical economic theories and were presented in the mainstream accounting textbooks (e.g. Horngren, 1977). Hence, this gap is largely a result of the problems of underlying assumptions of neoclassical economic theories of accounting models (Wickramasinghe and Alawattage, 2007). According to these problems, institutional theory was formulated to explain accounting practices, and particularly to study changes occurring in current practices (Scapens, 2006).

A number of accounting studies have been conducted to examine accounting change. Covaleski and Dirsmith (1986, 1988a, b) adopted an institutional perspective to investigate how, by whom, and for what purposes the societal expectations of acceptable budgetary practices have been articulated, implemented and modified during the period of organizational decline. They suggest that the process of institutionalization appears to be connected to power and vested interests both within the organization and in extra-organizational relations, with the latter appearing to play a dominant role in the periods of organizational decline. Covaleski *et al.* (1993) used an institutional perspective to extend the conceptualization of case-mix accounting systems, regarding the issues of power and decoupling, by considering institutionalization as an on-going process in the US healthcare context. They proposed that the adoption of case-mix accounting systems reflects as much the need to conform to societal expectations of acceptable practice as the technical imperative of reinforcing rationality. Alam (1997) drew on institutional theory to investigate the technical and symbolic roles of budgeting in two state-owned organizations in Bangladesh. His study concluded that, in conditions of high uncertainty, budgeting is more oriented toward the management of external relationships.

Brignall and Modell (2000) explored the implications of institutional theory for the successful implementation of multidimensional performance measurement and management in the public sector. They recognized that managerial choice constitutes a useful starting point for analyzing how performance measurement practices change in highly institutionalized settings; such as the public sector. Modell (2001, 2003, 2004, 2009) and Modell *et al.* (2007) studied the development of performance measurement practices in response to the requirements of the Swedish public sector. Their studies made two contributions to NIS. First, they found that loose coupling between many of the performance indicators reduced the likelihood of potential conflict; and second, that loose coupling may occur as a result of the passivity of centrally located actors as well as proactive resistance. Also, Modell (2002) drew on institutional theory to explore the influence of institutional pressures on the implementation of cost allocation practices. Modell developed a framework to reflect how interaction between extra-organizational pressures and organizational power relationships influences the coupling of cost allocation practices with operating control.

Hoque and Hopper (1994) used institutional theory to study the impact of external factors on management control systems in a Bangladeshi jute mill. Their study confirmed the conclusions of other studies that the broad social, economic, political and institutional contexts govern the operation of management control systems in the organization. In the same way, Abernethy and Chua (1996) drew on the institutional perspective to demonstrate the design and operation of management control systems. They identified how accounting controls operate as part of an organizational control "mix" that is actively shaped by the strategic choices of its dominant coalition. Hussain and Hoque (2002), along the same line as Hussain and Gunasekaran (2002), studied the relationship between external factors and the use of non-financial performance in banks. Both studies recognized that extra-institutional factors influenced the design and use of non-financial performance systems.

Hopper and Major (2007) extended institutional analysis by adopting theoretical triangulation to examine why Activity Based Costing (ABC) was adopted in a Portuguese telecommunications company (see also, Major and Hopper, 2005). The contributions of their study are several. First, it confirmed various criticisms of ABC; second, it also confirmed criticisms of early New Institutional Sociology (NIS) research; and finally, Dillard *et al.*'s model required an extension through using theoretical triangulation. Cruz *et al.* (2009, 2011) looked at a joint venture (JV) set up by a Portuguese company and a global corporation (GC) in the hospitality sector. They had examined how and why the JV's managers launched variations (heterogeneous practices) in the management control (MC) rules and procedures in institutionalizing the global MC system imposed by the GC. They concluded that, although institutional and technical criteria were not in dialectical tension, the JV's managers adapted the global MC system by developing loosely coupled MC rules and practices to satisfy the multiple logics in forming it.

Busco and Scapens (2011) and Busco *et al.* (2001) had focused on exploring the nature, roles and dynamics of change of accounting practices, in processes of continuous organizational learning and transformation. They have developed an institutional framework for interpreting the ways in which routinized systems of accountability connected the on-going processes of cultural transformation across time and space. Burns and Baldvinsdottir (2005) drew on institutional theory to describe the emergence of new team/process-oriented roles ("hybrid" accountants) in the manufacturing division of a multinational pharmaceuticals organization. They highlighted the institutional contradictions that create potential openings for change, and discussed the praxis that underpins when, how and why role(s) change had been carved out (see also, Burns and Nielsen, 2006). Ahmed and Scapens (2000, 2003) showed how the institutional perspective can help to explore the historical development of cost-based pricing (cost allocation) rules in Britain. They concluded that cost-based pricing rules were viewed as instrumental in bringing stability and control to a market that was operating in an apparently unacceptable way, and were implicated in a variety of restrictive practices.

2.2 Accounting changes and NPM

Accounting changes in public financial management (PFM) over the last decade were central to the rise of the NPM doctrine and its associated ideas of RBM and public accountability, of which accounting is a key element. NPM arose as an alternative paradigm to bureaucratic (traditional) public management (see Hood, 1995a, b). NPM is often interpreted as a response to budget cuts, fiscal stress, government overload and social dissatisfaction; with relatively poor macroeconomic indicators such as high public debt, budget deficit, inflation and unemployment. NPM reforms were taken up and generated by Organization for Economic Cooperation and Development (OECD) countries in the 1980s (Hood, 1995a, b). The NPM, called "a new paradigm" by many researchers, seems to have dominated the thinking about public sector and fiscal reforms by practitioners and academics alike (Osborne and Gaebler, 1992; Hood, 1995a, b; Hughes, 1998). As Hughes (1998, p. 1) states, "traditional public administration has been discredited theoretically and practically, and the adoption of new forms of public management means the emergence of a new paradigm in the public sector." Thus, NPM reforms appear to be a general response to widespread pressures, including improving public management and services, remedying fiscal stresses, minimizing budgets and clarifying the imperatives of globalization (Aucoin, 1990; Polidano and Hulme, 1999).

There is a universal consensus that key components of NPM reforms include deregulation of line management, RBM emphasis, strategic planning, performance-based accountability and conversion of civil service departments (Aucoin, 1990; Hood, 1991). Some authors also include privatization and downsizing as parts of this package (Ingraham, 1996; Minogue, 1998; Polidano and Hulme, 1999). The changing approach to public sector budgeting is part of a more general move to improve public sector performance management, referred to by the OECD as "performance management": "In general one could argue that, under performance management, input-oriented budgets have turned into performance budgets, cash-based accounting systems have changed into accrual-based cost accounting systems […] or performance reporting systems, and compliance and financial audits have been complemented by performance audits and evaluations" (OECD, 1997, p. 21). The OECD describes a subset of new approaches to the delivery of public services that is often described as the "RBM approach." The shift from the old public administration to NPM has fundamental implications for RBB. NPM systems permit greater flexibility of inputs and processes in return for greater emphasis on outputs and performance (OECD, 1997; Rose, 2003). In this regard, performance-based systems are intended to complement the accounting systems rather than replace them (Rose, 2003).

Kristensen *et al.* (2002) recognize the key drivers of an outcome-focused approach to budgeting and management to improve public sector learning about how government policy can have an impact on society: to make government leaders more accountable for program performance and their impacts on society; to enable government to prioritize the allocation of resources based on planned program results; and to understand that the achievement of positive outcomes involves realizing national objectives. Kristensen *et al.* (2002, p. 7) also reviewed the steps that OECD states have taken to move from input-based budgeting to output-based budgeting. They conclude that, generally, it is the view of central budgeting and management institutions that a change in focus enhances the quality of management and increases program effectiveness and efficiency. And one key change is the shift in many OECD countries from cash accounting to accruals budgeting and accounting; a shift designed to link the "allocation of costs to outputs and outcomes" (Kristensen *et al.*, 2002, p. 17).

Recently, the government of Jordan has made significant changes in PFM by drawing on the RBM approach as a main notion in NPM doctrine in terms of planning, budgeting, controlling, monitoring and accountability. The budgeting systems, as a key part of PFM, emerged along with the adoption of the RBM approach by the Ministry of Finance (MOF) (PEFA, 2011). In the government environment, public organizations (i.e. the MOF and its affiliated organizations), in cooperation with USAID consultants, donors and experts have developed procedures, guidelines and plans on how accounting systems should and/or could be developed and implemented by specific organizations and disseminated within the government environment. This study focuses on the development and implementation of budgeting systems among public organizations by focusing on the MOF case study. The paper contributes to accounting research by identifying factors beyond accounting changes as well as circumstances that resist the practical implementation of accounting changes at the organizational field level.

3. Theoretical framework

Alsharari *et al.*'s framework (2015) has been developed as a multilevel institutional analysis of the dynamics associated with the institutionalization process; it integrates structuration theory with institutional theory to theorize change at multiple levels, such as societal, field and organizational. The framework shows the potential to enable researchers to study the institutionalization of accounting practices as a process, considering the social, political and economic aspects that make up the context in which an organization operates (Moore and Park, 2011). Alsharari *et al.*'s (2015) framework supposes that meaningful change is more likely to be motivated and better understood where the societal context can be explicated and linked to social action through the various levels of the social order (Alsharari *et al.*, 2015). This framework particularly serves the purpose of this study through explaining accounting changes as interpretive case study. By adopting this framework, the study seeks to achieve further progress in institutional theory to tackle the above issues, and to provide a more holistic understanding of accounting changes.

Structuration theory in this paper provides a meta-theoretical representation of the key dynamics of institutional theory. It not only illustrates the primary context dimension, but also presents the dynamics for institutional change (Dillard *et al.*, 2004). Through the vehicle of the institution and structuration, "institutionalists provide the possibility of a contextual and culturally sensitive account. It is an account in which the actions of institutions are not reducible to the universal rational calculations of individuals found within them; but are embedded within, and constrained by, a local institutional culture of social relations, tacit rules and formal regulations" (MacLeod, 2004, p. 62). Burns (2001) points out that institutional theories utilized in the future will likely represent a "hybrid" framework that draws on insights of various institutional (and non-institutional) perspectives (p. 35). In doing so, the institutional theory can offer guidance on organizational change; first by providing a convincing definition of radical (as opposed to convergent) change and, second, by signaling the contextual dynamics that precipitate the need for organizational adaptation (Greenwood and Hinings, 1996).

Alsharari *et al.*'s (2015) framework, based on Dillard *et al.* (2004), recognizes that the multiple levels of the institutionalization process move in a recursively cascading manner by hierarchically linking the wider institutional influences of political and economic factors level (PE) with the organizational level, through the organizational field level (OF). Therefore, this framework examines the impact of external, as well as internal, factors on management accounting processes within a specific organization. It explains these wider institutional influences on organizational change by recognizing three levels of institutions. At the societal level, the first level, the most general norms and values, e.g. laws, principles and practices (CPE), are established and influenced by the existing distribution of power in the society. This macro set of norms and principles shapes the organizational field level criteria (COF), the second level, which is a function of the societal level criteria (CPE). As a result, the organizational field practices (POF), the third level, are influenced by the organizational field criteria (i.e. isomorphism pressures) that were previously shaped by the PE principles. The contextual framework adopts isomorphism drivers in equivalence with organizational field criteria (COF). The COF consist of professional groups, industry groups, government, etc., which might be inhabited by individual organizations; the final level is the organization itself (Hopper and Major, 2007). At the organizational level (the third level), Alsharari *et al.*'s framework adopts Burns and Scapens' (2000) framework, which assumes that the institutional realm and the realm of action are linked by rules and routines. Hence, it focuses on "micro institutions" inside the organization. The institutional realm represents the ways of thinking and the underlying assumptions that are taken for granted by the organizational actors before the process of change, while the realm of action comprises the actions that are carried out by the organizational individuals (Wanderley *et al.*, 2011).

Following the process of institutionalization, the new organizational institutionalized rules or practices may influence the set of normative practices (POF) and criteria (COF) at the organizational field level (the second level) by reinforcing, revising or eliminating existing practices (Dillard *et al.*, 2004). Changes in organizational field practices (P'OF) and criteria (C'OF) will usually influence the political and economic system criteria (C'PE).

Thus, new political and economic criteria will defy the present coalition of power at the economic and political levels. Consequently, the social processes of institutionalization, de-institutionalization or re-institutionalization might be generated by choosing significant norms, values and institutions. Hence, such new accounting practices become institutionalized through these social and political processes, and they cannot be justified merely through economic rationalities (Dillard *et al.*, 2004; Wickramasinghe and Alawattage, 2007). Such a process of institutionalization takes place only if the "axes of power" are manifested. In other words, Hardy's model can also be used to facilitate change on both the societal (PE) and organizational field (OF) levels. At those levels, power over resources can take the form of authority and funding; power over processes can take the form of agendas and decision making; and power over meaning can be practiced through emphasizing the legitimacy of change.

This framework is supported by the notion of duality of structure and agency; which is a general framework of social action (Anthony, 1965, 1989). According to this, institutions are the background for action but may, in contrast, be recursively modified through the action of human agents (Seal, 2003, 2006). The process of institutionalization is thus inverted again and flows downwards through the three levels; unfolding as acceptable and legitimate practices for organizations over time and space. The framework represents a convergence around multiple themes suggested by both old and new institutionalism. In particular, it offers an outstanding basis for accounting and organizational change as it pays special attention to the link between organizational contexts and organizational actions and offers a more detailed consideration of the different interests and powers of human actors (see Ma and Tayles, 2009). Hence, it represents a convenient tool for interpreting the accounting changes within the MOF.

4. The methodological underpinnings

This paper presents a case study of the Jordanian MOF, which has changed its accounting systems as influenced by NPM and public sector reforms. The establishment of the MOF dates back to the creation of the first ministry under the Emirate of Transjordan in April 1920. As set out in Figure 1, several public organizations were linked to the ministry, including: the Customs Organization, the Income and Sales Tax Organization, the General Budget Organization, the Organization of Land and Survey, and the General Supplies Organization.

The MOF is headed by a Finance Minister who reports directly to the Prime Minister. The roles and responsibilities of MOF are extensive and wide-ranging, in line with its public and fiscal policies and its objectives. In response to the reinvention of government, MOF has advanced to become more mission driven, customer focused, result oriented and

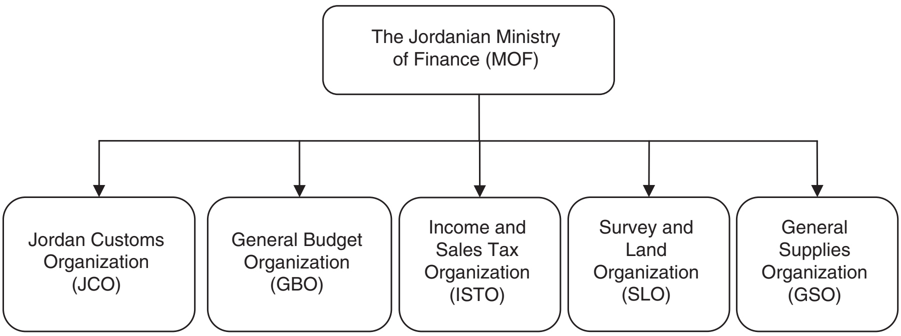


Figure 1.
Organizational field of the MOF

Source: MOF, Jordan

decentralized to match the needs of stakeholders, and to maintain its institutional stability and legitimacy. The mission of MOF is "Improving public finance management mechanisms and the quality of rendered services through modernization of financial legislations and implementation of international best practices building on the accumulated knowledge and highly qualified human resources."

Since the aim of this paper is to explain the emergence processes of accounting changes as produced by the public and fiscal reforms, the qualitative research takes the form of an interpretive case study to follow the different paths of change and their consequences over time (Brignall and Modell, 2000). In this regard, Scapens (1994) points out that structuration and institutional frameworks have cultural and anthropological dimensions and act as the basis for understanding accounting change. Thus, this paper uses structuration and institutional integrations as proposed by Alsharari *el al.*'s (2015) framework to achieve the required objective (see also, Englund *et al.*, 2011; Alsharari, 2013). The ontological and epistemological assumptions underpinning the interpretive paradigm are consistent with the assumptions that underlie the structuration and institutional frameworks used to explain the case study. While the relations between the extra- and intra-organizational contexts are not necessarily simple and/or linear, and are inextricably linked (Hong, 1991; Bhimani, 2001), an explanatory case study (Scapens, 1990) is needed within this paper to explain these complex relations, while theoretical concepts are required to interpret the case study findings.

The study focuses on both the external and internal environments of the MOF, as well as their interactions. It is expected that, when exploring the interface between the macro- and micro-levels, it might be possible to study the complex process of accounting changes in the MOF in more detail. However, constraints on data collection and analysis result in a number of limitations. It was not possible to conduct a longitudinal study to observe the historical events unfolding over time; nevertheless, we were able to reconstruct the historical context of the MOF; based on documentary evidence, historical data and interviews with managers (and others) who worked during the pre-emergence and post-emergence phases of the new accounting systems.

To enhance the validity of the research results, this study triangulates methods of data collection; interviews and observations as primary evidence, and documents and archival records as secondary evidence. This approach has been used by other authors (Lind, 2001; Marginson, 2002; Hopper and Major, 2007; Lukka, 2007; Vaivio and Sirén, 2010). Scapens (1990, p. 275) defines triangulation as "the process of collecting multiple sources of evidence on a particular issue." Although the semi-structured and unstructured interviews constituted the primary method of data collection, other methods were used to complement these interviews as follows: participant observations; reviews of documents, annual reports, monthly management reports and legislative documents; and direct observations of the processing activities.

The interviewees, drawn from different levels of the MOF, held different positions and have different backgrounds. The study is based on 31 interviews that were undertaken with different individuals over field-visits to the site in 2013, 2014 and 2015. These visits were used to gather evidence on accounting changes and the internal and external factors that affected the existing and new budgeting system. As such, a retrospective approach was used, with interviewees being asked to describe, explain and reflect upon the events they had experienced. In some situations, relying on their memories was the only practical option, but memories can be partial and may be shaped by present viewpoints. Hence, wherever possible, multiple data sources were used.

The views of the different groups were sought and interviewees were asked similar questions on the role of accounting changes. However, it is relevant to note that most of the accountants who had been present throughout the entire emergence process were interviewed.

These also included some members of the financial management, strategic planning, IT and operations divisions, as well as senior managers within the MOF field. In addition, related government officials from different public organizations were interviewed. The selection of the particular interviewees was directed by both theory and research questions. The sampling of interviewees was therefore purposeful and not theoretical (Chandler, 1992, 1993; Nor-Aziah and Scapens, 2007). There was a planned focus on the professional groups most likely to be involved in the accounting changes that had taken place during and beyond the emergence process of budgeting systems, such as Budgeting Specials and Fiscal Reforms Advisors.

Furthermore, this study uses both types of qualitative observations to supplement the other methods and increase the research validity. For direct observation, the GFMIS department was considered a suitable unit by the authors as it is the largest part of the ministry. The observation included the new budgeting system and the new accounting practices. Participant observation enabled the authors to share the subjects' experiences not merely by observing what was happening but also by feeling it (Gill and Johnson, 2002). This method is used, especially in committee meetings and training courses, to discover delicate nuances of meanings and symbolic frames, and to increase the level of immersion.

The evidence from the interviews and observations was further reinforced by documentary evidence. This study used internal and external documents to gain a large amount of information about the history of accounting changes. Background information on the MOF was obtained through web pages, reports, newspapers, general budget manuals, public policy, fiscal reform plans and others. The internal documents were obtained and reviewed during the fieldwork. They included, among others, the annual reports, the ministry prospectus, the planning and budgeting manuals, public and fiscal policy issues, training programs, strategic plans, organizational structure, etc. Informal documents, such as internal divisional newsletters and brochures, were also obtained and reviewed.

The process of analysis began at the same time as the data were collected and prepared for analysis. Accordingly, interviews were recorded and transcribed consecutively using a word-processor (Gill and Johnson, 2002). The process of analysis commenced with the full transcript of all interviews. These transcripts were entered and coded in QSR Nvivo9 software by reading and re-reading data many times, paying special attention to the mode of expression (e.g. intonation, pauses, etc.). This helped the authors to recognize the particular issues that resulted from each interview in relation to other evidence. Thus, data reduction took place when common sequences and patterns were spotted and highlighted. Afterwards, similar themes were grouped and classified, such as RBB, GFMIS and RBM. Meanwhile, the detection of any differences in perceptions among interviewees that might disconfirm the patterns previously identified was closely managed. In this regard, similar themes or opinions expressed by the interviewees were explained within the normal body of discussion and analysis, while dissimilar themes were discussed using direct quotations from the interviewees. These procedures were followed to guarantee the plausibility of the analysis and the authenticity of the paper findings.

5. The analysis and discussion

Jordan is considered an emerging free-market economy. Like some other developing countries, Jordan has faced substantial environmental challenges in the past two decades. These challenges are intensified by the scarcity of natural resources, large budget deficits, soaring levels of debt, structural unemployment, high tax pressures, low quality of public services and bureaucratic public management. The location and regime of Jordan has enabled the country to form strategic relations with the EU and the USA through several international agreements. As a result, Jordan launched the National Agenda (NA) in 2005, which represents a remarkable milestone in efforts to build a modern Jordan and address challenges facing the country. The NA initiative aimed to achieve sustainable development by implementing various public sector and fiscal reforms and, with the assistance of international donors and consultants, to set Jordan on a productive reform path toward rapid economic and political development (see NA, 2005). Consequently, this led to transformation from bureaucratic management into the NPM doctrine. The changes in the Jordanian public sector toward NPM were under way by 2008, especially after the implementation of accounting changes including budgeting systems. The following sections and figure provide an overview of the Jordanian dynamics on accounting changes, and discusses the emergence of budgeting systems. The following figure summarizes all accounting events including the major changes, which have taken place in the MOF case as influenced by fiscal and public reforms initiatives. The stages defined in the figure will be discussed in more details in the following sections (Figure 2).

5.1 The Jordanian economy and its challenges

The Jordanian economy is attempting to become industrialized by encouraging small to medium-sized producers to sell their produce in foreign countries as a way of increasing employment and expanding tax bases. However, the global economic slowdown and regional turmoil have also depressed Jordan's GDP growth and affected other economic indicators (as indicated in Figures 3-5)[1] such as budget deficit, exports and imports, foreign investments, inflation, unemployment, public debt, etc.

Figures 3-5 show some significant indicators. For instance, the country continues to face numerous economic and social challenges such as high fiscal deficit of almost 9 percent in 2010, and public debt of over 70 percent of total GDP in 2010, which threatens the rate of growth. External aid remains vital, and economic growth scarcely encourages the workforce to join the labor market every year. Unemployment is high in the country, particularly among young people. However, substantial expatriates' remittances (over 20 percent of GDP) have enabled Jordan to finance levels of consumption and investment far in excess of what is sustainable by domestic income. Imports of crude oil are a major drain on the economy and on

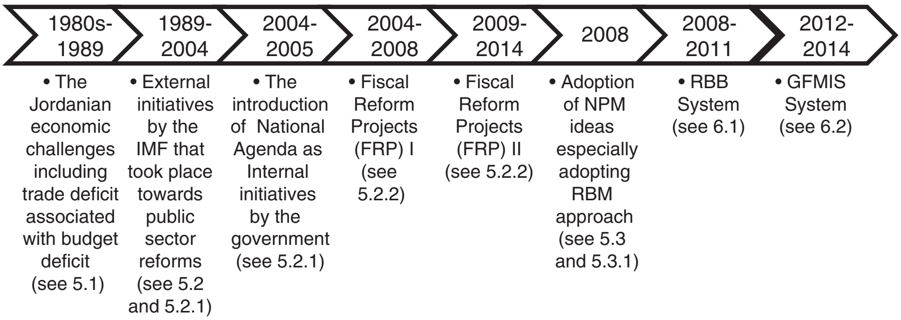


Figure 2. Summary of accounting events in the MOF case

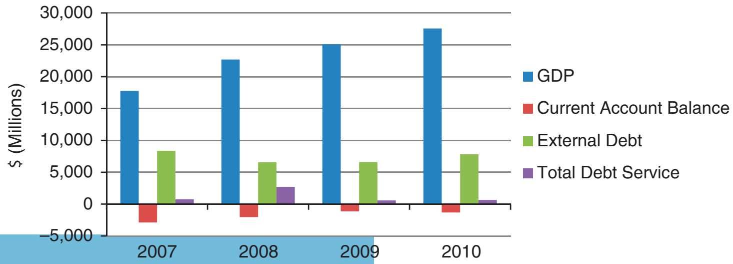


Figure 3. Key Jordanian economic indicators in millions of dollars, 2007-2010

its limited foreign exchange (El-Sakka, 2007). Besides, there has been a deficit in the trade balance and/or budget since the establishment of the state (Al-Hyari, 2009). The budget deficit started to increase again during the period 2011-2012, reaching over 10 percent of GDP. The trade balance remained highly unstable during this period, although foreign currency reserves remained high enough to safeguard against short-term fluctuations.

The previously discussed indicators have affected the Jordanian economy's performance, as the trade deficit and the associated current account deficit transformed Jordan from a closed economy with bureaucratic administration in the 1980s and 1990s to a country with a more open economy and NPM doctrine by the 2000s. These macroeconomic indicators have put economic and political pressures on the state and have allowed it to avoid more drastic measures by adopting a real reform path. To tackle the internal and external imbalances, the government has adopted economic reform programs since 1989, supported by the International Monetary Fund (IMF) and the World Bank. These reform programs have contributed significantly to reducing the macroeconomic imbalances, resulting in a satisfactory growth performance in terms of GDP with a more significant role for the private sector in the economy.

Consequently, the Jordanian government has consistently run large budget deficits that have led to rising levels of debt; thereby hindering its ability to invest in reform enablers. The government formulated a new "NA" in its attempt to tackle these challenges. The NA was established by royal decree in 2005. The NA ensures a process of "national inclusion" by involving stakeholders from various sectors of the society, including the governmental sector, with the aim of achieving a fair distribution of the expected benefits of social, economic and political reforms (NA, 2005). Thus, the ultimate objective of the NA is "to achieve sustainable development through a transformation program that puts Jordan on a reform path toward fast economic growth and greater social inclusion; resulting in comprehensive strategies and initiatives developed to evaluate and monitor the progress of its implementation according to detailed performance indicators" (NA, 2005, p. 4).

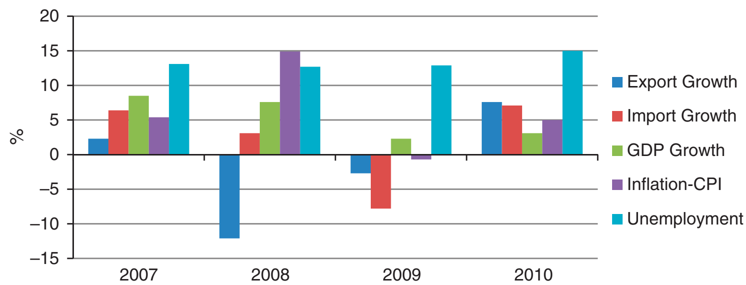


Figure 4.
Key Jordanian economic indicators in percentages, 2007-2010

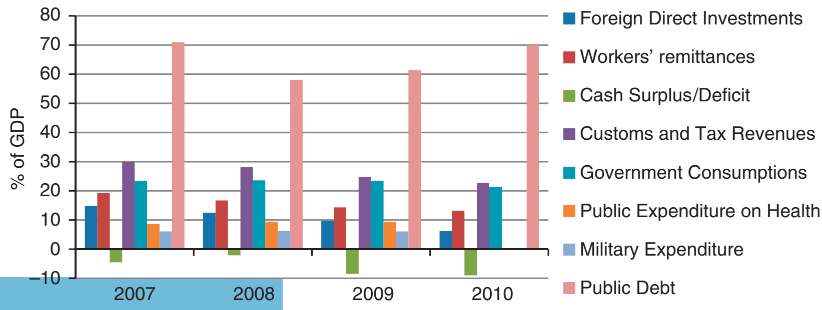


Figure 5.
Key Jordanian economic indicators as percentage of GDP, 2007-2010

With the intention to manage these challenges and to obtain the benefits of the opportunities created by the NA initiatives, the Jordanian government has changed and modernized its public management and budgeting system to be more focused on results. Consequently, export-led growth has become higher, foreign direct investment is increasing, and poverty and unemployment have been reduced (Cassing and Salameh, 2006). Furthermore, the government has striven to coordinate conflicting objectives and interests, but has been only moderately successful in this task. Over the last decade, several capacity-building initiatives linked with public sector and fiscal reforms, including RBB and GFMIS systems, have been developed and implemented under the umbrella of NA and NPM. These systems highlight a more general problem of policy coordination.

In conclusion, this section indicates how trade and budget deficit indicators have driven Jordan to be a more open economy by 2000.

5.2 Political and economic reforms

The conditions and challenges in the Jordanian political and economic context created pressure for change at the societal level, which forced the Jordanian government to establish the criteria for effective financial management in public organizations, especially the MOF. The political and economic reforms resulted in setting in motion the institutionalization of certain financial management processes by focusing mainly on the RBM approach, which was reflected in the public sector and fiscal reforms. These reform plans were developed by the government to address the implementation of accounting systems, especially budgeting systems. The Jordanian reform process can be divided into two stages: external initiatives by the IMF that took place between 1989 and 2004, and internal initiatives by the government that started in 2005.

5.2.1 Reforms path history: external and internal initiatives. Since 1989, Jordan has successfully implemented various economic reform programs to overcome the major imbalances and to recover macroeconomic stability as a precondition for sustainable economic growth. All of these reform programs were standalone and introduced by the IMF. Most of the targeted objectives located in these programs have been achieved and, in some cases, surpassed. Table I displays the positive impact of the IMF reform programs for the period 1989-2004, on macroeconomic indicators in Jordan.

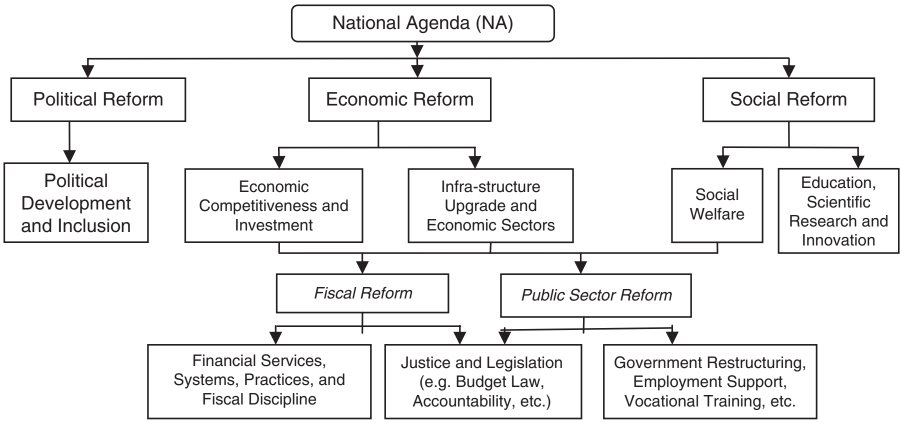
Afterwards, the government launched the "NA"[2] as an umbrella for national reforms spanning the period 2006-2015 (see Figure 6).

The reforms organized in Figure 6 were articulated and implemented in three phases of the transformation process of overall socio-economic and political development. The first phase spans a period of five years (2007-2012) and focuses on creating employment opportunities for all Jordanians by promoting export-oriented, labor-intensive industries, financial management and services, education, infrastructure and legislation regulating political life. Public sector and fiscal reforms drawing on NPM ideas are manifested clearly in this phase. The second phase covers the period 2013-2017 and focuses on gradual upgrading and strengthening of the

Macroeconomic indicators	1989	2004
Real GDP Growth	−13.4	7.2
Inflation (% change of CPI)	25.7	3.5
Budget deficit (including grants) (% of GDP)	−10.1	−2.7
Budget deficit (excluding grants) (% of GDP)	−21.7	−12.8
Foreign reserves (million US$)	130	4,824
External debt (% of GDP)	190	66

Sources: MOF, Central Bank of Jordan and Department of Statistics

Table I. Macroeconomic indicators, 1989-2004



Source: Authors

Figure 6.
Developmental dimensions of the national agenda

industrial base and preparing the ground for the development of high value-added sectors in the knowledge economy in the third phase. The third phase, to be implemented from 2018 onwards, will be represented in the process of transformation into world class competitor in the knowledge economy (see NA, 2005). The overall aim of the NA is to improve quality of life and social welfare through the creation of income-generating opportunities. Table II describes the targets (performance indicators) of NA expected to be achieved over the three transformation phases. These key performance indicators (KPIs) were established to monitor the progress of reform dimensions within the NA. Thus, the NA initiatives are measurable through clear sets of KPIs (NA, 2005). The focus of this study is on the first phase of NA reforms relating to public sector and fiscal reforms.

To summarize, this section discusses the three phases of the reform's articulation which extends from 2007 till 2018 and onwards.

5.2.2 Public sector and fiscal reforms. The radical reforms in PFM to improve budget performance and increase government efficiency were at the core of the NPM ideas and initiatives of fiscal and public sector reforms. Such reforms are particularly necessary to secure the required funding for socio-economic development programs implemented under the NA. As discussed before, Jordan's public finances suffered from continual distortions and deficits despite relative improvements in fiscal performance. The growing budget

National agenda indicators	2004 Phase 1	Target (2012) Phase 2	Target (2017) Phase 3
Average annual real GDP growth	5%	8%	7%
Public debt as a percentage of GDP	91%	63%	36%
Budget (deficit)/surplus as a percentage of GDP; excluding grants	(11.8%)	(3.6%)	1.8%
Capital investments as a percentage of GDP	21%	21%	24%
National savings as a percentage of GDP	13%	23%	27%
Net exports/imports in US$ billion	(2.4)	(1.7)	(0.9)
Unemployment as a percentage of active population	12.5%	9.3%	6.8%

Notes: Average real GDP growth rate over the 1998-2004 period; average real GDP growth rate over a ten-year period, starting from 2007, is 7.2 percent
Source: NA (2005, p. 7)

Table II.
Main national agenda socio-economic targets

deficit was mainly caused by the growth in government expenditures, which continued to be driven by capital expenditures, defense and security, public sector salaries and pensions. Furthermore, the expected decline in foreign grants, coupled with a high dependence on oil subsidies, made the budget extremely responsive to oil price fluctuations; all of these militated for support for fiscal reforms. As a result, reforms proposed to improve budget performance, such as NPM, include the following initiatives:

(1) Fiscal reform: mitigate oil subsidies, improve pension system, develop civil service and incentive system (wage bill), accelerate privatization program, modernize the customs and tax administration and system (see Table III).

(2) Government efficiency (PFM) (see Table IV): complete the implementation of the Public Sector Reform Program (FRP I), which was approved by the Cabinet in 2004, including the RBB system. Also, develop and implement a comprehensive e-government program.

The NA has already set a number of KPIs designed to monitor the implementation of these two initiatives, which are associated with public sector and fiscal reforms. The following tables include major KPIs for these initiatives respectively:

Along with the Action Plan, the Jordanian MOF has embarked on a significant fiscal reform program for public finance in two sequential projects: Fiscal Reform Projects (FRP) I (2004-2008) and II (2009-2014). The implementation of these projects was supported by external technical and financial support from international donors – in particular, USAID for reforms of the customs and tax system and the accounting systems; and the German Technical Cooperation (GTC) for the change in budgeting system and process, and the modernization of accounting practices including expenditure procedures. The IMF and the World Bank have also supported the fiscal reform efforts of the MOF (see EU, 2007b).

Key performance indicators (KPIs)	Current (2005)	Target (2012)	Target (2017)
GDP (real growth)	5%	8%	7%
Public debt as a percentage of GDP	91%	63%	36%
Budget (deficit)/surplus as a percentage of GDP, excluding grants	(11.3%)	(3.6%)	1.8%
Domestic revenues as a percentage of current expenditures	85%	140%	170%
Customs and tax revenues as a percentage of total government revenues	54%	71%	75%
Civil service pension costs (in JD Million)	111	0	0
Oil subsidies (in JD Million)	495	0	0
Subsidies on wheat, malt and bran (in JD Million)	57	0	0
Subsidies to state-owned enterprises (in JD Million)	133	78	78

Source: NA, Jordan: 24

Table III. Selected performance indicators for fiscal performance (A)

Key performance indicators (KPIs)	Current (2005) (%)	Target (2012) (%)	Target (2017) (%)
Control of corruption percentile ranking[a]	69	80	90
Central government Wage Bill as a percentage of GDP	14	9	7
Government effectiveness percentile ranking[a]	63	80	90

Note: [a]World Bank Governance Indicators
Source: NA, Jordan: 24

Table IV. Selected performance indicators for government efficiency (B)

The FRP I (2004-2008) was implemented within the Public Sector Reform Strategy that was adopted by the MOF in 2004. It focused on a PFM reform, consisting of RBM approach, RBB system, Taxation and Customs administrations, and the introduction of GFMIS system as well as the other public sector reforms (Beschel and Ahern, 2012). The FRP I was supplemented by FRP II, which was gradually implemented between 2009 and 2014. Thus, the work of the USAID FRP II is implemented through six components: Tax Revenue Mobilization; PFM; MOF Capacity and Organization; Customs Administration and Trade Facilitation; Results-Oriented Government (ROG); and GFMIS (USAID, 2011a). In this regard, it should be emphasized that the MOF, with the support of expertise and consultants and financed by USAID, has embarked on a computerization scheme (in the form of GFMIS) adapted to a new chart of account (COA) based on the accrual system, and in full conformity with the International Public Sector Accounting Standards (IPSAS).

The budgeting systems have been, and continue to be, the subject of constant major reform, bringing practices and procedures into line with international best practice, under both FRP I and II. Both initiatives are having a major positive impact on fiscal discipline and on the effectiveness of budget allocation in terms of developed KPIs. This also helps to fill the gap between strategic planning, the MTFF and RBB systems, which are considered inextricably linked. In the same way, the financial management system has been undertaking major reform by implementing the Oracle-based Government Wide Financial Management System, or GFMIS (USAID, 2010a). Figure 7 illustrates the implementation steps of the public sector and fiscal reform, which moved gradually from the NA to the implemented accounting systems.

The MOF, by implementing these projects (FRP I & II), focused on three main objectives drawing on the RBM approach: first, improving the macro-fiscal conditions of the treasury through the improvement of public debt management and domestic revenues management; rationalizing the tax system to minimize tax evasion; creating a comprehensive real estate information system; and continuing to review public expenditure annually to allocate funds in accordance with national priorities; second, raising competence in planning, preparation and implementation of the central budget through a rationalization of the budget preparation in terms of RBB within clear sector priorities, and also aiming to attain more fiscal transparency; and promotion of the quality of public services to citizens and investors through more accountability in ministries and outflow organizations; and third,

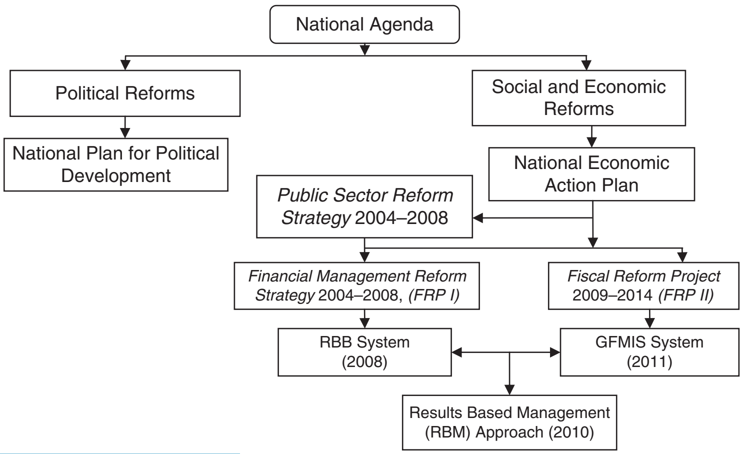


Figure 7.
The implementation steps of fiscal reform projects

Source: Authors

constructing institutional capacity and human resources development by a full reconsideration of the managerial and organizational structure of the MOF and affiliated organizations as well as the definitions of functions and job descriptions (EU, 2007b). This study examines the emergence and implementation of the RBM initiative, especially RBB and GFMIS systems, at the organizational field (government environment) level.

To conclude, this section explains the FRP I and II, which extend between 2004 and 2014, the reasons and the steps of their implementation and their objectives. Section (5.3) describes the Jordanian government environment and its orientation toward NPM ideas, and explains the RBM approach.

5.3 Jordanian government environment and NPM doctrine

The implementation of public sector and fiscal reform initiatives over the last decade has led to significant changes within public organizations in the governmental field in terms of management accounting and organizational changes. These changes have taken place in various facets, including organizational structure, strategies, information technology (IT), financial and management accounting and other aspects of financial management, human resource management, customer orientation and performance measures. The objective of these initiatives has been to stimulate socio-economic and political development by accelerating private sector-led growth and implementing sound economic and fiscal policies. The following sections show the major changes in the organizational and governmental fields.

5.3.1 Organizational structure of government. The organizational system driven by the administration of government is divided into three levels: ministries, central organization and corporations. The public sector and fiscal reforms program aimed to improve the performance of ministries and public organizations by providing them with general guidelines to work toward mid- and long-term strategic objectives as well as national objectives, while at the same time ensuring that change comes from within and in cooperation with the private sector. Thus, the government has developed its plan for the public sector and fiscal reforms program to achieve administrative and accounting development. The objectives of the plan included ensuring greater transparency and accountability of government performance. According to the plan and its program, the four main principles for reforming the public sector are developing accounting systems and practices that can achieve actual results in the development process; ensuring accountability and transparency; decentralizing decision making; and ensuring the proper use of financial resources (Caimed, 2012).

In accordance with the NA, the government has adopted seven strategic initiatives[3] to help focus its efforts in "the Government Implementation Plan" of 2010 and to better define and prioritize its activities. A new Delivery Unit (DU) has also been established in the Prime Minister's Office in order to monitor and track implementation of the Government Plan. The DU thus works closely with ministerial committees to resolve delays in the execution of capital projects and helps ministries and public organizations to accelerate implementation of initiatives based on the RBM approach (GOJ, 2010).

More specifically, the establishment of MOPSD, DU and ministerial committees was intended to ensure the successful implementation of the NA initiatives, especially RBM, as well as to facilitate its development toward monitoring the progress of implementation and measuring its impact on socio-economic development (GOJ, 2010). Consequently, the implementation of RBB was intended to link the strategic planning process with the budgeting system. Hence, the implementation of these stages at three levels of budgeting and strategic planning process enhanced the RBM approach (see Figure 8).

Along with the Government Implementation Plan, the government has prepared a new "Executive Development Program" for the Medium Term Fiscal Framework (MTFF). The program considers a comprehensive working plan for the next three years that was developed in a participatory approach; adopting the initiatives of the NA and the government, sectorial and organizational strategies, as well as the RBB system. The program determines objectives, policy actions, capital projects, required funding and related KPIs to measure targeted outcomes. Its activities and projects support the government's efforts to achieve economic, social and political reforms (MPIC, 2011).

To ensure the coherence of the executive program with the government's fiscal policy, coordination and cooperation at the highest level between MOPIC, DU, MOF and the GBO has linked the program with the MTFF to streamline the fiscal and economic objectives with the development objectives. Thus, the MOPIC, in coordination with the MOF and the GBO on one hand, matches the executive program with the state RBB in order to avoid any duplication of projects, and specifies the financial gap after priorities have been identified by the ministerial committees. On the other hand, the MOPSD and DU monitor and evaluate the implementation of capital programs and projects. In doing so, the government has moved forward to the RBM approach, which helps to accomplish its priorities within the framework of fiscal policy, accountability, monitoring and evaluating, and at the same time aiming to decrease the deficit and public debt, and maintain financial stability (MPIC, 2011).

However, there are still some limitations to the government structure. The five organizations and ministries, which have various monitoring and evaluation roles, are the MOPSD, the MOF, GBO, DU and Ministerial Committees. However, it appears that some of their roles overlap or are duplicated, hence causing a wastage of time and inefficiency of work. This further leads to a lack of coordination and cooperation, creating suboptimal outcomes and impacts. Besides this, the single largest factor causing delays in the process of public sector reform is said to be the frequent changes of ministers or ministerial portfolios and, to a lesser extent, the appointments of secretary generals. The government should seriously consider the importance of modernizing and re-engineering the processes, procedures, work flows and structures involved in providing key public services, and select the most appropriate service delivery channel(s) in accordance with the RBM approach. There is a need to develop and provide priority e-government applications to facilitate the interface of citizens/businesses with public organizations wherever applicable (USAID, 2010a). The following section highlights the emergence and diffusion of the RBM approach within the governmental field.

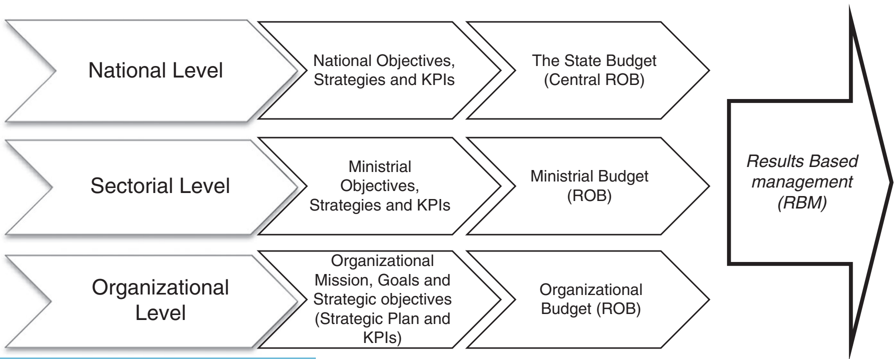


Figure 8.
The government planning and budgeting process-based RBM approach

Source: Authors

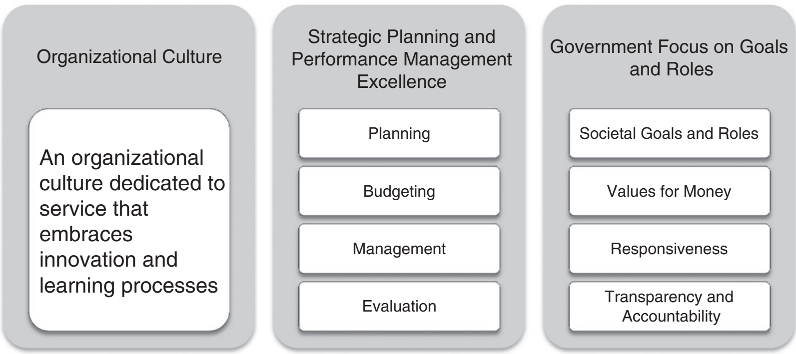
This section defines the organizational system driven by the administration of government and its three levels. It also shows how the implementation of RBB was intended to link the strategic planning process with the budgeting system with the objective of enhancing the RBM approach. Also, the limitations to the government structure have been demonstrated.

5.3.2 The RBM approach. Several challenges have affected public sector performance, including the continual expansion of the size of government, duplication of efforts and institutional responsibility for regulation and public services. This has been due, relatively, to the absence of clear processes for identifying and eliminating duplication of efforts, insufficient focus on public service outcomes, and disconnection between budget allocations and project results (GOJ, 2010). Therefore, the ROG[4] was introduced by the USAID FRP II as an approach to transforming government. It was launched in a workshop led by David Osborne, who is the author of "Reinventing Government" (USAID, 2010c).

According to Osborne and his co-authors, the RBM approach can be defined as the connection of results orientation to a cluster of ideas that they term "Reinventing Government"; especially entrepreneurial government and the measurement of performance. The ROG initiative thus aims to produce a more ROG management through review and redesign of the key performance drivers of the public organizations, including structures, processes and systems (GOJ, 2010). Each pillar is essential for implementing the RBM approach in the Jordanian government; hence, these pillars reinforce and enrich one another (see Figure 9).

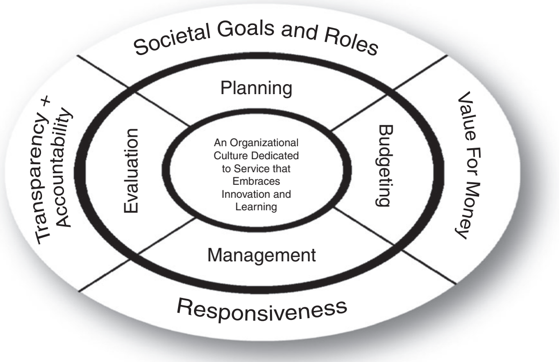
These three pillars support ROG like concentric circles by illustrating how they build upon one another to work as a whole (see Figure 10). Thus, the government's organizational culture is the core of RBM approach and is considered a platform to implement the RBM approach.

The transition to the RBM approach is a major change for most public organizations. Government leaders must be aware of the organizational culture and understand that they are leading organizational change. Building skills on the human side of change will help managers in overcoming resistance and facilitating RBM. This approach builds capacity in change management, specifically related to strategic planning and RBM practices (MOPSD, 2012). The Jordanian government, in cooperation with USAID, established a ROG administration[5] with the major role for MOPSD[6] in order to coordinate the implementation of the ROG initiative. The key priority programs and projects that were achieved within the Jordanian government in order to implement ROG comprised results orientation, restructuring the public sector, and restructuring salaries and allowances in the civil public sector. It also applied strategic planning in all public organizations by linking the strategic planning process with the RBB system and improving the quality of public services by introducing a comprehensive service improvement and automation of



Source: Ministry of Public Sector Development-FRP II, Jordan

Figure 9. Pillars of Results-Oriented Government (ROG)



Source: MOPSD, FRP-II, Jordan

Figure 10. Interrelationships among the pillars of the ROG approach

government services and e-government. Thus, a new sectorial governance framework was introduced to unify the sectorial structure and management[7].

Public organizations engaged in the RBM approach need to create the means to monitor and evaluate their activities to enable them to identify areas for development. Reporting on these activities can help key decision-makers within public organizations, as well as stakeholders, to obtain feedback for improving both policy and operational effectiveness (GAO, 2005).

To summarize, this section has illustrated the pillars of ROG, and discusses how the transition to the RBM approach represents a major change for most public organizations. Also, it focuses on how a new sectorial governance framework can unify the sectorial structure and management.

6. The analysis results

6.1 The emergence of the RBB system

The lack of an accounting system results in the absence of a system to control accruals and disburse expenditures evenly. This has led to the development of budget orientation, process, budget classification, accountability and transparency and the credibility of the budget. At the request of the European Commission by Jordanian Government, a team of three experts[8] traveled to Jordan to evaluate the quality of PFM through the methodology designed by the World Bank and explained in a detailed performance measurement framework. This framework comprises 31 indicators covering the credibility of the budget, its comprehensiveness and transparency, and the adequate management of the budget process in comparison with donors' practices and requirements. The mission was arranged by the European Commission as one of Jordan's main donors. The above mission has judged that continuation of its financial support to the government of Jordan could contribute to a better understanding of the dynamics of the Jordanian Reform Program in the field of PFM, which could help both the Jordanian Authorities and the Donor community (EU, 2007b). As a result, the IMF and World Bank published a Joint Report in 2004 and recommended that:

> The long-term objective should have a comprehensive budget system that gives a complete breakdown of all budget expenditures; the activities they finance, the outputs that are produced and the outcomes that are realized, and the linkages between the different parameters.

USAID accordingly has supported the Jordanian initiatives to implement FRP I, which aimed to increase revenue collection and tax administration, and to introduce a central RBB system.

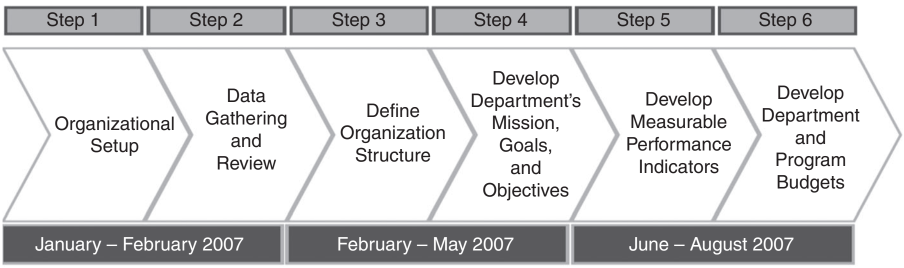
In the meantime, the FRP I focused on improving the efficiency of the tax system and changing the budget system. To enhance the efficiency and effectiveness of Jordan's FRP I, USAID/Jordan granted the implementation task of FRP I to a professional company, BearingPoint Inc., in 2006. The purpose was to provide technical support to the government of Jordan in the area of fiscal policy (budget) and financial management. BearingPoint Inc. (hereafter "consultants") embarked on the three-year project in four areas: tax policy, tax administration, budget system and management and public awareness campaign (USAID, 2008).

According to the performance measurement framework by the World Bank, Jordan's FRP I in the budget management area achieved its planned results and a maximum of 14 out of 17 performance indicators were analyzed. For example, budget management activities shaped RBB capacity within the Jordanian government, consisting of an integrated database of capital projects by linking them with strategic planning process within Medium Term Expenditure Framework (MTEF). The FRP I has also provided training programs for about 450 government staff from different organizations in important areas, such as the awareness of RBB, budget preparation, process and classification. This complementary work was completed by developing a new COA with various structures that are consistent with international best practices. In addition, the FRP I was on track to ensure the implementation of GFMIS. However, the project has also achieved planned results for nine out of 14 tax administration performance indicators; including automated portions of the tax collection process, building internal audit capability, and improving customer service (USAID, 2008). In fact, consultants worked closely with the MOF and GBO to implement the RBB system. Figure 11 outlines the steps of the process of the development of the RBB system.

According to Budget Execution Officers and Analysts:

> Three bodies have played an important role in the implementation process of RBB within the MOF field. Firstly, the consultants provided the content expertise, organization of training and implementation, and resources for self-directed learning. Secondly, the GBO played a key role in the implementation and diffusion of RBB through an interface between FRP-I consultants and public organizations: (1) adapting RBB system within the organizational context; (2) providing required training and workshops, and sustainability after project completion; and (3) diffusing the system to other organizations within the field. The final and important role was played by public organizations in showing their willingness to implement RBB, prepare and link organizational strategic plans with RBB, and provide actual needs of training and learning. As a result, the implementation of RBB by each organization has included the following changes in comparison with traditional budgets: prepare organizational strategic plan by identifying organizational objectives, mission, and vision, in relation to sectorial and national objectives; link the strategic plan with the RBB system within MTEF; and develop and integrate KPIs into the RBB.

The MOF represented by GBO implemented the RBB system in 2008. The budget has been restructured into programs and for the first time, the budget included KPIs (targets) for programs and projects. Hence, it presented an integrated approach to value-for-money



Source: USAID/Jordan, GBO

Figure 11.
Development process of RBB system

budgeting by allocating expenditure according to programs, subprograms, projects and activities, rather than just inputs. In this way, the procedures of policy, finance and implementation were involved and coordinated in the budget process. In 2008 and 2009, RBB was implemented at a program and project level in Jordan. The 2010 RBB Budget has extended the reform to include budgets at an activity level (UNICEF, 2009). The Advisor for Fiscal Reforms in the MOF mentioned that:

> The GBO thus developed a new budget methodology and manual in 2008. This required the inclusion of strategic goals for each ministry/organization and key performance indicators (KPIs) by identifying desired results for each program. The RBB methodology[9] overcomes deficiencies of previous traditional budget methodologies, which accounted for the levels of expenditures rather than outputs. By including outcomes and outputs in budget statements, ministries/organizations can be held accountable for achieving results.

The Financial Studies Manager in the MOF discussed that:

> RBB focuses on KPIs that are mainly measures of the effects of a program outputs and outcomes rather than the causes of a program inputs, actions, processes, and intermediate outputs. Hence, RBB incorporates efficiency indicators in the KPIs. RBB chooses SMART[10] indicators and target levels for performance.

Accordingly, The Head of RBB Component in FRP II added:

> The RBB system is fundamental to effective financial operations of a contemporary government. It is a key tool for the implementation of government policies and programs. The state RBB system is thus seen as a political document. Although expenditure choices are necessarily political, it is the role of the budget process to provide politicians and other key decision-makers with a coherent menu of options for meeting both their own priorities and those of society as a whole.

In this context, resources allocation can be improved by depending not only on an effective RBB system, but also on the ability to secure support and agreement (especially political support and agreement), and to promote a demand for disciplined, policy-based decision making. Accounting systems such as RBB and GFMIS have the potential to improve budgetary decision making, but they can never replace the political process of making those resource choices (USAID, 2010a, b).

However, RBB should not be viewed as an isolated initiative. Rather, it should be seen as part of a set of broader reforms – often referred to as the RBM approach – designed to focus PFM more on results delivered and less on internal processes or inputs. These broader reforms include the GFMIS system designed to increase the efficiency and effectiveness of public resources, organizational restructuring to increase the focus on service delivery and improve coordination, and institutional and supervisory changes to strengthen public accountability of performance. The RBB system is an important complement to the implementation of the GFMIS system, which makes information more easily available to RBB and also reduces the bureaucratic workload of budget analysts and decision-makers; thus, they make more time for RBB analysis and focus on strategic objectives (USAID, 2011b). GFMIS implementation helps MOF efforts to improve internal financial control throughout government, as well as the efficiency and effectiveness of public expenditure (USAID, 2011c).

To summarize, this section shows how the absence of a system to control accruals and disburse expenditures evenly can result in severe problems. As a result, the Jordanian government has requested the European Commission to measure the performance framework. Results by the World Bank recognize that Jordan's FRP I in the budget management area achieved its planned results. Also, it has been concluded that RBB should be seen as part of a set of broader reforms; designed to focus PFM more on results delivered and less on internal processes or inputs.

6.2 The Emergence of GFMIS

Jordan's economy was affected by the global recession and growth slowed in 2009. As a result, policies of economic revival have struggled together with enthusiastic domestic obligations by the government to understand the mass problems and be responsive to its citizen's urgent needs. Therefore, Jordan's economic organizations have worked with the USAID-funded FRP II to support recovered macro-fiscal management as a key solution to these intricate challenges (USAID, 2012). Accounting systems are considered to play a vital and constitutive role in NPM reforms; influencing the perceptions of organizational actors and contributing to the diffusion of a culture of change and institutionalization in the public realm (Meyer, 1998). These systems can shape organizational actors' reality, spreading notions such as value for money, technological enhancement, accountability, efficiency and effectiveness, and turning them into newly shared meanings and values. Simultaneously, existing accounting institutions and organizational inertia may constrain the process of change, negatively influencing the path of development of new accounting practices and systems (Caccia and Steccolini, 2006).

FRP II comprises many reform initiatives. The key one among these deals with all PFM reform programs aimed at helping Jordan's fiscal policy to achieve its objectives, which are to maintain fiscal stability and avoid financial crises through more efficient allocation of available financial resources in accordance with national priorities. Underlying these reforms is the need and intent to integrate existing standalone PFM systems under one integrated GFMIS to assist the government to achieve a more effective plan and manage the state's financial resources. So far, FRP II has focused its efforts on preparing budgets and reporting on public finances to be more effective by assisting the GBO to match budget preparation and execution according to global best practice, and by supporting the MOF to implement GFMIS for the reporting and standardized implementation of all financial transactions (USAID, 2010b). The Head of Budget Component in GFMIS Project stated that:

> The particular objectives of the GFMIS Project in supporting the PFM role are to improve the following: (1) Transparency and conformity with international best practices in budget execution; (2) Accuracy, timeliness and relevance of fiscal reporting at each level of government; (3) Budget execution by ensuring that payments are made in accordance with the budget law and within expenditure limits and cash constraints; (4) Timeliness and accuracy of banking and reporting the revenue collections; (5) Accessibility of information about financial management and budget execution to the legislature for decision-making purposes; and (6) Fiscal sustainability through more efficient and effective management of cash.

By doing so, the GFMIS can play a significant role in the PFM reform program and provide the required controls and reporting purposes to assist in achieving the fiscal policy objectives. To do so, the MOF has introduced a modern computer-based GFMIS, together with the necessary system integration to ensure full internal integration of the provided accounting system, and to complete interoperability with the remaining existing accounting systems. The GFMIS is being used to track government financial operations and the related financial reporting, enhancing transparency and strengthening fiscal discipline in the Jordanian government. However, the MOF management believed that it could be further implemented through a modern comprehensive system that matches instantaneous requirements for decision making; it was also capable of being enhanced to accommodate future developments in the realm of the PFM (see Intracom, 2012). Bearing in mind the above, the implementation project of GFMIS was awarded to INTRACOM Co. following a negotiation phase about certain financial and technical requirements. The Operations Head of GFMIS Project stated that:

> In early 2008, the MOF signed a contract with INTRACOM (hereafter consultants), who started the implementation process of GFMIS in the same year. A change in accounting system can lead to a

change in the organizational structure. Hence, a new directorate was established to manage the project named "GFMIS Department" within the organizational structure of MOF, which reports directly about the implementation stages to the MOF and Cabinet.

Figure 12 displays the development process of the GFMIS Project in accordance with the agreement between the project management and INTRACOM consultants.

The Head of COA in the GFMIS Project explained that:

> The consultants have provided an integrated solution; including the development of software applications, the installation of infrastructure and networks, training, support and maintenance, by using services and products from ORACLE, IBM and many other languages. The implementation process included the supply, installation, integration, training, technical support and implementation services of a commercially available and integrated software solution and hardware platform for the GFMIS.

The recently concluded new bylaw on internal financial control led to an improved control over budget execution and strengthened financial supervision. In this regard, the Audit Bureau has also introduced "performance auditing" to complement its traditional financial audits, which helped to narrow the gap between RBB and government performance. However, GFMIS implementation helped to automate many phases of budget planning, execution, process, accounting, treasury operations and reporting. All of these helped to achieve better control over public finances and more efficient and effective deployment of public resources (USAID, 2011b). The Operations Head of GFMIS Project clarified that:

> The GFMIS has improved governance and fiscal management by providing real-time financial information that public managers can use to manage programs and capital projects effectively, formulate budgets, and allocate resources. Nowadays, GFMIS is being applied in most public organizations. These organizations are managing a sizable share of government financial transactions, including most expenditure and large portions of other financial transactions.

In 2011 the entire central RBB was prepared in accordance with the GFMIS; this was the first time that the budget had been prepared using an integrated automated system, starting from the preparation phase by the MOF and up to the issuance of a royal decree (USAID, 2012). In this regard, The Head of COA in the GFMIS Project stated that:

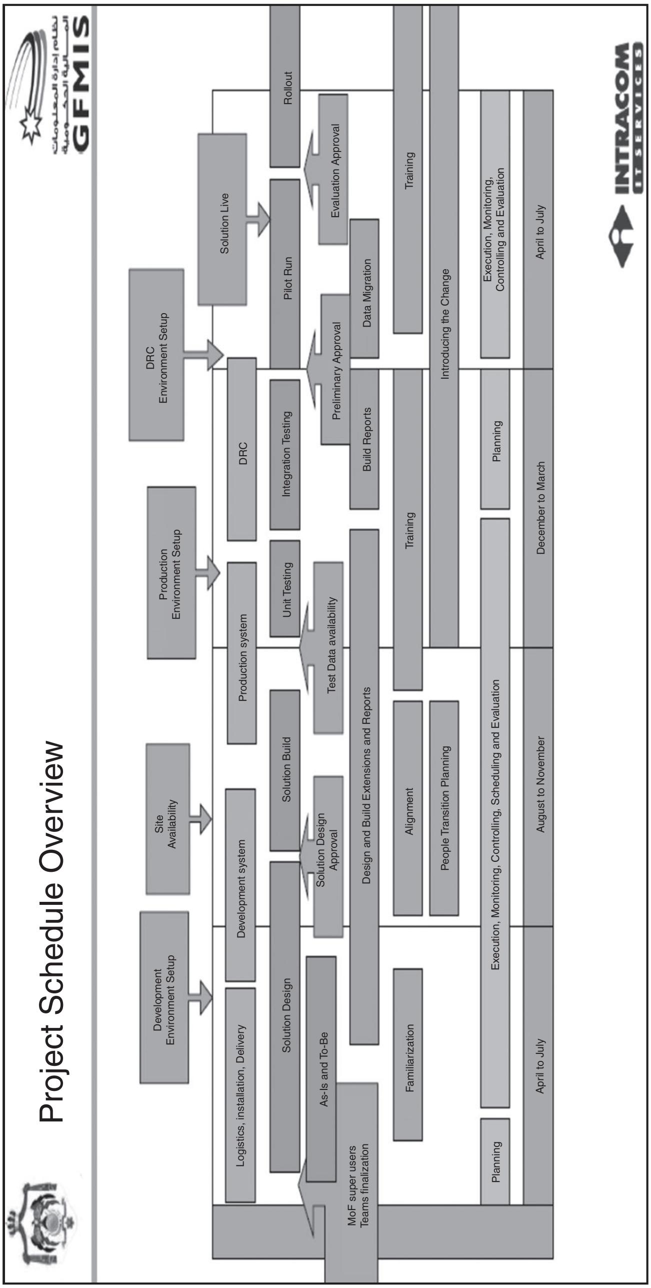
> GFMIS enabled each program to be split into subprograms through the COA in the form of programmatic classification as well as other classifications. The final level of this classification is the activity and project level. The programmatic classification is developed to enable the reporting of budget execution to be processed in terms of program format.

Accordingly, GFMIS represents a significant achievement in PFM by controlling the expenditures and revenues, and by ensuring that allocations, transactions, reports and appropriations are all aligned; inter-organization financial transfers are controlled; proper accounts are charged, thus preventing misuse of trust accounts; and expenditure commitments are accurately controlled. In doing so, GFMIS reduces accounting errors and opportunities for corruption, and helps the government to achieve macro-fiscal objectives (USAID, 2012).

To conclude, this section deals with how it can play a significant role in the PFM reform program. Also, it illustrates the development process of the GFMIS Project. It also explains how GFMIS acts as a significant achievement in PFM.

7. Concluding remarks

This paper has explained the emergence processes of accounting changes in the Jordanian MOF case study within its socio-economic contexts, as emerging from public and fiscal



Source: USAID/Jordan, GFMIS Project

Figure 12.
Development process of the GFMIS project

reforms. It also explained the ways in which accounting change dynamics can emerge over time. It concludes that the new budgeting systems (RBB and GFMIS) together with the RBM emerged as a result of the interaction between "external" origins and "internal" accounts. It also highlights the interaction process between these levels from one side, and the accounting and organizational change from the other side. It confirms the evidence that other factors, beyond economic factors, may also play an influential role in the emergence of accounting change. It also concludes that there is a radical change of accounting systems in the MOF case study, which is not only a decorative change in accounting but is also represented in the working practices. The study also confirms that accounting is not a static phenomenon, but one that changes over time to reflect new systems and practices.

It confirms the evidence that accounting is both shaped by, and shapes wider socio-economic and political processes. It thus concludes that the Jordanian government has been faced with various institutional pressures stemming from political and economic challenges. As a result, Jordan launched the NA in 2005, which represented a remarkable milestone in the building of a modern Jordan and addressed such challenges facing the country. Accordingly, the Jordanian government has implemented many political and economic reforms including public sector and fiscal reforms that stemmed from the NA. The public sector and fiscal reforms redefined the state's role in the economy and re-oriented the economy from a planned, collectivist type to a more free-market economy. This led to transformation from a traditional management approach toward the NPM. The changes in the Jordanian public sector toward NPM ideas were substantively underway in 2008, especially after the implementation of the FRP strategy (in two stages, I and II) focusing on the RBM approach.

The paper findings show how the Jordanian government reforms produced better "RBM" orientation and focused on PFM techniques that may strengthen short- and long-term managerial concerns with working processes within the MOF. Hence, there is some basis for arguing that the emerging reform agenda may represent a turn to NPM systems of PFM. As all accounting systems have usually been associated with the "bureaucratic" paradigm rooted in pre-NPM practices (Hood, 1991, 1995a, b), the study concludes that the "new" process of NPM concerns conforms to a more external focus on fiscal reform agenda, in response to political and economic pressures. The study finds that, at the political and economic level, there is clear evidence of RBM entailing the implementation of alternative accounting systems (Pierson, 2000). This has stressed the dominant position of the RBM approach, including RBB and GFMIS systems, at the expense of bureaucratic management practices, and emphasizes the path-dependent and evolutionary nature of change (Modell *et al.*, 2007). Furthermore, the RBM approach was accompanied by incremental changes in existing organizational culture and structure in search of excellence.

The implementation of NPM, and possibly of post-NPM reforms, such as RBB and GFMIS, may have emerged primarily as a response to external pressures. This environmental determinism may have resulted from an active national administrative policy and constraints from historically-developed administrative cultures (Olsen, 1992). The reform initiatives and programs are not characterized by a simple adjustment to existing administrative doctrines including accounting systems. They are evidently filtered, interpreted and modified through the combination of two more nationally-based processes (Olsen, 1992). The study also concludes that the budgeting system is fundamental to effective financial operations of a contemporary government. It is a key tool for the implementation of government policies and programs. The usage of structuration and institutional integration as proposed by Alsharari *et al.*'s (2015) framework helped to recognize the relationships between extra- and intra-organizational contexts, which were not necessarily simple and/or linear but rather inextricably linked. These perspectives have important implications for institutional research on accounting change and public sector reforms, in responding to recent calls to bridge the gap between the extra- and intra-organizational levels of analysis (Modell, 2003; Dillard *et al.*, 2004). And, as correctly narrated by Burns and Scapens (2000), this goes beyond conceptualization of budgeting change, as part of accounting change, that was mainly created by pressure for change in accounting routines over time.

One possible avenue for future research is to undertake comparative case studies of two or more organizations, especially if they are in the same institutional environment and are operating under the same circumstances. This comparison would be useful to acquire a deep understanding of their responses to the same new institutional pressures. This study might also be repeated in other developing countries, either focusing on a single country or comparing two or more countries. Another possible avenue for further research is to apply Alsharari *et al.*'s (2015) framework and institutional analysis of this paper to other cases involving public sector reforms.

Notes

1. Sources: modified from The World Bank; Central Bank of Jordan; World Development Indicators 2011; International Monetary Fund (IMF); World Economic Outlook 2011; Stockholm International Pease Research Institute (SIPRI); Military Expenditure Database 2011; and CIA 2012.
2. The National Agenda Steering Committee was formed by royal decree issued on February 9, 2005, to develop the NA. The committee comprised representatives from the government, parliament, civil society, the private sector, media and political parties.
3. The seven strategic initiatives are as follows: Strengthening government performance and accountability; encouraging political and civic participation; enhancing the business and investment environment; empowering Jordanian citizens with the skills to succeed and enter the labor market; feeding and fueling growth and security through infrastructure mega projects; expanding the middle class and empowering the underprivileged; improving public services.
4. ROG concept is the same as the "RBM" approach. Both are used in this study interchangeably.
5. The administration was established through the signing of a Memorandum of Understanding to coordinate the execution of the program between the Ministry of Public Sector Development, Ministry of Finance, Ministry of Planning and International Cooperation, Ministry of Information and Communications Technology, Civil Service Bureau, Government Performance Control Administration, King Abdullah II Centre for Excellence and The National Institute for Training.
6. The MOPSD defines its mission as "Results-oriented government administration, heading to the citizen, working efficiently and effectively" (MOPSD, Jordan).
7. A functional restructuring approach led to the achievement of a number of results: reducing bureaucracy, complexity, overlap and duplication; reducing the span of control, especially by the prime minister; reducing structural divergence; increasing efficiency, productivity and transparency; merging similar function-institutions; eliminating unnecessary units and institutions; and rationalizing public institutions (MOPSD, Jordan).
8. The team was composed of the team leader, a Public Finance specialist and structural reform expert, a Chartered Accountant and expert in audit and control procedures in the public sector and a senior macroeconomist.
9. To meet RBB methodology, each public organization or ministry should prepare its strategic plan, including organizational goals, mission and vision, and link it with national goals through sectoral goals. In this way, the RBB process establishes KPIs that are reported in organizational strategic plans, to measure and analyze the progress of government projects and programs.
10. Specific, measurable, achievable, relevant and time-bound.

References

Abernethy, M.A. and Chua, W.A.I.F. (1996), "A field study of control system 'redesign': the impact of institutional processes on strategic choice*", *Contemporary Accounting Research*, Vol. 13 No. 2, pp. 569-606.

Ahmed, M. and Scapens, R.W. (2000), "Cost allocation in Britain: towards an institutional analysis", *European Accounting Review*, Vol. 9 No. 2, pp. 159-204.

Ahmed, M.N. and Scapens, R.W. (2003), "The evolution of cost-based pricing rules in Britain: an institutionalist perspective", *Review of Political Economy*, Vol. 15 No. 2, pp. 173-191.

Alam, M. (1997), "Budgetary process in uncertain contexts: a study of state-owned enterprises in Bangladesh", *Management Accounting Research*, Vol. 8 No. 2, pp. 147-167.

Al-Hyari, K. (2009), "Exporting barriers and the internationalisation of manufacturing activities of SMEs in Jordan", unpublished PhD Thesis, University of Glamorgan, Treforest.

Alsharari, N.M. (2013), "The dynamics of management accounting change in the Jordanian customs organization as influenced by NPM reforms: institutional pressures", PhD Thesis, Durham University, Durham.

Alsharari, N.M., Dixon, R. and Youssef, M.A.E.-A. (2015), "Management accounting change: critical review and a new contextual framework", *Journal of Accounting & Organizational Change*, Vol. 11 No. 4, pp. 476-502.

Andon, P., Baxter, J. and Chua, W.F. (2007), "Accounting change as relational drifting: a field study of experiments with performance measurement", *Management Accounting Research*, Vol. 18 No. 2, pp. 273-308.

Anthony, R.N. (1965), *Planning and Control Systems: A Framework for Analysis*, Division of Research, Graduate School of Business Administration, Harvard University, Boston, MA.

Anthony, R.N. (1989), "Reminiscences about management accounting", *Journal of Management Accounting Research*, Vol. 1 No. 1, pp. 1-20.

Aucoin, P. (1990), "Administrative reform in public management: paradigms, principles, paradoxes and pendulums", *Governance*, Vol. 3 No. 2, pp. 115-137.

Beschel, R.P. and Ahern, M. (2012), *Public Financial Management Reform in the Middle East and North Africa*, The World Bank, Washington, DC.

Bhimani, A. (2001), *Management Accounting Manual*, Croner CCH Group Ltd, London.

Brignall, S. and Modell, S. (2000), "An institutional perspective on performance measurement and management in the new public sector", *Management Accounting Research*, Vol. 11 No. 3, pp. 281-306.

Burchell, S., Clubb, C. and Hopwood, A.G. (1985), "Accounting in its social context: towards a history of value added in the United Kingdom", *Accounting, Organizations and Society*, Vol. 10 No. 4, pp. 381-413.

Burchell, S., Clubb, C., Hopwood, A., Hughes, J. and Nahapiet, J. (1980), "The roles of accounting in organizations and society", *Accounting, Organizations and Society*, Vol. 5 No. 1, pp. 5-27.

Burns, J. (2001), "Institutional theory in management accounting research: towards more pluralistic dialogue in conceptualizing management accounting change", working paper, University of Manchester, Manchester.

Burns, J. and Baldvinsdottir, G. (2005), "An institutional perspective of accountants' new roles–the interplay of contradictions and praxis", *European Accounting Review*, Vol. 14 No. 4, pp. 725-757.

Burns, J. and Nielsen, K. (2006), "How do embedded agents engage in institutional change?", *Journal of Economic Issues*, Vol. 40 No. 2, pp. 449-456.

Burns, J. and Scapens, R.W. (2000), "Conceptualizing management accounting change: an institutional framework", *Management Accounting Research*, Vol. 11 No. 1, pp. 3-25.

Busco, C. and Scapens, R.W. (2011), "Management accounting systems and organisational culture: interpreting their linkages and processes of change", *Qualitative Research in Accounting & Management*, Vol. 8 No. 4, pp. 1-1.

Busco, C., Riccaboni, A. and Scapens, R.W. (2001), "Management accounting systems and organizational culture: an institutional framework for interpreting their linkages and processes of change", Quaderni senesi di Economia aziendale e di Ragioneria, Serie interventi.

Caccia, L. and Steccolini, I. (2006), "Accounting change in Italian local governments: what's beyond managerial fashion?", *Critical Perspectives on Accounting*, Vol. 17 Nos 2-3, pp. 154-174.

Caimed (2012), *Jordan: Administrative Reform, Innovation and Maintenance*, Centre for Administrative Innovation in the Euro-Mediterranean Region (CAIMED).

Cassing, J. and Salameh, A. (2006), "Jordan United States free trade agreement economic impact study: searching for effects of the FTA on exports, imports and trade related investment", Task No. 535.02, Achievement of Market-Friendly Initiatives and Results Program (AMIR 2.0 Program), PSPI Component, Jordan.

Chandler, A.D. (1992), "Organizational capabilities and the economic history of the industrial enterprise", *The journal of Economic Perspectives*, Vol. 6 No. 3, pp. 79-100.

Chandler, A.D. (1993), *Strategy and Structure*, MIT press, Cambridge.

Chapman, C., Cooper, D.J. and Miller, P.B. (2009), "Linking accounting, organizations, and institutions", in Chapman, C. (Ed.), *Accounting, Organizations and Institutions: Essay in Honour of Anthony Hopwood*.

Covaleski, M.A. and Dirsmith, M.W. (1986), "The budgetary process of power and politics", *Accounting, Organizations and Society*, Vol. 11 No. 3, pp. 193-214.

Covaleski, M.A. and Dirsmith, M.W. (1988a), "An institutional perspective on the rise, social transformation, and fall of a university budget category", *Administrative Science Quarterly*, Vol. 33 No. 4, pp. 562-587.

Covaleski, M.A. and Dirsmith, M.W. (1988b), "The use of budgetary symbols in the political arena: an historically informed field study", *Accounting, Organizations and Society*, Vol. 13 No. 1, pp. 1-24.

Covaleski, M.A., Dirsmith, M.W. and Michelman, J.E. (1993), "An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organizations* 1", *Accounting, Organizations and Society*, Vol. 18 No. 1, pp. 65-80.

Cruz, I., Major, M. and Scapens, R.W. (2009), "Institutionalization and practice variation in the management control of a global/local setting", *Accounting, Auditing & Accountability Journal*, Vol. 22 No. 1, pp. 91-117.

Cruz, I., Scapens, R.W. and Major, M. (2011), "The localisation of a global management control system", *Accounting, Organizations and Society*, Vol. 36 No. 7, pp. 412-427.

Dillard, J.F., Rigsby, J.T. and Goodman, C. (2004), "The making and remaking of organization context: duality and the institutionalization process", *Accounting, Auditing & Accountability Journal*, Vol. 17 No. 4, pp. 506-542.

El-Sakka, M. (2007), "Migrant workers' remittances and macroeconomic policy in Jordan", *The Arab Journal of Administrative Studies*, Vol. 14 No. 2, pp. 307-328.

Englund, H., Gerdin, J. and Burns, J. (2011), "25 Years of giddens in accounting research: achievements, limitations and the future", *Accounting, Organizations and Society*, Vol. 36 No. 2011, pp. 494-513.

EU (2007b), "Jordan: public financial management reform – performance report", Investment Development Consultancy, Paris.

GAO (2005), *Results Oriented Government*, United States Government Accountability Office.

Gill, J. and Johnson, P. (2002), *Research Methods for Managers*, Sage Publications Ltd, London.

GOJ (2010), *Government Implementation Plan*, Government of Jordan (GOJ).

Greenwood, R. and Hinings, C.R. (1996), "Understanding radical organizational change: bringing together the old and the new institutionalism", *Academy of Management Review*, Vol. 21 No. 4, pp. 1022-1054.

Hong, H.K. (1991), "Management accounting in the public sector", *International Journal of Public Sector Management*, Vol. 4 No. 3, pp. 5-17.

Hood, C. (1991), "A public management for all seasons", *Public Administration*, Vol. 69 No. 1, pp. 3-19.

Hood, C. (1995a), "Contemporary public management: a new global paradigm?", *Public policy and Administration*, Vol. 10 No. 2, pp. 104-117.

Hood, C. (1995b), "The 'new public management' in the 1980s: variations on a theme", *Accounting, Organizations and Society*, Vol. 20 No. 2, pp. 93-109.

Hopper, T. and Major, M. (2007), "Extending institutional analysis through theoretical triangulation: regulation and activity-based costing in Portuguese telecommunications", *European Accounting Review*, Vol. 16 No. 1, pp. 59-97.

Hopwood, A.G. (1976), "Editorial", *Accounting, Organizations and Society*, Vol. 1 No. 4, pp. 287-288.

Hopwood, A.G. (1978), "Towards an organizational perspective for the study of accounting and information systems", *Accounting, Organizations and Society*, Vol. 3 No. 1, pp. 3-13.

Hopwood, A.G. (1983), "On trying to study accounting in the contexts in which it operates", *Accounting, Organizations and Society*, Vol. 8 Nos 2-3, pp. 287-305.

Hopwood, A.G. (1987), "The archeology of accounting systems", *Accounting, Organizations and Society*, Vol. 12 No. 3, pp. 207-234.

Hopwood, A.G. (1990), "Accounting and organisation change", *Accounting, Auditing & Accountability Journal*, Vol. 3 No. 1, pp. 7-17.

Hopwood, A.G. and Miller, P. (1994), *Accounting as Social and Institutional Practice*, Cambridge University Press, Cambridge.

Hoque, Z. and Hopper, T. (1994), "Rationality, accounting and politics: a case study of management control in a Bangladeshi jute mill", *Management Accounting Research*, Vol. 5 No. 1, pp. 5-30.

Horngren, C.T. (1977), *Cost Accounting: A Managerial Emphasis*, Prentice-Hall, Englewood Cliffs, NJ.

Hughes, O.E. (1998), *Public Management and Administration*, Macmillan, London.

Hussain, M.M. and Gunasekaran, A. (2002), "An institutional perspective of non-financial management accounting measures: a review of the financial services industry", *Managerial Auditing Journal*, Vol. 17 No. 9, pp. 518-536.

Hussain, M.M. and Hoque, Z. (2002), "Understanding non-financial performance measurement practices in Japanese banks: a new institutional sociology perspective", *Accounting, Auditing & Accountability Journal*, Vol. 15 No. 2, pp. 162-183.

Ingraham, P.W. (1996), "The reform agenda for national civil service systems: external stress and internal strains", *Civil Service Systems in Comparative Perspective*, Indiana University Press, Bloomington, IN, pp. 247-267.

Intracom (2012), "Government of Financials Management Information System (GFMIS)", available at: www.intracom.jo/GFMIS.html

Kristensen, J.K., Groszyk, W. and Bühler, B. (2002), "Outcome-focused management and budgeting", *OECD Journal on Budgeting*, Vol. 1 No. 4, pp. 7-34.

Lind, J. (2001), "Control in world class manufacturing – a longitudinal case study", *Management Accounting Research*, Vol. 12 No. 1, pp. 41-74.

Lukka, K. (2007), "Management accounting change and stability: loosely coupled rules and routines in action", *Management Accounting Research*, Vol. 18 No. 1, pp. 76-101.

Ma, Y. and Tayles, M. (2009), "On the emergence of strategic management accounting: an institutional perspective", *Accounting and Business Research*, Vol. 39 No. 5, pp. 473-495.

Macintosh, B.N. and Scapens, B. (1991), "Management accounting and control systems: a structuration theory analysis", *Journal of Management Accounting Research*, Vol. 3 No. 3, pp. 131-158.

MacLeod, G. (2004), "Beyond soft institutionalism: accumulation, regulation, and their geographical fixes", in Wood, A. and Valler, D. (Eds), *Governing Local and Regional Economies: Institutions, Politics and Economic Development*, Ashgate, London, pp. 57-89.

Major, M. and Hopper, T. (2005), "Managers divided: implementing ABC in a Portuguese telecommunications company", *Management Accounting Research*, Vol. 16 No. 2, pp. 205-229.

Marginson, D.E.W. (2002), "Management control systems and their effects on strategy formation at middle-management levels: evidence from a UK organization", *Strategic Management Journal*, Vol. 23 No. 11, pp. 1019-1031.

Meyer, J.F. (1998), "Global warning: debating international developments in new public financial management", in Guthrie, J., Humphrey, C. and Olson, O. (Eds), Cappelen Akademisk Folag.

Miller, P. (1994), "Accounting as social and institutional practice: an introduction", in Hopwood, A.G. and Miller, P. (Eds), *Accounting as Social and Institutional Practice*, Cambridge University Press, Cambridge, pp. 1-39.

Minogue, M. (1998), *Changing the State: Concepts and Practice in the Reform of the Public Sector*, Institute for Development Policy and Management, University of Manchester, Manchester.

Modell, S. (2001), "Performance measurement and institutional processes: a study of managerial responses to public sector reform", *Management Accounting Research*, Vol. 12 No. 4, pp. 437-464.

Modell, S. (2002), "Institutional perspectives on cost allocations: integration and extension", *European Accounting Review*, Vol. 11 No. 4, pp. 653-679.

Modell, S. (2003), "Goals versus institutions: the development of performance measurement in the Swedish university sector", *Management Accounting Research*, Vol. 14 No. 4, pp. 333-359.

Modell, S. (2004), "Performance measurement myths in the public sector: a research note", *Financial Accountability & Management*, Vol. 20 No. 1, pp. 39-55.

Modell, S. (2009), "Institutional research on performance measurement and management in the public sector accounting literature: a review and assessment", *Financial Accountability & Management*, Vol. 25 No. 3, pp. 277-303.

Modell, S., Jacobs, K. and Wiesel, F. (2007), "A process (re) turn?: path dependencies, institutions and performance management in Swedish central government", *Management Accounting Research*, Vol. 18 No. 4, pp. 453-475.

Moore, M.D.R.J. and Park, F. (2011), "Sustainability, institutionalization and the duality of structure: a partial story with contested meanings within the political context of a water business.

MOPSD (2012), "Results oriented government toolkit overview", working paper, Ministry of Public Sector Development (MOPSD).

MPIC (2011), *Overview: Jordan's Executive Development Program (2011-2013)*, Ministry Of Planning And International Cooperation (MPIC).

NA (2005), *National Agenda: The Jordan We Strive for, 2006-2015*, The Royal Steering Committee, Amman.

Nor-Aziah, A.K. and Scapens, R.W. (2007), "Corporatisation and accounting change: the role of accounting and accountants in a Malaysian public utility", *Management Accounting Research*, Vol. 18 No. 2, pp. 209-247.

OECD (1997), *In Search of Results: Performance Management Practices*, OECD, Paris.

Olsen, J.P. (1992), "Analyzing institutional dynamics", *Staatswissenschaften und Staatspraxis*, Vol. 3 No. 2, pp. 247-271.

Osborne, D. and Gaebler, T. (1992), *Reinventing Government: How the Entrepreneurial Spirit is Transforming Government*, Addison Wesley Public Comp., Reading, MA.

PEFA (2011), *Jordan: Repeat Public Financial Management Assessment following the PEFA Methodology*, ACE, International Consultants (Spain), European Union.

Pierson, P. (2000), "Increasing returns, path dependence, and the study of politics", *American Political Science Review*, Vol. 94 No. 2, pp. 251-267.

Polidano, C. and Hulme, D. (1999), "Public management reform in developing countries", *Public Management an International Journal of Research and Theory*, Vol. 1 No. 1, pp. 121-132.

Rose, A. (2003), *Results-Orientated Budget Practice in OECD Countries*, Overseas Development Institute, London.

Scapens, R.W. (1984), "Management accounting: a survey paper", *Management Accounting, Organizational Theory and Capital Budgeting*, Oxford University Press, Oxford, pp. 15-95.

Scapens, R.W. (1985), *Management Accounting: A Review of Contemporary Developments*, McMillan, London.

Scapens, R.W. (1990), "Researching management accounting practice: the role of case study methods", *The British Accounting Review*, Vol. 22 No. 3, pp. 259-281.

Scapens, R.W. (1994), "Never mind the gap: towards an institutional perspective on management accounting practice", *Management Accounting Research*, Vol. 5 Nos 3-4, pp. 301-321.

Scapens, R.W. (2006), "Understanding management accounting practices: a personal journey", *The British Accounting Review*, Vol. 38 No. 1, pp. 1-30.

Seal, W. (2003), "Modernity, modernization and the deinstitutionalization of incremental budgeting in local government", *Financial Accountability & Management*, Vol. 19 No. 2, pp. 93-116.

Seal, W. (2006), "Management accounting and corporate governance: an institutional interpretation of the agency problem", *Management Accounting Research*, Vol. 17 No. 4, pp. 389-408.

UNICEF (2009), *Child Budget Analysis: Jordan*, UNICEF Jordan Country Office.

USAID (2008), "Audit of USAID/Jordan's Fiscal Reform Project", Audit Report No. 6-278-09-003-P, USAID.

USAID (2010a), *The Public Sector Development Strategy: Jordan Fiscal Reform Project II*, Jordan Economic Growth Office.

USAID (2010b), "Jordan fiscal reform II: quarterly report Nov 2009 – Jan 2010", Jordan Economic Growth Office.

USAID (2010c), "Jordan fiscal reform II: monthly report, March 2010", Jordan Economic Growth Office.

USAID (2011a), "Jordan fiscal reform project II: monthly report", Jordan Economic Growth Office.

USAID (2011b), "Public Expenditure Perspective", Fiscal Reform Project II.

USAID (2011c), "Year one results report", Fiscal Reform Project II, June.

USAID (2012), "Jordan makes key improvements in fiscal management", available at: www.usaid.gov

Vaivio, J. and Sirén, A. (2010), "Insights into method triangulation and 'paradigms' in interpretive management accounting research", *Management Accounting Research*, Vol. 21 No. 2, pp. 130-141.

Wanderley, C., Miranda, L.C., De Meira, J.M. and Cullen, J. (2011), "Management accounting change: a model based on three different theoretical frameworks", *BASE-Revista de Administração e Contabilidade da Unisinos*, Vol. 8 No. 2, pp. 111-121.

Wickramasinghe, D. and Alawattage, C. (2007), *Management Accounting Change: Approaches and Perspectives*, Routledge, London.

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