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## Post-privatisation changes in management control, firm activities and performance

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### **3 Management control system changes, influencing internal factors, firm performance, and the conceptual framework of the study**

#### **3.1 Introduction**

In chapter two we have seen that the theory of privatisation has been challenged. On the basis of empirical evidence gathered in the West as well as in LDCs, critiques argue that improved control systems do not materialise automatically. Management control systems are influenced by various external factors, such as socio-economic, political and cultural contexts as well as the internal firm environment. These external factors have been dealt with in chapter two. In this chapter the internal factors will be addressed. In this respect, our research aims at elaborating on former MCS research focussed on the wider socio-economic and political contexts (e.g., Uddin, 1997; Wickramasinghe, 1996; Ogden, 1993; Neimark & Tinker, 1986).

This chapter gives an overview of the relevant literature available on MCS practices dealt with in this study. First, we will present the definition of MCS and explain its formulation. Next, we will go into the various MCS techniques and assess the recent developments that have necessitated changes in MCS practices, while focussing on the internal factors. Then, we will give an outline of the empirical evidence on firm performance of former studies and the variables used. Furthermore, we will deal with the relationship of improved MCS practices [mainly non-financial] with firm performance. After that we will present our conceptual framework. The final section of this chapter contains a general summary and conclusions.

#### **3.2 The definition of MCS**

Prior to presenting the MCS definition, we will briefly describe the developments on the basis of which it has been formulated. These developments are related to the need for changes in the MCS practices of enterprises. Both internal and external contextual factors play a role here.

In the accounting literature there are various interpretations of the concept of control. See, for example, Anthony & Herzlinger, 1986; Marciariello, 1984; Hopper & Berry, 1983; Jensen & Meckling, 1976; Hofstede, 1968; Arrow, 1964; and Cyert & March, 1963. This diversity of interpretations of control implies that the control literature does not claim a single dominant paradigm representing coherent and consistent laws, theories, applications and methodologies (Macintosh, 1995). The traditional definitions of control as given in accounting books published in the US mainly apply to large organizations with many divisions. Here control is exercised to monitor the performance of division managers. Robert Anthony, for example, defines

management control as '*the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organisation's objectives*' (1967: cited in Otley *et al.*, 1995, p.332). However, this particular definition of control solely focuses on controlling the behaviour of division managers (Puxty, 1989: cited in Otley, 1994). According to the definition of Anthony, the organizational strategy is the starting point, on the basis of which MCS serves as a tool to support its adoption. Traditional MCS definitions also start from the assumption that employees are not allowed to participate and that control is exercised in favour of the owners (Wickramasinghe, 1996). Control systems of this kind may result in tight control, disciplinary actions and unfair wages. Moreover, they may create a climate in which employees are not being motivated to improve their productivity. In this way, firm performance is not stimulated and the development of a nation is undermined (*ibid*).

Both internal and external environmental changes have determined the nature of businesses today. This process of change started in the 1990s (Otley, 1994). Otley stresses that the management of today's businesses requires flexibility, a wider focus, a larger degree of adaptation and a willingness to learn. The traditional control systems, however, are not based on these concepts. Otley therefore argues that Anthony's definition is no longer up-to-date and that it is obstructive to the development of the field of management accounting. The more recent MCS literature particularly aims at worker-oriented control systems (e.g. Macintosh, 1995). Here the focus is on a clear participation of the workers in the decision-making process. The notion is that if workers are being trained in this direction, they will become more motivated in their work, and as a result the labour productivity will increase. In such circumstances, the firm will be inclined to pay its workforce more, encouraging investors to make additional investments (Wickramasinghe, 1996).

In business organizations management control systems play a pivotal role, as they serve as an instrument to survive in an uncertain environment. Otley argues that in a climate of continuous change management is forced to adapt itself constantly, which requires the active involvement of a larger number of organizational participants. This means that there is a need for the empowerment of the lower levels of the organization. In this context, MCS can be used as a control tool by work groups on all levels. Empowerment means giving the lower levels in the organization both authority and responsibility, so lower-level managers are encouraged to take whatever action is necessary to achieve the organizational goals.

In addition, studies on performance measurement suggest that the integration of both financial and non-financial control methods facilitates the achievement of organizational objectives (e.g., Flapper *et al.*, 1996; Eccles, 1991). According to Simons (1995) an MCS-definition should include the 'inherent tension' between freedom and constraint, empowerment and accountability, top-down management and bottom-up creativity, and experimentation and efficiency.

In this study the definition of Simons (1995: p.5) is adopted: '*Management control systems are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities*'. This definition is broader than that of Anthony's since it enables us to address the internal and external contexts of firms. Simons' definition also shows how managers control strategy (that is strategy formation and implementation) by balancing the above-mentioned tensions (Simons, 1995). Moreover, this definition encourages the integration of financial and non-financial performance measures and takes into account the wider participation and empowerment of employees. In this way most of the issues left out in earlier MCS definitions are being covered.

In sections 2.5 and 3.3 we investigate the external and internal environmental changes that may necessitate adaptations in MCS practices. We prefer Simons' definition because it allows the possibility of observing MCS practice changes in the wider socio-economic and political contexts of LDCs. Simons (1995) distinguishes between four control systems relevant in the analysis of the average firm. These control systems are diagnostic systems, beliefs systems, boundary systems, and interactive systems.

*Diagnostic Systems:* are the formal information systems that managers use to monitor organizational outcomes and to detect deviations from the objectives set. Examples of diagnostic systems are business plans and budgets. They function as tools for the manager in monitoring and evaluating the business results. It is argued that the evaluation of business processes and results improves the allocation of resources and stimulates managerial motivation. The data produced by diagnostic systems are expected to be accurate. The systems are also used to measure the output variables, or performance levels, of business strategies adopted by organizations. They are based on performance variables, such as effectiveness and efficiency. However, these performance variables may change when organizations alter their business strategy.

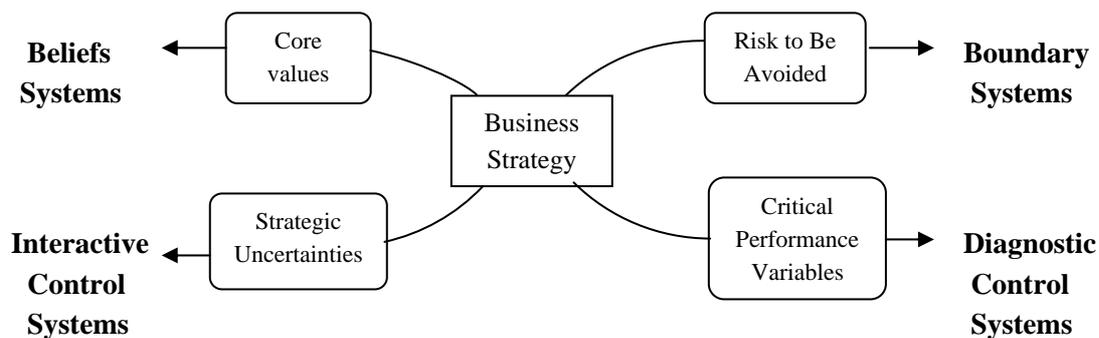
*Beliefs Systems:* are formal systems used by top managers to define, communicate, and reinforce the basic values, purposes, and direction of the organization. Belief systems state the organization's core values, the performance level desired, and the way in which the individual workers and staff members are expected to handle relationships both internally and externally. Beliefs systems are conveyed through formal documents, such as credos, mission statements, and business objective statements. They are used to set the direction of strategic change, and to energise and inspire the workforce in the process of entrepreneurial growth. Beliefs systems are generally used to empower and commit the individual workers to the organization's objectives and to its direct search for new opportunities.

*Boundary Systems:* are formal systems based on predefined business risks, which are used to set limits on opportunity-seeking behaviour. They set the boundaries of both strategic choice and

business conduct. For example, when environmental uncertainty is high or internal trust is low, senior managers may take measures that define business conduct on the basis of these systems. Boundary systems may constrain the degree of freedom of managers, and as a result make creativity more focused. Boundary systems are stated in negative terms, for example sanctions. However, they serve as an instrument to curtail high costs resulting from commercial experiments and they allow managers to delegate decision-making. If improperly set though, boundaries may hinder the adaptation to changing product, market, technological, and environmental conditions.

*Interactive Systems:* are formal information systems managers use to engage directly into the decision-making of subordinates. The data are provided by underlying systems and available for managers throughout the organization on a recurring basis. These control systems help in focussing attention on particular issues, creating dialogue, and stimulating learning, thereby allowing new ideas and strategies to emerge in response to opportunities or threats in the competitive environment. However, this requires a climate that values openness and accepts constructive criticism and debate. Interactive systems are highly useful in case of strategic uncertainty, when inventive change and opportunity seeking is required. Examples of strategic uncertainty are changes in technology and customers' tastes, government regulations and industrial competition. The design of interactive systems is based on the analysis of these uncertainties, and their aim is to facilitate pro-active decision-making.

The relationship between an organization's business strategy and the four control systems can be depicted as follows:



**Figure 3.1** Relationship between business strategy and the four control systems

In general, beliefs and interactive control systems stimulate inventive and innovative action, whereas diagnostic and boundary control systems serve to constrain decision-making and ensure compliance with particular rules and measures. Diagnostic control systems monitor the business

results and facilitate ‘single loop’ learning<sup>15</sup>, whereas interactive control systems focus on processes and facilitate ‘double loop’ learning. Beliefs and boundary systems are important when opportunities expand and the pressure to increase business performance grows. Simons argues that an effective strategy implementation requires a balance between the four control systems. In this way a strategy can be approached from several perspectives; its planning stage, its structure and pattern, and its position within the context as a whole.

### 3.3 Recent developments and internal change drivers of MCS:

Little is known about the change processes of MCS in firms in LDCs. In the case of LDCs the privatisation process may cause organizational change in terms of ownership form, additional investments, the composition and powers of the accounting staff, managerial attitude, etc. These changes may affect the way in which management control systems are being used. For example, firms may decide to automate their production process, involving the development of machine and equipment performance measures. Or cost structures may change, requiring a revision of the overhead cost application rates. Furthermore, competition may increase the focus on quality standards and their related cost information. However, MCS change may be hindered by problems applying particularly to companies in LDCs, such as shortages in accounting staff, a lack of authority, difficulties in recruiting new staff members, a lack of effective means of communication within firms, a strong emphasis on external reporting and a lack of interest and support on the part of managers and owners.

In our assessment of MCS changes and our description of the internal factors, we have partly drawn on contingency theory, since it enables us to explain MCS change on the basis of a number of influencing variables (Innes & Mitchell, 1990). In order to collect evidence on the use of new management control systems attention will be paid to recent innovations in MCS techniques. In our evaluation of MCS innovations, we will identify the problems associated with the traditional MCS practices and address the motives for innovation. In this way we will be able to obtain more insight into the necessity for MCS change and analyse the prediction of privatisation advocates that LDCs will be eager to adopt new MCS techniques. The aim of this chapter is to assess developments in MCS practices and how these are internally influenced. We will then build our conceptual framework on the basis of our findings. First, we will describe the innovations in the area of MCS. After that, we will discuss the internal factors that necessitate changes in MCS practices.

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<sup>15</sup> Single loop learning refers to process control by means of single feedback, whereas double loop learning serves to analyse the motives for the strategy chosen. Double loop learning involves a double feedback loop that connects the detection of error with both the strategy chosen and the norms that define effective performance (Simons, 1995: 106).

### 3.3.1 Innovations in MCS:

As already mentioned, development accounting researchers and aid agencies claim that privatised firms are likely to implement improved MCS techniques to help them deal with the continuous environmental changes. This section will describe the developments in MCS practices, which will enable us to obtain a view of the type of MCS changes that can be expected to take place in privatised firms.

*Why MCS change?* As already explained, the problems associated with the traditional management control systems are mainly the result of its underlying old conceptions. For a long time, the definition of MCS was narrow, leaving no room for adjustments required as a result of internal and external changes as well as environmental developments. It has been suggested that economic, social and political forces drive organizational change in ways not yet entirely understood. For example, Shields (1997) and Scapens (1999) argue that changes in the environment cause changes within organizations, which in turn cause changes in MCS practices (see also Atkinson et. al., 1997). Generally, accounting is expected to respond to environmental changes, since these changes have an impact on the stability of organizations. If no attention is paid to external influences and management is not capable of dealing with them, an organization may be seriously undermined, and even be in danger of bankruptcy (Sunder, 2004). Therefore, managers should continually be aware of existing and potential threats and be capable of anticipating them by adjusting their policies in a timely, vigilant and creative manner (Sunder, 2002). So management control systems should be designed to provide information that supports management in decision-making, and they should be modified each time environmental changes occur (Lee, 1987).

After firms have been privatised, they are faced with the challenges associated with the private market environment. In general, newly privatised firms are expected to readjust their core values and mission statements instantly, and adopt a more focussed and goal-oriented approach. Such an approach is crucial in achieving a successful standard of performance. In this respect, the firm's management are the main actors responsible for the company's future. They are the ones who may adopt proactive strategies and anticipate environmental changes. That is why after the privatisation process top-management may have to be replaced. As pointed out by Ramaswamy (2001), in most LDCs the managers of public enterprises are bureaucrats rather than businessmen. They are often political appointees or seconded by the Civil Service (Shirley & Nellis, 1991). It is therefore not surprising that most of them lack the necessary management skills and are less qualified than their counterparts in the private sector (Ramaswamy & Von Glinow, 2000). Moreover, in LDCs they have less opportunity to develop these skills. In addition, they are not familiar with the concept of involving lower levels of the organization in the decision making process, which entails aspects such as selecting employees, training and development, reward and compensation systems and performance measurement.

It is argued that the traditional approaches towards management control systems do not result in the vital provision of information that managers need to be able to develop their strategic priorities. Private ownership demands proactive business strategies that anticipate the erratic movements of the market (Okeahialam & Kedslie, 1999). So accounting practices should produce effective, timely, and accurate information that supports the decision-making process (United Nations, 1991: cited in Okeahialam & Kedslie, 1999). MCS practices should be, among other things, focussed on generating accurate costs, relate processes and activities to strategic outcomes, and provide elaborate performance evaluation (Chenhall & Langfield-Smith, 1998b). They should be in line with the privatisation policies, and if this is not the case, they should be renewed. The MCS in sub-Saharan Africa require fewer adjustments, since they are based on systems already used in the UK and France (Okeahialam & Kedslie, 1999).

Critics observe that the traditional MCS techniques do no longer fit in with the conditions of the contemporary business environment, involving global competition, rapid technological change and the development of new management approaches (see Adler *et al.*, 2000; Bunce *et al.*, 1995; Bromwich & Bhimani, 1994; Kaplan, 1994; Johnson, 1992; Cooper, 1988). As a result, *new* MCS practices<sup>16</sup> as well as new management and production techniques are being introduced. The focus is especially on cost control, for instance by means of better estimations of resource quantities (IFAC, 1998). Often cost control goes hand in hand with employee empowerment. It is generally acknowledged that by updating their MCS techniques firms substantially improve their competitive position on the market (see Adler *et al.*, 2000).

However, in a number of Asian countries the adaptation of new MCS practices has not yet been introduced (Sulaiman *et al.*, 2004). These countries are Singapore, Malaysia, China and India. Here the traditional systems are still being used, in particular for cost control, product pricing, and the assessment of investments and management performance (Adler *et al.*, 2000). In these countries the traditional systems are still considered to be beneficial. In addition, the mentality of managers is conservative and they are inclined to avoid risk. Moreover, implementing new MCS techniques involves high costs. Adler *et al.* (2000) also report on lack of time and the availability of the relevant software, a passive attitude of management, and the costs involved in hiring skilful employees. In general, important factors in the reluctance towards MCS innovation are the lack of awareness of new systems as well as the minor degree of expertise and support on the part of top-management. The study conducted on Saudi firms also reveals that the factors hindering innovation in MCS practices include vast oil revenues, low level of competition, and nominal use of computers (El-Ebaishi *et al.*, 2003).

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<sup>16</sup> Examples of recent innovations in MCS include activity-based costing (ABC), activity-based budgeting and activity-based management (ABM), strategic management accounting, the balanced scorecard, non-financial performance measures and economic value analysis (see Chenhall, 2003; Anderson & Young, 1999; Ittner & Larcker, 1998). Other examples are cost modelling, quality reporting, target costing, back flush costing, throughput accounting, just in time (JIT) methods, benchmarking, product and customer profitability analysis, and life-cycle costing (Baines & Langfield-Smith, 2003; Adler *et al.*, 2000; Berliner & Brimson, 1988).

In brief, the literature indicates that internal factors determine whether or not enterprises decide to change their MCS practices.

### 3.3.2 Internal factors that influence MCS change

Innes and Mitchell (1990) state that MCS change involves the interaction of several variables, for example the availability of an adequate accounting staff, computing resources, and the degree of authority that a firm ascribes to the accounting function. These variables relate to conditions favourable to MCS change. Other variables are associated with factors that in fact influence MCS change. These are competitiveness of the market, production technology, and the product cost structure. Finally, there are conditions that are directly connected with MCS change. The variables associated with these conditions are, for example, the loss of market share, a new accounting staff member or a decrease in the firm's profitability.

According to the contingency theory, organizational design and MCS practices are affected by contingency factors (Sharma & Nandan, 2000; Fisher, 1995; Otley, 1980). An effective design, which matches internal organizational elements with contingency factors (Burrell & Morgan, 1979), is believed to lead to an effective business performance (Langfield-Smith, 1997; Otley, 1980). In this study we will use the following contingency factors as relevant predictors of MCS change: competition, size, the capacity to change (Libby & Waterhouse, 1996), the introduction of new technology, and change of strategy (Haldma & Lääts, 2002). In addition, we include the institutional factor 'capacity to undertake action'. We selected the internal factors on the basis of their relevance as confirmed by the results obtained in our pilot study and fieldwork. We believe that the above-mentioned factors play an important role in MCS change and that they may enable us to analyse and explain the phenomenon more thoroughly. As *competition* is an external factor, it has already been discussed in Chapter 2.

The contingency approach views MSC change from two perspectives. The first is MCS change in relation to the entire spectrum of changes within a firm at a given period of time (Damanpour, 1987, Daft & Becker, 1978; cited in Libby & Waterhouse, 1996), and the second refers to the extent to which MCS change is being integrated into business operations (Downs & Mohr, 1976). Other research methods are aimed at determining the rate at which enterprises adopt new MCS techniques or on measuring MCS change by establishing the extent to which a particular set of MCS techniques is being applied. Some researchers base their findings on cross-country comparisons, whereas others conduct comparative studies in one country.

In the following sections we will deal with MCS change on the basis of the internal change factors mentioned-above.

**Size:** Firm size appears to be an important factor in the use of management control systems. Large enterprises use MCS quite extensively, whereas smaller firms are less inclined to do so (Chiu, 1973; Savage, 1966: cited in El-Ebaishi *et al.*, 2003). The costs associated with MCS

innovation are considerable. It should therefore not be surprising that cost is the major impediment for introducing new MCS techniques (Libby & Waterhouse, 1996). Size is generally defined as the number of employees working in an organization. Many studies have shown that a firm's size declines after privatisation (see section 3.5.1). We expect that this will have an impact on the use of MCS, which indeed appeared to be the case in some of our case firms.

***Organizational capacity to learn:*** The introduction of innovations in MCS techniques mainly depends on whether the enterprise has sufficient know-how to implement them (Cohn & Levinthal, 1990), and if not, whether it is capable of providing the necessary training, or whether it is in the position to hire skilled employees (Firth, 1996). Another condition for a successful implementation of new MCS techniques is the full support of senior management and a sufficient degree of commitment on the part of the organization as a whole. Further, it appears that the organizational capacity to learn is enhanced through the formation of joint ventures with multinational firms (see Firth, 1996).

Public firms are generally considered less efficient than private enterprises. This can be explained by the nature of public sector management, involving a lower degree of incentive and interest alignment (Kumar, 2004). In addition, it is argued that managers of public enterprises have fewer decision-making responsibilities, and so they do not require elaborate management control systems. However, in order to survive in privatised environments managements need more sophisticated MCS. In addition, Dzakpasu (1998) shows that especially in Ghana, Tanzania and Uganda '*effective managerial practices*' are crucial because in these countries the privatised environment has not yet fully developed and matured. His study also indicates that improvements in the effectiveness of the management of the privatised enterprises in these countries have increased firm performance.

***The introduction of new technology:*** The introduction of new technologies has changed the structure of manufacturing costs. New technologies, such as computer-integrated manufacturing and JIT systems, indicate that the proportion of variable direct labour and inventory costs is declining. The speed of an operation is no longer determined by how fast an operator can work, but by the type of automation and manufacturing system used (Dhavale, 1996). And since the traditional cost control systems are mainly focussed on variance analysis, aggregation of costs and inventory do not provide management with the proper information about resource consumption. In addition, they may fail to give the proper information about the manufacturing performance achieved on the basis of new technological processes (Bruggeman & Slagmulder, 1995; Kaplan, 1994; Gosse, 1993). That is why new MCS techniques, such as ABM, life-cycle costing, target costing, and benchmarking, are clearly gaining momentum (Granlund & Lukka, 1998). These techniques provide better approach to resource management and are focussed on the customer (e.g., Chenhall & Langfield-Smith, 1998a; Elnathan *et al.*, 1996). Concurrently,

quality improvement programmes are introduced, directed at the elimination of waste, the development of employees' skills and cost reduction (Sim & Killough, 1998). There is clearly a positive relation between the introduction of technology innovation and the degree of specialization of the staff (Kimberly & Evanisko, 1981). El-Ebaishi *et al.*, (2003) however, argue that although developing countries recognise the necessity of updating their technology, they fail to pay sufficient attention to the development of management skills. In some LDCs, therefore, the low performance of public firms could partly be explained by their poor management (e.g., Dzakpasu, 1998).

**Strategy changes:** The same applies to the basic strategic management processes of both family and non-family businesses in that a strategy, either implicit or explicit, has to be formulated, implemented and controlled on the basis of a set of goals. The owner(s) of a family firm are likely to control each single step in the business process (Sharma, Chrisman & Chua, 1997). According to Govindarajan and Shank (1992), in order to make MCS effective they have to be matched with a suitable strategy. Achieving success in a dynamic business environment requires strategies aimed at quality improvement, flexibility with respect to customers' requirements as well as a reduction in lead times, inventories and production costs (Lucas, 1997: cited in Sulaiman *et al*, 2004). In addition, Anderson and Lanen (1999) examined the relationship between the competitive strategies of firms and MCS change after the 1991 Indian liberalisation process. They argue that MCS change accompanies other organizational changes, and that the traditional systems are used in qualitatively different ways. Chenhall and Langfield-Smith (1998b) and Callahan and Gabriel (1998), however, show a direct relationship between high business performance and the introduction of new MCS techniques, such as quality improvement programmes, benchmarking, balanced performance measures and ABM in firms that emphasise product differentiation strategies (see also Chenhall & Morris, 1995). Modern MCS techniques are focussed on differentiation priorities such as quality, delivery and customer service, whereas the traditional systems are more finance-oriented. Strategies focussed on the requirements of the customer are usually combined with empowerment of the lower staff (Chenhall & Langfield-Smith, 1998b). In this customer-oriented context, the traditional performance measures are no longer effective (Shank, 1989).

There are also firms that try to achieve cost efficiency by improving the traditional systems. These improvements include the downsizing of operations and reducing non-value-added activities (Chenhall & Langfield-Smith, 1998b). Another way of achieving cost effectiveness is by investing in new plants (Hamel & Prahalad, 1994). Enterprises that adopt low price strategy generally use the traditional control systems, such as budgetary performance measures and variance analysis, to realise cost control (Johnson & Kaplan, 1987). Moreover, ABC systems are well recommended for controlling costs.

**Capacity to undertake action:** This factor includes issues such as the development of skills, the availability of resources, the influence of power, management attitude and institutional isomorphism. The capacity to undertake action is expected to play an important role in MCS change. The ability to cope with the dynamic and constantly changing internal and external forces has become a key determinant of organizational survival and gaining competitive advantage (Greenwood & Hinings, 1996). In this context, the neo-institutional theory provides a model of change that enables one to link the organizational context with intra-organizational dynamics. An important factor in intra-organizational dynamics is the *capacity to undertake action*<sup>17</sup>. Closely connected with this factor are the elements ‘*availability of skills*’ and ‘*resources*’. We expect the capacity to undertake action to be an influential factor in MCS change. Another element that is expected to improve this factor is former experience of the organization with change processes (Amburgey *et al.*, 1993).

Generally, groups in an organization vary in their ability to influence organizational change due to their *power differential*. Some have more potential than others to facilitate or resist change. The pressure to change may emanate from behaviour of dominant groups in organizations that are not satisfied with the way in which their interests are promoted. Thus, change is expected to take place when those in privileged positions and with sufficient power are in favour of it (Greenwood & Hinings, 1996). Therefore, with respect to MCS change the support and involvement of top-management is imperative (Bruns & Kaplan, 1986). In the case of small privately-owned firms, Young (1987)<sup>18</sup> suggests that the owner/manager’s personal behaviour highly influences the enterprise’s strategic course and ultimately its success. This behaviour actually reflects the owner/manager’s power to determine the direction of the firm, developing as a result of his/her unique influential position (Collins & Moore, 1970). The manager’s perceptions also influence the organizational task processes. For example, the owner or the manager is the one who dictates the decision criteria regarding issues such as product and service quality. And he or she may be either a good or an inadequate budgeter or negotiator, may spend too much or too little time on developing new ideas, or be extremely focussed on particular processes while neglecting others (Young, 1987).

According to El-Ebaishi *et al.*, the nature of the Saudi society, described as closed and conservative, hinders the introduction of new MCS practices. It is to be expected that it will take a long time to convince company managers to start using new management control systems. Therefore, El-Ebaishi *et al.* argue that *management attitudes* play a crucial role in the decision to introduce new MCS. So in this respect education and information on the importance and benefits of up-to-date control systems are desirable. As stated by Goldkuhl and Nilsson (2000),

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<sup>17</sup> The ‘capacity to undertake action’ is the ability to *manage* the transition process step by step. This involves three aspects: 1) having a clear *conception* of the new destination, 2) adopting an adequate *strategy* to reach this destination, and 3) having the *skills* and *competencies* to operate successfully in the new environment (Greenwood & Hinings, 1996).

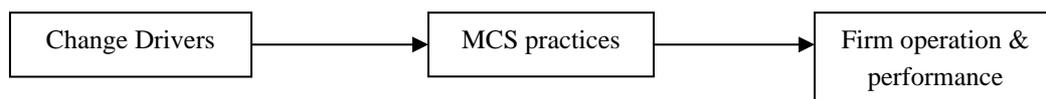
<sup>18</sup> <http://www.sbaer.uca.edu/research/sbida/1987/PDF/23.pdf>.

the continuous improvement and expansion of knowledge is vital for the development and performance of organizations. If knowledge and techniques are not continuously updated, an organization's progress is obstructed. In the case of Eritrean firms, the dependence of business owners/managers on family and friends is also a factor that impedes proper development of MCS.

DiMaggio & Powell (1983: cited in Firth, 1996) mention *institutional isomorphism* as an example of a process by which accounting innovations are transferred. It involves the adoption of the accounting practices, the performance and evaluation policies and the budgetary plans of the parent company by the subsidiary. Transfers of this kind are in particular facilitated by the formation of joint ventures with foreign firms. For instance, the decision of the Chinese government to form joint ventures with foreign firms was motivated by the objective to modernise the technology of the public enterprises by introducing more sophisticated accounting and management techniques (Firth, 1996). In this context, studies suggest that US firms are more persistent in sharing their management styles, structures (Firth, 1996) and home-country practices (Björkman & Xiucheng, 2002) than countries such as Japan.

One of the methods to stimulate the transfer of MCS practices is providing formal training to the accounting staff. In addition, the size and age of a joint venture play a role in the diffusion of improved MCS techniques.

The literature presented in this section describes the influence of internal factors on MCS change. It is claimed that there is a positive relationship between the improvement of MCS practices and the increase in firm performance. The relation among MCS practices, internal factors, and firm operation and performance is depicted in Figure 3.2.



**Figure 3.2** Relations among change drivers, MCS practices, and firm operations and performance.

To sum up our discussion, we present table 3.1 below, containing a list of internal change drivers discussed in this section together with their measurement criteria and their expected relationship with or implications for organizational and MCS change (Waweru *et al.*, 2004; Haldma & Lääts, 2002; Libby & Waterhouse, 1996).

So far, we have described the internal factors that drive MCS change and the way in which MCS practices are expected to develop as a result of them. The literature will help us to investigate how MCS practices are evolving and what role(s) internal factors play in the process of transition. Besides studying the role and effects of the above-mentioned change drivers, we will conduct an in-depth study on the individual MCS techniques of firms to obtain a wider picture

of the changes made. In the next sections we will present the most common MCS techniques and their expected changes.

**Table 3.1** *The implications of change drivers for organizational and MCS change*

<b>MCS change drivers:</b>	<b>Criteria to be used as measures for the change drivers</b>	<b>Expected implications for organizational and MCS change</b>
<b>1. Size</b>	- Number of employees in a firm	- Smaller firms are presumed to have fewer resources for innovation, to be less divisionalised, and employ few MCS practices relative to large companies.
<b>2. Organizational capacity to learn</b>	- Extent or amount of MCS techniques and management accounting staff present in an organization - Support of top-management for MCS innovations and managerial effectiveness	- A high degree of organizational capacity to learn facilitates MCS change - The extent of MCS knowledge, the interest in and approval for use, and the expertise of owners and/or managers affect the design and operation of MCS
<b>3. Introduction of new technology</b>	- Nature of the production processes, their degree of routine - Change of production technology	- Firms that operate with computerised or automated technologies mostly use new MCS practices, they are also stimulated to use budgets as control devices
<b>4. Change of strategy</b>	- Change of strategic orientation towards differentiation or low price directions (Provision of: on-time delivery, high quality products, effective after-sales service and support) - Ability to make changes in design and introduce new products, to make products widely available, to make rapid volume-product mix changes, and emphasis on cost control	- Product differentiation strategies: encourage firms to adopt new MCS techniques to serve customer preferences and enhance firm performance; employees need to adopt a customer-oriented attitude and should be given empowerment - Traditional MCS practices do not allow the pursuit of customer satisfaction and quality improvement - Low price strategy leads to the downsizing of operations and the reduction in non-value-added activities; it also motivates cost control using both traditional MCS practices and ABC
<b>5. Capacity to undertake action</b>	- Availability of skills and resources - Power to enforce implementation of MCS practice change - Personal behaviour, perceptions, trust, experience and knowledge of managers/owners concerning MCS - Institutional isomorphism (diffusion of practices from parent to joint-venture firm)	- High organizational capacity to undertake action is associated with rapid organizational and MCS change in new joint-venture firms - Possession of the required skills, resources and determination play a significant role in MCS change - The behaviour of managers combined with their knowledge and experience with MCS influences the strategic course and ultimately firm performance - The reliance on family members is expected to affect the operation of formal MCS practices in privatised firms

### 3.4 MCS techniques:

Agency theory predicts that privatisation will lead to the design of improved MCS including accounting systems (Macias, 2002). Advocates of privatisation presume that subsequent superior MCS will induce more transparent accounting and improved firm performance (Vickers & Yarrow, 1988). Their assumption is that MCS practices of privately owned firms including their accounting techniques are superior and can be established in privatised firms. Thus, privatisation is expected to facilitate introduction of MCS similar to the one practiced by Western private firms. It is therefore assumed that the replacement of the traditional bureaucratic and inefficient control systems by new MCS techniques, which are product-oriented and more effective, will instantly result in an improved economic welfare (Uddin, 1997; Waters, 1985). The assumption is that privatised firms would introduce MCS that is coupled to economic rewards and more efficient allocation of resources, supplemented by new initiatives such as total quality management, continuous improvement and enhanced benefits to employees. Moreover, internal control becomes more sensitive in adjusting operations to market information and communications would improve along with advances in information technology. Also, a relatively transparent, modern and market oriented accounting system would be established in order to assist firms in their decision-making processes, reporting and overall achievement of firm objectives (Hopper *et al.* 2004a). Like wise, the World Bank and the IMF encourage LDCs to pursue privatisation policies with the expectation that ownership change will induce improved [or *superior*] MCS and firm performance (Vickers & Yarrow, 1988). Here, superior MCS is presumed to be a transparent, incentive based control with market driven budgets that are free from politics and bureaucracy. Also, improved MCS is expected to be a system that ensures participation of both managers and employees in the control process, and that enforces proper accountability and responsibility for managers and employees.

For this study we have selected the most important and common MCS techniques. These have been documented in detail in the literature, and will serve as our starting point in investigating the expected MCS change. They include planning and budgeting, internal reporting and decision-making, product costing and pricing, cost control and waste minimisation, and performance measurement and evaluation. We will discuss their concepts, the degree to which they are used, their importance and the changes they are expected to undergo. As already mentioned, there is not much documentation on MCS change in LDCs, and the current literature may not provide us a suitable framework for our research topic. It mainly includes survey studies that do not offer detailed information. We will, however, present a review of former studies on MCS change to help us develop our framework. This review will enable us to identify the various new MCS components and techniques and to assess their usefulness.

### 3.4.1 Planning and Budgeting

The budget has various functions. It serves as a system of authorisation, as a means of forecasting, planning, performance evaluation and control, as a channel of communication and co-ordination, as a motivational device, as a basis for decision-making and as a tool for the efficient allocation of scarce resources (e.g., Sulaiman *et al.*, 2004). In the private sector, the budget is considered as an instrument for the objective and rational control of sub-units. However, this approach has its limitations. Accounting researchers argue that control based on the budget is only effective if socio-political and cultural factors are being taken into account (Hopper *et al.*, 1986; Tinker *et al.*, 1982; Tinker, 1980; Burchell *et al.*, 1980). Hoque and Hopper (1997), for example, show the way in which the budgeting process within the nationalised jute mills in Bangladesh has been constrained by political factors and industrial turbulence. Their study indicates that contextual factors affect budget-related issues. They argue that there is a significant connection between the budget-related behaviour of managers and environmental factors, which is in line with the claims made by the contingency theory. Besides, factors such as political and industrial relations, that were previously neglected, play an important role.

Anderson and Lanen (1999) state that after the economic reform in India in 1991 the planning process became more decentralised, giving employees more insight into the firms' strategic objectives. Consequently, budgeting policies have now become more realistic as a result of the adoption of standard procedures. Furthermore, there is a greater involvement of employees in these policies and their revisions. In this respect, the information on customer expectations and satisfaction has gained importance.

El-Ebaishi *et al.* (2003) reported that more than 74 percent of Saudi firms use master budget and prepare sales budget. Production budgets are mainly used by larger firms. More than 60% of the sample firms revise their budgets. Moreover, evidence shows that some firms use new management control systems, such as product life-cycle and JIT. However, most Saudi firms are family-owned businesses managed in the first place by the owners; the level of participation of the other managers is relatively low. Here accounting and budgeting control techniques are less common, but 'management attitude' seems to play a crucial role in the choice of MCS use. Other studies indicate that family businesses rely more on informal controls than non-family firms do (Hopper *et al.*, 2004b; Daily & Dollinger, 1992; Geeraerts, 1984: cited in Sharma *et al.*, 1997).

### 3.4.2 Product Costing and Pricing

The traditional absorption costing systems, generally based on labour costs/hours, have been criticised as inaccurate instruments for decision-making in highly automated firms where labour is negligible. Traditionally, overhead costs are allocated to cost centres (departments and products), depending on labour cost percentages as a blanket rate. This approach, however, does

not yield the cost information required for automated firms, and therefore forms no sound basis for decision-making (Duck R.E.V., 2001). That is why ABC was introduced (Ahmed, 1992). ABC identifies 'cost drivers'. It is, however, not widely used in LDCs (e.g., El-Ebaishi *et al.*, 2003).

According to Abdel-Kader and Luther (2004) only fifty percent of the firms studied separate their costs into variable and fixed components, although most of them believe that this method supports the decision-making process. Survey results indicate that especially the smaller firms do not apply this technique because it is rather complicated (e.g. Duck R.E.V., 2001). Abdel-Kader and Luther note that variable costing is much more common than the various forms of absorption costing. A study by Anderson and Lanen (1999) shows that after the 1991 reforms in India, firms have been using cost data for quoting, pricing, planning and process improvement purposes. Prior to the reforms, cost data was primarily used to evaluate production employees. El-Ebaishi *et al.*'s survey on Saudi companies (2003) shows that only 60 percent apply standard costing, although almost all firms sampled consider this method to be important. Adler *et al.* (2000) show in a study on New Zealand manufacturers that full costing is the most popular MCS technique used in this country. It appears to be more popular than any of the new MCS techniques.

Surveys suggest that the majority of enterprises rely on full cost rather than on variable cost information for their pricing policies (e.g., Drury & Tayles, 2000; Shim & Sudit, 1995; Govindarajan & Anthony, 1983). However, the accounting literature states that short-run prices should be based on variable costs (e.g., Garrison & Noreen, 1997; Horngren *et al.*, 1996). On the other hand, in the long term all costs are treated as variable (Pashigian, 1998).

### 3.4.3 Internal Reporting and Decision-making

Macias (2002) argues that efficient decision-making requires information provided on a timely, uniform and regular basis. It involves choosing among alternative courses of action by means of an incremental analysis approach (Weygandt *et al.*, 2002). Studies observe a tendency towards the regular provision of information within the decision-making process, whereby non-financial measures play an increasing role (Libby & Waterhouse, 1996). Drury *et al.* (1993) list a number of challenges with respect to the effectiveness of management accounting reporting. They are: transferring accurate information on-line to the shop floor in a timely manner, adapting the information system in such a way that it interfaces with other systems and becomes real-time.

Anderson and Lanen (1999) state that, after the reforms in 1991, Indian companies started to apply accounting techniques for managerial purposes along with external reporting requirements. Improvements were in particular promoted by obtaining internal information on process variation by means of quality measures. Their study also shows an increased demand for data and a focus on decision-making based on facts.

#### 3.4.4 Cost Control and Waste Minimisation

Duck R.E.V. (2001) claims that cost reduction methods involve a periodic reappraisal of issues such as components used, design, possible substitution with cheaper materials, and production methods. Scrap control can also be used for cost reduction purposes. With regard to the control of labour costs, labour efficiency and labour productivity techniques are commonly used to assess the production levels attained. Labour productivity measurements result in output measured in physical units and calculated as output per man-hour, however only for productive labour.

Quality is a vital component in business strategies of which the improvement is closely linked to the competitive environment (Adam *et al.*, 2001). In this respect, the focus of firms on the customer as well as on the involvement of employees is positively related to quality improvement. Adam *et al.*'s study shows that an increase in the involvement of employees in Mexico and the USA led to quality improvement in terms of decreased costs of internal failures, defective items and costs of quality.

#### 3.4.5 Performance Measurement and Evaluation

The literature generally classifies performance measures into two broad categories, named financial and non-financial items. The changes that are expected to take place refer to performance measurement on both the individual and the organizational level and evaluation of performance in terms of quality and customer services. Details on the relative importance and use of financial as well as non-financial measurement tools are presented below.

**Financial Measures:** Firms compare their budgeted figures of sales, profit and income, mostly based on standard costing, with their actual figures. Budget variance is also used for setting goals and evaluating performance (Joye & Blayney, 1990). Other financial performance measurements are based on budget expenditure, operating income figures, return on equity/assets (ROE/A), return on sales, efficiency, output, and dividend. However, financial measures focussed on profits, ROI, standard costs and variance analysis have been criticised because they provide a picture that is too narrow and have a tendency to manipulate data. Moreover, when using these instruments factors such as cost of capital and non-financial measures are not taken into account (e.g. Ittner *et al.*, 1997; Shields, 1997; Kaplan & Norton, 1996). Despite their disadvantages, however, they are considered functional by a large number of firms, as indicated by studies of Abdel-Kader & Luther (2004) and El-Ebaishi *et al.* (2003). Duck R.E.V. states that smaller businesses show a lack of interest in MCS techniques.

**Non-financial measures:** Non-financial measurements are based on issues such as on-time delivery, employee training/education, customer satisfaction, employee turnover, material scrap loss, market share, product defects, team performance, supplier evaluations, set-up times, and employee satisfaction (Baines & Langfield, 2003). Research shows that the importance of non-

financial measures is increasing; in a number of countries they are widely being applied (Bhimani, 1994). Other examples of non-financial measures adopted in different countries are based on issues such as inventory turnover, throughput, quality, innovativeness, economic value added, benchmarking, the balanced scorecard and working conditions (e.g. Abdel-Kader & Luther, 2004; Chenhall & Langfield-Smith, 1998). Research conducted by Langfield-Smith (1998) shows that firms that use product differentiation strategies benefit from both new MCS techniques and non-financial information. There are no significant data on the extent to which performance measures are used in LDCs.

Table 3.2 contains a list of MCS techniques, including their components. The list is based on the work of Libby and Waterhouse (1996) and Waweru *et al.* (2004) and has been slightly modified to fit our research.

**Table 3.2** *MCS techniques and their components*

List of MCS techniques:	Components of MCS techniques to be investigated:
1. Planning & Budgeting	<ul style="list-style-type: none"> <li>- Budgeting (its uses, process of preparation and level of participation)</li> <li>- Profit planning</li> <li>- Operations planning (production)</li> <li>- Co-ordination of activities</li> <li>- Long-term planning (Capital Budgeting)</li> <li>- Strategic planning</li> </ul>
2. Product Costing & Pricing	<ul style="list-style-type: none"> <li>- Type of costing system                             <ul style="list-style-type: none"> <li>• Actual costing vs. Standard costing</li> <li>• Absorption vs. Variable costing</li> </ul> </li> <li>- Nature of cost accumulation and allocation (e.g., manufacturing overhead, marketing, etc)</li> <li>- Type of pricing system and use of MCS information</li> <li>- Freedom in product pricing</li> </ul>
3. Internal Reporting & Decision-making	<ul style="list-style-type: none"> <li>- Communication of MCS information                             <ul style="list-style-type: none"> <li>• Frequency of reporting information</li> <li>• Timeliness</li> <li>• Accuracy</li> </ul> </li> <li>- Use of more non-financial measures</li> <li>- More detailed exchange of information</li> <li>- Use of existing systems but a different interpretation of the results</li> <li>- Decision-making responsibility</li> </ul>
4. Cost Control & Waste Minimisation	<ul style="list-style-type: none"> <li>- Quality control methods</li> <li>- Waste minimisation techniques</li> </ul>
5. Performance Measurement & Evaluation	<ul style="list-style-type: none"> <li>- Individual or team-based performance measures</li> <li>- Organizational performance measurements (extent of using financial and non-financial measures)</li> <li>- Measurement of performance in terms of quality</li> <li>- Measurement of performance in terms of customer satisfaction</li> <li>- Measurement of performance in terms of delivery innovations</li> <li>- Reward systems (pay for performance plans)</li> <li>- Reward systems (bonuses and salary increments)</li> <li>- Extent of employee benefits</li> </ul>

### 3.5 Privatisation and Expected Firm Performance

This section presents additional material on the effects of privatisation on firm performance, which we will compare with our case findings (chapter eight). We will describe the data collected and address performance measures as described in past studies. We will interpret our data on the basis of the performance measurement tools selected for our case study. In addition, we will present evidence on improvements in firm performance as a result of improved MCS techniques, mainly non-financial performance measures.

#### 3.5.1 Evidence on firm performance and measurements used

There are several approaches to measuring and evaluating firm performance. Some studies mainly focus on measuring the performance of firms after the privatisation process, others compare the pre- and post-privatisation results of firms, and there are studies that compare the performance of privatised firms with that of public enterprises in a specific period. The methods most frequently used for measuring firm performance are based on issues such as profitability, labour productivity, efficiency, output, employment, leverage, and capital investment. In this sub-section we will give an outline of the empirical findings of different studies. First, we will present the positive results. Next, we will address the studies that report on negative results, and finally, we will deal with studies with a specific focus.

##### *Studies with positive outcomes:*

A number of theoretical as well as empirical studies support the proposition that private firms outperform state-owned enterprises (SOEs) and that privatisation increases the efficiency of divested firms. A theoretical study by Boycko *et al.* (1993) shows that privatisation only leads to efficiency improvements if both cash flow and control rights are transferred from the government into private hands. Boardman and Vining (1989) analysed the performance of 500 major non-US mining and manufacturing companies in 1983. They found that private companies are more profitable as well as more efficient in terms of sales per employee and per asset than both SOEs and firms under mixed ownership. In fact, their study shows that the performance level of firms under mixed ownership is not significantly different from that of SOEs.

*Study by the World Bank:* The World Bank made an empirical analysis of the post-privatisation performance of twelve companies in Britain, Chile, Malaysia, and Mexico to assess whether or not ownership change actually improved the efficiency of firms (Galal *et al.*, 1994). The study indicates that in eleven of the twelve cases an increase in net welfare was achieved. There was no company where the situation of employees deteriorated, and in three cases their position improved considerably. Other studies have also observed significant changes in the operational performance of privatised companies, both in developed and developing countries (e.g. Megginson *et al.*, 1994; Boubakri & Cosset, 1998).

*Comparative study:* Megginson *et al.* (1994) conducted research in 18 countries to compare the pre- and post-privatisation operational and financial performance of 61 companies in 32 industries during the period from 1961 until 1990. Their study includes both developed and developing countries, and shows strong improvements in the performance standards after privatisation without any decrease in employment. The privatised firms increased their output (real sales), became more profitable, raised their expenditure on capital investment, improved their operational efficiency in terms of output per employee (adjusted for inflation), and increased their labour force. Moreover, debt levels were lowered and dividend payout was increased. These results applied to both competitive and non-competitive industries.

*Studies conducted in LDCs:* Boubakri and Cosset (1998) examined the financial and operational performance of 79 firms that were fully or partially privatised in the period from 1980 until 1992 in 21 developing countries. Their study shows that after privatisation firm performance increased considerably in terms of profitability, operational efficiency, capital investments, real sales, employment levels, and dividends. In addition, there was a decline in leverage. Another study conducted in Mexico by La Porta & Lopez-de-Silanes (1997) also produced positive results. Data were collected in 218 non-financial privatised Mexican firms during the period from 1983 until 1991. The effects of privatisation on firm performance were assessed by using seven measurement tools. The results showed that there was a large increase in profitability; sales rose, while fixed assets basically remained the same. However, the number of employees decreased considerably. Profitability gain was illustrated by an increase in both operating and net income to sales ratios. La Porta and Lopez-de-Silanes explain the decrease in employment by the circumstance that before the introduction of privatisation these companies had an excess capacity of both employees and physical capital. Moreover, privatisation has led to increased output and government revenues in the form of taxes.

The increase in firm performance as a result of privatisation is also indicated by a study of D'Souza *et al.* (2001). They conducted research in 29 countries to assess the performance of 118 privatised companies in 28 industries during the period from 1961 until 1995. They applied financial and operating performance measures. D'Souza *et al.* observed significant improvements in profitability, efficiency, output per employee, real sales, and capital expenditure. These were achieved without any loss of employment. In addition, there was a decrease in leverage.

Another study was conducted by Ramaswamy (2001), who explored the relationship of ownership status and competition on performance of SOEs as well as private firms in India during the period of 1990 until 1992. Performance was measured in terms of return of sales and return on investment. Operating efficiency was measured as a ratio of cost of goods sold to sales. He applied statistical analysis and found out that private firms outperformed SOEs on all

performance measures. In addition, the performance of SOEs sharply declined as the intensity of competition increased.

*Studies conducted in LDCs - Transition Economies:* Frydman *et al.* (1997) examined the impact of privatisation on firm performance by studying about 150 Czech, Hungarian and Polish privatised companies during the period from 1990 until 1993. Their research was based on statistical tests; they compared the performance of state firms with that of privatised firms covering the pre- and post-privatisation period. The general conclusion of this study is that private ownership highly improves the performance of firms. Already in the transitional stage both revenue and productivity increased and costs decreased. Further, in comparison with the 93 SOEs fewer workers lost their jobs. According to Frydman *et al.* their data show that once the subsidies have been abolished or reduced and macroeconomic reform has been introduced, the employment strategies are based on the principle of supply and demand.

*Studies with negative outcomes:*

*Comparative study:* A study by D'Souza and Megginson (1998) indicates that in both developed and developing countries employment reduced as a result of privatisation. This is because SOEs are usually overstaffed due to the political structure of the state-governed economies (Aussenegg & Jelic, 2002).

*Studies conducted in LDCs – Transition Economies:* Harper (2001) examined the operating performance of 178 Czech companies that were privatised during the first wave of the voucher privatisation. During a two year post-privatisation period, the firms' profitability (return on sales and return on total assets), net income efficiency, real sales and employment declined significantly. Sales efficiency increased slightly, but was not statistically significant. The study also shows that factors such as size and ownership have no significant effect on firm performance.

Aussenegg and Jelic (2002) conducted research on the operational performance of 154 Polish, Hungarian and Czech companies that were fully or partially privatised in the period from 1990 until 1998. Their study shows that the privatised firms did not increase their profitability. Moreover, their efficiency and output decreased significantly. In addition, the sales efficiency of more than 70 percent of the firms deteriorated, while the average net income per employee also decreased. There were no real changes with respect to leverage and capital investment spending, and the employment levels of more than 80 percent of all privatised firms dropped after privatisation. Aussenegg and Jelic argue that the results they found are not in line with the findings of similar studies conducted in countries with a transition economy. It can therefore be stated that the results of studies on transition economies are not conclusive.

*Studies with a specific focus:*

*Studies focussed on management:* Lauterbach and Vaninsky (1999) examined the effect of ownership structure on firm performance. They studied 280 Israeli firms, collecting data on net income in the period from 1992 until 1994, the total of assets and equity in 1994, and top management remuneration as well as ownership structure in 1994. Their conclusion, particularly with respect to generating income, is that owner-manager firms are less efficient than companies managed by a professional (non-owner) manager. Family firms that are run by their owners relatively performed the worst. Firms managed by non-owners generally performed better than those managed by owners.

*Studies focussed on ownership structure:* Qi, *et al.* (1999) conducted a study to investigate whether and, if so, how the corporate performance of listed Chinese firms, which were partially privatised, was affected by the proportion of shareholding structure. Their sample consisted of firms listed in the Shanghai Stock Exchange in the period from 1991 until 1996. Their research shows that there is a positive relation between firm performance in terms of return on equity and legal-person shares, and a negative relation between firm performance and state-owned shares. So, performance appears to increase as the amount of legal-person shares exceeds that of state shares.

Walsh and Whelan (2000) assessed the performance of 220 firms in a number of Central and Eastern European countries during a transition period of seven years. Performance was determined in terms of employment growth. The results indicate that firms owned and managed by outsiders outperform both the companies managed by the owner and the state-owned enterprises. The study shows that in various countries the effect of privatisation on employment tends to be ambiguous.

From the evidence presented above, it can be concluded that the impact of privatisation is mixed, that is both positive and negative. In addition, most past studies focus on the post-privatisation stage and fail to give a thorough analysis of MCS change and the factors that influence firm performance.

The expected outcomes associated with the performance measurements used are given in Table 3.3. This table serves as our basis for assessing the firm level impact of privatisation on firm performance. We will make use of the measurements depending on the availability of data.

**Table 3.3** *Measurements of firm performance and expected results*

Measurements of Firm Performance:	Components of the Measurement Tools:	Expected results after privatisation
1. Profitability	- Amount of Revenues, Return on Sales, Return on Assets, and Return on Equity	Increase
2. Labour Productivity	- Growth in Labour Productivity	Increase
3. Operational Efficiency	- Sales Efficiency and Net Income Efficiency	Increase
4. Output	- Real Sale (sales adjusted to inflation by using CPI)	Increase
5. Employment & Salary level	- Growth in Employment - Improvements in Salary Level	Increase
6. Leverage	- Total Debt to Asset Ratio, Long-term Debt to Asset Ratio, and Long-term Debt to Equity Ratio	Decrease
7. Capital Investment	- Capital Expenditures to Sales and Capital Expenditures to Assets	Increase
8. Dividend Payout	- Dividend to Sales Ratio and Dividend Payout Ratio	Increase
9. Taxes	- Total Tax Revenues paid and Tax per unit of Sales	Increase

### 3.5.2 Improved MCS practices in relation to firm performance

In this sub-section we will give an overview of the Western literature on the role of improved MCS in firm performance. The literature presented supports the proposition that MCS information that provides data on both internal conditions (e.g. firm strategy and manufacturing technology) and external circumstances (e.g. competition, customer preferences, etc.) will positively contribute to the enhancement of firm performance. We use Western literature as our point of departure since there is no sufficient literature available dealing with the context of LDCs. The literature will help us structure our study and clarify the role of improved MCS.

It has been argued that financial performance measures alone may not improve a company's financial results, since they merely indicate the outcomes of past activities, which may not help to improve future performance. Non-financial measures, on the other hand, provide an insight into the factors that influence future financial performance. This is corroborated by, for example, Banker *et al.* (2000) and Ittner and Larcker (1998). It can therefore be concluded that in order to provide management information that can be properly used to address, data on, for example, manufacturing operations should also be included (Nanni *et al.*, 1992).

The majority of the current research supports a positive relationship between the inclusion of non-financial information and firm performance. Mia and Clarke (1999) observe an indirect relation between the use of MCS information and business unit performance. Studies of Davila (2000) and Chong and Chong (1997) show that an increase use of non-financial information by firms following customer-focussed (or prospector-type) strategy has a positive impact on performance. Sim and Killough (1998) and Abernethy and Lillis (1995) also argue that firms have improved their performance on the basis of non-financial manufacturing information. Scott

and Tiessen (1999) reported that firm performance has improved when they applied comprehensive performance measures [that combine both financial and non-financial information]. Sim and Killough (1998) and Ittner and Larcher (1995) observe a positive interaction among total quality management practices, MCS information and performance. Moreover, a study by Lin Sum (1979; cited in Hopper *et al.* 2004b) indicates that the implementation of Western MCS in China, aimed at increasing autonomy and responsibility, has led to an improved economic performance.

However, factors such as *organizational strategy*, the *type of technology*, and *structural* as well as *environmental* issues may also have an influence on firm performance and the degree to which non-financial performance measurements are being used (Ittner & Larcker, 1998; Daft & Lengel, 1986). Research conducted by Baines and Langfield-Smith (2003) shows that the increasing competitiveness of the business environment has led to an increased focus on differentiation strategies, having an impact on the nature of the organizational design, the manufacturing technologies and improved MCS practices. This impact requires a greater reliance on non-financial accounting information in order to improve firm performance. Furthermore, for companies to be successful they should not only aim at improving their financial performance and operational efficiency, but also pay attention to issues such as customer satisfaction and human resources. In addition, there has to be clarity on the organizational level with respect to the strategies chosen (Lingle & Schiemann, 1996). These strategies should be based on the proper success criteria. For instance, financial performance will not improve on the basis of quality criteria if these are not of value to the customers. A strategy of innovation may fail unless it is initiated in an environment that values renewal and realised by a company that is fit to do so. Similarly, adjusting the organizational design to the environment will be ineffective if the strategy selected is inappropriate (Pelham, 1999; Miller, 1982).

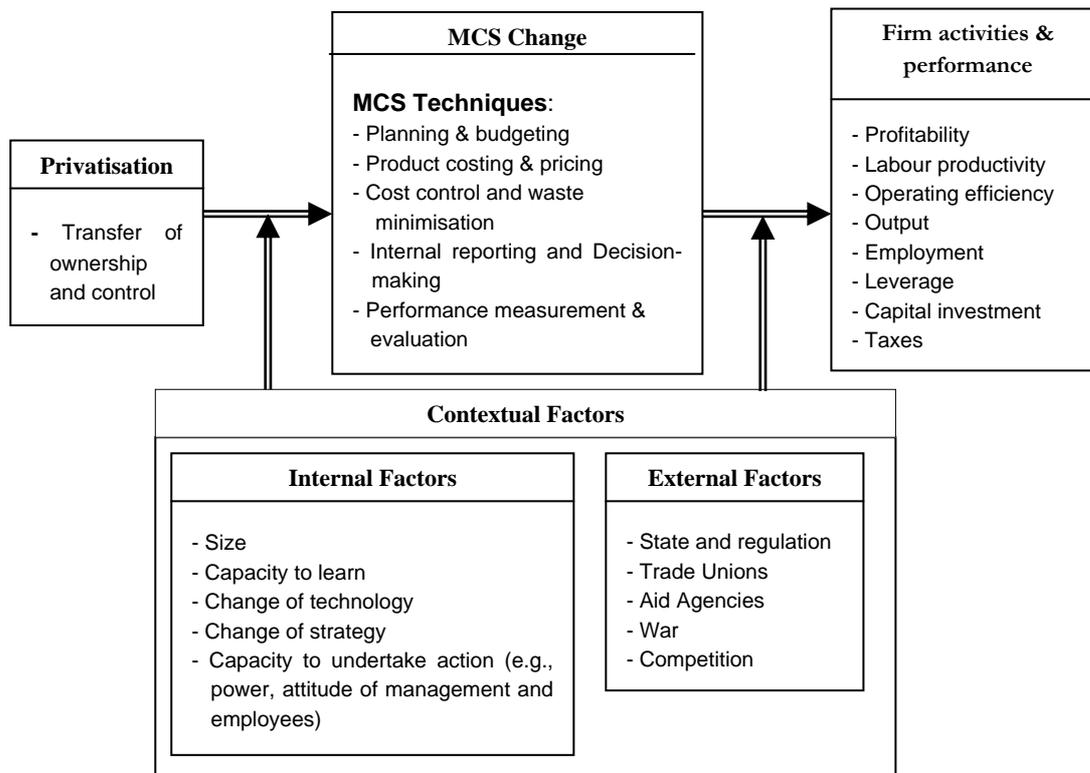
It can be concluded that information is now being recognised as one of the most powerful tools for improving the wealth of firms (Mangaliso, 1995). And in view of the dynamic nature of the business environment it is the function of MCS to provide up-to-date information that helps managers in making the proper decisions and to motivate these managers to establish organizational change beneficial to the firm (Horngren, 1995; Stokes & Lawrimore, 1989). Inadequate and incomplete accounting information will certainly undermine the effectiveness of resource management and hinder the improvement of firm performance.

### **3.6 Towards a conceptual Framework**

In this section we will present the conceptual framework on which we will base our data collection and analysis. We will describe its components and their relations. We developed our

conceptual framework on the basis of the literature and discussions referred to in the previous chapters and the present one.

As already mentioned, former studies on MCS have mostly been conducted in the West. In addition, it is generally assumed that accounting is a neutral practice, which can be implemented and developed in any part of the world, regardless of the country-specific differences of the socio-economic, institutional, political and cultural environments. Due to this assumption, the accounting research in LDCs has been conducted on the basis of Western perspectives and models (e.g. Tinker,1980). Typically Western management control systems and practices were introduced in LDCs. This approach, however, has led to problems in the *ontological* sphere (Hopper *et al.*, 2004b). Western theories are not suitable for application in LDCs because of the cultural, political and socio-economic differences between the West and the developing countries (Hulme & Tuner, 1991; Hewagama & Warnapala, 1989). It is therefore crucial for future research to adopt an approach that includes the contextual circumstances relevant in LDCs. In most of the current studies the issues that influence the nature and functioning of MCS in LDCs have so far been neglected (Wickramasinghe & Hopper, 2000; Uddin & Hopper, 2001).



**Figure 3.3** *Conceptual Framework:* The relations among privatisation, MCS change, firm activities, performance, and contextual [internal and external] factors.

A conceptual model that includes the wider context of LDCs is therefore indispensable. In designing our framework we have adopted the following criteria: 1) the model has to meet the objectives of our study as described in section 1.4, 2) it has to be suitable for application in the privatised Eritrean business environment and its socio-economic and political contexts. Our pilot study has indicated that these criteria were valid. This study focuses particularly on the issues playing a role in the actual accounting practice and includes the internal and external contextual factors that shape MCS and influence firm performance. In short, the aim of our research is to describe and analyse the effect of privatisation on MCS and to evaluate firm performance while taking into account the contextual factors addressed in this and the previous chapter. MCS change, firm performance and the contextual factors will be approached with the aid of our conceptual framework. It is presented in Figure 3.3 above.

On the basis of our conceptual framework, privatisation is expected to improve efficiency by offering new owners the right to appropriate the returns from assets; it brings incentives, and would positively impact productivity and innovation. Generally, competition and the transfer of property rights to private hands is presumed to bring better MCS practices that ultimately improve firm performance and promote development goals. The new owners would likely be well informed, pursue profitability goals, and possess higher capacity to monitor firms via MCS practices than the government. Based on the literature, we can anticipate privatisation to bring higher output, increased investments, supply of quality goods and services at low prices, advent of modern technology and know-how, higher profits and dividends, improved employment and salaries while reducing leverage, effective corporate governance, and government benefits in finance and increased taxation income (see Makalou, 1999; Fahy *et al.*, 1999; Kikeri *et al.*, 1992). MCS would become tightly coupled to economic rewards and more efficient allocation of resources. Consequently, we anticipate fast decision-making processes, efficient reporting, and overall achievement of firm objectives. However, the above expectations are likely to be mediated by the internal and external factors indicated in figure 3.3. Normally, we expect less pressure from politics, bureaucracy, and Trade Union (TU) activities. The government is expected to help in creating conducive market environment, establish efficient capital markets, bestow unconstrained access to capital, uphold a fair taxation system, and reduce socio-political instability. It would be possible that privatisation may lead to the emergence of informal controls in LDCs (see Hopper *et al.*, 2004b; Uddin & Hopper 2003, 1999). We expect that cooperation with multinational firms leads to introduction of improved knowledge and MCS practices. Conversely, small firms would use few and traditional forms of MCS with more emphasis on informal and direct controls by the owner(s). Adoption of innovations in MCS practices would be influenced by the presence of adequate skilled labour for its implementation (Cohn & Levinthal, 1991) and the level of training offered by firms (Firth, 1996). Most importantly, the support and involvement of top-managers and owners is believed to facilitate MCS practice changes (Bruns & Kaplan, 1987).

The first-hand data gathered by means of our conceptual framework will provide us with information about the way in which MCS change has developed after the introduction of privatisation and the role of the contextual factors. Further, we will obtain insight into how firms deal with their business and investment plans. The way in which they approach these plans can be partly explained by the contextual factors. As former studies conducted in LDCs have indicated, both internal and external contextual factors are believed to affect MCS practices, firm activities and performance. Our research has been conducted by means of interviews and analysis of documents and quantitative figures. The interviews served for gathering information about issues such as competition, capacity to learn, technology changes, the state and regulation, TUs, aid agencies, and war. Information from documents and quantitative figures on firm size and technology changes served to supplement the data obtained through interviews.

We believe that insight into the impact of the internal and contextual factors will enable us to explain the inconsistencies in the theoretical arguments with respect to the outcomes of privatisation. Moreover, it would allow us to obtain an image of the practical problems and challenges faced by Eritrean firms during the transition period.

We conducted interviews with officials of the Ministry of Trade and Industry, the Ministry of National Development, the Department of Inland Revenue, the Eritrean National Chamber of Commerce, the National Confederation of Eritrean Workers, The World Bank Country Office in Eritrea, and the Business Consultant. These interviews served to obtain information on the role played by governmental and non-government institutions in assisting privatised firms. The role involves providing assistance in the form of creating conducive business environment, solving practical problems related to business operations, granting access to foreign exchange services, facilitating industrial relations and so on. On the basis of our findings, we will assess the role that the government has so far played in the transition period to privatisation.

### **3.7 Summary and Conclusions**

The literature shows that the internal and external businesses environments are continuously changing in such a way that firms have to make the necessary adaptations to their MCS. The development and updating of these control systems has stimulated the development of new MCS practices, equipping firms more efficiently to increase their firm performance and gain competitive advantage (Adler *et al.*, 2000). This chapter has dealt with internal change drivers and new developments in MCS. The external contextual factors have been described in chapter two. Change can be conceptualised as the degree of changes adopted in a given period or the extent to which changes are being integrated into operations (Libby & Waterhouse, 1996). The previous studies on MCS change have mainly been conducted in the West and are mostly based on statistical analysis. So far, the amount of data on post-privatisation MCS change in the context of LDCs has been very limited.

This chapter has provided us with a relevant body of literature that will enable us to conduct our research from the perspective of LDCs, while including internal and external contextual factors. The internal factors are mostly explained by contingency theory and institutional theory. The literature presented in this chapter clarifies how the internal environment stimulates MCS change. In view of this fact, it is claimed that improved MCS will eventually lead to improvements in firm performance (see Figures 3.2 and 3.3). We have described the details of MCS techniques on which our conceptual framework is based. This framework serves as an instrument for data collection and analysis. The definition of MCS and the further analysis of MCS techniques have revealed the importance of recognising the role of employees in firms. If employees are given more influence and incentives, such as additional training, compensation, benefits etc., their job satisfaction increases, which in turn encourages a customer-oriented approach and improves firm productivity.

With regard to firm performance, this chapter has presented some of the current evidence, and addressed the performance measures commonly used. Further, it points at the importance of deploying non-financial performance measures and their impact on firm performance. Finally, we have introduced our conceptual framework, based on the insights obtained from the literature as well as the results of the pilot interviews. MCS change is inevitable in privatised firms and strongly related to internal and external contextual factors. The data on MCS change in privatised firms in LDCs are limited. In order to gain more insight into this particular field, we therefore strongly suggest that more research should be conducted, preferably by means of case studies.