#### **CHAPTER 2**

#### THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

This chapter reviews selected literature in accordance with the universalistic and contingency frameworks. The two frameworks attempt to study how budget-based performance evaluation could potentially be related to job performance and job satisfaction. An emphasis is placed upon discussion of how contingency theory is applied to management accounting, which has an implication to budget-based performance evaluation.

According to Kren and Liao (1988), prior literature concerning the impact of budget-based performance evaluation is discussed along the two lines of basic frameworks:

- 1. Universalistic framework
- 2. Contingency framework

In the universalistic framework, accounting researchers look for direct relationship between budget-based performance evaluation styles and job performance as well as job satisfaction. On the other hand, the contingency framework suggests that such relationship be moderated by certain contingent factors. As such, the relationship between the budget-based performance evaluation styles and job performance as well as job satisfaction may be moderated by some variables related to organizational context. In this study, the impacts of budget-based performance evaluation styles are discussed via universalistic and contingency frameworks, respectively.

# 2.1 Budget-Based Performance Evaluation in Universalistic Framework

The early performance evaluation literature is focused upon the direct relationship between budget-based performance evaluation styles and job performance as well as job satisfaction. There are two styles of budget-based performance evaluation that are widely acknowledged in order to evaluate managerial performance. The two styles are discussed and categorized in a number of studies ( Brownell, 1982a; Brownell and Hirst, 1986; Dunk, 1993; Harrisson, 1993 ) as follows:

- 1. High budget use
- 2. Low budget use

The two styles are discussed in the literature with different names, including budget-constrained and profit-conscious styles ( Hopwood, 1972 ), rigid and flexible styles ( Otley, 1978 ), high and low reliance on accounting measures ( Hirst, 1981 ), and accounting-based and non-accounting styles ( Brownell and Dunk, 1991 ). In these studies, the differences between the nature of the two styles are similarly explained in terms of the degree of emphasis placed on budgetary information in performance evaluation.

The descriptions provided by Hopwood (1972) are used to explain the nature of the high and low budget use styles in this study. In the high budget use style, managerial performance is strictly measured according to the ability to continually meet budgets on a short-term basis that is normally within the fiscal period. Other important performance criteria that may be important on a long-term basis, such as the ability to develop quality products or to maintain flexible

manufacturing processes, are ignored. In this case, budgetary information are used in a so-called rigid manner to evaluate performance.

In the low budget use style, managerial performance is evaluated according to the ability to increase the effectiveness in relation to the long-term organizational objectives, such as the ability to minimize long-term costs or maximize long-term profits. Therefore, managerial performance is not solely evaluated based on the achievement of budgets. In this case, budgetary information are used in a rather flexible manner to evaluate performance.

#### 2.1.1 Impact of Budget Use

Budget use concerns the way in which budgetary information are used for managerial performance evaluation. Most often, the impact of budget use has been studied directly and indirectly through job-related tension ( Hopwood, 1972 ), job performance as well as job-related tension ( Otley, 1978 ), and job performance as well as job satisfaction ( Brownell, 1982a ).

In an investigation of cost center managers from one Chicago-based manufacturing company, Hopwood (1972) studies the relationship between budget use styles and job-related tension. In particular, high budget use is found to be associated with high job-related tension. Managers who are primarily evaluated on their ability to continually meet budgets feel more tension because they often have little control over short-term performance. To reduce such job-related tension, they are likely to engage in dysfunctional behaviors.

Dysfunctional behaviors include actions that allegedly reduce long-term performance of the company as a whole, very often without management hierarchy being aware of the extent of dysfunctionality. For example, mid-level managers often put research and development projects on hold in an attempt to meet their short-term budgets, even though these projects are vital to effective performance in the long run. Based upon dysfunctional decision-making, it is implied that high budget use is detrimental to long-term managerial performance.

On the other hand, low budget use is reported to be associated with low job-related tension. However, this does not mean that the management is not encouraged to work hard because costs and budgets are also being closely monitored. Instead, it is that costs and budgets do not constrain job performance by allowing managers to be able to justify their actions. Hopwood (1972) explains that:

managers are able to justify actions which results in long term cost savings even though they produce unfavorable current budget variances. Indeed, it is the ability to explain which plays an important role in avoiding the higher tension and anxiety associated with the rigid style, a style whose approach is ' just don't do it, rather than asking for explanations.'

With low budget use, managers feel less stressed because of their justifiability, thereby causing lower job-related tension. As a result, they would spend less time and effort to engage in dysfunctional behaviors. Consequently, it is contended that a low budget emphasis could enhance managerial performance.

In an attempt to replicate and extend the work of Hopwood (1972), Otley (1978) investigates the issue from a group of profit center managers in a single company located in the United Kingdom. He studies how budget use is related to job-related tension as well as managerial performance. Paradoxically, results indicate that high budget use does not lead to increased job-related tension. In addition, high budget use appears to be associated with small budget errors, which is indicative of the achievement of budgets. This is, in turn, taken to imply increased managerial performance. However, such apparently improved performance may not be real. In the words of Otley (1978):

It therefore appears that a major reason for performance being closer to budget when budgetary means of evaluation are stressed is not so much that performance improves, but that the budget is set at more realistic levels. Such realism in budgets is also associated with ... profitability ... Where a unit was thought likely to achieve a level of profit which would be acceptable to senior management, its output budget was set at a relatively realistic level. In these circumstances, the unit manager perceived that his performance would be evaluated strictly by reference to the budgeted standards. However, where the level of profit expected for a unit was felt to be unacceptable to senior management, its output was biased in an optimistic direction. In this latter case, the unit manager felt that his actual performance would not be evaluated solely by reference to the budgeted figures.

It can be inferred from the paragraph above that the apparently improved managerial performance can be biased by the probable manipulation of budget standard. The extent of manipulation could depend upon the level of anticipated profitability. If profit anticipation is deemed acceptable to senior management, then there is not likely to be manipulation of budget standard. If, on the other hand, profit anticipation is deemed unacceptable, then there is likely to be manipulation.

On the other hand, low budget use is reported to have a strong correlation with large output budget errors, which is indicative of the failure to meet budgets. This is taken to imply low managerial performance. To explain, managers realize that they are not solely evaluated on whether or not they meet their budgets. Therefore, they put relatively less effort to achieve their budgets. As a result, budgets are achieved less frequently.

To summarize the works of these two classic studies (Hopwood, 1972; Otley, 1978), they are viewed to provide contradictory results as to the impact of budget use. Hopwood reports that high (low) budget use is associated to high (low) job-related tension, which should be indicative of low (high) job performance. On the other hand, Otley reports that high (low) budget use is associated with low (high) job-related tension and high (low) job performance. The conflicting results point out to the fact that a group of significant variables may not have been taken into account in explaining the impact of budget use.

Both Hopwood and Otley themselves have later suggested a path to reconcile their results by studying other important budget characteristics. Hopwood (1976) suggests that a comprehensive means to

understand budgeting is to study the process in a broader scope. Otley (1980) also follows this line of thought and further insists that:

The accounting information system must be seen as part of a management information system, itself part of a management planning and control system, and all of which are but part of an overall organizational control package.

A number of studies have directly examined relationship between budget participation and use, and there are both theoretical foundation (Cherrington and Cherrington, 1973) and empirical evidence (Brownell, 1982a; Dunk, 1989) to suggest that the level of budget participation may confound the impact of budget use upon job performance and job satisfaction. Therefore, it is noteworthy to explore the possible relationship between budget participation and use, and to analyze their potential impact upon job performance and job satisfaction.

# 2.1.2 Impact of Budget Participation and Use

Budget participation concerns a process whereby managers are involved in, and have influence on, budgetary decisions that have direct effects on them. Budget use is already defined in the previous section. The impact of budget participation and use is often studied through job performance ( Brownell, 1982a; Brownell and Hirst, 1986; Dunk, 1989 ) and job satisfaction ( Brownell, 1982a ).

Cherrington and Cherrington (1973), in an investigation of 230 undergraduate students in an introductory business class, attempt to analyze the appropriate reward structure in the budgeting process, which has a major implication to the study of budget participation and use. In their framework, it is suggested that the perception of reward structure emphasizing budget achievement represents appropriate reinforcement, which gives rise to high job performance and satisfaction for managers in high budget participation group. In addition, it is further suggested that the reward structure de-emphasizing budget achievement represents appropriate reinforcement, which yields high job performance and satisfaction for managers in low budget participation group. The Cherrington and Cherrington study serves as a milestone in a sense that it gives recognition to a possible relationship between budget participation and use.

Based upon the foundation laid by Cherrington and Cherrington (1973), a study is conducted by Brownell (1982a) to directly examine relationship between budget participation and use, and its impact on job performance and job satisfaction. In an investigation of 48 cost center managers from one manufacturing company in San Francisco Bay area, the Brownell study is widely regarded as significantly pioneering work in a sense that it is able to reconcile the works of Hopwood (1972) and Otley (1978) pertaining to the impact of high and low budget use. It is construed that the impact of budget-based performance evaluation on managerial behaviors and performance must be studied in light of relationship between budget participation and use.

It should be emphasized that the results above are only conclusive to suggest that relationship between budget participation and use is important to affect job performance. High budget use is found to be associated with higher performance under conditions of high budget participation, and low budget use is found to be associated with higher performance under low budget participation. However, the results concerning job satisfaction are still inconclusive.

A plausible explanation for the above performance results is expressed in a subsequent work of Brownell and McInnes (1986), who attempt to study linkage among budget participation, motivation, and managerial performance. In the absence of participation, managers feel that the budget goals may not be appropriate. Psychologically, a heavy emphasis on budget to evaluate performance is felt by managers to be illegitimate. As a result, performance deteriorates in a high budget use style under conditions of low participation. This explanation provides a strong support for relationship between budget participation and use.

Brownell and Hirst (1986) study the impact of budget participation and use in different levels of task uncertainty, via an investigation of 80 cost and revenue center managers from one manufacturing company based in Sydney, Australia. One of the important findings is that the relationship between budget participation and use affecting job performance found in Brownell (1982a) cannot be confirmed. Two possible explanations are offered for their different results. First is the presence of cross-national difference in samples, i.e., Brownell study in the US. and Brownell and Hirst study in Australia. Second, their study fails to consider important contingent variables that may intervene in relationship between budget participation and use.

Dunk (1989), in an investigation of 26 production managers from a number of manufacturing companies in the United Kingdom, attempts to study the relationship between budget participation and use affecting managerial performance. This is considered to represent an important extension from previous studies (Brownell, 1982a; Brownell and Hirst, 1986) because it is based upon cross-sectional data. The two studies should be noted for having their subjects sampled from single companies in different geographical areas. The different environments between San Francisco and Sidney could be partly responsible to their different findings.

However, empirical results of Dunk (1989) are perplexing. It is found that there is relationship between budget participation and use affecting managerial performance, but in the direction opposite to prior expectation. In particular, there is a negative relationship, i.e., high (low) budget use enhances high performance in low (high) budget participation. The random sampling of the Dunk study is given as a possible explanation for his different finding from that of the two previous studies that involves non-random sampling. It is possible that the use of cross-sectional study may average out the effects of budget participation and use on job performance across firms.

The theoretical foundation and empirical evidence discussed above suggest a potential relationship between budget participation and use. Therefore, the ways to classify how budgetary information are used to evaluate managerial performance should take a broader perspective and incorporate at least two essential aspects of budgeting: budget participation and budget use.

As a result, it is necessary to classify the styles of budget-based performance evaluation by characterizing them according to the two dimensions above. Based upon such characterization, this study is able to identify two styles as follows:

- 1. Congruence style
- 2. Incongruence style

Congruence style refers to the situations in which a consistency exists between budget participation and use, i.e., 1) high budget participation and use, or 2) low budget participation and use. Incongruence style refers to the situations in which an inconsistency exists between budget participation and use, i.e., 1) high budget participation and low budget use, or 2) low budget participation and high budget use. To repeat, it should be noted that the foundation of congruence and incongruence styles are derived based upon the study of Brownell (1982a), which suggests that the former and the latter should be related to high and low job performance and job satisfaction, respectively. Table 2.1 diagrams the congruence and incongruence styles of budget-based performance evaluation.

Table 2.1

Description of Congruence and Incongruence Styles

of Budget-Based Performance Evaluation

	High Budget Participation	Low Budget Participation
High budget Use	Congruence Style	Incongruence Style
Low Budget Use	Incongruence Style	Congruence Style

Based on the discussion above, there is research evidence to support that budget-based performance evaluation may be associated with job performance. However, there seem to be inconclusive research evidence concerning job satisfaction. It is beneficial to include job satisfaction as the other dependent variable in this study for the following reasons. First, job satisfaction is of concern to managers on a day-to-day basis ( Gresov, Drazin, and Van de Ven, 1989 ). Furthermore, it is an important predictor of managerial turnover and absentee rates ( Snead and Harrel, 1991 ). There are logical grounds to study the impact of budget-based performance evaluation on job performance and job satisfaction because they both are widely considered among the most important job outcome ( De Pietro and Achremser, 1987 ).

From the arguments developed in the review of literature, congruence style is expected to be associated with high job performance and satisfaction, while incongruence style is expected to be associated with low job performance and job satisfaction. Therefore, it leads to the development of hypotheses 1.1 and 2.1, which are stated in their null form:

Hypothesis 1.1: There are no significant difference in job performance between the two styles of budget-based performance evaluation.

Hypothesis 2.1: There are no significant difference in job satisfaction between the two styles of budget-based performance evaluation.

It is important to note that empirical results of relationship between budget participation and use affecting managerial performance are quite inconclusive, with positive impact ( Brownell, 1982a ), no impact ( Brownell and Hirst, 1986 ), and even negative impact ( Dunk, 1989 ). These rather contradictory empirical results may serve to point out that such relationship may not be universal, calling for the " it all depends " arguments. If proper consideration is given to the organizational context in which such relationship has been studied, then an useful contingency model of budget-based performance evaluation can be created. This is to suggest that the contingency framework may be relevant in studying such relationship. However, a comprehensive literature review of the contingency theory of management accounting by Otley ( 1980 ) points out that it is also important to analyze the conceptual framework of contingency theory to determine its validity to study such relationship.

# 2.2 Budget-Based Performance Evaluation in Contingency Framework

Recent performance evaluation literature seeks to apply the contingency framework in an attempt to reconcile the seemingly contrasting results generated from the universalistic framework. The contingency framework has played an instrumental part in the development of performance evaluation literature (Kren and Liao, 1988), and will continue to retain its importance in the future for the broad study of the design and use of accounting information (Kaplan and Mackey, 1992).

#### 2.2.1 The Contingency Theory of Management Accounting

The impact of budget-based performance evaluation on job performance and job satisfaction has been studied, and results have been less than conclusive. Kren and Liao (1988) state that:

The evidence indicates that universalistic explanations are probably too simplistic to explain the relationship of reliance on accounting performance measures. Contingent explanations are needed to draw meaningful conclusions.

In the contingency framework, there does not exist one best management control system for all organizations in all circumstances. The best management control system is contingent upon a number of factors, both internal and external to the organization, which do change in accordance with circumstances. In this sense, the contingency theory of management accounting recognizes the importance of an appropriate match between

management control systems and the context in which they are used. Otley (1987) comments that:

The fundamental basis of contingency theory is that the most appropriate control system for an organization depends upon certain contingent variables; that is, the system must be matched with circumstances ... The major contingent variables that have been suggested to date are the nature of the environment in which the organization is set, the type of task it undertakes and the technology it utilizes, the organizational structure it has adopted and the strategy it is attempting to pursue.

From the perspective of contingency theory of management accounting, budget-based performance evaluation can greatly affect managerial behaviors, some of which are associated with high managerial performance and satisfaction, while others are associated with low managerial performance and satisfaction. But there is no uniform answer as to how managerial performance and satisfaction will be affected because there are so many other factors that must be taken into consideration. The core of contingency approach is to discover the so-called contingent variables to explain the differential effectiveness of budget-based performance evaluation in different situations.

The contingency theory of management accounting implies that budgetary control system must be made compatible with the context in which they are used. In both conceptual works ( Scott, 1987; Daft, 1989 ) and empirical works ( Pugh, Hickson, Hinings, and Turner, 1969 ) in organizational literature, the contingency context has generally been referred to environment, task,

technology, firm size, and ownership. Of particular interest, firm size and ownership affect the ways in which firms decentralize decision-making authority in management hierarchy. Furthermore, decentralization is believed to affect the accounting information system ( Gordon and Miller, 1976; Dermer, 1978 ), financial control system ( Piper, 1978 ), and budgetary control system ( Bruns and Waterhouse, 1975; Merchant, 1981 ).

The above contention suggests that firm size and ownership may be related to decentralization, which, in turn, may have implications to budgetary control systems. Therefore, there are logical grounds to suggest that firm size and ownership are important to the investigation of the design and use of budgetary control system. For example, decision-making patterns tend to be more decentralized in large and professionally managed firms. In this situation, a particular form of budgetary control system is best fit to such pattern. On the other hand, decision-making patterns tend to be less decentralized in small firms with owner-management. In this situation, a different form of budgetary control system is best fit to such pattern. This is in accordance with the contingency viewpoint of budgeting literature (Merchant, 1981; Otley, 1987) that different budgetary control systems are best fit to firms with different contexts.

# 2.2.2 Impact of Firm Size

The relationship between budgetary control system and firm size has been studied in early budgeting literature, and the firm size has been found to be influential to explain budget-related behaviors of managers. Swieringa and Moncur (1972), in an investigation of 26 branch managers of one large international bank, attempt to study budget-oriented behaviors in different

organizational contexts, one of which is concerned with the size of branch operation. Budget-oriented behavior refers to the recurring actions and interactions of managers brought about by the use of budgetary information to measure managerial performance.

It is contended in their study that there are four distinct patterns of budget-oriented behaviors based upon factor analysis as follows:

- 1. Active participant behavior
- 2. Involved exponent behavior
- 3. Reluctant victim behavior
- 4. Unconcerned recipient behavior

Results indicate that the four patterns of budget-oriented behavior are associated with different levels of job satisfaction. The highest level of job satisfaction is found in the active participant group, followed by the unconcerned recipient, involved exponent, and reluctant victim groups, respectively. However, results cannot specify the particular patterns of budget-oriented behavior that are associated with either of the large or small branches. Therefore, bank branch size is suggested to be insignificant to explain relationship among budgetary control systems, budget-oriented behaviors, and job satisfaction.

However, Swieringa and Moncur (1972) themselves admit that the measurement of branch size is quite crude, and could possibly introduce bias towards results. This is coupled with the fact that the sample is merely composed of one large bank, thus further limiting the generalizability of their results. Therefore, there is not yet conclusive evidence to deny relationship among budgetary control systems, organizational size, and budget-oriented behaviors that are thought to influence job satisfaction.

A more comprehensive investigation of budget-related behaviors is conducted by Bruns and Waterhouse (1975), using a much larger sample of 26 manufacturing and service companies. In their framework, it is hypothesized and found that desirable budget-related behaviors can be encouraged only when budgetary control systems are matched with organizational structure, which is, in turn, dependent upon organizational context, i.e., firm size and technology. Budget-related behavior refers to the activities, actions, and interactions of managers with each other as well as their tasks that relate either directly or indirectly to budgeting systems.

Organizations tend to decentralize their decision-making authority as they grow in size ( Pugh, Hickson, Hinings, and Turner, 1969 ) and as technology makes it possible for standardized mass production ( Perrow, 1967 ). In such large and decentralized organizations, budget-related behavior is found to be more administrative in terms of higher structured activities, formalized communications, and standardized information for performance evaluation. In small and centralized organizations, on the other hand, budget-related behavior is found to be more interpersonal, which refers to low structured activities, informalized communications, and less standardized information for performance evaluation.

One of the most important works concerning the design and use of budgetary control systems is conducted by Merchant (1981), which explicitly specifies implications for budget participation and use that are directly relevant to this study. In an investigation of 170 manufacturing managers in 19 electronics firms, the study is focused upon how budgetary control systems are used in different organizational contexts, including firm size, and their impact on firm performance and managerial attitudes.

Consistent with Swieringa and Moncur (1972), it is hypothesized by Merchant (1981) that a formal approach (administrative approach) to budgetary control system becomes necessary as organizations grow and decentralize their decision-making authority down the management hierarchy. This is because such organizations involve enlarged and complex chain of command. This administrative control approach stresses that the budgetary control system should allow high budget participation and high budget use in performance evaluation.

The other approach is called informal approach (interpersonal approach) which is suitable for small and less decentralized organizations. This interpersonal approach stresses that budgetary control system should allow low budget participation and low budget use in performance evaluation.

Results support the above hypotheses derived from the contingency theory of management accounting. Most importantly, firm performance is increased when budgetary control systems are matched with the organizational context in which they are used. An administrative approach to budgetary control system is effective in large and decentralized organizations. An interpersonal approach to budgetary control system is effective in small and less decentralized organizations.

The relationship between firm size and decentralization of decision-making authority has also been widely supported in the early empirical organizational literature (Blau, 1972; Hickson, Pugh, and Pheyley, 1969; Pugh, Hickson, Hinings, and Turner, 1969). However, a more comprehensive study is recently conducted. Conner (1992) investigates the administrators of 101 nursing homes in Oregon in order to determine whether participation in decision-making is contingent upon organizational context, including organizational size. In small organizations with few employees and simple work processes, it is first hypothesized that the top management is likely to manage in centralized manner. Consequently, decision-making participation is not likely to be widely distributed. It is also hypothesized that large and technically complex organizations are managed in a more decentralized manner. As a result, there is likely to be a wide distribution of decision-making participation.

Results support the first hypothesis rather than the second. Small firms are managed in a centralized manner. However, large firms are not necessarily managed in a decentralized manner. It is possible that there could be other factors, which influence the extent to which large firms decentralize their decision-making authority. The impact of firm ownership on the patterns of decentralization of both large and small firms has been investigated in the organizational literature by Geeraerts (1984) and Robbins (1990). Such impact is to be later discussed in the next section.

To summarize the discussion above, it can be hypothesized from the contingency theory of management accounting, and empirically confirmed that firm size can be instrumental to the effectiveness of budgetary control systems, which have implications to relationship between budget participation and use. Firm size is shown to be significant in generating different budget-related behaviors. Therefore, it is considered worthwhile to further investigate whether budget-related behaviors are associated with job performance and job satisfaction. As a result, it leads to the development of hypotheses 1.2 and 2.2, respectively.

**Hypothesis 1.2**: There are no significant difference in job performance between the two styles of budget-based performance evaluation in large and small banks.

Hypothesis 2.2: There are no significant difference in job satisfaction between the two styles of budget-based performance evaluation in large and small banks.

### 2.2.3 Impact of Firm Ownership

Another organizational variable that has received no less attention than firm size is firm ownership. This variable refers to the extent to which firm owners are involved in firm management. Based on this variable, firms can be classified as follows:

- 1. Owner-managed firms
- 2. Professional-managed firms

There are two important contentions regarding the importance of firm ownership. First, it is contended in the organizational literature ( Geeraerts, 1984; Robbins, 1990 ) that owner-managed and professional-managed firms employ different pattern concerning decentralization of decision-making authority. In particular, owner-managed firms tend to be less decentralized, and professional-managed firms tend to be more decentralized.

A very important study which supports the relationship between firm ownership and decentralization of decision-making authority in the organizational literature is conducted by Geeraerts (1984). In an investigation of 142 small- and medium-sized organizations, it is found that changes in large firms towards decentralization is dependent upon firm ownership. There are sufficient evidence to conclude that changes towards decentralization are less evident in owner-managed firms than in professional-managed firms.

A number of reasons why managers are reluctant to delegate their decision-making authority are discussed in the organizational behavior literature (Davis and Newstrom, 1985). Some managers may view that such delegation will weaken their power (Montana and Nash, 1981). Other managers may view themselves to be perfectionists; therefore, they do not trust their subordinate managers to perform the work for them. This is especially true for a number of owner-managers, who are entrepreneurial. In entrepreneurial firms, power is restricted to the "chief," who exercises it personally with no formal control systems. In other words, their decision-making is highly centralized (Mintzberg, 1989).

Second, it is also contended in the agency theory that the two types of firms have different impacts upon firm performance (Kim, Lee, and Francis, 1988; Morch, Shleifer, and Vishney, 1988; Schellenger, Wood, and Tashakori, 1989; Oswald and Jahera, 1991; Hudson, Jahera, and Lloyd, 1992). According to the agency theory, Jensen and Meckling (1976) define organizations as," legal fictions which serve as a nexus for a set of contracting relationship among individuals."

In these sets of contracts, there is separation of ownership and control, i.e., owners hire managers to coordinate activities among all interested parties. In owner-controlled firms where managers are allowed to increase their stakes in the firm's equity, agency theory suggests that managerial interest become more compatible with the firm's interest. Consequently, managers are inherently provided with more incentive to improve decision-making to benefit firms in the long run. Therefore, pecuniary consumption and other dysfunctional behaviors are likely to be discouraged. As a result, firm performance is enhanced.

It can be empirically inferred from the contingency theory of management accounting that budgetary control systems are related to different budget-related behaviors in organizational context, characterized by different pattern concerning decentralization of decision-making authority (Bruns and Waterhouse, 1975; Merchant, 1981); the organization theory further suggests that such decentralization is related to firm ownership (Geerearts, 1984); finally, the agency theory also suggests that firm ownership is related to firm performance (Kim, Lee, and Francis, 1988; Oswald and Jahera, 1991; Hudson, Jahera, and Lloyd, 1992).

Based on the discussion above, it is reasonable to suggest that budgetary control systems used in different ownership contexts (owner-managed as opposed to professional-managed firms) should be associated with different patterns of budget-related behaviors, which could possibly be associated with different job performance and job satisfaction. However, there seems to be a gap in the accounting literature to provide empirical evidence on the impact of budgetary control systems upon job performance and job satisfaction in different ownership contexts. Therefore, it is thought to be useful if a study is conducted to fill this gap. As a result, it leads to the development of hypotheses 1.3 and 2.3, respectively.

Hypothesis 1.3: There are no significant difference in job performance between the two styles of budget-based performance evaluation in owner-managed and professional-managed banks.

Hypothesis 2.3: There are no significant difference in job satisfaction between the two styles of budget-based performance evaluation in owner-managed and professional-managed banks.

To summarize, there are inconsistent results in early studies based upon universalistic approach, which merely attempts to examine the simple relationship between budget-based performance evaluation and managerial performance as well as behaviors. Such relationship should be studied in a more comprehensive manner, possibly by adopting the contingency approach. From the contingency approach, it is contended that budget-based performance evaluation may have different effects on job performance and satisfaction in different organizational contexts. The above contingency-based discussion suggests two

important organizational-level variables, i.e., firm size and firm ownership. Firm size and ownership are consequently of particular interest in this study.