

**THE ANTECEDENTS AND OUTCOMES OF BUSINESS UNITS'
SLACK: A PROSPECT THEORY APPROACH**

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**THE ANTECEDENTS AND OUTCOMES OF BUSINESS UNITS'
SLACK: A PROSPECT THEORY APPROACH**

By

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LISREL NOTATIONS

Notation	Explanation
ξ (KSI)	Exogenous (independent) latent variable
η (ETA)	Endogenous (dependent) latent variable
γ (GAMMA)	Direct effects of a particular exogenous latent variable to a particular endogenous latent variable
β (BETA)	Direct effects of a particular endogenous latent variable to a particular endogenous latent variable
Y	Indicators of endogenous latent variable
X	Indicators of endogenous latent variable
λ (LAMBDA)	Loadings or relationships between exogenous and endogenous latent variables and their indicators
ϕ (PHI)	Covariance/correlation between exogenous variables
δ (DELTA)	Measurement errors of indicators of exogenous latent variables
ε (EPSILON)	Measurement errors of indicators of endogenous latent variables
ζ (ZETA)	Structural errors of the relationships between exogenous/endogenous variables and endogenous variables
Ψ (PSI)	Covariance matrix of structural errors (ζ)
Λ	Covariance matrix of relationships between exogenous and endogenous latent variables and their indicators (λ)
Θ_{δ} (THETA-DELTA)	Covariance matrix of measurement errors of exogenous variable(δ)
Θ_{ε} (THETA-EPSILON)	Covariance matrix of measurement errors of endogenous variables (ε)

ANTESEDEN DAN HASILAN DARIPADA *SLACK* UNIT BISNIS: SATU PENDEKATAN TEORI PROSPEK

ABSTRAK

Slack organisasi telah lama digunakan untuk menerangkan fenomena organisasi *diverse* dan telah dikaitkan sebagai salah satu blok pembentuk teori kelakuan firma. Ia telah diterima secara meluas bahawa satu penyelidikan komprehensif untuk mengamati penentu *slack* dan hasilan prestasi ialah merupakan penyelesaian kepada ‘unsolved puzzles’ untuk mewujudkan *slack*. Walau bagaimanapun, penyelidikan awal sebenarnya telah menunjukkan bahawa penentu kepada pengujudan *slack* sendiri belum dibuktikan secara konklusif dan keputusan adalah samar-samar. Bukti belum konklusif dan pelbagai tentang penentu *slack* telah ditetapkan secara normatif disebabkan oleh kekurangan mendalam, model yang robust dan telah mengambil kaedah peringkat-berperingkat untuk mengukur pengujudan *slack*. Mengkaji penentu-penentu pengujudan *slack* pada peringkat unit bisnis, kajian ini menguji kesan penentu korporat, persekitaran dan tahap unit bisnis terhadap pengujudan *slack*. Secara khusus, kajian ini menguji impak tekanan persaingan dan diversifikasi terhadap *slack* unit bisnis sama ada secara langsung ataupun tidak langsung melalui kebergantungan ke atas pengukuran prestasi perakaunan dan asymmetry maklumat. Selain daripada itu, memperbetulkan pendapat-pendapat positif dan negative oleh teori kelakuan firma dan ahli ekonomi berkaitan *slack*, kajian ini menguji kesan tidak linear *slack* unit bisnis terhadap hasilan prestasi. Keputusan menunjukkan bahawa diversifikasi korporat memberi kesan secara positif kepada *slack* bajet manakala ia memberi sedikit bukti kesan signifikan terhadap *slack* kewangan. Menariknya, ia telah membuktikan bahawa unit bisnis tidak mengujudkan *slack* bajet dan kewangan

apabila dikaitkan dengan persekitaran dan tekanan persaingan yang mana tiada kesan secara langsung telah ditemui terhadap perhubungan di antara tekanan persaingan dan kedua-dua slack kewangan dan bajet. Walau bagaimanapun, walaupun tiada kesan secara langsung ditemui terhadap kesan tekanan persaingan terhadap slack kewangan dan bajet, keputusan membayangkan peranan pencelah pergantungan korporat terhadap pengukuran perakaunan. Lebih khusus lagi, telah ditunjukkan bahawa peningkatan tekanan persaingan menambahkan penekanan korporat terhadap pengukuran prestasi perakaunan dan seterusnya membawa kepada pengujudan slack unit bisnis. Kajian juga menunjukkan bahawa kedua-dua slack kewangan dan bajet meningkatkan prestasi kewangan dan bukan kewangan pada puncak tertentu, dan lebih daripada itu, ia akan memberi hambatan terhadap prestasi unit bisnis.

THE ANTECEDENTS AND OUTCOMES OF BUSINESS UNITS' SLACK: A PROSPECT THEORY

ABSTRACT

Organizational slack has long been used to explain diverse organizational phenomena and has been regarded as one of building blocks of the behavioral theory of the firm. It has been widely accepted that a comprehensive study to observe the determinants of slack and its performance outcome is the solution for the unsolved puzzles for slack creation. However, prior researches have indeed revealed that the determinants of slack creation itself are yet still inconclusive and the results were ambiguous. The inconclusive and mixed research on the determinants of slack has been normatively prescribed due to lack vigorous, robust model and adopted the piecemeal approach to the measurements of slack creation. Examining the determinants of slack creation at the business units level, this study tested the impacts of corporate, environmental and business unit level predictors to the extent of slack creation. In particular, this study tested the impact of competitive forces and diversification on the business units' slack either directly or indirectly through reliance on accounting performance measures and information asymmetry. Furthermore, reconciling the positive and negative views of behavioral theory of the firm and economists regarding slack, respectively, this study tested the non-linear effect of business units' slack to its performance outcome. The results showed that corporate diversification positively affects the budgetary slack while it provides little evidence for the significant effect on financial slack. Interestingly, it is evident that the business units did not build budgetary and financial slack to hedge against the environmental shocks and competitive forces as no direct effect was observed on the relationship between competitive forces and both the financial and

budgetary slack. However, although no direct effects were found on the effects of competitive forces on financial and budgetary slack, the results hinted the mediating role of corporate reliance on accounting performance measures. More specifically, it was revealed that the increasing forces of competition enhanced the corporate emphasis on accounting performance measures and then it would lead to the slack creation of the business units. The study also indicated that both the financial and budgetary slack increased the financial and non-financial performance at some “peak” levels, and beyond them, they would hurt the business units performance.

CHAPTER 1

INTRODUCTION

This chapter elaborates the background of the study by theoretically analyzing the determinants of slack creation in the business units as well as its performance outcome. The chapter begins with the ambiguous position of slack creation and its unsolved issues in the management accounting domain. The problem statements are briefly explained in the second part. The third and the fourth part of this chapter discuss the research questions and research objectives respectively, and followed by the study's significance and contribution. The last part of this chapter describes the scope of the study and the operational definitions of key terms and variables.

1.1. Background of the study

Due to increasing global competition, reliance on organizations' resources to be more effective, productive and innovative is becoming unavoidable. However, the financial crisis began in July 1997 in Indonesia had destructive effects and impaired the stability of fundamentals economy systems. Growth rate before this crisis was always in excess of 5 % prior to the crisis and sharply turned to negative during and after the crisis (Firdausy, undated). It has been widely accepted that the most contributing factors on the crisis are due to the deterioration of balance sheets besides its loose-fitting regulation and supervision.

It is then become apparent that to date, companies in manufacturing sectors did not perform well in comparison to other industrial sectors. For example, data from Indonesian National Statistical Bureau reveals that Gross National Product growth from this sector ranging from 0.06 to 3.09. This is not the case for other sectors, however.

Agriculture sector contribution to GNP for instance, ranges from 3.21 to 18.78. A dramatic figure that indicates the instability movement of the manufacturing sector (kindly refer to table 1.1.)

Table 1.1: Industrial sectors Gross National Product growth

	1Q06/4Q05	2Q06/1Q06	1Q06/1Q05	2Q06/2Q05	1S06/1S05
Agriculture	18.78	3.21	3.93	5	4.47
Mining	-4.83	2.23	3.65	5.43	4.45
Manufacturing	0.06	1.01	3.09	3.05	3.07
Construction	0.04	3.14	7.15	8.26	7.71
Trading, Hotel and Restaurant	-0.15	2.34	4.72	4.64	4.68
Transportation and Communication	1.62	5.03	11.03	13.29	12.18
Financial and Services	0.59	1.84	5.39	5.07	5.23
Other Services	0.67	1.55	5.44	5.86	5.65

On average, GNP growth on manufacturing sector in comparison to other sectors indicates the lowest (see figure 1.1.). This is an interesting phenomenon however, since manufacturing sector still becomes the less vulnerable sector (after agriculture) because of the monetary crisis. For example, it was found that high performing firms (high Return on Equity) were more vulnerable to the shocks due to the crisis rather than low performing ones (Ahuja, 2000; Hitt et al., 1996). It is plausible that firms with low Return on Equity and Earnings per Share, rather than their counterparts, could justify the uncertainty attached during the crisis. It can be speculated that the low performing firms have more idle resources that can be used as a buffer to reduce the uncertainty (Yang et al., 2009; Herold et al., 2006) and as a cushion during bad times. George (2005) maintained that these idle resources can be redeployed or reallocated for further more important use during bad times to achieve the organization goals.

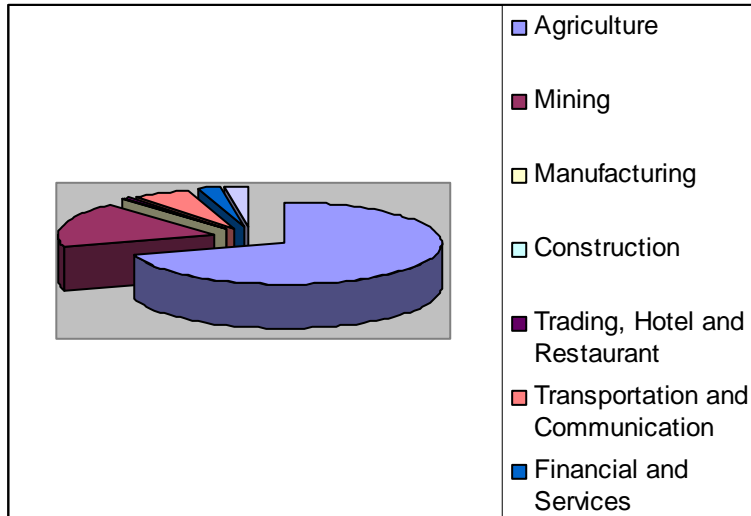


Figure 1.1.: Performance indicator (GNP growth) on each sector.

However, to date, authors are not in the same agreement pertaining to the benefits of slack (Chen & Huang, 2010; Dunk & Nouri, 1998) that may lead to the misclassification of the model (Chenhall, 2003). For example, taking a positive view, accounting “behaviorists” have suggested the use of idle resources that may act as a buffer from environmental pressures (Lin et al. 2008; Patzelt et al., 2008; Geiger & Makri, 2006; George, 2008; Stede, 2000; 2001a; Cyert & March, 1963), or as a shock absorber (Merchant 1985), and as a cushion to engage in risk taking/innovative behavior (Yang et al., 2009; Herold et al., 2006; Love & Nohria, 2005). It is claimed that these idle resources are very important for organizations to run the operations effectively as compared to organizations with less resources. (Nohria & Gulati, 1996). George (2005) maintained that the presence of slack can be used as an enactment of strategies. Lawson (2001) also insisted that attempts to reduce slack may be ill-advised; and in a more provoking position, Martinez and Artz (2006) even argued that “it is not possible for a

firm to survive long without the presence of resources above and beyond its immediate needs” (p.12)

On the other hand, economists such as Jensen (1986; 1993) and Jensen and Meckling (1986) argued that slack is destructive in ways that it encourages the waste investments in R&D, while deteriorating the economic benefits. They also argued that slack is the obvious outcome of self-serving interest of managers. Bourgeois (1981) and Yasai-Ardekani (1986) documented that slack limits firms’ ability to explore the innovative activities due to the slack-induced sub-optimal systems, processes and structures. In fact, as been noted by Cheng and Kesner (1997), the term slack itself literally reflects for negative perceptions. The conflicting stands of slack creation produces more severe, ambiguous problems, in particular with relation to the management, accounting control systems.

A great deal of researches, for example Libby & Lindsay (2010) Otley and Fakiolas (2000) and Hansen and Stede (2004) call for serious caution with respect to lack of conclusive evidences in budget-related researches. They desperately complain about the variety of ways of how budget-related variables are conceptualized and measured. As a result, the academic inquiries do not have some potential, explicit implications to practical contributions. One way to solve the issue regarding the slack creation of course is to relate it with the management control system as its main driver.

Indeed, the area of slack creation in the context of management control systems and situational, environmental factors remains an important area of management accounting research (Chenhall, 2005; Davila & Wouters, 2005; Maiga & Jacobs, 2008; Davila, 2005; Lau & Eggleton, 2003). However, as a major explanation of those phenomena, contingency literature has for a long time been criticized for being

fragmentary and contradictory pursuant to methodological limitation (Gerdin & Greve, 2004; Chenhall, 2003). In this respect, contingency theory has been severely blamed for its uncritical and loose implementation in management accounting research (Hartmann, 2000; Chapman, 1997). It is apparent, therefore, that “taken as a whole, this body of research, although typically interesting to explain discrepancies, does not add up to a coherent body of knowledge or understanding” (Lindsay & Ehrenberg, 1993, p. 224).

Therefore, due to the lack of relevancy inherently embedded in the contingency theory, slack creation activities curtailed by management control systems are not well-developed, and rarely the proposed determinants provide meaningful results. A considerable amount of researches has attempted to identify the conditions under which it arises and the means by which it may be controlled. Furthermore, as previously mentioned, propositions and empirical evidences provided by the economists and behaviorists are not consistent and seemed to create more puzzle in the determinants of slack (Ghosal & Moran, 1996; see also Chenhall, 2003; Langfield-Smith, 1997 for reviews).

Furthermore, only few studies, in fact, have addressed how situational factors such as competitive forces and corporate diversification, and budgetary control affect the presence of slack (Chong et al., 2005; Stede 2001a). These few inconclusive and mixed studies (please compare the findings of Stede, 2000; 2001a, Libby & Lindsay 2010, Merhant, 1985; Govindarajan, 1988; Govindarajan & Fisher 1990; Lau 1999; Linn et al., 2001; Fisher et al., 2002; Fuad and Ghozali, 2004; Fuad et al. 2007; among others) however, stand divided on whether those situational factors and budget emphasis inhibit or encourage slack creation in the business units. This ambiguity, particularly pertaining

to the effect of situational factors and budgetary controls affecting slack may be creating more serious issues in the interpretation if the variables are implemented in a totally different context (Ditillo, 2004). For example, Langfield-Smith (1997) warned for the various ways of measuring business units strategy (e.g. Porter's vs Miles and Snow vs Mintzberg, etc.) that may encourage confounding impact to slack creation because each was separately conceptualized. In order to put the debate to an end, and also proposing the flourishing, unexplored determinants of slack creation, this study opts for broader situational factors (i.e. diversification and competitive forces)

These situational factors-diversification and competitive forces are proposed to influence the corporate reliance on accounting performance measures and information asymmetry and then lead to business units-related slack. As the number of diversified firms controlled by the corporate increase, the corporate may not be able to understand the specific operational knowledge of its business units (Stede, 2001a). With this regards, conventional thinking of agency literature may "prescribe" that administrative and results controls are more suitable and may disclose private information held by business units (Jensen & Meckling, 1976; Eisenhardt, 1989). Yet prior researches were not in-line with this widely-held view of "principal-agent wisdom". For example, although economists propose that highly diversified firms will put more reliance on budgeting and financial numbers as their control mechanism to their subsidiaries, Stede (2001) found that highly diversified firms do not put high reliance on accounting performance measures. Merchant and Manzoni (1989) on the other hand, predicted that firms with loose control through increased diversification "should" implement tight

budgetary controls. This rigid-type control should reduce, if not eliminate, the amount of information processing capacities at the top.

Aiming to control the slack creation is not only the case of diversification. As previously mentioned, a number of arguments maintained that the environment in which a particular firm operates affects use and outcome of management control systems (Anthony & Govindarajan, 1998; Chenhall, 2003; 2005). Porter (1980) implicitly stated that external environment (reflected as five competitive forces e.g., industry competitors, threat of substitute products, bargaining power of suppliers, threat of new entrants and bargaining power of buyers) is more associated with the need for sophisticated information systems as a means for controlling and monitoring activities and on the same time more use of externally focused management control systems. Based on Chenhall (2003) literature review on management control systems, researches were usually concurred with the notion that high environmental uncertainty due to ‘fierce’ competitive forces impinge on a lower emphasis on meeting the budget objectives and more sophisticated accounting procedures.

However, this interesting logical flow was neglected by prior researchers, although some shares, to some extent, common belief that budgeting plays an important role when high environmental uncertainty, particularly due to competitive forces, exists. For instance, Merchant (1984) found that competitive position was not associated with the importance of budget. Khandawalla (1972), Otley (1978), and Imoisili (1989) on the other hand, found that environmental hostility has been associated with more reliance on formal, accounting-based budgetary controls. It is very likely therefore, how the corporate designs budgetary controls may not necessarily be affected by the

environmental characteristics per se, rather it should be further understood from its risk preferences (Lau and Eggleton, 2002).

Recent finding suggested that the entity's risk preferences can be comprehended by its perception regarding the existence of threats and opportunities (Chattopadyay et al., 2001). This risk-preferences behavior seems to challenge for the need of conventional agency thinking in tailoring the design and expecting the outcomes of management control systems. Prospect theory, that proposing such a lemma, expects that entities face opportunities are risk averse because they feel they have more to lose than gain (Kahneman & Tversky, 1979; Pope, 2010). In contrary, managers facing threats are risk taker because they have little to lose (Kahneman and Tversky 1979). Slack creation, in terms of idle resources or the behavior to overstate cost and/or understate revenues, may be regarded as the outcome of how entities frame the gains and losses.

Assuming slack creation activities denotes for entity's risk averse behavior (kindly recall that slack is creating resources that can be redeployed to hedge against unforeseen contingencies), it is expected thus, that business units facing threats to respond with more slack creation activities and conversely, business units facing opportunities may respond with fewer slack creation activities (Chattopadyay et al., 2001) Despite this interesting phenomenon, few research, if any, examine the effect of business units' competitive forces (threats and opportunities) on business units' slack creation.

The issue of researches on slack is not only on the confounding determinants of slack creation; rather, an area that needs further exploration is regarding the slack conceptualization. Particularly, management accounting researchers have focused on the subjective measures of budgetary slack. The use of such measures raises some question about the accuracy in measuring budgetary slack. Organizational theorists (e.g. Bourgeois, 1981; Cyert & March, 1963) proposed objective measures of slack in organization that rarely put into considerations in management accounting research, despite its flourishing use of its conceptualizations. Such objective measures were usually operationalized using financial indicators of slack such as absorbed and unabsorbed slack (Singh, 1986) and available (Ahuja, 2000, Combs & Ketchen, 1999), recoverable (Steensma & Corley, 2000) and potential slack (Simerly & Li, 2000, see also Daniel et al., 2004 for a meta analysis). Therefore, in order to provide a more meaningful result, this study looks at slack from the objective and subjective measures. This is particularly useful when dealing with the outcome of slack creation.

Although the positive and negative impact of slack have been recognized in the literature, few research in management accounting has attempted to test whether slack is good or bad for business units performance. Bourgeois (1981), trying to reconcile economists and behaviorists, postulated a curvilinear relationship between slack and organizational performance in general. Recent studies by Nohria and Gulati (1996), Geiger and Cashen (2002) and Herold et al. (2006) have extended the non-linear argument between slack and R&D intensity. They argued that R&D activities cannot be carried out without any slack available; and on the other hand, too much slack may deteriorate the R&D due to wasted spending and careless innovation projects.

In line with the previous works above, it is also interesting to study the reasons behind slack creation in business units. However, as the slack is a multidimensional construct that can be decomposed into financial and budgetary slack, each effect to the performance is still left unanswered. Lack of prior researches on management accounting to date that explore the role of slack on enhancing (or inhibiting) performance becomes the main motivation.

Based on the introduction above, it can be concluded that this study is an antecedent-outcome type in nature, which means that no theoretical justification can be established on the relationship between situational factors (diversification and competitive forces) as antecedents and performance as the outcome. On other words, the relationships between antecedents, independent variables and the outcome variables are independently connected.

1.2. Problem Statements

Prior researchers on behavioral-based management accounting setting have linked business units' slack on a variety of aspects of management control systems. These includes attributes to attach to the budgeting such as importance of meeting the budget target (Stede, 2003; 2001a; 2001b; 2000; Linn et al. 2001; Hansen and Stede 2004), ethical positioning pertaining to budget emphasis (Davis et al., 2006; Douglas & Wier, 2000; 2005; Stevens, 2002), attitudes and satisfaction with the budget target (Yuen, 2006; Shields et al. 2000), information asymmetry (Fisher et al. 2002a; 2002b; Chong & Eggleton, 2007; Lau & Eggleton 2003, among others), environmental variables such as business unit strategy (Stede 2000; 2001; Govindarajan, 1984), incentive systems (Stede, 2001a; Merchant, 1985a), and many other variables. However,

despite its flourishing development of budget-related researches, no consensus has been reached and results were stand divided on whether slack creation should be diminished, if it is perceived as “bad”; or how much slack should be retained if it is argued as good (see Chenhall, 2003; for a review, see also Dunk & Nouri, 1998 for a theoretical gap on budgetary slack researches and George 2005 & Tan, 2003 for an optimum slack), resulting on more ambiguity pertaining to what really constitute slack creation in business units.

There are several issues that were neglected in conjunction to these mixed, inconclusive researches. First, slack creation behavior, that can be traced back to the behavioral theory of the firm (see seminal works of Cyert and March, 1963 and Bourgeois, 1980) is a multi-dimensional construct, and not as observed variable that can be traced directly to the budgeting process of a firm. The extent of these slack (available, recoverable and potential slack) may be impinged by the nature of external and internal environment and also type of budgetary controls being used by the corporate. Neglecting these elements of slack has contributed to lack of generalization of the findings and led to the misspecification of the determinants of slack.

Second, following Langfield-Smith (1997) in her literature review maintaining that the use of environmental uncertainty attributed to the strategy adoption is exaggerated, environmental uncertainty should be shifted to the specific external environment relative to an industry. Chattopadyay (2001) insisted that threats and opportunities faced by organizations are the most contributing factors for the presence of slack in business units. Porter (1980) suggested that external factors proxied as competitive forces may also capture the essence of uncertainty. However, as to date, no research, at least based on researcher’s literature review, provides empirical evidence on

the relationship between competitive forces and the presence of slack in business units budget, or how these forces may impinge on the tightness of budgetary controls.

Third, despite its numerous researchers on antecedents of budgetary slack, no attempt has been made to distinguish whether the presence of slack is beneficial or destructive to the organization's goals. One way to unveil the beneficial nature of slack is through testing its impact on organizational outcome. In this vein, the presence of slack was linked to the business units' performance. The study argues that if the use of idle resource is beneficial, then it will create more innovative ideas and promoting desirable projects and thus its use will foster the overall business units' performance.

1.3. Research Questions

With regard to the reasons for discretionary use of budgetary resources, the following research questions are the heart of the study:

1. What is the relationship between competitive forces and business units' slack?
2. What is the relationship between corporate diversification and business unit's slack?
3. What is the relationship between reliance on accounting performance measures and business unit's slack?
4. What is the relationship between information asymmetry and business unit's slack?
5. What is the role of information asymmetry and budget emphasis in mediating the relationship between competitive forces and business unit's slack?
6. What is the role of information asymmetry and accounting performance measures in mediating the relationship between diversification and business unit's slack?
7. Is the presence of slack in business unit's budget enhance or reduce business unit performance?

1.4. Research Objectives

Based on the problem statements above, the study aims to examine the reasons of slack creation in business units and also reveal the impact of slack on business units' performance. Specifically, the purposes of the study are to:

1. examine the effect of competitive forces and business unit's slack
2. examine the impact of diversification on business unit's slack
3. investigate the relationship between reliance on accounting performance measures and business unit's slack
4. examine the effect of information asymmetry on business unit's slack
5. identify the role of reliance on accounting performance measures and information asymmetry on the relationship between competitive forces on business unit's slack
6. identify the role of reliance on accounting performance measures and information asymmetry on the relationship between diversification on business unit's slack
7. explore the impact of business unit's slack creation on performance

1.5. Significance of study

Current study contributes to management accounting, and partly in financial accounting, literature in several ways. First, this study is among the first examining the role of prospect theory in explaining the reasons for engagement in slack creation activities. Based on the literature review, no research in management accounting setting has viewed the slack creation as the risky decision. Whether the reason to embark on slack creation that is based on how managers frame the risk attached on the budgeting process has not been scrutinized. Particularly, the study argues that slack creation activities are determined based on the managerial (organizational) framing of losses and gains.

Second, present study believes that the competitive environments play some important roles in explaining the managerial decisions to engage on slack activities that have not been explored by prior researchers. Third, the study insists that slack is a construct. In other words, its existence is not directly observable and there are many financial allocations that can be used as a financial buffer (so called slack) during the bad times. Inspired from strategic management literature, slack creation exist as a form of discretionary (available and recoverable slack) and non discretionary slack (potential slack), besides its well-established slack in the budgeting process (i.e. budgetary slack). Prior researches ignore this conceptualization, which is perhaps, due to difficulty in data generating.

Fourth, this study also contributes to the management accounting literature particularly regarding the inherent nature of slack. Previous literature did not prescribe clearly whether slack is good (accounting behaviorists) or bad (economists). This study provides a way out of the intractable debate between behaviorists and economists by reconciling those views. In particular, this study insists that there is “curse” in both “too few slack” and “too much slack”. For instance, too few slack may inhibit the business units to flexibly engage in their activities because there is no room to make maneuvers (as there is no idle resource). On the other hand, too much slack reveals inefficiency and pursues the business units to make insufficient, pet projects that may not yield economic benefits to the organizations.

This study contributes to the practical world as well. First, by figuring out the non-linear relationship between slack and performance may prescribe the industry regarding the optimum slack. Using the continuous type of data, it is plausible to

investigate the maximum, optimum level of slack creation that yields greatest economic as well as non financial benefits. Second, this study also of importance to the practical world by providing evidence with regard to the best-fit design of management control systems and may also provide clear understanding of the determinants of slack creation. More specifically, the industry can figure out that diversification can be utilized as a way to control the presence of slack.

Similarly, the industry can also minimize the use of accounting controls when the competitive forces are high with the consequence of having the slack exist either in the budget or in other resources. Understanding this pattern may result in the effective and efficient control in order to attain goal congruence among the corporate and business units.

1.6. Scope of the Study

This study focuses on manufacturing business units of public-listed corporate at the Jakarta Stock Exchange. The sampled-business units must also be registered at the Indonesian Manufacturing Industry Directory issued by Badan Pusat Statistik Indonesia per 2006. Manufacturing sector is chosen because of its significant contribution towards Indonesian economy. Furthermore, it was widely accepted with the notion that manufacturing companies have a more formal, interactive management control systems compared to other industrial sectors (Anthony & Govindarajan, 1998).

1.7. Operational Definitions of Key Terms and Variables

Followings are the definitions adopted for the respective study variables

1.7.1. Competitive forces

Competitive forces refer to firms' capability to earn above average profit compare to competitors that is predominantly due to the forces in the external environment. It also can be used to measure attractiveness of an industry structure based on five fundamental competitive forces: 1) rivalry among competitors, 2) bargaining power of suppliers, 3) bargaining power of buyers, 4) the presence of substitute products, and 5) the presence of entry barriers

1.7.2. Corporate Diversification

Corporate diversification is conceptualized as the extent to which a firm is simultaneously active in distinct businesses. The distinctness simply reflects the number of business units being controlled by the corporate

1.7.3. Reliance on Accounting Performance Measures (RAPM)

The study uses budget emphasis, budget tightness, and RAPM interchangeably as is common in the management accounting domain. Basically it reflects the extent to which superiors rely on, and emphasize performance criteria which are quantified in accounting and financial terms, and which are pre-specified as budget targets

1.7.4. Information Asymmetry

Information asymmetry denotes for the difference in the extent of private information possessed by the superior (in this case corporate managers) and subordinate (e.g. business unit managers).

1.7.5. Business units Slack

Business Unit's Slack refers to the excess of actual or potential resources which intentionally built to help an organization to overcome internal or external shocks, unexpected crises.

1.7.5.1. Available Slack

Available Slack represents resources available and not yet committed for particular allocation.

1.7.5.2. Recoverable Slack

Recoverable slack represents resources that have been absorbed by the organization, but could be easily recovered (usually through increased efficiency) when it is needed.

1.7.5.3. Potential Slack

Potential Slack refers to future ability to generate resources.

1.7.5.4. Budgetary Slack

Budgetary slack is defined as business units' act to underestimate the expected revenues and overestimate expected expenses during the budgeting process so that the budget becomes easier to achieve.

1.7.6. Performance

Performance, in this respect consists of twofold: financial and non-financial performance. Financial performance reflects business units' ability to yield profitable earning that can be quantified in monetary terms. While non-financial

performance refers to business units' superiority relative to other business units within the same corporate parent on the following items: 1) productivity, 2) product quality, 3) Supplier relationships, 4) Productivity improvement, 5) Technology, 6) Customer development, and 7) Labor costs

1.7.7 Structural equations modeling

Structural equations modeling is a quantitative test of a hypothesized theoretical model examining how some sets of latent variables or constructs (variables that cannot be directly measured, but requires several indicators as the “proxy”). The main goal of SEM, besides testing the acceptance/rejection of the hypotheses, is to determine whether the theoretical model is supported sample data, representing the population. In a particular model, SEM consist of both the structural model (for hypotheses testing purposes), and measurement model (for constructs' convergent validity)

CHAPTER 2

LITERATURE REVIEW

This chapter presents the relevant literature pertaining to the present research. The first part of this chapter provides a brief review of theory used in this study (e.g. Prospect theory) and its relevance in accounting setting. The following parts of this chapter deals with the conceptualization of the hypothesized variables.

2.1. Organizational Slack

2.1.1. Nature of Organizational Slack

The leading view of financial (organizational) slack used in the literature is one based on Cyert and March (1963), in their seminal work entitled *A Behavioral Theory of the Firm*. They are credited and cited most often for their preconceived ideas on organizational slack. Their impressive essence conceptualization of slack was excess of payments over the minimum necessary required to maintain the organization that took an additional idea which is so-called “reserved resources”. Thus, it is likely that members of the organization may have a different resource needs and different slack requirement depending upon environmental favorableness. Cyert and March (1963) suggest the need for slack as a buffer by proposing that

...it seems to be useful in dealing with the adjustment of firms to gross shifts in the external environment...When the environment becomes less favorable, organizational slack represents a cushion. Resource scarcity brings on renewed bargaining and tends to cut heavily into the excess payments introduced during plush times...the cushion provided by organizational slack permits firms to survive in the face of adversity. (pp. 37-38)

They also posited that

Organizational slack absorbs a substantial share of the potential variability in the firm's environment. As a result, it plays both a stabilizing and adaptive role...Slack operates to stabilize the system in two ways: (1) by absorbing excess resources, it retards upward adjustment of aspirations during relatively good times; (2) by providing a pool of emergency resources, it permits aspirations to be maintained (and achieved) during relatively bad times. (p. 38)

Bourgeois (1981) definition of slack, in his seminal article "on the measurement of organizational slack" is also the most commonly used conceptualization and adapted by scholars in management accounting. He maintained that organizational slack as

"...(the) cushion of actual or potential resources which allows an organization to adapt successfully to internal resources for adjustment or to external pressures for change in policy, as well as to initiate changes in strategy with respect to the external environment (p.30)"

Many other authors have warned the possibility that slack arises as a result of improper resource allocation in the organizational process. Since Bourgeois (1981) and Cyert and March (1963) definition of slack, a number of authors have defined slack into diverse conceptualizations. For example, Nohria and Gulati (1996) in their influential work, defined organizational slack as "the pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output" (p. 1246). George (2005), on the other hand, defined slack as "potentially utilizable resources that can be diverted or redeployed for the achievement of organizational goals" (p.661). The resources vary on terms of both type and form from social or financial capital to discretionary to non-discretionary. Slack therefore can be very beneficial for the organizations to engage in innovative and creative activities as compared to the organizations that are poor in the slack resources (Chattopadhyay, 2001; Love & Nohria,

2005; Nohria & Gulati, 1996; Martinez & Artz, 2006). However, these various conceptualizations also lead to the conflicting stands regarding the benefits and disadvantages of having slack in an organization

Taking a positive view of slack, some have articulated that slack may act as a buffer from environmental pressures (Onsi, 1973; Cyert & March, 1963), or as a “shock absorber” (means to adjust and smooth the production activities) and the enactment of strategies (George, 2005). Slack also encourages the organization to engage in more risky activities that may increase the innovation and growth (Sidhu, et al. 2003; Greve, 2003 & O’Brien, 2003). Goerge (1995) have also implied that slack flexibility gives the organization some ways to absorb the volatile events by decreasing the need for structural changes. Furthermore, slack resources also facilitate the innovation activities by reducing the risk attached in these innovation engagements Singh (1986). Therefore, managers with high slack flexibility may be impelled to take risk-related innovation activities. Given the fruitful benefits of slack, Lawson (2001) insisted that attempts to reduce slack may be *ill-advised*. In a more provoking position, Martinez and Artz (2006) even argued that “it is not possible for a firm to survive long without the presence of resources above and beyond its immediate needs” (p.12).

From the negative point of view, Bourgeois (1981) and Yasai-Ardekani (1986) documented that slack reduces the organization’s ability to explore in new responses since slack increases the below-par processes and structures. Agency theory point of view, Jensen (1986; 1993) and Jensen and Meckling (1986) argued that slack does not yield any economic benefits and in fact, it may encourage wasted spending in R&D

activities. Cheng and Kesner (1997), the term slack itself literally implies some negative meanings.

Table 2.1. The positive and negative impacts of organizational slack

Positive impacts of organizational slack	Negative impacts of organizational slack
1. enhance the fit between strategy and structure (George 2005)	1. reflects organizational inefficiency (Bourgeois, 1981; Jensen and Meckling 1978)
2. influences ability of a firm to adapt to its environment (Bourgeois, 1981; Miller et. 1996)	2. encourages a lack of discipline
3. facilitates innovation (Cyert & March, 1963; Herold et al. 2006, Martinez & Artz 2006; Nohria & Gulati 1995)	3. Diminishes incentives to innovate (Jensen 1986)
4. Encourages increased risk-taking (Martinez & Artz, 2006; Singh 1986)	4. enhancing the non-optimizing behavior (Bourgeois 1981, Jensen & Meckling 1978)
5. Facilitates creative strategic behavior (Bourgeois 1981; McGratch & macMillan, 2000; George 2005)	5. Loosen the management control systems (Davis & Stout 1992)
6. Encourages experimentation (Bourgeois 1981)	6. leads to wasted resources and careless spending (McGrath & MacMillan 2000)
7. Encourages increased risk-taking (Singh 1986)	
8. Supports exploitation of opportunities (Bourgeois 1981)	

Based on literature review above, this study conceptualizes financial slack as the idle resources (can be quantified in monetary terms) that may have been absorbed or not yet absorbed and can be redeployed for further use. Usually, the entity builds slack to minimize the uncertainty that is currently happening or as a shock absorber in the future, implying the risk averse attitude of the entity.

2.1.2. Types of Financial Slack

Slack resources can be measured using several financial indicators. Most prior researches differentiate slack into three main typologies; which are available, recoverable, and potential slack resources (Bourgeois, 1981; Bourgeois & Singh, 1983; Sharfman et al, 1988; Singh, 1986). Available slack (that can also be referred as unobserved slack) describes the resources that are available but not yet committed for any particular allocation such as the funding for innovation activities or dividend payments to shareholders (Martinez & Artz, 2006). Recoverable slack (as it is sometimes referred as absorbed slack) represents resources that have been allocated and absorbed by the organization but can be easily recovered through cost-cutting and efficiency. One example of recoverable slack is the overhead costs for executive salary. Nevertheless, as pointed out by Herold et al. (2006) and Hendrick (2006), although recoverable slack is theoretically easy to recover, but in practice the recovery could be difficult and may bring out some strong negative consequences. Potential slack on the other hand is simply conceptualized as the organization's future capability to earn resources. Usually potential slack is basically operationalized as the extent of equity capital owned by the company.

Several studies have articulated a rationale for the existence of those forms of slack. The studies have forwarded classifications of slack based on managerial discretion in the deployment of resources. Sharfman et al. (1988) specify slack in terms of ease of recovery or employability in the future that led them contrasted high discretion (easy to recover) and low discretion (difficult to recover). Bourgeois (1981) and Bourgeois and Singh (1983) have also noted that absorbed, or excess costs in specialized assets, is low

discretion, while unabsorbed slack is high discretion. George (2006) provides some ingenious examples with regard to low vs high discretionary-based slack resources, in which he divides high discretion financial resources as cash and receivables, and low discretionary financial resources include debt, fixed assets and excess capacity.

The presence of slack has been linked to the idle capacity of the firms. As company resources increase, the presence of slack in organization also increases, but in a faster rate (e.g. Cyert & March 1963). In contrary, when the company resources decrease, organizational slack decreases, also at a faster rate. The financial mechanism of slack over time is a function of sales growth, profitability, situational and behavioral factors. Leavins (1995) postulated that the slack in the highly performing firms inherently tend to increase, but firms can find many alternative ways to reduce the costs if they are forced to do so. This relationship was modeled by Wolf (1971) as:

$$\begin{array}{l} \frac{\Delta E}{\Delta R} > 0, \frac{\Delta SGE}{\Delta E} > 0, \\ \text{and } \frac{\Delta E}{\Delta R} < \frac{\Delta SGE}{\Delta R} \end{array} \left. \vphantom{\begin{array}{l} \frac{\Delta E}{\Delta R} > 0, \frac{\Delta SGE}{\Delta E} > 0, \\ \frac{\Delta E}{\Delta R} < \frac{\Delta SGE}{\Delta R} \end{array}} \right\} \begin{array}{|l} \text{Use of} \\ \text{resources in a} \\ \text{slack building} \\ \text{state} \end{array}$$

$$\begin{array}{l} \frac{\Delta E}{\Delta R} < 0, \frac{\Delta SGE}{\Delta R} < 0, \\ \text{and } \frac{\Delta E}{\Delta R} > \frac{\Delta SGE}{\Delta R} \end{array} \left. \vphantom{\begin{array}{l} \frac{\Delta E}{\Delta R} < 0, \frac{\Delta SGE}{\Delta R} < 0, \\ \frac{\Delta E}{\Delta R} > \frac{\Delta SGE}{\Delta R} \end{array}} \right\} \begin{array}{|l} \text{Use of} \\ \text{resources in a} \\ \text{slack} \\ \text{reduction} \\ \text{state} \end{array}$$