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The effects of budget emphasis, budgetary participation, trust and organisational commitment on job related tension and propensity to create slack : Empirical evidence from Norway

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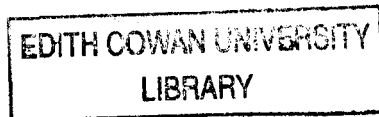
Edith Cowan University

Faculty of Business

A Thesis Submitted in Partial Fulfillment of the Requirements for the

Award of Master of Business, Accounting

**"The Effects of Budget Emphasis, Budgetary Participation,
Trust and Organisational Commitment on Job Related
Tension and Propensity to Create Slack: Empirical Evidence
from Norway "**



By: Christin Selsaas Buckland

Date of submission: 18 June 1999

ABSTRACT

Results of early studies (eg. Hopwood, 1972; Otley, 1978) on the effects of supervisory styles on subordinates' job related tension have been contradictory. Subsequent studies using the contingency model to resolve these conflicting results have identified budgetary participation (Brownell, 1982a) and trust (Ross, 1994) as important moderating variables. With respect to participation, a number of prior studies found that a compatible combination of *high* budget emphasis and *high* participation was associated with better behavioural outcomes (eg. lower job related tension), than other combinations of budget emphasis and participation. Yet there has been relatively little research to investigate why *this particular combination* of budget emphasis and participation is associated with better behavioural outcomes.

This thesis therefore investigates a number of important issues. First, it investigates whether different combinations of budget emphasis and participation affect subordinates' propensity to create slack and job related tension differently. Second, it examines whether a high budget emphasis-high participation combination results in lower subordinates' propensity to create slack and lower job related tension than a low budget emphasis-high participation combination. Third, it investigates the reasons why a high budget emphasis-high participation combination leads to lower propensity to create slack and lower job related tension.

The interaction between budget emphasis and participation was dealt with by testing a model on supervisory styles in a high participatory environment. Norway was hypothesised to have a high participatory environment because of its high power distance culture and its highly centralised and formalised industrial relations systems which emphasise democratic work environment. Moreover, its highly homogeneous population and society are likely to result in a small diversity within its national

culture, which in turn, leads to a smaller range of participation. Hence participation in Norway is expected to be not only high, but also widespread. This means that a high budget emphasis situation in Norway is similar to a high budget emphasis and high participation combination, whilst a low budget emphasis situation in Norway is similar to a low budget emphasis-high participation combination. This allows a high budget emphasis-high participation (Norway) situation to be compared with a low budget emphasis-high participation (Norway) situation. Consequently, a high budget emphasis situation in Norway, which is similar to a high budget emphasis and high participation situation, is therefore expected to be associated with lower job related tension than a low budget emphasis in Norway.

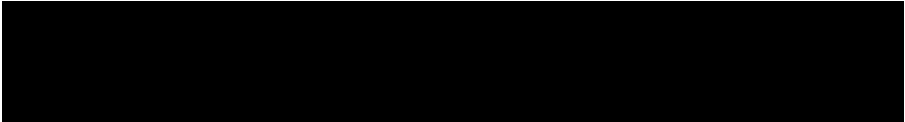
In order to investigate the reason why a high budget emphasis-high participation combination promotes lower propensity to create slack and job related tension, path analytical models, which investigate the intervening effects of participation, trust and organisational commitment on the relationship between budget emphasis and propensity to create slack/job related tension, were developed. Testing these models in Norway permits two issues to be investigated. These are: (i) the interaction between budget emphasis and participation affecting propensity to create slack/job related tension, and (ii) the intervening effects of participation, trust and organisational commitment on the relationship between budget emphasis and propensity to create slack/job related tension.

The results support the expectation that Norwegian managers generally enjoy very high level of budgetary participation. Second, they also support the expected significant negative relationship between budget emphasis and job related tension. Third, a high budget emphasis situation in Norway (high participatory) was found to have only a small and insignificant *direct* effect of job related tension. Instead, there is

a strong *indirect* effect through trust. Based on these results, it is possible to conclude that a high budget emphasis and high participation combination will lead to lower job related tension. The reason for this is partly because this combination promotes higher trust between the subordinates and their superior. Trust, in turn, leads to lower subordinates' job related tension. These results provide valuable insights which help to explain why a compatible combination of high budget emphasis and high participation, found by a number of prior studies with the contingency model, can lead to better behavioural outcomes than other combinations of budget emphasis and participation.

DECLARATION

"I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text".



Date... 13/6/99

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CHAPTER 1

Introduction

Introduction

An important area of management accounting research is the relationship between budget based evaluation styles and participation and its effect on subordinates' behaviours

including job related tension and propensity to create slack. Management accounting research has gradually evolved from a focus on budgetary control to a broader organisational view. It has concentrated on explaining the most efficient managerial evaluation style by examining the inter- and intraorganisational relations affecting the use of accounting, and how members of the organisation utilise the information and control system to benefit themselves or their organisation. A number of studies have also recognised the dysfunctional effects of budgetary slack, which has been the focus of a considerable number of studies in management accounting research. Finally, it has also long been recognised that "enriched" jobs include factors such as job satisfaction, jobs containing more variety, autonomy, feedback and participation, which have led researchers to include variables, and combination of variables, that when experienced in a positive fashion, should benefit the whole organisation and consequently its members. This thesis thus seeks to further explore the relationships between budget emphasis and budgetary participation and its effect on propensity to create slack and job related tension by including two other variables, namely trust and organisational commitment to bring about a more integrated model to explain the effects of evaluative styles on subordinates' behaviours.

Motivation for the study

The impact of performance evaluative styles on subordinates' attitudes and performance has been the focus of much management accounting research interest. The first systematic study in this area by Hopwood (1972) indicated that an inflexible approach in the use of accounting data to evaluate subordinates' performance was associated with subordinates' job related tension and other dysfunctional behaviour. Otley (1978), however, was unable to replicate these results. Since then, a stream of studies has examined a variety of variables, which could influence the relationships between performance evaluative styles and a variety of behavioural outcome variables. Whilst the results of these studies are not always consistent, the large body of evidence accumulated has nevertheless provided some general patterns of these relationships.

In particular, a remarkably consistent pattern appears to occur with respect to the effects of budgetary participation. Brownell (1982a) argued that for beneficial behavioural consequences to occur, an evaluative style with a heavy reliance on accounting performance measures (high budget emphasis) should be complemented with a high extent of budgetary participation. His results indicated that a compatible match of a *high* budget emphasis and *high* participation was associated with high managerial performance. Since then, a number of studies have found remarkably consistent results with this particular combination of budget emphasis and participation on a variety of behavioural outcomes in different environments. These include Brownell & Hirst (1986) in low task uncertainty situation for job related tension; Brownell & Dunk (1991) in low task difficulty situation for managerial performance; Harrison (1992) in Australia and Singapore for job satisfaction and job

related tension; Dunk (1993) in Australia for budgetary slack; Lau et al. (1995) in Singapore for managerial performance; Lau & Tan (1998) in Australia and Singapore for the financial services sector managerial performance; Lau & Eggleton (1998) in Australia and Singapore for propensity to create slack; and Lau & Buckland (1999) in Norway for managerial performance.

This thesis attempts to extend on these relatively consistent results by examining a number of previously unexplored issues. First, as participation is one of the two crucial variables in the relationship, it is unclear if the results of prior studies were not confounded by the lack of control over the effects of national culture and other societal influences on this variable. Some researchers (eg., Hofstede, 1980; Brownell, 1982b; Harrison, 1992) have suggested that national culture could affect the extent of budgetary participation and that high participatory environment could be found in certain cultures. For instance, Harrison (1992) suggests that a high participatory environment, where participation is widespread among members of the society, could exist in a low power distance culture. This means that a study undertaken in a low power distance culture may have respondents who are generally experiencing relatively *high* participation in their organisations. As *low* participation is rare in such a cultural environment, respondents described as having low participation may still enjoy relatively *high* participation. Hence, a situation classified, as a *low* participation situation in a low power distance culture could, in reality, still be a *high* participation situation or be equivalent to a high participation situation in a different cultural environment. Consequently, results of studies undertaken in a particular cultural environment, for instance in high participatory cultures should be interpreted with caution and their results may not be generalisable to other cultural environments. This means that control over the impact of culture on participation is crucial for studies investigating the effects of evaluative styles on behavioural outcomes. For this reason,

even though there have been many studies which examined the effects of evaluative styles, there is a concern that the impact of the cultural environment on participation may have been overlooked (Harrison, 1992). Hence, there is a need to undertake further such studies which provide some control over the participatory environment.

With respect to this thesis, since it was previously noted that a high budget emphasis evaluative style should be complemented with high participation, it follows that if a high budget emphasis evaluative style is employed in a high participatory environment such as in Norway, favourable behavioural outcomes should be expected. An examination of the impact of performance evaluative styles on behavioural outcomes in such a cultural environment would provide valuable evidence to consolidate the theory in this research area pertaining to high participatory situations. The results of such a study will only be generalisable to high participatory environment. But it would be valuable and meaningful evidence to organisations operating in high participatory cultural environments in the design and implementation of their control systems. Moreover, the selection of Norway for study is also important in another aspect. Norway, a country within the Nordic cultural region (Norway, Sweden, Denmark and Finland) and located in continental Europe, which whilst very important economically, has largely been overlooked by management accounting researchers (Lau & Buckland, 1999). Hence, the results of this thesis will not only extend the area of research relating to the behavioural consequences of supervisory evaluative styles, but may also provide interesting research insights into the control systems of a previously unexplored Nordic cultural environment.

Whilst the expectation that beneficial behavioural outcomes will be associated with a combination of *high* budget emphasis and *high* participation is relatively well established, it remains unclear as to why this particular combination is generally found

to be better (in terms of favourable behavioural outcomes) than other combinations of budget emphasis and participation. *This thesis proposes that the extent of trust brought about by the combination of high budget emphasis in a high participatory environment is responsible for the favourable subordinates' behavioural outcomes.* The positive association between participation and trust has been suggested by some researchers (eg., Meadow et al., 1959; Read, 1962; Parloff & Handlon, 1966). It is plausible that increased communication is likely to reduce suspicion and mistrust. Similarly, Ross (1994, p. 630) found trust to be important in high budget emphasis situations. He suggests that subordinates are likely to find evaluative styles based on relatively "objective verifiable accounting measures" are easier to interpret and hence more trustworthy than relatively subjective and ambiguous nonaccounting performance measures which are difficult to interpret and subject to a "superior's biases and idiosyncrasies". To date, the role of trust in a high budget emphasis and high participatory environment has remained untested. The results of such a study may provide valuable insight which helps to explain why a combination of high budget emphasis and high participation is associated with functional behaviour.

The importance of organisational commitment

Another variable of interest to studies examining slack and job related tension is organisational commitment. Recent interest on organisational commitment is attributable to the recognition of the important role organisational commitment plays in employees' attitudes and performance. Organisational commitment has mostly been a major focus in studies of organisational behaviour, which have concentrated on explaining the antecedents and consequences of organisational commitment. According to Zahra (1984, p. 26); the common antecedents of organisational commitment are background (ie., age, sex, race, education), organisational (ie., work

experience, leadership styles), personality and attitudinal. These variables determine to varying degrees the efficiency of the organisation by explaining the underlying factors for "efficient" workers. This thesis will further explore the relationship among budget based evaluation styles, participation, propensity to create slack and job related tension by suggesting that organisational commitment may have an intervening effect in the model.

Organisational commitment has also been examined in the context of managerial accounting. However, empirical research is rather limited. The first study was conducted by Nouri (1994) who reported that organisational commitment and the managers' propensity to create slack are negatively related. A later study by Nouri & Parker (1996), integrated organisational commitment and budgetary participation when examining their effects on slack. Most of the existing literature on budgetary slack creation is grounded in agency theory propositions and argue that participation gives the subordinate a better opportunity to introduce slack into the budget (Young, 1985; Lukka, 1988; Dunk, 1993) leading to a positive relationship between participative budgeting and budgetary slack. However, Nouri & Parker suggested that subordinates with strong organisational commitment would take advantage of their budget influence to pursue organisational goals, whereas subordinates with low organisational commitment would use their budget influence to primarily pursue self-interest. In other words, the level of organisational commitment experienced by the subordinate will determine his/hers likelihood of creating slack. Their findings supported their hypotheses that an inverse relationship between participation and slack exists for individuals with strong organisational commitment, whereas a positive relationship between participation and slack exists for individuals with weak organisational commitment.

In a recent study, Nouri & Parker (1998) examined organisational commitment as an intervening variable when testing the relationship between budgetary participation and job performance. They found that budgetary participation affects job performance indirectly via organisational commitment and budget adequacy.

Other studies (eg., Rhodes & Steers, 1981; Welsch & LaVan (1981; DeCotiis & Summers, 1987) also provide evidence of a positive link between employee participation and organisational commitment. However, studies involving organisational commitment have mostly concentrated on testing positive outcomes, ie job performance or job satisfaction. These studies (eg. Aranya et al., 1982; Norris & Niebuhr, 1983; Meixner & Bline, 1989; Pozanski & Bine, 1997) examined this relationship on professional accountants. This thesis will provide further extension as it will include slack creation and job related tension.

The lack of empirical evidence regarding trust

Omitted from studies on supervisory evaluative styles is the variable of trust. For many years it has been recognised as an underlying phenomena in managerial effectiveness. A few attempts to correlate trust and managerial effectiveness have not been able to find any significant results (eg., House, 1967; Dunnette & Campbell, 1968). However, Zand (1972) succeeded in determining such a relationship. However, generalising his results to other settings imposes difficulties.

Later studies (eg., Simmons, 1981) also suggest that trust is a prerequisite for effective, humane and efficient organisations. Recently, Ross (1994) examined trust as a moderating variable on the relationship between budget emphasis and job related tension. He found that trust has a moderating effect on job related tension.

Consequently, this thesis is motivated to apply the notion of trust developed in Zand's (1972) study to other formal (statistical) circumstances.

The integration of budget emphasis, budgetary participation, organisational commitment and trust

The above discussion indicates that a considerable number of researchers have studied the impact of budget emphasis on slack and behavioural outcomes, such as job related tension. Other studies have also examined the effectiveness of budgetary participation. Whilst organisational commitment has been the subject of interest for mainly organisational studies, it has not been examined extensively in management accounting research. To date no study has integrated budget emphasis, budgetary participation, organisational commitment and trust to examine their effects on slack creation or job related tension.

As mentioned earlier, this thesis is also motivated by the lack of prior studies in this area which include trust into their models. Several researchers have mentioned the notion of trust without systematically accounting for it. For instance, Lau & Eggleton (1998) mentioned the importance of trust in the relationship between a subordinate and a superior. They believed that subordinates will not create slack in order to not jeopardise the level of trust the superiors have in them. Other researchers (eg., Merlinger, 1956; Read, 1962) suggested that trust will increase an organisation's internal communication, especially between the subordinate and the superior. This thesis will therefore integrate these variables into two different models. The model in figure 1.1, show the relationships among budget emphasis, budgetary participation, trust and organisational commitment and their affects on slack and job related tension.

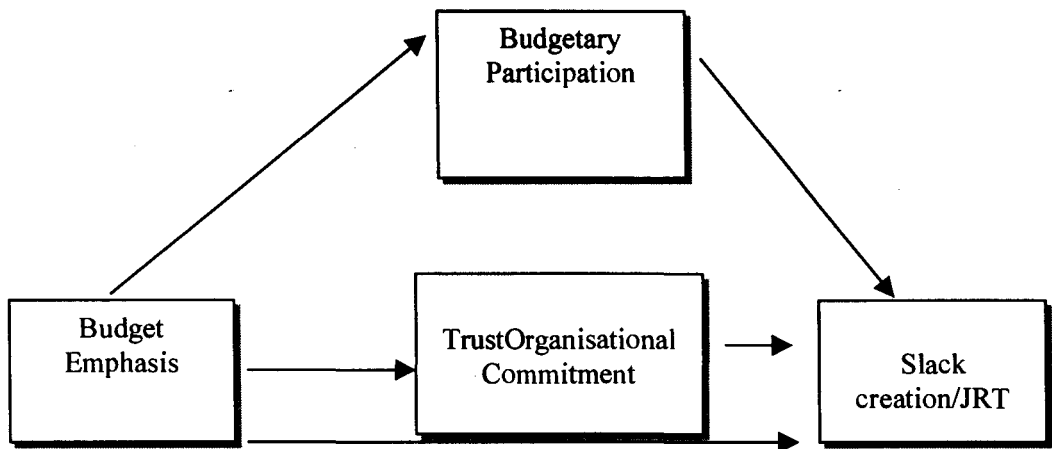


Fig. 1.1

This thesis therefore examines the *intervening* effects of trust, budgetary participation and organisational commitment on the relationship between budget emphasis and propensity to create slack/job related tension in a high participatory environment. The model in Figure 1.1 allows the hypothesised *intervening* effects to be observed. Norway was chosen as a surrogate for a high participatory environment because of its highly centralised and formalised industrial relations systems which emphasises democratic work environment (Johansen, 1985) and its low power distance culture (Hofstede & Bond, 1988; Lau & Buckland, 1999), which promotes high participation. The Norwegian environment therefore allows the *interaction* between budget emphasis and *high* participation to be observed. Hence testing the model in Figure 1.1 in Norway permits the observation of (i) the *interaction* effects of budget emphasis and *high* participation; and (ii) the *intervening* effects of trust and organisational commitment to be observed within an integrated model. It also allows Brownell's (1982a) study to be combined with that of Ross (1994). Whilst examining the interaction between budget emphasis and trust, Brownell had overlooked the *intervening* effect of trust. Similarly, whilst examining the intervening effects of trust,

Ross had overlooked the *moderating* effects of participation. This thesis incorporates the effects of both of these variables into an integrated and more comprehensive model.

Finally, this thesis is also motivated by the need to investigate the role of trust on the important relationship between budgetary participation and subordinates' attitudes and behaviour. Prior studies have suggested that budgetary participation is an important predictor of subordinates' behaviour and attitudes (eg., Milani, 1975; Kenis, 1979). However, according to Chenhall & Brownell (1988), the results in this research area are fraught with inconsistencies partly because of the failure of prior studies to consider the possibility that there may be no *direct* relationships between budgetary participation and the outcome variables. They argued that "there is no theoretical argument which can support simple, direct effects of participation on job satisfaction or performance. Instead, the effects of participation, if any, are indirect and are conveyed to outcome criteria via some intervening constructs which links the variables." (p. 225-226). They found role ambiguity to be an important intervening variable and concluded that "it is possible, indeed likely, that other variables can add to the explanation of the indirect path between participation and criteria" (p. 232). This thesis therefore provides further examination of another plausible intervening variables, namely, trust and organisational commitment, which may mediate the relationship between participation and subordinates' attitudes. The model to investigate this proposition is incorporated in the model in Figure 1.1.

Purpose of study

The purpose of this thesis is twofold. First, this thesis attempts to develop and test empirically a theory on how the four predictor variables of budget emphasis, budgetary participation, trust and organisational commitment affect the two dependent variables of job related tension and the propensity to create slack. Second, this thesis attempts to provide empirical evidence on the behavioural impact of control systems from Norway, a country located in continental Europe, which whilst very important economically, has largely been ignored by management accounting researchers (Lau & Buckland, 1999). Hence, the results of this thesis will not only extend the area of research relating to the behavioural consequences of supervisory evaluative styles, but may also provide interesting insights into the control systems of a previously unexplored Nordic cultural environment.

Aims of study and research questions

The focus of this thesis is to examine how budget emphasis, budgetary participation, organisational commitment and trust affect job related tension and propensity to create slack. The following are the research questions explored in this thesis:

- (1) Does Norway have a high participatory environment?
- (2) Does *budget emphasis* affect job related tension and subordinates' propensity to create slack in the Norwegian environment?
- (3) Are the relationships between budget emphasis and job related tension/propensity to create slack a *direct* one or *indirectly* through the

intervening variables of (a) budgetary participation and trust; and/or (b) budgetary participation and organisational commitment?

- (4) Does budgetary participation affect job related tension and subordinates' propensity to create slack?
- (5) Are the relationships between budgetary participation and job related tension/propensity to create slack a *direct* one or indirectly through the intervening variables of (a) trust; and/or (b) organisational commitment?
- (6) Will the models developed for this study (see Figure 1.1) provide evidence to explain the extent of subordinates' job related tension and propensity to create slack and the reasons why these relationships occur?
- (7) Will the theory pertaining to the impact of evaluative styles and budgetary participation on subordinates' behaviour be generalisable to the Nordic cultural region?

Definition of variables

Four independent and two dependent variables are used in this thesis. The dependent variables are the propensity to create slack and job related tension. The independent variables are budget emphasis, budgetary participation, organisational commitment and trust.

The propensity to create slack

The propensity to create slack refers to the extent of subordinates' attitude toward slack which is the extent of intentional understatement of the subordinate's performance capability built into the budget by the subordinate to make budgeted

targets easier to attain (Lau & Eggleton, 1988). The instrument used to measure the propensity to create slack was developed by Onsi's (1973).

Job related tension

Job related tension refers to tension arising from psychologically stressful circumstances in the job environment (Kenis, 1979).

Budget emphasis

Budget emphasis refers to the degree of reliance on accounting performance measures to assess the performance of subordinates. A high budget emphasis occurs when a superior adheres rigidly to accounting performance measures to evaluate their subordinates' performance. Conversely, in situations with low budget emphasis, superiors use non accounting performance criteria to evaluate their subordinates' performance.

Budgetary participation

Budgetary participation refers to the degree of participation and/or influence a subordinate has when setting budgets, which will be used as a criterion for the evaluation of subordinates' performance.

Organisational commitment

Organisational commitment refers to three critical aspects of the relationship between the individual and the employing firm. The first aspect refers to identification with and attachment to the organisation and concern with its future. The second aspect refers to the employee's desire to maintain his or her membership in the organisation. The third refers to the effort expended by the individual to help achieve the goals of the organisation (Zahra, 1984).

Trust

Trust refers to interpersonal acceptance and openness of expression (Zand, 1972).

Hypotheses

The major hypotheses to be tested are as follows:

The extent of budgetary participation among Norwegian managers is high.

Budget emphasis is negatively associated with job related tension/propensity to create slack in the Norwegian high participatory environment.

Model One

Budget emphasis has an indirect effect on job related tension/propensity to create slack through (1) trust and (2) budgetary participation.

Budgetary participation has an indirect effect on job related tension/propensity to create slack through trust.

Model Two

Budget emphasis has an indirect effect on job related tension/propensity to create slack through (1) organisational commitment and (2) budgetary participation.

Budgetary participation has an indirect effect on job related tension/propensity to create slack through organisational commitment.

Method

A questionnaire translated from English to Norwegian was administered to three functional heads from 100 randomly selected manufacturing companies in Norway. Path analysis was used to examine systematically the direct, indirect or spurious effects of the hypothesised relationships.

Chapter outline and organisation

This thesis is organised as follows:

Chapter 2 surveys critically the relevant literature pertaining to relevant studies on budget emphasis, budgetary participation, organisational commitment, as well as trust and their effects on propensity to create slack or job related tension.

Chapter 3 examines the underlying theories and formulates the hypotheses. The theories concerning the direct effects of budget emphasis/budgetary participation, budgetary participation/trust, budgetary participation/organisational commitment are first presented. This is followed by a discussion on the indirect effects of budget emphasis/slack or job related tension, and budgetary participation/slack or job related tension via trust and organisational commitment.

Chapter 4 discusses the research methods used to collect the data and the reasons for the choice of nation, organisations and respondents. In addition, an outline and justification of the instruments used to measure the variables are presented in this chapter.

Chapter 5 presents the results of the study. These include the response rate of the questionnaire survey, the descriptive statistics of the variables measured, an assessment of the reliability of the measurement instruments, and finally, the results of the hypotheses tests.

Finally, chapter 6 provides a conclusion to the findings of this thesis, the limitations inherent in this study and suggestions for future research in this area of management accounting research.

CHAPTER 2

Literature Review

Introduction

Over the past five decades, researchers have examined the effects of budgets on subordinates' job related attitudes and performance. Empirical evidence suggests that a high emphasis on budgets in evaluative style may have a negative impact on subordinates' job related tension and increase subordinates' dysfunctional behaviour. Job related tension may be defined as dissatisfaction, constant worrying about the job situation and distrust with the evaluation system, whereas dysfunctional behaviour may be defined as budgetary slack creation and decision-making according to the self interest of the individual rather than the organisation (Argyris, 1952; Hofstede, 1968; Lowe & Shaw, 1968; Schiff & Lewin, 1968; Onsi, 1973; Kenis, 1979).

In addition to studies concentrating on resolving the issue of ascertaining which performance criteria the subordinates either perform better, experience higher job satisfaction or reduced tension, or higher propensity to create slack, some studies have also included variables not related to budget based performance criteria. These include organisational commitment and trust. Following these studies, this thesis examines the relationship between (1) budget emphasis, budgetary participation, trust, slack and job related tension, and (2) budget emphasis, budgetary participation, organisational commitment, slack and job related tension. As such the literature in these areas will be reviewed critically to provide an insight into the work that has been undertaken in these areas. Based on these insights, it may be possible to ascertain how further

research should progress. This will provide the motivation and direction on how this thesis can further extend and contribute to this area of research.

This chapter will thus review the relevant literature pertaining to the issues of this study, and will include the following sections:

(i) Superior evaluative styles.

This section is reviewed because superior evaluative styles have consistently shown by prior studies to have a significant impact on organisational commitment, budgetary slack creation and job related tension.

(ii) Budgetary participation.

This section is reviewed because prior studies have shown participation to have both a favourable and an unfavourable impact on job specific outcomes, such as job related tension and budgetary slack creation.

(iii) Trust.

This section is reviewed because trust is a crucial variable in this thesis. Since this thesis is motivated by the lack of management accounting studies involving trust, the literature review comprises studies that may explain the importance of including trust to studies on supervisory evaluative styles.

(iv) Organisational commitment.

This section is reviewed because of the recent recognition of the importance of organisational commitment in organisational and management accounting research. Since most of the existing literature involving organisational commitment is found in organisational studies, this section comprises mostly prior studies stemming from the organisational literature. However, the emphasis is given to those recent studies in management accounting involving organisational commitment (also referred to in the section of budgetary slack creation).

(v) Budgetary slack creation and propensity to create slack.

Two dependent variables are examined in this thesis, namely propensity to create slack and job related tension. As the literature on budgetary slack is quite extensive and prior studies have found strong links between superior evaluative styles, budgetary participation and organisational commitment on the one hand, and budgetary slack creation on the other, budgetary slack will be reviewed extensively as a separate section. The literature relating to job related tension is included in the other sections.

Finally, the chapter will discuss the implications of the literature review and summarise the issues to be examined in this study.

(i) Studies on Superiors' Evaluative Style

As early as 1952, Argyris examined the effects of superiors' evaluative styles on subordinates' behaviour. He has been regarded as the initial explorer, as he was the first to report that in organisations where budget emphasis was high, subordinates clearly engaged in dysfunctional behaviour. He interviewed both operating and accounting personnel in four manufacturing companies to identify their feelings towards the use of accounting measures (budgets) by superiors to evaluate subordinates' performance. He found that subordinates felt that budgets were used by superiors as a pressure device, a motivating factor and a means of isolating and improving problems. He reported that such subordinates' feelings were derived from three main factors, (1) the propensity of supervisors to emphasise the need to meet the budget, (2) the increasing of budget standards as soon as they were met, and (3) the inflexible and uncompromising nature of the budget documents which failed to disclose the real reasons for the budget variances. Consequently, there was higher

tension, frustration, resentment, suspicion, fear and mistrust amongst subordinates when superiors used budgetary information to evaluate their performance. (Argyris, 1952).

Argyris proposed budgetary participation as a possible moderating variable of supervisory style. According to Briers & Hirst (1990), his study provided a milestone in behavioural accounting research as “it went beyond simply examining alternative uses of accounting information in performance evaluation. Importantly, it was a comprehensive study, rich in theoretical, as well as empirical, content” (p. 376).

Argyris' (1952) findings were later supported by Hofstede (1968), who conducted a study of six manufacturing plants. He found that high budget emphasis resulted in lower job satisfaction, more stress and anxiety. Also, consistent with Argyris (1952), he found the adverse effects led to dysfunctional behaviour amongst the subordinates, such as absenteeism and interpersonal conflicts.

Other studies found similar results. Lowe & Shaw (1968) researched the sales budgeting process in a retail chain of approximately 400 shops. They found that when management used budgets to evaluate their subordinates' performance, the subordinates (in this case the sales managers) took advantage of their positions and manipulated accounting figures. In addition, they also found that, in some cases, budgetary slack was created when superiors emphasised budgets as a means of performance. Onsi (1973) looked further into the effects on budgetary slack. In a study of 32 managers, he found that 80% of the managers were involved in slack creation when there was evidence of high budget emphasis.

These studies are important as they provide the support for a relationship between budget emphasis and job related tension and slack with budgetary participation and trust as intervening variables. Basically, a high budget emphasis evaluative style should be complemented by a high extent of budgetary participation, which reduces mistrust and hence leads to lower job related tension and a lower propensity to create slack.

Hopwood (1972) undertook the first systematic empirical study on the relationship between the use of accounting data and dysfunctional behaviour. He examined cost centre managers from a large Chicago manufacturing company. He related dysfunctional behaviour to three different styles of performance evaluation.

- The first is the **Budget-Constrained** (BC) style, where a high emphasis is placed on the subordinates' ability to continually meet budget targets when evaluating their performance.
- The second is the **Profit-Conscious** (PC) style, which involves a more flexible style of budget use. More specifically, the importance of the budgetary information is retained, but one is also able to recognise its shortcomings.
- The third, the **Non-Accounting** (NA) style, is a style where the accounting data are not important for evaluating performance.

Hopwood found that under the **Budget-Constrained** style (high budget emphasis), subordinates experienced higher job related tension, a poorer relationship with their superiors, and were more inclined to engage in dysfunctional behaviour compared with subordinates evaluated under the Profit-Conscious or Non-Accounting style.

Since Hopwood did not systematically examine managerial performance in his study, Otley (1978) extended Hopwood's research by examining the effects of alternative evaluation styles on managerial performance. Following suggestions from Baulmer (1971) and Bruns & Waterhouse (1975), Otley examined unit managers with independent production units, which would better enable him to isolate the effects of supervisory styles. Whilst he followed Hopwood's definitions of evaluative styles, his findings did not support Hopwood's findings.

Otley's inability to support Hopwood's findings led to his suggestion that a high budget emphasis style could improve managerial performance. He explained the differences in the results by questioning the realism or accuracy of budgets. For instance, he argued that actual performance is likely to be closer to budget when the budget is set realistically, and superiors would emphasise budget standards for performance evaluation only when the standards were perceived to be realistic.

Due to Hopwood's and Otley's contradicting results, other researchers extended the research on budgetary control with emphasis on a contingent approach. Otley (1978) suggested that other contingency variables such as the types of organisations, the size of the firms, the economic environment, and the shared norms and values within the organisation and within the society would better explain the effects of budgetary control. Some of these factors were already examined by Hopwood (1973) and Hayes (1977), and their results suggested that as organisations were increasingly exposed to the environment, the use of accounting information for evaluation purpose could not capture adequately the performance of subordinates.

Hirst (1981) was the first to continue the research based on Otley's study. Hirst built on Otley's (1978) suggestion that task interdependence could explain the divergence

between Hopwood's (1972) results and his results. Otley studied profit centres that were independent of each other whereas Hopwood studied cost centres in an integrated manufacturing company. As neither Otley nor Hopwood measured task interdependence, Hirst included task uncertainty as a moderating variable. He argued that subordinates may have no incentive to improve their performance when there is a low (high) reliance on accounting performance measures in low (high) task uncertainty situations.

Task uncertainty is defined as an individual's beliefs on the completeness of cause-effect knowledge of the task performance (Hirst 1981, p. 599). Hirst hypothesised that a medium to high (medium to low) budget emphasis minimises dysfunctional behaviour in situations of low (high) task uncertainty. This may explain Hopwood's (1973) and Otley's (1978) contradicting results. It is probable that Hopwood may have examined departments characterised by high task uncertainty whereas Otley may have examined independent subunits characterised by low task uncertainty.

Hirst (1983) conducted an empirical study to test his hypothesis by surveying part-time students (who were full-time middle-level managers) from four universities in Sydney. He found a positive (negative) relationship between job-related tension and budget emphasis for high (low) task uncertainty situations. These results indicate that a high reliance on incomplete accounting performance measures in high task uncertainty situations increases disagreement about evaluation styles between subordinates and superiors, which in turn, increases job-related tension.

Task uncertainty as a moderating variable was also tested by Imoisili (1985). He included role stress as an intervening variable, in addition to dependent variables such as performance and dysfunctional behaviour. However, he was unable to find any

significant results. A possible explanation may be due to the hardship the sample organisation was experiencing at the time of his research.

Govindarajan (1984) attempted to reconcile the conflicting results of Hopwood (1973) and Otley (1978) by examining environment as a contingent variable. He based his study on the proposition that organisational effectiveness depends upon the existence of a match between organisational control and its environment. He suggested that Hopwood's and Otley's results were characterised by different levels of environmental uncertainty. He defined environmental uncertainty as the unpredictability in the actions of the customers, suppliers, competitors and regulatory groups that comprise the external environment of business units. Following Hirst's (1981) contingency framework, he argued that a moderate to low (high) budget emphasis combined with high (low) environmental uncertainty would lead to increased performance.

Govindarajan tested his hypotheses with a sample of 58 general managers from eight Fortune 500 companies in America, and found that environmental uncertainty has a significant moderating effect on the relationship between budget emphasis and performance. He suggested that his findings could explain the differences in the results of Hopwood and Otley, as it was possible that different degrees of environmental uncertainty existed in their studies. He suggested that Otley's sample could be operating under stable environmental conditions, whereas the interdependent unit studies by Hopwood faced greater environmental uncertainty based on Thompson's (1967) argument that environmental uncertainty increases when task interdependence increases.

Another variable that has been examined to bring further closure to the Hopwood (1973) and Otley (1978) conflict is the role of technology. Brownell & Merchant (1987) considered the role of technology by arguing that a high product standardisation provides a greater opportunity to accurately identify cost/volume relationships, which would in turn affect adjustments to the budget. Hence, the use of flexible budgets for evaluation purposes is more appropriate than a similar use of static budgets. Brownell & Merchant examined their proposition by studying 201 production managers in the electronics industry and found support for their hypotheses.

(ii) Studies on Budgetary Participation

With regard to the importance of budgetary participation, Brownell (1982) made an important contribution to the resolution of the conflicting findings of Hopwood (1972) and Otley (1978), when he examined the moderating effect of budgetary *participation* on the relationship between budget emphasis and job performance. He explained Hopwood and Otley's results with the principles of operant conditioning and balance theory. He suggested that a high budget emphasis is appropriate when subordinates have the opportunity to negotiate the criteria against which their performance is assessed. In contrast, a low budget emphasis is appropriate when there is a low level of participation. He tested his hypotheses with a sample of 48 cost-center managers in a San Francisco manufacturing company and found results that supported his hypotheses.

Hirst (1987) and Dunk (1989) later replicated Brownell's (1982) study. Hirst (1987) studied a property development firm and found no significant interaction between

budget emphasis and participation. Dunk (1989) conducted a cross-sectional study of 26 companies and found that high (low) budgetary participation together with high (low) budgetary emphasis reduces performance. Bottger & Hirst (1988) who also examined the impact of participation, found that participation caused a reduction in job stress where budget emphasis is high but found no such effect where budget emphasis is low, which is consistent with Hopwood's (1973) study.

Brownell & Hirst (1986) attempted to link the Brownell (1982) and Hirst (1983) studies by examining the three-way interaction between budget emphasis, task uncertainty and budgetary participation. They believed that Brownell's (1982) result would hold in low task uncertainty situations but not in high task uncertainty situations as participation in high task uncertainty situations is deemed necessary for managers to enhance performance, regardless of the level of budget emphasis. Their results support their hypotheses that compatible combinations of high (low) participation and high (low) budget emphasis decrease job-related tension in low task uncertainty situations. However, they were unable to find any significant results for the dependent variable of performance. They suggested the possibility of cross-national differences (one Australian and one U.S.), or some other intervening variables, which could have affected their results.

Brownell & Dunk (1991) concentrated on task difficulty when they re-examined Brownell & Hirst's (1986) study. They suggested that task difficulty rather than task uncertainty might be of importance in order to generalise Brownell & Dunk's (1986) results. Task difficulty is defined as the ability to specify input/output relations, and whether there is any standard procedure or manual for subordinates to follow in order to successfully carry out a task. The other dimension, task variability, is considered to be less important in order to generalise Brownell's (1982) study. For instance, in cases

of high level of task variability, tasks could still be relatively simple and straightforward. Thus, Brownell's (1982) results can be generalised across different levels of task variability. Their results supported their proposition, that is, where task difficulty is low, low (high) participation accompanied by low (high) budget emphasis is associated with effective managerial performance. However, they found that when task difficulty is high, high participation, regardless of the level of budget emphasis, is associated with effective managerial performance.

Hwang (1989) and Harrison (1992) provided further insights into the study of superiors' evaluative styles and budgetary participation by introducing national culture as a contingent variable. Hwang (1989) studied the effect of power distance on the relationship between budgetary participation and motivation. Harrison (1992) examined the moderating effect of national cultures on the relationship between budget emphasis and both job satisfaction and job-related tension. He conducted a cross-cultural study to ascertain whether Brownell's (1982) results can be generalised across nations with different cultures. He suggested that culture might influence the perceived appropriateness of participation. He used Hofstede's (1980) cultural dimensions when categorising nations according to what would most likely affect participation. The cultural dimensions used were power distance and individualism.

Since Brownell's (1982) findings were based on a sample from the U.S., they were expected to be generalised to nations similar to the U.S., in other words, nations with a low power distance and high individualism, like for instance, Australia. However, Harrison (1992) also expected Brownell's findings to be applicable to high power distance and low individualism nations, like Singapore, because these nations like the U.S., have one dimension (low individualism) which favours subordinates' participation and another (high power distance) which is unfavourable to subordinates'

participation. His results supported his hypothesis that the participation effects on the relationship between budget emphasis and the dependent variables of job related tension and job satisfaction, could be generalised across nations with high (low) power distance and low (high) individualism. His results were also consistent with those of Brownell (1982) and Brownell and Hirst (1986), that matching increasing level of budget emphasis with increasing levels of participation would, in both nations (Australia and Singapore), reduce job-related tension.

In addition, Harrison (1990, 1993) also examined the moderating personal variable of authoritarianism to the relationship between budget emphasis and the dependent variables job related tension and job satisfaction. He hypothesised that high budget emphasis is preferable in high power distance nations as these nations place a high reliance on accounting performance measures in evaluative styles. According to Hofstede (1984) subordinates in high power distance nations are very dependent and expect their superiors to behave autocratically and be non-consultative. Hence a leadership style based on high budget emphasis would be desirable. The same would apply to low individualism nations. In contrast, subordinates in low power distance nations will prefer a low budget emphasis as the latter leadership style is categorised by a non-representative leadership style in the evaluation process. Subordinates in a low power distance nation emphasise the need to take part in decisions that concerns them. Hence, a consultative leadership style is most appropriate. Harrison (1990, 1993) was able to support his hypotheses regarding the interaction between national culture and budget emphasis on job related tension and job satisfaction. However, he found no significant result for the three-way interactions between budget emphasis, culture and personality affecting job satisfaction.

Lau et al. (1995) used Harrison's (1992) framework for a study on national culture. They extended Harrison's study by examining the three-way interaction between budget emphasis, budget participation and task characteristics (task uncertainty and task difficulty) affecting job-related tension and managerial performance. They surveyed Singapore, and drew their sample from functional heads of manufacturing companies. Their results gave further support to those of Brownell and Dunk (1991) that high budgetary participation, irrespective of level of budget emphasis, in *high task difficulty* situations will improve managerial performance. Also, compatible combinations of high budget emphasis and high participation were associated with improved managerial performance in low task uncertainty situations. More importantly, Lau, et al. (1995) found further evidence to support Harrison's (1992) findings that the effect of budgetary participation on managerial performance can be generalised between high (low) power distance and low (high) individualism nations. Their results also indicate the possibility of generalising Harrison's results to manufacturing industries and across functional areas.

Finally, a recent paper by Lau & Buckland (1999) also supports the generalisation of research results on the effects of supervisory styles across cultures. The study was a replication of the Lau et al. (1995) study. However, the research site was Norway, a continental European nation with a Nordic culture. They found that the three-way interaction between budget emphasis, budgetary participation and task difficulty has a significant effect on job performance of Norwegian managers. In addition, when the results were compared with those of Singapore (drawn from Lau et al.'s study), the Norwegian managers, like the Singaporean managers, performed best when budget emphasis and budgetary participation were both high in *low* task difficulty situations, and performed worst when budget emphasis and budgetary participation were both low. In *high* task difficulty situations, Norwegian managers performed best when

budget emphasis was high, as opposed to Singaporean managers who performed best when participation was high.

(iii) Studies on Trust

Despite repeated mention of trust in the organisational and management literature, relatively little theoretical explication or empirical examination of trust in relation to supervisory styles and its effect on job outcomes is found in the management accounting literature. However, the study by Ross (1994) is one exception. He is the first managerial accounting researcher to systematically examine trust. He argued that trust may moderate the effect of superior's evaluative style on the level of job related tension. Specifically, he argued that trust may mediate the relationship between budget-constrained and the profit-conscious style and job related tension. However, since the non-accounting performance evaluative style is ambiguous, subordinates will experience anxiety irrespective of trust due to the ambiguity of an evaluative style based on subjective criteria. Ross found that trust moderated the effects of the performance evaluative styles on job related tension, but only for the budget constrained and profit conscious styles.

Trust has been widely recognised as an important condition to facilitate stable social relationships. Merlinger (1956) and Read (1962) suggest that trust may increase an organisation's internal communication, especially between superiors and subordinates. It has also been suggested that trust is essential for effective problem solving in groups (eg., Meadow et al., 1959; Parloff & Handlon, 1966), and that trust is a prerequisite for effective and efficient organisations (eg., Simmons, 1981; Ouchi, 1981). In a study on trust and managerial problem solving, Zand (1972) provided an extensive model of

trust and its interaction with information flow, influence, and control. He isolated the problem solving exercise by studying the relationship in a group setting amongst managers of a large, international electronics company. The model conceptualises trust by transforming one's inner trust into behaviour that is trusting through information, influence and control. The hypotheses derived from the model were tested by a group exercise. Two groups were given identical factual information about a difficult problem, and one group was briefed to expect trusting behaviour whilst the other group was briefed to expect untrusting behaviour. Zand found that there were highly significant differences in the effectiveness between the high-trust and the low-trust groups in the clarification of goals, the reality of information exchanged, the scope of search for solutions, and the commitment of managers to implement solutions. Consequently, trust appears to be a significant explanatory variable in enhancing managerial problem solving.

With regard to the effect of trust on the performance of the individuals in the organisation, Robinson (1996) found that trust had a mediating effect on the employee's contributions to the firm. With regard to the effects of budgetary slack creation, Dunk (1997) reported that the relationship between participation and slack is a rather complex one. His study indicated that *personal* factors are implicated in influencing managerial behaviours (p. 660). Lau & Eggleton (1998) also mentioned the notion of trust. They believed that subordinates will not create slack in order to not jeopardise the level of trust their superiors have in them.

In conclusion, these studies suggest that trust is an important factor affecting the relationships between evaluation styles, participation and subordinates' behaviour. Yet there seems to be a dearth of research studies on the effects of trust in management accounting research. This gap in the accounting literature provides the motivation for

this thesis to undertake a study on the intervening effect of trust on the relationship between evaluative styles and subordinates' behaviour.

iv) Studies on Organisational Commitment

Organisational commitment refers to an employee's willingness to exert effort in the organisation. With respect to studies concerning organisational commitment and its effect on job specific outcomes, the literature is characterised by conflicting results. For instance, Mowday et al. (1974) found that employees' attitudes towards their organisations were related to job performance. They investigated the relationship between performance (based on work units) and employee attitudes towards their organisations among female clerical workers in a bank. They reported that in branches rated high in performance, the workers experienced a higher level of attitudes toward both the branch they were working for and the larger organisation they were part of, whereas workers in low- and medium-performing branches had a lower level of similar attitudes.

In contrast, Steers (1977) could not detect a relationship between organisational commitment and performance. His results were inconclusive as he only found an association in two out of possible five situations. In a study of junior-level and senior-level staff accountants, Ferris (1981) found mixed results for the relationship between organisational commitment and performance. For the junior-level sample, performance was found to be influenced by a willingness to exert effort, whereas for the senior-level sample, performance was found to be influenced by a desire to maintain membership (p. 323). However, as both categories are part of the definition of organisational commitment, it is possible to conclude that Ferris found relative

strong support for a relationship between organisational commitment and performance.

Another study by Welsch and LaVan (1981) indicates that organisational commitment is also related to job satisfaction and communication in organisations. They examined organisational commitment and its relationship to different variables, such as demographic characteristics, job satisfaction, job characteristics, professional behaviour and organisational climate. In their study of 149 upper and middle managers of a large Medical Center, they found organisational commitment to be strongly related to job satisfaction (satisfaction with work and satisfaction with promotion) as well as participation (when the organisational climate was perceived to be participative). An important implication of their findings is that in order to increase the level of commitment in the organisation, different strategies will need to be evaluated, such as the various components of organisational climate, power, teamwork, and role conflict and role ambiguity (p. 1087).

Jamal (1985) suggested that organisational commitment acts as a moderator between job stress and job performance. He argued that individuals with different levels of organisational commitment might perceive job stress differently. Since individuals with low organisational commitment have only limited feelings of loyalty toward the organisation, they may perform only at a marginal level. He found marginally significant results to support his hypothesis.

A number of other studies involving organisational commitment have addressed the question of which casual relationship exists between organisational commitment and a number of other variables, such as job satisfaction. Job satisfaction has been reported to be both an antecedent and a consequence of organisational commitment. Whilst

Gregson (1992) found that job satisfaction is an antecedent to organisational commitment, Poznanski & Blin (1997) found the opposite casual relationship, that the level of organisational commitment experienced by a subordinate is directly related to his/hers level of job satisfaction. The latter result is also in accordance with the findings of DeCotiis & Summers's (1987) study.

Only a few studies have considered the role of organisational commitment in research on superiors' evaluative styles. Collins et al. (1995) examined the relationship between evaluative styles and organisational commitment by surveying 344 non-supervisors in a not-for-profit organisation. They found that management style based on budget data was positively and directly related to organisational commitment, whereas the profit-conscious and budget-constrained styles were only indirectly related to organisational commitment.

The relationship between organisational commitment and participation was examined by both Rhodes & Steers (1981) and by Nouri & Parker (1998). Rhodes & Steers found that participation in decision making is significantly related to organisational commitment in cooperatives, as these organisations will face a higher level of commitment than conventional organisations. Nouri & Parker (1998) examined organisational commitment, as well as budget adequacy, as intervening variables in the budgetary participation – job performance relationship. They surveyed 139 American managers and supervisors from large multi-national corporations. They found that budget participation affects job performance *indirectly* via budget adequacy and organisational commitment.

(v) Studies on Budgetary Slack

The literature pertaining to the effects of superiors' evaluative styles and participation on budgetary slack is quite extensive, and also quite equivocal. For instance, with respect to budget emphasis, different results were obtained by Onsi (1973), Collins (1978) and Merchant (1985). Onsi (1973) found a positive relationship between budget emphasis and slack. He examined the proposed relationship by surveying 107 managers from 7 large-size, multinational U.S. corporations. His results indicated that there is a significant relationship between managers' attitude toward an authoritarian top management budgetary control system and budgetary slack. Cammann (1976) reported similar findings as Onsi when he examined the effects of subordinates' participation in decision making and job difficulty on their responses to different uses of control systems by their superiors. He drew his sample from a large private utility, where the respondents were managers at different levels of the organisation. Specifically, Cammann investigated the effects of different styles of uses of control systems on so called "defensive subordinate responses", which may be interpreted to include budgetary slack creation. He found that the use of control systems (ie budget emphasis) for reward allocation resulted in defensive subordinate responses (ie budgetary slack creation).

Collins (1978) examined the relationship amongst several behavioural variables affecting individual responses to budgets. Although he found evidence of budgetary slack, he was not able to support Onsi's (1973) findings with regard to the relationship between budget pressure and slack creation.

Merchant (1985) conducted a study to investigate how managers' propensity to create slack is affected by the budgeting system. He hypothesised that propensity to create

slack is positively related to the importance placed on meeting budget targets. His findings showed that propensity to create slack increases "if a tight budget requires the managers to make frequent tactical responses as not to incur budget overruns" (p. 207). Lal et al. (1996) who replicated Merchant's (1985) study, were unable to find any significant results. Based on these mixed results, later researchers examined the effects of budgetary participation on the relationship between budget emphasis and slack.

Empirical evidence regarding the effects of budgetary participation on slack is even more inconsistent. Some researchers found the effect of budgetary participation associated on slack to be positive (eg., Young, 1985; Lukka, 1988), whilst others found it to be negative (eg., Onsi, 1973; Merchant, 1985; Govindarajan, 1986). Young (1985) tested the effects of participation on budgetary slack in an experimental study. He found that a subordinate who participates builds in budgetary slack, and that slack is attributable to the subordinate's risk preferences. He also included information asymmetry in his study, but was unable to find any significant effect on slack.

Lukka (1988) provided an extensive theoretical framework in an attempt to gain a wider understanding of the concept of budgeting biasing. The theoretical framework was divided into two parts, the explanatory model of 'slack' at the individual level, and the organisational model for 'slack'. The explanatory model suggested that three different intentions, namely, resource intention, performance evaluation intention, and motivation intention explain the reasons why budgetary biasing exists. The organisational model suggested that "budgetary bias may have either an intensifying or a dampening influence on conflicts in negotiations" (p. 298). His results provide support for his theoretical framework. Amongst the implications of his findings was the importance of the performance evaluation intention to explain the major part of

budgetary slack creation. In addition, he found that the degree of participation was positively related to the level of budgeting bias created.

The study by Dunk (1993) is important as he was the first to link budget emphasis, budgetary participation and information asymmetry to resolve the issue of when subordinates are likely to create slack. He hypothesised that when participation, budget emphasis and information asymmetry were all high, slack would be high. He drew his sample from a random selection of 118 managers from a total of 61 manufacturing companies. His results showed that the relation between participation and slack is contingent upon budget emphasis and information asymmetry. Further, his findings indicate surprisingly that when budget emphasis is high, participation reduces slack. Due to his surprising results Lau & Eggleton (1998) provided and tested an alternative theory to explain the conflicting results.

Lau & Eggleton (1998) theorised that subordinates in high budget emphasis-high participation situations may not create slack because "they are likely to place greater utility on the long run maintenance of participation privileges and the opportunities they afford to both gain information from the superior and to influence the level of budgetary targets" (p. 3). This theory was based on prior studies which focused on the interaction between budget emphasis and budgetary participation (Brownell, 1982; Brownell & Hirst, 1986; Brownell & Dunk, 1991; Harrison, 1992; Lau et al., 1995). Further, Lau & Eggleton (1998) suggested that subordinates in a high information asymmetry situation may not create slack if they fear that slack creation may undermine their superiors' trust in them. As a result, they hypothesised that the extent to which subordinates find participation useful for their purpose will be dependent on the three-way interaction between budget emphasis, participation and information asymmetry. They tested their theory by examining the proposed three-way interaction

on a cross-cultural sample of 103 Australian and Singaporean managers, and found support for their hypotheses.

These studies are important as they indicate that budget emphasis and participation are related to slack creation. Additionally, these are suggestions that trust may be an important variable in affecting the extent of slack creation. However, to date, the role of trust on slack creation appears to have been left untested despite the large number of prior studies investigating slack. Hence, this omission provides the motivation for this thesis to examine systematically the role of trust in slack creation.

Another variable, which may affect slack creation, is organisational commitment. Most of the existing literature on budgetary slack creation is grounded in agency theory propositions. Some researchers argue that participation gives the subordinate a better opportunity to introduce slack into the budget (Young, 1985; Lukka, 1988; Dunk, 1993). Nouri (1994) studied the effects of the motivational factors of organisational commitment and job involvement to ascertain the level of a manager's propensity to create slack. He posited that "managers who are highly committed to organisational goals and values should have low levels of propensity to create budgetary slack because they understand the dysfunctional impacts of budgetary slack on the organisation" (p. 290). He examined his proposal on 139 managers from a large multinational organisation. His results indicated that for managers with high organisational commitment, job involvement was associated with decreased levels of slack, whereas for managers with low organisational commitment, job involvement was associated with an increased propensity to create slack.

In a later study, Nouri & Parker (1996) extended Nouri's (1994) study by examining the interaction between budgetary participation and organisational commitment

affecting budgetary slack. They posited that in a participatory budget, subordinates with strong organisational commitment would use their budgetary influence to reduce budgetary slack to benefit the organisation. In contrast, subordinates with low organisational commitment would use their budgetary influence to increase slack to secure favourable budget evaluations. Their results support these expectations. These results indicate that there is considerable support to include organisational commitment as an important variable in the study of subordinates' propensity to create slack.

Implications of Literature Review

The literature review provides a number of important insights into the relationships between superior's evaluative styles and subordinates' behaviour, such as job related tension and slack creation. It indicates that this research area has been the focus of much research work, extending as far back to the early fifties. The continuing stream of studies undertaken recently indicates that it is still an important and contemporary area of research. This is not surprising as budget constitutes probably the most important report of management accountants and the use of budget for performance evaluation remains a crucial aspect of management accounting even in contemporary highly competitive and complex operating environment.

The current interest in the use of nonfinancial performance indicators for performance evaluation does not mean that studies on evaluative styles are no longer relevant. Note that whilst nonfinancial performance indicators are important, they are not intended to displace financial indicators. Rather, they are intended to complement the financial performance indicators. Note that financial performance indicators remain as one of the four key groups of performance indicators in the Balanced score card developed by Kaplan & Norton (1992). Moreover, nonfinancial indicators as performance evaluation criteria are not radically different from the superiors' evaluative styles that were examined by those prior studies included in the literature review. The use of nonfinancial indicators as performance indicators is in many ways the same as *low budget emphasis* evaluative style, which emphasises nonaccounting or nonfinancial performance indicators. This therefore means that many of the results of prior research on superior's evaluative styles are applicable to contemporary organisations. This suggests that there is a strong justification to continue to focus research effort and to

extend on the area of supervisory evaluative styles so that a coherent theory can be developed for this important management accounting area.

However, whilst much research effort had been expended in this area, the literature review indicates that much remains to be done. There is clearly a need to undertake further research to explain many of the conflicting, surprising and unexplained results of prior studies. For instance, the literature review indicates that the effects of budget emphasis on slack creation can be positive (Onsi, 1973; Cammann, 1976) or negative (Merchant, 1985). Similarly, with respect to the effects of budgetary participation on slack creation, they can be negative (Onsi, 1973; Cammann, 1976; Merchant, 1985), insignificant (Collins, 1978) or positive (Young, 1985). Such results suggest the need to re-examine the relationships among the variables. It is plausible that some of the variables may be intervening rather than moderating variables. For instance, whilst most prior studies have considered budget participation to be a moderating variable in the relationships between budget emphasis and subordinates' behaviour, the results of some prior studies (eg., Brownell & Dunk, 1991; Lau et al., 1995) indicates that it is probable that budgetary participation may be an intervening variable. The theory for this expectation will be discussed further in the next chapter. Hence, the literature review indicates that the area of the impact of supervisory style on subordinates' behaviour is relatively complex, involving a number of variables in complex relationships that need to be investigated further.

Additionally, the literature review also indicated that whilst some variables have been subjected to frequent investigation (eg., participation, task and environmental uncertainty, national culture), other variables, which are likely to affect the relationships between budget emphasis and subordinates' behavior have remained largely untested. The literature review indicates that few prior studies have

systematically investigated these relationships, particularly with respect to trust (Ross, 1994). More importantly, the literature indicates that few studies have attempted to incorporate these variables into a single integrated model.

Hence, the literature review indicates the need to examine a number of issues. First, whilst there seems to be a consistent pattern relating to the beneficial consequences of a compatible combination of high budget emphasis and high participation, it is unclear whether these results are generalisable to the Nordic cultural region where high participation is the norm because of their low power distance culture and their centralised and formalised industrial relations systems which emphasise democratic work practices (Lau & Buckland, 1999). Second, it seems that there has been no studies undertaken to investigate why a compatible combination of high budget emphasis and high participation is associated with beneficial behavioural outcomes. Hence, this gap in the literature needs to be addressed. Third, there is a need to consider whether participation is an intervening instead of a moderating variable (Brownell, 1982) in the relationships between budget emphasis and subordinates' behaviour. Fourth, trust and organisational commitment should be included in the relationships. Fifth, the issue of whether trust and organisational commitment are moderating or intervening variables should also be investigated. Sixth, as the literature review indicates that studies are often fragmented and variables which are related are often not integrated into a single model, a model should be developed to integrate the variables of budget emphasis, participation, trust, organisational commitment, job related tension and propensity to create slack. Such a model is likely to provide better insights into the complex relationships among these variables. It will also address a concern of Chenhall & Brownell (1988) that there may be number of intervening variables, apart from role ambiguity, which may affect the relationship between budgetary participation and behavioural outcomes.

The literature review also indicates that almost all studies undertaken in the area of superiors' evaluative styles were undertaken in Anglo-American and Asian nations. None were undertaken in continental Europe in general and the Scandinavian region in particular. This suggests that some important regions were generally overlooked by management accounting researchers. Hence, in spite of the vast bodies of evidence built up in this research area, it remains unclear if any of this evidence is generalisable to continental Europe and the Scandinavian region. Note that these regions are very important, in terms of economic and social indicators and are among the most industrialised and developed countries in the world. Hence, research evidence from these regions is crucially needed to assist in the design and implementation of control systems in these regions.

In conclusion, the literature suggests that the area of research pertaining to supervisory evaluative styles and budgetary participation constitutes a very important and heavily research area in management accounting. It suggests that this area of research is one of the main and current management accounting research areas. Brownell & Dunk (1991, p. 703) described this research area as "the only organised critical mass of empirical research work in management accounting" and Lindsay & Ehrenberg (1993, p. 223) described it as "one of the relatively few areas in management accounting where there has been any sequence of repeated studies". Whilst conflicting results among these studies do exist, there has nevertheless been an accumulation of a wide body of research of evidence suggesting some general patterns on how these variables affect subordinates' behaviour. Consequently, further research will help to contribute to the understanding of this important area of management accounting.

Conclusion

The literature review provides important insights into the complex relationships between superior's evaluative styles and subordinates' behaviour. These insights have provided this thesis with not only the motivation to undertake further research in this important area, but also the theories to develop the hypotheses to be tested. These theories will be discussed further in the next chapter.

CHAPTER 3

Theoretical Development and Hypotheses Formulation

Introduction

This chapter presents the theoretical development of the hypotheses tested in this thesis, along with the suggested models. It provides the theories linking the direct effects and indirect effects of budget emphasis, budgetary participation, trust, organisational commitment, slack creation and job related tension. Specifically, it will discuss the relationships between budget emphasis/budgetary participation, budgetary participation/trust, budget emphasis/organisational commitment, budgetary participation/organisational commitment, trust/slack, trust/job related tension, organisational commitment/slack, organisational commitment/job related tension, budget emphasis/slack, budget emphasis/job related tension, budgetary participation/slack and budgetary participation/job related tension.

This thesis argues that the relationships between budget emphasis and slack/job related tension may be indirect through budgetary participation and trust (see model one in Fig. 3.1, page 56). This study will also examine the direct and indirect effects of budget emphasis through the intervening variables, budgetary participation and organisational commitment, on slack/job related tension (see model two in Fig. 3.2, page 67).

Before the hypotheses are developed, it is necessary to discuss the concepts of the variables examined. These are: (1) budget emphasis, (2) budgetary participation, (3)

trust, (4) organisational commitment, (5) propensity to create slack, and (6) job related tension.

Concept of Budget Emphasis

Budget emphasis is defined as the extent to which superiors rely on or emphasise pre-specified budget targets when evaluating their subordinates' performance. A high budget emphasis occurs when superiors do not deviate from preset budget targets when evaluating their subordinates' performance. A low budget emphasis occurs when superiors take into account other factors apart from budget targets when assessing their subordinates' performance.

Hopwood (1972) classified superior evaluation styles into three categories:

1. Budget Constrained Style (BC) is used when a superior evaluates his/hers subordinates strictly according to short term budgetary goals.
2. Profit Conscious Style (PC) describes an evaluation style that still uses accounting data but in a moderated fashion. The accounting data are used in a flexible manner and other criteria are also of importance.
3. Nonaccounting Style (NA) is used when accounting data are unimportant in the evaluation of subordinates' performance.

Several researchers have categorised the Budget Constrained Style and the Profit Conscious Style as high budget emphasis and the Nonaccounting Style as low budget emphasis (e.g. Brownell, 1982; Brownell and Hirst, 1986; Brownell & Dunk, 1991).

Hopwood tested these consequences of the three different evaluative styles. He found that the budget constrained style (BC) resulted in greater stress, more hostility towards

superiors and peers, a greater tendency to blame other managers for poor performance outcomes and a tendency to charge departmental costs to other departments, as well as a greater tendency to falsify budget data.

Concept of Budgetary Participation

Milani (1975, p. 274) defines participation as a concept "used to describe the extent to which a subordinate is allowed to select his own courses of action". Brownell (1982) similarly defined participation as an organisational process whereby individuals are involved in, and have influence on, decisions that have direct effects on those individuals (p. 126). It refers to the process in which individuals, on the basis of their achievement of budgeted targets, are involved and have influence on the setting of those budget targets.

Brownell (1982) undertook a study in order to bring closure to Hopwood's (1972) and Otley's (1978) contradictory findings by incorporating budgetary participation as a moderating variable. He suggested that there are no direct observable associations between superior evaluative style and performance because the relationship is affected by budgetary participation. He based his hypotheses on two theoretical paradigms, operant conditioning and balance theory. Operant conditioning is concerned with the level of participation when planning the budget. Cherrington & Cherrington (1973) explained that rewards for budget related performance should be compatible with the level of emphasis placed on budgets. The relationship between budget emphasis and participation will operate in the same manner, as subordinates will accept high budget emphasis only if they have been involved in setting the budget targets. Balance theory explains the predicted consequences of either high budget emphasis matched with

high budgetary participation or low budget emphasis matched with low budgetary participation.

Brownell (1982) found a significant interaction between budgetary participation and budget emphasis affecting managerial performance. Similarly, Bottger & Hirst (1988) found that budgetary participation reduces job related tension when there is high budget emphasis.

Concept of Trust

Gibb (1961) identifies trust as a condition that facilitates interpersonal acceptance and openness of expression. Deutsch (1962) considers trusting behaviour as consisting of "actions that (a) increase one's vulnerability, (b) to another whose behavior is not under one's control, (c) in a situation in which the penalty (disutility) one suffers if the other abuses that vulnerability is greater than the benefit (utility) one gains if the other does not abuse the vulnerability" Cited in Zand (1972, p. 230).

In this thesis, trust is argued to be an important motivating factor that influences the subordinates to work towards a better environment in their job situation. It may affect the level of tension the subordinates feel, and the level of slack they create. It may be related directly to the degree of subordinate's participation in the budgetary process. Ouchi (1981) suggests that trust is the keyword when explaining the success of Japanese management styles because the success stems from a willingness on the part of the employees to sacrifice personal interests through the knowledge that such sacrifices will always be repaid in the future due to the managerial practices that foster trust (p. 6).

Concept of Organisational Commitment

Mowday et al. (1979)-define organisational commitment as “the relative strength of an individual’s identification with and involvement in a particular organization.” They suggested that organisational commitment is characterised by three related factors:

- 1) a strong belief in and acceptance of the organisation’s goals and values;
- 2) a willingness to exert considerable effort on behalf of the organisation; and
- 3) a strong desire to maintain membership in the organisation. (p. 226).

Another definition offered by DeCotiis & Summers (1987) considers organisational commitment as "the extent to which an individual accepts and internalizes the goals and values of an organisation and views his or her organizational role in terms of its contribution to those goals and values, apart from any personal instrumentalities that may attend his or her contribution" (p. 448).

The existing literature operates with different conceptualisations of organisational commitment. Nevertheless, there seems to be a clear distinction between affective commitment and continuance commitment (Meyer et al., 1990). Affective commitment encompasses the three characteristics given above, whereas continuance commitment is concerned more with the costs associated with leaving the organisation (Becker, 1960). To be consistent with prior literature (eg., Nouri & Parker, 1996), this thesis employs the affective commitment conceptualisation of organisational commitment.

Concept of Slack Creation

Cyert & March (1963) defined organisational slack as the difference between the total resources available to the firm and the total necessary to maintain the organisation coalition. Later researchers have defined slack in the context of a budgetary process. Slack is regarded as part of the budgetary deviations between actual and standards intentionally created by the subordinates (Onsi, 1973; Birnberg et al., 1983; Merchant, 1985; Young, 1985; Chow et al., 1988; Dunk, 1993). Lau & Eggelton (1998) define slack as the “extent of intentional understatement of the subordinate’s performance capability built into the budget by the subordinate to make budgeted targets easier to attain,” (p. 5). This thesis employ the latter definition of slack creation.

Concept of Job Related Tension

Job related tension may be defined as “tension arising from psychologically stressful circumstances in the job environment” (Kenis, 1979, p. 55). Jamal (1985) similarly defines job stress as “an individual’s reactions to the characteristics of the work environment which appear threatening to the individual,” (p. 410). These definitions are adopted for job related tension in this thesis.

Hypotheses Development

High participatory environment in the Norwegian society

Just as common culture can exist in a society comprising individuals who vary in terms of personality, a common pattern of participation can occur in a certain cultural environment. Hence, some researchers argue that some societal cultures may promote a high participatory environment, whilst other societal cultures may promote a low participatory environment (Hofstede, 1980; Brownell, 1982b). For instance, Harrison (1992) suggests that societies with a low (high) power distance culture are likely to have high (low) participation among members of the societies. Lau & Buckland (1999) suggested that participatory environments are also likely to be influenced by the political, social and economic norms of societies.

Power distance occurs because of human inequalities in areas such as prestige, wealth and power, the extent of which is determined by the ways societies deal with such inequalities. High power distance societies are characterised by the importance and formalisation of such human inequalities, whereas low power distance societies emphasise dominance and stratification (Hofstede, 1980). As low power distance cultures generally deemphasise the importance of hierarchy in society, but stress the importance of equality and the sharing of power among members of the societies, participation in the affairs of the societies by all their members is expected to be the norm in low power distance cultures. Norway has a low power distance culture. In a study undertaken by Hofstede (1980), a power distance score of 31 was reported for Norway. A more recent study by Lau & Buckland (1999) reported an even lower score of minus 10. This suggests that participation among members of the Norwegian

society in the affairs of their groups and their organisations is likely to be high. Harrison (1992) suggests that individualism can also affect participation. Norway was reported to have an individualism score of 69 by both Hofstede (1980) and Lau & Buckland (1999). This moderate level of individualism score is unlikely to affect the high extent of participation in the Norwegian society brought about by its very low power distance culture, particularly the very low power distance score of minus 10 reported recently by Lau & Buckland (1999). Hence, it is probable that the Norwegian society is characterised by a *high* extent of participation, including budgetary participation, among members of the society.

The high participatory environment in Norway is also supported by its very centralised and formalised industrial relations systems which emphasise democratic work environment (Lau & Buckland, 1999). Norway has a very strong trade union movement, led by the powerful Landsorganisasjonen. The Landsorganisasjonen is very closely affiliated with the Norwegian Labour Party, the political party which has dominated the government in Norway for the past few decades and has given Norway a socialist government almost continuously since the 1930s. The consolidated position shared by the Landsorganisasjonen and the Norwegian Labour Party has enabled these two powerful bodies to introduce many pro-labour policies and legislation which enshrine the positions and power of the employees in their organisations. Hence, the Norwegian industrial relations systems are very formalised, whereby, much of the work environment is enshrined in legislations, such as the very comprehensive Work Environment Act passed by the Norwegian parliament in 1977.

Not only is the Norwegian work environment very formalised, it is also very democratic (Lau & Buckland, 1999). In a study of Norwegian and Swedish industrial relations systems, Johansen (1985, p. 6) noted that "Norway and Sweden have

developed a view of the technology which is different from the orthodox capitalist view of profit maximisation towards a *democratised* technology.” (Emphasis added). He further reported that since the 1960s, both Norway and Sweden have been involved “in the first systematic national effort in the world to change and *democratise* the quality of work life. These developments....strengthened trade union participation in technological change and *more humanistic and democratic* forms of work. ...By the 1980s, Norway and Sweden have become leaders in developing innovative and *democratic* approaches to the problems of ... work design: (emphasis added). Hence, Norwegian employees participate and involve themselves in all aspects of their organisations’ affairs up to the highest organisational level. There are legislations which provide employees with representation at their organisations’ board level. Norwegian organisations with more than 200 employees are also required by legislation to set up “Company Assemblies” with a third of their members elected by the employees. The “Company Assemblies” are powerful bodies with authority to cover most aspects of Norwegian working life (Johansen, 1985). Hence, it is possible to conclude that the Norwegian work environment is likely to be characterised by very high participatory environment, with employees enjoying a very high extent of participation in all the affairs of their organisations, including budgetary participation. Finally, as the Norwegian society is very homogeneous, in terms of ethnic background, religion, language and egalitarianism, participation is not only high, but also widespread among Norwegian managers. Based on the above discussion, the following hypothesis is tested:

H1 The extent of budgetary participation among Norwegian managers is high.

The effects of budget emphasis in high participatory environment

Prior studies suggest that matching budget emphasis with budgetary participation is crucial before beneficial behavioural outcomes such as lower job related tension could occur. Relying on operant conditioning and balance theory, Brownell (1982a) argued that a compatible match of high budget emphasis and high participation is needed to achieve improved behavioural outcomes. Since a high budget emphasis evaluative style links rewards to the achievement of budget targets, budget targets are therefore important to the subordinates. Participation is therefore important to the subordinates, possibly because participation improves subordinates' understanding of the budget target setting process and allows them to influence the levels of their budget targets. Brownell (1982a) found support for his expectation pertaining to managerial performance. Similar results pertaining to the beneficial consequences of a compatible match of budget emphasis and participation were found by a number of subsequent studies although in varying circumstances. These include Brownell & Hirst (1986), Brownell & Dunk (1991), Harrison (1992), Dunk (1993), Lau et al. (1995), Lau & Tan (1998), Lau & Eggleton (1998) and Lau & Buckland (1999). Such remarkable similarities in the results provide support for the expectation that a *high budget emphasis evaluative style* is likely to be associated with favourable behavioral outcomes, such as reduced job related tension and reduced propensity to create slack, and *in a high participatory environment*. Since it was previously hypothesised that the Norwegian culture promotes a high participatory environment, a high budget emphasis evaluative style in the high Norwegian participatory environment is likely to be associated with low job related tension and a low propensity to create slack.

The following hypotheses are therefore tested:

- H2.1 Budget emphasis is negatively associated with job related tension in the Norwegian high participatory environment.**
- H2.2 Budget emphasis is negatively associated with subordinates' propensity to create slack in the Norwegian high participatory environment.**

Relationships between variables in Model One (Figure 3.1)

Model One

The following sections provide the theoretical justification for the relationships between the variables examined in Model One (see Figure 3.1).

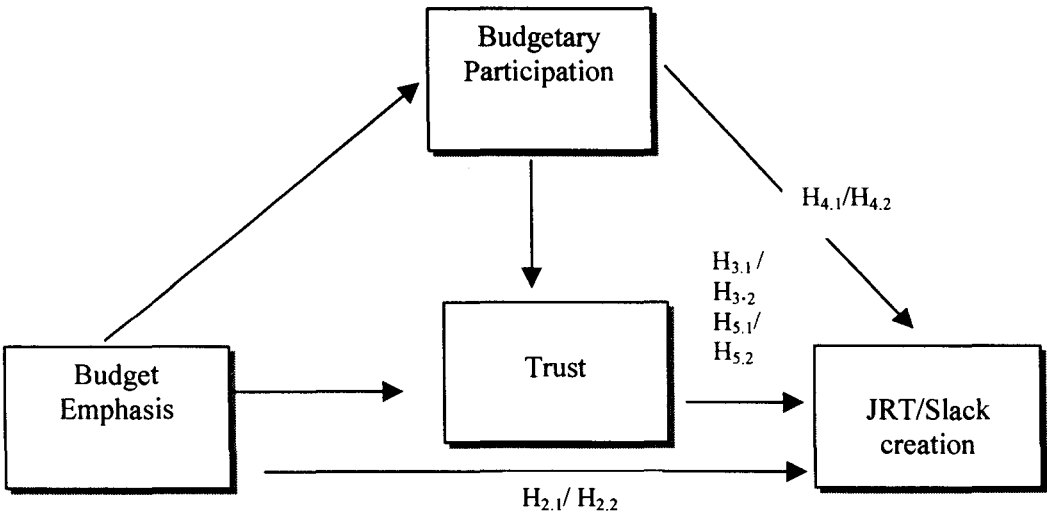


Fig. 3.1 Model one

(a) Budget emphasis and job related tension/propensity to create slack

Whilst prior studies have found remarkably consistent results pertaining to the beneficial behavioural consequences associated with a compatible combination of high budget emphasis and high participation, there has been little systematic investigation in the manner in which this combination is able to produce the desired behavioural outcomes. This gap in the literature provide the motivation for this study to systematically examine the intervening effects of omitted variables to explain why a compatible combination of high budget emphasis and high participation could lead to lower job related tension and propensity to create slack in a high participatory environment.

Support for the existence of omitted variables is found in the results of two of the earliest studies in this research area. Whilst Hopwood (1972) found a significant relationship between performance evaluative styles and job related tension, Otley (1978) was unable to find any significant results. Otley's failure to find a significant relationship between evaluative styles and job related tension strongly suggests that evaluative style by itself may have no *direct* effect on subordinates' attitudes. Since a significant finding was found in Hopwood's study, this significant finding is likely to be an *indirect* effect through some omitted intervening variables. Moreover, since the results ranges from significant (Hopwood's finding) to not significant (Otley's finding), they suggest that the omitted variables have a full mediation (Baron & Kenny, 1986) on the relationship between evaluative styles and job related tension/propensity to create slack. This thesis therefore proposes that there is no direct relationships between budget emphasis and job related tension/propensity to create slack. Instead, the relationships are indirect via trust and participation. The theoretical support for this expectation is provided below in sections (b), (c) and (d).

(b) Budget emphasis and trust

The link between trust and budget emphasis was first explored by Ross (1994) who found that budget emphasis interacted with trust to affect job related tension. He found trust to be significant in moderating the effects of budget emphasis on job related tension only with respect to the two evaluative styles (budget conscious and profit constrained) which rely on accounting performance measures, but not with respect to nonaccounting style.

This thesis proposes a positive relationship between budget emphasis and trust in the Norwegian high participatory environment. According to Ross (1994), subordinates are likely to be suspicious and apprehensive of a *nonaccounting* evaluative style. He described such a style as difficult to interpret as “the criteria associated with the nonaccounting performance evaluation style are somewhat subjective and therefore, may well be ambiguous and difficult to measure” and are subject to “a superior’s biases and idiosyncrasies” (p. 630). He further suggested that subordinates “may always have a nagging doubts as to the reasonableness of an evaluation based on subjective criteria.... The managers may, therefore, feel a lack of control over their ability to affect their evaluation”. In contrast, evaluative style based on accounting performance measures are likely to be much more acceptable to subordinates because such criteria were described by Ross (1994) as much more “objective” and “verifiable” than nonaccounting criteria. This means that nonaccounting evaluative styles are likely to be associated with greater mistrust than accounting based evaluative styles.

Empirically, Hopwood (1972, p. 173) found that trust was positively associated with the two criteria of “meeting the budget” and “concern with costs”, the two items he

used to measure accounting based criteria. He suggested that “this might reflect the fact that one purpose of a budget is to clearly set out the objectives for a cost centre. While this certainly cannot be done with perfect accuracy, it is possible to carefully and cautiously use the budget for this purpose and thereby add an important element of structure and clarity to the job environment.” He further suggested that “A *nonaccounting* evaluation, in particular, might be made on the basis of rather vague criteria: attitudes, the way the cost centre head handles his men, and effort. Whilst such criteria are important, they are surrounded by a great deal of uncertainty. It is difficult to clearly specify what constitutes good and bad performance, and a supervisor might find it difficult to determine when improvement occurs. In these circumstances, the budgetary systems offer one definite advantage. It attempts to express the unit’s objectives in a precise manner.” (p. 174). Within the Norwegian cultural environment, where high participation is common and widespread, a high budget emphasis evaluative style in Norway is similar to a high budget emphasis and high participation combination. As this is regarded as a desirable combination (Brownell, 1982a), it is likely to be received favourably by Norwegian managers. *Hence, it is possible to conclude that in a high participatory environment such as Norway, a high budget emphasis evaluative style is likely to be positively associated with trust.*

(c) Trust and job related tension/propensity to create slack

Trust is likely to be an important variable affecting job related tension and propensity to create slack. Zand (1972, p. 230) defines trust as “actions that (a) increase one’s vulnerability, (b) to another whose behaviour is not under one’s control, (c) in a situation in which the penalty (disutility) one suffers if the other abuses that vulnerability is greater than the benefit (utility) one gains if the other does not abuse the vulnerability.” Accordingly, a low trust environment is not conducive to open communication. Subordinates learn to bottle up their feelings and not to express them openly. Such a strained working environment is likely to lead to high job related tension. In contrast, when high trust exists, subordinates and their superiors are more willing to communicate with each other. They are also likely to be more willing to express their feelings and air their concerns and grievances more openly.

Trust is generally associated with the acceptance of each other decisions. Trust is crucial for the subordinates to accept their superiors’ decision and choices, such as the choice of evaluative styles. Trust will alleviate the consequences of choices. With trust, superior choices are accepted and agreed, leading to low job related tension. In contrast under low trust condition, suspicion is likely to lead to lack of agreement and apprehensive of the superiors’ decisions and choices. This is likely to lead to high job related tension. For instance, Ross suggested that “the level of job related tension that resulted from performance evaluation can be reduced by the development of trust held by subordinates for their superiors.” (p. 630).

In summary, trust is a prerequisite for a number of activities, such as communication, problem solving and decision making. In a high trust environment, all these activities can be undertaken with less apprehension and conflict as trust generally facilitates

such activities. With less conflict between subordinates and the superiors, subordinates' job related tension is likely to be reduced. Trust leads to greater acceptance of other views, greater consensus of opinions of the two parties and hence less disagreement and conflict (Merlinger, 1965). It is therefore possible to conclude that trust is negatively associated with job related tension. Similarly, in a high trust environment, subordinates are less likely to create budgetary slack. As Zand (1972) suggests,

“one who does not trust others will conceal or distort relevant information, and avoid stating or will disguise facts, conclusions and feelings that he believes will increase his exposure to others, so that the information he provides will be low in accuracy, comprehensiveness, and timeliness; and therefore have low congruence with reality” (p. 230).

Hence, it is also possible to conclude that trust is negatively associated with subordinates' propensity to create slack.

The discussion in section (a) suggests that budget emphasis is negatively related to job related tension/propensity to create slack in a high participatory environment. However, section (b) indicates that budget emphasis may also be positively related to trust. Trust, in turn, may be negatively related to job related tension/propensity to create slack (see Section (c)). These discussions therefore support the existence of an indirect effect of budget emphasis on job related tension/propensity to create slack through trust. Accordingly, the following hypotheses are tested:

H3.1 Budget emphasis has an indirect effect on job related tension through trust.

H3.2 Budget emphasis has an indirect effect on propensity to create slack through trust.

(d) Budget emphasis and participation

In addition to trust, it is plausible that budgetary participation may also be an intervening variable in the relationship between budget emphasis and job related tension. Prior studies suggest that high participation is needed to complement a high budget emphasis evaluative style (Brownell, 1982a, Brownell & Hirst, 1986). A high budget emphasis evaluative style places a heavy reliance on accounting performance measures such as budget targets (Hirst, 1981, 1983) as criteria for the evaluation of subordinates' performance. As performance evaluation is likely to be closely linked to the reward systems, performance evaluation criteria are likely to be of interest and concern to the subordinates since these criteria are likely to affect their rewards in terms of remuneration, bonuses and promotions. Consequently, they are likely to want to participate in the budget setting process so that they can understand how their budget targets are determined and also to influence the levels of these budget targets. Studies have also found that budgetary participation was associated with better performance as budgetary participation led to greater subordinates' acceptance of budget targets, which in turn, led to greater subordinates' internalisation of budget targets (Becker & Green, 1962). Since high participation is important to the subordinates in a high budget emphasis situation, it is highly likely that organisations using a high budget emphasis evaluative style will experience a greater willingness to a participative budgeting setting process. In contrast, if a low budget emphasis evaluative style is used, there would be less incentive for the subordinates to be overly concerned with the budget setting process. Consequently, budgetary participation is likely to be lower in a low budget emphasis situation than in a high budget emphasis situation. This expectation was supported by the results of Lau & Buckland (1999), who found a highly significant positive relationship between budget emphasis and participation among Norwegian managers. *The above discussion therefore suggests*

that a positive relationship exists between budget emphasis and budgetary participation.

(e) Budgetary participation and job related tension/propensity to create slack

Budgetary participation serves as a means of communication between the subordinates and their superiors. It allows the subordinates to exchange and seek information from their superiors, leading to a greater understanding of the budget setting process and other organisational affairs. It also permits the subordinates to air their grievances, to seek information for task completion (Brownell & Hirst, 1986), to ensure budget adequacy (Nouri & Parker, 1998), by incorporating their input on the amount of resources needed to successfully perform their tasks. Participation also permits the subordinate to influence their budget targets. All these benefits of participation are likely to lead to a greater extent of agreement on the evaluative style used, less suspicion and apprehension and therefore less stress and anxiety. *Consequently, it is plausible that high participation will lead to lower job related tension/propensity to create slack.*

In summary, based on the discussion above, it is plausible that budget emphasis is positively related to budgetary participation (see Section (d)). Budgetary participation, in turn, is likely to be negatively related to job related tension/propensity to create slack (see Section (e)). These relationships suggest that the effect of budget emphasis on job related tension/propensity to create slack as discussed in Section (a) may be *indirect* through participation. The following hypotheses are therefore tested:

H4.1 Budget emphasis has an indirect effect on job related tension through budgetary participation.

H4.2 Budget emphasis has an indirect effect on propensity to create slack through budgetary participation.

(f) Budgetary participation and trust

Budgetary participation is likely to promote a higher extent of trust between the subordinates and their superiors in a number of ways. First, budgetary participation opens up the budget target setting process to the subordinates' scrutiny. It makes the process transparent, thereby lowering subordinates' fear, apprehension, suspicion and mistrust of their superior's evaluative styles and ultimately their superiors. Related to these, participation permits the subordinates to understand how their budget targets are ascertained. Third, budgetary participation allows the subordinates to influence the level of their budget targets, leading to more accurate and realistic targets. Subordinates are more likely to trust the budget targets they are involved in setting than targets that are imposed on them by others. Fourth, budgetary participation provides the opportunity for the subordinates to communicate with their superiors, not only on budget-related matters, but also on other issues of concern to them. Finally, as the Norwegian society is generally highly receptive to high participation, high budgetary participation would be consistent with the societal norm. In conclusion, it is plausible that budgetary participation, which promotes an atmosphere of greater transparency, open and frank communication and is consistent with the cultural norm, is likely to be associated with a greater feeling of trust between Norwegian managers and their superiors. *This suggests a positive association between budgetary participation and trust.*

Note that it was previously discussed in Section (e) that budgetary participation is likely to be negatively related to job related tension. Since Section (f) indicates that budgetary participation is also likely to be positively related to trust, and trust, in turn, may be negatively related to job related tension/propensity to create slack (see Section (c)), it is possible to conclude that the effect of budgetary participation on job related

tension/propensity to create slack may be mediated by the intervening effect of trust.

Accordingly, the following hypotheses are tested:

H5.1 Budgetary participation has an indirect effect on job related tension through trust.

H5.2 Budgetary participation has an indirect effect on propensity to create slack through trust.

Relationships between variables in Model Two (Figure 3.2)

Model Two

The following sections provide the theoretical justification for the relationships between the variables examined in Model Two (see Figure 3.2).

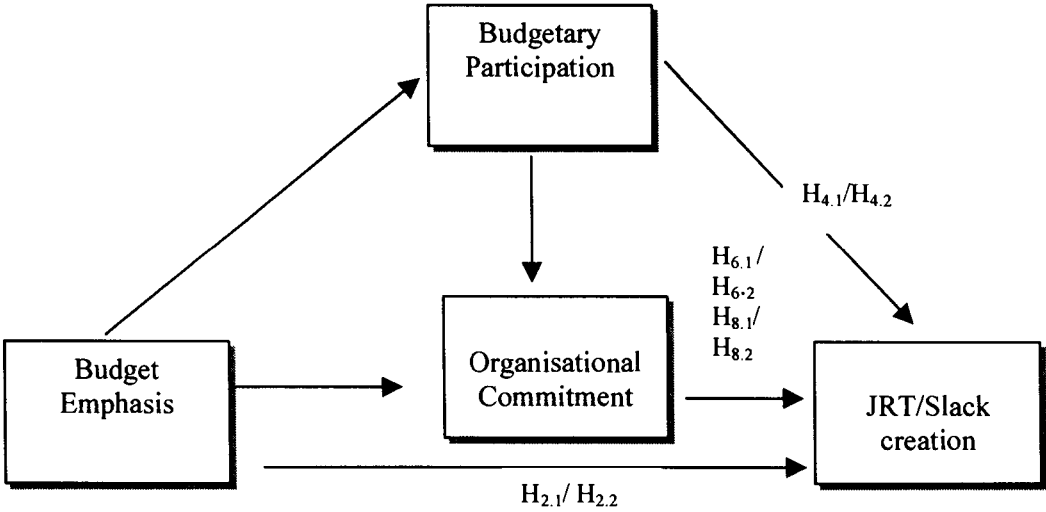


Fig. 3.2 Model two

The relationship between budget emphasis and budgetary participation

The expected hypothesised relationship between budget emphasis and budgetary participation discussed for the previous model, model one (see Section d), will apply to model two.

(g) The relationship between budgetary participation and organisational commitment

This thesis proposes a positive relationship between budgetary participation and organisational commitment for a number of reasons. First, budgetary participation enables the subordinates to understand the budget setting process. It also enables the subordinates to directly affect the budgets and/or budget setting process to their organisation's benefit. It is plausible that a better understanding and higher appreciation of the organisational goals will lead to a higher level of commitment by the subordinates towards their organisations.

Additionally, as budgetary participation enables the subordinates to influence decisions directly affecting them, it enhances their feeling of importance, of being valued and appreciated by their organisations. Participation also improves the relationship between the subordinates and the superior, as both parties have to make an effort to communicate, and thereby understand each other. To sum up, participation may generate more satisfied employees who may then feel more committed to their organisations.

The importance of participation in enhancing individuals' commitment to their organisations is also argued by Hanson (1966) who suggests that subordinates' participation in the budget setting process will give the subordinates a better identification with both budget objectives and organisational goals than subordinates who do not participate. Similarly, Ouchi (1981) points out that for those organisations with employees experiencing high commitment, the decision-making process is largely a participatory one. Other prior studies also support a relationship between organisational commitment and participation. For instance, Angle & Perry (1981) suggest that employees' contributions to the organisation can be in two general forms, with participation as one of them. Another example of the importance of participation in decision-making was found by Rhodes & Steers (1981), who hypothesised that perceived participation in decision-making is greater for worker-owners in cooperatives than for employees in conventional firms, as worker-owners are likely to be more committed to their organisations than employees in conventional firms. This suggests a relationship between participation and organisational commitment.

Welsch & LaVan (1981) and DeCotiis & Summers (1987) also report a positive link between employee participation and organisational commitment. Welsch & LaVan found that participation in the decision-making process and clear downward communications were directly linked to cohesiveness, referred to the sense of teamwork, which in turn affects organisational commitment "through the individual's understanding of the organizations' goals and values and through his or her role involvement." (p. 464).

Finally, a recent paper by Nouri & Parker (1998), where they tested both direct and indirect links between budget participation, organisational commitment and job performance provides further support for a significant relationship between budget

participation and organisational commitment. Based on the above discussion, *it is plausible that there is a positive direct relationship between budgetary participation and organisational commitment* (see model two in Fig. 3.2).

(h) The relationship between organisational commitment and job related tension/propensity to create slack

This thesis suggests that organisational commitment is likely to have an impact on subordinates job related tension and propensity to create slack. Subordinates who feel committed to their organisation are likely to identify themselves with the organisation's goals and values, and may thus better appreciate and work towards these goals at his/hers best effort. Since job related tension and propensity to create slack are mainly associated with dysfunctional side effects, it is probable that strongly committed subordinates are likely to have lower job related tension and propensity to create slack.

This proposition is supported by Nouri (1994) who examined the relationship between organisational commitment and job involvement and their effects on managers' propensity to create slack. He argued that "managers who are highly committed to organizational goals and values should have low levels of propensity to create budgetary slack because they understand the dysfunctional impacts of budgetary slack on the organisation" (p. 291). *It is therefore proposed in this thesis that organisational commitment and job related tension/propensity to create slack are negatively related.*

(i) The relationship between budget emphasis and organisational commitment

A positive relationship between budget emphasis and organisational commitment is hypothesised in this thesis for a number of reasons. First, budget emphasis is accounting based. As discussed previously, Hopwood (1972) identified three different performance evaluative styles, budget constrained (BC), profit conscious (PC) and non accounting (NA). The budget constrained and profit conscious styles are characterised by a high reliance on accounting performance criteria. The non accounting management styles allow for a more flexible use of a wider range of performance criteria for longer-term objectives (Briers & Hirst, 1990). As an accounting based evaluation criteria involves clarity and objectivity it is plausible that the subordinates may be more satisfied with a performance evaluation style that contains no ambiguity. In other words, they would appreciate a high budget emphasis evaluative style. When the subordinates feel they are being evaluated with a clear and fair system they are likely to be more committed to the organisation.

There is some support from prior literature that superiors' evaluative style is related to organisational commitment. For instance, Hanson (1966) suggests that "the more closely an individual identifies himself with budget goals, the more appropriate will be his responses to the budget." (p. 241). As budgets reflect organisational goals, identification with budget goals is also likely to increase the subordinates' identification with organisational goals. Similarly, Collins et al. (1995) found in their study of not-for-profit organisations that superiors' evaluative style was directly related to organisational commitment.

Finally, budget emphasis is normally accompanied with budgetary participation. By allowing participation in the budgetary setting procedures the subordinates will be

motivated to work harder to meet those goals. Also, the subordinates may feel that their words and effort are being recognised and appreciated. *It is therefore plausible that budget emphasis will enhance subordinates' organisational commitment.*

Indirect effect on budget emphasis on job related tension/propensity to create slack through organisational commitment

Based on the discussion in Section (a) (Budget emphasis and job related tension/propensity to create slack), Section (i) (Budget emphasis and organisational commitment) and Section (h) (Organisational commitment and job related tension/propensity to create slack) the following hypotheses are tested:

- H6.1 Budget emphasis has an indirect effect on job related tension through organisational commitment.
- H6.2 Budget emphasis has an indirect effect on propensity to create slack through organisational commitment.

Indirect effect of budget emphasis on job related tension/propensity to create slack through budgetary participation

Based on the discussion in Section (a) (Budget emphasis and job related tension/propensity to create slack), Section (d) (Budget emphasis and budgetary participation), Section (g) (Budgetary participation and organisational commitment) and Section (h) (Organisational commitment and job related tension/propensity to create slack), the following hypotheses are tested:

- H7.1 Budget emphasis has an indirect effect on job related tension through budgetary participation.

H7.2 Budget emphasis has an indirect effect on propensity to create slack through budgetary participation.

Indirect effect of budgetary participation on job related tension/propensity to create slack through organisational commitment

Based on the discussion in Section (e) (Budgetary participation and job related tension/propensity to create slack), Section (g) (Budgetary participation and organisational commitment) and Section (h) (Organisational commitment and job related tension/propensity to create slack) it is plausible to conclude that budgetary participation has an indirect effect on job related tension/propensity to create slack through organisational commitment. Accordingly, the following hypotheses are tested:

H8.1 Budgetary participation has an indirect effect on job related tension through organisational commitment.

H8.2 Budgetary participation has an indirect effect on propensity to create slack through organisational commitment.

Conclusion

A total of eight sets of hypotheses are developed in this chapter. The results of the hypothesis tests will be reported in Chapter 5.

CHAPTER 4

Methodology

Introduction

This chapter presents the methods used in this thesis. A description of the data collection is provided followed by the justification for the selection of the nation, organisations and respondents. Lastly, a description and justification for the measurement instruments used to measure the variables in this thesis are presented.

Data collection

Data were collected by the use of a questionnaire, which was sent to 300 functional heads from 150 manufacturing companies selected randomly from the manufacturing industry in Norway. Since the measurement instruments adopted for this thesis are written in English, and since English is not a widely spoken language in Norway, the measurement instruments were translated into Norwegian.

The selection of a nation

The survey was based on the Norwegian manufacturing industry. Culturally Norway fits into the same category as nations belonging to the Anglo-American block, for

instance, Australia, U.K, and the U.S.A. with regard to the power distance and individualism dimensions (Hofstede, 1984). It is clustered with the other two Scandinavian countries, Denmark and Sweden, enabling the results of this thesis to be generalisable to Scandinavia as a whole.

Selection of organisations

The selected organisations are manufacturing companies in Norway, as the use of budgets is fairly common in such companies. These organisations (a total of 100) were randomly selected from Kompass Norway (1998). Only organisations with a minimum of one hundred employees were selected to ensure that only relatively large organisations were selected. Large organisations were used as large organisations are more likely to rely on formal rather than informal budgetary control systems.

Selection of respondents

Respondents were selected from the company's work functional units to ensure that the respondents were responsible for an identifiable department of the organisation for which budgets are set, whether in profit terms, sales volume, revenue or cost terms (Harrison, 1992, p. 110-111). Functional heads from three different functional areas were selected to represent three different work units. The functional heads were mostly department managers from the functional areas of marketing, finance,

personnel departments, and production. The names of the functional heads were obtained from Kompas Norway 1998.

The administration of the questionnaires was carried out in June 1998. The selected respondents were sent a questionnaire together with a covering letter explaining the objectives of the research, and a prepaid addressed envelope. A follow up by telephone to those respondents who had not replied was undertaken three weeks after the date the questionnaires were mailed. Appendix A presents the covering letter to the respondents.

Translation of questionnaire

Both the Norwegian and the English versions of the instruments used in this thesis are presented in Appendix B. The process of translating the questionnaire from English to Norwegian involved three separate steps. First, the author of this thesis (who is a Norwegian) translated the questionnaire from English to Norwegian. Second, a Norwegian professor of management at an Australian university translated the Norwegian version of the questionnaire back to English. The last step involved a cross-check of the latter English version with the original English version of the questionnaire to ensure that the translation was accurately undertaken.

Measurement instruments

The following describes and justifies the choice of instruments used for measuring the independent variables of budget emphasis, budgetary participation, organisational commitment and trust, and the dependent variables of propensity to create slack and job related tension.

Budget emphasis

Budget emphasis was measured by Hopwood's (1972) instrument. His original instruments contained the following items:

1. Co-operation with colleagues
2. Concern with costs
3. How well the subordinate gets along with the superior
4. Concern with quality
5. Meeting the budget
6. Attitude towards work and company
7. Ability to handle employees

Later researchers made some modifications to Hopwood's instrument. Brownell and Hirst (1986) added three new items to the list, by dividing "attitude towards work and company" into two items, and adding a new item "how well I cooperate with individuals outside the firm". This modified version was used in this thesis.

Based on Brownell's (1982) comment that many of his respondents failed to complete the questionnaire adequately when they were asked to rank the items, the rating form instead of the ranking form was used in this study. The rating allows the evaluative

styles to be measured as a continuum (Otley, 1978; Govindarajan, 1984; Brownell and Dunk, 1991; Harrison, 1992).

The two accounting based items: "Concern with costs" and "Meeting the budget" were used to measure budget emphasis. The item "Meeting the budget" was intended to be linked to situations when a cost center head's performance is evaluated based on the cost center head's ability to "continually meet the budget on a *short term* basis" (Hopwood, 1972, p. 160) (emphasis added). The item "concern with costs" was intended to measure the "unit's operations in relation to the *long-term* purpose of the organization" (Hopwood, 1972, p. 160) (emphasis added). Harrison (1992, 1993) modified Hopwood's item "Meeting the budget" to "My ability to meet budgeted targets in the short run", and the item "Concern with costs" to "My long run concern with cost and/or revenues." These were also adopted in this study.

A high combined score of these two items indicates high budget emphasis and a low combined score indicates a low budget emphasis. The 10-item list is numbered A1 to A10 in the questionnaire in Appendix B.

Budgetary participation

Budgetary participation was measured by Milani's (1975) instrument and are numbered D1 to D6 in Appendix B. A 7-point Likert scale was used. The scale is additive as the participation score is obtained by adding the scores of all six items. The scale has been tested and used extensively in a number of previous studies (eg. Brownell, 1982, 1985; Brownell and Hirst, 1986; Brownell and Dunk, 1991; Harrison, 1992; Lau et al., 1995, 1997; Lau & Tan, 1998). Their results of the internal consistency of the instrument have shown satisfactory Cronbach alpha values.

Trust

Trust was measured by a four-item instrument developed by Zand (1972). As Zand conducted his research based on interviews and case settings, the questions regarding the evaluation of trust between a subordinate and a superior were set out in a questionnaire form with a 7-point Likert scale ranging from "strongly disagree" to "strongly agree". The questions include "You have learned from your experiences during the past two years that you can trust the other members of top management", and "You and the other top managers openly express your differences and your feelings of encouragement or of disappointment." The questions are numbered C1 to C4 in Appendix B.

Organisational Commitment

The instrument developed by Mowday et al. (1979) to measure organisational commitment was used. It is a nine-item short-form scale assessed on a seven-point Likert scale. It includes items like, "I found that my values and the organisation's values are very similar" and "I really care about the fate of this organisation." Prior studies have reported satisfactory levels of reliability and validity for this scale (Price & Muller, 1981; Blau, 1987; Nouri & Parker, 1996, 1998).

Propensity to create slack

There are two instruments to measure slack, namely, Dunk's (1993) four-item instrument and Onsi's (1973) four-item instrument. The latter measures the subordinate's propensity to create slack, which focuses more on the subordinate's attitude towards slack creation.

The measurement instrument developed by Onsi (1973) was adopted in this thesis for a number of reasons. First, it has been widely used in prior studies with satisfactory levels of internal reliability (e.g., Merchant, 1985, Nouri, 1994; Nouri & Parker, 1996; Lal et al., 1996, Lau & Eggleton, 1998). Second, the instrument also implicitly measures subordinates' intention to create slack, which is more consistent with the definition of slack adopted in this thesis. Moreover, the instrument developed by Dunk (1993) does not distinguish between slack created by superiors and slack created by the subordinates, nor does it measure the subordinate's intentions to create slack (Lau & Eggleton, 1998). The questions pertaining to propensity to create slack are numbered H1-H4 in Appendix B.

Job Related Tension

Job-related tension is defined as *tension arising from psychologically stressful circumstances in the job environment*. There is an instrument known as Job Related Tension index developed by the Institute for Social Research at the University of Michigan to measure this variable. This index comprises 15 questions with a 7-point scale. Since tension is stress-related in the work environment, the questions are related to the individual's feelings towards his/hers working environment. For instance, respondents are asked if they feel that they have enough authority, responsibilities, opportunities, openness towards colleagues, independence etc. The 7-point Likert scale ranges from "Very seldom" to "Almost all the time" to express how often the individual is bothered by work situations in the daily work routine.

A number of prior researchers have also used this job-related tension index, including Hopwood (1972), Otley (1978), Bottger & Hirst (1988), Hirst (1983), Brownell & Hirst (1986), Harrison (1992). The questions are numbered K1-K15 in Appendix B.

Conclusion

The instruments for measuring the variables used in this thesis are included in Appendix B. The instruments for all variables except for trust have been used extensively in managerial accounting research. The next chapter will present the results of the reliability and validity tests for these instruments.

CHAPTER 5

Results

Introduction

This chapter presents the results of this study. First, it presents the response rate of the questionnaire survey and the demographic data of the respondents. Then the descriptive statistics of the variables measured and an assessment of the internal reliability of the instruments used. This is followed by the results of the factor analysis for construct validity, tests for adequacy of the regression models used and a correlation matrix for the independent and dependent variables. Lastly, the results of the hypothesis tests are presented.

Response Rate

Three hundred questionnaires were mailed to respondents from 100 manufacturing companies located in Norway. A total of 132 questionnaires were returned, yielding a response rate of 44 %. Out of the 132 returned questionnaires, 12 responses were excluded from the study as they failed to complete the questionnaire fully. This leaves the study with 120 usable responses. The nonresponse test suggested by Oppenheim (1966) indicate that there were no significant differences between early and late responses. Hence, nonresponse bias was not present.

Demographic Data

The mean age of the respondents was 52.3. On average, the respondents had held their current positions for 5.4 years. The number of years of experience in their present area of responsibility averaged to 12.1 years. The mean number of employees in their areas of responsibility was 185, and the mean number of employees in their companies was 1,205. In addition, the demographic data also indicate that the respondents were generally highly educated, as 95% of the respondents had tertiary qualifications.

Factor Analysis for Construct Validity

To test the variables for construct validity, the factor analysis principle components method was used. The method addresses the problem of analysing the structure of the inter-relationship among a large number of variables by defining a set of common underlying dimension (Hair, et al., 1995). The variables tested for construct validity were budgetary participation, organisational commitment, trust, propensity to create slack and job related tension. The following Tables 5.1, 5.2, 5.3, 5.4, and 5.5 present the results of the factor analyses, which show the rotated factor matrix, the Eigenvalue of each factor and the percentage of total variance explained.

Table 5.1

Factor Analysis of Budgetary Participation

Items	Factor	Factor
	1	2
1 What is the extent of your involvement in the setting of your area of responsibility's budget?	0.729	-0.362
2 What is the extent of the reasoning given by your superior for revision to your budget?	0.584	0.610
3 How frequently do you give your opinions to your superior about the budget?	0.616	0.356
4 What is the extent of your influence on the final budget for your area of responsibility?	0.727	-0.419
5 What is the degree of importance of your contribution to the budget?	0.814	-0.344
6 How frequently are you asked for your opinions when the budget is being set by your superior?	0.733	0.373
<hr/>		
% of variance explained	49.69%	17.70%
Eigenvalue	2.981	1.062

As all the six items show satisfactory loadings, including item (2) (0.584) which also loaded on second factor, in the first factor, the scores of all the six items were summed and used as the overall score for budgetary participation.

Table 5.2

Factor Analysis of Organisational Commitment

Items	Factor	Factor
	1	2
1 I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful.	0.546	-0.356
2 I talk up this organisation to my friends as a great organisation to work for.	0.770	-0.174
3 I would accept almost any type of job assignment in order to keep working for this organisation.	0.187	0.823
4 I find that my values and this organisation's values are very similar.	0.735	0.286
5 I am proud to tell others that I am part of this organisation.	0.753	-0.180
6 I really care about the fate of this organisation.	0.538	-0.439
7 For me, this is the best of all possible organisations for which to work.	0.724	0.339
8 This organisation really inspires the very best in me in the way of job performance.	0.802	0.048
9 I am extremely glad that I chose this organisation to work for over others I was considering at the time I joined.	0.795	0.065
<hr/>		
% of variance explained	45.79%	14.03%
Eigenvalue	4.12	1.26

One item (number 3) loads on a second factor. Hence, for this thesis, only the scores of the eight items (excluding item 3) were summed and used as the overall score for organisational commitment. ¹

Table 5.3

Factor Analysis of Trust

Items	Factor loadings
1 You have learned from your experience during the past two years that you can trust the other members of top management.	0.840
2 You and the other top managers openly express your differences and your feelings of encouragement or of disappointment.	0.862
3 You and the others share all relevant information and freely explore ideas and feelings that may be in or out of your defined responsibility.	0.849
4 The result has been a high level of give and take and mutual confidence in each other's support and ability.	0.735
% of variance explained	67.8 %
Eigenvalue	2.71

With respect to trust, all four items loaded satisfactory on a single factor. Hence all four items were included in the measurement of trust.

Table 5.4

Factor Analysis of The Propensity to create Slack

Items	Factor	Factor
	1	2
1 In good business times, my superior is willing to accept a reasonable level of slack in my budget.	0.584	-0.547
2 Slack in the budget is good to do things that cannot be officially approved.	0.647	-0.418
3 To protect himself/herself, a responsibility centre manager submits budgets that can safely be attained.	0.666	0.376
4 To be safe, a responsibility centre manager sets two levels of budgets: one between himself/herself and his/her subordinates, and another between himself/herself and his/her superior.	0.647	-0.418
% of variance explained	36.71%	26.29%
Eigenvalue	1.47	1.05

All the items of the variable propensity to create slack have a satisfactory factor loading in factor 1. Even though the reliability value (Cronbach alpha) is not satisfactory (see Table 5.6), this instrument is used for a number of reasons. First, this instrument developed by Onsi (1973), is a relatively well established instrument used by almost all survey studies on slack (e.g. Merchant, 1985; Govindarajan, 1986; Nouri, 1994; Nouri & Parker, 1994; Lal, Dunk & Smith, 1996; Lau & Eggleton, 1998). Second, all prior studies, except Posadas & Mia (1995), which used this instrument had reported satisfactory reliability and validity. Third, the Cronbach alpha of this study is not improved with the deletion of any item from this variable. Finally, as stated by Hair, Anderson, Tathan & Black (1995, p. 388) "the comparison of two or more factor model results has always been problematic". Many causes, such as the sample size and choice of factor analysis techniques, could influence the results.

Hence, the reliability of factor analysis results from any single analysis is always questionable and not always dependable (Hair, Anderson, Tathan & Black, 1995, p. 405). Nevertheless, given the low Cronbach alpha, care should be exercised in interpreting the results relating to this variable.

Table 5.5

Factor Analysis of Job related tension

Items	Factor			
	1	2	3	4
1 Feeling that you have too little authority to carry out the responsibilities assigned to you.	0.684	0.224	-0.327	0.276
2 Being unclear on just what the scope and responsibilities of your job are.	0.619	0.184	-0.435	0.279
3 Not knowing what opportunities for advancement of promotion exist for you.	0.642	0.225	0.033	-0.510
4 Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary work day.	0.678	-0.507	0.007	-0.084
5 Thinking that you'll not be able to satisfy the conflicting demands of various people over you.	0.740	-0.349	-0.075	0.028
6 Feeling that you are not fully qualified to handle your job.	0.501	0.198	0.508	0.196
7 Not knowing what your superior thinks of you, how he or she evaluates your performance.	0.669	0.300	-0.123	-0.159
8 The fact that you can't get information needed to carry out your job.	0.658	0.225	-0.062	0.166
9 Having to decide things that affect the lives of individuals, people that you know.	0.340	-0.150	0.627	0.455
10 Feeling that you may not be liked and accepted by the people you work with.	0.512	0.443	0.403	-0.296
11 Feeling unable to influence your immediate superior's decisions and actions that affect you.	0.717	0.248	-0.159	0.073
12 Not knowing just what the people you work with expect of you.	0.701	0.153	0.149	-0.131
13 Thinking that the amount of work you have to do may interfere with how well it gets done.	0.768	-0.358	-0.103	0.106
14 Feeling that you have to do things on the job that are against your better judgement.	0.680	-0.304	0.073	0.089
15 Feeling that your job tends to interfere with your family life.	0.483	-0.490	0.018	-0.420

% of variance explained	40.47	9.716	7.995	6.837
Eigenvalue	6.072	1.457	1.199	1.026

The factor analysis results on job related tension indicate four factors are extracted. However, all items, with the exemption of item (9) loaded satisfactorily on Factor 1. Hence, the scores of the fourteen items (excluding item 9) were summed and used as the overall score for organisational commitment. Item number 15 was included in the summation as the factor loadings of (0.483) is very close to 0.5. ²

Descriptive Statistics and Scale Reliability Measures

Table 5.6 presents the descriptive statistics for the independent and dependent variables measured in this thesis. The table also includes an assessment of the internal consistency of the measurements of the applicable variables.

Table 5.6

Descriptive Statistics and Cronbach Alphas for both Independent and Dependent Variables

	Mean	Standard Deviation	Theoretical Range Min Max		Actual Range Min Max		Cronbach Alpha
Budget Emphasis	11.367	1.878	2	14	5	14	n/a
Budgetary							
Participation	36.420	4.630	6	42	14	42	0.79
Organisational							
Commitment	45.612	5.920	8	56	26	56	0.86
Trust	21.858	4.193	4	28	4	28	0.84
Slack	11.892	3.622	4	28	4	21	0.42
Job Related Tension	34.117	10.901	14	98	14	74	0.89

The Cronbach alpha for budgetary participation, organisational commitment, trust and job related tension were 0.79, 0.86, 0.84, and 0.89 respectively, thus indicating high internal consistency. In contrast, the Cronbach alpha for propensity to create slack was relatively low at only 0.42. The instrument for propensity to create slack is Onsi's (1973) four item instrument. Prior studies have reported satisfactory Cronbach alpha statistics for this instrument, (eg., 0.7 for Merchant, 1985; 0.75 for Nouri, 1994; 0.75 for Nouri & Parker, 1996; 0.74 for Lal et al., 1996; 0.62 for Lau & Eggleton, 1998). The low score obtained for this variable in this thesis may pose as a limitation to the reported results.

Test for Adequacy of Models

Regression models were used for testing the hypotheses of this thesis. Before commencing on tests of hypotheses, it was important to test if the models chosen to analyse the data were appropriate and valid. The analysis of the residuals would determine the validity of the assumptions of the analytical models used. The assumptions are that the underlying relationships between the dependent and independent variables are approximately linear, and that the error terms are independently and normally distributed with mean zero and variance σ (Montgomery and Peck, 1982, p. 57).

The normal probability plot of the residuals is a common test for normality, which compares the cumulative distribution of actual data values with the cumulative distribution of a normal distribution (Hair, et al., 1995). Appendix D shows the normal probability plots of the residuals of the regression models used in this thesis. As the normal probability plots show relatively straight lines for all models, it can be concluded that the normality assumption was not violated in this study. These results indicate that the linear regression models used in this thesis were adequate as the assumptions of the models were satisfied by the data. Thus, the analysis of the hypotheses using the regression models could be undertaken with confidence.

Pearson Correlation Matrix for Independent and Dependent Variables

Table 5.7 shows the correlation coefficients using the Pearson pairwise correlations between the independent variables of budget emphasis, budgetary participation, organisational commitment, and trust, as well as the dependent variables of the propensity to create slack and job related tension.

Table 5.7

**Pearson Correlation Matrix for Independent and Dependent Variables
(standardised)**

		x ₁	x ₂	x ₃	x ₄	x ₅	x ₆
x ₁	Budget Emphasis	1.000					
x ₂	Budgetary Participation	0.341**	1.000				
x ₃	Trust	0.399**	0.291**	1.000			
x ₄	Organisational Commitment	0.127	0.316**	0.449**	1.000		
x ₅	Job Related Tension	-0.303**	-0.375**	-0.495**	-0.477**	1.000	
x ₆	Propensity to create slack	-0.204*	-0.018	-0.288**	-0.140	0.296**	1.000
**	p < 0.01 (2-tailed)						
*	p< 0.05 (2-tailed)						

Hypotheses to be tested

The hypotheses formulated in chapter 3 are as follows:

- H₁: The extent of budgetary participation among Norwegian managers is high.
- H_{2.1}: Budget emphasis is negatively associated with job related tension in the Norwegian high participatory environment.
- H_{2.2}: Budget emphasis is negatively associated with subordinates' propensity to create slack in the Norwegian high participatory environment.

Model One:

- H_{3.1}: Budget emphasis has an indirect effect on job related tension through trust.
- H_{3.2}: Budget emphasis has an indirect effect on propensity to create slack through trust.
- H_{4.1}: Budget emphasis has an indirect effect on job related tension through budgetary participation.
- H_{4.2}: Budget emphasis has an indirect effect on propensity to create slack through budgetary participation.

H_{5.1}: Budgetary participation has an indirect effect on job related tension through trust.

H_{5.2}: Budgetary participation has an indirect effect on propensity to create slack through trust.

Model Two:

H_{6.1}: Budget emphasis has an indirect effect on job related tension through organisational commitment.

H_{6.2}: Budget emphasis has an indirect effect on propensity to create slack through organisational commitment.

H_{7.1}: Budget emphasis has an indirect effect on job related tension through budgetary participation.

H_{7.2}: Budget emphasis has an indirect effect on propensity to create slack through budgetary participation.

H_{8.1}: Budgetary participation has an indirect effect on job related tension through organisational commitment.

H_{8.2}: Budgetary participation has an indirect effect on propensity to create slack through organisational commitment.

Results for Hypothesis H1

Before other hypotheses were tested, it was necessary to ascertain if the Norwegian environment was associated with high participation as hypothesised in hypothesis H1, which states that the extent of budgetary participation among Norwegian manager is high. Table 5.6 indicates that the *theoretical* range of participation is from 6 to 42. The *actual* mean participation score is 36.42 out of a maximum of 42. This actual mean is considerably higher than the theoretical mean of 24. The actual minimum score of 14 is also considerably higher than the theoretical minimum of 6.

Table 5.8 also presents the descriptive statistics of budgetary participation as measured by the Milani instrument by some of the prior studies in this research area undertaken in different countries. Note that mean participation score of 36.42 for Norway in this study is much higher than those found in other countries, including the U.S.A., Singapore and Australia. The standard deviation of 4.63 for the Norwegian managers' participation scores is also smaller than those of the other countries. Finally, the range of 28 is also small relative to those of the other countries. Overall, the results in Tables 5.6 and 5.8 support the expectation that Norway has a high participatory environment. Hypothesis H1 is therefore supported.

Table 5.8

Descriptive statistics of Participation scores with Milani's instrument

Studies	Mean	Std dev	Min	Max	Range
Norway (Present study)	36.42	4.63	14	42	28
USA (Nouri & Parker, 1998)	28.18	6.69	6	40	34
Singapore (Lau et al., 1995)	30.65	7.63	6	42	36
Australia & Singapore (Harrison, 1992)	26.87	8.28	7	42	35
Australia (Brownell & Dunk, 1991)	31.21	7.49	6	42	36
Australia (Brownell & Hirst, 1986)	27.04	8.95	6	42	36
Australia (Brownell 1982a)	25.79	7.10	13	39	26

Results for Hypotheses H2.1 and H2.2 (Budget emphasis and job related tension/propensity to create slack)

The zero-order correlations between the variables examined in this thesis are presented in Table 5.7. The results indicates that budget emphasis is significantly and negatively associated with job related tension ($r = -0.303$; $p < 0.01$), and with propensity to create slack ($r = -0.204$; $p < 0.05$). Hypothesis H2.1, which states that budget emphasis is negatively related to job related tension, and hypothesis H2.2, which states that budget emphasis is negatively associated with propensity to create slack in the Norwegian high participatory environment, are both supported.

Path Analytical Model for Hypotheses H3 - H8

A path analytic technique was used to test the hypothesised relationships for hypotheses H3 to H8. This technique allows the examination of the direct, indirect and spurious effects (Duncan, 1966; Alwin & Hauser, 1975; Asher, 1983; Greene, 1977; Lewis-Beck, 1980). The path models used in the analysis correspond to the theoretical models in Fig. 3.1 and 3.2. These models show the links between the variables where each variable has a path coefficient that measures the number of standard deviations of j associated with a one standard deviations change in i . For example, the path coefficient for the link between budget emphasis and budgetary participation indicates the increase in budget emphasis, measured in the number of standard deviations, associated with a one standard deviation increase in budgetary participation (Nouri & Parker, 1998, p. 473).

The values for path coefficients were estimated using regression and correlation analysis, where the path coefficient is the standardised beta coefficient found by regressing the outcome variable on the appropriate variables (Asher, 1983). The following equations represent the structural models examined:

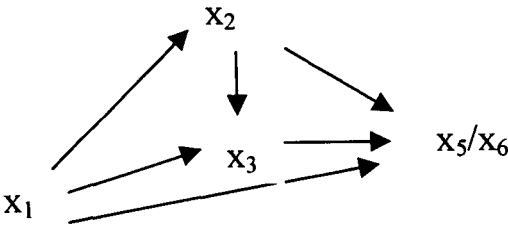
Model One (1a) JRT and Model One (1b) PTCS

$$x_2 = P_{21}x_1 + P_{2a}R_a \tag{1a}$$

$$x_3 = P_{32}x_2 + P_{31}x_1+ P_{3b}R_b \tag{2a}$$

$$x_5 = P_{51}x_1 + P_{52}x_2 + P_{53}x_3 + P_{5c}R_c \tag{3a}$$

$$x_6 = P_{61}x_1 + P_{62}x_2 +P_{63}x_3 + P_{6d}R_d \tag{4a}$$



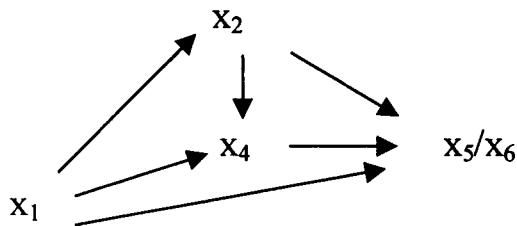
Model Two (2a) JRT and Model Two (2b) PTCS

$$x_2 = P_{21}x_1 + P_{2a}R_a \quad (1b)$$

$$x_4 = P_{42}x_2 + P_{41}x_1 + P_{4b}R_b \quad (2b)$$

$$x_5 = P_{51}x_1 + P_{52}x_2 + P_{54}x_4 + P_{5c}R_c \quad (3b)$$

$$x_6 = P_{61}x_1 + P_{62}x_2 + P_{64}x_4 + P_{6d}R_d \quad (4b)$$



where x_1 = budget emphasis

x_2 = budgetary participation

x_3 = trust

x_4 = organisational commitment

x_5 = job related tension

x_6 = propensity to create slack

P_{ij} = the standardised partial regression coefficients (path coefficient)

R_i = the standardised residuals

Hypotheses H3.1 and H4.1 (Indirect effect of budget emphasis on job related tension via trust and participation)

This section presents the results of the hypotheses tests for hypotheses 3.1 and 4.1 of *model 1 (a)*.

Trust and Job related tension (Model 1a)

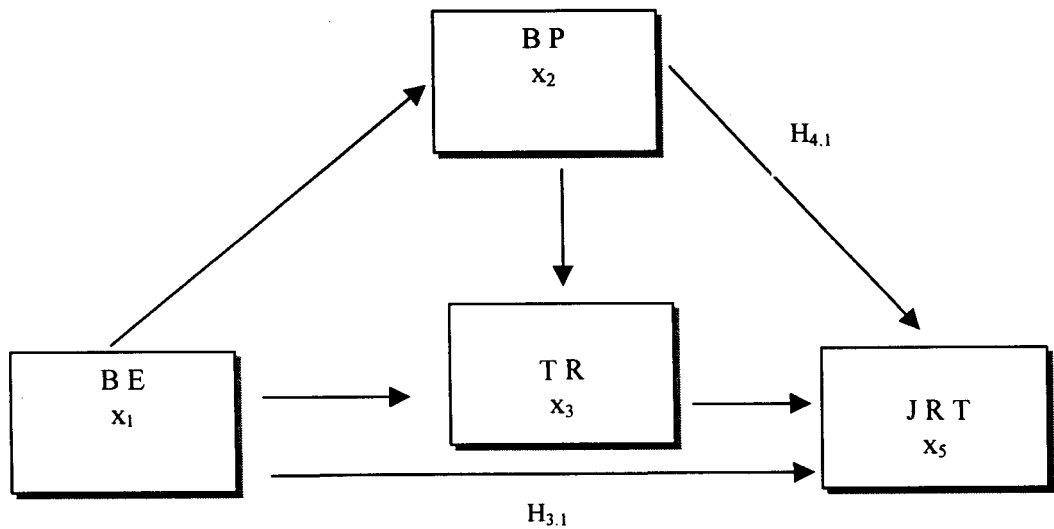


Fig. 5.1

Hypothesis H3.1 states that there is an indirect relationship between budget emphasis and job related tension through trust, and hypothesis H4.1 states that there is an indirect relationship between budget emphasis and job related tension through participation. Table 5.9 presents the values of the path coefficients of the various relationships and are calculated in accordance with the equations 1a, 2a and 3a for Model 1 for Job Related Tension. The indirect effect of budget emphasis on job

related tension consist of the following paths and are calculated based on the values of the path coefficients in Table 5.9:

Path (1)	BE - BP - JRT	$0.341 * -0.237$	$= -0.081$
Path (2)	BE - BP - TR - JRT	$0.341 * 0.175 * -0.401$	$= -0.024$
Path (3)	BE - TR - JRT	$0.339 * -0.401$	$= -0.136$
	Total indirect effect		$= -0.241$

Path (1) indicates the indirect effect exclusively via budgetary participation, which is -0.81. Paths (2) and (3) indicate the indirect effect through trust, which is -0.16 (Nouri & Parker, 1998). These results show that the relationship between budget emphasis and job related tension comprises two effects. First, there is a direct effect of -0.062 (see Table 5.9). Second, there is an indirect effect of -0.241, which can be further decomposed into the portion attributable to participation (-0.081) and the portion attributable to trust (-0.16). According to Bartol (1983, p.809), an indirect effect in excess of 0.05 may be considered meaningful. Based on these results, hypotheses H3.1 and H4.1 are both supported.

Table 5.9

Path Analysis Results (model 1a)

Dependent variable	Independent variables	Path coefficient	t-value	p-value	R2
BP	BE	0.341	3.945	0.001	0.117
TR	BE	0.339	3.827	0.001	0.186
	BP	0.175	1.973	0.051	
JRT	BE	-0.062	-0.708	0.481	0.306
	BP	-0.237	-2.840	0.005	
	TR	-0.401	-4.682	0.001	

Hypotheses H5.1 (Indirect effect of participation on job related tension via trust)

Hypothesis H5.1 states that there is an indirect relationship between budgetary participation and job related tension through trust. The indirect effect and the spurious effect consist of the following paths and are computed based on the values of the path coefficients in Table 5.9:

Path (1)	BP - TR - JRT	$0.175 * -0.401$	$= -0.0701$
Path (2)	BP - BE - JRT	$0.341 * -0.062$	$= -0.0211$
Path (3)	BP - BE - TR - JRT	$0.341 * 0.339 * -0.401$	$= -0.0464$
Total indirect effect			$= -0.1376$

Path (1) indicates the indirect effect exclusively via trust is -0.07. Paths (2) and (3) indicate a spurious effect of -0.0675. As the indirect effect via trust is in excess of 0.05 (Bartol, 1983), hypothesis H5.1 is supported.

Model one indicates that there is also an indirect relationship between budget emphasis and trust through participation. The indirect effect of budget emphasis and trust is calculated as follows:

Path (1)	BE - BP - TR	$0.341 * 0.175$	$= 0.060$
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Table 5.10 presents a decomposition of the observed correlations for model 1 (a).

Table 5.10

Decomposition of observed correlations (model 1b)

	Observed	Direct	Indirect	Spurious
Relations	correlation (a)	effect (b)	effect	effect
BE/JRT	-0.303**	-0.062	-0.241	
BE/BP	+0.341**	+0.341**		
BP/TR	+0.291**	+0.175*		+0.116
BE/TR	+0.399**	+0.339**	+0.060	
TR/JRT	-0.495**	-0.401**		-0.094
BP/JRT	-0.375**	-0.237**	-0.070	-0.068

** $p < 0.01$

* $p < 0.10$

(a) from Table 5.7

(b) from Table 5.9

Hypotheses H3.2 and H4.2 (Indirect effect of budget emphasis on propensity to create slack via trust and participation)

This section presents the results of the hypotheses tests for hypotheses 3.2 and 4.2 of *model 1 (b)*.

Trust and Propensity to create slack (Model 1b)

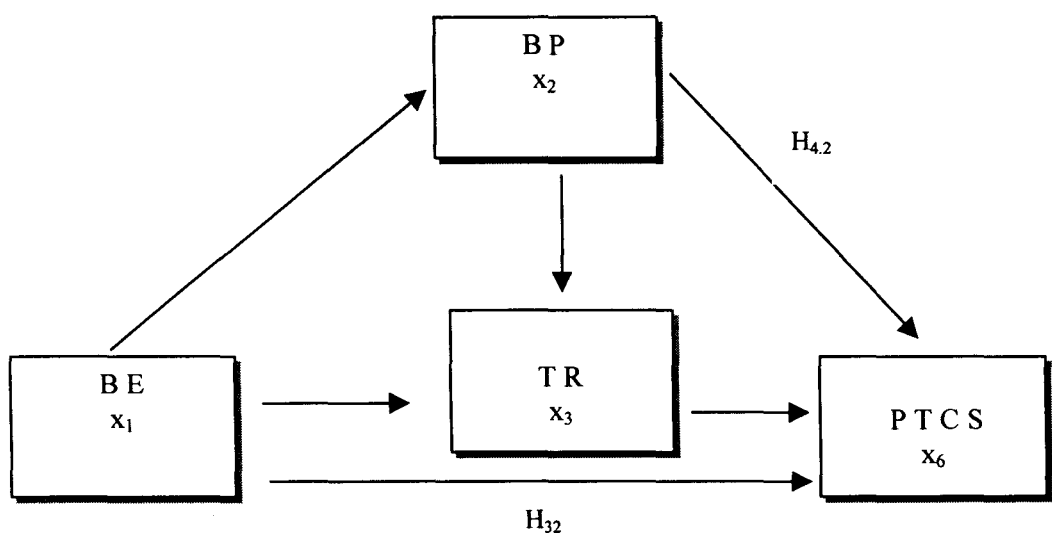


Fig. 5.2

Hypothesis H3.2 states that there is an indirect relationship between budget emphasis and propensity to create slack through trust, and hypothesis H4.2 states that there is an indirect relationship between budget emphasis and propensity to create slack through participation. Table 5.11 presents the values of the path coefficients of the various relationships and are calculated in accordance with the equations 1a, 2a and 4a for Model 1(b) for Propensity to Create Slack. Similarly to model 1 (a) the indirect effect

of budget emphasis on propensity to create slack consist of the following paths and are calculated based on the values of the path coefficients in Table 5.11:

Path (1)	BE - BP - PTCS	$0.341 * 0.104$	$= 0.035$
Path (2)	BE - BP - TR - PTCS	$0.341 * 0.175 * -0.264$	$= -0.016$
Path (3)	BE - TR - PTCS	$0.339 * -0.262$	$= -0.089$
	Total indirect effect		$= -0.070$

Path (1) indicates the indirect effect exclusively via budgetary participation, is 0.035. Paths (2) and (3) indicate the indirect effect through trust, which is -0.105. These results show that the relationship between budget emphasis and propensity to create slack comprises two effects, which are the direct effect of -0.134 (see Table 5.11) and the indirect effect of -0.070. The total indirect effect can be further decomposed into the portion attributable to participation (0.035) and the portion attributable to trust (-0.105). Recall, that according to Bartol (1983, p. 809), an indirect effect in excess of 0.05 may be considered meaningful. Hence, hypothesis H3.2 (indirect effect less than 0.05) is not supported. However hypothesis H4.2 is supported.

Table 5.11

Path Analysis Results (model 1b)

Dependent variable	Independent variables	Path coefficient	t-value	p-value	R2
BP	BE	0.341	3.945	0.001	0.117
TR	BE	0.339	3.827	0.001	0.186
	BP	0.175	1.973	0.051	
PTCS	BE	-0.134	-1.351	0.090	0.101
	BP	0.104	1.097	0.138	
	TR	-0.262	-2.710	0.004	

Hypotheses H5.2 (Indirect effect of participation on propensity to create slack via trust)

Hypothesis H5.2 states that there is an indirect relationship between budgetary participation and propensity to create slack through trust. The indirect effect and the spurious effect consist of the following paths and are computed based on the values of the path coefficients in Table 5.11:

Path (1)	BP - TR - PTCS	$0.175 * -0.262$	$= -0.0459$
Path (2)	BP - BE - PTCS	$0.341 * -0.134$	$= -0.0456$
Path (3)	BP - BE - TR - PTCS	$0.341 * 0.339 * -0.262$	$= -0.0303$
Total indirect effect			$= -0.1218$

Path (1) indicates the indirect effect exclusively via trust is -0.0459. Paths (2) and (3) indicate a spurious effect of -0.0759. The indirect effect via trust is just below the limit of 0.05 (Bartol, 1983). Hence hypothesis H5.2 is marginally supported.

Model 1 (b) also indicates that there is an indirect relationship between budget emphasis and trust through participation. The indirect effect of budget emphasis and trust is calculated as follows (which is identical to model 1 (a):

Path (1)	BE - BP - TR	$0.341 * 0.175$	$= 0.060$
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Table 5.12 presents a decomposition of the observed correlations for model 1 (b).

Table 5.12

Decomposition of observed correlations (model 1b)

Relations	Observed correlation (a)	Direct effect (b)	Indirect effect	Spurious effect
BE/PTCS	-0.204*	-0.134	-0.070	
BE/BP	+0.341**	+0.341**		
BP/TR	+0.291**	+0.175*		+0.116
BE/TR	+0.399**	+0.339**	+0.060	
TR/PTCS	-0.288**	-0.262**		-0.026
BP/PTCS	-0.018	+0.104*	-0.046	-0.076

** p<0.01

* p<0.10

(a) from Table 5.7

(b) from Table 5.10

Hypotheses H6.1 and H7.1 (Indirect effect of budget emphasis on job related tension via organisational commitment and participation)

This section presents the results of the hypotheses tests for hypotheses 6.1 and 7.1 of *model 2 (a)*.

Organisational commitment and Job related tension (Model 2a)

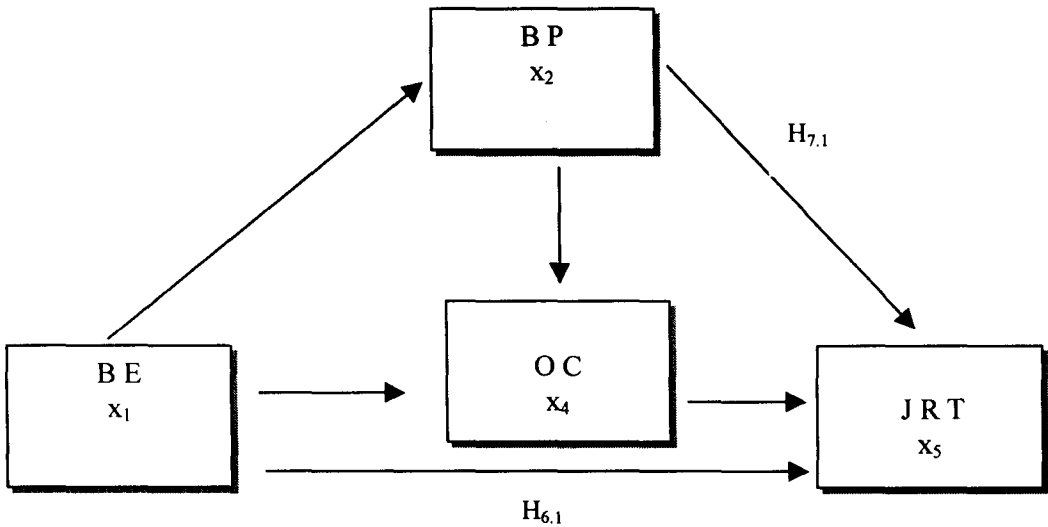


Fig. 5.3

Hypothesis H6.1 states that there is an indirect relationship between budget emphasis and job related tension through organisational commitment, and hypothesis H7.1 states that there is an indirect relationship between budget emphasis and job related tension through participation. Table 5.13 presents the values of the path coefficients of the various relationships and are calculated in accordance with the equations 1b, 2b and 3b for Model 2 (a) for Job Related Tension. Accordingly, the indirect effect of

budget emphasis on job related tension consist of the following paths and are calculated based on the values of the path coefficients in Table 5.13:

Path (1)	BE - BP - JRT	$0.341 * -0.186$	$= -0.064$
Path (2)	BE - BP - OC - JRT	$0.341 * 0.308 * -0.394$	$= -0.041$
Path (3)	BE - OC - JRT	$0.022 * -0.394$	<u>$= -0.009$</u>
	Total indirect effect		<u>$= -0.114$</u>

Path (1) shows that the indirect effect between budget emphasis and job related tension is exclusively via budgetary participation, which is -0.64. Paths (2) and (3) indicate the indirect effect through organisatinoal commitment, which is -0.050. These results show that the relationship between budget emphasis and job related tension comprises two effects. First, there is a direct effect of -0.189 (see Table 5.13). Second, there is an indirect effect of -0.154, which can be further decomposed into the portion attributabe to participation (-0.064) and the portion attributable to organisational commitment (-0.050). As both indirect effects, (0.064) and (0.050) are in excess of 0.05, hypotheses H6.1 and H7.1 are both supported.

Table 5.13

Path Analysis Results (model 2a)

Dependent variable	Independent variables	Path coefficient	t-value	p-value	R2
BP	BE	0.341	3.945	0.001	0.117
OC	BE	0.022	0.233	0.204	0.100
	BP	0.308	3.303	0.000	
JRT	BE	-0.189	-2.316	0.011	0.315
	BP	-0.186	-2.178	0.016	
	OC	-0.394	-4.869	0.000	

Hypotheses H8.1 (Indirect effect of participation on job related tension via organisational commitment)

Hypothesis H8.1 states that there is an indirect relationship between budgetary participation and job related tension through organisational commitment. The indirect effect and the spurious effect consist of the following paths and are computed based on the values of the path coefficients in Table 5.13:

Path (1)	BP - OC - JRT	$0.308 * -0.394$	$= -0.121$
Path (2)	BP - BE - JRT	$0.341 * -0.189$	$= -0.065$
Path (3)	BP - BE - OC - JRT	$0.341 * 0.022 * -0.394$	<u>$= -0.003$</u>
	Total indirect effect		<u>$= -0.189$</u>

Path (1) indicates the indirect effect exclusively via budgetary participation, which is - 0.121. Paths (2) and (3) indicate a spurious effect of -0.068. As the indirect effect via participation is in excess of 0.05 (Bartol, 1983), hypothesis H8.1 is also supported.

Model 2 (a) indicates that there is also an indirect relationship between budget emphasis and organisational commitment through participation. The indirect effect of budget emphasis and organisational commitment is calculated as follows:

Path (1)	BE - BP - OC	$0.341 * 0.308$	$= 0.105$
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Table 5.14 presents a decomposition of the observed correlations for model 2 (a).

Table 5.14

Decomposition of observed correlations (model 2a)

Relations	Observed correlation (a)	Direct effect (b)	Indirect effect	Spurious effect
BE/JRT	-0.303**	-0.189*	-0.114	
BE/BP	+0.341**	+0.341**		
BP/OC	+0.316**	+0.308**		+0.008
BE/OC	+0.127	+0.022*	-0.105	
OC/JRT	-0.477**	-0.394**		-0.083
BP/JRT	-0.375**	-0.186**	-0.121	-0.068

** p<0.01

* p<0.10

(a) from Table 5.7

(b) from Table 5.9

Hypotheses H6.2 and H7.2 (Indirect effect of budget emphasis on propensity to create slack via organisational commitment and participation)

This section presents the results of the hypotheses tests for hypotheses 6.2 and 7.2 of *model 2 (b)*.

Trust and Propensity to create slack (Model 2b)

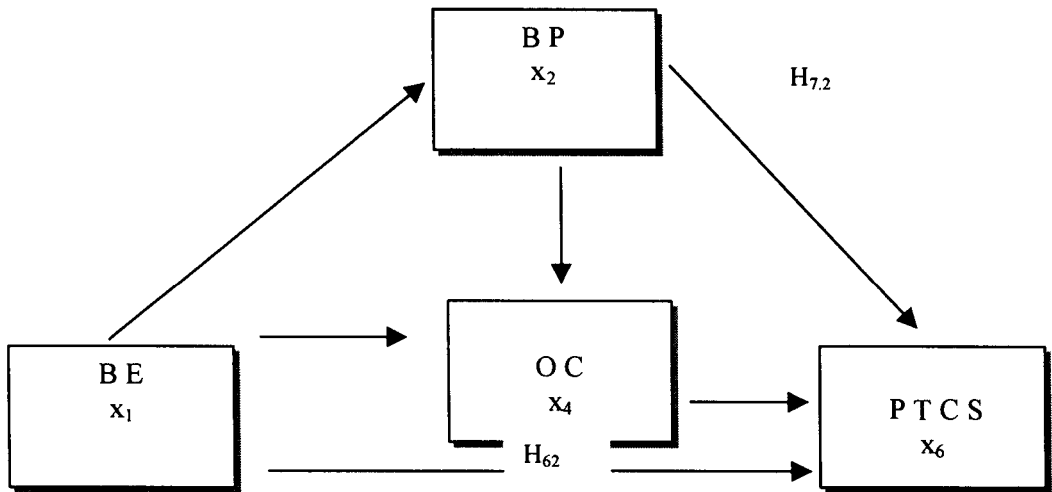


Fig. 5.4

Hypothesis H6.2 states that there is an indirect relationship between budget emphasis and propensity to create slack through organisational commitment, and hypothesis H7.2 states that there is an indirect relationship between budget emphasis and propensity to create slack through participation. Table 5.15 presents the values of the path coefficients of the various relationships and are calculated in accordance with the equations 1b, 2b and 3b for Model 2(b) for Propensity to Create Slack. Similarly to model 1 (b) the indirect effect of budget emphasis on propensity to create slack consist

of the following paths and are calculated based on the values of the path coefficients in Table 5.15:

Path (1)	BE - BP - PTCS	$0.341 * 0.103$	$= 0.035$
Path (2)	BE - BP - OC - PTCS	$0.341 * 0.308 * -0.144$	$= -0.015$
Path (3)	BE - OC - PTCS	$0.022 * -0.144$	<u>$= -0.003$</u>
	Total indirect effect		<u>$= 0.017$</u>

Path (1) indicates the indirect effect exclusively via budgetary participation, which is 0.035. Paths (2) and (3) indicate the indirect effect through organisational commitment, which is -0.018. These results show that the relationship between budget emphasis and propensity to create slack comprises two effects, which are the direct effect of -0.221 (see Table 5.15) and the indirect effect of -0.017. The total indirect effect can be further decomposed into the portion attributable to participation (-0.035) and the portion attributable to organisational commitment (-0.018). Since both indirect effects are less than 0.05, neither H6.2 nor 7.2 are supported.

Table 5.15

Path Analysis Results (model 2b)

Dependent variable	Independent variables	Path coefficient	t-value	p-value	R2
BP	BE	0.341	3.945	0.001	0.117
	OC	0.022	0.233	0.408	0.100
PTCS	BP	0.308	3.303	0.000	
	BE	-0.221	-2.309	0.012	0.063
	BP	0.103	1.026	0.154	
	OC	-0.144	-1.522	0.065	

Hypotheses H8.2 (Indirect effect of participation on propensity to create slack via organisational commitment)

Hypothesis H8.2 states that there is an indirect relationship between budgetary participation and propensity to create slack through organisational commitment. The indirect effect and the spurious effect consist of the following paths and are computed based on the values of the path coefficients in Table 5.15:

Path (1)	BP - OC - PTCS	$0.308 * -0.144$	$= -0.044$
Path (2)	BP - BE - PTCS	$0.341 * -0.221$	$= -0.076$
Path (3)	BP - BE - OC - PTCS	$0.341 * 0.022 * -0.144$	$= -0.001$
Total indirect effect			$= -0.121$

Path (1) indicates the indirect effect exclusively via organisational commitment is - 0.04. Paths (2) and (3) indicate a spurious effect of -0.077. As the indirect effect via organisational commitment is lower than 0.05 (Bartol, 1983), hypothesis H8.2 is not supported.

Model 2 (b) also indicates that there is an indirect relationship between budget emphasis and organisational commitment through participation. The indirect effect of budget emphasis and organisational commitment is calculated as follows:

Path (1)	BE - BP - OC	$0.341 * 0.308$	$= 0.105$
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Table 5.16 presents a decomposition of the observed correlations for model 2 (b).

Table 5.16

Decomposition of observed correlations (model 2b)

	Observed	Direct	Indirect	Spurious
Relations	correlation (a)	effect (b)	effect	effect
BE/PTCS	-0.204*	-0.221*	+0.017	
BE/BP	+0.341**	+0.341**		
BP/OC	+0.316**	+0.308*		+0.008
BE/OC	+0.127	+0.022*	+0.105	
OC/PTCS	-0.140	-0.144*		+0.004
BP/PTCS	-0.018	+0.103*	-0.044	-0.077

** p<0.01

* p<0.10

(a) from Table 5.7

(b) from Table 5.10

Conclusion

The analysis of the hypotheses was conducted by utilising path analysis. When one is constructing structural models there are a few questions that need to be answered. For instance, are the variables measured related, or in other words, is there a significant non-zero correlation. If so, is this relationship spurious, that is, is the only relation between the two variables based on their mutual dependence on another variable. Finally, if the correlation is nonspurious, what is then the causal linkage between the variables? (Heise, 1982). The benefit of such a structural model is the ability to break down empirically observed correlations into parts that are due to different processes. This is the strength of the models used in this thesis.

Table 5.17 presents the summarised results for this study.

Model One

Overall, the results offered support for some of the stated hypotheses. With regard to **model one** (trust), the results showed that budget emphasis and budgetary participation are directly related. Hence the literature on the beneficial effects of a compatible combination of high budget emphasis and high participation is further supported (eg., Brownell, 1982; Brownell & Hirst, 1986; Brownell & Dunk, 1991; Lau & Eggleton, 1998). Trust was also found to be strongly related to job related tension (see model 1a). Similarly, budgetary participation and job related tension were also significantly related. No significant relationship between budget emphasis and job related tension was also found. Both budgetary participation and trust were also found to have an intervening effects on the relationship between budget emphasis and job related tension.

Trust was also found to be directly related to budgetary participation and propensity to create slack (Model 1b). However, no significant direct relationships were found between (i) budget emphasis and propensity to create slack, and (ii) budgetary participation and propensity to create slack. Hence, it is not possible to conclude that budget emphasis or budgetary participation are negatively related to slack creation. More importantly, this study found that budgetary participation and trust have intervening effects on the relationship between supervisory evaluative styles and the propensity to create slack.

Model two

Model two revealed that organisational commitment was related to budgetary participation, which is supported by prior studies (e.g., Welsch & LaVan, 1981; DeCotiis & Summers, 1987; Nouri & Parker, 1996, 1998). The findings also indicated that organisational commitment is negatively related to propensity to create slack (although only marginally) and job related tension. Model two showed that the relationship between supervisory evaluative styles and job related tension is similarly affected by the intervening effects of budgetary participation and organisational commitment. However, with regard to model 2 (b), the indirect effect of budgetary participation and organisational commitment on the relationship between budget emphasis and propensity to create slack was negligible.

In conclusion, this study found that trust, and to a lesser extent, organisational commitment have a mediating effect between budget emphasis and propensity to create slack. However, both variables acted as mediating variables between the relationships of budget emphasis, budgetary participation and job related tension. Hence, we can conclude that trust and organisational commitment are important

variables in explaining the relationship between superior evaluative styles and subordinates behaviours.

CHAPTER 6

Discussion & Conclusions

Introduction

This thesis examined the relationships between the independent variables of budget emphasis, the intervening variables of budgetary participation, organisational commitment, and trust, and the dependent variables of propensity to create slack and job related tension in the Norwegian environment. Using data from a Scandinavian nation enabled the research on supervisory evaluative styles to be extended to a relatively unexplored cultural region.

The motivations for this study are (i) to extend further research on supervisory evaluative styles, and (ii) to extend the research in this area to a cultural region not studied previously. Prior studies on culture have concentrated on high power distance/low individualism nations in Asia versus low power distance/high individualism nations in the Anglo-American block, where Australia has frequently been proxied as a nation in this cultural block (e.g., Hwang, 1989; Harrison, 1991; Harrison et al., 1996; Lau et al., 1995, 1997; Lau & Tan, 1998). European nations, particularly Scandinavian countries such as Norway, have to date been barely explored (Lau & Buckland, 1999).

A questionnaire was used on a sample of functional heads drawn from the Norwegian manufacturing industry. The data were analysed by path analysis which enabled the interpretation of the causal relationships among the different variables to be

undertaken. Of special interest was the effect of trust and organisational commitment on the relationship between budget emphasis, budgetary participation, on the one hand, and slack or job related tension on the other.

Findings of the study

The major findings of this study are presented in Table 5.17 in chapter 5. They are as follows:

- (i) Norway has a high participatory environment.

Model One

a) Job related tension

- (i) There is a significant positive direct relationship between budget emphasis and budgetary participation, ($p < 0.000$).
- (ii) The relationships between (i) budget emphasis and job related tension is indirect through a mediating effect of budgetary participation and trust (total indirect effect: -0.241) and (ii) budgetary participation and job related tension is also indirectly via trust (-0.138).
- (iii) The causal relationship between budgetary participation and job related tension is both direct (-0.237, $p < 0.005$) and indirect (-0.07) via trust.

b) Propensity to create slack

- (iv) The relationships between (i) budget emphasis and propensity to create slack was indirect via budgetary participation and trust (total indirect effect: -0.070), and (ii) budgetary participation and propensity to create slack was also indirectly via trust (-0.123).
- (v) The relationship between budgetary participation and propensity to create slack is both direct (0.104, $p < 0.000$) and indirect (-0.077) via trust.

Model Two

a) Job related tension

- (vi) The relationships between (i) budget emphasis and job related tension is partially moderated by budgetary participation and organisational commitment (total indirect effect: -0.114), and (ii) budgetary participation and job related tension is mediated by organisational commitment (-0.189).
- (vii) The relationship between budgetary participation and job related tension is both direct (-0.186) and indirect via organisational commitment and budgetary participation (-0.121).

b) Propensity to create slack

- (viii) No intervening effects of budgetary participation and organisational commitment on the relationships between budget emphasis and the propensity to create slack was found (0.017).
- (ix) Organisational commitment was found to have only a small intervening effect on the relationship between budgetary participation and propensity to create slack (-0.044).

Based on these results, the following conclusions may be made. First, as Norway has a high participatory environment, it may be regarded as surrogate for high participation. Second, consistent with the theory suggested by Brownell (1982a) and the results of a number of prior studies including Brownell (1982a), a compatible combination of high budget emphasis and high participation will lead to lower job related tension than a mismatched combination of low budget emphasis and high participation combination. Third, the direct effect of high budget emphasis and high participation (Norway) is small. The effect is mainly indirect through trust and participation. Fourth, a compatible combination of high budget emphasis and high participation will lead to a higher level of trust between the subordinates and their superior than a mismatched combination of low budget emphasis and high participation. Fifth, since trust is higher between the subordinates and their superior in a high budget emphasis and high participation situation, subordinates will experience lower job related tension. These results, derived from an intervening model, therefore provide valuable insight which helps to explain why a compatible combination of high budget emphasis and high participation, found by a number of prior studies with the contingency model, can lead

to better behavioural outcomes than other combinations of budget emphasis and participation.

Discussion of results

With respect to the relationship between budget emphasis and budgetary participation, a significant relationship was found. Hence, the findings of this study reinforce Brownell's (1982) contention that a compatible mix of high budget emphasis and high participation will have favourable outcomes. Prior studies have consistently supported the expectation of beneficial consequences associated with compatible match of high budget emphasis and high participation (eg., Brownell, 1982; Brownell & Hirst, 1986; Brownell & Dunk, 1991; Harrison, 1992; Lau et al., 1995, Lau & Eggleton, 1998, Lau & Buckland, 1999) With respect to the effect budget emphasis and participation have on slack creation and job related tension, this thesis revealed that the relationships are in most cases affected by the intervening variables trust and organisational commitment. These findings are reinforced by the lack of significant relationships between budget emphasis or budgetary participation on the propensity to create slack. For instance, model 1 (b) found no direct link between budget emphasis and propensity to create slack. These results are consistent with the findings of Collins (1978), who also found no significant relationship between budget pressure and the extent of budgetary slack creation. Similarly, no link was found between budgetary participation and slack creation. Prior findings on the effect of participation and slack have been rather inconsistent. Although some studies found participation to have an effect on slack, they were not consistent with respect to which direction that applies, being either positive or negative (e.g., Onsi, 1973; Merchant, 1985; Young, 1985; Govindarajan, 1986; Lukka, 1988). The findings therefore indicate that the

relationship between superior evaluative styles and propensity to create slack involved other intervening variables.

Further, it was also found that budgetary participation has a negative direct effect on job related tension. These results are consistent with prior studies which have found participation and job outcomes to be highly related (eg., Argyris, 1952; Becker & Green, 1962; Hofstede, 1968; Locke & Schweiger, 1979; Mechant, 1981; Brownell, 1982). Whilst many of these studies have mostly examined the effect of participation on either job performance or job satisfaction, and, only a few have examined the effect of participation on job related tension (eg., Brownell & Hirst, 1986), the findings may be inter-related. Jamal (1985) found job related tension to be associated with managerial performance and Jaworski & Young (1992) found job related tension and dysfunctional behavior to be related. Hence, the findings of this thesis are consistent with many of these prior studies.

As mentioned, the relationships between either budget emphasis (and/or budgetary participation) and slack creation and job related tension could be affected by other intervening variables. One such variable investigated in this thesis was trust. Trust was found to be positively and directly associated with budgetary participation, and together with budgetary participation to have an intervening effect on the relationship between budget emphasis and propensity to create slack, which is in accordance with the theory developed in this thesis. It was argued in this thesis that a budget based evaluative style (where targets are objective and verifiable) implemented in a high participating environment, would increase the level of trust experienced by the subordinates.

This thesis also found that the effect of trust was negative on both propensity to create slack and job related tension. Moreover, the intervening effects of budgetary participation and trust were even bigger than the direct effect of budget emphasis on job related tension. Also, trust was found to have a considerable intervening effect on the relationship between budgetary participation and both slack creation and job related tension. In other words, trust has a strong beneficial impact on behavioural outcomes in an organisation.

Both Dunk (1993) and Lau & Eggleton (1998) found a significant three-way interaction among budget emphasis, participation and information asymmetry affecting budgetary slack. Thus, this thesis provided an extension to these prior studies by including trust as an intervening variable. As mentioned, it was found in this thesis that trust has a partial mediation effect on both the relationships between budget emphasis and slack, and budgetary participation and slack creation. It therefore conforms to Read's (1962) suggestion that trust has a strong effect on the communication relationships within an organisation, and to Lau & Eggleton's (1998) suggestion that subordinates will not create slack in order to not jeopardise the level of trust the superiors have in them. These results provide empirical support for the suggestions of these prior studies. Ross (1994) also investigated the importance of trust on the relationship between evaluative styles and job related tension. Hence, the results of this thesis provided further support for his findings. The results of this thesis indicate that participation also has a significant direct effect on job related tension. This means that participation will reduce tension directly. However, trust will further enhance this process.

This thesis also included an examination of organisational commitment as an intervening variable shown in model two. The existence of a significant relationship

between budgetary participation and organisational commitment found in this thesis was in accordance with expectation. One important consequence of participation has been found to be motivation (eg., Argyris, 1952; Becker & Green, 1962; Hotstede, 1968). Motivation was found to be an important characteristic of those individuals who feel strongly committed to their organisation. These results are also consistent with those of Nouri & Partker (1996) who also studied the link between participation and organisational commitment. These findings also support the contention by Hanson (1966), that individuals who are involved in the *creation* of the budgets will better identify themselves with both budget objectives and organisational goals. Also, the results of this thesis are consistent with studies by Welsch & LaVan (1981) and DeCotiis & Summers (1987), who also reported that employee participation and organisational commitment are positively related.

Organisational commitment was found to be significant related to slack creation. This thesis is therefore able to support the findings of Nouri & Parker (1996) who found a link between organisational commitment and slack. With respect to the relationship between organisational commitment and job related tension, the findings of this thesis indicate a significant direct relationship. The literature is rather consistent with regard to the effects of organisational commitment on job satisfaction (eg., Welsch & LaVan, 1981; Aranya et al., 1982; Norris & Niebuhr, 1983; Meixner & Bline, 1989; Poznanski & Bine, 1997) or job performance (Nouri & Parker, 1988). Consequently, it seems that the effect of organisational commitment on job satisfaction, performance and job related tension is similar. Finally, it was found that organisational commitment acted as an intervening variable between budgetary participation and slack creation (see model 2b). Budgetary participation and organisational commitment also acted as intervening variables in the relationship between budget emphasis and job related tension, and between budgetary participation and job related tension (see model 2a).

Both trust and organisational commitment were found to be strongly linked to how much tension a subordinate feels about his/hers job. Considering both variables acted as intervening variables between budget emphasis/budgetary participation and propensity to create slack/job related tension highlights the need for organisations to emphasise their management policies to be aligned with the needs and understandings of their subordinates.

Contributions of the Study

The major contributions of this study are the findings related to the effects of the variables, trust and organisational commitment, in the area of supervisory evaluative styles. Trust was found to be a crucial variable when examining the relationship between budget emphasis and budgetary participation on the one hand, and their effects on slack creation and job related tension on the other.

Trust was identified as a mediating variable of the relationship between (i) budget emphasis and both slack creation and job related tension, and (ii) between budgetary participation and both slack creation and job related tension. In addition, trust was also found to be negatively related to both slack creation and job related tension. By reporting that trust acts as an intervening variable, these results indicate the importance of trust as the essential ingredient in every stable social and managerial relationship. One implication of these findings is to create an awareness among senior managers that the adoption of strategies to enhance interpersonal trust within the organisation may lead to beneficial consequences such as reduced employees' job related tension and slack creation. Along with trust, organisational commitment was also found to be an important intervening variable of the relationship between

budgetary participation and slack creation, and between budget emphasis and budgetary participation and job related tension. Hence, this thesis has contributed to the literature on both budgetary slack creation and job attitudes such as job related tension.

In addition, as this thesis has focused on the Norwegian manufacturing industry, the results provide further contributions to the knowledge about supervisory evaluative styles and its implications for Norwegian managers. As only one prior study in the area of supervisory evaluative style have been based on Norwegian managers (Lau & Buckland, 1999), the findings of this thesis on trust and organisational commitment as essential mediating variables between budget emphasis and job related tension/budgetary slack, may provide managers in Norway with a better understanding of these relationships, and consequently guide system designers in Norway on how to design and implement an effective managerial control system.

Besides, according to Hofstede's (1984) cultural dimensions of power distance and individualism, Norway is clustered with other Nordic European countries. This allows the results of this thesis to be generalised to other Scandinavian countries, such as Sweden, Finland and Denmark. Given the lack of research along this line in Norway and Sweden (see Hoegheim et al., 1989; Samuelsen, 1986; Jonsson, 1982, who focused on budgetary control in government agencies only), an understanding of the relationship between budget emphasis, participation, organisational commitment, and trust may change managers' attitudes and supervisory styles and ultimately enhance the productivity of organisations in this region. Also, since Norway was reported by Hofstede (1980) to have similar level of power distance and individualism as nations in the Anglo-American block, it may be possible to generalise the results of this thesis to the Anglo-American block of nations.

Limitations and Suggestions for Further Research in this Area

A number of limitations may have influenced the results of this thesis. First, with regard to the reported results on propensity to create slack, the relative weak internal reliability of the instrument used to measure the propensity to create slack may have influenced the results. Although the results were relatively strong and supportive, the Cronback alpha for the slack instrument was only 42 %. Second, this thesis regards slack as the understatement of the subordinate's performance capability to make budgeted targets easier to attain. Hence, this may restrict the generalisation of the results of this thesis to downward biasing only, even though Lowe & Shaw (1968) found that upward biasing could also occur (Lau & Eggleton, 1998).

Third, this thesis had drawn its sample from the functional heads of the manufacturing industry. This may pose as another limitation to the generalisability of the results of this thesis to other levels of management and also to other types of industry. Hence, opportunities exist for testing these models in non-manufacturing industries, for instance service industries and across different levels of management.

More research is also needed to provide support for the generalisation of the results of this thesis to other Nordic countries. Two avenues are possible: (i) a comparison between Norway or other Scandinavian countries (low power distance/middle to high individualism) and nations proxied as high power distance/low individualism (South East Asia), and (ii) a comparison between Norway and another Scandinavian country, e.g. Sweden or Finland.

Finally, there may also be some problems that are inherently associated with questionnaire survey methods. Future research may incorporate different methods for

instance, longitudinal studies or in depth case studies. Longitudinal studies would assist in the understanding of the interactions between variables on manager behaviour, and in depth case studies have the advantage of enabling the researchers to observe the sensitive data.

Nevertheless, despite the listed limitations above, this thesis has attempted to evaluate systematically the impact of trust on management control systems. It has continued to advance an important area of management accounting research commencing from the pioneer work by Hopwood (1972) and Otley (1978) to subsequent contingency studies. Further work in this line of research by evaluating systematically other variables may help to advance this important area of management accounting research.

Footnotes

1: The exclusion of item 3 in the measurement of organisational commitment made a slight difference to the reported results. Organisational commitment was found to be marginally significant with propensity to create slack, whereas there was no significance when the analysis was based on the full nine-item measure of organisational commitment.

2: The exclusion of item 9 in the measurement of job related tension made no difference to the reported results.

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APPENDIX A

This appendix contains:

Copy of letter to manufacturing companies in Norway

- (a) the Norwegian, and
- (b) the English translation

PRIVAT & KONFIDENSIELT

Navn
Tittel
Firma navn
Adresse

1. Juni 1998

VEDRØRENDE FORSKNINGSPROSJEKT

Jeg henvender meg til deg for din hjelp og samarbeid til et forskningsprosjekt angående budsjettmiljø i Norge. Forskningsprosjektet er en del av min Master of Business, Accounting utdanning som jeg fullfører i Perth, Vest Australia.

Bedriften din har blitt valgt ut til å assistere meg med dette studiet som er for forskningsformål. Prosjektet er bare basert på norske data, og resultatet er dermed avhengig av tilstrekkelig antall utfylte skjema. Jeg ønsker å meddele at all informasjon vil bli behandlet konfidensielt og bare oppsummerte resultater vil bli rapportert. En kopi av de oppsummerte resultater vil bli sent til deg etter anmodning.

Jeg er veldig takknemlig hvis du tar deg tid til å fylle ut dette spørsmålsskjema. Det skulle ikke ta mer enn ca. 20 minutter. En frankert og adressert svarskonvolutt er vedlagt til din fordel.

Hvis du har noen spørsmål angående spørsmålsskjemaet, kan du kontakte meg direkte i Perth på telefonnummer () eller er jeg i Haugesund fra den 12. juni på telefonnummer ().

Tusen takk for ditt samarbeid og jeg ser fram til et snarlig svar.
Svarfristen er satt til 1. juli d.å.

Med hilsen

Christin Selsaas Buckland
Masterstudent

PRIVATE & CONFIDENTIAL

Date

Name of Manager
Job Title
Company Name
Address
Western Australia

Dear Sir/Madam,

Re: RESEARCH PROJECT

I am writing to seek your co-operation and assistance in a research project on budgetary environment in Norway. The research is part of my Master of Business, Accounting degree I am completing in Perth, Western Australia. I am in charge of a particular function such as production, marketing, sales, administration, personnel, accounting and other such functions.

The research project is based entirely on Norwegian data. Therefore in order to obtain meaningful results a high response rate is acquired. I am therefore appealing to you to assist me so that the body of knowledge on Norwegian companies could be expanded. I would be most happy to share the summarised results of this project with you.

You are kindly requested to assist in this study which is purely for research purposes. I wish to assure you that all the information provided will be treated with **strictest confidence** and only summarised results will be reported. A copy of the summarised results will be sent to you if you request it.

I would be most grateful if you could complete this questionnaire. This should not take more than **twenty minutes** of your time. A self-addressed prepaid envelope is enclosed for your convenience.

If you have any queries with the questionnaire, kindly contact Christin Buckland at [REDACTED] in Perth, or at [REDACTED] in Haugesund after 12 June.

Thank you very much for your kind cooperation and assistance and hoping for an early response from you. Without your help, this research project would not be possible.

Yours sincerely,

Christin S. Buckland
Research Scholar

APPENDIX B

This appendix contains:

- (i) A copy of the Norwegian questionnaire
- (ii) A copy of the English questionnaire

**EDITH COWAN UNIVERSITY
PERTH WESTERN AUSTRALIA
FACULTY OF BUSINESS**

SPØRSMÅLSSKJEMA OM BUDSJETTERINGS MILJØ

Svarene vil bli behandlet konfidensielt. Ingen i din organisasjon vil ha tilgang til ditt spørsmålsskjema.

Er budsjetter brukt i din organisasjon?

Ja

☐

Nei

☐

Hvis svaret ditt er "Nei", vennligst ikke fyll ut resten av skjemaet. Vennligst send skjemaet til meg i den vedlagte konvolutten snarest mulig.

Hvis svaret er "Ja", vennligst fyll ut resten av skjemaet.

- 1. Når din overordnede (din nærmeste sjef) evaluerer din utførelse, hvor mye tror du at han eller hun vektlegger de følgende faktorer? Vennligst svar ved å merke av et nummer fra 1 til 7 basert på følgende skala for hvert punkt nevnt nedenfor.**

1. Aldri av betydning
2. Sjelden av betydning
3. Av og til av betydning
4. Noen ganger av betydning

5. Ofte av betydning
6. Vanligvis av betydning
7. Alltid av betydning

Aldri av
betydning

Alltid av
betydning

Hvor godt jeg samarbeider med mine medarbeidere. 1 2 3 4 5 6 7 **A1**

Min evne til å holde meg innenfor

på kort sikt. 1 2 3 4 5 6 7 **A2**

Hvor godt jeg forholder meg til mine overordnede. 1 2 3 4 5 6 7 **A3**

Hvor mye innsats jeg gir på jobben. 1 2 3 4 5 6 7 **A4**

Hvor opptatt jeg er av kvaliteter. 1 2 3 4 5 6 7 **A5**

Min langtidsbekymring for kostnader

og/eller inntekter. 1 2 3 4 5 6 7 **A6**

Min holdning til arbeid mitt. 1 2 3 4 5 6 7 **A7**

Min evne til å takle arbeidsmengden min. 1 2 3 4 5 6 7 **A8**

Min holdning til organisasjonen. 1 2 3 4 5 6 7 **A9**

Hvor godt jeg samarbeider med individer utenfor

organisasjonen (f. eks. kunder). 1 2 3 4 5 6 7 **A10**

- 2. Indiker i hvilken grad hvert av de følgende spørsmål om forholdet mellom deg og din overordnede du er enig i. Vennligst svar ved å merke av et nummer fra 1 til 5 basert på følgende skala for hvert punkt.**

- | | | | |
|----|--------------------|----|-----------------------|
| 1. | I veldig stor grad | 4. | Til liten grad |
| 2. | I stor grad | 5. | Til veldig liten grad |
| 3. | Til noen grad | | |

Til en stor grad	Til en liten grad
---------------------	----------------------

Benytter din overordnede seg av dine fordeler av muligheter som oppstår for å fremme dine interesser ved hans/hennes handlinger og beslutninger?

1 2 3 4 5 **B1**

Hvor fri føler du deg til å diskutere med din overordnede de problemer og vanskeligheter du har i ditt arbeid uten å risikere din stilling eller å ha "det i mot" deg senere?

1 2 3 4 5 **B2**

Hvor sikker føler du at din overordnede holder deg ærlig og holdent informert om saker som kanskje opptar deg?

1 2 3 4 5 **B3**

Noen ganger må overordnede ta beslutninger som ser ut for å være imot deres underordnedes interesser. Når dette hender deg som en underordnede, hvor mye tillit har du til at din overordnedes beslutninger er forsvarlige ved andre vurderinger?

1 2 3 4 5 **B4**

- 3. Vennligst indiker i hvilken grad du er enig eller uenig med følgende uttalelser. Vennligst svar ved å merke av et nummer fra 1 til 5 basert på følgende skala for hvert punkt:**

- | | | | |
|----|-------------------------|----|--------------|
| 1. | Svært uenig | 5. | Lite enig |
| 2. | Moderat uenig | 6. | Moderat enig |
| 3. | Lite uenig | 7. | Svært enig |
| 4. | Verken uenig eller enig | | |

Svært uenig	Svært enig
-------------	------------

Du har lært fra dine opplevelser fra de to siste årene at du kan stole på de andre medlemmene av toppledelsen.

1 2 3 4 5 6 7 **C1**

Du og de andre ledere uttaler fritt deres ulikheter og følelser av modighet eller av skuffelser.

1 2 3 4 5 6 7 **C2**

Du og de andre ledere deler all relevant informasjon og utveksler i åpenhet og følelser som kanskje er i eller utenfor deres definerte ansvarsområde.

1 2 3 4 5 6 7 **C3**

Resultater oppnås ved et høyt nivå av å ta og gi og gjensidig tillit til hver enkeltes støtte og evne.

1 2 3 4 5 6 7 **C4**

4. De følgende situasjonene kan bli brukt til å beskrive din rolle i utarbeidelse av budsjettet for ditt ansvarsområde. Vennligst svar ved å merke av et nummer fra 1 til 7 basert på skalaen for hvert punkt.

Hvor engasjert er du i å sette opp ditt budsjett ansvarsområde?

Jeg er engasjert i:

Noe av budsjettet

Hele budsjettet

1 2 3 4 5 6 7 **D1**

I hvilken grad har din overordnede gitt begrunnelse for revisjon til ditt budsjett.

Ingen begrunnelse

Omfattende begrunnelse

1 2 3 4 5 6 7 **D2**

Hvor ofte gir du din mening om budsjettet til din overordnede?

Aldri

Veldig ofte

1 2 3 4 5 6 7 **D3**

Hvor mye innflytelse har du i det endelige budsjettet i ditt ansvarsområde?

Ingen innflytelse

Omfattende innflytelse

1 2 3 4 5 6 7 **D4**

Hvor viktig er ditt bidrag til budsjettet?

Ikke viktig

Veldig viktig

1 2 3 4 5 6 7 **D5**

Hvor ofte er du spurt om dine meninger når budsjettet er under utarbeidelse av din overordnede?

Aldri

Veldig ofte

1 2 3 4 5 6 7 **D6**

5. Vennligst svar på de følgende uttalelser ved å merke av et nummer fra 1 til 7 basert på følgende skala:

1. Veldig sjelden

5. Ganske ofte

2. Sjelden

6. Veldig ofte

3. Av og til

7. Nesten hele tiden

4. Noen ganger

Veldig
sjelden

Nesten
hele tiden

Jeg akter å overse visse arbeidsbeslektet aktiviteter bare fordi de ikke er sett over av ledelsen.

1 2 3 4 5 6 7 **E1**

Jeg har justert data for å fremstille utførelsen min på lik linje med min avdelings mål.

1 2 3 4 5 6 7 **E2**

Når jeg presenterer data til toppledelsen prøver jeg å unngå å være den som formidler dårlige nyheter.

1 2 3 4 5 6 7 **E3**

Også når produktiviteten min er i uoverensstemmelse, prøver jeg fremdeles å la det virke konsekvent.

1 2 3 4 5 6 7 **E4**

**6. Vennligst indiker i hvilken grad du er enig eller uenig med følgende uttalelser.
Vennligst svar ved å merke av et nummer fra 1 til 7 basert på følgende skala:**

- | | | | |
|----|-------------------------|-----|--------------|
| 1. | Svært uenig | 5. | Lite enig |
| 2. | Moderat uenig | 6.. | Moderat enig |
| 3. | Lite uenig | 7. | Svært enig |
| 4. | Verken uenig eller enig | | |

	Svært uenig				Svært enig				
Topplederen har nok informasjon til å ha kjennskap til avvik i et avdelingsbudsjett.	1	2	3	4	5	6	7		F1
Topplederen mottar detaljert informasjon om aktiviteter for hver avdeling og hvert produkt.	1	2	3	4	5	6	7		F2
Topplederen har en måte å finne ut om der er avvik i et avdelingsbudsjett.	1	2	3	4	5	6	7		F3
Budsjetter utarbeidet for mitt ansvarsområde er lett oppnåelige.	1	2	3	4	5	6	7		G1
Budsjetter for mitt ansvarsområde er ikke særlig krevende.	1	2	3	4	5	6	7		G2
Budsjettmål har ikke gitt meg unødvendige bekymringer med å forbedre effektiviteten i mitt ansvarsområde.	1	2	3	4	5	6	7		G3
Mål som er innarbeidet i mitt budsjett er vanskelige å oppnå.	1	2	3	4	5	6	7		G4
I gode forretningstider er min overordnede villig til å akseptere et forsvarlig nivå av avvik i mitt budsjett.	1	2	3	4	5	6	7		H1
Avvik i budsjettet er gunstig for å gjøre saker som ikke kan bli offisielt akseptert.	1	2	3	4	5	6	7		H2
For å forsvare seg, en ansvarlig leder tildeler budsjetter som kan forsvarlig oppnås.	1	2	3	4	5	6	7		H3
For å sikre seg, en ansvarlig leder setter to nivåer på budsjettet: ett mellom han/hun selv og hans/hennes underordnede, og en annen mellom ham/hun selv og hans/hennes overordnede.	1	2	3	4	5	6	7		H4

7. Nevnt nedenfor er en del uttalelser som forstiller mulige følelser som individer kanskje har overfor organisasjonen de arbeider for. Med hensyn til dine følelser for organisasjonen du for tiden arbeider i, vennligst indiker i hvilken grad du er enig eller uenig med hver av de følgende uttalelser ved å merke av et nummer fra 1 til 7 basert på følgende skala:

- | | | | |
|----|-------------------------|----|--------------|
| 1. | Svært uenig | 5. | Lite enig |
| 2. | Moderat uenig | 6. | Moderat enig |
| 3. | Lite uenig | 7. | Svært enig |
| 4. | Verken uenig eller enig | | |

	Svært uenig				Svært enig			
Jeg er villig til å gi mer enn vanligvis forventet for å hjelpe denne organisasjonen til å bli fremgangsrisk.	1	2	3	4	5	6	7	I1
Jeg snakker om denne organisasjonen til mine venner som en storartet organisasjon å arbeide for.	1	2	3	4	5	6	7	I2
Jeg er så og si villig til å akseptere hvilket som helst jobb oppdrag for å kunne fremdeles jobbe for denne organisasjonen.	1	2	3	4	5	6	7	I3
Jeg betrakter mine verdier og denne organisasjonens verdier til å være svært like.	1	2	3	4	5	6	7	I4
Jeg er stolt over å kunne fortelle andre at jeg er en del av denne organisasjonen.	1	2	3	4	5	6	7	I5
Jeg bryr meg virkelig om skjebnen til denne organisasjonen.	1	2	3	4	5	6	7	I6
For meg er dette den beste av alle mulig organisasjoner å arbeide for.	1	2	3	4	5	6	7	I7
Denne organisasjonen inspirerer virkelig det beste ut av meg med hensyn til arbeidsutførelse.	1	2	3	4	5	6	7	I8
Jeg er virkelig glad for at jeg valgte å arbeide for denne organisasjonen overfor andre jeg vurderte da jeg ble medlem av denne organisasjonen.	1	2	3	4	5	6	7	I9

***Du har nå fullført halvparten av dette skjemaet.
Jeg er veldig takknemlig for hjelpen din.***

8. Vennligst svar hvert spørsmål ved å merke av et nummer fra 1 til 7 basert på hver individuell skala:

Ved sammenligning med din overordnede, hvem er det som sitter med best informasjon om de aktivitetesom foretas i ditt ansvarsområde?

1	2	3	4	5	6	7	J1
Min overordnede har mye bedre informasjon			Vi har omtrent et samme kvalitet av informasjon			Jeg har mye bedre informasjon	

Ved sammenligning med din overordnede, hvem er mer kjent med inndata/utdata forholdet innarbeidet i de interne funksjoner i ditt ansvarsområde?

1	2	3	4	5	6	7	J2
Min overordnede er mye bedre kjent			Vi er omtrent like mye kjent			Jeg er mye bedre kjent	

Ved sammenligning med din overordnede, hvem har mer kjennskap til mulige utførelser i ditt ansvarsområde?

1	2	3	4	5	6	7	J3
Min overordnede har mer kjennskap			Vi har omtrent like mye kjennskap			Jeg har mye mer kjennskap	

Ved sammenligning med din overordnede, hvem har mer teknisk kjennskap til arbeidet i ditt ansvarsområde?

1	2	3	4	5	6	7	J4
Min overordnede har mer kjennskap			Vi har omtrent like mye kjennskap			Jeg har mye mer kjennskap	

Ved sammenligning med din overordnede, hvem er bedre i stand til å vurdere mulig innvirkning på dine aktiviteter på punkter som er ekseterne i ditt ansvarsområde?

1	2	3	4	5	6	7	J5
Min overordnede er mye bedre i stand til			Vi er omtrent like mye i stand til			Jeg er mye bedre i stand til	

Ved sammenligning med din overordnede, hvem har bedre forståelse for hva som kan bli oppnådd i ditt ansvarsområde?

1	2	3	4	5	6	7	J6
Min overordnede har mye bedre forståelse			Vi har omtrent like mye forståelse			Jeg har mye bedre forståelse	

9. Av og til så føler alle seg litt plaget av forskjellige saker i vårt arbeid. Følgende er en liste av saker som noen ganger plager folk. Hvor ofte føler du deg plaget av hver av dem? Vennligst svar ved å merke av et nummer fra 1 til 7 basert på følgende skala for hvert punkt.

1. Veldig sjelden
2. Sjelden
3. Av og til
4. Noen ganger

5. Ganske ofte
6. Veldig ofte
7. Nesten hele tiden

	Veldig sjelden				Nesten hele tiden				
Føler at du har for liten autoritet til å utføre ansvaret som er gitt deg.	1	2	3	4	5	6	7	K1	
Usikker om hvilken rekkevidde og ansvar som er tilegnet jobben din.	1	2	3	4	5	6	7	K2	
Å ikke vite hvilke muligheter for forfremmelse eller opprykning som eksisterer for deg.	1	2	3	4	5	6	7	K3	
Å føle at arbeidsmengden er for stor for deg slik at det er umulig å få gjort det i løpet av en vanlig arbeidsdag.	1	2	3	4	5	6	7	K4	
Å føle at du er ikke i stand til å tilfredsstille de motsettende etterspørsler fra forskjellige folk over deg.	1	2	3	4	5	6	7	K5	
Å føle at du ikke er kvalifisert til å gjøre jobben din.	1	2	3	4	5	6	7	K6	
Å ikke vite hva din overordnede mener om deg, hvordan han eller hun evaluerer utførelsen din.	1	2	3	4	5	6	7	K7	
Det faktum at du kan ikke få nok informasjon til å utføre jobben din.	1	2	3	4	5	6	7	K8	
Å måtte bestemme ting som angår livet av individer, folk du kjenner.	1	2	3	4	5	6	7	K9	
Å føle at du kanskje ikke er likt og godkjent av folkene du arbeider med.	1	2	3	4	5	6	7	K10	
Å føle seg ute av stand til å influere din nærmeste overordnede avgjørelser og handlinger som berører deg.	1	2	3	4	5	6	7	K11	
Å ikke vite av de folkene du arbeider med hva som ventes av deg.	1	2	3	4	5	6	7	K12	
Å føle at arbeidsmengden din forstyrrer kvaliteten på arbeidet.	1	2	3	4	5	6	7	K13	
Å føle at du må gjøre løpende saker som er imot din bedømmelse.	1	2	3	4	5	6	7	K14	
Å føle at jobben din har en tendens til å forstyrre familie livet ditt.	1	2	3	4	5	6	7	K15	

10. Vennligst forestill deg en idell jobb - se bort fra din nåværende jobb. I valget av en idell jobb, av hvor stor betydning vil det være for deg (vennligst merk av et nummer for hvert svar).

1.	Av stor betydning	4.	Av liten betydning			
2.	Av betydning	5.	Av veldig liten eller ingen betydning			
3.	Av moderat betydning					
		Av stor betydning	Av ingen betydning			
Ha nok tid til ditt personlige eller familie liv?	1	2	3	4	5	L1
Ha utfordrende oppgaver som vil gi deg en personlig tilfredshet?	1	2	3	4	5	L2
Ha gode fysiske arbeidsforhold (god ventilasjon og lys, passelig arbeidsplass, osv)?	1	2	3	4	5	L3
Ha tilstrekkelig frihet til å tilegne deg dine egne fremgangsmåter til arbeidet?	1	2	3	4	5	L4
Ha treningsmuligheter (til å forbedre dine ferdigheter eller å lære nye ferdigheter)?	1	2	3	4	5	L5
Fullt ut bruke dine ferdigheter og muligheter på jobben?	1	2	3	4	5	L6

11. Vennligst indiker i hvilken grad du er enig eller uenig med de følgende uttalelser.

	Sterkt enig	Enig	Ubestemt	Uenig	Sterkt uenig	
En organisasjons regler bør ikke bli brutt, også når arbeidstakeren tror at det er for det beste for organisasjonen.	1	2	3	4	5	M1
Hvor lenge tror du at du kommer til å fortsette å arbeide for denne organisasjonen. Vennligst merk av.						
1. To år på det meste			3. Lengre enn 5 år			M2
2. Fra to til fem år			4. Til jeg pensjoneres			
Hvor ofte er du nervøs eller anspent på jobben? Vennligst merk av.						
1. Jeg føler alltid slik			4. Sjelden			M3
2. Vanligvis			5. Jeg føler aldri slik			
3. Noen ganger						

12. Beskrivelsene nedenfor gjelder for fire forskjellige typer sjef. Les gjennom disse beskrivelsene først:

- Sjef 1:** Tar vanligvis beslutninger omgående og meddeler dem til underordnede klart og tydelig. Forventer dem til å utføre beslutningene med lojalitet og uten å påføre problemer.
- Sjef 2:** Tar vanligvis beslutninger omgående men før han/hun går i gang, prøver han/hun å forklare dem fullstendig til underordnede. Gir dem forklaringer for bestemmelsene og svarer dem på de spørsmålene de har.
- Sjef 3:** Rådfører seg vanligvis med underordnede før de treffer beslutninger. Hører på deres råd, betrakter det og så kunngjør beslutningene. Forventer alle til å arbeide med lojalitet for å gjennomføre det uansett om det er i samsvar med rådet de ga.
- Sjef 4:** Samler vanligvis til et møte med underordnede når det er en viktig beslutning som nå tas. Framlegger problemet for gruppen og inviterer til diskusjon. Aksepterer majoritetens syn som beslutningen.

Vennligst merk av det passende nummer.

Nå, for de typer sjef, hvilken vil du foretrekke å arbeide for.

- | | | | |
|----|--------|----|--------|
| 1. | Sjef 1 | 3. | Sjef 3 |
| 2. | Sjef 2 | 4. | Sjef 4 |
- N1**

Og hvilken av de fire typer sjef vil du si beskriver din sjef.

- | | | | |
|----|--------|----|-----------------|
| 1. | Sjef 1 | 4. | Sjef 4 |
| 2. | Sjef 2 | 5. | Passer ikke til |
| 3. | Sjef 3 | | noen av dem |
- N2**

Hvor ofte, i ditt miljø, er underordnede engstelige for å uttrykke uenighet med engstelige for å uttrykke uenighet med deres overordnede?

- | | | | |
|----|-------------|----|----------------|
| 1. | Veldig ofte | 4. | Sjelden |
| 2. | Ofte | 5. | Veldig sjelden |
| 3. | Noen ganger | | |
- N3**

13. Vennligst svar de følgende spørsmål.

Organisasjonens navn

(valgfritt): _____

Lokalisering (land) av deres

hovedkontor: _____

Nåværende jobbtittel eller

posisjon: _____

Hvor lenge har du vært i nåværende

posisjon? _____ år

Hvor mange års erfaring har du i ditt nåværendes

ansvarsområde? _____ år

Hvor mange ansatte er der i ditt

ansvarsområde? _____ ca

Hvor mange ansatte er der i din organisasjon

nasjonalt? _____ ca

Hvor lenge har du bodd i dette

landet? _____ år

Fødsels år?

19 _____

Hvilken nasjonalitet er du? _____

I hvilket land ble du

født? _____

Hva er din høyeste kvalifisering?

1. Videregående

2. Høyskole

3. Universitet

4.

Profesjonelle kvalifikasjoner

5. Andre

(Klargjør) _____

Hvis du ønsker å motta en kopi av det konkluderende resultat, vennligst fyll ut følgende:

Navn: _____

Adresse: _____

Tusen takk for hjelpen!

QUESTIONNAIRE ON BUDGETARY ENVIRONMENT

All responses will be treated in strictest confidence. No one in your organisation will have access to your completed questionnaire.

Are budgets used in your organisation

Yes

☐

No

☐

If your answer is "No", please do not complete the rest of this questionnaire. Please return the uncompleted questionnaire to me in the enclosed envelope as soon as possible.

If your answer is "Yes", please answer the rest of this questionnaire.

1. When your superior (your immediate boss) is ***evaluating your performance***, how much importance do you think he or she attaches to the following items? Please respond by **circling** a number from 1 to 7, based on the following scale, for each of the items listed below.

- | | |
|---------------------------|----------------------|
| 1. Never important | 5. Often important |
| 2. Seldom important | 6. Usually important |
| 3. Occasionally important | 7. Always important |
| 4. Sometimes important | |

	Never important				Always important		
How well I cooperate with my colleagues.	1	2	3	4	5	6	7
My ability to meet budgeted targets in the short run.	1	2	3	4	5	6	7
How well I get along with my superior.	1	2	3	4	5	6	7
How much effort I put	1	2	3	4	5	6	7
My concern with quality.	1	2	3	4	5	6	7
My long run concern with costs and/or revenues.	1	2	3	4	5	6	7
My attitude toward the work.	1	2	3	4	5	6	7
My ability to handle my work force.	1	2	3	4	5	6	7
My attitude toward the organisation.	1	2	3	4	5	6	7
How well I cooperate with individuals outside the organisation (e.g. customers)	1	2	3	4	5	6	7

2. Indicate the extent of your agreement with each of the following questions about the relationship between your superior and yourself. Please circle a number from 1 to 7 based on the following scale:

- | | |
|---------------------------|----------------------------|
| 1. To a very great extent | 4. To a little extent |
| 2. To a great extent | 5. To a very little extent |
| 3. To some extent | |

	To a very great extent		To a very little extent		
Does your superior take advantage of opportunities that come up to further your interests by his actions and decisions?	1	2	3	4	5
How free do you feel to discuss with your superior the problems and difficulties you have in your job without jeopardising your position or having it "held against" you?	1	2	3	4	5
How confident do you feel that your superior keeps you fully and frankly informed about things that might concern you?	1	2	3	4	5
Superiors at times must make decisions which seem to be against the interests of their subordinates. When this happens to you as a subordinate, how much trust do you have that your superior's decision is justified by other considerations?	1	2	3	4	5

3. Please indicate your degree of agreement or disagreement with the following statement. Please circle a number from 1 to 7 based on the following scale:

- | | |
|------------------------|---------------------|
| 1. Strongly disagree | 5. Mildly agree |
| 2. Moderately disagree | 6. Moderately agree |
| 3. Mildly disagree | 7. Strongly agree |
| 4. Neutral | |

	Strongly disagree			Strongly agree			
You have learned from your experience during the past two years that you can trust the other members of top management.	1	2	3	4	5	6	7
You and the other top managers openly express your differences and your feelings of encouragement or of disappointment.	1	2	3	4	5	6	7
You and the others share all relevant information and freely explore ideas and feelings that may be in or out of your defined responsibility.	1	2	3	4	5	6	7
The result has been a high level of give and take and mutual confidence in each other's support and ability.	1	2	3	4	5	6	7

4. The following items can be used to describe *the role you play* in the development of the budget for your area of responsibility. Please respond by circling form 1 to 7 on the scale for each of the items.

What is the extent of your involvement in the setting of your area of responsibility's budget?

I am involved in setting:

None of the budget				All of the budget		
1	2	3	4	5	6	7

What is the extent of the reasoning given by your superior for revision to your budget?

No reasoning				Extensive reasoning		
1	2	3	4	5	6	7

How frequently do you give your opinions to your superior about the budget?

Never				Very frequently		
1	2	3	4	5	6	7

What is the extent of your influence on the final budget for your area of responsibility.

No influence				Extensive influence		
1	2	3	4	5	6	7

What is the degree of importance of your contribution to the budget?

No importance				Extensive importance		
1	2	3	4	5	6	7

How frequently are you asked for your opinions when the budget is being set by your?

Never				Very frequently		
1	2	3	4	5	6	7

5. Please respond by circling a number from 1 to 7, based on the following scale.

- | | |
|-----------------|------------------------|
| 1. Very rarely | 5. Quite often |
| 2. Rarely | 6. Very often |
| 3. Occasionally | 7. Nearly all the time |
| 4. Sometimes | |

						Very rarely						Nearly all the time
I tend to ignore certain job-related activities simply because they are not monitored by management.	1	2	3	4	5	6	7					

I have adjusted data to make my performance more in line with my department goals.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

When presenting data to upper management, I try to avoid being the bearer of bad news.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Even if my productivity is inconsistent, I still try to make it appear consistent.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

6. Please indicate your degree of agreement or disagreement with the following statement. Please circle a number from 1 to 7 based on the following scale:

- | | |
|------------------------|---------------------|
| 1. Strongly disagree | 5. Mildly agree |
| 2. Moderately disagree | 6. Moderately agree |
| 3. Mildly disagree | 7. Strongly agree |
| 4. Neutral | |

	Strongly disagree		Neutral		Strongly agree		
Top management has enough information to know if there is slack in a departmental budget.	1	2	3	4	5	6	7
Top management receives detailed information on activities by department and by product.	1	2	3	4	5	6	7
Top management has a way of finding out if there is slack in a departmental budget.	1	2	3	4	5	6	7
Budgets set for my area of responsibility are safely attainable.	1	2	3	4	5	6	7
Budgets for my area of responsibility are not particularly demanding.	1	2	3	4	5	6	7
Budgetary targets have not caused me to be particularly concerned with improving efficiency in my area of responsibility.	1	2	3	4	5	6	7
Targets incorporated in my budget are difficult to reach.	1	2	3	4	5	6	7
In good business times, my superior is willing to accept a reasonable level of slack in my budget.	1	2	3	4	5	6	7
Slack in the budget is good to do things that cannot be officially approved.	1	2	3	4	5	6	7
To protect himself/herself, a responsibility centre manager submits budgets that can safely be attained.	1	2	3	4	5	6	7
To be safe, a responsibility centre manager sets two levels of budgets: one between himself/herself and his/her subordinates, and another between himself/herself and his/her superior.	1	2	3	4	5	6	7

7. Listed below are a series of statements that represent possible feelings that individuals might have about the organisation for which they work. With respect to your own feelings about the particular organisation for which you are now working, please indicate the degree of your agreement or disagreement with each of the following statements by circling a number from 1 to 7 based on the following scale:

- | | |
|-------------------------------|---------------------|
| 1. Strongly disagree | 5. Mildly agree |
| 2. Moderately disagree | 6. Moderately agree |
| 3. Mildly disagree | 7. Strongly agree |
| 4. Neither disagree nor agree | |

	Strongly disagree				Strongly agree		
I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful.	1	2	3	4	5	6	7
I talk up this organisation to my friends as a great organisation to work for.	1	2	3	4	5	6	7
I would accept almost any type of job assignment in order to keep working for this organisation.	1	2	3	4	5	6	7
I find that my values and this organisation's values are very similar.	1	2	3	4	5	6	7
I am proud to tell others that I am part of this organisation.	1	2	3	4	5	6	7
I really care about the fate of this organisation.	1	2	3	4	5	6	7
For me, this is the best of all possible organisations for which to work.	1	2	3	4	5	6	7
This organisation really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
I am extremely glad that I chose this organisation to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7

**YOU HAVE NOW COMPLETED HALF OF THIS QUESTIONNAIRE
I REALLY APPRECIATE YOUR TIME IN HELPING ME**

8. Please respond to each of the following questions by circling a number from 1 to 7, based on their individual scales:

In comparison with your superior, who is in possession of better information regarding the activities undertaken in your area of responsibility?

1	2	3	4	5	6	7
My superior has much better information		We have about the same quality of information				I have much better information

In comparison with your superior, who is more familiar with the input-output relationships inherent in the internal operations of your area of responsibility?

1	2	3	4	5	6	7
My superior is much more familiar		we are about equally familiar				I am much more familiar

In comparison with your superior, who is more certain of the performance potential of your area of responsibility?

1	2	3	4	5	6	7
My superior is much more certain		We are about equally certain				I am much more certain

In comparison with your superior, who is more familiar technically with the work of your area of responsibility?

1	2	3	4	5	6	7
My superior is much more familiar		We are about equally familiar				I am much more familiar

In comparison with your superior, who is better able to assess the potential impact on your activities of factors external to your area of responsibility?

1	2	3	4	5	6	7
My superior is much better able		We are about equally able				I am much better able

In comparison with your superior, who has a better understanding of what can be achieved in your area of responsibility?

1	2	3	4	5	6	7
My superior is a much better understanding		We have about the same understanding				I have a much better understanding

9. All of us occasionally feel bothered by certain kinds of things in our work. The following is a list of things that sometimes bother people. How frequently do you feel bothered by each of them? Please respond by circling a number from 1 to 7, based on the following scale.

- | | |
|-----------------|------------------------|
| 1. Very rarely | 5. Quite often |
| 2. Rarely | 6. Very often |
| 3. Occasionally | 7. Nearly all the time |
| 4. Sometimes | |

Very rarely	Nearly all the time
----------------	------------------------

Feeling that you have too little authority to carry out the responsibilities assigned to you.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Being unclear on just what the scope and responsibilities of your job are.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Not knowing what opportunities for advancement of promotion exist for you.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary work day.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Thinking that you'll not be able to satisfy the conflicting demands of various people over you.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Feeling that you are not fully qualified to handle your job.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Not knowing what your superior thinks of you, how he or she evaluates your performance.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

The fact that you can't get information needed to carry out your job.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Having to decide things that affect the lives of individuals, people that you know.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Feeling that you may not be liked and accepted by the people you work with.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Feeling unable to influence your immediate superior's decisions and actions that affect you.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

Not knowing just what the people you work with expect of you.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Thinking that the amount of work you have to do may interfere with how well it gets done.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Feeling that you have to do things on the job that are against your better judgement.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Feeling that your job tends to interfere with your family life.	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

10. Please think of an ideal job - disregarding your present job. In choosing an ideal job, how important would it be to you (please circle one answer number in each line across):

1.	Of utmost importance	4.	Of little importance		
2.	Very important	5.	Of very little or no importance		
3.	Of moderate importance				
		Of utmost importance	Of no importance		
Have sufficient time left for your personal or family life?	1	2	3	4	5
Have challenging tasks to do, from which you can get a personal sense of accomplishment?	1	2	3	4	5
Have good physical working conditions (good ventilation and lighting, adequate work space, etc.)?	1	2	3	4	5
Have considerable freedom to adopt your own approach to the job?	1	2	3	4	5
Have training opportunities (to improve your skills or learn new skills)?	1	2	3	4	5
Fully use your skills and abilities on the job?	1	2	3	4	5

11. Please indicate your degree of agreement or disagreement with the following statement:

	Strongly agree	Agree	Undecided	Strongly Disagree	
An organisation's rules should not be broken - even when the employee thinks it is in the organisation's best interests.	1	2	3	4	5

How long do you think you will continue working for this organisation? Please circle.

- | | |
|---------------------------|--|
| 1. Two years at the most | 3. More than 5 years (but I probable will leave before I retire) |
| 2. From two to five years | 4. Until I retire |

How often do you feel nervous or tense at work? Please circle.

- | | |
|---------------------------|--------------------------|
| 1. I always feel this way | 4. Seldom |
| 2. Usually | 5. I never feel this way |
| 3. Sometimes | |

12. The descriptions below apply to four different types of managers. First, please read through these descriptions:

- Manager 1:** Usually makes decisions promptly and communicates them to subordinates clearly and firmly. Expects them to carry out the decisions loyally and without raising difficulties.
- Manager 2:** Usually makes decisions promptly, but, before going ahead, tries to explain them fully to subordinates. Gives them the reasons for the decisions and answers whatever questions they may have.
- Manager 3:** Usually consults with subordinates before reaching decisions. Listens to their advice, considers it, and then announces decisions. Expects all to work loyally to implement it whether or not it is in accordance with the advice they gave.
- Manager 4:** Usually calls a meeting of subordinates when there is an important decision to be made. Puts the problem before the group and invites discussion. Accepts the majority viewpoint as the decision.

Please response by circling the appropriate number.

Now, for the above types of managers, which one would you prefer to work under.

- | | | | |
|----|-----------|----|-----------|
| 1. | Manager 1 | 3. | Manager 3 |
| 2. | Manager 2 | 4. | Manager 4 |

And, to which of the above four types of managers would you say your own superior *most closely corresponds*?

- | | | | |
|----|-----------|----|-------------------------|
| 1. | Manager 1 | 4. | Manager 4 |
| 2. | Manager 2 | 5. | Does not correspond |
| 3. | Manager 3 | | closely to any of them. |

How frequently, in your work environment, are subordinates afraid to express disagreement with their superiors?

- | | | | |
|----|-----------------|----|-------------|
| 1. | Very frequently | 4. | Seldom |
| 2. | Frequently | 5. | Very seldom |
| 3. | Sometimes | | |

13. Please answer the following questions.

Name of organisation (Optionally): _____

Location (country of your head office): _____

Present job title or position: _____

How long have you been in this current position? _____ years

How many years of experience do you have in your current area of responsibility? _____ years

How many employees are there in your area of responsibility? _____ approximately

How many employees are there in your organisation nationally? _____ approximately

How long have you lived in this country? _____ years

What is your year of birth? 19 _____

What is your nationality? _____

In which country were you born? _____

What is your highest qualification? (Please circle the appropriate number).

- | | |
|-----------------------------------|--------------------------------|
| 1. Secondary school | 4. Professional Qualifications |
| 2. Vocational/Diploma Certificate | 5. Others |
| 3. University Degree | (Specify) _____ |

If you wish to receive a copy of the summarised results, please fill in the following:

Name: _____

Address: _____

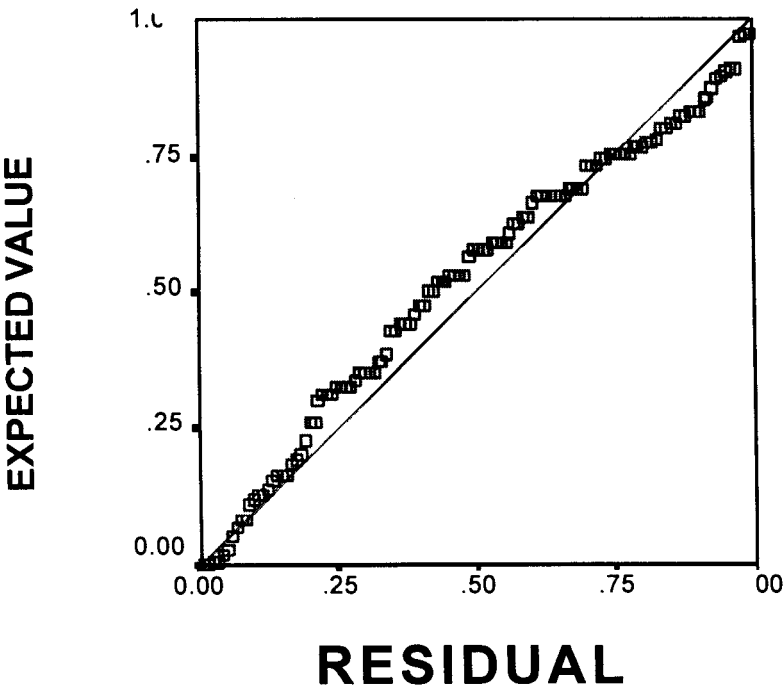
Thank you very much for your time!

APPENDIX C

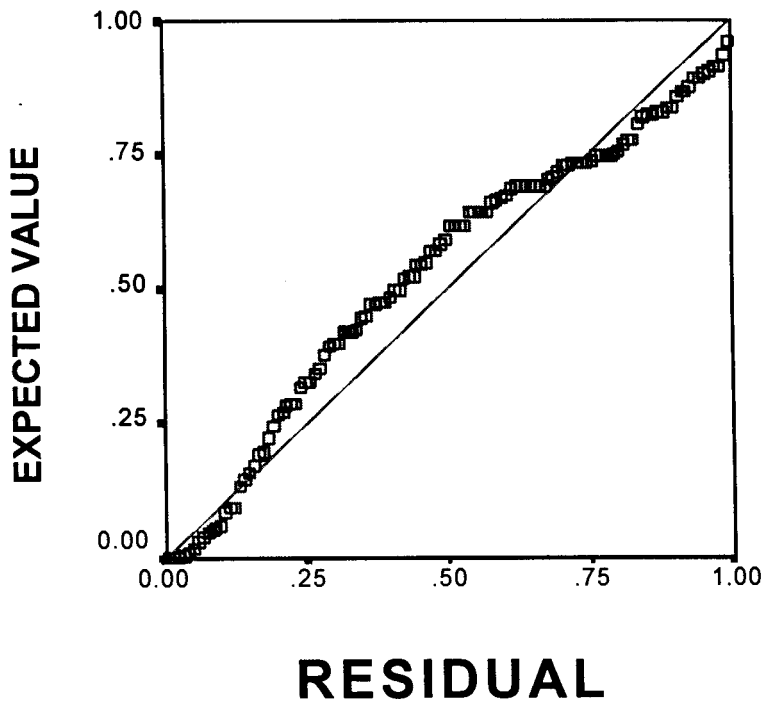
This appendix contains:

- (1) Normal probability plot for the relationship between budget emphasis and budgetary participation, (models 1 and 2).
- (2) Normal probability plot for the relationship between budgetary participation and trust, (model 1).
- (3) Normal probability plot for the relationship between budget emphasis, budgetary participation, trust and propensity to create slack, (model 1).
- (4) Normal probability plot for the relationship between budget emphasis and budgetary participation, trust and job related tension, (model 1).
- (5) Normal probability plot for the relationship between budgetary participation and organisational commitment, (model 2).
- (6) Normal probability plot for the relationship between budget emphasis, budgetary participation, organisational commitment and propensity to create slack, (model 2).
- (7) Normal probability plot for the relationship between budget emphasis, budgetary participation, organisational commitment and job related tension, (model 2).

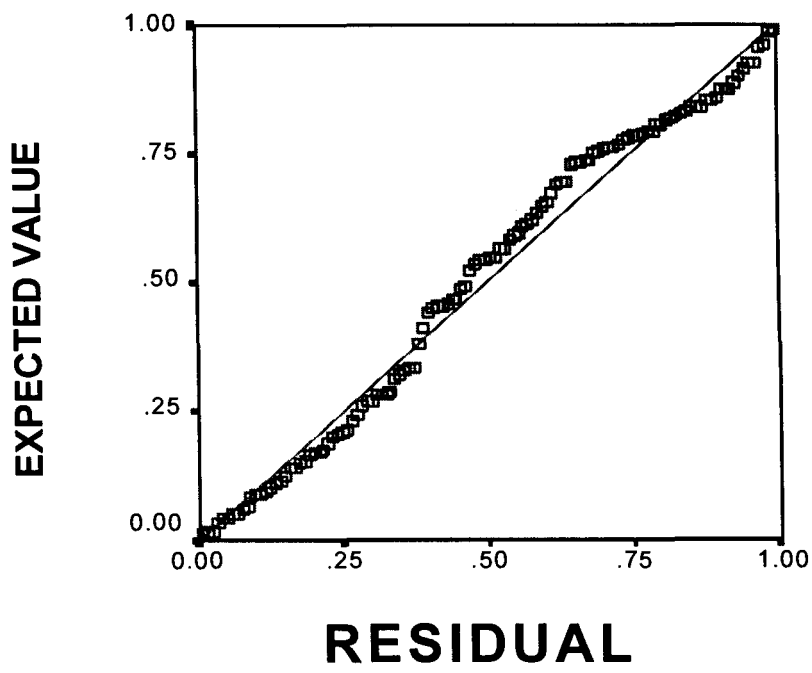
Normal probability plot for the relationship between budget emphasis & budgetary participation (models 1 and 2).



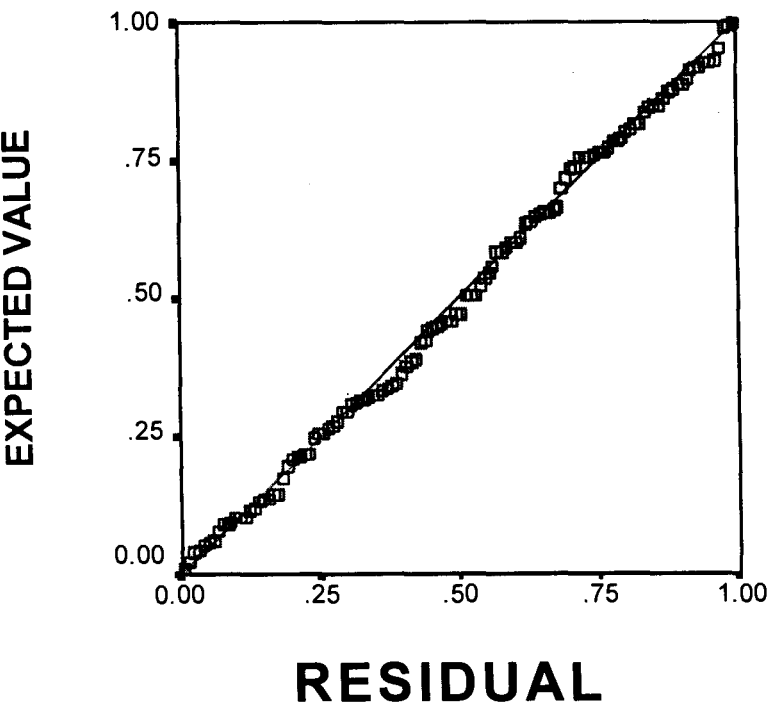
Normal probability plot for the relationship between budgetary participation and trust, (model 1)



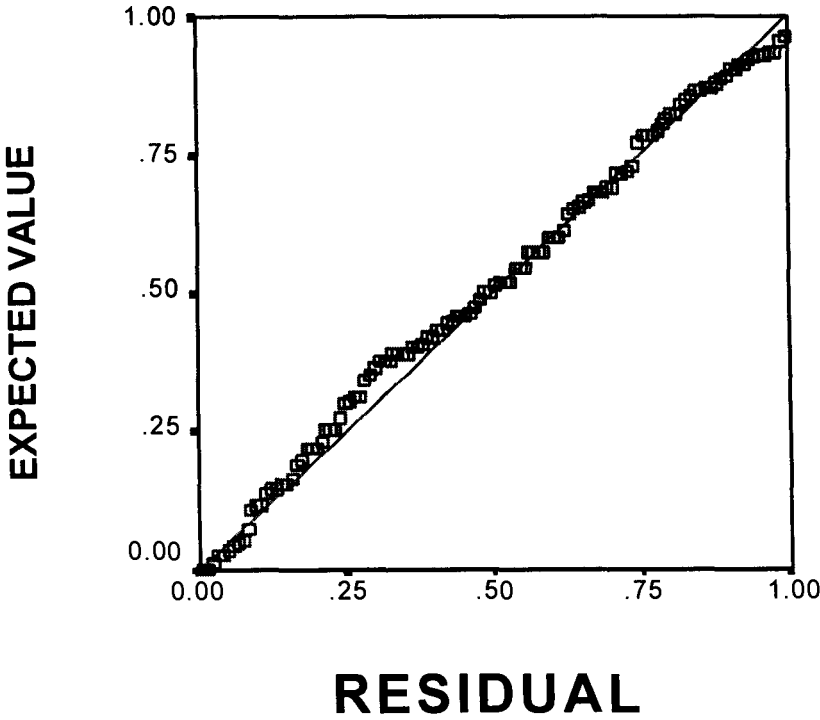
Normal probability plot for the relationship between budget emphasis, budgetary participation, trust and propensity to create slack, (model 1)



Normal probability plot for the relationship between budget emphasis, budgetary participation, trust and job related tension, (model 1)

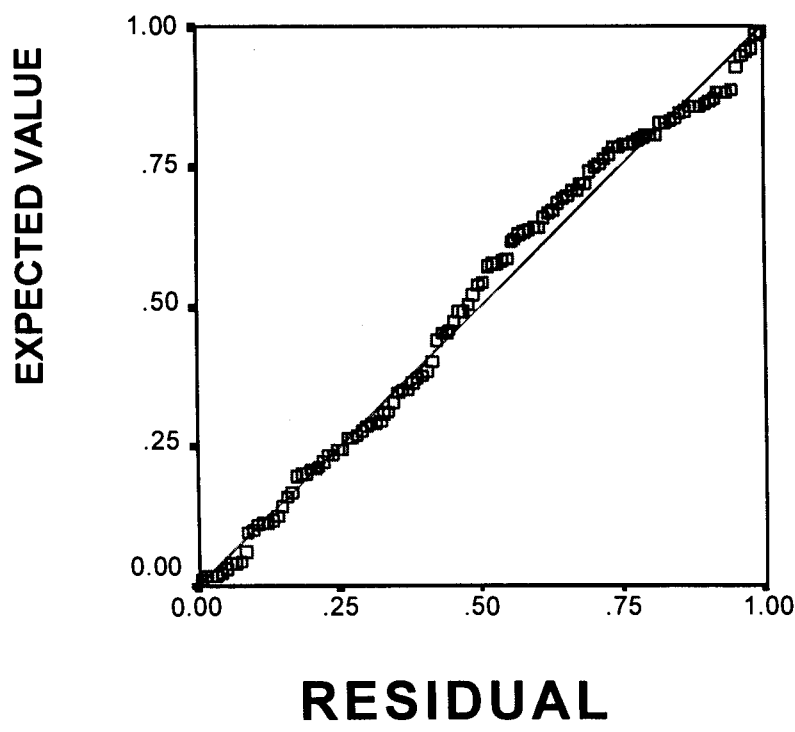


Normal probability plot for the relationship between budgetary participation and organisational commitment, (model 2)

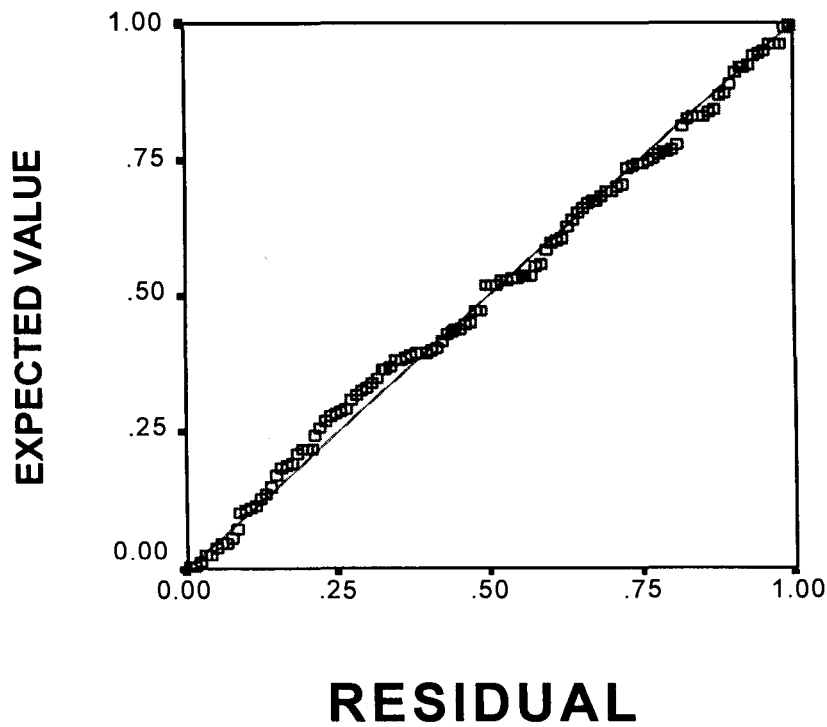


Normal probability plot for the relationship between budget emphasis, budgetary participation, organisational commitment and propensity to create slack, (model

2)



Normal probability plot for the relationship between budget emphasis, budgetary participation, organisational commitment and job related tension, (model 2)

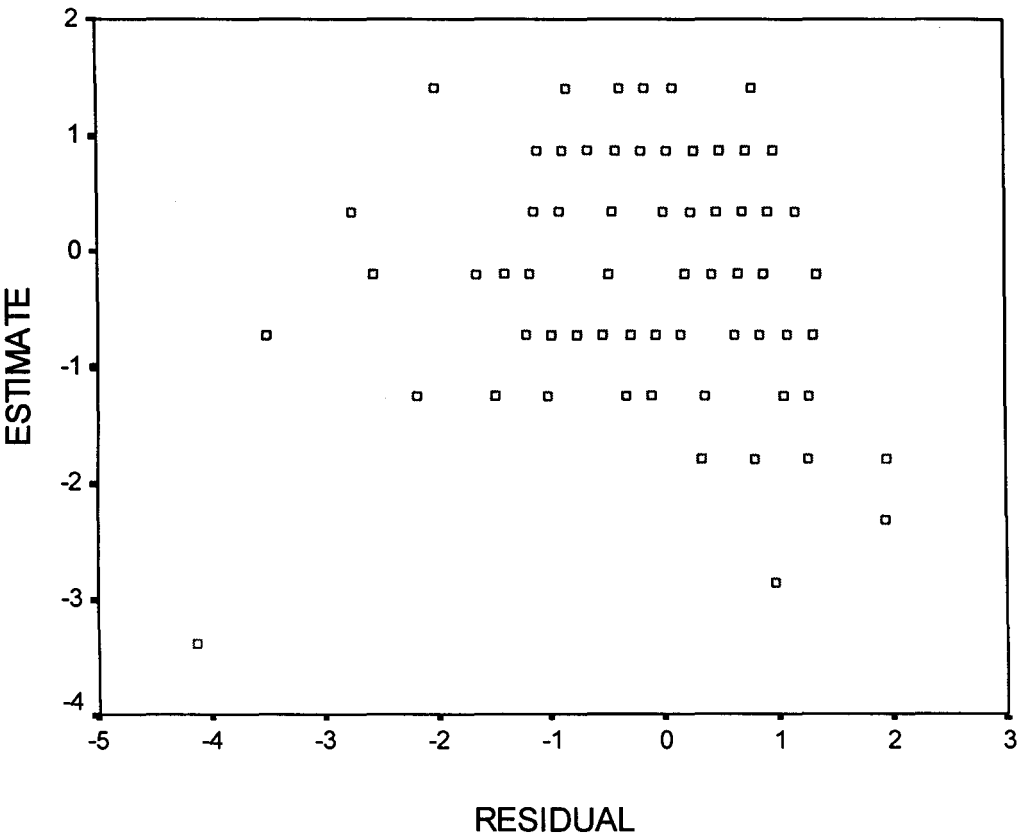


APPENDIX D

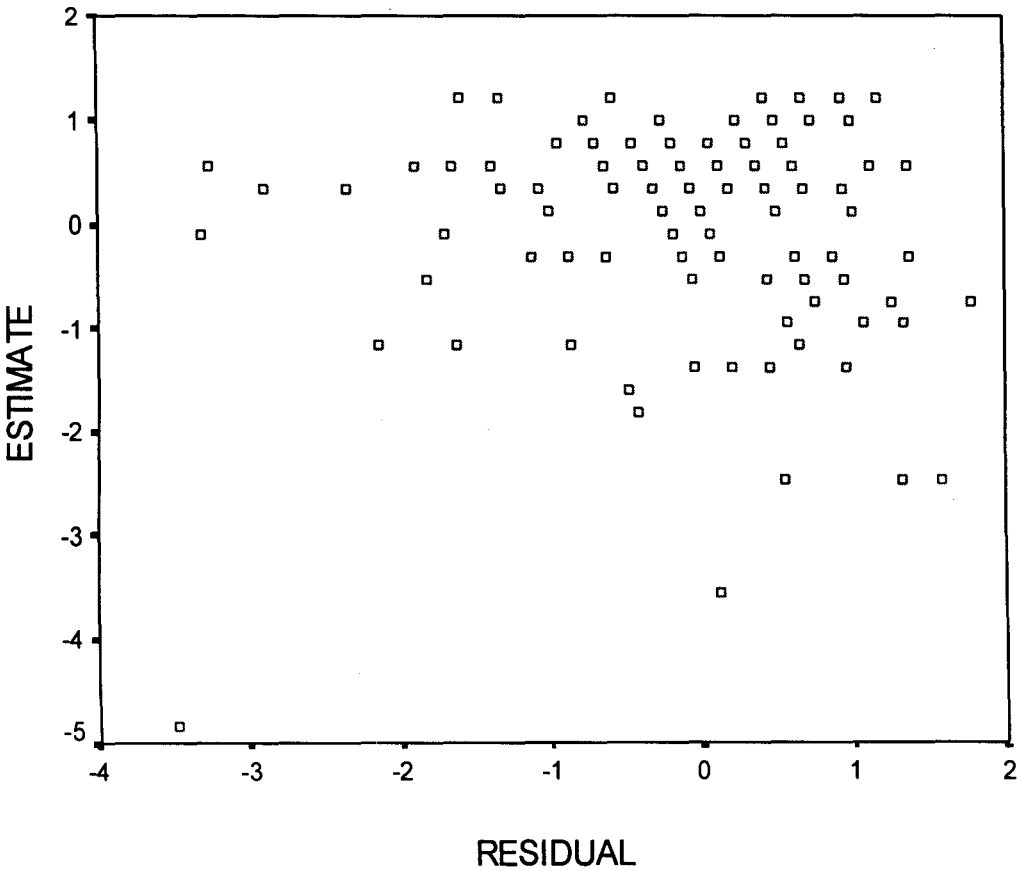
This appendix contains:

- (1) Plot of residuals against predicted value for the relationship between budget emphasis and budgetary participation, (models 1 and 2).
- (2) Plot of residuals against predicted value for the relationship between budgetary participation and trust, (model 1).
- (3) Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, trust and propensity to create slack, (model 1).
- (4) Plot of residuals against predicted value for the relationship between budget emphasis and budgetary participation, trust and job related tension, (model 1).
- (5) Plot of residuals against predicted value for the relationship between budgetary participation and organisational commitment, (model 2).
- (6) Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, organisational commitment and propensity to create slack, (model 2).
- (7) Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, organisational commitment and job related tension, (model 2).

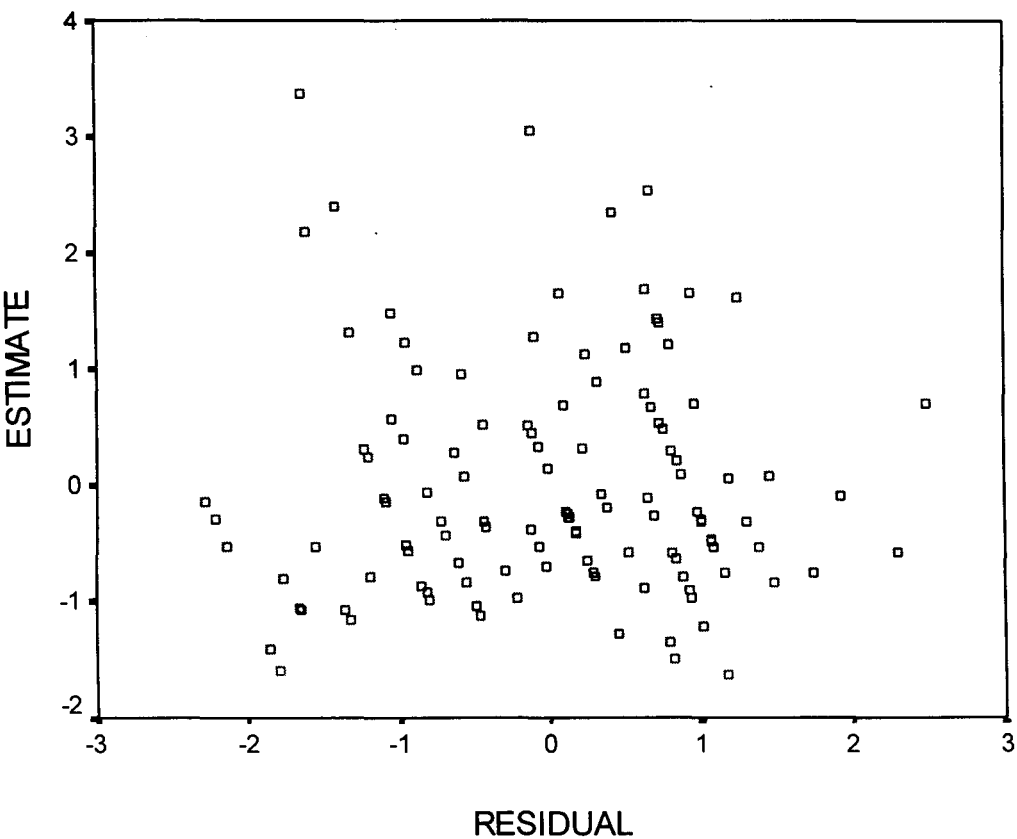
Plot of residuals against predicted value for the relationship between budget emphasis & budgetary participation (models 1 and 2).



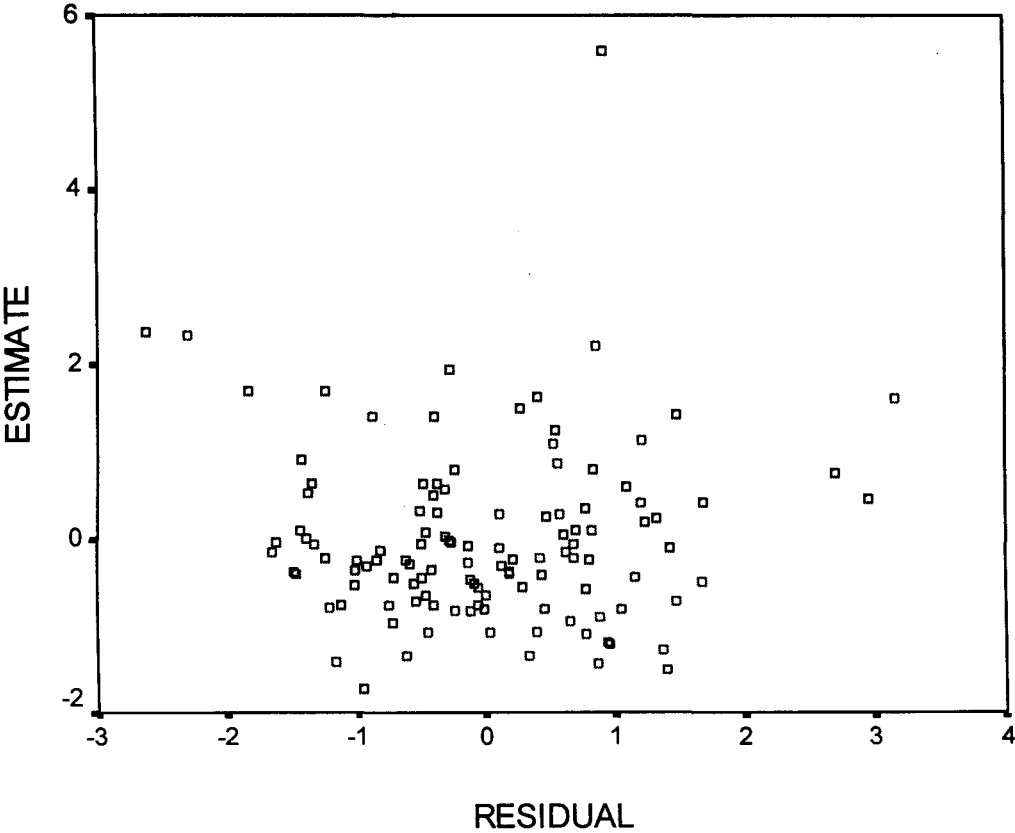
Plot of residuals against predicted value for the relationship between budgetary participation and trust, (model 1)



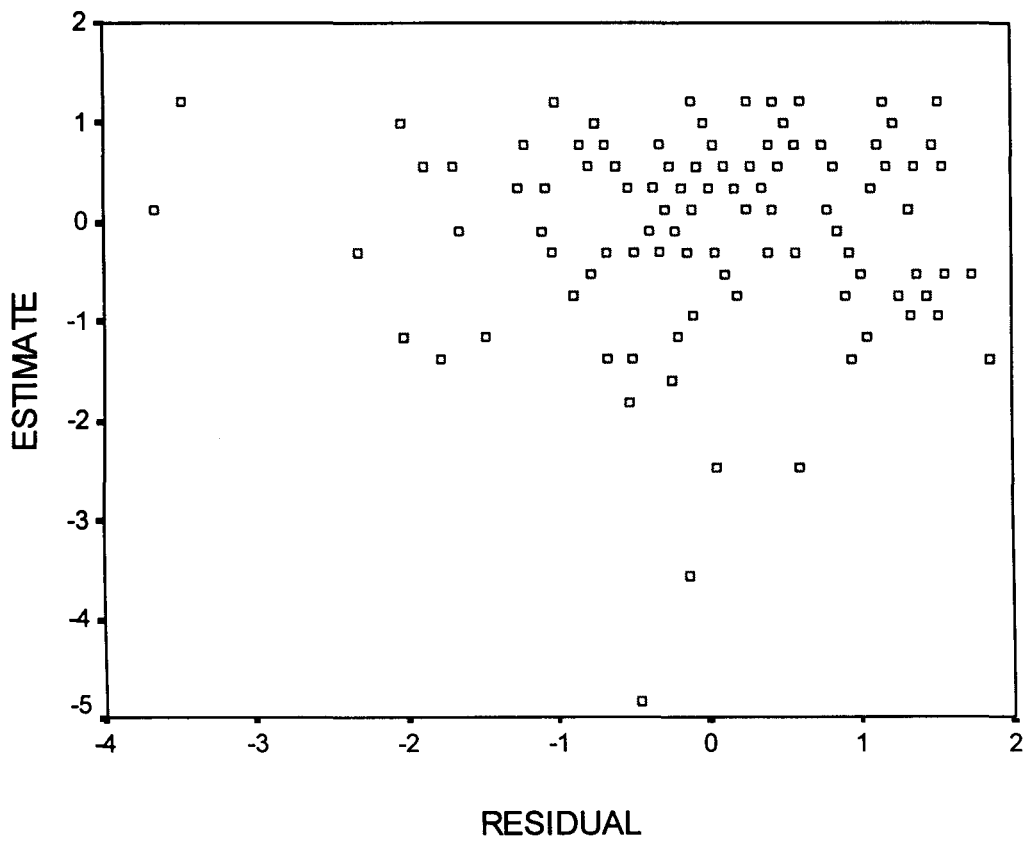
Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, trust and propensity to create slack, (model 1)



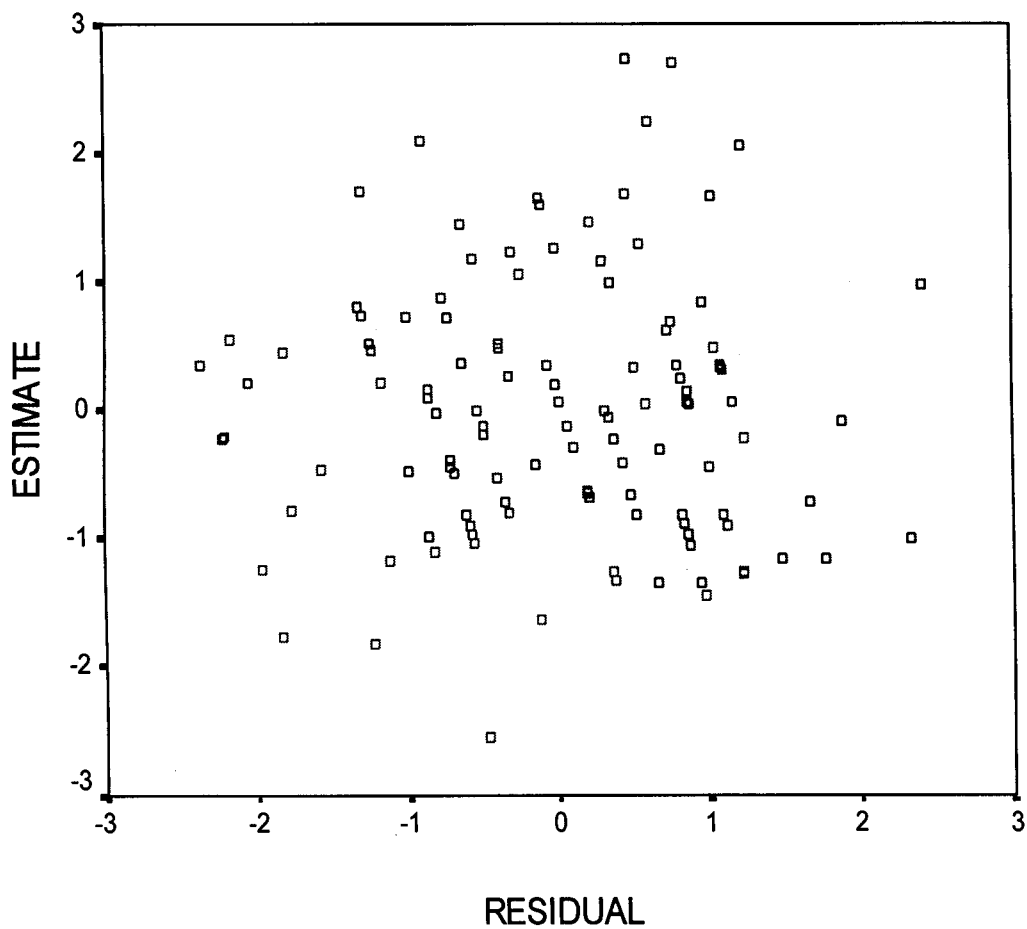
Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, trust and job related tension, (model 1)



Plot of residuals against predicted value for the relationship between budgetary participation and organisational commitment, (model 2)



Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, organisational commitment and propensity to create slack, (model 2)



Plot of residuals against predicted value for the relationship between budget emphasis, budgetary participation, organisational commitment and job related tension, (model 2)

