

Effect of Time Budget Pressure on Dysfunctional Audit and Audit Quality, Information Technology as Moderator

Anis Rachma Utary*

***Abstract:** This study investigates time budget pressure affect to auditor dysfunctional behaviour and audit quality. The respondent are Indonesian auditors at BPK (Government Audit Board). Mail Survey method and convenience sampling. Results showed that when the time budget become less attainable, then the audit is expected to rise dysfunctional similar things also stated that at the time of the audit dysfunctional increases, it will lower the quality of the audit. Another result states that as time budgets become less attainable, the incidence of reduced audit quality. Although time budget pressures negatively affect to audit quality, time budget will improve audit quality, it will be assisted by a reliable information system.*

***Keywords:** Time Budget Pressure, dysfunctional behaviour and audit quality, information technology*

1. INTRODUCTION

Highly demand for the profession of auditors attracted many of people. Complexly a job, make the auditor working full time, always with the high level of activity. This is lead to pressure for auditors. The most notable thing about the audit profession is a high level of stress due to working under pressure. According to McGrath in Bowrin and King II (2009), stress is actually needed in the effectiveness of the work. At the stress in the high level then the effectiveness of the auditor's work will decrease due to fear and worry so much can not achieve the target. This is consistent with the Inverted "U" Theory proposed by Yarkes and Dodson (1908). Kind of pressure is the time pressure. Budget time had given by the firm to the auditor to reduce audit fee. The faster processing time of audit, the audit fee will be smaller. Time budget pressure is defined as "constraints that occur in the audit contract because of limited resources such as time allocated to carry out the entire task of auditing" (DeZoort and Lord, 1997).

Otely, *et al.* (1996) argue that increased competition among the firm has increased the pressure to reduce audit fee. Alderman and Deitrick (1982) said the budget time

* Accounting Dept., Faculty of Economic., Univesrity of Mulawarman, Indonesia, E-mail: anisutary@ymail.com

setting greatly assist the accounting firm in planning, allocation of personnel, evaluating audit, fee setting, and performance efficiency of each stage of the audit. Solomon and Brown (1992) said the auditing literature has distinguish between time budget pressure and time pressure deadlines which *time budget pressure* arises because of the need to complete audit assignments on time. Time budget pressures arise because of the deadline, and a tight budget time to perform the audit. The time budget pressure is one type of pressure that has the potential to undermine Severely auditors' control environment (McNair, 1991). This pressure Refers to "time constraints that occur in the audit engagement from the limitations on the resources [time] The Necessary allocable to perform auditing tasks" (DeZoort and Lord, 1997, p. 45).

Auditor dysfunctional behavior was first studied in America in 1978 by John G. Rhode. In the 1980s noted that study by (Alderman and Deitrick, 1982; Kelley and Seiler, 1982; Cook and Kwilly, 1988). We are interested to pass up this research in Indonesia with reference to previous research by McNamara and Liyanarachchi (2008) in New Zealand. McNamara and Liyanarachchi began his research in 2004, after the discovery of the case of Enron-Anderson followed negative publicity about the public accounting profession and increasing public uncertainty about the quality of the professional work (Imhoff, 2003).

2. THEORETICAL FRAMEWORKS AND HYPHOTESIS DEVELOPMENT

2.1. Inverted "U" Theory

Inverted "U" curve theory is the most widely used model to explain the relationship between stress and performance. According to Robbins (2006), the logic underlying the inverted U theory is that stress at low to moderate levels stimulate the body and increase the ability to react. However, if excessive stress it will place demands that can not be achieved, resulting in decreased performance. But the model of an inverted "U" theory has been criticized by many researchers such as Otley and Pierce (1996b), which found no evidence of an inverted U-curve relationship; Similarly, the results of research by Pierce and Sweeney (2004), who found a linear relationship between time budget pressure and dysfunctional behavior. Robbins (2006), also mentions that these models did not get much support empirically.

2.2. Hyphotesis Development

2.2.1. *Effect of Time Budget Pressure on Audit Dysfunctional*

Based on the theory of organization's performance aspirations Kelley and Margheim (1990) and Outley & Pierce (1996b) predicts that the "inverted U relationship" will appear at the event due to dysfunctional behavior time budget pressure. Kelley & Margheim (1990) concluded that the relationship found in their research in accordance with the theory. However, Outley & Pierce (1996b) found that the inverted U-shaped

relationship does not occur in these events because the results of his research in the form of a linear relationship.

Although there is still disagreement on the results of research on the exact form of the relationship between time budget and dysfunctional behavior, but certainly in these studies it was found that the auditor dysfunctional behavior tends to rise when the time budget is not reached, however, it can be concluded that the auditor dysfunctional behavior is expected to increase in line the failure to achieve budget. This leads to the following hypotheses, stated in their alternative form as follows:

H₁: As time budgets become less attainable, auditors' dysfunctional behaviour will increase.

2.2.2. Effect Audit Dysfunctional on the Quality Audit

Dysfunctional audit behavior is defined as any act performed in the execution of audit work the auditor can reduce or degrade the quality of the audit directly or indirectly (Kelley and Margheim, 1990; Otley and Pierce, 1996a). Dysfunctional behavior as a result of audit time budget pressure has a tendency to degrade the quality of the audit form *Reduced Audit Quality Practices* and *Under Reporting of Time*.

Some previous research indicates that generally dysfunctional behavior negatively affects the quality of the audit (Donnelly *et al.*, 2003; Otley and Pierce, 1996, and Shapeero *et al.*, 2003). Azad (1994) supports this and believes the quality of the audit will be the victim if the auditor does not run some of the audit procedures. Furthermore, dysfunctional behavior will give a direct threat to the reliability of an audit process and will give unfavorable impact in the future, such as an inaccurate evaluation of staff, loss of income of the company, future budgets are not realistic, and audit reduction behavior on audits in the future so that the rising action of dysfunctional behavior will reduce the quality of the audit. The following hypothesis is tested:

H₂: When auditors' dysfunctional behaviour will increase, the incidence of reduced audit quality practices will increase.

2.2.3. Effect of Time Budget Pressure on the Quality Audit

According to the research Prasita and Priyo (2007), showed that the time budget pressure has a negative effect on audit quality. Similarly, in the study of Simajuntak (2008) showed time budget pressures make auditors tend to perform actions that cause a decrease in audit quality. Kelley and Margheim (1990) concluded that the relationship found in their study conformed to such a theory. However Otley and Pierce (1996a) found that as time budgets approached unattainable levels (i.e., highest levels of pressure) the level of dysfunctional behaviour peaked. Otley and Pierce (1996a) suggested the differences in sample and audit conditions between the two studies as some reasons for this inconsistent result. Another important reason was the difference in auditor perception.

There is a difference of opinion on the importance of time pressure budget, this depends on the conditions of the culture of a country or region. For example, Irish auditors placed a significantly higher level of importance on time budget achievement (Otley and Pierce, 1996a) than their US counterparts (Cook and Kelley, 1991). This leads to the following hypotheses, stated in their alternative form as follows:

H₃: As time budgets become less attainable, the incidence of reduced audit quality practices will increase.

2.2.4. The Ability in Information Technology Moderate the Relationship between Time Budget Pressure on Audit Quality

The development of technology provides significant changes to the audit profession. The use of technology in providing opportunities for companies to expand their business. Along with the development of the company, the complexity of the company be even higher. Developments in IT have a significant impact to the business world, both related to the practice, process, recording and data storage (Rezaee *et al.* 2001). The quality and availability of data in real time provide a huge benefit because a quality capable of supporting decisions and timely.

In the audit process should be an agreement that the system used. Hardi and Reeve (1999) found that in many cases required prior consensus between management and the auditors to determine the size of a reliable control system and area/scope of auditing activities. This is due to the lack of standards and the increasing complexity of the company is applying advanced information technology. The following hypothesis is tested:

H₄: The interaction between time budget pressure and ability in information systems positively impact on audit quality

3. METHODS

The variables measured is time budget pressure, dysfunctional audit, quality audit, and ability in information technologi. Abilities in information technology moderating influence of time budget pressure on audit quality. Several Questions in the questionnaire for each of the variables were measured using a Likert scale. This study uses a variable unobservabel (*construct*) the measurement should use the indicators, so it must be analyzed with PLS structural equation approach.

PLS is a powerful analytical method (Wold, 1985 in Ghozali, 2006) because it is not based on many assumptions. For example, the data must be normally distributed, the sample does not have to be huge. It can be used to confirm the theory, PLS can also be used to explain the relationship between the latent variables. PLS can simultaneously analyze constructs formed with reflexive and formative indicators. It can not be done by a covariance-based SEM as a model would be unidentified.

Table 1
Definition and Measurement of Variables

<i>Construct</i>	<i>Definition</i>	<i>Indicator</i>
Quality of Audit	The quality of auditor's job related to qualifications, expertise, timeliness of completion of the Job and general standards, the examination of evidence sufficiency, independence and attitude towards clients.	1) Obey the general standard 2) Do field work with appropriate 3) Have high ethical standards
Dysfunctional Audit	Auditor behavior changes that can threaten an audit system, which is an action taken to reduce the effectiveness of the auditor's evidence gathering during testing. (Donnelly <i>et al.</i> 2003) and (Otley and Pierce, 1996)	1) Underreporting of audit time 2) Premature signing-off 3) Reduced audit quality behavior
Time Budget Pressure	The condition where the auditor is required to perform efficiency on time budget that has been prepared, or there are time restrictions on a very tight budget (outley & pierce, 1996b)	1) The level of time pressure experienced by auditors 2) Intensity attainment time budget 3) Achievement budget time in office
Ability in Information Technologi	Auditor's Skill in information systems relating to the audit process (Bierstaker <i>et al.</i> 2001)	1) Ability in System Standard Audit 2) Ability in Software

The population is that the government auditor who worked on the Supreme Audit Agency (BPK) in Indonesia, time resaerch period 2014. While the reasons for selecting the BPK as government audit institutions in Indonesia is the high rate of corruption committed by government officials in Indonesia. Determination of the sample with nonprobability sampling is convenience sampling methods. Questionnaires were sent about 323 units, through a mail survey to the BPK auditors, emails obtained from the database BPK auditors. From the 323 questionnaires just returned 123 only, and just 96 were complete and useable.

4. DISCUSSION

4.1. Validity and Reliability

Each latent variable (*construct*) were tested for internal consistency validity using Cronbach's alpha and construct reliability. Result of Validity and Reliability testing is listed in Table 2, the coefficient alpha was QA (0,788), DA (0,821), TBP (813) and IT Cap (0,786), respectively, greater than the 0,70 limit proposed by Nunnally (1978). All construct reliability is greater than 0,8, is above the limit of 0,60 proposed by Fornell and Larcker (1981). Overall, the results suggest a high internal validity indicator measurement; therefore, the reliability of each construt valid.

Tabel 2
Validity and Reliability

Construct	Cronbach' Alpha
AQ	0,788
DA	0,821
TBP	0,813
AIT	0,786

4.1.1. Structural Equation Analysis

In the PLS analysis is done there are 2 things, *the first*, outer assess measurement models or models is an assessment of the reliability and validity of research variables, There are several criteria to assess the outer models: the convergent validity, discriminant validity and composite reliability, *Second*, assess the inner workings of the model or structural models, testing structural inner models or models is made to see the relationship between the constructs, significance and value of R-square of the model study.

The results of the first test with the PLS analysis generates outer loading as follows:

Figure 1: Results of Outer Model

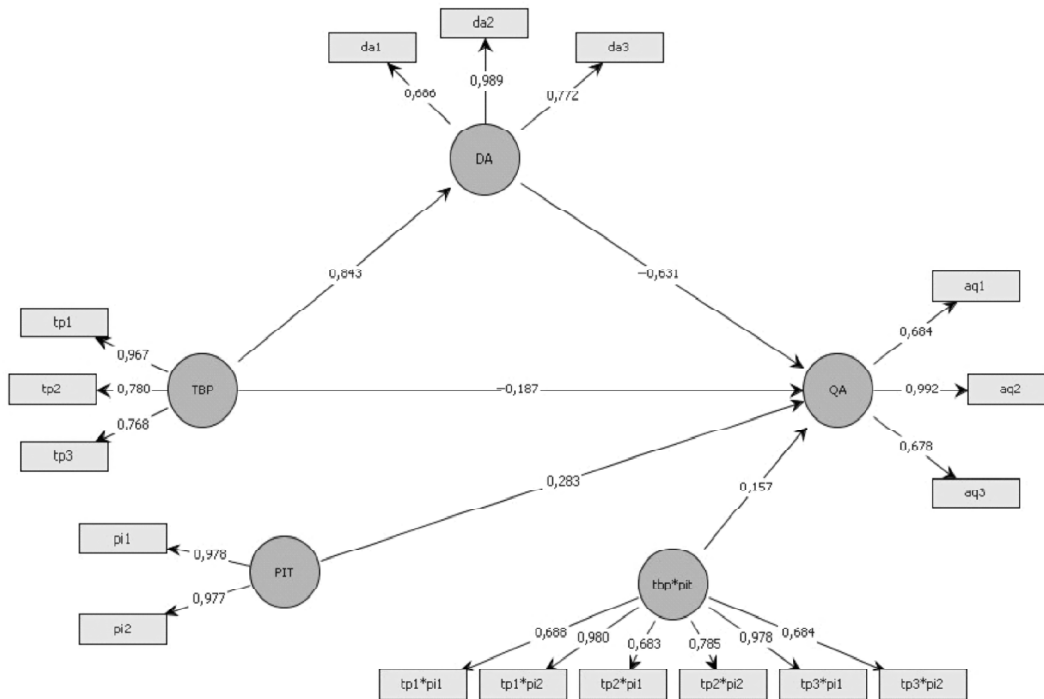


Table 3
Value Regression Weight Relationships between Constructs, the Value of Statistical Significance (t-statistic) and R-square

<i>Causalities Variable</i>	<i>Inner Model R-Square (R²)</i>	<i>Coefficient</i>	<i>T-Statistic</i>
TBP → DA	0,416	0,843 **)	4,214
TBP → QA	0,511	-0,187	0,548
DA → QA	0,511	-0,631	3,486
tbp*it → QA	0,511	0,157 **)	2,231

Annotation:

**) Sig on 0,01 **) Sig on 0,05 *) Sig on 0,10

TBP = Time Budget Pressure

QA = Quality of Audit

DA = Dysfunctional of Audit

IT = Ability in Information Technology

Source: Analysis Output SmartPLS

4.2. Hypothesis Testing

The first hypothesis states that As time budgets become less attainable, auditors' dysfunctional behaviour will increase. Statistical analysis states that the pressure of time and a significant positive influence on the behavior of dysfunctional audit, its mean auditors' dysfunctional behaviour will increase. The results have been successfully confirmed the *theory of Attitude of Change* as a whole which includes Consistency, Dissonance, and the Functional Theory to explain the phenomenon of decline in the quality of auditing in general turned out to be caused by the pressure experienced by the auditor during the audit resolution process, the tendency of the personal characteristics that cause the auditor two opposite conditions in which auditors need to eliminate the mismatches in various ways such dysfunctional behavior. The findings of this study in relation to auditors across all levels indicate that the two types of dysfunctional behaviour significantly increase as time budgets become less attainable. These results therefore add support to the findings of Otley and Pierce (1996a) who found a linear relationship between time budget pressure and dysfunctional behaviour although they contradict the findings of Kelley and Margheim (1990).

The second hypothesis states that When auditors' dysfunctional behaviour will increase, the incidence of reduced audit quality practices will increase. Some previous research indicates that generally dysfunctional behavior negatively affects the audit quality. Kelley and Margheim (2002) find evidence that such behavior yag client receives a weak explanation, perform a superficial review of the documents, failed to examine the accounting principles, and reduce substandard work that is considered reasonable is 4 (four) special type of behavior *audits quality reduction* (AQR). Other Previous research has shown conflicting findings of the variables that explain the emergence of dysfunctional behaviors such as leadership style variables found to be significant to explain behaviors that reduce audit quality (Liyandarachchi and McNamara, 2007) but not significant in other studies (Kelley and Margheim, 2002).

The third hypothesis states that as time budgets become less attainable, the incidence of reduced audit quality practices will increase, this result is not acceptable. Although not significant, but it gives a negative direction, meaning that the time budget pressure will result in poor performance auditors. Quality audits can be even worse, if the budgeted allocation of time is not realistic with the complexity of the audit to which it aspires. Coram *et al.* (2003) produced findings that showed the decrease related to audit quality due to a very tight of time budget.

The fourth hypothesis states that the *Interaction between time budget pressure and ability in information systems positively impact on audit quality* is acceptable. It can be interpreted that despite the negative impact of time budget pressure on audit quality, but with a good mastery of information technology, then the presence of pressure fixed time budget will improve audit quality, because it will be assisted by a reliable information system. Rezaee *et al.* (2001) noted several important things that must be met, namely: *first*, auditor knowledge about the client's business and industry should be the better to ensure the reliability and relevance of electronic documents. Both the auditor should have a better understanding of the flow of transactions and related control aktivitas to assure the validity and reliability of information (documents) paperless.

5. CONCLUSSION AND LIMITATION

The results indicate that there is positive and significant correlation between increased *time pressure* on the *behavior of the audit dysfunction*. Then the same thing happened also a significant negative influence of dysfunction audit on the *declining quality audit*. But something else happened, that time pressure has no significant effect on audit quality, however, have a negative impact. Moderating variable in the interact ability in information technology turns out to have a positive impact on audit quality, although the pressure of time, this indicates that even though the auditor had work deadlines, but if you have good IT skills, then the resulting audit quality is also good.

This study has several limitations one of which is a low-level generalization for sampling methods using *non-probability sampling* specific a *convinien sampling*, it means only that easy to find any sample (respondents who have an email address) which is used as a respondent. Besides, the level of response rate is low, the goal of 323 respondents, only 96 respondents who could be used as a sample.

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