The Influence of COSO Organizational Framework Implementation on the Quality of Internal Control in Group of Companies Dani Prisma Mitra (DPM)

Siswo Akhmad Nurhidayat 1*
1 Sekolah Tinggi Manajemen Ipmi, DKI Jakarta 12750, Indonesia

ABSTRACT

This study analyzed the perception of organization members of the group of company in Dani Prisma Mitra (DPM) about the influence of COSO organizational framework consisting of company ethical environments, risk management trainings and internal audit activities on the quality of internal control procedures. Population in this research is all employee in finance and non-finance department with level of supervisor and upward at DPM. Hypothesis testing used multiple regression analysis with discussion of contingency theory. Hypothesis testing concluded that company ethics environments and internal audit activities have positive and significant influence to the quality of internal control procedure, while risk management activities have positive but not significant effect on to the quality of internal control procedure.

INTRODUCTION

The existence of the internal control in an organization is very important to support the survival and achievement of its mission. An organization needs internal control to provide greater assurance for the achievement of operational objectives, financial reporting, and for purposes of compliance to laws or regulations. Internal controls help to ensure that the directions, policies, procedures and practices that are designed and approved by management and the board of commissioners are appropriate and functioning as expected (COSO, 2006). A general definition of internal control is a process run by board of commissioners, management, and other personnel of the company designed to provide reasonable assurance for 3 (three) objectives namely (a) financial reporting reliability, (b) effectiveness and efficiency of operations; (c) compliance to applicable laws and regulations (COSO, 2006; PSA 69, 2011).

The Committee of Sponsors of Organizations of the Treadway Commission (COSO, 1994) provides 5 (five) interrelated components in internal control, which are the control environment, risk assessment, control activities, communication...
Seeing the importance of the objective of achieving internal control within the framework of 3 (three) organizational factors of COSO, the authors propose a research proposal under the title The Implementation of Organizational Framework of the COSO on the Quality of Internal Control in Group of Companies Dani Prisma Mitra (DPM) by studying at the perceptions of the organization's members about the influence of the company ethical environments, risk management trainings and internal audit activities on the quality of internal control procedures.

LITERATURE REVIEW

Internal control

According to Anthony (2006) to achieve internal control objectives, management is responsible for organizing and maintaining internal activities in accordance with 5 (five) interrelated components and must be applied at all organizational levels starting at entity level to transaction or business process level. These five components refer to the Internal Control Integrated Framework (COSO, 1992) as described in the figure 1.

Control environment is the organizational and cultural structure established by management and workers to maintain the sustainability of organizational support for organizational effectiveness. Risk Assessment Management must identify internal and external risks that can prevent the organization from achieving its objectives. In identifying risks, management should consider the auditor’s previous findings, internal (information and communication) and monitoring (monitoring). Furthermore, in January 2009, COSO issued Guidance on Monitoring of Internal Control Systems which provided a model for enterprise management to design and implement the internal control assessment program (Tsay, 2010).

The failures to implement internal controls occurring in the global and or national companies did not reflect that the company had not a series of internal control procedures in place to authorize the transactions. Thus, prevention from the failures of internal control function and to ensure the objectives of internal control can be achieved, it is necessary to implement the quality internal controls throughout the organization (APB, 1995). The quality of internal control procedures refers to the design of internal control policies and procedures within the organization and the level of compliance to the policies and procedures of internal control by all employees within the organization (Rae and Subramaniam, 2008).

This research is based on research conducted by Rae and Subramaniam (2008) under the title "Quality of Internal Control Procedures Antecedents and Moderating Effects on Organizational Justice and Employee Fraud". The selection of three organizational factors is based on the COSO's internal control system framework, that the organization's internal environment, risk assessment policy, activity monitoring can be clearly seen to be different elements of a larger system of management controls related to the quality of internal control procedures (COSO, 2004; Prasetyo, 2011). This study was different with research conducted by Rae and Subramaniam (2008) where in this study not to include the influence of moderation of organizational and fraud justice factors. Research conducted by Rae and Subramaniam (2008), and Prasetya (2011) have conflicting results with each other. The research was conducted in a group of company called DPM, a group of companies that have business in the national restaurant chain, plantation, hotels and pleasures, processing/logistic and manufacturing, so it was expected that the assessment of risk management and internal audit activities tend to be the same.

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management reviews, or non-compliance with laws and regulations. The identified risks should be analyzed to determine the potential risks to the organization.

Control activities include policies, procedures and mechanisms to achieve organizational goals. Communication information should be communicated to relevant personnel at all levels of the organization. Information must be relevant, reliable and timely. Monitoring of the effectiveness of internal control should be undertaken in normal business. In addition, regular review, reconciliation or comparison of data should be included as part of routine tasks assigned to designated personnel. Periodic assessments should be integrated as part of continuous monitoring of management of internal controls.

Contingency Theory
Contingency theory argues that the design of the control system depends on the organizational setting context then contingency theory emerges as responses to the approaches the arguments that optimal control designs can be applied to all settings and firms. This universalistic approach is a natural extension of scientific management theory that says that there is an optimal system for designing operational processes in order to maximize efficiency (Pock, 2007).

Asel (2009) asserted the unique factors of each event or situation encountered will strongly influence the design and implementation of Management Control System (MCS) in an organization. Furthermore, two organizations will not have the same internal control system unless the organization is identical (COSO, 1994). Therefore, the contingency approach to MCS then to identify the best design and implementation in the context of organizational uniqueness (Chenhall and Capman, 2009).

The organization shall apply adequate internal control systems to ensure that organizational activities are carried out in an effective and efficient manner, the availability of information reliability and compliance to applicable laws and regulations. Internal Control System or MCS is a process by which managers ensure that resources are obtained and used effectively and efficiently in order to achieve organizational goals (Antony in Asel, 2009) and have 2 (two) objectives of providing information which is useful for management and helps to assure appropriate employee behavior patterns to achieve organizational goals (Asel, 2009).

The Company’s Environmental Ethics Effect on Quality of Internal Control Procedures
In the context of contingency theory, decision making by members of the organization is influenced by individual factors and organizational factors. Individual factors (knowledge, values, attitudes and attention) interact with organizational factors (the influence of co-workers and opportunities) influence the dilemma of ethical or unethical decision making (Ferrel and Gresham, 1985).

Research conducted by Rae and Subramaniam (2008) explained that in a more ethical environment, employees tended to follow company rules and regulations and it was viewed as morally acceptable. Elias (2004) concluded that public accountants working for companies with high ethical standards perceive earning management activities to be more unethical. While Rae and Subramaniam (2008) proved that the company ethical environments had a positive effect on the quality of internal control procedures. Based on the above research, the first hypothesis of this research are:

H1: The corporate ethics environments positively affects the quality of internal control procedures

Effect of Risk Management Trainings on the Quality of Internal Control Procedures
The achievement of organizational goals is a continuous process so that the understanding of risk management must also always be updated. Therefore, risk management training for members of the organization was a very important element in risk management and should always be updated about the type of risk and design of internal
controls because the organization was in a dynamic environment (Farrugia, 2002).

This approach made enterprise risk management training tailored to the context of operational and organizational needs. Kramer's (2003) research on risk management training to organizational members stated that members of organizations that were actively trained with risk management tend to be more accurate in identifying threats to the organization as a result of weakness or lack of internal control.

Risk management training also causes members of the organization could to map risk relationships between parts of the organization and the implications of internal control failures against the organization in general. Rae and Subramaniam (2008) confirmed that risk management training positively influences the quality of internal control procedures. Based on the above research, the second hypothesis of this study are:

H2: Risk management training positively affects the quality of internal control procedures

**Effect of Internal Audit Activity on the Quality of Internal Control Procedures**

The monitoring system used will be adjusted to the circumstances or the environment of the company. One form of supervision is the formation of an internal audit function that plans and conducts internal audits. The good and appropriate plan of internal audit program is expected to identify areas where control or supervision is not fully functioning, and the existence of systems and procedures are not clear.

Research conducted by Fadzil et al. (2005) found that the management of the internal audit department, professional expertise, review and objectivity significantly affected the monitoring / supervision aspects of the internal control system. Rae and Subramaniam (2008) demonstrated that internal audit activities had a positive effect on the quality of internal control procedures. Based on the above research, the third hypothesis of this research are:

H3: Internal audit activities have a positive effect on the quality of internal control procedures

**Theoretical Framework and Formulation Hypotheses**

The problem in this research was how know the perception of organization members to the company ethical environments in improving the quality of internal control. In addition, the risk management trainings will enable organizational members to recognize threats to the organization, as a result of weaknesses in the quality of internal control procedures, getting better and giving employees deep insight into the importance and the benefits of compliance with established procedures.

Internal audit activities cover the areas of finance and non-finance as well as financial and non-financial procedures that will improve the quality of internal control procedures. The findings and recommendations of internal audit results on the weaknesses in the internal control system will be addressed by improvements to the procedures established so that ultimately will improve the quality of internal control procedures. The flow of thought is described in the figure 2.

**RESEARCH METHODS**

This research type was hypothesis testing research (hypothesis testing). Hypothesis testing is a study that aims to test the hypothesis and generally is a study that explains the phenomenon in the form of relationships between variables. The type of data in this study were subject data in the form of opinions, attitudes, experiences or characteristics of a person.
or group of people who become the subject of research or respondents.

**Research Variables**

**1. Risk Management Trainings**

Farrugia (2002) stated that employee was a key element in risk management and something that required constant reassessment of the types of risks and controls as long as the organization operates in a dynamic environment. Employees who were actively trained in risk management recognize more threats to the organization more accurately, as a result of weak internal control (Kramer, 2003).

**2. Internal Audit Activities**

The Institute of Internal Auditors (IIA) (1999) provided a new definition of internal auditing as an independent activity in setting goals and designing value added advisory activities and improving company operations. Thus, internal audits assist the organization in achieving its goals by a systematic and systematic approach to assessing and evaluating the effectiveness of risk management through control and governance processes. The measurement of this variable uses 13 (thirteen) items adapted from statements in the questionnaire concerning the Internal Global Practices Audit Benchmarking Questionnaire by PriceWaterhouseCoopers (2004).

**3. The Quality of Internal Control Procedures**

According to the Professional Standards of Certified Public Accountant - Standar Profesional Akuntan Publik (SPAP), SA Section 319; paragraph 06, internal control is a process undertaken by board of commissioners, management, and other personnel entities designed to provide reasonable assurance about achievement of the following three classes of objectives: (a) reliability of financial reporting, (b) effectiveness and efficiency of operation, and (c) compliance with applicable laws and regulations. While the quality conception of internal control procedure refers to 2 (two) things were the quality of the internal accounting control design and the compliance of members of the organization to run the policies and procedures (Rae et al., 2008).

The measurement of this variable used 11 (eleven) questions adapted from a nation-wide over-control survey by CPA Australia (2003) and Harrer (2008). Measurement of the answer of each question item using Likert scale 5 (five) points, namely: VS (Very Strong) rated 5, Answer Strong (Strong) rated 4, Answer N (Neutral) rated 3, Answer Weak (Weak) value 2, VW (Very Weak) is rated 1.

**Data Testing**

1. Data Quality Test: test of reliability and validity
2. Classic assumption test: normality test, multicollinearity test, heteroscedasticity test
3. Assess Goodness of Fit Model: coefficient of determination and statistical value F
4. Hypothesis Testing: Testing model of H1 to H3 by using multiple regression analysis OLS (OLS multiple regression analysis).

The dependent variable was the quality of the internal control procedure regressed against three independent variables were the company’s ethical environments, risk management trainings, and internal audit activities. The OLS regression equation is as follows:

\[ Y_1 = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e \]

\( Y_1 \): quality internal control procedures
\( X_1 \): corporate ethical environment
\( X_2 \): risk management training
\( X_3 \): internal audit activities

\( \beta_0 \): constants
\( e \): random error (error term)

\( \beta_1, \beta_2, \beta_3 \): regression coefficients of independent variables

Influence of independent variable to dependent variable in test on significance (\( \alpha = 5\% \)).

**RESULTS AND DISCUSSION**

DPM consists of 12 (twelve) companies engaged in different types of business. The names of companies in the study are deliberately abbreviated as part of research ethics. Then from each company selected respondents who come from the financial and non-financial. Respondents from finance and non-financial division came from 2 (two) companies that contributed the largest sales and high operational
complexity, while the remaining respondents only came from the finance department of 10 (ten) other companies. The statistical data of sample distribution as describe in the table 1.

The Company’s Environmental Ethics Effect on Quality of Internal Control Procedures
Hypothesis test resulted that hypothesis I (H1) which stated that the company ethical environments positively affect the quality of internal control procedures was accepted. This research also supported by descriptive statistics of research variables. Descriptive statistics of research variables showed the mean value of internal research procedure quality of 38.5 with a standard deviation of 4.93, greater than the theoretical middle value 33. The actual value of the mean variable internal research quality variable of 38.5 means the mean value of each attribute is 3.52 (38.5/11). The respondent’s answer between neutral and half strong means that the respondents said the quality of internal control procedures that run in DPM tend to be strong.

Descriptive statistics of the research variables also showed the true mean value of the corporate ethical environments of 18.7 with the standard deviation of 2.45, and also greater than the theoretical middle value 15. The true mean value of the firm ethical environments is 18.7 means the mean value of each attribute is 3.74. Respondents’ answer between neutral and close to agree means that the company ethical environments in DPM exemplified by the ethical behavior of the company leadership goes well.

The study proved that a good corporate ethics environments applied and exemplified by the company leadership will significantly improve the quality of internal control procedures. Elias (2004) mentioned that employees perceive implicit forms of institutionalizing ethics for example, leadership and organizational culture to be more effective than explicit forms such as codes of ethics to shape ethical behavior. Ethical and unethical decision-making will be influenced by contingency factors that are individual factors and organizational factors (Ferrel and Gresham, 1985).

The Effect of Risk Management Training on Quality of Internal Control Procedures
The result of hypothesis test showed that hypothesis II (H2) which stated that risk management training has positive effect on quality of internal control procedure was rejected. Descriptive statistics of research variables as in table 4.9 does not support the results of hypothesis testing statistically.

The descriptive statistics of the research variables figured that the mean value of a risk management training variable is 17.7 with a standard deviation of 2.99, greater than the theoretical middle value of 15. The real mean value of the risk management training variable is 17.7 means the mean value of each attribute is between 3.54 (17.7/5). This indicated that the respondents answered between close to neutral and half agree on the routine of risk

| Profile                  | Frequency | Percentage (%) |
|--------------------------|-----------|----------------|
| Gender                   |           |                |
| Male                     | 68        | 67.3           |
| Female                   | 33        | 32.7           |
| Age                      |           |                |
| ≤30                      | 27        | 26.7           |
| 31 – 37                  | 25        | 24.8           |
| 37 – 44                  | 37        | 36.6           |
| ≥45                      | 12        | 11.9           |
| Working Experiences      |           |                |
| ≤5                       | 45        | 44.6           |
| 6 – 10                   | 18        | 17.8           |
| 11 – 15                  | 29        | 28.7           |
| ≥16                      | 9         | 8.9            |

| Profile                  | Frequency | Percentage (%) |
|--------------------------|-----------|----------------|
| Education Level          |           |                |
| Senior High School       | 2         | 2.0            |
| Diploma                  | 11        | 10.9           |
| Undergraduate            | 75        | 74.3           |
| Department               |           |                |
| Finance and Accounting   | 74        | 73.3           |
| Non-Finance and Accounting| 27    | 26.7           |
| Level of Responsibility  |           |                |
| Staff                    | 24        | 23.8           |
| Supervisor               | 28        | 27.7           |
| Manager Assistant        | 26        | 25.7           |
| Manager                  | 20        | 19.8           |
| Senior Manager           | 3         | 3.0            |

Table 1. Summary of Demographic Information
management training in DPM.

The statistical calculation of t-test showed that the hypothesis was rejected. The rejection can be seen in the comparison of the true mean value of 17.7 compared with the theoretical mean value of 15. The statistical comparison of the real value with the theoretical value is not significantly different which was shown at the sig value. (H0) was accepted or rejection on alternative hypothesis, in this case the alternative hypothesis was hypothesis 2. The null hypothesis (H0) says there was no difference between the real value and the value theoretical mean, while the alternative hypothesis explained that there was a difference between the real mean and the theoretical mean. Acceptance of the null hypothesis (H0) showed that risk management training performed would not significantly affect the quality of internal control procedures.

Based on contingency theory, risk management training should be tailored to contingency factors consisting of external environmental factors, technology, strategy and organizational size (Ferrel and Gresham, 1985). The results of this study concluded that considering these contingency factors in risk management training would not have a significant effect on the quality of internal control procedures.

**Effect of Internal Audit Activity on Quality of Internal Control Procedures**

The hypothesis test result showed that hypothesis III (H3) that stated there was positive influence between internal audit activity and quality of internal control procedure accepted. The results of this study were also supported by descriptive statistics of research variables. The mean value of internal audit activity variable is 46.2 with a standard deviation of 6.72 being greater than the theoretical core value of 39, which means that internal audit activity in DPM tends to be strong.

The mean value of internal audit activity variable is 46.2 means the mean value of each attribute is 3.55. This means that the respondent answered between neutral and half strong over the implementation of internal audit activities in the DPM. Contingency factor in internal audit activities was supervision system must be adjusted to company requirement. This study proved that the supervision system through internal audit activities performed positively affect the quality of internal control procedures.

**CONCLUSION AND RECOMMENDATION**

The result of statistical test of organizational member's perception about the influence of company ethical environments, risk management trainings and internal audit activities on the quality of internal control procedures in DPM by using multiple regression can be summarized as follows:

1. The company ethical environments had a positive and significant influence on the quality of internal control procedures. This means that a high corporate ethical environment would improve the quality of internal control procedures.

2. Risk management trainings had a positive but insignificant effect on the quality of internal control procedures. This means that risk management training did not have a significant impact on improving the quality of internal control procedures.

3. Internal audit activities had a positive and significant influence on the quality of internal control procedures. This means that high internal audit activities would improve the quality of internal control procedures.

Contribution this research to DPM is that the DPM management needs to set the standard of corporate ethics values to support the achievement of the quality internal control procedures and prepare sufficient resources to support internal audit activities. In addition, because the risk management training did not affect the quality of internal control procedures, it is necessary to do alternative activities such as supervision of risk management implementation in each company to support the achievement of corporate objectives.
REFERENCES

Asel, J. A. (2009). Risk Management and Management Control-The impact of the financial crisis on the use of Management Control Systems. Research Design and Methodology Approach.

Chenhall, R. H., & Chapman, C. S. (2006). Theorising and testing fit in contingency research on management control systems. Methodological issues in accounting research: Theories and methods, 35-52.

COSO. (2004). Enterprise Risk Management – Integrated Framework, Committee of Sponsoring Organizations, Retrieved from www.coso.org/publications/ERM/COSO_ERM_ExecutiveSummary.pdf.

COSO. (2006). Internal Control over Financial Reporting – Guidance for Smaller Public Companies, Committee of Sponsoring Organizations of the Treadway Commission.

COSO. (2009). Internal Control - Integrated Framework, Guidance on Monitoring Internal Control Systems, Committee of Sponsoring Organizations of the Treadway Commission.

Ferrell, O. C., & Gresham, L. G. (1985). A contingency framework for understanding ethical decision making in marketing. The Journal of Marketing, 49(3), 87-96.

Fraser, I., & Henry, W. (2007). Embedding risk management: structures and approaches. Managerial Auditing Journal, 22(4), 392-409.

Gerhardy, P. G. (2003). An extended contingency model of environmental factors influencing national accounting and disclosure practices. Korea Accounting Information Association.

Ghozali, I. (2011). Aplikasi Analisis Multivariate dengan Program SPSS 21 (Vol. 7). Semarang, Jawa Tengah, Indonesia: Universitas Diponegoro.

Gupta, P. P. (2009). COSO 1992 Control framework and management reporting on internal control: survey and analysis of implementation practices. Published as a Research Monograph by the Institute of Management Accountants in U.S.A. Available at SSRN: https://ssrn.com/abstract=1417604

Hair, J. F., Anderson, R., Tatham, R., & Black, W. (2006). Multivariate data analysis 6th edition prentice hall. New Jersey.

HanimFadzil, F., Haron, H., & Jantan, M. (2005). Internal auditing practices and internal control system. Managerial Auditing Journal, 20(8), 844-866.

Hendriani, S. (2014). Pengaruh pendidikan dan latihan serta kompetensi terhadap implementasi SPIP guna pencegahan fraud. Jurnal Akuntansi (Media Riset Akuntansi & Keuangan), 2(1), 84-100.

Hongkong Institute of Certified Accountant. (2005). Internal Control and Risk Management: Basic Framework Hongkong. Retrieved from http://aci.kpmg.com.hk/docs/Internal_control_Guide.pdf.

Jamshidi-Navid, B. (2010). A Clear look at internal controls: Theory and concepts. Available at SSRN: http://ssrn.com/abstract=1342048 or http://dx.doi.org/10.2139/ssrn.1342048

Jokipii, A. (2010). Determinants and consequences of internal control in firms: a contingency theory based analysis. Journal of Management & Governance, 14(2), 115-144.

Jones, M. J. (2008). Internal control, accountability and corporate governance: Medieval and modern Britain compared. Accounting, Auditing & Accountability Journal, 21(7), 1052-1075.

Pfister, J., & Hartmann, F. (2011). Managing organizational culture for effective internal control: From practice to theory. The Accounting Review, 86(2), 738-741.

Prasetyo, A. B., & Syafruddin, M. (2011). Kualitas Prosedur Pengendalian Internal: Antecedents dan Pengaruh Moderating pada Keadilan Organisational dan Kecurangan Pegawai (Doctoral dissertation, Universitas Diponegoro).

PriceWaterhouse Coopers. (2004). Global Best Practices Internal Audit Benchmarking Questionnaire. Retrieved from www.globalbestpractices.com.

Rae, K., & Subramaniam, N. (2008). Quality of internal control procedures: Antecedents and moderating effect on organisational justice and employee fraud. Managerial Auditing Journal, 23(2), 104-124.
Rae, K., Subramaniam, N., & Sands, J. (2008). Risk management and ethical environment: effects on internal audit and accounting control procedures. *Journal of Applied Management Accounting Research, 6*(1), 11.

Sawyer, L. B., Dittenhofer, M. A., Scheiner, J. H. (2005). *The Practice of Modern Internal Auditing, Edisi 5*. USA: The Institute of Internal Auditors.

Tsay, B. Y. (2010). Designing an internal control assessment program using COSO’s guidance on monitoring. *The CPA Journal, 80*(5), 52.