

# The Relationship of CSR and Financial Performance: New Evidence from Indonesian Companies

**Hasan Fauzi**

Faculty of Economics  
Sebelas Maret University, Indonesia

**Kamil M. Idris**

College of Business  
Universiti Utara Malaysia

---

## Abstract

The research objectives of the study are to investigate whether there are any positive relationships between CFP and CSR under the slack resource theory and to investigate whether there are any positive relationships between CSR and CFP under good management theory by integrating concept of strategic management into the definition of CSR as sustainable corporate performance including economy, social, and environment. To answer the research questions of this study, questionnaire-based survey research design was used. The questionnaires that include items representing variables in this study (corporate social performance, corporate financial performance, business environment, strategy, organization structure, and control system) were sent to the respondents who are managers of state-owned companies (BUMN) and private-owned companies using post and e-mail services. There is a positive relationship between CFP and CSP under the slack resource theory and under good management theory.

**Keywords:** *corporate social performance, corporate financial performance, business environment, strategy, organization structure, and control system, slack resource theory, good management theory*

---

## Introduction

The phenomenon of management's low understanding of the CSR (corporate

social responsibility)-CFP (corporate financial performance) link and the perceived CSR across the companies in In-

---

Hasan Fauzi, Ph.D. is senior lecturer (Lektor kepala, equivalent to Associate Professor) at Faculty of Economics, Sebelas Maret University, Indonesia and Director of Indonesian Center for Social and Environmental Accounting Research and Development (ICSEARD) of Sebelas Maret University, email: hfauzi@icseard.uns.ac.id. Kamil Md. Idris, Ph.D. is Associate Professor at College of Business, University Utara Malaysia, email: kamil@uum.edu.my. The authors are very grateful to some reviewers including Prof. Mustaffa M. Zein of UiTM Malaysia, and Prof. Ku Noor Izzah Ku Ismail of Universiti Uatara Malaysia and others for their direction and helpful suggestion on final stage of research project and to some anonymous referees for comments on earlier draft of this paper. The authors also would like to acknowledge that main funding for this project came from faculty of Economics, Sebelas Maret University and College of Business, Universiti Utara Malaysia.

Indonesia economy can raise some problems on the social and environmental performance. Even though, some attempts have been conducted to improve the social and environmental performance in Indonesian business practice, the performance has so far not indicated satisfactorily. There is no specific study explaining the phenomena. Some studies (Fauzi et al., 2007; Fauzi, 2008; Fauzi et al., 2009) on CSR in Indonesia have been conducted, but they focus on CSR disclosure in companies' annual report and do not touch managerial perception that is considered important approach in the literature (Cochran and Wood, 1984; Orlizky et al., 2003). In addition, studies of the CSR-CFP link using contingency factors have also been done, but the contingency factors used in the studies focus on common factor affecting the CSR such the size company and type of industry and not related to important factors affecting corporate performance (for example, Russo and Fouts, 1997; Rowley and Berman; 2000; McWilliam and Siegel, 2001; Husted, 2000; Brammer and Pavelin, 2006; Fauzi et al., 2007a and 2007b). Based on understanding of the concept TBL (triple bottom line) coined by Elkington (1994), the three factors need to be considered as the CSR concept is an extended corporate performance. The approach is also a redefined concept of CSR concept as suggested by Fauzi (2009). This study is exactly the first attempt considering the important factors of corporate performance in affecting CSR under two theories: slack resource and good management theory.

The demand for business considering the interest of stakeholder groups has recently become increasingly common across the world. The demand has

emerged ever since the notion of corporate social responsibility (CSR), with other synonymous names, among others, sustainability, corporate accountability, social performance, and triple bottom line (TBL), has been introduced three decades ago. As a result, the term corporate performance has been extended to include not only financial aspect, but also social and environmental dimensions.

Indonesia is not exceptional for the demand for the implementation of CSR and its various synonyms in the business practices. The demand has been met by government of Indonesia by issuing several regulations. There are various legal instruments to umbrella the CSR in Indonesia: the Law No. 17/2000 (Republic of Indonesia) on the Third Amendment of the Law No. 7/1983 on Income Tax, the Law No. 23/1997 (Republic of Indonesia) on Environment Management, the Law No. 19/2003 (Republic of Indonesia) on State-Owned Company, the Law 25/2007 on Capital Investment, and the Law 40/2007 (Republic of Indonesia) on Corporation.

Based on the review of accounting and strategic management literatures, it can be found that corporate performance is matching of business environment, strategy, internal structure, and control system (Lenz, 1980; Gupta and Govindarajan, 1984; Govindarajan and Gupta, 1985; Govindarajan, 1988; Tan and Lischert, 1994; Langfield-Smit, 1997). Thus it can be argued that corporate performance referred to the notion of TBL should be affected by several important variables: business environment, strategy, structure, and control system. Therefore, better attempt to seek explanation of the relationship between CSP

and CFP need to be conducted using the integrated model as suggested in the accounting and strategic management literatures.

The research objectives of the study are to investigate whether there are any positive relationships between CFP and CSR under the slack resource theory and to investigate whether there are any positive relationships between CSR and CFP under good management theory by integrating concept of strategic management into the definition of CSR as sustainable corporate performance including economy, social, and environment.

The study also addresses methodological problems, which become the sources of the conflicting result of CSP-CFP link. The problems include (1) mismatching measurement, (2) sampling error, and (3) measurement error. Mismatching measurement is addressed by using the matching concept of CSP and CFP, with the improved definition of CSP. The second source of the conflicting result is due to sampling error. Therefore, in the current study, data set of manufacturing sector in Jakarta Stock Exchange for POC data and in the directory of SOC in Ministry of State-Owned Company is used with the intention to reduce the sampling error. Measurement error is the last source of the conflicting result. Measurement for CSP used in the previous studies can be grouped into two categories: one-dimensional measure and multi-dimensional measure (see for example Waddock and Grave, 1997; Margolis et al, 2001). In the one-dimensional measure, CSP is measured using only one aspect such as social disclosure and pollution control. Due to the lack of comprehensiveness, CSP measured using one dimensional leads to in-

clude measurement error and, in turn, it contributes to the difference in CSP-CFP relation result. Thus, this study addresses the relationship between CSP and CFP derived from the strategic management domain and developing perceptual CSP measurement drawn from survey instrument of CSP containing seven (7) dimensions initially developed by KLD (KLD Research Incorporated, 2008) and MJRA (Jantzi Research Incorporated, 2008).

This study attempts to contribute to the literature by addressing the following research questions: Is there any positive relationship between CFP and CSP under the slack resource theory? Is there any positive relationship between CSP and CFP under good management theory?

## **Literature Review and Hypotheses Development**

### **Slack Resource Theory**

In explaining the relationship between CSP and CFP two theories from management literature may be adapted: (1) slack resource theory, and (2) good management theory or resource-based perspective of competitive advantage (Miles et al., 2000). Slack resource theory is developed based on the view that a company is able to carry out its activities because of the resources owned by the company, which have normally been dedicated to the predefined activities. The function of the resource is to enable the company to successfully adapt to internal pressure for adjustment or to external pressures for change (Buchholtz et al., 1999). The resource needed by the company to successfully adapt is slack

in nature, which is defined as any available or free resource (financial and other organization resource) used to attain the company's certain goal (see for example Bourgeois, 1981; Jensen, 1986).

According to Waddock and Grave (1997), when a company's financial performance improves, slack resources will be available to enable the company to conduct corporate social performance such as society and community relation, employee relation, and environment performance. Some activities conducted by the company in the domain of corporate social performance are meant to develop and enhance the company's competitive advantage through image, reputation, segmentation, and long term cost saving (Miles & Covin, 2000; Miles & Russel, 1997; Miles et al., 1997). McGuire et al. (1988, 1990) have provided some empirical support to the theory.

### **Good Management Theory**

Good management theory, taken on by Waddock and Grave (1997) in explaining CSP-CFP link, is further articulation of stakeholder theory (Donaldson & Preston, 1995). Proposition developed under the good management theory is that a company should try to satisfy its stakeholders without presupposing its financial condition. In so doing, the company will have good image and reputation. Based on resource-based perspective, the attributes are one of company's assets in the intangible component that is one component contributing to the company's competitive advantage (Barney, 1991). Essentially, the theory encourages managers of a company to continuously seek better ways to improve the company's competitive advantage, which ultimately can enhance the com-

pany's financial performance. According to Miles and Covin (2000), environmental performance is an alternative way to satisfy stakeholders and can be a distinct layer of advantage that intensifies competitive power.

Good management theory proponents also suggest that good management practice has high relation to CSP because it can improve a company's relationship to its stakeholders, and this in turn will improve the company's financial performance (Donaldson & Preston, 1995; Freeman, 1994; Waddock & Grave, 1997) and its competitive advantage (Prahalad & Hamel, 1994; Waddock & Grave, 1997). Good management theory has received some empirical support (McGuire, 1988, 1990; Waddock & Grave (1997).

### **CSP-CFP Relationship**

Based on the literature review, the relationship between CSP and CFP could be positive, negative, or neutral. Griffin and Mahon (1997) reviewed studies discussing the relationship between CSP and CFP for period of the 1970s (16 studies), the 1980s (27 studies), and the 1990s (8 studies) with total of 51 articles. Griffin and Mahon (1997) had mapped the issue of direction of the relationship between CSP and CFP for the periods. In the 1970s, there were 16 studies reviewed with 12 findings showing positive relationships. For the 1980s and 1990s, the findings of positive direction had been accounted for 14 of 27 studies and 7 of the 8 studies, respectively. Negative results (findings) were supported by 1 study in the 1970s, 17 studies in the 1980s, and 3 studies in the 1990s. Inconclusive findings were provided by 4 studies in the 1970s, 5 studies in the

1980s, and no finding in the 1990s. It should be noted that one or more studies could have one or more findings. This is because one study may use one approach to measuring CSP and one or more approach to measuring CFP. There may be mixed results within a study. One of the findings is positive and no effect/inconclusive as found, for example, in the studies of Anderson et al. (1980) and Fry et al. (2001). Another the findings are positive and negative relationship as indicated, for example, in the studies of Cochran and Wood (1984); Cofrey and Fryxell (1991); and McGuire et al. (1988). This is in line with the suggestion of Wood and Jones (1995) that mismatching measurement in CSP and CFP can contribute to the inconsistency result of the relationship between CSP and CFP.

The work of Griffin and Mahon (1997) was not all inclusive. There were some studies contributing to the direction of the CSP-CFP relation in the 1990s. In the period, positive direction of the relationship had also been provided by Worrell, Davidson III, and Sharma (1991), Preston and O'Bannon (1997), Waddock and Graves (1997), Froman (1997), Roman et al. (1999). A negative result was revealed by Wright and Ferris (1997). Subsequently, in the 2000s, there were some researchers who add the tension of the debate on the CSP-CFP link with different methodology in terms of sampling and measurement as well as the measurement matching. A positive result had been indicated in the works of Orlitzky (2001), Orlitzky and Benjamin (2001), Ruf et al. (2001), Konar and Cohen (2001), Murphy (2002), Simpson and Kohers (2002), Orlitzky et al. (2003), and Wu (2006). Paten (2002) found a negative relationship. Research-

ers such as McWilliams and Siegel (2000), McWilliams and Siegel (2001), and Moore (2001) had supported the inconclusive results. Fauzi (2004) using content analysis of annual reports of companies listed in the New York Stock Exchange for the year of 2004 showed an inconclusive result. Mahoney and Robert (2007), based on the Canadian companies and by excluding the environmental aspect from the CSR variable aspect to be a separate variable, examined the corporate social and environmental performance variables on financial performance and institutional ownership using company size, financial leverage, and type of industry as control variables. The result of the study indicated that while environmental performance significantly and positively affected financial performance, corporate social performance variable did not. In addition, Mahoney and Robert (2007) found that while a positive relation between corporate social performance and institutional ownership existed, environmental performance variable did not.

In addition to providing the different results of the direction of the relationship from the work of Griffin and Mahon (1997), Roman et al. (1999) corrected the table in the Griffin and Mahon's work (1997) for erroneous conclusion, from moving negative to positive result and moving from positive or negative direction to inconclusive result, and for invalidity of CSP or CFP measure used by authors of studies reviewed by Griffin and Mahon (1997). The correction might be due to the invalidity of research result included in the list of Griffin and Mahon (1997). For those generalized erroneously by Griffin and Mahon (1997), Roman et al. (1999) reclassified Griffin and Mahon's (1997)

list from negative to positive direction and from positive or negative to inconclusive result. In their new table summarizing the direction of CSP-CFP relation, Roman et al. (1999) removed articles with problems of invalidity of measurement mentioned above and replaced with the new studies for those supplanted by later studies from the table of Griffin and Mahon (1997). Articles reviewed by Roman et al. (1999) were 46 studies comprising 51 research results (findings) of which 33 (65%) showed positive associations.

In their more recent work, Margolis and Walsh (2003) had also mapped studies investigating the CSP-CFP relation as done by Griffin and Mahon (1997) using a wider span of period (1972 – 2002) and 127 published studies for that period. Of the studies, 70 studies (55%) reported positive direction, while only 7 studies showed negative direction, 27 studies supported inconclusive result, and 23 studies found in both directions. Gray (2006), in his review of studies investigating the relationship between CSP and CFP, had argued that no sound theory exists to potentially create the implausible relationship in addition to the methodological problems in the previous studies. Those can lead to the inconclusive result. This argument was also supported by Murray et al. (2006) in their cross section data analysis. However, using the longitudinal data analysis, they found different results. In the most recent study, Hill et al. (2007) investigated the effect of corporate social responsibility on financial performance in terms of market-based measures and provided a positive result in the long-term horizon.

Another issue of the relationship be-

tween CSP and CFP that Griffin and Mahon raised is about the causality. In an effort to meet stakeholders' expectation, every company should try to improve corporate social performance from time to time and, at the same time, the economic/financial should also be improved. One question raises regarding which one between corporate social performance and financial performance come first. Waddock and Graves (1997) and Dean (1999) put forward two theories to explain the question: Slack resource theory and good management theory. Under the slack resource theory, a company should have a good financial position to contribute to the corporate social performance. Conducting the social performance needs some fund resulting from the success of financial performance. According to this theory, financial performance comes first. Good management theory holds that social performance comes first. Based on the theory, a company perceived by its stakeholders as having a good reputation will ease the company to get a good financial performance (through market mechanism).

Based on the findings of the previous studies especially the works of Griffin and Mahon (1997), Roman et al. (1999) and Margolis and Walsch (2003) and following the theories used by Waddock and Grave (1997), the hypothesis of this current study could be formulated as follows:

H1a: there is a positive relationship between CFP and CSP based on the slack resource theory

H1b: there is a positive relationship between CSP and CFP based on good management theory

## Research Method

There are several variables used in this study: Corporate social performance, corporate financial performance, business environment, strategy, organization structure, and control system as main variable; and company size and type of company (in term of ownership: state-owned company non state-owned company) as control variables. The measure for CSP variable in this study used the MJRA's dimensions of CSP by deleting some indicators to adjust Indonesian environment. This CFP variable was measured by using the perceptual method to match with the CSP measure (Wood and Jones, 1995). In this approach, some subjective judgments were provided by respondents using 8 (eight) indicators developed by Ventakraman (1989) comprising of two dimensions: growth and profitability dimension. Business environment were measured using managers' perception of the level of hostility, dynamism, and complexity in each environmental dimension using a 7-point scale (Tan and Lischert, 1994). The business strategy variable was measured by strategic orientation. Using focus on decision as developed by Mintzberg (1973), the strategic orientation were broken down into several dimensions including (1) analysis, (2) defensiveness, (3) futurity, (4) proactiveness, and (5) riskiness. The organization structure was measured using three dimensions: formalization, decentralization, and specialization. Control system was defined by using typology of control of Simons (1994 and 2000) including belief system, boundary system, diagnostic control system, and interactive control system. The company size followed the measure used by Mahoney and Robert (2007) with the argument

that total asset is "money machine" to generate sales and income. Type of company was measured using dummy variable. The measure of 1 is for state-owned company and while 0 is for non-state-owned company.

Unit of analysis in this study is Indonesian managers. Population of this study is all Indonesian managers working in the Jakarta stock exchange's listed companies and in state-owned companies.

Data set of manufacturing sector in publicly traded companies' stock (private-owned companies) and in the directory of state companies in State Ministry of State Owned Company (state-owned companies=BUMN) was used with the intention to reduce mismatching problem as suggested by Wood and Jones (1995) in addition to lessen the sampling error. The data are perception and views of managers in BUMN and private-owned companies pertaining to the indicators of corporate social performance, companies' financial performance, business environment, strategy, organization structure, and management control system. In broader sense, state-owned companies can be defined as a legal entity created by a government to undertake commercial or business activities on behalf of an owner government.

Data for the non state (private)-owned companies were taken from the companies listed in Jakarta Stock exchange (Indonesia Stock Exchange). The choice of the manufacturing sector is based on the fact that this sector (including all mining companies) has contributed more to the aspect of people (social) and planet (environmental) than other sectors. In addition to having the data on indicators of corporate social perform-

ance, this study also captured the data on business environment, strategy, organization structure, and management control system to test the moderating effect of the contextual variables on CSP-CFP link and to test managers' perception toward CSP. Using the same way, data for state-owned companies were selected from the list of manufacturing sector (including mining) in Indonesian State-Owned Companies under control of the Indonesian Ministry of State-Owned Companies. The sampling selection for two sets of data was conducted using the purposive sampling method. Given that method, samples were selected from the two sampling frames: list of companies listed in Jakarta Stock Exchange in 2007 for non state companies and list of state-owned companies under Ministry of State-Owned Companies.

There are several techniques used to analysis the data (1) psychometric analysis, (2) factor analysis, (3) and multiple regression analysis. The psychometric analysis is used to determine consistency or reliability of the measured result. Exploratory factor analyses including coefficient alpha and item-to-total correlation were estimated to assess the psychometric characteristics of scales for each variable.

Due to the fact that latent variables are used in this study coming from constructs that have been developed based on some dimensions of concept, factor analysis was needed to reduce the dimensions becoming the single measure of the latent variables. There were criteria used in conducting factor analysis: Kaiser-Meyer-Olkin (KMO) and (2) factor loading.

There two models used in this study: (1)

model 1 and (2) model 2. Model 1 is needed to test the CFP-CSP link under slack resource theory without considering moderating effect. Like model 1, Model 2 is based on the good management theory to test the CSP-CFP link.

The main theoretical model under slack resource theory and good management theory are as follows, respectively:

**CSP = f {CFP, BEV, STG, FOR, DEC, SPE, BEL, BND, DNT, INC,}**

**CFP = f {CSP, BEV, STG, FOR, DEC, SPE, BEL, BND, DNT, INC,}**

Where:

CFP=Corporate financial performance

CSP=Corporate social performance

BEV=Business environment

STG=Strategy

FOR=Formalization

DEC=Decentralization

SPE=Specialization

BEL=Belief system

BND=Boundary system

DNT=Diagnostic control system

INC=Interactive control system

## Results and Discussion

There are 78 managers state-owned companies (SOC) and 158 managers of private owned companies (POC) participating in this study, with the response rate of 60.20%. However, only 220 managers (72 from SOC and 148 from POC) are eligible for analysis. The variable descriptive profile is as follows: Most managers participating in this research are 36-45 years old with percentage of 42.7% and the second majority of them are of age of 46-55 years. Very few of them are more than 55 years old. In terms of gender, they are male with the percentage of 78.2%. In addition, their education backgrounds are S1 degree



(bachelor) with the percentage of 95% and most of them have been with their companies of 11-20 years with the percentage of 53.4%.

Based on reliability test by entering items for each corresponding construct, seven items have been deleted as they do not meet the critical test. They are four items (CSRCOG4, CSRCUS5, CSRENV6, and CSRHMR2) from the CSR construct, one item (STGRKN1) from strategy construct, and two items (STRDEC6 and STRSPE2) coming from the organization structure (see the appendix).

The validity test generates no deletion items for all constructs. However, based on the rotation matrix components, there are some reclassifications of factors or dimensions for constructs. The reclassification of the factors is especially important as the factors become variables in the regression model. The constructs undergoing the reclassification are organization structure and control system. In the first discussion, the construct of organization structure has three dimensions: (1) formalization, (2) decentralization, and (3) specialization. The reclassifications based on the analysis are only two factors: (1) formalization, and (2) decentralization. Control system including four dimensions in the first discussion: (1) belief system, (2) boundary system, (3) diagnostic control system, and (4) interactive control system becomes three factor based on factor analysis. The new factors or dimension are: (1) combination of belief and boundary system, (2) combination of diagnostic and interactive control system, and (3) interactive control system.

The result of Model 1 (see Table 1)

shows that the model is significant at level of 0.01 with an  $R^2$  of 67%. It should be noted that the  $\beta$  (0.000,  $p=0.621$ ) for company size and the  $\beta$  coefficient ( $\beta=2.482$ ,  $p=0.177$ ) for type of company indicated that the variables had no impact on the variance of the dependent variable, corporate social performance (CSP).

The result of Model 1 also shows that the  $\beta$  coefficient for the independent variable corporate financial performance (CFP) ( $\beta=0.655$ ,  $p=0.000$ ) demonstrated a significant positive impact on the variance of the dependent variable, corporate social performance (CSP). In addition, the model also shows the regression result of contextual variables (business environment, strategy, formalization, decentralization, combination of belief and boundary system, combination of diagnostic and interactive control system, and interactive control system) on the dependent variable, corporate social performance. The  $\beta$  coefficient ( $\beta=0.25721$ ,  $p=0.000$ ) for business environment, decentralization ( $\beta=0.243$ ,  $p=0.004$ ), combination of belief and boundary system ( $\beta=0.829$ ,  $p=0.000$ ), combination of diagnostic and interactive control system ( $\beta=0.653$ ,  $p=0.000$ ) and interactive control system ( $\beta=0.352$ ,  $p=0.000$ ) demonstrated significant positive impact on CSP, while strategy ( $\beta=-0.122$ ,  $p=0.185$ ) and formalization ( $\beta=0.239$ ,  $p=0.537$ ) clearly indicated no significant impact on the variance of CSP. Therefore, based on the model, using contextual variables as independent variable, this study accepted hypothesis  $H_{1a}$  and concluded that  $H_{1a}$  has been empirically supported.

The CSP-CFP link under the two models are based on two theories namely slack

**Table 1 Summary of Regression Results**

Regression Model	Model 1	Model 2
Dependent Variables	CSR	CFP
Adjusted-R <sup>2</sup>	0.693	0.427
p-value of F Statistics	0.000*	0.000*
SIZE	0.000 (0.984)	0.000 (0.882)
TYPE	2.093 (0.303)	-0.244 (0.752)
CSP	-	0.119 (0.000)*
CFP	0.790 (0.000)*	-
BEV	0.221 (0.000)*	-0.007 (0.721)
STG	-0.099 (0.315)	-0.075 (0.049)**
FOR_SPE	-0.919 (0.613)	0,241 (0.980)
DEC	3.910 (0.003)	0.980 (0.059)***
BEL_BOU	10.372 (0.000)*	1.999 (0.010)**
DIA_INT	8.951 (0.000)*	1.014 (0.041)**
INT	4.807 (0.000)*	-0.167 (0.739)

resource and good management theory. The findings are inconsistent with numerous previous studies (Wright & Ferris, 1997; Moore, 2001; McWilliams & Siegel, 2001; McWilliams & Siegel, 2000; McWilliams & Siegel, 2000; Robert and Mahoney, 2007<sup>1</sup>). The inconsistency was demonstrated in the results of study. There are some reasons to explain the difference of results: (1) the previous studies used the disclosure data to measure CSP, and (2) the previous study only measure CSP and never relate it to extended corporate performance model, which in this study is called

sustainable corporate performance, (3) model used in this study has never been considered by previous studies. In addition, this finding is also inconsistent with that of Fauzi et al. (2007), Fauzi (2008), and Fauzi et al. (2009a). Even though the studies were conducted in the same setting, i.e. Indonesia, but different methods were utilized. The measurement of CSP conducted in the studies of Fauzi et al. (2007), Fauzi (2008), and Fauzi et al. (2009a) is disclosure approach, while in this study perceptual approach both for CSP and for CFP has been used as suggested by Wood and Jones (2005). In terms of measurement, the previous studies mentioned above used the disclosure approach. Furthermore, the difference of the findings from

<sup>1</sup> Mahoney and Robert (2007) exclude the environment aspect from the CSP construct and make it as one variable, beside the CSP itself. The finding is not consistent with the CSP itself.

the other studies may be explained in this study by the contextual variables becoming the important determining factor of corporate performance (business environment, strategy, organization structure, and control system) which was considered in the model to explain the relationship between CFP and CSP. The reason for the inclusion of the contextual variable in the model is that the CSP construct is considered an extended corporate performance that includes the three bottom line aspect: (1) social performance, (2) environmental performance, and (3) financial performance. The new aspects have never been considered in the previous studies.

The findings of the CFP-CSP link and CSP-CFP link are consistent with the ones of Waddock and Grave (1997) even though they used different measurement of CSP. The index of CSR done by the third party was used by them, while in this study perceptual approach developed using questionnaires is used. The index data is not purely perceptual approach. Rather it combines perceptual and content analysis, like the one done by rating companies such as KLD (USA) and MJRA (Canada). Mahoney and Roberts (2007) followed the approach of Waddock and Grave (2007) using the index data of CSP issued by MJRA.

The regression result of Model 1 supporting hypothesis  $H_{1a}$  indicated that CFP is the most important variable in promoting CSR in manufacturing firms in Indonesia. This finding may be explained partially by the fact that in Indonesia the strength of financial position affects the implementation of CSR. This finding is consistent with the finding of McGuire (1988 and 1990) and Waddock

and Grave (1997). In contrast, the finding of this study is conflicting with Fauzi (2007) which used the content analysis of more than 300 companies listed in BEJ (Jakarta Stock exchange both in manufacturing and nonmanufacturing sectors). In addition, the objection to Law No.40/2007 passed by Indonesian law maker for compulsory implementation of CSR (Fauzi, 2009) supported the inconsistency of this study with the other previous studies conducted in Indonesia. What becomes the business people's concern is the lack of resources to conduct the CSR. They are somewhat apprehensive of the profitability problem when they are obligated to conduct CSR. This study under the two theories found that the relationship between CSP and CFP is positive thus it should eliminate the concern that conducting CSR can impair their profitability.

The variance of CSR was also contributed by business environment, decentralization, combination of belief and boundary system, combination of diagnostic & interactive control system, and interactive control system. The condition of business environment will determine the CSR. On the high uncertainty of business environment, the CSR will be high accordingly to maintain good relationship with customer. This finding is consistent with the study of Higgin and Currie (2004). In addition, decentralization also has a positive impact on CSP and CFP. More decentralization will improve CSR. Decentralization is defined as the delegation of power from higher level to the lower of managers. Given the power to make decisions, the managers can make some efforts to conduct CSR and improve CFP. This finding is consistent with the proposition of

the Centre for Business Ethics (1986). In Indonesia, the commitment of top management is important to make CSR a success. The commitment of top management also means using inducement like implementation of Law No.40./2007 and law No. 19/2003 for state-owned company only. Control system has also an impact on CSR. Under slack resource theory, a company has more chance to conduct CSR (CSP). But in an Indonesian context, redefining CSR is needed (Fauzi, 2009) to avoid improper perception on CSR by business community in responding to the Law No. 40/2007. Under slack resource theory, this study confirms the relationship between CFP and CSP.

The regression result of Model 2 (under good management theory) indicated that CSP is also an important variable in improving financial performance in manufacturing companies in Indonesia. But further investigations of the regression results found that the  $R^2$  of the model is relatively low (51%) compared to the  $R^2$  of Model 1 (67%). The predictability of Model 2 is lower than that of Model 1. In addition, the coefficient of regression ( $\beta$ ) of CSP (0.114) is lower than that of the CFP (0.655). This means that the CFP-CSP link (under slack resource theory) is stronger than the CSP-CFP link (under good management theory). This situation is similar to the one in Waddock and Grave (1997). Waddock and Grave (1997) discovered that under slack resource theory, the regression coefficient of CFP is greater than 1, while under good management theory; the regression coefficient of CSR is far less than 1.

This situation may be explained by the implementation of CSR that is more

driven by the availability of a firm's resources rather than the awareness to do that regardless the resources the firm has. On the other hand, Friedman's (1962/1970) assertion that the social responsibility of business was to increase profit has dominated the view of business community all over the world, including in Indonesia. That is why the CSP-CFP link has produced conflicting results. The low regression coefficient in Waddock and Grave's (1997) study concerning good management theory has supported the assertion of Friedman. Similar situation also occurs in Indonesia in the case of the Law No. 40/2007. Companies in Indonesia were highly reactive to respond to the implementation of the law (article 74) that obligated them to conduct CSR.

## Conclusion

The research questions of this study have been answered. There is a positive relationship between CFP and CSP under the slack resource theory and under good management theory.

Based on the finding of the study, there is a need for further study on the impact of contextual variables of corporate performance on CSR as a base to develop TBL-based CSR reporting in Indonesia. This suggestion for future research is important for the following reasons: (1) stakeholder theory used in this study and others may undergo some modification given the deep study on impact of contextual variables of corporate on CSR, (2) as suggested in managerial decision implication, the CSR need to be redefined in Indonesian and (3) there is the possibility of making mandatory CSR reporting as a consequence of imple-

mentation of Law No. 40/2007 (Article 74).

It should be pointed out that this study has several limitations. This may be especially important for researchers who are less familiar with Indonesia culture, business environment, and differing culture.

The first limitation of the study is the timing of the survey. For the last two years, compulsory implementation of CSR in Indonesia based on the Law No. 40/2007 has been in the process and most Indonesian companies objected to the compulsory implementation of the law.

The second limitation is related to the questionnaire procedure. The length of the questionnaires exceeds eleven pages. Such length, according to Dilman (1978), may reduce the expected response rate. In addition, non random and non probability methods were used in selecting the sample. These techniques may influence the finding of the study and its application to businesses other than manufacturing.

The third limitation is that the population of the study for non BUMN was manufacturing companies listed on ISE (Indonesian Stock Exchange). Thus, other big manufacturing companies including mining companies such as Freeport are not included in the sample as they are not listed on the Exchange. Such companies may have importantly contributed to the environment.

The fourth limitation is that no study has examined the constructs of this research (integrating contextual variables affecting corporate performance into CSR as

an extended corporate performance), either in Indonesia or outside Indonesian. Therefore, the researcher has to proceed without the advantage of having an established model to refer to and research findings as comparisons.

## References

- Anderson, J.C., Frankle, A.W.(1980) "Voluntary Social Reporting: An Iso Beta Portfolio Analysis", *The Accounting Review*, Vol. LV, No. 3, pp. 467-479
- Barney, J.(1991) "Firm Resources and Sustained Competitive dvantage", *Journal of Management*, Vol. 17, No. 1, pp. 99-120
- Brammer, S.J., & Pavelin, S. (2006) "Corporate Reputation and Social Performance: The Importance of Fit", *Journal of Management Studies*, Vol. 43, No. 3.
- Center for Business Ethics (1986) "Are Corporations Institutionalizing Business Ethics"? *Journal of Business Ethics*, Vol. 5, pp. 85-91
- Cochran, P.L., & Wood, R.A.(1984) "Corporate Social Performance and Financial Performance", *Academy of Management Journal*, Vol. 27, No. 1 (March), pp. 42-56.
- Coffey, B.S., & Fryxell, G.E. (1991)"Institutional Ownership of Stock and Dimensions of Corporate social Performance: An Empirical Examination" *Journal of Business Ethics*, Vol. 10, No. 6 (June), pp. 437-444.
- Donaldson, T. & Preston L.E. (1995). "The Stakeholder Theory of the Corporation: Concept, Evidence, and Implications", *The Academy of Management Review*, Vol. 20, No. 1, pp. 65-91.

- Elkington, John. (1994) "Towards the sustainable corporation: Win-win business strategies for Sustainable Corporation: Win-Win Business Strategies for Sustainable Development", *California Management Review*, Vol. 36, No. 2, pp. 90-100.
- Fauzi, H. (2004) "Identifying and Analyzing the Level of Practices of Company's Social Responsibility in Improving Financial Performance", *Journal of Business and Management*, Vol. 4, No. 2, pp. 109-124.
- \_\_\_\_\_ (2008) "Corporate Social and Environmental Performance: A Comparative Study of Indonesian Companies and MNCs Operating in Indonesia", *Journal of Global Knowledge*, Vol. 1, No. 1 (Spring).
- \_\_\_\_\_ (2009) "Redefining CSR Concept in Indonesia" *Jakarta Post*, (August 5)
- \_\_\_\_\_, Mahoney, L., Rahman, A.A. (2007a). "The Link Between Corporate Social Performance and Financial Performance: Evidence from Indonesian Companies" *Issues in Social and Environmental Accounting*, Vol. 1, No. 1, pp. 149-159
- \_\_\_\_\_, Mahoney, L., Rahman, A.A. (2007b) "The Ownership and Corporate Social Performance" *Issues in Social and Environmental Accounting*, Vol. 1, No. 2 (December).
- \_\_\_\_\_, Rahman, A.A., Hussain, M., Adnan, M., (2009) "Corporate Social Performance in Indonesian State-Owned Companies and Private-Owned Companies" in Sigh (ed), *Handbook of Corporate Performance in Emerging Market. Singapore*
- Freeman, R.E. (1994) "The Politics of Stakeholder Theory: Some Future Directions" *Business Ethics Quarterly*, Vol. 4, No. 4, pp. 409-421.
- Friedman, M. (1977) "Social Responsibility of Business", *New York Time* (September)
- Frooman, J. (1997) "Socially Irresponsible and Illegal Behavior and Shareholder Wealth", *Business & Society*, Vol. 3, pp. 221-249.
- Fry, F.L., & Hock, R.I (2001) "Who Claim Corporate Responsibility?" *The Biggest and the Worst. Business and Society Review*, Vol. 18, pp. 62-65.
- Govindarajan, V. & Gupta, A. K. (1985) "Linking Control Systems to Business Unit Strategy: Impact on Performance" in Emmanuel, C.R., Otley, D.T, and Merchant, K.A. (Eds.) *Accounting for Management Control*, International Thompson Business Press, (1996) 285.
- Govindarajan, V. (1988) "A Contingency Approach to a Strategy Implementation at the Business-Unit Level: Integrating A Administrative Mechanism with Strategy" *Academy of Management Journal*, Vol. 31, No. 4, pp. 838-853.
- Gray, R.H., Owen, D., & Adams, C. (1996) *Accounting & Accountability: Changes and Challenges in Corporate Social and Environmental Reporting*. London: PrenticeHall
- Griffin, J.J. & Mahon, J.F. (1997) "The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research", *Business and Society*, Vol. 36, No. 1, pp. 5-31.

- Gupta, A.K. & Govindarajan, V.(1982) "An Empirical Examination of Linkage Between Strategy, Managerial Characteristics and Performance", *Academy of Management Proceedings*, pp. 31-35
- Higgins, J.M. & Currie, D.M. (2004). "It's Time to Rebalance the Scorecard", *Business and Society Review*, Vol. 109, No. 3, pp. 297-309
- Hill, R.P., Ainscough, T., Shank, T. & Manullang, D. (2007) "Corporate Social Responsibility and Socially Responsible Investing: A Global Perspective" *Journal of Business Ethics*, Vol. 70, No. 2, pp. 165-174.
- Husted, B.W., (2000) "contingency theory of corporate social performance", *Business and Society*, Vol. 39, No. 1, pp. 24-48.
- Konar, S. & Cohen, M.A. (2001) "Does the Market Value Environmental Performance?", *The Review of Economics and Statistics*, Vol. 83, No. 2, pp. 281-289.
- Langfield-Smith, K. (1997) "Management Control Systems and Strategy: A Critical Review", *Accounting, Organizations and Society*, Vol. 22, No. 2, pp. 207-232.
- Lenz, R.T.(1980) "Environmental Strategy, Organization Structure and Performance: Pattern in One Industry", *Strategic Management Journal*, Vol. 1, No. 3, pp. 209-22
- Mahoney, L.S. & Roberts, R.W. (2007) "Corporate Social Performance, Financial Performance and Institutional Ownership in Canadian Firms", *Accounting Forum*, Vol. 31, No. 3, pp. 233-253.
- Margolis. J.D. & Walsh. J.P. (2003) "Misery Loves Companies: Rethinking Social Initiatives by Business", *Administrative Science Quarterly*, Vol. 48, No. 2, pp. 268-305.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988) "Corporate Social Responsibility And Firm Financial Performance", *Academy of Management Journal*, Vol. 3, No. 4 (Dec), pp. 854-872.
- \_\_\_\_\_, Scheneeweiss, T., & Branch, B.(1990) "Perception of Fiem Quality: A Cause or Result of Firm Performance", *Journal of Management*, Vol. 16, No. 1, pp. 167-180.
- McWilliams, A. & Siegel, D. (2000) "Corporate Social Responsibility and Financial Performance: Correlation or Misspecification?" *Strategic Management Journal*, Vol. 21, No. 5, pp. 603-609.
- \_\_\_\_\_, & Siegel, D. (2001) "Corporate Social Responsibility: A Theory of Firm Perspective", *Academy of Management Review*, Vol. 26, No. 1, pp. 117-127.
- Miles, M. P., Russell, G. R. (1997) "ISO 14000 total quality environmental management: The integration of Environmental Marketing, Total Quality management, and corporate environmental policy", *Journal of Quality Management*, Vol. 2, No. 1, pp. 151-168
- \_\_\_\_\_, & Covin, J.G. (2000) "Environmental marketing: A source of reputational, competitive, and financial Advantage", *Journal of Business Ethics*, Vol. 23, No. 3, pp. 299 - 311
- \_\_\_\_\_, Munilla, L.S. & Russell, G.R. (1997) "Marketing and

- Environmental Registration/Certification: What Industrial Marketers Should Understand About ISO 14000" *Industrial Marketing Management*, Vol. 26, pp. 363-370.
- Mintzberg, H. (1973) "Strategy Making in Three Modes" *California Management Review*, Vol. 16, Vol. 2, (Winter), pp. 44-53.
- Moore, G. (2001) "Corporate Social and Financial Performance: An Investigation in the UK Supermarket Industry", *Journal of Business Ethics*, Vol. 34, No. (3/4), pp. 299-315.
- Murphy, E. (2002) "Best Corporate Citizens Have Better Financial Performance", *Strategic Finance*, Vol. 83, No. 7, pp. 20-21.
- Murray, A., Sinclair, D., Power, D., & Gray, R. (2006) "Do Financial Markets Care about Social and Environmental Disclosure? Further Evidence and Exploration from the UK", *Accounting, Auditing & Accountability Journal*, Vol. 19, No. 2, pp. 228-255.
- Orlitzky, M. (2001) "Does Firm Size Confound the Relationship Between Corporate Social Performance and Firm Financial Performance?" *Journal of Business Ethics*, Vol. 33, No. 2, pp. 167-180.
- \_\_\_\_\_ & Benjamin, J.D. (2001) "Corporate Social Performance and Firm Risk: A Meta-Analytic Review", *Business and Society*, Vol. 40, No. 4, pp. 369-396.
- \_\_\_\_\_, Schmidt, F. L., & Rynes, S.L. 2003 "Corporate Social and Financial Performance: A Meta Analysis", *Organization Studies*, Vol. 24, No. 3, pp. 403-441.
- Patten, D.M. 2002 "The Relation Between Environmental Performance and Environmental Disclosure: A Research Note", *Accounting Organizations and Society*, Vol. 27, No. 8, pp. 763-773.
- Prahalad, C K; Hamel, Gary (1994) "Strategy as a field of study: Why search for a new paradigm?" *Strategic Management Journal*, Vol. 15, pp. 5-16.
- Republic of Indonesia. (1997) *The Law No. 23, 1997 on Environment Management and its Explanations*. www.ri.go.id
- \_\_\_\_\_ (2000) *The Law No.17, 2000 on Income Tax and its Explanations*. www.ri.go.id
- \_\_\_\_\_ (2003) *The Law No.19, 2003 on State-Owned Companies and its Explanations*. www.ri.go.id
- \_\_\_\_\_ (2007) *The Law No.25, 2007 on Capital Investment its Explanations*. www.ri.go.id
- \_\_\_\_\_ (2007) *The Law No.40, 2007 on Indonesian Corporation and its Explanations*. www.ri.go.id
- Roman, R.M., Hayibor, S., & Agle, B.R. (1999) "The Relationship Between Social and Financial Performance: Repainting a Portrait" *Business and Society*, Vol. 38, No. 1, pp. 109-125.
- Rowley, T. & Berman, S.(2000)."A Brand New Brand of Corporate Social Performance", *Business and Society*, Vol. 39, No. 4, pp. 397-418.
- Ruf, B.M., Muralidhar, K., Brown, R.M., Janney, J.J., & Paul, K. (2001) "An Empirical Investigation of the Relationship Between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective", *Journal of Business*



- Ethics*, Vol. 32, No. 2, pp. 143-156.
- Russo, M.V., & Fouts, P.A. (1997) "A resource-based Perspective on Corporate Environmental Performance and Profitability", *Academy of Management Journal*, Vol. 40, pp. 534-559.
- Simons, R. (1994) "How New Top Managers Use Control Systems as Levers of Strategic Renewal", *Strategic Management Journal*, Vol. 15 (March), pp. 169-189
- \_\_\_\_\_ (2000) *Performance Measurement and Control System for Implementing Strategy: text and Cases*. New Jersey: Prentice Hall
- Simpson, W.G. & Kohers, T. (2002). "The Link Between Corporate Social and Financial Performance: Evidence from the Banking Industry", *Journal of Business Ethics*, Vol. 35, NO. 2, pp. 97-109.
- Tan, J.J., & Listcchert, R.J.(1994) "Environment-Strategy Relationship and its Performance Implications: An Empirical Study of the Chinese Electronic Industry", *Strategic Management Journal*, Vol. 15, NO. 1(Jan), pp. 1-20.
- Waddock, S.A. & Graves, S.M. (1997) "The Corporate Social Performance-Financial Performance Link", *Strategic Management Journal*, Vol. 18, No. 4, pp. 303-319.
- Worrell, D.L., Davidson III, W.N., & Sharma, V.M. (1997) "Lay off Announcements and Stockholder Wealth", *Academy of Management Journal*, Vol. 34, No. 3, pp. 662-678.
- Wood, D.J & Jones, R.E.(1995) "Stakeholder Mismatching: Theoretical Problems in Empirical Research on Corporate Social Performance" *International Journal of Organizational Analysis*, Vol. 3, No. 3, pp. 229-267.
- Wright, P. & Ferris, S.P. (1997) "Agency Conflict and Corporate Strategy: The Effect of Divestment on Corporate Value", *Strategic Management Journal*, Vol. 18, No. 1, pp. 77-83.
- Wu, ML. (2006) "Corporate Social Performance, Corporate Financial Performance, and Size: A Meta-Analysis", *Journal of American Academy of Business*, Vol. 8, No. 1 (March), pp. 163-171.

**Appendix: Reliability Test Results**

Scale Item	$\alpha$	X	S	Item-to-Total P	F
<b>Corporate Social Responsibility (CSR):</b>					
<b>Community and Society (COM): 0.79</b>					
CSRCOM1		25.26	13.17	0.58	0.71
CSRCOM2		25.51	9.90	0.67	0.68
CSRCOM3		25.01	14.14	0.45	0.73
CSRCOM4		24.57	12.82	0.58	0.71
CSRCOM5		24.67	13.75	0.60	0.73
CSRCOM6		26.81	11.19	0.52	0.76
<b>Corporate Governance (COG): 0.90</b>					
CSRCOG1		49.75	41.23	0.60	0.88
CSRCOG2		50.29	37.34	0.82	0.87
CSRCOG3		50.31	37.09	0.80	0.87
CSRCOG5		50.48	36.72	0.74	0.87
CSRCOG6		49.66	38.98	0.60	0.88
CSRCOG7		50.37	40.47	0.57	0.88
CSRCOG8		49.75	42.05	0.53	0.89
CSRCOG9		50.15	38.50	0.71	0.87
CSRCOG10		51.28	37.53	0.61	0.88
<b>Customer (CUS) 0.83</b>					
CSRCUS1		23.35	7.94	0.59	0.75
CSRCUS2		23.17	7.26	0.70	0.72
CSRCUS3		23.33	6.99	0.67	0.72
CSRCUS4		23.99	6.57	0.61	0.74
<b>Employee (EMP): 0.84</b>					
CSREMP1		61.71	57.77	0.75	0.80
CSREMP2		62.00	58.12	0.54	0.80
CSREMP3		62.72	54.97	0.57	0.80
CSREMP4		61.72	55.38	0.61	0.80
CSREMP5		71.37	61.41	0.20	0.83
CSREMP6		63.43	58.86	0.22	0.83
CSREMP7		61.63	63.49	0.15	0.82
CSREMP8		63.04	55.49	0.56	0.80
CSREMP9		62.11	60.05	0.38	0.81
CSREMP10		62.70	53.64	0.62	0.79
CSREMP11		63.20	48.16	0.63	0.79
CSREMP12		61.35	61.44	0.42	0.81
CSREMP13		62.52	63.04	0.56	0.79
<b>Environment (ENV): 0.88</b>					
CSRENV1		24.95	16.40	0.66	0.83

CSRENV2	25.30	15.73	0.82	0.80
CSRENV3	25.88	15.93	0.55	0.86
CSRENV4	24.93	16.24	0.67	0.83
CSRENV5	25.18	15.78	0.86	0.80
<b>Human Rights (HMR):</b>	<b>0.71</b>			
CSRHMR1	13.95	6.58	0.65	0.35
CSRHMR3	13.52	7.69	0.54	0.46
CSRHMR4	14.77	6.84	0.33	0.59
<b>Controversial Business (CTB):</b>	<b>0.63</b>			
CSRCTB1	16.71	7.87	0.50	0.51
CSRCTB2	17.09	7.91	0.31	0.60
CSRCTB3	17.56	5.29	0.47	0.49
CSRCTB4	18.24	6.97	0.36	0.57
<b>Corporate Financial Performance (CFP):</b>				
<b>Growth Dimension (GRD):</b>	<b>0.93</b>			
CFPGRD1	9.87	3.87	0.88	0.86
CFPGRD2	10.16	3.27	0.81	0.92
CFPGRD3	10.05	3.84	0.85	0.88
<b>Profitability Dimension (PRD):</b>	<b>0.94</b>			
CFPPRD1	19.07	12.45	0.91	0.91
CFPPRD2	18.86	13.32	0.78	0.94
CFPPRD3	18.93	13.38	0.92	0.91
CFPPRD4	19.19	13.43	0.83	0.93
CFPPRD5	19.00	13.74	0.76	0.94
<b>Business Environment (BEV)</b>				
<b>Hostility (HOS)</b>	<b>0.93</b>			
BEVHOS1	75.84	118.98	0.45	0.94
BEVHOS2	76.39	114.91	0.67	0.93
BEVHOS3	76.49	116.10	0.60	0.93
BEVHOS4	76.55	115.35	0.66	0.93
BEVHOS5	76.95	112.16	0.79	0.93
BEVHOS6	76.65	114.88	0.72	0.93
BEVHOS7	77.05	114.23	0.67	0.93
BEVHOS8	76.78	114.86	0.57	0.93
BEVHOS9	75.88	113.80	0.65	0.93
BEVHOS10	76.50	110.80	0.68	0.93
BEVHOS11	76.78	117.14	0.53	0.93
BEVHOS12	76.87	116.11	0.73	0.93
BEVHOS13	76.88	115.02	0.66	0.93
BEVHOS14	77.00	111.01	0.77	0.93
BEVHOS15	77.10	116.36	0.68	0.93
BEVHOS16	77.17	110.94	0.78	0.93
<b>Dynamism (DYN):</b>	<b>0.90</b>			
BEVDYN1	70.46	98.23	0.49	0.90

BEVDYN2	70.56	95.95	0.58	0.90
BEVDYN3	70.80	100.64	0.43	0.90
BEVDYN4	71.30	94.20	0.60	0.90
BEVDYN5	71.01	94.54	0.66	0.90
BEVDTN6	71.03	95.88	0.65	0.89
BEVDYN7	70.97	93.34	0.74	0.89
BEVDYN8	71.37	92.32	0.61	0.90
BEVDYN9	70.43	102.15	0.27	0.89
BEVDYN10	70.94	98.25	0.48	0.90
BEVDYN11	70.66	97.49	0.59	0.90
BEVDYN12	70.65	97.06	0.51	0.89
BEVDYN13	71.10	90.88	0.71	0.90
BEVDYN14	70.98	93.03	0.64	0.89
BEVDYN15	71.12	95.69	0.66	0.90
BEVDYN16	71.05	94.36	0.64	0.89
<b>Complexity (COM):</b>	<b>0.89</b>			
BEVCOM1	68.62	88.77	0.49	0.89
BEVCOM2	69.09	88.18	0.50	0.88
BEVCOM3	68.86	90.15	0.44	0.89
BEVCOM4	69.30	89.14	0.58	0.88
BEVCOM5	69.31	84.74	0.59	0.88
BEVCOM6	69.22	87.06	0.52	0.88
BEVCOM7	69.40	88.84	0.54	0.87
BEVCOM8	69.22	84.41	0.70	0.88
BEVCOM9	61.40	82.64	0.57	0.87
BEVCOM10	69.22	86.31	0.65	0.87
BEVCOM11	69.26	83.89	0.53	0.88
BEVCOM12	69.40	87.98	0.60	0.87
BEVCOM13	69.16	85.40	0.57	0.88
BEVCOM14	69.26	87.57	0.51	0.88
BEVCOM15	69.45	89.78	0.45	0.89
BEVCOM16	69.37	88.18	0.56	0.88
<b>Strategy (STG):</b>				
<b>Aggressiveness (AGR):</b>	<b>0.89</b>			
STGAGR1	12.32	10.46	0.76	0.86
STGAGR2	12.44	9.19	0.83	0.83
STGAGR3	12.36	10.23	0.66	0.89
STGAGR4	12.72	8.38	0.80	0.84
<b>Analysis (ANL):</b>	<b>0.88</b>			
STGANL1	26.59	16.62	0.69	0.85
STGANL2	26.83	15.94	0.66	0.85
STGANL3	26.67	15.31	0.59	0.87
STGANL4	26.79	14.13	0.77	0.83
STGANL5	26.85	15.52	0.80	0.83
STGANL6	27.47	15.60	0.60	0.87

<b>Defensiveness (DFN):</b>	<b>0.90</b>				
STGDFN1		15.14	7.65	0.72	0.88
STGDFN2		14.57	9.08	0.73	0.88
STGDFN3		14.67	8.02	0.75	0.87
STGDFN4		14.74	6.64	0.88	0.81
<b>Futurity (FTR):</b>	<b>0.89</b>				
STGFTR1		19.93	10.33	0.70	0.88
STGFTR2		19.41	11.31	0.55	0.91
STGFTR3		19.62	9.68	0.84	0.84
STGFTR4		19.75	9.51	0.86	0.84
STGFTR5		19.77	10.01	0.75	0.87
<b>Proactiveness (PRO)</b>	<b>0.78</b>				
STGPRO1		17.73	12.55	0.44	0.77
STGPRO2		18.50	8.97	0.71	0.67
STGPRO3		18.94	9.64	0.53	0.75
STGPRO4		18.70	12.47	0.42	0.78
STGPRO5		18.61	10.89	0.74	0.69
<b>Riskiness (RKN)</b>	<b>0.82</b>				
STGRKN1		19.75	7.51	0.31	0.82
STGRKN2		19.64	7.79	0.50	0.75
STGRKN3		19.23	6.35	0.72	0.67
STGRKN4		19.18	6.59	0.62	0.71
STGRKN5		19.39	6.60	0.67	0.69
<b>Organization Structure (STR):</b>					
<b>Formalization (FOR):</b>	<b>0.87</b>				
STRFOR1		9.72	4.81	0.83	0.75
STRFOR2		9.68	5.99	0.73	0.85
STRFOR3		9.37	5.59	0.72	0.85
<b>Decentralization (DEC)</b>	<b>0.67</b>				
STRDEC1		16.42	10.49	0.48	0.44
STRDEC2		26.18	12.51	0.48	0.48
STRDEC3		26.26	11.36	0.63	0.42
STRDEC4		27.15	12.02	0.36	0.50
STRDEC5		27.73	10.56	0.33	0.52
STRDEC6		26.76	16.21	0.16-	0.67
STRDEC7		26.54	14.88	0.06	0.59
<b>Specialization (SPE)</b>	<b>0.83</b>				
STRSPE1		10.31	2.54	0.37	0.12
STRSPE2		10.98	3.74	0.22-	0.83
STRSPE3		9.66	2.33	0.55	0.21
<b>Control System (CON):</b>					
<b>Belief System (BEL):</b>	<b>0.89</b>				
CONBEL1		16.32	7.10	0.68	0.89
CONBEL2		16.42	5.52	0.79	0.85
CONBEL3		16.82	5.81	0.88	0.81

CONBEL4	16.76	6.24	0.72	0.87
<b>Boundary System (BOU):</b>	0.94			
CONBOU1	5.14	8.35	0.86	0.91
CONBOU2	5.36	8.46	0.81	0.93
CONBOU3	5.21	7.81	0.85	0.92
CONBOU4	5.17	8.18	0.87	0.91
<b>Diagnostic System (DIA)</b>	0.94			
CONDIA1	52.84	54.90	0.63	0.94
CONDIA2	52.87	54.40	0.80	0.93
CONDIA3	53.44	51.68	0.60	0.94
CONDIA4	53.00	52.58	0.86	0.93
CONDIA5	53.10	53.48	0.83	0.93
CONDIA6	52.96	53.07	0.73	0.93
CONDIA7	53.62	51.00	0.75	0.93
CONDIA8	53.29	52.29	0.79	0.93
CONDIA9	53.51	53.98	0.76	0.93
CONDIA10	53.12	52.45	0.79	0.93
CONDIA11	53.61	54.29	0.69	0.93
<b>Interactive System (INT)</b>	0.70			
CONINT1	22.85	11.52	0.30	0.69
CONINT2	22.72	10.94	0.50	0.62
CONINT3	24.27	9.73	0.56	0.60
CONINT4	23.53	11.22	0.37	0.67
CONINT5	22.54	12.63	0.39	0.66
CONINT6	22.97	12.14	0.47	0.64

$\alpha$ = Cronbach's alpha

X=Scale Mean if item deleted

S=Scale variance if item deleted

F=Cronbach's Alpha if item deleted

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:**

<http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

### **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

