

# The Influence of Organizational Culture on Corporate Performance: Using Management Accounting System as the Mediating Variable

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**Abstract: Purpose:** The purpose of this research is mostly to explore the influence of organizational culture on corporate performance at Indonesia Stock Exchange listed companies, with Management Accounting System (MAS) being the mediating variable.

**Method/Design :** The target population in this study consists of C-level at the existing 100 Indonesia Stock Exchange companies, selected using purposive convenience sampling. The linear Structural Equation Modelling (SEM) was adopted to verify the goodness-of-fit effects among the overall model, structural model and measurement model. This study focuses on the path coefficients between latent variables of the structural model, with the Bayesian Estimation used to test the significance of the model's direct effect, mediating effect and total effect.

**Findings :** Findings from this research include: (1) organizational culture has no direct influence on corporate performance; and (2) organizational culture has a significantly positive influence on management accounting system, which in turn affects the organizational performance in a significant and positive manner. In summary, management accounting system has a fully mediating effect.

**Implication :** Good organizational culture will influence MAS which mediate fully to corporate performance.

**Future Research :** Each of organizational culture dimensions should be tested to find which is the strong influence MAS. Is there any possibility that after tested each dimensions, we can find the weakness and strongest has influenced corporate performance.

**Originality and Value :** Management Accounting system as a full mediating variable is a new finding which can be used to improve organizational success.

**Keywords:** Organizational culture, Management Accounting System, Organizational performance.

## Introduction

According to the report from the Global Competitiveness of the 2014-2015 edition, published by the World Economic Forum, the economic index ranking shows that Indonesia is still relatively low compared to the other 144 countries. The average rating of Indonesia since 2007 – 2016 is 46.6 with the lowest 55 in 2009 and the highest, 34 by 2015. Although there is an increase trend in the rankings, Indonesia still needs to continue to enhance its competitiveness to be able to compete in international business. The other reports of Human Development, UNDP Programme (2014) also pointed out that Indonesia was still ranked at 110 among the other 188 countries.

The economic index rank difference between countries surely can be caused by the influence of the culture of their respective organizations. Hofstede (1980) stated that culture was the important thing in the organization as culture can affect the behavior and how people think. Deal and Kennedy (1982) stated that organization development must be integrated with the organizational culture to make people working efficiently. There are two functions of organizational culture in the organization. Firstly, it will create a sense of the identity of the individual and a commitment to the organization. Secondly, it will create a sense of competitive which makes the members of the company (especially new members) of the organization understand the acceptable behavior and social systems that exist in their organization (Martins, 2000). When the culture of the organization does not provide the appropriate

functions, then the culture can reduce the efficiency of the organization (Furnham and Gunther, 1993). The organizational culture will influence the individual behavior in using management tools, such as strategic direction, goals, tasks, technology, structure, communication, decision making, cooperation and interpersonal relationships, etc in the organization (Martins, 2000). According to Campbell (1999), culture also affect employee morale, motivation, productivity and efficiency, quality of employment, innovation, creativity, and the attitude of employees in the workplace.

Likewise Hellriegel et al. (2001), argues that the culture of the organization has the potential to improve the performance of organizations, individual satisfaction, problem solving. The qualitative research about the relationships of organizational culture and organizational performance is conducted by Peters and Waterman (1988) and Boyne and Walker, (2004). Cameron and Freeman (1991) examined the quantitative relationship between the effectiveness of the organization culture and the culture type of the organization. Marcoulides and Heck (1993) examined the correlation of organizational culture with the performance improvement of the organization. Ogbonna and Harris (2000) in their research also showed a positive relationship between the innovative culture with commercial success.

The activity and the development of management accounting system was heavily influenced by the supports of organizational culture. According to Cokins (2013), the function of management accounting in the current era not only to collect, to compile the data into a report but its main function is to affect behavior in the whole level of the organization. With a good management accounting system then it will be possible for the management to improve information systems, performance measurement, and resource allocation as a useful information (Ittner and Larcker, 1998). In addition, with the good management accounting system, companies will be easier to increase the effectiveness of the allocation of relevant resources for improving the performance of the company by a planning and budget system that is always tailored to the company's business.

As a result, how organizational culture affects a company's organizational performance has become a management issue that can never be ignored. That is the reasons to conduct this research to find out the influence of organizational culture on corporate performance.

The specific purposes of this research are listed as follows:

1. To verify and understand whether the organizational culture affects organizational performance in a significantly positive way.
2. To verify and understand whether the organizational culture has a significant and positive influence on management accounting system, and whether management accounting system has a significant and positive influence on organizational performance. That is, whether or not management accounting system has a mediating effect
3. To generate from an analytical study conclusions that may provide references for the management at all Indonesia corporations when making management decisions.

## **Literature Review**

### **Organizational Culture**

Schein (1985) stated that culture should be declared as a set of pre-disposition of psychology, called the basic assumption, which is owned by members of the Organization as a benchmark to think and act a certain way. Schein (1985) defines culture as "A pattern of shared basic assumptions that a group learns as it solves its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems." Other definition were also given by Hofstede (1984), which defines the culture as "the collective programming of the mind which distinguishes the members of one human group from another", i.e. the collective thinking program that distinguishes one group of individuals with a group of other individuals. There are some models of organizational culture that are used for research. Cameron and Quinn (1993) develops the Organizational Culture Assessment Instrument (OCAI) which assesses the organizational culture based on the core values, beliefs and assumptions OCAI (2010) defines 4 types of organizational culture as follows:

1. Clan Culture. It is characterized by a comfortable workplace, where people share a lot of personal information, such as the extended family. President and the organization head is seen as a mentor figures and even as parents. The organization is built based on a sense of loyalty or tradition. People have high commitment to the organization. The organization emphasizes on long term benefits from the development of human resources and big interests to maintain moral cohesion of organization. Success is defined based on sensitivity to customers and concern for others. The organization emphasizes on teamwork, participation, and consensus.

2. Adaptive Culture. It is characterized by a dynamic, entrepreneurial, and creativity. People have courageous to take responsibility and risks. The leadership of the organization is regarded as an innovator. The commitment to the organizations is on trying new things/innovation and experiment. The organization emphasizes on long term growth and gaining new resources. Success means getting products and services that are new and unique. Being a leader in products and services are considered essential. The organization encourages individuals in the organization to take the initiative.

3. Mission Culture. It is characterized by results-oriented where the main concern is how to complete the task. Individuals within the organization mutually competing and oriented on the target. The leadership of the organization is a driving force of hard accomplishment, productive and competitors. They are very tough and demand oriented. The unity of the organization is kept by the desire to win the competition. The success and reputation are a major concern. The long-term focus is on competitive action and the success of reaching the objectives and targets that are measurable. Success is defined based on the part of market penetration. Price competitiveness and leadership on the market are considered important.

4. Bureaucratic Culture. It is characterized by formal and structured working place. Standard operating procedure determines what is done. The leadership of the organization is concerned with effectiveness. Keeping the organization smoothly works is the top priority. Formal rules and policy are that keeping the unity of the organization. Long-term attention is on stability and performance with a smooth and efficient operation. Success is defined based on services/products that are reliable, smoothly routine and low-cost. The organization emphasizes a sense of security of all officers.

Generally each organization rarely have the characteristics of only one type of culture but in its development will have one of more dominant culture along with the process of adaptation and response to the changes and challenges that exist in the organizational environment (Schein, 1985).

### **Management Accounting System**

Management Accounting System (MAS) is defined as a set of management accounting practices consisting of the control system and organizational decision making, which are designed to provide information to managers for decision-making and control function (Chenhall, 2003; Simons, 1995). The importance of MAS in the function of information provision is that the characteristics and quality of the information can be presented in accordance with the main issues that could be developed into the basis for decision making and control processes (IFAC, 1998). Control function and decision making through MAS are as a basis for improving the performance of the company. There is a research conducted by Abernethy and Brownell (1999) and Bisbe and Otley (2004), about the role the company's improved performance using MAS. In its application, according to Simons (1990) there were three styles of usage of MAS, i.e. diagnostics, interactive, and dysfunctional. This research only focuses on the use of the MAS by diagnostic and interactive styles.

The diagnostic style is traditionally used with monitoring and rewarding when goals have been set previously can be reached (Henri, 2006). As with any style of mechanistic control diagnostic styles traditionally associated with the use of MAS systems of formal information to monitor organizational performance and perform correction of the deviation of performance standards that have been set. The interactive style is used by motivating and coordinating the activities of the organization, focusing attention to encourage ongoing learning (Simons, 1995). The interactive style gives priority to dialogue of important things from top management in the organization, development of new ideas, initiative used as the basis for the creation of corporate strategy.

The use of the MAS will generate information already debated between management levels so that it can be used for strategic planning. In the provision of information according to the level, there are two types of formats that are provided by MAS, i.e. the level of aggregation and the level of integration (Bouwens et al., 2000; Chenhall et al., 1986; Chia, 1995; Moores and Yuen, 2001). This type of information either a level of aggregation or integration that are generated by the MAS will depend on information needed by users who also have something to do with the level of sophistication of the system in the company (Moores et al., 2001).

The system must also be able to provide information by the concept of comparability and understandability of such information. Aggregation of information refers to the process, time, of the relevant information about the various aspects of the reality in the organization (Bouwens et al., 2000). Clancy and Collins. (1979) in his research using a perspective with a level of detail of the information.

The integration of information is used as a mean to conduct coordination within sub organizational units that comply with the decentralized structure of the unit respectively. MAS is intended not only to supporting the decision-making process but also as a control function after decision making (Chia, 1995).

According to Chenhall (2005), the capacity of integration of the MAS should consider two key components, namely: (1) can provide information that helps understand the causal relationship (cause-effect relationship) between the operational structure, strategies, and objectives of the Organization, and also between the different components of the value chain of its customers and suppliers; and (2) can provide the information needs for the measurement of components related to the measurement of financial performance, innovation, and customer organizations. Therefore, the resulting level of integration should constitute a system that serves to integrate the elements of operational activities with strategic elements.

MAS's ability in providing integrated information will be the specific characteristics for these organizations. To support management decision-making through MAS, there are two basic types of considerations, namely: (1) support the decisions based on resource allocation; and (2) support the decision based on the performance evaluation. Gil et al. (2006) describe the function of the resource allocation as a function of the distribution of the resources of the monetary and non-monetary to decentralized units within the company so that the manager can perform its duties in accordance with their respective responsibilities. Therefore, the decisions made at this level must be supported by the right information to the right resources distribution as well. It is in accordance with the economic model for decision making, which stipulates that in the conditions of uncertainty with the availability of better information will be able to improve the application of the appropriate resource (Baines et al., 2003).

The function of performance evaluation are to monitor and control objectives of the organization, managers performance and organizational units. Unlike the function of resource allocation, performance evaluation dimensions focus on what happens after the use of the MAS, for the monitoring and control so that organizational performance can be improved. The assumption that the MAS is an element of the organizational structure that provides the necessary information to support the decision-making process is already recognized either explicitly or implicitly, in the library. According to Abernethy (2007), Anderson (2007), in their perspective, MAS is a prerequisite for decision making which functions not only as an effective resource management but are also used for performance assessment organization.

### **Corporate Performance**

According to Ford and Schellenberg (1982), there is no one agreement about the meaning or definition of organizational performance. This is not caused by the difference in methodology or concept from the performance itself but rather by the fundamental reason. Therefore Ford tends to refer to some of the organization performance, not just one performance measures. In this research, performance is defined as the level of achievement of the organization objectives (Wickramasinghe and Alwattage, 2007). Some indicators are used to measure performance, either financial or non-financial. This is due to the financial indicators have their limitations, or because in certain circumstances required an indication of non-financial performance of the organization, or because the complexity of organization that need not only financial indicators. However, measuring performance using financial indicators also have certain advantages, namely as the nature of objectivity and its universality.

Bromwich (1996) asserts the existence of benefits from the use of several indicators, namely to get the views of multidimensional performance. To measure the performance by using a solely traditionally based on financial indicators already felt inadequate because many of the critical success factor in the organization that can not be expressed or measured by financial indicators. On the other hand, measurements with some indicators will show performance at a variety of different dimensions (Kaplan and Norton, 1992). However, the company still faces challenges that performance measurements should be combined into a measurement system that can support the implementation of the strategy and improve the performance of the company.

According to Scott (1999), performance measurement can be defined as the process of quantifying the efficiency and effectiveness of corporate actions in the context of customers. Effectiveness refers to the extent to which customer needs are met, while efficiency is a measure of how economically resources used to achieve customer satisfaction at some level.

Performance measurement system is made in the internal and external environment of the organization. Internally, the performance measurement system is part of a development strategy, the company's goal setting process, feedback, and recognition system of management of the company, all of which are influenced by the culture of the organization. While externally consisting of customers and competitors of the company (Collier and Gregory, 1995).

There are different of performance measurement interest operationally and financially. According to McNair (1998), information from the accounting system is not suitable for controlling operational processes as the time dimension becomes less precise to support decision making at the operational level. Then to support operational decisions, the company started to develop a new performance measurement system as part of the strategic planning or quality improvement programs, including for the measurement of customer satisfaction, flexibility, and productivity.

Development of the control system is intended to direct behavior, evaluate performance against goals, and provide the information feedback from time to time (McNair, 1998). In summary the criteria for organizations or companies in performing the measurement of its performance must consider: the right performance measures that can control the improvement of corporate performance, using some critical success factors, some measurement factor that adapts to the changing environment of the organization.

### **Relationship between Organizational Culture and Corporate Performance**

The corporate performance will be greatly determined by the existing culture which is shaped by the organizations. Certain types of culture can produce a high performance. This is caused by a strong shared values of the organizational culture amongst them. Some organizational culture is able to create competitive advantage due to the strong interaction and the best information system of the company. This relationship is shown in the research conducted by Ogbonna and Harris (1998). Other studies from Gordon and DiTomaso (1992) suggests that a kind of adaptive culture of the organization can produce better financial performance. We may derive the following hypothesis from the aforementioned analyses :

H1: Organizational culture has a positive and significant influence on corporate performance.

### **Relationship between Organizational Culture and Management Accounting System**

In line with its definition there are three characteristic of good management accounting system, it should be good in technical, behavioral and cultural barriers. Technical role refers to the quality size of the resulting management information. The role of behaviors is how the information generated will affects the behavior in the organization because of a change in perception, motivation, attitude and aspiration of the people in the organization. This change occurs because the management accounting system can change values, belief and the mindset of the organization. This relationship is shown in the research conducted by Harrison (1993), which examines the influence of organizational culture on the management accounting system implemented in companies in Singapore and Australia. They examine the relationship between the behavior of superiors and subordinates because of performance measurement in accounting. We may derive the following hypothesis from the aforementioned analyses :

H2: Organizational culture has a positive and significant influence on Management Accounting System

### **Relationship between Management Accounting System and Corporate Performance**

Management Accounting System is defined as a set of management accounting practices consisting of the control system and organizational decision making, which are designed to provide information to managers for decision-making and control function (Chenhall, 2003; Simons, 1995). The importance of MAS in the function of information provision is that the characteristics and quality of the information can be presented in accordance with the main issues that could be developed into the basis for decision making and control processes (IFAC, 1998). Control function and decision making with the MAS is as a basis for improving the performance of the company. This role looks at some of the research conducted by Abernethy et al. (1999) and Bibse et al. (2004), about the role MAS on the improvement of corporate performance. We may derive the following hypothesis from the aforementioned analyses :

H3: Management Accounting System has a positive and significant influence on corporate performance.

Based on the research purposes and literature reviews described above, we may obtain the research framework in Fig. 1.

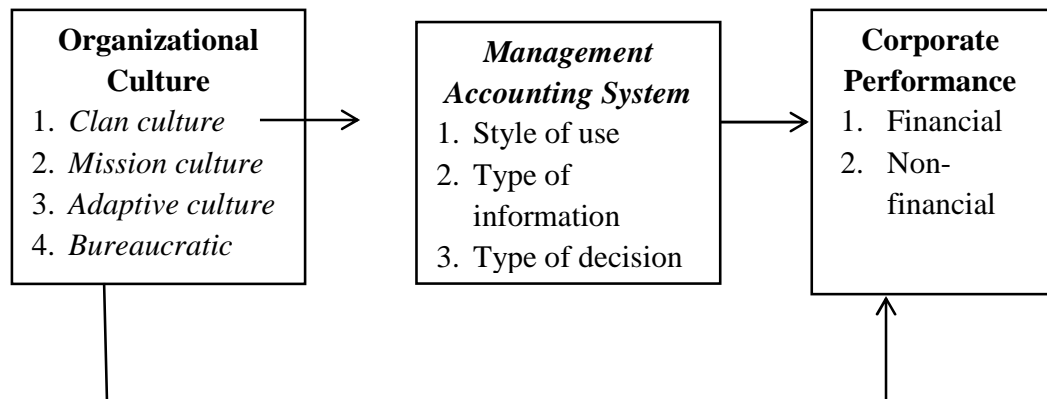


Figure 1 : Research Framework

## Research Methodology

### Sampling Method

This research collecting data by distributing questionnaires to top level manager of companies. The criteria of top level manager are :

1. CFO, CEO, Corporate Secretary and Financial Director
2. Minimum experience as top level manager is 3 years
3. Selected companies is from Fact Book 2014, Indonesia Stock Exchange

The response rate of the questionnaires will be put in table 1 below.

Table 1. Questionnaire response rate

|   | n   | %    |
|---|-----|------|
| Population / Questionnaires distributed | 379 | 100  |
| Returned                                | 106 | 27.9 |
| Not valid                               | 6   | 1.6  |
| Valid                                   | 100 | 26.4 |

### Designing the Questionnaire

The questionnaire of this study was designed on the basis of Multi-Dimension Measurement. It uses a 7-point Likert Scale to measure each answer, with 7 being strongly agree and 1 being strongly disagree. A higher point represents a higher degree of agreement, and vice versa.

The questionnaire for the dimensions of organizational culture was adapted using Chang and Lee (2007), which consist of "clan culture", "mission culture", "adaptive culture" and "bureaucratic culture" being the four major dimensions. The questionnaire contains 9 items in total.

The questionnaire for the dimensions of Management Accounting System (MAS) was adapted using Novas and Ceu (2012), which consist of "style of use", "type of information" and "type of decision" being three major dimensions. The questionnaire contains 24 items in total.

The questionnaire for the dimensions of organizational performance was adapted using Novas and Ceu (2012), which consist of "financial", and "non-financial" being two major dimensions. The questionnaire contains 8 items in total.

### Data Collection from Questionnaire and the Measurement Model

To verify the research framework proposed, this study applied linear SEM to a Confirmatory Factor Analysis (CFA) of the framework of research model. The questionnaire comprises three implicit/latent variables (i.e., organizational culture, MAS and organizational performance), each containing some observable/explicit variables as stated below. The survey was conducted using these observable/explicit variables, with several questionnaire items categorized under them each. After processing data collected in the survey, files were created for the primary data. Table 2 shows the total number of questionnaire items under each implicit/explicit variable in this study, along with their reference resources.

**Table 2: Number of Questionnaire Items for “Implicit Variables” and “Observable Variables”**

| Implicit Variable      | Explicit Variables    | Number of Items | References for Questionnaire |
|------------------------|-----------------------|-----------------|------------------------------|
| Organizational Culture | Clan Cultures         | 3               | Chang and Lee (2007)         |
|                        | Market Cultures       | 2               |                              |
|                        | Adaptive Cultures     | 2               |                              |
|                        | Bureaucratic Cultures | 2               |                              |
| MAS                    | Style of Use          | 10              | Novas and Ceu (2012)         |
|                        | Type of Information   | 5               |                              |
|                        | Type of Decision      | 9               |                              |
| Corporate Performance  | Financial             | 3               | Novas and Ceu (2012)         |
|                        | Non-financial         | 5               |                              |

### Results and Analyses

#### Linear Structure Model Analysis

This research conducted a CFA (confirmatory factor analysis) of three implicit variables: organizational culture, MAS and corporate performance. Consisting of the Structural Model and Measurement Model, the SEM provides an effective solution to the cause-effect relation between implicit variables. Besides, the models verified in this study has three parts: (1) verifying the goodness-of-fit of Measurement Model; (2) verifying the goodness-of-fit of Structural Model and (3) verifying the overall model's goodness-of-fit to make sure it conforms to the goodness-of-fit indices. That is, the goodness-of-fit of the overall SEM was judged with related goodness-of-fit indices (Diamantopoulos & Sigauw, 2000).

#### Analysing Fit of Measurement Model

The factor loading of implicit variables and explicit variables mainly measures the intensity of linear correlation between explicit and implicit variables. A factor loading close to 1 indicates the explicit variable is relatively capable of measuring the implicit one. In this research, all explicit variables' factor loading are between 0.7 and 0.9, hence the satisfying reliability. Consequently, all explicit variables in the model's measurement system are capable of appropriately measuring the implicit variables. Moreover, the Average Variance Extracted (AVE) is used to calculate the explanatory power of variance between implicit variables" versus explicit ones; the higher the VE value, the greater reliability and convergent validity of the implicit variable. Usually, the VE value must be larger than 0.5 to indicate the explanatory variance of explicit variables is larger than measurement error (Fornell and Larcker, 1981). In this research, all AVEs are larger than 0.5, hence the explicit variables' excellent reliability and convergent validity (See Table 2 and Fig. 2).

**Table 3: Judgment Indicators of Measurement System in the Model**

| Implicit Variable      | Explicit Variables    | Factor Loading | Variance Extracted (VE) |
|------------------------|-----------------------|----------------|-------------------------|
| Organizational Culture | Clan Cultures         | 0,83           | 0,70                    |
|                        | Market Cultures       | 0,92           | 0,85                    |
|                        | Adaptive Cultures     | 0,77           | 0,61                    |
|                        | Bureaucratic Cultures | 0,94           | 0,90                    |
| MAS                    | Style of Use          | 0,85           | 0,73                    |
|                        | Type of Information   | 0,94           | 0,87                    |
|                        | Type of Decision      | 0,84           | 0,70                    |
| Corporate Performance  | Non Financial         | 0,88           | 0,77                    |

### Analysing Fit of Structure Model

#### Path analysis results of structure model

After the overall model passed the goodness-of-fit test, Table 3 shows such results as the parameter estimates, S.E. and Critical Ratio (C.R.) between implicit variables.

**Table 4: Path Analysis Results of the Structural Model**

| Path Coefficient between Implicit Variables            | Estimates | S.E   | C.R.   | P     |
|--|-----------|-------|--------|-------|
| Organizational Culture (X) → MAS (ME)                  | 1,00      | -     | -      | -     |
| MAS (ME) → Corporate Performance (Y)                   | 0,90      | 0,135 | 6,713  | 0,000 |
| Organizational Culture (X) → Corporate Performance (Y) | -0,10     | 0,153 | -0,639 | 0,523 |

Note: \* indicates  $P < 0.05$  ; \*\* indicates  $P < 0.01$  ; \*\*\* indicates  $P < 0.00$

#### Coefficient of Determination

The R2 value is the degree of explanatory power of “independent variable” regarding “dependent variable” under each implicit variable. Table 5 shows the Path Coefficient of Determination in this study:

**Table 5: Path Coefficient of Determination**

| Coefficient of Determination                         | R <sup>2</sup> |
|--|----------------|
| Organizational Culture → MAS                         | <b>0,776</b>   |
| Organizational Culture & MAS → Corporate Performance | <b>0,631</b>   |

#### The Indices of Fit of the Overall Model

After a literature review and factor analysis conducted on the collected sample data, we were able to construct a framework for the overall model. Following the advice of Hari et al (1998), the measurement of the fit of the overall model was divided into three aspects, namely the Measures of Absolute Fit, Incremental Fit Measures and Parsimonious Fit Measures. Table 6 shows the test results concerning fit of the overall model.

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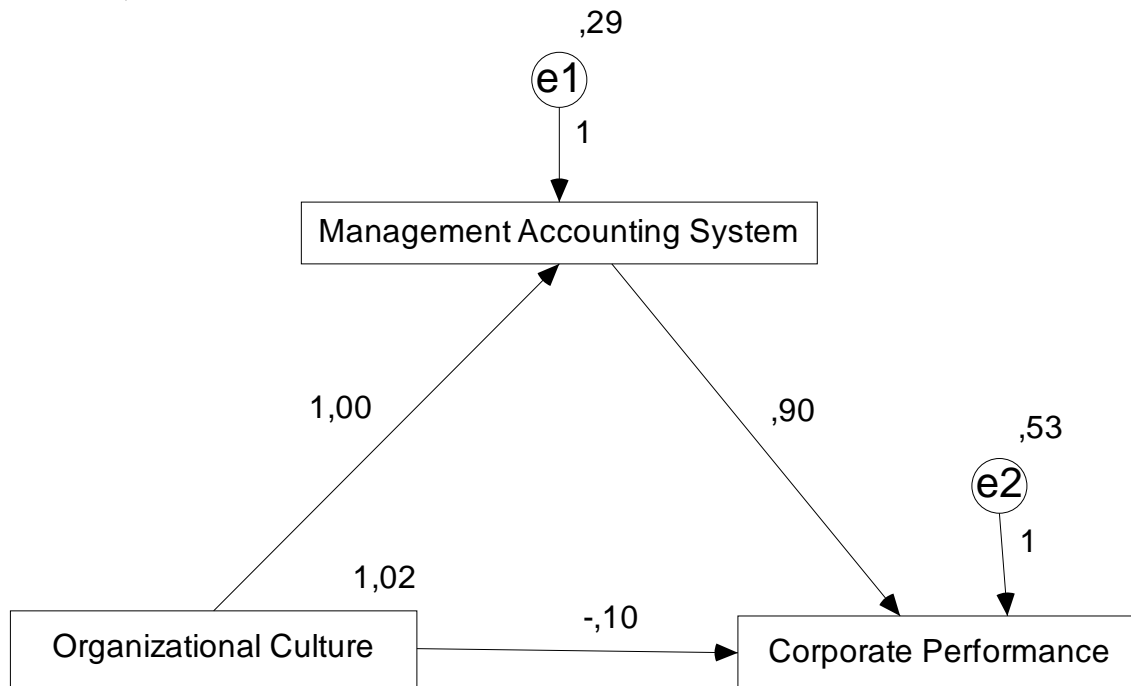


**Table 6: Analysis of Fit of the Overall Model**

| Goodness – of – fit – indices |      | Standards for Evaluation | Results Obtained |
|-------------------------------|------|--------------------------|------------------|
| Measures of Absolute Fit      | GFI  | > 0.9                    | 0,980            |
|                               | AGFI | > 0.8                    | 0,880            |
| Incremental Fit Measures      | NFI  | > 0.9                    | 0,986            |
|                               | CFI  | > 0.9                    | 0,991            |
| Parsimonious Fit Measures     | PNFI | > 0.5                    | 0,329            |
|                               | PGFI | > 0.5                    | 0,163            |

**Standardized Results of SEM Analysis**

Fig. 2 indicates the result of computer-aided standardization of the model’s overall framework (Lee, 2011):



**Figure 2: The result of computer-aided standardization of the model’s overall framework**

**Analytical Testing of Path Effect for the Structural Model**

Focused on the path coefficients between implicit variables in the structural model, this research used Bayesian Estimation to conduct an analytical test to find out the path effect of structural model, with management accounting system as the mediating factor (ME), as shown in Table 7:

- (1) Since the path coefficient of organizational culture (X) versus MAS (ME) is  $a_1=0.906$ , with a 95% confidence interval (0.797, 1.015), the two variables have a significant linkage and a significant first-order efficacy.
- (2) Since the path coefficient of MAS (ME) versus corporate performance (Y) is  $b_1=0.905$ , with a 95% confidence interval (0.620, 1.188), the two variables have a significant linkage and a significant second-order efficacy.

(3) Since the path coefficient of organizational culture (X) versus corporate performance (Y) is  $c = -0.097$  (minus), the two variables have no linkage and negative influence. Organizational culture consists of 4 dimensions, which has different indicators for each dimension.

**Table 7: Bayesian Estimation**

| Regression Weights                   | Mean   | S.D.  | 95% Lower Bound | 95% Upper Bound | Name |
|--------------------------------------|--------|-------|-----------------|-----------------|------|
| Organizational Culture → MAS         | 0,906  | 0,055 | 0,797           | 1,015           | a1   |
| MAS → Performance                    | 0,905  | 0,143 | 0,620           | 1,188           | b1   |
| Organizational Culture → Performance | -0,097 | 0,151 | -0,398          | 0,201           | c    |

**Table 8: Custom Estimates**

| Numeric Estimates                                | Mean   | S.D.  | 95% Lower Bound | 95% Upper Bound |
|--|--------|-------|-----------------|-----------------|
| Dirrect Efficacy (a1)                            | 0,906  | 0,055 | 0,797           | 1,015           |
| Dirrect Efficacy (b1)                            | 0,905  | 0,143 | 0,620           | 1,188           |
| Dirrect Efficacy (c)                             | -0,097 | 0,151 | -0,398          | 0,201           |
| Indirect Efficacy (a1*b1)                        | 0,819  | 0,007 | 0,494           | 1,205           |
| Total Efficacy (c+a1*b1)                         | 0,722  | 0,158 | 5,139           | 1,406           |
| The Ratio of Indirect Efficacy to Total Efficacy | 1,113  | 0,05  | 0,096           | 0,857           |

We know from Table 8 that:

- (1) The estimate of Indirect Efficacy ( $a1*b1$ ) is 0.819, with a 95% confidence interval (0.494, 1.205), indicating a significant linkage and significant indirect efficacy, which accounts for an estimated 111.3% of the total efficacy.
- (2) Due to the significant indirect efficacy but no influence of direct effect, MAS has a *fully mediating effect*.

The test results obtained from the analysis above are:

1. Organizational culture has no direct effect regarding corporate performance, with a minus 0.97 standardized path coefficient that reject H1;
2. Organizational culture has a significantly positive influence on MAS, which in turn has a significant and positive influence on corporate performance. In other word, MAS will have a “fully” mediating effect when H1 is rejected.

## Conclusion and Recommendations

### Conclusion

The following conclusions are derived from the aforementioned data analyses and results:

- As for SEM verification, the SEM established in this research has a satisfying goodness-All of the Measurement Model, Structural Model and the overall structure, have a goodness-of-fit model in SEM verification.
- Concerning the relationship between organizational culture and corporate performance, the organizational culture does not affect corporate performance directly;
- Concerning the relationship between organizational culture and MAS, the organizational culture has a positive and significant influence on MAS.
- Concerning the relationship between MAS and corporate performance, the MAS has a positive and significant influence on corporate performance.

In summary, the organizational culture has no influence on corporate performance, but only with MAS as fully mediating effect.

### Research contribution

- As this research is a CFA-based one that addresses a crucial topic regarding business practices about how organizational culture influence the use of MAS, this topic will be worth for further research in relevant fields, besides provide a reference for the management when making management decisions.
- According to findings from this research, the organizational culture, MAS and corporate performance are significantly correlated. Moreover, a good organizational culture exerts a positive and significant influence

on a MAS of the company while indirectly improving the corporate performance. That is, a company should examine whether or not it has a good organizational culture before implementing MAS.

### Limitations and Suggestions

- As this research focuses only on organizational culture, future studies may consider extending the scope of research on other implicit variables like intellectual capital on how they will affect the MAS of company. Besides, this research only tested the organizational variable not separated into dimensions, future research may consider testing each dimension on how they will affect the corporate performance.
- Given the limited amount of the research population, this study adopted the non-probability, purposive convenience sampling method for convenience purposes. That resulted however, in a substantial sampling bias and a reduced reliability. Therefore future studies are advised to use simple random sampling or stratified random sampling instead.

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