DOES ORGANISATIONAL CULTURE AFFECT INTERNAL CORPORATE GOVERNANCE? A STUDY OF INDONESIAN COMPANIES

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ABSTRACT

Despite the growing awareness of the importance of culture in many studies of corporate governance, the works which have been carried out to date have insufficiently measured cultural constructs, and have been predominantly been based upon archival data of corporate governance. The objectives of this study are to measure organisational culture thoroughly, to measure internal corporate governance based on the fulfilment of duties by companies' governance structures, and to relate organisational culture to internal corporate governance. Reporting the responses of a sample of 496 managers and executives of companies in Indonesia, this study finds a valid and reliable measure of constructs being examined, and shows a strong impact of organisational culture on internal corporate governance. This implies that to execute corporate governance effectively, companies need to understand the ways cultural factors influence it. Continued examination of this issue will be particularly important given the pace of change confronting Indonesian companies as a result of reformation and privatisation, and the unique characteristic of the two-tier governance system in Indonesia.

Keywords: Organisational Culture, Internal Corporate Governance, Confirmatory Factor Analysis, Structural Relationship, LISREL, Indonesia.

INTRODUCTION

The influence of organisational culture on internal corporate governance is an important issue in today's organisations. Semenov (2000), for instance, found that cultural factors relate to corporate governance systems in his study of western countries. To execute corporate governance effectively, companies need to understand the ways cultural factors influence them. This is particularly so in Indonesia, as many companies have experienced problems due to weak governance practices.

However, there is scarce wide-ranging measurement of culture, which has resulted in unconvincing solutions to the problems faced by poorly-governed firms. Additionally, at least until the present there has not been much published work on Indonesian corporate governance. Simply to assert that Indonesian firms are badly governed is not enough. Economy-wide approaches such as legal restructuring and new institution building may be necessary conditions, but they are not sufficient to overcome poorly-governed firms. In this regard, McCawley stated clearly that 'it is often the case that important aspects of governance issues need to be tackled at the firms' (2005: 1). Although there is awareness of the importance of culture, as shown by a growing number of reports that have acknowledged the importance of culture on corporate governance, a country culture-wide approach unlikely touches the bottom line of corporate governance, as it is within companies that corporate governance takes place.

Corporate governance is 'a fashionable concept, and like many fashionable concepts, it is somewhat ambiguous and a bit of cliché' (Farrar 2005: 3). No single definition has been approved by many scholars. Experts define corporate governance depending on the issues they would like to deal with. Broad definitions are used by Monks and Minow (2004: 2) and Blair (1995: 3), while tight definitions of corporate governance were proposed by Shleifer and Vishny (1997: 737) and Cadbury

Committee (1992), among many others. The broad definitions capture not only the functions of companies' governance structures or organs but also the external environment, comprising social influences, government rules regulating firms, and capital and labour markets. While narrow definitions place corporate governance only as a matter of firms' businesses, including the internal structure and processes of running the companies. These diverse definitions reflect the perspective of what corporate governance is likely to deal with and the areas it should overcome. However, in essence corporate governance is the system by which companies are directed and controlled. Whereas approaching corporate governance research through archival data has been common in many previous studies, and board demography-outcome links have been subject to debate, the current study proposes an alternative way of advancing research in corporate governance by incorporating primary data relating to the duties of governance structures. This approach is taken since 'empirical dogmatism' in the form of the negligence of alternative paradigms is one of the greatest barriers to advancing the field of corporate governance. This research aims to develop a valid and reliable measure of organisational culture and internal corporate governance, and examine the impact of organisational culture on the operation of internal corporate governance among Indonesian firms.

THEORETICAL PERSPECTIVE ON ORGANISATIONAL CULTURE

The terms 'organisational culture' and 'corporate culture' were introduced to the academic literature by Pettigrew (1979) and Silverzweig and Allen (1976), respectively. It seems that the popularity of these terms grew because of the work of Peters and Waterman (1982). Since then, an enormous literature has developed on these topics. Although no conclusive definitions have been widely agreed upon among researchers, there are common characteristics of culture which involve some combination of artefacts (also called practices, expressive symbols or forms), values and beliefs, and underlying assumptions that organisational members share about appropriate behaviour (Schein, 1992). In this study, organisational culture is defined as 'particular ways of conducting organisational functions that have evolved over time under the influence of an organisation's history, people, interests, and actions and that have become institutionalized in the organisation' (Kostova, 1999: 309). This definition portrays the perceptions of organisational work practices within an organisation. Here, organisational practices are believed to reflect the 'collective wisdom within an organisation about how things can best be done' (Wilderom & Van den Berg, 2005: 6). Further, these practices are viewed as ways of doing certain tasks that are taken-for-granted (Kostova, 1999).

The organisational culture construct operationalised in this study was developed from the studies of Van den Berg and Wilderom (2004) and Wilderom and Van den Berg (1998). Then, additional items were added to better portray the domain of the organisational culture construct. In accordance with the dimensions used in this study, Detert, Schroeder and Mauriel (2000), who performed a qualitative content analysis of the extant literature, lend support to utilising these

dimensions in researching organisational culture. The dimension of Autonomy (Auto) was selected because it refers to the freedom of employees to contribute the skills they have in advancing the company. This dimension was also used by Gordon and DiTomaso (1992), who called it 'accountability and systematic decision making' and Detert et al. (2000), who termed it 'control, coordination, and responsibility'. The External Orientation (EO) dimension is similar to willingness and effort taken to quickly anticipate and respond to customers' demands. The work of Hofstede, Neuijen, Ohavy and Sanders (1990) termed this an 'open vs. closed system'; and the research of Detert et al. (2000) called it 'orientation and focus-internal and/or external' - each of which can refer to this dimension. The dimension of Inter-Departmental Coordination (IDC) was chosen since modern organisations commonly have divisions of work, which increase the flow of work and information among members. As a result of increasing barriers, an organisation's functioning is likely to be adversely influenced. Previous studies which support the use of this dimension are O'Reilly, Chatman and Cadwell (1991), who used the term 'team oriented', and Detert et al. (2000) who named it 'isolation versus collaboration/cooperation'. The Human Resource Management (HRM) dimension has been considered as one aspect of organisational culture by many in the past. Van Muijen et al. (1999) named it 'support orientation', and Detert et al. (2000) termed it 'orientation to work, task, and coworkers'. This dimension covers the process of employees' selection, the support to employees' functioning and whether performance mechanisms were in place. Reflecting humans' ambition, Improvement Orientation (IO) is utilised in this study. Most people are stimulated to achieve a better result, both for themselves and their company. Backing the use of this dimension are the studies of Van Muijen et al. (1999), who labelled it 'innovation orientation', and Detert et al. (2000), who named it 'stability versus change/innovation/personal growth'.

THEORETICAL PERSPECTIVE ON INTERNAL CORPORATE GOVERNANCE

To date, many publications about internal corporate governance mechanisms have been based on secondary data on executive schemes and governance structures. In contrast, the study of the internal mechanisms of corporate governance, defined as the fulfilment of the duties of a company's governance structures, has lagged behind. Bank (2004) specially defined internal corporate governance in terms of the duties that are performed by a company's governance structures including its board of directors, executive management, and independent control functions. He argued that in any national system, there are standards to be followed by boards of directors and executive management in running corporations. Obviously, having thus defined the internal mechanisms of corporate governance demands primary data that should be gathered from boards of directors and executives. In this regard, companies are largely unwilling to provide such information, and this barrier further inhibits the development of research in corporate governance. Nonetheless, research on corporate governance using primary data does exist. Gill, Flynn, and Reissing (2005) to some extent

used primary data in their study of corporate governance. Daily, Dalton and Cannella (2003) believe that such data will enhance the understanding of the effectiveness of corporate governance, and they call it 'process-oriented data'. The potential value of this data has also been recognised by Forbes and Milliken, who stated that process-oriented data 'will enable researchers to better explain inconsistencies in past research on boards, to disentangle the contributions that multiple theoretical perspectives have to offer in explaining board dynamics, and to clarify the tradeoffs inherent in board design' (1999: 502).

In developing an internal corporate governance construct the dimension of the duties of companies' organs developed by Banks (2004), was used as a starting point. As the work of Banks was derived from the context of corporate governance systems in western countries, which are based on a one-tier system, adjustments were made in order to better portray the duties of governance structures in the Indonesian two-tier system. These adjustments were based on interviews¹ and literature reviews of the Indonesian corporate governance system. According to the Indonesian Company Law, Law No. 1 of 1995, Indonesian company law adopts a two-tier management structure comprising a board of directors and a board of commissioners. Boards of directors are tasked with the management of the company, and their role is similar to that of executive management in western management structures. Boards of commissioners are tasked with supervising and advising the directors, and are similar to boards of directors in western management structures.

The internal corporate governance construct consisted of 6 dimensions – namely the *Board of Commissioners (BOC), Independent Commissioners (IC), Audit Committee (AC), Board of Directors (BOD), Internal Control Group (ICG),* and *Codes of Conduct (COC)*. The dimension of the *BOC* was selected because it represented the interests of shareholders and stakeholders by overseeing the fulfilment of the duties of boards of directors and by implementing internal controls. This dimension was applied by Bhagat and Black (1999), and Gill et al. (2005), among many others. The independency of commissioners is shown by the selection of criteria which stated that the members of *IC* are those that have no affiliation with the company, other commissioners, the board of directors, or controlling shareholders of the company, and do not have a business relationship with the company's ultimate business. Examples of previous studies which support the use of this dimension are Bhagat and Black (2002), and Rosenstein and Wyatt (1997). The duties of auditing and controlling the

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¹ Interviewees' expertise was acknowledged based on the qualifications they hold. The first two persons graduated with doctoral degrees from foreign universities, are researchers, and supervise the research of PhD students in Indonesia. One of these two persons is an independent commissioner of two companies in Indonesia. The third person is one of directors of the Capital Market Supervisory Agency, Minister of Finance, The Republic of Indonesia, and a member of the National Committee on Governance. The fourth person is a researcher with a Non-Government Organisation focusing on the practices of corporate governance within Indonesia. The fifth person is the author of a book on good corporate governance in Indonesia, a vice-director of one of the biggest electronics companies in Indonesia, a member of the National Committee on Governance, and was the former director of the Jakarta Stock Exchange. The sixth person is a PhD graduate of a foreign university, an academic, and a researcher in the area of organisational behaviour.

process of financial disclosure and reporting, and internal control, are the responsibility of the *AC* (Daniri, 2005; NCCG, 2004). This dimension has been considered as one aspect of internal corporate governance by many in the past (Kurniawan & Indriantoro, 2000; Olson, 1999). The *BOD* dimension was selected since it represented the tone of the board of directors in advancing the company, protecting interested parties, being accountable for the company's decisions, and providing full and accurate information. Among many others, the works of Gomez-Mejia and Barkema (1998), has considered the importance of this dimension. Further, unless the *ICG* is in place, it will be very difficult for the board of commissioners and board of directors to perform effectively. This group of technical experts provides review, assessment, and control of a company's operations. In this regard, the *ICG* plays a significant role in bridging the daily business activities of the company and the policies launched by higher levels of the corporate structure. Derived from the conceptual work of Daniri (2005) and the guidance of the National Committee for Corporate Governance (2001), this research utilised this dimension. In regard to the last dimension, the *COC* can be seen as 'the standards for behaviour and action when dealing with those inside and outside of the firm' (Banks, 2004; 47).

HYPOTHESIS OF THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND INTERNAL CORPORATE GOVERNANCE

In his doctoral research, Semenov (2000) compared the systems of corporate governance in industrialized western countries, and asserted that culture scores explained the differences of corporate governance in seventeen western countries better than any of the other economic variables suggested in the literature. Similarly, Licht (2001) revealed that cross-cultural theories of corporate governance systems based on cultural value dimensions relate to shareholding structures and the regulation of self-dealing, insider trading, and disclosure. In line with the above claims, Weimerand Semenov, cited in Hofstede (2004), also asserted that culture has became a powerful explanatory variable of corporate governance.

Notwithstanding the above strong arguments, caution should exercised as these studies were limited by national scope. At the micro or organisational level, empirical studies relating to organisational culture and internal corporate governance in particular are rarely undertaken. Internal corporate governance, which was defined as the specific mechanisms and actions taken by individual firms to enforce control and accountability, is a mechanism within firms to promote proper behaviour. This mechanism rarely stands in isolation, but rather exists because of right culture being in place. Saffold III (1988) was among the first who implicitly acknowledged internal mechanisms, which he called 'the performance-related cultural processes'; these were climate formation, behaviour control, organisational learning, strategy formulation, social efficiency, and leadership, and were viewed as intermediary elements of the culture-performance link. Similarly, Hofstede et al. (1990) claimed that

organisational culture influences internal control by demonstrating structure, role expectations and job description, how to act on the job, how to solve problems, who makes decisions in various situations, how to think about and behave toward co-workers and supervisors, and industry norms and practices. The dimension of organisational culture – *autonomy* – deals with empowerment which was needed by governance structures to fulfil their duties. This was also the case for *external orientation*, which was seen to be needed by governance structures. To perform their expected roles, these structures should be outward looking or searching for benchmarks for their jobs. The internal controls which were exercised by governance structures were better organised if there was *interdepartmental coordination* among them. In regard to the *human resource management* dimension, members of company governance structures had to be assured that performing such roles was being objectively assessed and related to better human resource practices. Finally, *improvement orientation* related to the basic nature of human beings to serve others well, not only for her/his personal career advancement, but also for broader reasons within the wider community.

Based on the above arguments, the research model related organisational culture to internal corporate governance. The second-order organisational culture constructs consisted of 5 first-order construct — namely *Autonomy (Auto)*, *External Orientation (EO)*, *Interdepartmental Coordination (IDC)*, *Human Resource Management (HRM)*, and *Improvement Orientation (IO)*. The second-order internal corporate governance construct consisted of 6 first-order constructs — namely *Board of Commissioners (BOC)*, *Independent Commissioners (IC)*, *Audit Committee (AC)*, *Board of Directors (BOD)*, *Internal Control Group (ICG)*, and Codes of Conduct (COC).

Having discussed the relationship between organisational culture and internal corporate governance, and having constructed a research model, the following hypothesis was developed:

Hypotheses 1: Organisational culture that emphasises a higher degree of autonomy, external orientation, interdepartmental coordination, human resource orientation, and improvement orientation is positively related to internal corporate governance, which is measured by the fulfilment of the duties of boards of commissioners, independent committees, audit committees, boards of directors, internal control groups, and the reinforcement of codes of conduct.

RESEARCH METHOD

Two stages of analysis were performed: the first was factor analysis, and the second was the full Structural Equation Modelling (SEM) analysis using LISREL 8.8. Factor analysis was applied to reduce a large number of variables to a smaller set of underlying factors that sum up the essential information contained in the variables. Full SEM consisted of examining the measurement part and the structural part. The one-factor congeneric measurement model of Holmes-Smith (2001) was applied. In doing so, a robust construct was sought through the tests of construct reliability,

convergent validity, and discriminant validity. These procedures produced parsimonious constructs with reasonable fit indicators such as Satorra-Bentler (S-B) χ^2 , Root Mean Square Error of Approximation (RMSR), Goodness of Fit Index (GFI), among many others. In the structural part, the path between organisational culture and internal corporate governance was examined using fit indices tests

Sample and Procedure

The subject of the study implicitly demanded that respondents should be familiar with the topic of interest. Choosing managers and executives as respondents in research relating to culture and organisational phenomena had been common in several studies (as examples see Heuer, Cummings, & Hutabarat, 1999). This technique is known as purposive sampling and 'is characterized by the use of judgment and a deliberate effort to obtain representative samples by including presumably typical areas or groups in the sample' (Kerlinger & Lee, 2000: 179). Managers and executives who were taking educational programs and/or trainings session in three big cities were approached.

Pilot Studies

Two pilot studies were carried out prior to the main survey. The reliability test of the first pilot study showed that all but three constructs had a Cronbach's alpha higher than 0.7. These three were *Auto*, *HRM*, and *AC* with scores of .676, .654 and .389 respectively. A poorly worded item may produce low loading; thus, rather than deleting these items, refining them was the final choice for this study. The second pilot study showed that the Cronbach's Alpha coefficient of all constructs surpassed the point of reference .70. Thus, it was concluded that the research instrument was sufficient to be used for the final survey.

Main Study

One thousand questionnaires were distributed to managers and executives who enrolled in educational degrees and/or training programs run by one of university in Indonesia. The method applied here was similar to that of Carmeli and Tishler (2004), who used the individual respondent in their study of organisational phenomenon. Supporting such an approach were Schein, and Van Aken and Strikwerda, cited in De Witte and Van Muijen (1999), who argued that as they were the enablers and the makers of organisations, asking individuals about their perception of organisational phenomena was natural. Individual responses, although applied in many organisational studies, are not immune from deficiency, as acknowledged by Calori and Sarnin (1991: 61). Nonetheless, they deemed this approach is appropriate, stating 'there is bias in asking individuals to respond to questions concerning the whole company. However, it seemed to be a better solution than aggregating specific work group practices and values, mainly because the surveys do not cover the whole population of the company'.

Pointing to the aggregation technique, Hofmann (1997) claimed that the shortcoming of this approach is that potentially meaningful individual level variance in the items or constructs is neglected. The response rate of the main study was 66.9 per cent. Among the responses, 496 useable questionnaires were tabulated for statistical analysis. A demographic profile of respondents is shown in the Table 1.

[Insert Table 1 here]

Measures

The dimensions of organisational culture developed by Van den Berg and Wilderom (2004) and Wilderom and Van den Berg (1998) were used as primary references. For internal corporate governance, the dimensions developed by Banks (2004) were used as a starting point. Additional dimensions from other literature were included to capture the domain. In regard to the EO dimension, items proposed by Nahm, Vonderembse and Koufteros (2004) were added; the IDC dimension was improved by adding items used by Nahm et al. (2004) and Denison (1990); HRM dimension was improved with items proposed by Hofstede (1990); and IO dimension was improved with items proposed by Denison (1990) and Hofstede et al. (1990). In regard to the BOC dimension, items summarised from Indonesian Company Law 1995 and the Code for Good Corporate Governance (NCCG, 2001) were added; the IC dimension was improved by adding items derived from the Code for Good Corporate Governance (NCCG, 2004), and the Jakarta Stock Exchange Directors' decree No. Kep-315/Bursa Efek Jakarta/06-2000; the AC dimension was improved with items obtained from the Code for Good Corporate Governance (NCCG, 2004), The Stock Exchange Supervisory Body circular letter No. SE-03/PM/2000, and the Jakarta Stock Exchange Directors' decree No. Kep-315/Bursa Efek Jakarta/06-2000; the BOD dimension was improved with items drawn from Indonesian Company Law 1995 and the Code for Good Corporate Governance (NCCG, 2001); the ICG dimension was improved with items summarised from the work of Daniri (2005) and material from the Code for Good Corporate Governance (NCCG, 2001); and the COC dimension was improved with items developed by the Code for Good Corporate Governance (NCCG, 2004). As a result of these processes, the organisational culture second-order construct consisted of with 5 dimensions and 33 observed variables, and the internal corporate governance second-order construct consisted of 6 dimensions and 64 observed variables. The questionnaire was translated into Bahasa Indonesia as the study was carried out in Indonesia.

In regard to the scale, the study asked participants to express the extent of their agreement or disagreement using a six-point Likert scale, ranging from strongly agree to strongly disagree. The utilisation of a six-point scale instead of a five- or seven-point scale was based on the argument advanced by Trompenaars and Hampden-Turner (1997), who provided evidence that some Asian countries, including Indonesia, rank high in the neutrality dimension. Consequently, the middle choice

of response — namely 'neutral' and 'neither agree or disagree' — was excluded. It was believed that such responses would have contributed to the central tendency error (Cooper & Schindler, 2003).

Data Examination

Little's MCAR test of .035 indicated that the missing values could be considered to be missing completely at random (Little & Rubin, 2002). As such, any method of replacement was acceptable. Since series means replacement is most widely used, the study used this method. Kolmogorov-Smirnov's normality test showed that although skewness and kurtosis values fell within the acceptable range (± 2) there were distribution anomalies in all indicators. With 496 cases, the requirement of minimal sample size of 200 cases for SEM was fulfilled (Hair, Anderson, Tatham, & Black, 1998).

RESULTS

Factor Analysis

The large number of variables could have been a disadvantage of the study, as 'increasing the number of variables also increases the possibility that the variables are not all uncorrelated and representative of distinct concepts' {Hair, 1998 p. 91}. Results of factor analysis showed that there were 20 observed variables for the organisational culture construct and 24 observed variables for the internal corporate governance construct. The results of factor analysis are not shown here, but will be made available on request.

Assessment of Measurement Properties

Assessment of unidimensionality, convergent validity, and discriminant validity

Each construct was subject to a one-factor congeneric measurement model. Model re-specification was carried out to improve the model fit. In doing so, deletion of non-significant estimated parameters and freeing parameters that share large error variance could be applied. This process was stopped when model fit was accomplished and there were neither theoretical nor statistical justifications for further modifications.

Following the assessment of the model, there were 40 observed variables remaining. In terms of the *Auto* construct, *Auto3* was dropped since it shared significant error variance with *Auto4*, and it had lower loading than *Auto4*. *Auto3* measured the freedom employees had in implementing decisions according to their own views, which theoretically overlapped with *Auto4*, which gauged the extent to which employees influenced important decisions concerning work. In regard to the *IDC* construct, *IDC7*, which measured the extent to which cooperation across different parts of the organisation was actively encouraged, correlated highly with *IDC6*, which measured the extent to which work was organised so that each person could see the relationship between his or her job and the goals of the

organisation. IDC7 also had lower loading then IDC6. Theoretically, IDC7 overlapped with IDC6. Therefore, for the sake of parsimony IDC7 was dropped. Relating to the HRM construct, HRM3 shared significant error variance with HRM1. HRM3 measured the existence of careful selection of new employees, while HRM1 gauged the extent to which performance appraisals were taken seriously. Statistically, HRM3 had lower loading than HRM1, and it overlapped highly with HRM1. As a result it was dropped in the interest of model parsimony. In terms of BOC construct, BOC1 was dropped since it shared significant error variance with BOC4, and it had lower loading than BOC4. BOC1 measured the extent to which BOCs supervise the action of BODs; this theoretically overlapped with BOC4, which gauged the extent to which BOCs ensure that BODs comply with regulations having the force of law. Therefore, for the sake of parsimony BOC1 was dropped. Overall model fit, which shows the value of $SB\chi^2$ (df), p-value, RMSEA, RMR, GFI, AGFI, and CFI indicated that all benchmarks were satisfied, thus supporting the retention of remaining indicators.

Convergent validity measures the magnitude of the direct structural relationship between an observed variable and a latent construct. It is achieved when this relationship (factor loading) is significant from zero (Holmes-Smith, 2001). At 5 per cent significance level the *t*-value of the parameter should be higher than 1.96. The convergent validity requirement was fully satisfied as no *t*-values were less than ± 1.96. All detailed results can be made available on demand. Another measure of validity is discriminant validity. This represents the extent to which the constructs in a model are different. Constructs are supposed to not be highly correlated, as they are measuring different concepts. Therefore, a correlation between constructs that is greater than .80 or .90 represents a lack of discriminant validity (Holmes-Smith, 2001). Fornel and Larcker (1981) recommend that discriminant validity is fulfilled if the average variance extracted for two constructs is greater than the square of the correlation between the two constructs. Results – which can be made available on request – indicated that discriminant validity was satisfied.

Assessment of reliability

The indicator reliability was measured using squared multiple correlation. It was observed that Auto4, Auto5, EO1, and IDC6 — with squared multiple correlations of .407, .480, .454, and .480 respectively — were below the threshold of .500 (Holmes-Smith, 2001). Keeping the above variables was based on the following reasons. Firstly, their t-values were significant (greater than \pm 1.96 at 5 per cent significance level). Secondly, they were important variables which were derived from the literature review and empirical studies (Van den Berg & Wilderom, 2004).

Meanwhile, in assessing construct reliability the internal consistency measure developed by Fornell and Larcker (1981) was applied. A commonly used threshold value for acceptable reliability is .50, which roughly corresponds to a standardised loading of .7 (Holmes-Smith, 2001). Another measure is variance extracted estimate. Higher variance extracted values occur when the indicators are

truly representative of the latent construct. Guidelines suggest that the variance extracted value should exceed .50 for a construct (Hair et al., 1998). The variance extracted measure is a complementary measure to construct reliability. Results of this study indicated that all constructs had good construct reliability (>.50). All but one had variance extracted estimate greater than .50. The only construct that had variance extracted estimate less than .50 was *Auto* (0.474). In this regard, there was the possibility of dropping this construct from subsequent analysis. However, considering that the construct reliability of *Auto* was very good (0.729) and taking into consideration that the variance extracted estimate is a complementary measure, the study decided to maintain this construct. In addition, past literature and empirical studies support the existence of this construct (Van den Berg & Wilderom, 2004). The assessment of reliability test is not shown here, but will be made available on request.

Second-order analysis of organisational culture and internal corporate governance constructs

Organisational culture and internal corporate governance were second-order constructs; therefore, their properties needed to be assessed prior to structural analysis relating to them being executed (Gerbing, Hamilton, & Freeman, 1994). First of all, to properly specify a second-order construct it is important to ensure that all first-order constructs are unidimensional (Kotha, Vadlamani, & Nair, 1997), as was the case with this study. To evaluate the fit of the second-order construct, researchers recommend using CFI along with other fit indices (Gerbing et al., 1994).

For the organisational culture construct, results in Table 2 show that after 5 iterations the overall fit indices satisfied the benchmark applied to this study. The ratio of S-B χ^2 /df was 1.104, which is within the threshold range of 1-2; the *p*-value was well above the .05 benchmark (=0.28643); RMSEA was well below the .05 cut-off point (= 0.0145); RMR was equal with the benchmark (= 0.0551); GFI and AGFI showed a very good values (= 0.966 and 0.946 respectively); and CFI was excellent (= 0.999).

[Insert Table 2 here]

For the internal corporate governance construct, Table 3 shows that the ratio of S-B χ^2 /df was within the acceptable range of 1-2 (= 155.958/129= 1.209); the *p*-value was satisfactory (= 0.0532); RMSEA was very good (= 0.0205); GFI was acceptable (= 0.909); and CFI's value was excellent (= 0.999). The RMR score was not as good as the recommended benchmark of less then or equal to .05. However, since the RMSEA index was excellent, and RMSEA is superior to RMR in term of its characteristic of being least affected by sample size (Fan, Thompson, & Wang, 1999), the study considered that good fit indices were still satisfactory. In regard to AGFI, it was acknowledged that this index was less than the restrictive threshold of .9, but exceeded the threshold of .80 (Gefen,

Straub, & Boudreau, 2000). GFI and AGFI in the .80 to .89 range were also believed to represent a reasonable fit (Doll, Xia, & Torkzadeh, 1994). Moreover, Kotha et al. (1997) argued that such an AGFI index was still appropriate as long as other indices performed well, as was the case in this study. In sum, the overall fit indices were fulfilled in this study.

[Insert Table 3 here]

Assessment of Structural Model

As stated by Gefen et al. (2000: 24-25), the objective of covariance-based SEM is:

to show that the null hypotheses – the assumed research model with all its paths – is insignificant, meaning that the complete set of paths as specified in the model that is being analysed is plausible, given the sample data. Moreover, its goodness of fit tests, such as χ^2 , test the restrictions implied by a model. In other words, the objective of covariance-based SEM is to show that the operationalization of the theory being examined is corroborated and not disconfirmed by the data.

This objective can be met by, for example, *insignificant* χ^2 with *p*-value above .05, among many other satisfactory criteria. If needed, model re-specification can be performed to improve the structural relation between constructs or latent variables. Results showed that after five iterations all fit indices met the benchmark, as shown in Table 4 below.

[Insert Table 4 here]

RMR, GFI and AGFI did not meet the recommended targets of 0.05, 0.90 and 0.90 respectively. All other measures satisfied the benchmarks. However, considering the argument advanced by Fan et al., (1999), Doll et al. (1994) and Kotha et al. (1997) above, the study considered that overall fit indices were satisfactory.

The path between the organisational culture construct and internal corporate governance was measured by Gamma (γ) coefficients. In assessing the structural paths the *t*-value was applied. The path was to be considered statistically significant if the *t*-value was greater than \pm 1.96 at a 5 per cent significance level (greater than \pm 2.57 at a 1 per cent significance level). With γ coefficients of 0.85, the relationship was significant (*t*-values = 10.39), as shown in Table 5.

[Insert Table 5 here]

DISCUSSIONS, CONCLUSIONS, AND PROSPECTS FOR THE STUDY

The awareness and understanding of the importance of the implementation of good corporate governance principles in Indonesia just begun following the monetary crisis in 1997 (Herwidayatmo 2003). Indonesia has taken important steps since 1999 by establishing the National Committee for

Corporate Governance (NCCG). The main task of the NCCG is strengthening, disseminating, and promoting good corporate governance principles, not only in the private sector but also in the public sector. Unfortunately, published studies relating organisational culture and internal corporate governance, particularly post economic crisis in Indonesia, have not discovered much. Further, observing that the corporate governance system in Indonesia is unique in terms of its two-tier system, this research is called for to fill the gap in the lack of published work in this area, and to observe the nature of organisational culture and internal corporate governance employed by Indonesian companies.

Three conclusions appeared evident from the results of this research. Firstly, the study showed that the measurement of the organisational culture construct was valid and reliable. Secondly, the results of the measurement part of internal corporate governance also satisfied the threshold applied in this research. Their first-order constructs were dimensional (Kotha et al. 1997), and their second-order constructs satisfied the benchmark applied in this study – as indicated by the results of their confirmatory factor analysis. The importance of developing standardised instruments for measuring the organisational culture construct has been stressed, as 'there is a strong need for speculating less and measuring more' (Hofstede, 1986: 256). Similarly, the requirement of having valid measurement of internal corporate governance was no less important, as this construct was developed to overcome 'empirical dogmatism' in the form of negligence of alternative approaches of measurement in the field of corporate governance (Daily et al. 2003). Having satisfied the requirements of validity and reliability, the results enhanced the utility of organisational culture and internal corporate governance constructs. This implies that any organisations that start to study organisational culture can use this construct with confidence. It also implies that organisations planning to embark on internal corporate governance can utilise this construct with assurance.

Thirdly, the study confirmed that the fulfilment of the duties of companies' governance structures, which was measured by the second-order construct of internal corporate governance, was directly influenced by the organisational culture of the organisations. It showed that the model explained the very significant amount of variance (72.3 per cent) of the internal corporate governance. That is to say that organisational culture was a significant determinant of fulfilling the duties of companies' governance structure. This result suggested that successful implementation of the roles of corporate officers – the elements of internal corporate governance – is directly linked to the existence of organisational culture. This is in accordance with the studies of Semenov (2000) and Licht (2001). It must be noted however, that these aforementioned studies are carried out using national culture – for culture variables – and secondary/archival data – for internal corporate governance variables. To the best of this researcher's knowledge, no empirical studies test the relationship of organisational culture – defined as organisational practices – and internal corporate governance – defined as the fulfilment of the duties of a companies' governance structure. Based on the above significant

relationship, it is possible to say that having the organisational practices of *autonomy*, *external orientation*, *interdepartmental coordination*, *human resource management*, and *improvement orientation* in place is a requirement for company officers – the enactors of internal corporate governance – to accomplish the duties assigned to them.

The first limitation relating to this study was its relatively small sample size. To overcome the requirement of sample size, the study used factor analysis to select a representative subset of variables while retaining their original character. With fewer variables, the requirement of sample size was mitigated but could not be fully overcome. The second is that the study may also suffer from the potential self-report bias due to the use of single source respondents. Efforts were made to remedy these biases by applying procedural remedies proposed by Podsakoff, MacKenzie, Lee and Podsakoff (2003).

As no single study can provide a comprehensive conclusion on the validity of any research model, future research is needed to provide more evidence. This is particularly so, due to the unique governance structure in Indonesian companies, and the absence of research in internal corporate governance that utilises 'soft' data of internal corporate governance – gathered through questionnaires. Most internal corporate governance studies have been dominated by archival or secondary data that should be valid and reliable – requirements that are hardly fulfilled in Indonesia (Nasution, 2003). Future research may look at the longitudinal view of the relationship of the constructs in the research model. Such an approach would benefit the field of knowledge, revealing the extent to which the new concept of internal corporate governance has been embraced by corporate officers. Finally, the results of this study were gathered from Indonesian companies. The validity of generalising the results to other non-western styles of corporate governance and other developing countries is yet to be examined.

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TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Demographic	C Characteristics	Frequency	Percentage
Gender:	Female	108	21.8%
	Male	388	78.2%
Age Group:	■ Under 30	68	13.7%
	■ 30+ to 40	234	47.2%
	■ 40+ to 50	139	28.0%
	■ 50+ to 60	53	10.7%
	■ 60+	2	0.4%
Tenure:	 Less than 1 year 	10	2.0%
	■ 1 to 5 years	90	18.1%
	■ 5+ to 10 years	141	28.4%
	■ 10+ to 15 years	120	24.2%
	■ 15+ to 20 years	60	12.1%
	More than 20 years	75	15.1%
Department:	Finance/Accounting	88	17.7%
	Marketing	64	12.9%
	 Production/Operation 	104	21.0%
	 Human Resource Management 	36	7.3%
	 Others (corporate secretary, internal auditors, 	204	41.1%
	communication, and general managers)		

TABLE 2: RESULT OF ORGANISATIONAL CULTURE SECOND-ORDER CONSTRUCT

Fit Index	$S-B\chi^2$ (df)	<i>p</i> -value	RMSEA	RMR	GFI	AGFI	CFI
Result	54.09 (49)	0.29	0.01	0.06	0.97	0.95	0.99

TABLE 3: RESULT OF INTERNAL CORPORATE GOVERNANCE SECOND-ORDER CONSTRUCT

Fit Index	$S-B\chi^2$ (df)	<i>p</i> -value	RMSEA	RMR	GFI	AGFI	CFI
Result	155.96 (129)	0.05	0.02	0.16	0.91	0.88	0.99

TABLE 4: MODEL SPECIFICATION OF FULL MODEL

Fit Index	$S-B\chi^2$ (df)	<i>p</i> -value	RMSEA	RMR	GFI	AGFI	CFI
Results	433.427(388)	0.06	0.015	0.14	0.88	0.86	0.99

TABLE 5: ASSESSMENT OF STRUCTURAL MODEL-FINAL MODEL

Structural Path	Hypothesis	Gamma (γ) coefficients	<i>t</i> -values	Variance Explained
Organisational Culture to Internal Corporate Governance	\mathbf{H}_{1}	0.85	10.39**	.723