Corporate governance and ownership structure: Indonesia evidence

Cynthia Afriani Utama, Sidharta Utama and Fitriany Amarullah

Abstract

Purpose – *The purpose of this study is to investigate simultaneous relations between corporate governance (CG) practice and cash flow right, cash flow leverage (the divergence between control right and cash flow right of controlling shareholders). The two ownership measures reflect alignment and expropriation incentives of controlling shareholders. This study also examines the effect of multiple large shareholders (MLSs) on CG practice.*

Design/methodology/approach – *The study uses publicly listed companies (PLCs) excluding those from the Indonesian finance sector during 2011-2013 as the samples of the study. Two-stages least squares regression models were used to test the simultaneous relations between CG practice and ownership structure variables. The study develops a CG instrument to measure CG practice based on ASEAN CG Scorecard, that comprehensively covers OECD CG principles and that can be used for panel data.*

Findings – *CG practice has a positive influence on cash flow right and has a marginally negative impact on cash flow leverage, while cash flow right and cash flow leverage have a marginally negative impact on CG practice. Further, the existence of large MLS complements CG practice, but as the control right of the second largest shareholders becomes closer to the largest shareholder, the complement relation becomes less important. State- or foreign-controlled PLCs practice better CG than other PLCs.*

Research limitations/implications – *Studies on CG/ownership structure need to treat CG and ownership structure as endogenous variables in their research design. In addition, the level of rule of law in a country should be taken into account when examining the relation between CG and ownership structure. The interrelation among CG, ownership structure, capital structure and firm performance has been studied in the context of dispersed ownership structure and strong rule of law. Thus, future study needs to examine the interrelation among these four concepts in countries with high concentrated ownership and weak rule of law.*

Practical implications – *To minimize the risk of expropriation, investors in the capital market need to select shares of PLCs that practice CG suitable for the ownership structure of PLCs, have high ownership by the largest shareholder and have no divergence between control and ownership right, and or have MLSs. PLCs may need to choose the level of CG mechanism in the context of their ownership structure and consider the benefits and costs implementing them.*

Social implications – *The study supports the "one size does not fit all" perspective on CG and, thus, it supports the recently enacted financial service authority (FSA) rule requiring PLCs to follow the "comply or explain" rule on the CG code for PLCs. The FSA needs to enforce the compliance of PLCs with CG rules and encourage PLCs to implement CG in substance, not just in form. To strengthen the positive impact of good CG practice in attracting investments in capital market, the regulator needs to improve investor protection rules and ensure strong rule of law.*

Originality/value – *The study is the first to examine the simultaneous relation between CG practice and both cash flow right and cash flow leverage of the largest shareholder. It is also the first that investigates the impact of MLS on CG practice. It explores the complement and substitution relation between the two concepts in reducing agency costs. In term of research design, the study develops a CG instrument that is based on OECD CG principles, that can be used for panel data and that uses public information.*

Keywords *Corporate governance, Corporate ownership, Shareholders, Emerging markets, Agency theory*

Paper type *Research paper*

Cynthia Utama is Associate Professor of Finance, Sidharta Utama is Professor of Accounting and Fitriany Amarullah is Assistant Professor of Accounting, all at the Faculty of Economics and Business, Universitas Indonesia, Depok, Indonesia.

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1. Background

The purpose of the study is to examine if there are simultaneous relations between corporate governance (CG) practice and two different dimensions of ownership structure: ownership/cash flow right and the divergence between control right and ownership right of the largest controlling shareholder. We also investigate the influence of multiple large shareholders (MLSs) and the identity of controlling shareholders on CG practice. To our knowledge, very few studies have examined the simultaneous relation of various dimensions of ownership structure on CG practice, while according to the agency theory, ownership structure and CG may affect each other to reduce agency costs. This study attempts to fill the gap by examining the relations between different dimensions of ownership structure and CG practice.

According to the agency theory (Jensen and Meckling, 1976), under dispersed ownership structure, separation between ownership of resources and control and management of those resources creates agency conflict between the agent (i.e. one that manages and controls resources) and the principal (i.e. one that own the resources), whereby the self-interest agent expropriates the resources for the benefit of him/herself while detriment the principal. As a consequence of the conflict, agency costs arise as reflected in the decrease of firm value.

Higher ownership (i.e. cash flow right) by the largest shareholder(s) can reduce the agency costs, as the largest shareholder has incentive and means to monitor the agent, ensuring that expropriation does not occur. In line with the argument, Claessens *et al.* (2002b) document that higher cash flow right creates more incentive for the largest shareholders to maximize total shareholders' wealth (i.e. alignment effect).

On the other hand, Claessens *et al.* (2002b) suggest and document that higher cash flow leverage (the divergence between control and cash flow right) results in another type of agency costs, i.e. the largest/controlling shareholders have more incentive and ability to expropriate firms' assets which are detrimental to the wealth of small/non-controlling shareholders (i.e. entrenchment effect). Thus, different dimensions of ownership structure (cash-flow right [CFR] and cash-flow leverage [CFL]) have an opposite impact on agency costs.

In addition to ownership structure, CG can also be used to protect shareholders including non-controlling shareholders from expropriation by managers or controlling shareholders (La Porta *et al.*, 2000; Mitton, 2002). From the perspective of the agency theory, CG provides mechanism to oversee the agent and emphasizes the importance of transparency to reduce the asymmetric information between the principal and the agent.

Given that both CG and different dimensions of ownership structure have an impact on agency costs, the research issue is whether CG and different types of ownership structure reinforce and or substitute each other. To our knowledge, no study has examined this issue. Suk (2008) and Firth and Rui (2012) suggest and document that CFR has a simultaneous relation with CG practice. Suk (2008) finds that CFR and CG practice complement each other, while Firth and Rui (2012) document that they substitute each other. Both studies, however, do not control the simultaneous effect between CFL and CG that may affect the results.

With respect to the relation between CG practice and ownership right, the results of Suk (2008) and Firth and Rui (2012) are contradictory. The difference may be because of different country environments between Indonesia and China. Our study controls the possible country effects by focusing on only Indonesia. We use years 2011-2013 as the period of our study, 10 years after Suk's (2008) study. During the period, Otoritas Jasa Keuangan (OJK) (financial services authority or FSA) enacted a number of CG rules mandated to PLCs. While the intention of the rules is to enhance CG practice in Indonesia,

from the perspective of PLCs, the cost of practicing CG in accordance with the mandated rules must significantly increase relative to 10 years ago. In addition, the mandated rule provides some flexibility in implementation, and PLCs may choose the level of CG practice suitable to their context. Thus, it is a research issue whether the complementary relation between ownership right and CG mechanism still exists under the costlier CG implementation in recent years.

Given costs and flexibility in implementing CG mechanism, we expect the substitution effect to be dominant, and thus in Indonesia, higher CFR results in lower CG practice. On the other hand, while theoretically, better CG mechanism may either reduce or increase CFR, we posit that CG mechanism increases CFR, as the legal and investor protection environment in Indonesia is not conducive for lower CFR.

To our knowledge, only one study has investigated the possible relation between CG practice and CFL, which measures the incentive of the largest shareholder to expropriate wealth of other shareholders. Silviera *et al.* (2010) suggest that CFL may have either a positive or a negative impact on CG practice. Using Brazilian listed firms, they find that CFL has no effect on CG. Silviera *et al.* (2010), however, do not account for possible simultaneous relation between CG and CFL. Thus, we extend their study by examining not only the effect of CFL on CG practice but also the effect of CG practice on CFL. We posit that firms whose controlling shareholders have high incentive of expropriation, will choose poor CG mechanisms to avoid being detected expropriating the firms. We expect that CG practice has a negative impact on CFL.

Some PLCs have more than one shareholder with a relatively high ownership (i.e. MLS). The existence of other large shareholder(s) counterbalances controlling shareholder in overseeing the company and makes it difficult for controlling shareholders to expropriate company wealth (Attig *et al.*, 2008). Thus, the existence of MLS provides an alternative control mechanism on the management/controlling shareholders. Up to this time, no study has examined the influence of the existence of either MLS on CG practice and thus we attempt to fill this research gap. Because the existence of MLS may complement or substitute CG mechanism in controlling the company, we expect that the existence of MLS has an influence on CG practice.

The issues we investigate are of interest, as they provide evidence whether the ownership and CG structure of a particular firm reflects the tradeoff between costs and benefits for that firm (Linck *et al.*, 2008). The findings of inter-relationship between ownership structure and CG imply that CG mechanisms vary across firms depending on the ownership structure of the firm. Thus, performances of firms with relatively weak CG mechanisms are not necessarily poor if these firms have alternative control mechanism such as having high concentrated ownership or MLSs.

The ownership structure of most publicly listed companies (PLCs) in emerging countries (including Indonesia) is highly concentrated, and a large number of PLCs have a pyramidal ownership structure resulting in the divergence between control and CFR. Thus, our study is highly relevant, as the results provide evidence whether these types of firms choose to practice weak CG mechanisms to enable controlling shareholders to expropriate firms' assets.

As one's best knowledge, our contributions to previous empirical studies are as follows:

- Our study is the first to examine the simultaneous relationship between CG practice and both CFR and CFL of the largest shareholder.
- Our study is also the first to investigate the impact of MLS on CG practice.

We also examine the impact of the identity of the controlling shareholder (family/state/other, foreign/domestic) and other factors on CG in Indonesia. Previous studies in Indonesia do not comprehensively examine the influence of these factors on CG practice.

Methodologically, we contribute to previous studies by developing an alternative measure of CG that is comprehensive and efficient. The instrument is based on the ASEAN CG Scorecard (ASC) that was developed by the Asian Development Bank – ASEAN Capital Market Forum in 2011, but it is simpler than the ASC and can be used for time-series research.

We find that CG practice has a positive influence on CFR of the largest shareholders, while CFR marginally has a negative effect on CG practice. Further, the existence of large multiple shareholders enhances CG practice. Thus, there is evidence that firms with high ownership concentration do not require strong CG mechanisms (substitution relation); however, firms with MLSs and good governance mechanism tend to have high concentrated ownership (complement relation). The study also provides evidence that firms whose controlling shareholders have high incentive to expropriate tend to practice weak CG mechanisms, while a better CG mechanism reduces (albeit weak) expropriation incentive of the largest shareholder.

The remainder of the paper is as follow. Section 2 provides a literature review and hypothesis development, and Section 3 explains the research design. Section 4 elaborates the results of empirical tests, while the Section 5 contains conclusion and implications of the study.

2. Literature review and hypotheses development

2.1 Agency theory, ownership structure and corporate governance

Under dispersed ownership structure, the separation of ownership and control of resources in a corporation raises an agency problem between the agent who controls the resources (e.g. managers) and the principal who owns the resources (i.e. shareholders). Being self-interest, managers have incentives to hide some information to the principal and extract the company assets for private benefits. This type of agency problem (Type I) can be reduced by, among others, having concentrated ownership, as large shareholders have incentive and ability to monitor the manager (Jensen and Meckling, 1976). Firms in developed countries (especially in Anglo-Saxon countries) have dispersed ownership and, generally, agency problem is between outside equity (held by anyone outside of the firm) and inside equity (held by the manager).

Concentrated ownership, however, causes another type of agency problem (Type 2): controlling shareholders align with manager to expropriate non-controlling shareholder (Claessens *et al.*, 2000). Controlling shareholders may extract private benefit through self-dealing transactions or related party transactions, transfer pricing, asset stripping and investor dilution (La Porta *et al.*, 1999). Consequently, concentrated ownership can have a negative impact on firm profitability (Morck *et al.*, 1988). Because concentrated ownership tends to prevail in emerging countries including Indonesia, this type of agency problem is more prevalent in these countries.

Claessens *et al.* (2000, 2002b) differentiate concentrated ownership into two measures: CFR and control right. CFR measures the percentage investments of a shareholder in a firm and accordingly reflects the rights on share of cash-flow in the firm. Control right measures share of control/voting right of a shareholder in a firm. Control rights can be augmented beyond ownership stakes through pyramidal structures and cross holding among firms, and sometimes through dual-class shares. For example, a family has a 50 per cent stock ownership in firm X, which, in turn, has 40 per cent of stock ownership in firm Y. Control rights are computed by the weakest link in the chain of ownership, i.e. 40 per cent, while cash flow rights are a product of the two ownership stakes along the chain, i.e. 20 per cent. Cash flow rights show how much stock ownership that family owns in firm Y through firm X while effectively the family controls 40 per cent of firm Y. CFL is the divergence between control and CFR. In the example, CFL is 20 per cent.

A number of studies (Claessens *et al.*, 2002b; Attig *et al.*, 2008) document that controlling shareholders tend to expropriate minority shareholders as divergence between cash flow rights and control right widens. High control rights mean that majority shareholders can exert their control over firm's operation even though their ownership stakes are very small. Higher control right than CFR induces controlling shareholders to expropriate the company assets for their own private benefit and reduce the company value including minority shareholders' wealth (*entrenchment effect*). Claessens *et al.* (2002a, 2002b) note that agency problem in East Asia arises from the difference between control right and CFR of controlling shareholders.

On the contrary, controlling shareholders with high CFR does not have expropriation incentive, as it will jeopardize their large cash flow stake in the company. With high CFR, controlling shareholders are motivated to increase firm value, as they bear most of the gain. Previous empirical studies (Hill and Snell, 1989; Guriev *et al.*, 2003; Durnev and Kim, 2005; Ariff *et al.*, 2007) show that concentrated ownership reduces information asymmetry because coordination and oversight function are easier by the existence of controlling shareholders. Claessens *et al.* (2002a, 2002b) further assert that controlling shareholders with higher cash flow rights is associated with the increase in the *alignment effect* between controlling shareholders and non-controlling shareholders. In other words, agency problems that could arise between controlling shareholders and non-controlling shareholders will be mitigated. Their empirical results show that higher CFR of controlling shareholders weakens controlling shareholders' motivation to divert the company's cash-flow and asset for their own private benefit.

The agency problem caused by single controlling shareholders can be reduced by the existence of MLSs (Bennedsen and Wolfenzon, 2000) and consequently firm value is higher (Pagano and Röell, 1998). This finding is also supported by Volpin (2002); Laeven and Levin (2008); Attig *et al.* (2009) who document that MLSs may reduce the controlling shareholders' expropriation of private benefits and achieve value premium. On the other hand, Konijn *et al.* (2011); Cheng *et al.* (2013) find the non-controlling large shareholders that collude with controlling shareholders tend to expropriate minority shareholders and lower firm value.

In addition to ownership structure, CG also aims to mitigate agency costs by protecting the principal's interests, realigning the interests of the agent and the principal, reducing information asymmetry between the principal and the agent and assuring adequate monitoring and direction to the agent. In line with this, OECD Corporate Governance Principles (OECD, 2015) reflect the role of CG in mitigating agency costs in its principles. Some of the rules are as follow:

1. the right of shareholders;
2. the equitable treatment of shareholders;
3. the role of stakeholders;
4. disclosure and transparency; and
5. the responsibility of board.

The first three principles aim to protect the interests of principals (shareholders, non-controlling shareholders and stakeholders); principle four aims to reduce information asymmetry between the principal and the agent; and principle five aims to ensure proper monitoring and direction to the agent.

Good CG (GCG) practice supports development of capital markets and economic prosperity (Morck *et al.*, 2005). In addition, various studies find that the implementation of GCG reduces cost of capital and improves firm performance and firm value (Utama and Utama, 2013; Connelly *et al.*, 2012; Ge *et al.*, 2012; Bhagat and Bolton, 2008). Therefore,

increasing CG practices in Indonesia is very important for achieving sustainable economic development.

2.2 Corporate governance in Indonesia

One root cause of financial crisis in East Asia, including Indonesia, is lack of GCG practices. Indonesian Government has enacted a variety of regulations to support GCG, for example, Jakarta Stock Exchange in 2002 required public firms to have independent commissioners. At the same time, Indonesia FSA issued reporting and disclosure guidance for public firms to improve the firm's reporting and disclosure quality.

Characteristic of concentrated ownership in Indonesian firm and lack of investor protection cause major obstacles of GCG practices. As mentioned in Indonesia Corporate Governance Manual (2014) that:

> Many private companies in Indonesia start out as small private companies owned either by a single controlling shareholder, members of a family, or a small group of shareholders. Although many have expanded significantly, the controlling shareholders have not changed. This concentrated ownership structure often entails a lack of proper documents (such as the company charter or financial regulations) and a lack of supervisory activities and proper book-keeping. This impedes the ability of outsiders to become shareholders and leaves room for minority shareholder abuses. Such insider dominance and weak protection of external shareholders/investors has resulted in failed deals and the underdevelopment of the capital markets in Indonesia.

Various studies show that in general CG practice of PLCs in Indonesia is relatively poorer than that of other countries. Recent CLSA (2014) survey puts Indonesia and the Philippines at the lowest ranking among the 12 Asian countries that are assessed. Similarly, the assessment of CG practice of ASEAN listed companies with the use of ASC (ADB, 2014) shows that the average CG score of Indonesian listed companies is relatively lower than the average score of Malaysia, the Philippines, Singapore and Thailand.

Over the past 15 years, the Indonesia Government and especially the capital market regulator (the FSA) have issued various regulations that encourage public companies to improve their CG practice. The implementation of regulation tends to increase CG practice of public companies in Indonesia, but further improvement is still warranted given that as mentioned above, several studies document the relatively poor CG practice of Indonesian public companies.

2.3 Simultaneous relation between ownership structure and corporate governance

The explanation above suggests that different dimensions of ownership structure have a contrasting impact on agency costs: higher ownership/CFR reduces agency costs, while higher CFL increases agency costs. Further, CG and MLSs can also be used to reduce agency costs. Given that there are alternative mechanisms to control agency costs while there are costs in implementing them, the research issue is whether CG and different types of ownership structure reinforce and or substitute each other.

Bebchuk and Roe (1999) suggests that ownership structure and governance structure are interdependent. A given ownership structure will choose CG rules for efficiency and or maintaining power reasons, while, a given governance rules will determine how ownership structure evolves. Based on Bebchuk and Roe (1999), Suk (2008) examines if there is a simultaneous relation between CG practice and CFR of the largest shareholder using a sample of PLCs in Indonesia from 2001 to 2003. He finds that CFR has a positive impact on CG practice and, at the same time, CG practice also has a positive influence on CFR. Thus, Suk's findings suggest that CFR and CG practice complement each other.

A more recent paper by Firth and Rui (2012) confirms the interdependence between ownership structure and CG mechanism. Using Chinese listed firms during period

1999-2007, they examine the inter-relation among ownership structure variables (institutional and government ownership, ownership concentration/ CFR), governance structure variables (board composition, compensation) and capital structure variable (long-term debt ratio). They find that both governance variables negatively affect CFR, while CFR positively influences board composition. They interpret their findings that ownership concentration and CG mechanism are substitutes for one another and are consistent with the works of Rediker and Seth (1995), Barkema and Gomez-Mejia (1998), Lehn *et al.* (2007).

So far, no study has examined the simultaneous relation between CG and two dimensions of ownership structure (CFR and CFL), while these measures reflect contrasting effects of ownership structure (alignment and entrenchment effect) on agency problem. In addition, while the prevalence of MLSs is relatively high, no study has investigated the effect of MLS on CG practice. We attempt to fill the research gaps by empirically examining the simultaneous relation between two types of ownership structure and CG practice and investigate the influence of MLS on CG practice.

The following sections explain hypotheses development for the simultaneous relation between CFR and CG, CFL and CG and the effect of MLS on CG.

2.4 Hypothesis development

2.4.1 The impact of CFR on CG practice. In accordance with the agency framework explained above, controlling shareholders with large CFR have an incentive to perform GCG practice, as it can be used to prevent a company's cash-flow and assets that are being diverted and to increase firm performance. Using data from year 2001 to year 2003, Suk (2008) examines if there is a simultaneous relation between CG practice and ownership right (i.e. CFR) of the largest shareholder using a sample of PLCs in Indonesia from year 2001 to 2003, and he finds that CFR has a positive impact on CG practice.

On the other hand, some studies (Rediker and Seth, 1995; Barkema and Gomez-Mejia, 1998; Lehn *et al.*, 2007) suggest that higher ownership right may substitute CG mechanisms in assuring that companies are managed for the best interest of shareholders. With a high ownership right, the incentive of the controlling shareholder is aligned with other shareholders and thus the company need not implement various CG mechanisms that can be costly. Consistent with this view, Cho and Kim (2003) find that the level of ownership of large shareholders is negatively associated with CG mechanisms, as large shareholders actually participate in the management, and their participation hinders the need to improve governance mechanism.

As mentioned in the previous section, in the past 10 years, OJK has enacted a number of rules on CG to PLCs such as rules to prevent abusive-related party transactions (revised in year 2008); rules requiring independent commissioner, audit committee (enacted in year 2002) and internal audit (enacted in year 2008); more extensive disclosure in the annual report (2006), etc. Although these rules are mandated, they allow some flexibilities for PLCs in implementing them. For example, the rule requires that PLCs have at least 30 per cent of members of the Board of Commissioner that are independent; thus, to meet the requirement, PLCs may opt to appoint only one independent commissioner with only two or three members sitting at the Board. Another rule requires PLCs to have an internal audit unit with at least one person working at the unit; thus, PLCs can have only one or two persons at the internal audit unit to meet the requirement. Under this flexible CG implementation condition, PLCs with high level of ownership may not see the benefit of implementing high-level but costly CG practice, and this results in a negative effect of cash flow-right on CG practice.

In the past 10 years, rules requiring implementation have been increasing, while the CG-mandated rules provide flexibilities for PLCs in implementing them, and consistent with

Firth *et al.*, 2002, we posit that the substitution relation between CFR and CG mechanism dominates the complement relation. Therefore, we posit the following hypothesis:

H1. Cash-flow right of the largest shareholder negatively influences CG practice.

2.5 The impact of cash-flow leverage on CG practice

The impact of CFL on CG practice can either be negative or positive. As documented by Claessens *et al.* (2000, 2002b), controlling shareholders with large CFL have high incentive and ability to expropriate the wealth of non-controlling shareholders (entrenchment effect). This entrenchment effect reduces the motivation of controlling shareholders to adopt GCG practices voluntarily, as better CG practice reduces the possibility of controlling shareholders to divert a company's assets for their private use. Thus, CFL has a negative effect on CG practice. On the other hand, controlling shareholders with a large CFL may want to implement GCG practices voluntarily to provide a good signal to its non-controlling shareholders that they are less exposed to expropriation (Silviera *et al.*, 2010).

We posit that in Indonesia, the negative effect of CFL dominates its positive effect for the following reasons. First, as discussed above, CG regulations provide flexibilities for controlling shareholders to choose the level of CG practice that they want. Under this condition, controlling shareholders will choose a relatively poor CG practice while, at the same time, meeting the requirement so that the CG mechanism will not prevent them from expropriating wealth from non-controlling shareholders. Second, a number of surveys (CLSA, 2014; World Governance Indicators, 2015) indicate that the rule of law and enforcement of the rules in Indonesia remains relatively poor. Under this environment, the risk of being caught and penalized from expropriating firms' assets is relatively low; therefore, from the perspective of controlling shareholders, the benefits for providing a good signal to non-controlling shareholders are less than those for expropriation purpose.

Thus, we posit our hypotheses as follows:

H2. Cash-flow leverage of the largest shareholder negatively influences CG practice.

2.6 The influence of CG practice on CFR and CFL

Existing literature suggests that the effect of CG practice on CFR can be either positive or negative. According to Lazarides *et al.* (2009), firms with GCG practice are more attractive to potential foreign shareholders and this attractiveness will increase share price (Min and Bowman, 2015). The increase in share price induces firms to conduct rights issue, and eventually this decreases ownership concentration. In line with this view, Firth and Rui (2012) find that a higher proportion of independent directors reduces the ownership right.

Wu *et al.* (2012), however, suggest and document that the increase in foreign capital through capital market is more significant if the country has a strong public rule of law. Because the rule of law in Indonesia is relatively poor, the positive impact of CG on capital inflow is weakened. Further, the poor rule of law results in large private benefits of control and, therefore, as Bebchuk (1999) shows, better CG is unlikely to reduce the degree of ownership concentration.

We argue that in the context of Indonesia, better CG tends to induce higher CFR. The rule of law in Indonesia is relatively weak; under this condition, the CG mechanism cannot rely on external rules to support CG's effectiveness. Because CG aims to align the interest of the agent and the principal (McKnight and Weir, 2009), while high CFRs results in aligned interests of controlling shareholders (the agent) and non-controlling shareholders (the principal); therefore, better CG practices will induce higher CFR. In line with the argument, Cueto (2013) finds better CG increases CFR in Latin America, which, in general, also exhibits poor rule of law. He interprets the findings as CG mechanisms that complement CFR.

Given the above argument, we formulate the third hypothesis as follows:

H3. CG practice has a positive influence on CFR.

Consistent with the agency theory (Jensen and Meckling, 1976), CG principles developed by OECD (2015) state a number of measures to reduce or mitigate the likelihood of controlling shareholders expropriating the wealth of non-controlling shareholders. Among the measures are the following: disclosure of ownership structure arrangement resulting in the divergence between control and CFR, approval of related party or conflict of interest transactions by person/party independent of the transaction, related party transactions are conducted at arm's length, prompt and extensive disclosure of related party transactions, board's role in monitoring-related party transactions, etc. For firms practicing high-quality CG, these measures are implemented and, as a result, the benefits of having control right exceeding CFR decrease. Therefore, we expect that better CG practice reduces CFL of the largest shareholder:

H4. CG practice has a negative influence on cash-flow leverage.

2.7 The influence of multiple large shareholders on CG practice

The existence of MLS counterbalances controlling shareholder in controlling the company and makes it difficult for controlling shareholders to expropriate company wealth. Consistent with this view, Attig *et al.* (2008) found that companies with MLS have a lower cost of capital compared to companies without MLS. Further, they find that not only the presence of MLS but also the size of the control right of other large shareholders relative to the largest shareholder is significant in reducing a firm's agency costs. They conclude that MLSs' ownership structure imposes an internal governance role in mitigating private benefits and reducing information asymmetry.

Based on the finding of Attig *et al*. (2008), we expect that the existence of MLS may either complement or substitute CG practice depending on the size of other large shareholders relative to the largest shareholder. When the control right of other large shareholders is small relative to the largest shareholder, strong CG mechanism is needed to support their ability to oversee and assure proper check and balance on the largest shareholders to protect their large stakes in the company. On the other hand, when the control right of other large shareholders becomes higher, they can perform internal CG role without necessarily needing to have a strong CG mechanism.

Based on the above arguments, our hypothesis is as follows:

H5. Multiple large shareholders have an influence on CG practice.

2.8 Corporate governance instrument

In this section, we review some measures of CG practice that have been developed in the Southeast Asia region and especially in Indonesia in the past 10 years. This provides the background for our measure of CG practice.

Suk (2008) uses a CG instrument developed by Arsjah (2005). Arsjah (2005) conducted two surveys, the first survey was conducted on listed companies in Indonesia Stock Exchange and the second survey was performed on financial analysts in Indonesia Stock Exchange. Because it is based on a survey, it is difficult to obtain a large number of samples given the low response rate of a typical survey study in Indonesia. In addition, the instrument cannot be used for time series data; thus, it cannot be used for panel data, except if we assume that CG practice over time is constant.

A number of studies (Utama and Utama, 2014, 2012; Utama and Handy, 2011; Utama and Musa, 2011) use the results of an assessment of CG practice of PLCs conducted by the Indonesian Institute for Corporate Directorship (IICD). The instrument used by IICD is CG Scorecard developed by the Thai Institute of Directors. The instrument is composed of five

components that constitute the principles of CG developed by OECD that are explained in Section 2.1. Assessment of CG practice is based on publicly disclosed information such as annual reports, company announcements, corporate websites and so on. This instrument consists of 117 questions and answers to each question is one (poor), two (fair) or three (good). The total score is a weighted sum of all the items and is stated as a percentage. Besides Indonesia, the instrument has also been used in other countries such as in China (Cheung *et al.*, 2010), Thailand (Connelly *et al.*, 2012) and Hong Kong, the Philippines, Indonesia and Thailand (Cheung *et al.*, 2014).

In 2012, ASEAN Capital Market Forum (ACMF), whose members are capital market regulators in ASEAN, agreed to develop ASC that would be used to assess CG practices of large PLCs in term of market capitalization in the ASEAN region. This instrument was developed by CG experts appointed by capital market regulators in six ASEAN countries and is based on the CG Scorecard explained above.

The total number of CG practice items covered in ASC is more than 210 items. For the company being assessed, each item is checked for whether the company practices the item by referring to publicly available information which includes annual report, company website, media coverage, etc. The large number of items causes the assessment cost to be very high; furthermore, as some information is obtained from the company website which constantly changes, the instrument cannot be used if a researcher wants to use panel data.

Based on the above explanation, this study develops a CG instrument that refers to ASC. We test the reliability and validity of ASC to ensure that the items in the scorecard can be included in the CG practice instrument. The process in developing the instrument is explained below.

3. Research methods

3.1 Sample

The samples are PLCs with complete data and are not from the finance sector. The study covers the period from 2011 until 2013. The finance industry is excluded because it has a very different financial characteristic compared to other industries. In addition, it is highly regulated, which can affect the relationship that is tested.

Total observations include randomly selected 160 public companies during 2011 until 2013, excluding those from the finance sector. After being filtered by the completeness of financial and capital market data, total observations are 323 firm-year observations.

3.2 Empirical model

Tests are carried out with three simultaneous equation models with two-stage least squares (2SLS). The simultaneous equations models are as follows.

$$\begin{aligned} CGI_{i,t} = {} & \alpha - \beta_1 CFR_{i,t} + \beta_2 CFL_{i,t} + \beta_3 PUBLICOWN_{i,t} \\ & + \beta_4 DMLSA_{i,t} + \beta_5 CR2OVERCR1_{i,t} + \beta_6 DGOV_{i,t} \\ & + \beta_7 DUNIDENTIFIED_{i,t} + \beta_8 DFOREIGN_{i,t} + \beta_9 LOGTA_{i,t} \\ & + \beta_{10} PPEOS_{i,t} + \beta_{11} NIIOA_{i,t} + \beta_{12} LIABO_{i,t} + \beta_{13} DEBTOA_{i,t} \\ & + \beta_{14} INVOA_{i,t} + \beta_{15} D2012_{i,t} + \beta_{16} D2013_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (1)$$

$$\begin{aligned} CFR_{i,t} \text{ or } CFL_{i,t} = {} & \alpha + \beta_1 CGI_{i,t} + \beta_2 DMLSA_{i,t} + \beta_3 CR2OVERCR1_{i,t} \\ & + \beta_4 PS1DGOV_{i,t} + \beta_6 FOREIGN_{i,t} + \beta_7 FBD_{i,t} + \beta_8 LOGTA_{i,t} \\ & + \beta_9 NIIOA_{i,t} + \beta_{10} LIABO_{i,t} + \beta_{11} DEBTOA_{i,t} \\ & + \beta_{12} DIVPAYOUT_{i,t} + \beta_{13} LOGCASH_{i,t} + \beta_{14} PPEOS_{i,t} \\ & + \beta_{15} SGAOS_{i,t} + \beta_{16} D2012_{i,t} + \beta_{17} D2013_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

Equation (2) consists of two models: one model with CFR as the dependent variable and the other model with CFL as the dependent variable.

Equation (1) treats CG practice as an endogenous variable, CFR and CFL as exogenous variables and other variables as instrument variables. Equation (2) treats CFR and CFL as endogenous variables and CG practice as an endogenous variable and other variables as instrument variables.

In equation (1), according to *H1* and *H2*, β_1 *and* β_2 are expected to be negative, respectively. In equation (2), according to *H3*, when CFR is the dependent variable, β_1 is predicted to be positive, while, according to *H4*, when CFL is the dependent variable, β_1 is predicted to be negative. In line with *H5*, β_2 is predicted to be positive, while β_2 is predicted to be negative.

The selection of instrument variables is based on previous studies that have used these variables as determinants of CG practice and CFR/CLF. The definition of variables is provided Table I.

Independent variables measuring different dimensions of ownership structure are explained as follows.

3.2.1 Multiple large shareholders. Following Attig *et al.* (2008), we use two variables as proxies for MLS. The first one (MLSA) is a dummy variable taking a value of 1 if the number of shareholders having control right greater than 10 per cent is two or more, otherwise zero. The second proxy (CR2OVERCR1) is the ratio of control right of the second largest shareholder to that of the largest shareholder. The first proxy measures the existence of MLS, while the second proxy indicates the relative power of the second largest shareholder to the largest shareholder. The coefficient of MLSA is expected to be positive, reflecting complementary relations between MLS and CG practice when the relative power of the second large shareholders is relatively small. The coefficient of CR2OVERCR1 is expected to be negative, reflecting the decreasing need/role of CG mechanism as the relative power of the second largest shareholder gets bigger.

Table I List of variables used in the analysis

Variable name	*Variable definition*
CGI	CG index
Ownership variables	
PUBLICOWN	% of public ownership
DMLSA	Dummy one if MLSs, else zero
CR2OVERCR1	Ratio of CFR of second largest shareholder to the largest shareholder
DGOV	Dummy one if controlling shareholder is government; else zero
DUNIDENTIFIED	Dummy one if controlling shareholder is unidentified; else zero
CFR	CFR of the largest shareholder
CFL	Cash flow Leverage (i.e. Control–CFR) of the largest shareholder
DFOREIGN	Dummy one if the largest shareholder is foreign, else zero
DFBD	Legally foreign-owned but in substance domestic
Other variables	
LOGTA	Log total assets
SALESGROWTH	% of sales growth
LIABOA	Liabilities/Total assets
DEBTOA	Interest bearing debt/Total assets
D2012	Dummy year 2012
D2013	Dummy year 2013
NIIOA	(Net income + Interest expense after tax)/Total assets
PPEOS	Property plant equipment/Total sales
INVOA	Investment over assets
DIVPAYOUT	Dividend payout ratio = total dividend/total earnings
LOGCASH	Log of cash-in-hands
SGAOS	(Sales and general administrative expenses)/Sales

3.2.2 Identity of controlling shareholder. As in Firth and Rui (2012), we compare the CG practice of state-controlled PLCs with other controlling shareholders (the majority of which is family). In Indonesia, these state-controlled PLCs have to abide to not only with the capital market rule but also with the rules enacted by the Ministry of State-Owned Enterprises, some of which are related to CG. Therefore, we expect that state-controlled PLCs have better CG practice than other PLCs. We also classify controlling shareholders whether they are foreign (non-Indonesian) or domestic (Indonesian). The concept of CG was relatively new in Indonesia, as it was just introduced after the Asian financial crisis in year 1997-1998; therefore, we expect that foreign-controlled PLCs are more familiar with CG practice than domestic-controlled PLCs, and this is reflected in their higher CG score compared to the CG score of domestic controlled PLCs.

3.3 Data collection and measurement of CG practice, CFR and CFL

3.3.1 CG practice. As explained in previous sections, we developed a CG instrument based on the ASC. The instrument is then used to assess the CG practices of our samples. Data are derived from public data, especially from annual reports.

The development of the CG instrument is performed by following stages:

1. ASC is adjusted to the Indonesian context and to be able be used to assess companies for three years.
2. Adjustments are made with the following steps:
    - In ASC, items that are mandated by law/rules in a country by default are assumed to be practiced by all PLCs in that country. We remove these items, as we only cover PLCs in Indonesia. However, if mandated items are disclosure requirements, then the items are not removed because we can check whether the company actually discloses the items or not.
    - Items obtained from company websites that only provide current information are removed, as we need historical data for three years.
    - Items that refer to the minutes of General Meeting of Shareholders (GMS) are removed because during the period of the study, no Indonesian company disclosed the minutes of the GMS.
    - The remaining questions are tested for validity and reliability. Questions that do not meet both these criteria are removed. Testing of validity and reliability are conducted by using the results of the ASC assessment on 100 largest PLCs in year 2012.
    - Review the FSA rule on disclosure in the annual report that was revised in year 2012. If there are disclosure items related to CG practices that are not contained in the ASC, then the item is added to the CG Scorecard instrument being developed.

Based on above explanation, the CG instrument in this study consists of 130 questions and two levels. The first level consists of five parts referring to the five CG principles of the OECD with a total of 117 items. The second level consists of two parts (i.e. bonus and penalty). Bonus provides additional points for exemplary CG practice, while penalty provides deduction for poor CG practice. The maximum possible score of the first level is 100 per cent, while the minimum possible score is 0 per cent. With bonus and penalty, it is possible for a company to score either above 100 or below 100.

Data of CG practices are mainly obtained from annual reports of PLCs. The assessment of CG practice for one company is estimated to take 6 h. The assessment is conducted by approximately 20 research assistants who study at the Faculty of Economics and Business, University of Indonesia. They consist of accounting/management undergraduate students who are in their last academic year and accounting graduate students who are in the

second year of academic calendar. To ensure the accuracy of the assessment results, eight supervisors oversee the assessment process and review the results of the research assistants' assessment. They are lecturers and their education at least is Master in Accounting or Finance.

3.3.2 Cash-flow right and cash-flow leverage. Ownership structure data that are collected is as follows:

- legal shareholders (LSs)' ownership with shareholdings greater than 5 per cent;
- CFR and control right of shareholders with shareholdings greater than 5 per cent;
- identity of the first, second and third largest shareholders (family, government, institutional investors, public companies with dispersed ownership), as well as whether they originate from domestic or abroad; and
- the proportion of public ownership.

CFR is the proportion of direct and indirect investment of large shareholders in a PLC. Control right is the proportion of control of large shareholders in a PLC. CFL is the difference between control right and CFR.

To compute the variables, we have to trace the ownership chain of shareholding above 5 per cent ownership threshold until we identify the ultimate shareholders. The ownership structure data of PLCs can be obtained from annual report and state gazette provided by the Ministry of Justice and Human Rights. Some companies domiciled abroad are actually owned by Indonesians. For these companies, we create a dummy variable (DFBD) which takes a value of one if the ultimate owner is domiciled abroad but actually is Indonesian, otherwise zero. If the shareholder of a company is a company domiciled abroad and public companies, we check to Datastream database and internet to identify the ultimate owner and their identity (foreign or non-foreign). Some companies cannot be identified whether the ultimate owner is foreign or non-foreign. For these companies, we set up a dummy variable (DUNIDENTIFIED) which takes a value of one if the ultimate owner is not identified, otherwise zero.

To gather and calculate the ownership structure, nine research assistants and four supervisors were recruited. Education requirements remain the same as those of research assistants and supervisors for CG practice assessments.

4. Empirical results

4.1 Descriptive statistics of corporate governance practice

The following table conveys descriptive statistics of CG scores and their components, based on the data that have been through verification.

Table II conveys that the average score of CG is very low, at 29.8. The result is as expected, as the CG instrument excludes mandatory non-disclosure CG requirements. The average score is lower than the average CG score based on the ASC (44 in year 2012 and 54 in year 2013), as ASC includes some mandatory items that are assumed to be practiced by all

Table II Descriptive statistics of total CG scores and its components

CG components	*Average (%)*	*Maximum (%)*	*Minimum (%)*	*SD (%)*
A. Protection of shareholder rights	30.6	87.5	0.0	15.6
B. Fair treatment of shareholders	19.7	90.0	0.0	13.1
C. Respect to the rights of stakeholders	37.9	100.0	0.0	21.4
D. Disclosure and transparency	38.5	88.5	7.7	13.7
E. Responsibilities of the Board	25.8	83.3	0.0	14.1
CG Score – Level 1	30.6	76.4	5.9	12.5
CG Score – Total	29.8	75.0	5.9	12.5

PLCs being assessed. This score indicates that generally public companies in Indonesia are not yet exercising GCG. The large difference between the highest and lowest CG scores (75.0 to 5.9) and the large standard deviation indicate that there is a very high variation in CG practice of PLCs in Indonesia. The average scores of all CG components are also very low with wide variation. Our findings indicate that the improvements in CG practices in Indonesia have to be performed comprehensively.

Table III shows the average CG scores and their components for three years. The results show that there is an increase in both the average of total CG scores and their components. This improvement could be partly because of the revision of the FSA rules by the end of 2012 regarding disclosure in the annual report of public companies. In addition, during 2012 and 2013, the FSA socialized the ASC to PLCs and encouraged PLCs to refer to ASC to enhance their CG practice.

4.2 Descriptive statistics of ownership structure

We describe ownership structure based on data of all PLCs that can be gathered and calculated, i.e. 480 total firm-year observations. Table IV conveys descriptive statistics on the percentage of LSs of the five largest shareholders and public shareholders. LS 1 is the LS with the first largest ownership, LS 2 is the shareholder with the second largest ownership and so on. In accordance with FSA rules, LSs are shareholders who are registered in the statute gazette of the Ministry of Justice and Human Rights and the Constitution and/or disclosed in the Annual Report. Those shareholders must have a minimum of 5 per cent ownership in the company.

Table IV shows that the ownership structure of public companies in Indonesia is highly concentrated. On average, the largest shareholder has almost 50 per cent ownership, while the average public ownership is only 36 per cent.

More than 50 per cent of companies have only one shareholder with holdings above 5 per cent. The rest have two or more shareholders with holdings above 5 per cent. These data suggest that in Indonesia, it is quite prevalent for public companies to have only a few shareholders with significantly large holdings (i.e. 5 per cent). However, there is a possibility that some LSs are actually owned by the same single party.

Table V conveys the frequency distribution of 480 firm-year based on the type of LS. LSs are grouped into seven, namely, limited liability company which is not a listed company, PLC, the government or state-owned enterprise (SOE), family, nominee, financial

Table III Average of CG score and its components on 2012, 2013, and 2014

	CG components						
Year	*A (%)*	*B (%)*	*C (%)*	*D (%)*	*E (%)*	*Level 1 (%)*	*CG score*
2012	28.1	17.9	33.4	35.1	22.7	27.4	26.90
2013	30.3	20.1	38.4	38.5	25.9	30.8	30.17
2014	33.0	20.8	41.5	41.5	28.4	33.3	32.05

Table IV Percentage of legal and public ownership

	Percentage of ownership structure					
Statistics descriptive	*LS 1*	*LS 2*	*LS 3*	*LS 4*	*LS 5*	*Public*
Average (%)	48.6	8.7	2.5	1.0	0.6	35.8
SD (%)	22.3	7.7	4.4	3.5	2.4	19.9
Maximum (%)	99.9	37.2	21.1	21.1	13.3	86.5
Minimum (%)	9.0	5.0	5.1	5.0	5.0	0.0
Total firm-year (FY) with shareholdings ≥ 5	480	236	105	56	33	
% of total FY	100.0	49.2	21.9	11.7	6.9	

Table V Firm-year frequency distribution by type of legal shareholder

No.	*Type of legal shareholders*	*Frequency*	*(%)*
1	Corporation	346	72.1
2	Public corporation	69	14.4
3	SOE	24	5.0
4	Family	19	4.0
5	Nominee	17	3.5
6	Financial institutions	2	0.4
7	Publicly listed financial institutions	3	0.6
	Total	480	100.0

institutions and publicly listed financial institutions. Nominee is the entity designated to represent shareholders. A nominee is generally a bank or a custodian.

Table V shows that the majority of LSs of public companies in Indonesia are limited liability companies that are not listed (over 70 per cent). Only 4 per cent of public companies are directly owned by an individual/family. Therefore, it is difficult for investors/stakeholders to find out who is the real ultimate owner of these companies.

To be able to identify the ultimate owner of a public company, it is necessary to explore the names of the owners of a limited liability company which is not a listed company (corporation), publicly listed liability company (public corporation), nominee, financial institutions or publicly listed financial institutions. If the company is domiciled in Indonesia, corporation and financial institution ownership data can be obtained from the Ministry of Justice and Human Rights, while public corporation data can be obtained from the company's annual report. If the company is domiciled abroad or is a nominee, tracing can be done as follows:

- refer to the annual report because there are a number of companies that disclose the information in the annual report; and/or
- by looking through information searching sites (Google, Yahoo and so on).

To determine and assign shareholders as part of substantial shareholders, this study uses a cutoff of minimum 10 per cent ownership, similar to previous studies (Claessens *et al.*, 2002a). From tracing, besides being able to identify the name and type of ultimate owner, the CFR and control right of substantial shareholders can be calculated. However, from 480 firm-years, there are 64 firm-years of which the largest shareholder based on CFR cannot be identified. Table VI conveys the frequency distribution of ultimate owner identities and largest shareholders for 416 firm-year. Almost 90 per cent of public companies in Indonesia are ultimately owned by families, 8.9 per cent owned by the government and 1.4 per cent of companies with dispersed ownership.

The largest shareholder based on domicile can be classified from Indonesia (domestic) or abroad (foreign). However, domicile abroad is not necessarily that of foreign shareholders, because many shareholders from Indonesia establish companies abroad and then these companies own PLCs in Indonesia. Table VII shows firm-year frequency distribution based on the domicile of the largest shareholders.

Table VI Firm-year frequency distribution based on ultimate owner identity and largest shareholder based on cash-flow rights

Identity	*Frequency*	*(%)*
Family	373	89.7
government	37	8.9
Widely held	6	1.4
Total	416	100.0

Table VII Firm-year frequency distribution based on the domicile of the largest shareholders

Domicile	*Frequency*	*(%)*
Domestic	284	59.2
Foreign, Owned by Indonesia	113	23.5
Foreign	83	17.3
Total	480	100.0

Table VII shows that most public companies in Indonesia are owned by Indonesians (82.7 per cent). There are quite a lot of companies that are owned by foreign-domiciled companies, but the companies are actually owned by Indonesians.

CFR and control right can be calculated if data of shareholder proportion for each ownership chain are obtained. For some public companies in Indonesia this cannot be done, as the shareholders are nominee and/or foreign. Because they cannot be calculated, this study assumes control rights and CFRs are the same. These assumptions lead to bias in the measurement of CFR and control right variables, i.e. the frequency of companies with same levels of CFR and control right is too high, and this may bias the results toward not supporting the hypothesis.

The average CFR and control right of the largest shareholder is 41.6 and 47.8 per cent, respectively, or an average difference (i.e. the CFL) of 6.2 per cent. Further, majority of PLCs have control right greater than CFR (52.5 per cent). Thus, the pyramid ownership structure remains common among public companies in Indonesia.

A PLC can have several shareholders with significant holdings (i.e. above 10 per cent). Based on 480 firm-years, there are 40.4 per cent firm-years that have two significant shareholders, 15.2 per cent firm-year that have three significant stockholders and 3.75 per cent firm-year that have four significant shareholders. Thus, the existence of MLSs is quite common in Indonesia.

4.3 Descriptive statistics of variables used in the study

We elaborate descriptive statistics for variables used in this study (Table VIII).

The average growth rate of sales of the samples is quite high (19 per cent), and in line with this, the average investment rate is also high (28 per cent). These figures indicate that our samples are expanding quite fast during years 2011-2013. The funding for the expansion is mostly from internal funding (i.e. equity), as the average liabilities and debt over assets are less than 50 per cent. The relatively low average dividend payout ratio (30 per cent) shows that most of the profits are reinvested to fund the expansion.

4.4 Correlation analysis

Based on the correlation analysis, the ownership structure variables that have a positive correlation with CG practice are CFL, DGOV and DFBD (Table IX). On the contrary, the ownership structure variables that have a negative correlation with CG practice are PUBLICOWN and CR2OVERCR1. The share of public ownership and that of the second largest to total largest shareholder has a negative correlation with CG practices. Further, the correlation analysis also shows that the ownership structure, i.e. CFR, does not have a relationship with CG practice. The CFR also has a negative relationship with CFL and percentage of second largest shareholder to total shareholders. Thus, firms with high incentive of expropriation tend to have low CFR.

For control variables, the correlation analysis shows that CG practice has a positive relationship with firm size, while dividend payout ratio and firm's cash-in-hands have a negative correlation with cash flow rights.

Table VIII Descriptive statistics of variables

Variable	*Minimum*	*Maximum*	*Mean*	*SD*
TOTCG	0.09	0.750	0.33	0.13
CFR	0.00	0.98	0.46	0.24
CFL	0.00	0.67	0.07	0.11
PUBLICOWN	0.00	0.86	0.36	0.20
DMLS	0.00	1.00	0.22	0.42
CR2OVERCR1	0.00	5.62	0.25	0.67
DGOV	0.00	1.00	0.10	0.29
DUNIDENTIFIED	0.00	1.00	0.13	0.33
DFOREIGN	0.00	1.00	0.17	0.37
DFBD	0.00	1.00	0.23	0.42
LOGTA	0.00	11.33	8.93	2.14
SALESGROWTH	−0.88	2.54	0.19	0.41
PPEOS	0.00	48.65	1.44	4.55
NIIOA (%)	−34.34	47.81	6.06	9.68
LIABO	0.00	5.03	0.48	0.36
DEBTOA	0.00	4.58	0.25	0.32
INVOA	−0.78	13.08	0.28	1.34
DIVPAYOUT	−0.78	7.55	0.30	0.86
LOGCASH	0.00	10.27	7.94	1.83
SGAOS	0.00	2.46	0.20	0.26

Notes: CGI = CG index; PUBLICOWN = % of public ownership; DMLSA = dummy one if MLSs or else zero; CR2OVERCR1 = ratio of CFR of second largest shareholder to the largest shareholder; DGOV = dummy one if controlling shareholder is government or else zero; DUNIDENTIFIED = dummy one if controlling shareholder is unidentified or else zero; CFR = CFR of the largest shareholder; CFL = cash flow leverage (i.e. Control – CFR) of the largest shareholder; DFOREIGN = dummy one if the largest shareholder is foreign or else zero; DFBD = legally foreign-owned but in substance domestic; LOGTA = log total assets; SALESGROW = % of sales growth; LIABOA = liabilities/total assets; DEBTOA = Interest bearing debt/total assets; D2012 = dummy year 2012, D2013 = dummy year 2013; NIIOA = (net income + interest expense after tax)/total assets; PPEOS = property plant equipment/total sales, INVOA = Investment over assets; SGAOS = (sales and general administrative expenses)/sales

4.5 Empirical results of 2SLS

4.5.1 Results of hypotheses testing. Table X provides the results of simultaneous regressions with CG Index (CGI) and CFR as endogenous variables, while Table XI provides the results of simultaneous regressions with CGI and CFL as endogenous variables.

H1 states that CFR negatively influences CG practices. Table X shows that even though the coefficient of CFR is negative, CFR statistically has no significant effect on CG practice (CGI); however, contrary to Table X, when CGI and CFL are the endogenous variables, Table XI shows that CFR has a marginally significant negative impact on CGI, supporting *H1*.

Therefore, the test results weakly support that high ownership right of controlling shareholders substitutes CG mechanism as a way to oversee and direct the company. The results are not consistent with the finding of Suk (2008) that high ownership complements CG practice but are in line with the finding of Firth and Rui (2012) that high ownership substitutes CG practice. The different result between our study and Suk (2008) may be explained as follow. Because of increasing CG regulation in the past 10 years, implementation of mandated CG rules during the period of our study (2011-2013) is costlier than Suk's study (2001-2003). As a result, controlling shareholders with high alignment incentive substitutes costly CG mechanism in reducing agency costs.

H2 states that CFL has a negative impact on CG practice. Based on Table X, although the coefficient of CFL is negative, it is not statistically significant, while based on Table XI, CFL has a marginally negative effect on CG practice, supporting *H2*. Thus, the empirical tests marginally support that firms whose controlling shareholder has a higher incentive of expropriation tend to opt for poorer CG practice. The results also suggest that under poor

Table IX Correlation analysis

Variable	*CGI*	*CFR*	*CFL*	*PUBLICOWN*	*DMLS*	*CR2OVERCR1*	*DGOV*	*DUNIDENTIFIED*	*DFOREIGN*
CFR	−0.063 (0.122)								
CFL	0.147** (0.003)	−0.397** 0.000							
PUBLICOWN	−0.123* (0.012)	−0.036 (0.256)	0.045 (0.206)						
DMLS	−0.050 (0.179)	−0.039 (0.238)	0.037 (0.247)	−0.023 (0.337)					
CR2OVERCR1	−0.0116* (0.016)	−0.129** (0.009)	0.057 (0.146)	−0.036(0.255)	0.616** (0.000)				
DGOV	0.457** (0.000)	−0.016(0.384)	0.007(0.446	−0.131** (0.008	−0.097* (0.037)	−0.110* (0.019)			
DUNIDENTIFIED	−0.187** (0.000)	0.031 (0.283)	0.020 (0.357)	0.029 (0.295)	−0.120* (0.014)	−0.104* (0.024)	−0.123** (0.010)		
DFOREIGN	0.006 (0.454)	0.012 (0.410)	0.005 (0.465)	0.101* (0.032)	0.056(0.151	−0.027(0.306)	0.033 (0.268)	0.032 (0.271)	
DFBD	−0.006(0.459)	0.026 (0.314	−0.0263** (0.000)	−0.004 (0.469)	−0.012 (0.414)	−0.055 (0.151)	0.002 (0.484)	−0.089* (0.046)	−0.247** (0.000)
LOGTA	0.320** (0.000)	−0.055 (0.154)	0.020 (0.358)	0.108* (0.023)	−0.028 (0.301)	0.014 (0.399)	0.138** (0.005)	−0.142** (0.004)	0.026 (0.310)
SALESGROWTH	0.029 (0.298)	−0.058 (0.143)	−0.036 (0.252)	0.070 (0.101)	0.102* (0.031)	0.059 (0.135)	−0.025 (0.321)	−0.028 (0.302)	−0.033 (0.265)
PPEOS	0.034 (0.269)	−0.0076 (0.081)	0.074 (0.088)	−0.001 (0.495)	−0.024 (0.333)	−0.020 (0.351)	−0.057 (0.141)	−0.042 (0.215)	0.110* (0.019)
NIIOA	−0.010 (0.428)	0.021 (0.351)	0.035 (0.263)	0.076 (0.081)	−0.101* (0.032)	−0.010 (0.425)	0.016 (0.385)	0.018 (0.367)	0.022 (0.341)
LIABO	0.034 (0.265)	0.059 (0.139)	−0.058 (0.145)	0.022 (0.346)	0.078 (0.076)	0.032 (0.273)	0.035 (0.257)	−0.106* (0.023)	−0.014 (0.399)
DEBTOA	0.026 (0.317)	0.079 (0.075)	−0.045 (0.207)	0.057 (0.150)	0.058 (0.146)	0.051 (0.177)	0.018 (0.373)	−0.059 (0.141)	−0.032 (0.277)
INVOA	−0.033 (0.274)	0.031 (0.285)	−0.052 (0.172)	0.007 (0.449)	0.056 (0.152)	0.032 (0.281)	−0.024 (0.332)	0.082 (0.066)	−0.035 (0.262)
DIVPAYOUT	−0.023 (0.338)	−0.133**(0.007)	0.072 (0.094)	−0.077 (0.081)	−0.026 (0.321)	0.039 (0.241)	0.035 (0.262)	−0.013 (0.409)	0.070 (0.101)
LOGCASH	0.058 (0.146)	−0.125* (0.011)	0.019 (0.365)	0.003 (0.477)	0.050 (0.182)	0.056 (0.152)	−0.051 (0.176)	0.010 (0.429)	0.140** (0.005)
SGAOS	0.090* (0.050)	−0.031(0.283)	−0.041(0.225)	−0.115* (0.018)	(0.039) (0.240)	−0.024 (0.331)	−0.046 (0.200)	0.003 (0.481)	−0.011 (0.420)

(*continued*)

Notes: **Correlation is significant at the 0.01 level (1-tailed); *correlation is significant at the 0.05 level (1-tailed); *p-value* is provided in parentheses; CGI = CG Index; PUBLICOWN = % of public ownership, DMLSA = dummy one if MLSs or else zero; CR2OVERCR1A = ratio of CFR of second largest shareholder to the largest shareholder; PS1DGOV = dummy one if controlling shareholder is government or else zero; PS1DUNIDENTIFIED = dummy one if controlling shareholder is unidentified or else zero; PS1CFRA = CFR of the largest shareholder; PS1CFLA = cash flow leverage (i.e. control–CFR) of the largest shareholder; DASING = dummy one if the largest shareholder is foreign or else zero; DATD = legally foreign-owned but in substance domestic; LOGTA = log total assets; SALESGROW = % of sales growth; LIABOA = liabilities/total assets; DEBTOA = Interest bearing debt/total assets; D2012 = dummy year 2012, D2013 = dummy year 2013; NIIOA = (net income + interest expense after tax)/total assets; PPEOS = property plant equipment/total sales; INVOA = Investment over assets; SGAOS = (sales and general administrative expenses)/sales

Table IX

Variable	*DFBD*	*LOGTA*	*SALESGROWTH*	*PPEOS*	*NIIOA*	*LIABO*	*DEBTOA*	*INVOA*	*DIVPAYOUT*	*LOGCASH*
CFR										
CFL										
PUBLICOWN										
DMLS										
CR2OVERCR1										
DGOV										
DUNIDENTIFIED										
DFOREIGN										
DFBD										
LOGTA	0.037 (0.245)									
SALESGROWTH	−0.041 (0.221)	0.001 (0.494)								
PPEOS	0.011 (0.421)	0.081 (0.063)	−0.022 (0.339)							
NIIOA	0.027 (0.308)	−0.035 (0.257)	0.004 (0.471)	0.010 (0.429)						
LIABO	−0.026 (0.311)	0.240** (0.000)	0.021 (0.346)	−0.109* (0.020)	−0.049 (0.180)					
DEBTOA	−0.062 (0.129)	0.172** (0.001)	−0.024 (0.328)	−0.033 (0.272)	−0.023 (0.339)	0.891**(0.000)				
INVOA	−0.041 (0.226)	0.010 (0.430)	−0.004 (0.471)	−0.006 (0.457)	0.004 (0.471)	−0.037 (0.247)	−0.025 (0.326)			
DIVPAYOUT	−0.024 (0.333)	0.049 (0.186)	−0.016 (0.385)	−0.021 (0.351)	−0.015 (0.390)	−0.032 (0.280)	−0.066 (0.114)	−0.023 (0.340)		
LOGCASH	0.023 (0.338)	(0.048) (0.193)	−0.049 (0.184)	−0.066 (0.115)	0.006 (0.457)	−0.055 (0.156)	−0.046 (0.200)	−0.005 (0.460)	0.111* (0.022)	
SGAOS	0.086 (0.059)	0.074 (0.088)	−0.024 (0.328)	0.165** (0.001)	0.026 (0.319)	0.032 (0.280)	0.019 (0.364)	0.189** (0.000)	−0.0104* (0.028)	0.041 (0.227)

Table X The simultaneous relation between CGI and CFRs of the largest shareholder (CFR)

	CGI		*CFR*	
Variable	*Coefficient*	p-*value*	*Coefficient*	p-*value*
Intercept	−0.071	0.410	2.254***	0.000
CGI			1.591***	0.009
CFL	−0.210	0.133		
CFR	−0.209	0.188		
PUBLICOWN	−0.192	0.138		
DMLSA	0.036**	0.034	−0.093*	0.092
CR2OVERCR1	−0.040**	0.041	0.012	0.372
DGOV	0.160***	0.000	0.131	0.183
DUNIDENTIFIED	−0.027*	0.097		
DFOREIGN	0.043**	0.028	0.141	0.120
DFBD			0.530**	0.010
LOGTA	0.056***	0.000	−0.221***	0.000
SALESGROWTH	−0.023*	0.063		
PPEOS	−0.001	0.352		
NIIOA	0.002***	0.003	−0.001	0.263
LIABOA	0.015	0.355	0.121	0.164
DEBTOA	−0.014	0.378	−0.185	0.089
D2012	0.039***	0.004		
D2013	0.061***	0.000		
INVOA	−0.002	0.336		
DIVPAYOUT			−0.038**	0.044
LOGCASH			−0.039	0.182
SGAOS			−0.236***	0.009
R^2	0.464		0.143	
Adjusted *R* square	0.433		0.102	
F-Statistic	14.766***	0.000	3.501***	0.000

Notes: CGI = CG index; PUBLICOWN = % of public ownership; DMLS = dummy one if MLSs or else zero; CR2OVERCR1 = ratio of CFR of second largest shareholder to the largest shareholder; DGOV = dummy one if controlling shareholder is government or else zero; DUNIDENTIFIED = dummy one if controlling shareholder is unidentified or else zero; CFR = CFR of the largest shareholder; CFL = cash flow leverage (i.e. Control – CFR) of the largest shareholder; DFOREIGN = dummy one if the largest shareholder is foreign or else zero; DFBD = legally foreign-owned but in substance domestic; LOGTA = log total assets; SALESGROW = % of Sales Growth; LIABOA = liabilities/total assets; DEBTOA = Interest-bearing debt/total assets; D2012 = Dummy year 2012; D2013 = Dummy year 2013; NIIOA = (net income + interest expense after tax)/total assets; PPEOS = property plant equipment/total sales; INVOA = Investment over assets; SGAOS = (sales and general administrative expenses)/sales; *significant at 10% level; **significant at 5% level; ***significant at 1% level

investor protection environment, controlling shareholders view the benefits of providing good signal to non-controlling shareholders by practicing GCG are less than benefits obtained from expropriating them.

H3 stipulates that CG practice has a positive impact on CFR. The results in Table X indicate that CG practice (CGI) has a significant positive influence on CFR, consistent with Suk (2008) and Cueto (2013 This result supports *H3* and corroborates our argument that in a country with poor rule of law, to align the interest of controlling shareholders with other shareholders, CG practice encourages high ownership of the largest shareholders. Therefore, if capital market regulator wants to reduce ownership concentration of PLCs, it cannot rely on internal CG mechanism; instead, the regulator has to improve the rule on investor protection and enforce the law.

H4 states that better CG practice reduces CFL of the largest shareholder. Table XI shows that the coefficient of CG practice (CGI) is negative, but it is significant only at 88 per cent confidence level. This result weakly supports *H4*. One possible reason for the weak impact of CG practice in reducing the incentive of controlling shareholders to expropriate firms'

Table XI The causality output statistics of CGI and CFL of the largest shareholder (CFL)

	CGI		*CFL*	
Variable	*Coefficient*	p-*value*	*Coefficient*	p-*value*
Intercept	−0.107	0.511	−0.158	0.132
CGI			−0.247	0.119
CFL	−0.645*	0.059		
CFR	−0.172*	0.078		
PUBLICOWN	−0.168**	0.038		
DMLSA	0.081***	0.006	0.097***	0.000
CR2OVERCR1	−0.05	0.018	−0.038***	0.001
DGOV	0.128***	0.000	−0.043	0.142
DUNIDENTIFIED	−0.054**	0.015	−0.027	0.126
DFOREIGN	0.045**	0.044	−0.010	0.341
DFBD	−0.001	0.488	−0.059***	0.001
LOGTA	0.061***	0.000	0.041**	0.011
SALESGROWTH	−0.023*	0.079		
PPEOS	-0.001	0.237		
NIIOA	0.002***	0.003	0.001	0.105
LIABOA	−0.016	0.354	−0.034	0.177
DEBTOA	0.019	0.348	0.043	0.151
D2012	0.040***	0.006		
D2013	0.061***	0.000		
DIVPAYOUT			0.008	0.119
LOGCASH			−0.009	0.246
SGAOS			0.019	0.235
R^2	0.428		0.204	
Adjusted *R* square	0.394		0.166	
F-Statistic	12.763***	0.000	5.379***	0.000

Notes: CGI = CG Index; PUBLICOWN = % of public ownership; DMLS = dummy one if MLSss or else zero; CR2OVERCR1A = ratio of cashflow right of second largest shareholder to the largest shareholder; DGOV = dummy one if controlling shareholder is government or else zero; DUNIDENTIFIED = dummy one if controlling shareholder is unidentified or else zero; CFA = cashflow right of the largest shareholder; CFL = cashflow leverage (i.e. control–cashflow right) of the largest shareholder; DFOREIGN = dummy one if the largest shareholder is foreign or else zero; DFBD = legally foreign-owned but in substance domestic; LOGTA = Log total assets; SALESGROW = % of sales growth; LIABOA = liabilities/total assets; DEBTOA = interest-bearing debt/total assets, D2012 = Dummy year 2012, D2013 = dummy year 2013; NIIOA = (net income + interest expense after tax)/total assets; PPEOS = property plant equipment/total sales; INVOA = investment over assets; SGAOS = (sales and general administrative expenses)/sales; *significant at 10% level; **significant at 5% level; ***significant at 1% level

assets is that various CG mechanisms have just been recently introduced to PLCs in Indonesia; thus, their implementation may not yet be fully enforced and effective. This explanation is supported by the findings of IICD (2016) documenting that the level of compliance of the 100 largest PLCs with the CG rules is only 69 per cent. To our knowledge, *H4* has never been tested. Thus, the study provides the first evidence that CG practice can reduce the incentive of controlling shareholders to expropriate firms' assets; however, to be effective, the enforcement of the CG rules has to be heightened.

In summary, we contribute to the literature providing evidence that high ownership by the controlling shareholder may substitute GCG practice in reducing agency costs, while better CG practice results in higher alignment incentive (i.e. higher CFR) and may lower expropriation incentive (i.e. lower CFL) of controlling shareholders. We also provide evidence that high incentive of expropriation may result in poor CG practice.

H5 stipulates that the existence of MLSs has an influence on CG practice. Consistent with the expectation, both Tables X and XI show that the coefficient of the existence of MLS (DMLSA) is significantly positive, while the coefficient of CR2OVERCR1 is significantly negative. In combination, the results indicate that when the relative control right of the

second largest shareholder is small, CG mechanism is needed to complement the second largest shareholder in controlling and mitigating agency costs. Thus, the existence of MLS counterbalances the power of the largest shareholder by strengthening the CG practice and thus making it difficult for controlling shareholders to expropriate company wealth.

However, as the control right of the second largest shareholder becomes closer to the largest shareholder, the need for CG mechanism becomes less important. The power of the second largest shareholder becomes relatively stronger; therefore, the second largest shareholder can have more involvement in company affairs and thus the need to have a high-quality CG is not necessary.

The study contributes to the literature, as it provides first evidence that the existence of MLS complements CG practice when the share ownership of the second largest shareholders is much lower than that of the largest shareholders. As the share ownership of the second largest shareholders becomes closer to that of the largest shareholders, the relation between MLS and CG practice becomes substitutes.

Overall, the empirical results suggest that ownership structure both substitutes and complements CG practice as alternative control mechanisms to mitigate agency problem arising from the conflict of interests between the principal and the agent.

4.5.2 Results of other ownership structure variables. Both Tables X and XI show that government-controlled PLCs (DGOV) and foreign ownership (DFOREIGN) have a positive impact on CG practices (CGI).

Borisova *et al.* (2012), Ang and Ding (2006) find that government-linked companies (GLCs) implement better CG practices than a control group of non-GLCs in Singapore. While, in Australia, government-owned corporations have adopted several principles according to common law that are beneficial for CG (McDonough, 1998). These principles include efficiency in production and allocation of resources, management independence and accountability for overall firm performance. Hence, government ownership exerts its powerful and coercive owner to improve CG practices through widespread monitoring and direct enforcement of recommended policies.

Further, the literature also indicates that foreigners tend to invest more in firms with good governance to manage their investment risk (Shleifer and Vishny, 1997; La Porta *et al.*, 2002; Aggarwal *et al.*, 2009). The goals of CG include protection of minority shareholders' interests and support for optimal performance. Foreign investors are more likely to be dependent on an effective CG system than local investors, partly because foreign investors are usually minority shareholders. When international investors buy shares in a company, they face the risk that they may fail to realize an appropriate return on their investment because of expropriation by local corporate managers. (Min and Bowman, 2015). This result corroborates previous studies that show higher foreign ownership leads to a higher proportion of outside directors as proxy of GCG practices. So, outside investors requires better CG mechanism through higher proportion of outside directors to strengthen monitoring mechanism and protect their interest (Lee and Park, 2008).

4.5.3 Other determinants of CG and ownership structure. Our tests find that firm size (LOGTA) has a positive impact on CG practice. Large firms conduct better CG mechanism (CGI) than small firms because of several reasons (Lee and Park, 2008; Klapper and Love, 2004; Laing and Weir, 1999; Drobetz *et al.*, 2004; Beiner *et al.*, 2004; Ariff *et al.*, 2007):

- larger firm may bear monitoring costs more easily because larger firms have greater resources which would enable them to adapt better CG practices;
- market/public has great scrutiny on large firms and this encourages large firms to perform good governance practice; and

- large firms exhibit greater pressures to perform well in their CG because failure to do so would significantly hamper their well-established reputation.

The empirical results in Tables X and XI show that profitability (NIIOA) (i.e. measured by net income + interest expense after tax)/total assets) has a positive influence on CG practice. Firms with higher profitability have more resources to conduct CG practice. While, sales growth in both tables has a negative impact on CG practice. Because, higher sales growth needs more investment in working capital and/or capital expenditure and tends to increase asymmetric information and reduce CG practices. The results are consistent with the finding of Suk (2008).

Finally, Tables X and XI show that CG practices of Indonesian firms tend to improve overtime. The results show that dummy year (i.e. D2012 than D2013) is very significant at the 1 per cent level. They clearly reflect the steady improvement of the overall CG practices throughout the sample period. They show that there was a clear trend to adopt GCG practices between 2011 until 2013.

Table X shows that CFR is negatively affected by firm size (LOGTA), while Table XI shows that firm size has a positive impact on control rights (CFLA). Thus, large firms tend to experience more entrenchment effect and less alignment effect than small firms. Large firms have more resources and complex organization to manage and consequently exhibit more asymmetric information and conflicts of interest between controlling shareholders and minority shareholders. As a result, controlling shareholder can easily conduct expropriation in large firms than in small firms.

5. Conclusion

The main purpose of this study is to investigate simultaneous relations between CG practice and ownership structure (i.e. cash flow rights and control rights). We also examine the effect of MLSs on CG practice

The result of this study shows that most PLCs carry out poor CG practice, but during the past three years (2012, 2013 and 2014), there has been a significant increase. This improvement could be due to the requirements of CG disclosure that have become more extensive, and/or awareness of companies to implement better CG practices.

The ownership structure of PLCs in Indonesia is very concentrated. The majority of direct shareholders are either privately held corporations or nominees. Most public companies have a pyramidal ownership structure and many of them are domiciled outside of Indonesia. This makes it difficult to identify the ultimate shareholders and to calculate CFR and control rights for many companies.

We find that under the condition of weak rule of law, CG practice has a positive influence on CFR and a marginally negative impact on CFL. These findings indicate that companies with better CG practice tend to encourage the alignment of interests between controlling and non-controlling shareholders and discourage the entrenchment incentive of controlling shareholders. We also find that there are weak evidences that CFR and CFL have a negative impact on CG practice. Therefore, a large level of ownership by controlling shareholders performs as a substitute for CG practice, while higher motivation of controlling shareholders to expropriate firms' assets exacerbates CG practice.

Our study provides first evidence that the existence of MLSs enhances CG practice; however, as the ownership right of the second largest shareholder becomes closer to the largest shareholder, balance of power becomes more eminent and the need for high-quality CG decreases. We also document that firms controlled by either state or foreign shareholders practice better CG mechanism than other firms. Thus, regulation on CG and familiarity with CG mechanism play an important role in enhancing CG practice.

The implications of our study are as follows:

- Our study supports the "one size does not fit all" perspective on CG. Controlling shareholders with high CFR and MLSs with similar control rights have high incentive to maximize shareholders' wealth and thus may not need too delicate CG mechanism in the companies they control. Thus, the study supports the recently enacted FSA rule that requires PLCs to follow "comply or explain" rule on CG code for PLCs.
- Because better CG practice only marginally reduces expropriation incentive, we suggest that to improve the effectiveness of CG implementation, FSA needs to enforce the compliance of PLCs with CG rules. FSA and market participants also need to encourage PLCs to implement CG in substance, not just in form and to educate them that practicing CG provides long-term benefits for the PLCs.
- To strengthen the positive impact of GCG practice in attracting investment in capital market, the regulator needs to improve investor protection rules and ensure strong rule of law.
- We suggest that the disclosure of direct and indirect beneficial owners in annual reports of PLCs needs to be enforced. Currently, FSA requires public companies to disclose the direct and indirect ownership of majority shareholders in the annual report. However, we find that the majority of PLCs do not comply with the requirement. Thus, the FSA needs to enforce this rule.
- For investors in the capital market, in addition to consider the relative price of the stocks, to minimize the risk of expropriation, they need to select shares of PLCs that practice GCG suitable to the ownership structure of PLCs; have high ownership by the largest shareholder; have no divergence between control and ownership right; and or have MLSs. They should avoid shares of PLCs that are not transparent in disclosing the identity, direct and indirect ownership, of ultimate large shareholders and disclosing CG mechanism.
- PLCs may want to choose the level of CG mechanism in the context of their ownership structure and by considering the benefits and costs implementing them.

The implications of our study to research on CG and ownership structure are as follows. Future studies may need to consider CG and ownership structure as endogenous variables in their research design. Future studies can also use our CG instrument to measure CG practice, as the instrument comprehensively covers OECD CG principles, and can be used for panel data and based on public information.

Because we cover only Indonesia, the results may not be applicable to countries that have a strong rule of law. Thus, we suggest that future research conducts a cross-countries study that examines whether the relation between various dimensions of ownership structure and CG mechanism is contingent on the strength of rule of law in the countries.

Our study only examines the relation between ownership structure and CG while using US PLCs as their samples. Bhagat and Bolton (2008) show the interrelation among CG, ownership structure, capital structure and firm performance. The ownership structure of PLCs in the USA in general is dispersed and the rule of law in the USA is very strong. Thus, future study needs to show the interrelation among these four concepts in countries with high concentrated ownership and weak rule of law.

References

Aggarwal, R., Erel, I., Stulz, R. and Williamson, R. (2009), "Differences in governance practices between US and foreign firms: measurement, causes and consequences", *Review of Financial Studies*, Vol. 22 No. 8, pp. 3131-3169.

Ang, J. and Ding, D. (2006), "Government ownership and the performance of government-linked companies: the case of Singapore", *Journal of Multinational Financial Management*, Vol. 16 No. 1, pp. 64-88.

Ariff, A.M., Ibrahim, M.K. and Radiah, O. (2007), "Determinants of firm level governance: Malaysian evidence", *Corporate Governance*, Vol. 7 No. 5, pp. 562-573.

Arsjah, R.J. (2005), "Hubungan CG, Nilai Perusahaan dan Pengelolaan Laba di Bursa Efek Jakarta", Unpublished dissertation, Program Pascasarjana Fakultas Ekonomi, Universitas Indonesia.

Asian Development Bank (ADB) (2014), *ASEAN Corporate Governance Scorecard: Country Reports and Assessments 2013-2014*, ADB.

Attig, N., El Ghoul, S. and Guedhami, O. (2009), "Do multiple large shareholders play a corporate governance role? Evidence from East Asia", *Journal of Financial Research*, Vol. 32 No. 4, pp. 395-422.

Attig, N., Guedhami, O. and Mishra, D. (2008), "Multiple large shareholders, control contests, and implied cost of equity", *Journal of Corporate Finance*, Vol. 14 No. 5, pp. 721-737.

Barkema, H.G. and Gomez-Mejia, L.R. (1998), "Managerial compensation and firm performance: a general research framework", *Academy of Management Journal*, Vol. 135, pp. 135-145.

Bebchuk, L. (1999), "A rent-protection theory of corporate ownership and control", *Harvard Law and Economics Discussion Paper No*. 260.

Bebchuk, L.A. and Roe, M.J. (1999), "A theory of path dependence in corporate ownership and governance", *Stanford Law Review*, Vol. 52, pp. 127-170.

Beiner, S., Drobetz, W., Schmid, M. and Zimmerman, H. (2004), "An integrated framework of corporate governance and firm valuation – evidence from Switzerland", available at: www.wwz.unibas.ch/cofi/publications/papers/2003/09-03.pdf (accessed 10 December 2015).

Bennedsen, M. and Wolfenzon, D. (2000), "The balance of power in closely held", *Economics and Business*, Vol. 70 No. 11, pp. 43-70.

Bhagat, S. and Bolton, B. (2008), "Corporate governance and firm performance", *Journal of Corporate Finance*, Vol. 14 No. 3, pp. 257-273.

Borisova, G., Brockman, P., Salas, J.M. and Zagorchev, A. (2012), "Government ownership and corporate governance: evidence from the EU", *Journal of Banking & Finance*, Vol. 36 No. 11, pp. 2917-2934.

Cheng, M.Y., Lin, B.X. and Wei, M.H. (2013), "How does the relationship between multiple large shareholders affect corporate valuations? Evidence from China", *Journal of Economics and Business*, Vol. 70 No. 11, pp. 43-70.

Cheung, Y.L., Jiang, P., Limpaphayom, P. and Lu, T. (2010), "Corporate governance in China: a step forward", *European Financial Management*, Vol. 16 No. 1, pp. 94-123.

Cheung, Y.L., Connelly, J.T., Estanislao, J.P., Limphapayon, P., Lu, T. and Utama, S. (2014), "Corporate governance and firm valuation in Asian emerging market", in Boubaker, S. and Nguyen, D.K. (Eds), *Corporate Governance in Emerging Markets: Theories, Practices and Cases*, pp. 27-53.

Cho, D.S. and Kim, J. (2003), "Determinants in introduction of outside directors in Korean companies", *Journal of International and Area Studies*, Vol. 10 No. 1, pp. 1-20.

Claessens, S., Djankov, S. and Lang, L.H.P. (2000), "The separation of ownership and control in East Asian Corporations", *Journal of Financial Economics* Vol. 58 Nos 1/2, pp. 81-112.

Claessens, S., Fan, J.H.P. and Lang, L.H.P. (2002a), "The benefits and costs of group affiliation: evidence from East Asia", Working Paper, University of Amsterdam, Hong Kong University of Science and Technology, and the Chinese University of Hong Kong.

Claessens, S., Djankov, S., Fan, J.H.P. and Lang, L.H.P. (2002b), "Disentangling the incentive and entrenchment effects of large shareholdings", *The Journal of Finance*, Vol. 57 No. 6, pp. 2741-3277.

CLSA (2014), *CG Watch 2014: Corporate Governance in Asia*, available at: www.clsa.com (accessed 10 December 2015).

Connelly, J.T., Piman, L. and Nagarajan, N.J. (2012), "Form versus substance: the effect of ownership structure and corporate governance on firm value in Thailand", *Journal of Banking & Finance*, Vol. 36 No. 6, pp. 1722-1743.

Cueto, D.C. (2013), "Substitutability and complementarity of corporate governance mechanisms in Latin America", *International Review of Economics and Finance*, Vol. 25, pp. 310-325.

Drobetz, W., Schillhofer, A. and Zimmerman, H. (2004), "Corporate governance and expected stock returns: evidence from Germany", *European Financial Management*, Vol. 10 No. 2, pp. 267-293.

Durnev, A. and Kim, H. (2005), "To steal or not to steal: firm attributes, legal environment, and valuation", *Journal of Finance*, Vol. 60 No. 3, pp. 1461-1493.

Firth, M., Fung, P.M.Y. and Rui, O.M. (2002), "Simultaneous relationship among ownership corporations", *Journal of Financial Economics*, Vol. 58 Nos 1/2, pp. 113-139.

Firth, M.A. and Rui, O.M. (2012), "Does one size fit all? A study of the simultaneous relations among ownership, corporate governance mechanisms, and the financial performance of firms in China", in Boubaker, S., Nguyen, B.D. and Nguyen, D.K. (Eds), *Corporate Governance*, Springer-Verlag, Berlin, pp. 29-57.

Ge, W., Kim, J.B. and Song, B.Y. (2012), "Internal governance, legal institutions and bank loan contracting around the world", *Journal of Corporate Finance*, Vol. 18 No. 3, pp. 413-432.

Guriev, S., Lazareva, O., Rachinsky, A. and Tsouhlo, S. (2003), "Concentrated ownership, market for corporate control and corporate governance", available at www.nes.ru/,sguriev/CGRussia.pdf (accessed 10 December 2015).

Hill, C.W.L. and Snell, S.A. (1989), "Effect of ownership structure and control on corporate productivity", *Academy of Management Journal*, Vol. 32 No. 1, pp. 25-45.

IICD (2016), "Enhancing corporate governance disclosure policy and practice based on ASEAN CG scorecard: overview of ASEAN CG scorecard (Powerpoint Slides)", IICD Training Materials, slide 22.

Indonesia Corporate Governance Manual (2014), "Issued by Indonesia Financial Services Authority and International Finance Corporation (member of World Bank Group)", available at: www.ifc.org/wps/wcm/connect/64185f0042cc3ab0b145fd384c61d9f7/Indonesia_CG_Manual_Feb2014.pdf?MOD=AJPERES (accessed 22 December 2015).

Jensen, M. and Meckling, W. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.

Klapper, L. and Love, I. (2004), "Corporate governance, investor protection, and performance in emerging markets", *Journal of Corporate Finance*, Vol. 10 No. 5, pp. 703-728.

Konijn, S., Kraussl, R. and Lucas, A. (2011), "Blockholder dispersion and firm value", *Journal of Corporate Finance*, Vol. 17 No. 5, pp. 1330-1339.

Laeven, L. and Levine, R. (2008), "Complex ownership structure and corporate valuations", *Review of Financial Studies*, Vol. 21 No. 2, pp. 579-604.

Laing, D. and Weir, C.M. (1999), "Governance structures, size and corporate performance in UK firms", *Management Decision*, Vol. 37 No. 5, pp. 457-464.

La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999), "Corporate ownership around the world", *Journal of Finance*, Vol. 54 No. 2, pp. 471-517.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2000), "Investor protection and corporate governance", *Journal of Financial Economics*, Vol. 58 Nos 1/2, pp. 3-27.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2002), "Investor protection and corporate valuation", *The Journal of Finance*, Vol. 57, pp. 1147-1170.

Lazarides, T., Drimpetas, E. and Dimitrios, K. (2009), "Ownership structure in Greece: determinants and implication on corporate governance", *International Conference on Applied Economics*, pp. 379-392.

Lee, E. and Park, K.S. (2008), "Determinants of the corporate governance of Korean firms", *Corporate Ownership and Control*, Vol. 5 No. 2, pp. 15-23.

Lehn, K., Patro, S. and Zhao, M. (2007), "Governance indexes and valuation: which causes which?", *Journal of Corporate Finance*, Vol. 13, pp. 907-928.

Linck, J.S., Netter, J.M. and Yang, T. (2008), "The determinants of board structure", *Journal of Financial Economics*, Vol. 87 No. 2, pp. 308-328.

McDonough, D. (1998), "Corporate governance and government owned corporations in Queensland", *Bond Law Review*, Vol. 10 No. 2, pp. 272-312.

McKnight, P.J. and Weir, C. (2009), "Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: a panel data analysis", *The Quarterly Review of Economics and Finance*, Vol. 49 No. 2, pp. 139-158.

Min, B.S. and Bowman, R.G. (2015), "Corporate governance, regulation and foreign equity ownership: lessons from Korea", *Economic Modelling*, Vol. 45, pp. 145-155.

Mitton, T. (2002), "A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis", *Journal of Financial Economics*, Vol. 64 No. 2, pp. 215-241.

Morck, R., Olfenzon, D.W. and Eung, B. (2005), "Corporate governance, economic entrenchment, and growth", *Journal of Economic Literature*, Vol. 43, pp. 655-720.

Morck, R., Shleifer, A. and Vishny, R. (1988), "Management ownership and market valuation: an empirical analysis", *Journal of Financial Economics*, Vol. 20 Nos 1/2, pp. 293-315.

OECD (2015), "G20/OECD principles of corporate governance", OECD Report to G20 Finance Ministers and Central Bank Governors, available at: www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf (accessed 22 December 2015).

Pagano, M. and Roell, A. (1998), "The choice of stock ownership structure: agency costs, monitoring and the decision to go public", *Quarterly Journal of Economics*, Vol. 113 No. 1, pp. 187-225.

Rediker, K.J. and Seth, A. (1995), "Board of directors and substitution effects of alternative governance mechanisms", *Strategic Management Journal*, Vol. 16, pp. 85-99.

Shleifer, A. and Vishny, R.W. (1997), "A survey of corporate governance", *The Journal of Finance*, Vol. 52 No. 2, pp. 737-783.

Silviera, A.D.M., Leal, R.P.C., Silva, A.L.C. and Barros, L.A.B.C. (2010), "Endogeneity of Brazilian corporate governance quality determinants", *Corporate Governance*, Vol. 10 No. 2, pp. 191-202.

Suk, K.S. (2008), "Simultaneous relationship between ownership structure, corporate governance, and firm value in Indonesia", *The South East Asian Journal of Management*, Vol. 2 No. 1, pp. 1-25.

Utama, C.A. and Handy (2011), "Simultaneous relationship between corporate governance practice and firm value", *The Indonesian Journal of Accounting Research*, Vol. 14 No. 1, pp. 1-22.

Utama, C.A. and Musa, H. (2011), "The causality between corporate governance practice and bank performance: empirical from Indonesia", *Gadjah Mada International Journal of Business*, Vol. 13 No. 3, pp. 227-247.

Utama, C.A. and Utama, S. (2013), "Corporate governance, size, disclosure of related party transactions and firm value: Indonesia evidence", *International Journal of Disclosure and Governance*, Vol. 11 No. 4, pp. 74-98.

Utama, C.A. and Utama, S. (2014), "Corporate governance, size and disclosure of related party transactions, and firm value: Indonesia evidence", *International Journal of Disclosure and Governance*, pp. 1-25.

Volpin, P. (2002), "Governance with poor investor protection: evidence from top executive turnover in Italy", *Journal of Financial Economics*, Vol. 65 No. 1, pp. 159-160.

World Governance Indicators (2015), available at: http://info.worldbank.org/governance/wgi/index.aspx#home (accessed 16 August 2016).

Wu, J., Li, S. and Selover, D. (2012), "Foreign direct investment vs foreign portfolio investment? The effect of the governance environment", *Management International Review*, Vol. 52 No. 5, pp. 643-670.

Further reading

Chau, G. and Gray, S.J. (2010), "Family ownership, board independence, and voluntary disclosure: evidence from Hong Kong", *Journal of International Accounting, Auditing, and Taxation*, Vol. 19, pp. 93-109.

Utama, C. and Utama, S. (2005), "Hubungan antara praktek corporate governance dan penciptaan nilai perusahaan: Studi empiris di Bursa Efek Jakarta", Manajemen Usahawan.

Corresponding author

Cynthia Afriani Utama can be contacted at: cynthiautama@gmail.com