

What Drives Firm-level Anti Corruption and Bribery Mechanism in Indonesia?

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Keyword: Anti-Corruption, Anti Bribery, Corporate Governance, Compliance, Indonesia, Logistic Regression

Abstract: The article seeks to provide empirical findings on the determinants of anti-bribery and corruption efforts in the context of the Indonesian market. Datasets are collected between 2003 and 2013 from companies listed in the Indonesia Stock Exchanges. By applying a logistic model, this study predicts that the key factors of the implementation of anti-bribery and anti-corruption systems are the size of the firm, age and the positive influence of the firm's supervisory board (board of commissioners). Further evidence reveals that foreign firms and state-owned companies are more likely to engage in bribery and corruption prevention than family-run businesses. In particular, the most interesting finding in this paper is the empirical evidence that firms are less likely to employ anti-corruption and bribery mechanism during the financial crisis.

1 INTRODUCTION

Anti-bribery and corruption principles have been integrated into the global corporations' strategy in recent years. Since the beginning of the 1990s, the development of newer provisions and the adoption by many countries have become increasingly rapid. Past literature and surveys by think-tanks (e.g., ADB, OECD) and plenty of private firms have been exploring and rating anti-bribery and corruption mechanisms, including the extensive cross-country studies and firm-level research.

The recent increase of interest of the international governments and institutional investors in corporate governance provisions should be welcomed as good news in the global campaign against corruption and bribery. To add, more attention should be paid to bribe payers rather than focus solely to bribe-takers, or the demand side. While research that focuses on-demand aspect of corruption provides a fairly pessimistic perspective on the global actions to deter bribery (Beets, 2005), the assessment of corruption and bribery in this article provides a reason to be more optimistic. It is in the interests of the key actor, the firms, to improve their efforts in curbing corruption and bribery and adopting the values of corporate governance. Corporate governance provisions, in the form of anti-corruption and anti-bribery measures, can also play well in the strategy to end the violent

cycle of bribery and corruption in Indonesia seeing that corporations are the main contributors of the supply side (Wu, 2005).

The consequences and implications of bribery and corruption have been extensively discussed in the past literature. Most of the studies highlight the cost of corruption and bribery for corporations (Cai, Fang, & Xu, 2005; Gaviria, 2002) and countries (Asiedu and Freeman, 2009; Beuselinck et al., 2017; Hakimi and Hamdi, 2017). Even though findings and implications vary and inconclusive in many ways (Quah, 1999), we should not neglect the fact that corruption and bribery are among the top governance issues since the early 20s. For Indonesia, the cost of bribery and corruption are associated with excessive firm production costs and higher business risks (Kuncoro, 2004, 2006), poor public service quality and social costs (Alatas et al., 2009), and natural resources damage and environmental issues (Palmer, 2001). In the financial sector, corrupt practices are linked to lower firm valuations, poor governance, and higher cost of capital (Ng, 2006).

It is apparent that the qualities of anti-bribery and corruption compliance vary among countries and the micro-level of inter-firm basis. Do family-owned firms comply with less than widely-held or foreign-owned firms? What possible key factors contribute to high governance and transparent business practices? The set of questions are intriguing. Unfortunately, we cannot find adequate literature

and empirical findings to satisfactorily address them, especially in the context of the large Indonesian corporations. The inconclusive answers and empirical findings pose a challenge to scientifically supporting applicable and non-biased evidence.

Challenged by data availability and accessibility, Indonesia is relatively under-researched with only minor empirical works which focused on the specific subject of anti-bribery and corruption and the micro-level actual implementation by the key actors. Since studies on this specific topic are still, results from this paper are expected to expand knowledge about how anti-corruption and bribery mechanisms to operate and converge in a unique institutional setting such as Indonesia.

2 DETERMINANTS OF ANTI BRIBERY AND CORRUPTION

The main objective of this study is to identify and investigate the determinants of micro-level anti-bribery and anti-corruption implementation in the Indonesian public listed corporations. Indonesia is relatively under research with only minor empirical works which focused on the specific subject of corporate governance elements and the effective implementation by the business community.

What are the consequences of rampant corruption and bribery offenses for Indonesia? Previous papers identified that economic growth, political stability, business, and public sector are severely threatened by corruption and bribery (Gaviria, 2002; Hakimi and Hamdi, 2017; Jain, 2001). For this reason, in order to deter and prevent the offenses, the Indonesian government introduced Corruption Law No.20 Year 2001. Anti-corruption and bribery policies for public companies had also been published by the Indonesia Financial Service Authority. This paper argues that it is crucial for the corporation to have an internal anti-corruption and bribery policy as it sends signals that any misconduct will be punished in compliance with regulations and the applicable laws. To add, frauds and severe conflict of interests also can be deterred by the firm.

Since studies on this specific topic are still limited in Indonesia, this study is expected to expand knowledge about how anti-corruption and bribery mechanisms, as part of corporate governance principles, operate and converge in a unique institutional setting such as Indonesia. To meet the objective, the article proposes the following research questions:

1. What are the determinants of firm-level anti-bribery and anti-corruption compliance in Indonesia?
2. In times of crisis, do firms more engage in anti-corruption and bribery prevention?

The article identifies variables that can be considered as determinants of high governance compliance. These variables are grouped into 4 clusters: (1) firm type and ownership structures, (2) family control, (3) financial characteristics, and (4) financial crisis. Next sections will further explore the key elements of this study. The author identifies each element or variable that is highly correlated with the firm's motivation to comply with corporate governance requirements and principles set by the financial market regulator.

2.1 Firm Types and Ownership Structures

Agency theory was developed from the original work of Jensen and Meckling (1976). This theory has been able to explain various issues that arise concerning the separation of corporate ownership, control, and management. The effect of the separation of ownership and management was the subject of debate by Berle and Means in 1932 (Stigler and Friedland, 1983). The literature states that agency cost is the result of a contract made by the owner of the firm (the principals) who hire outsiders (the agent) to perform services for the firm on behalf of the owner, a contract which includes an arrangement of delegation and power-sharing in the firm's decision-making (Jensen and Meckling, 1976). This contract was designed as a measure of the owners' decision to improve corporate values by delegating authority to managers.

The study gathers ownership data from firms' financial and corporate information. Datasets are extracted from the Indonesian TICMI, firm annual reports and financial filings, and other publicly available data. The author identifies the ownership structure by retrieving the company's shareholder information and disclosure in the annual reports and financial statements. By using these data, the author can identify the controlling shareholder(s) of the firms and how much voting rights they hold. In this study, the controlling shareholders are grouped into family and non-family firms. Non-family firms can be identified further as (1) state-owned companies, (2) foreign-owned companies, and (3) widely-held firms with dispersed ownership. In this paper, the family firm is defined as a business owned and run by the founding family.

Ownerships which are concentrated into blocks of majority stakeholders play an important role in the firm's operational and strategic goals. The majority shareholders have better positions and chance to access the company's information; and, in fact, the majority shareholders also have the power to remove managers with poor performance and to hire new agents to maximize shareholders' wealth. According to past studies, the presence of large shareholders and concentrated ownerships has its costs and benefits. Management control is effective when ownership is concentrated as block holders might control managers and help to foster value-maximizing resource allocation (Demsetz and Lehn, 1985; Shleifer and Vishny, 1986). However, other studies indicate a negative relation between concentrated ownership and agency costs. A large or block shareholder might be likely to expropriate the wealth of minority shareholders, by committing frauds, theft, and other business misconducts, particularly in an environment where legal protection for the minority shareholders is weak, which mainly occurs in the developing capital market. Therefore, this study employs ownership structures and firm type as key variables in examining the determinants of anti-corruption and bribery compliance.

The author argues that high family ownerships are detrimental to the adoption and application of anti-corruption and bribery policies. The work by Ricardo et al. (2016) highlights that there is an inverse U-shape relationship between compliance quality and family stake ownerships. In line with this view, this study aims to find evidence that non-family firms' compliance level is lower than that of family firms, as a side-effect of agency costs. Family firms are plagued with high agency conflicts (conflicts between owner-manager and owner-minority shareholder), and the controlling families are reluctant to enforce good governance, for example, by providing better financial and non-financial disclosures.

Ownership structures are defined as the percentages of stakes owned by the family, the block-holder, and the minority shareholders or the public. Firstly, family ownerships are the percentage of voting rights retained by the founding families. Secondly, block-holder shares are the ratio of the largest shares held by a party/person (e.g., a firm may have the largest shareholder who owns 50% of the firm's stakes). The expected influence from each of these variables on firm-level governance quality is presented in Table 1. Lastly, the expected coefficient signs of family ownerships, block-

holders and free float ratio are "-", "-", and "+" respectively. For those reasons, this study develops hypothesis:

H1: There is a negative association between family ownerships and anti-corruption and bribery mechanism.

H2: Non-family firms are more likely to have an anti-corruption and bribery mechanism.

H3: There is a negative association between block-holders ownerships and anti-corruption and bribery mechanism.

2.2 Family Control

The author defines family control following previous governance literature (Isakov and Weisskopf, 2014; Saito, 2008). Family control is a measurement of the representation of the controlling family members in the firm's management and boards. As the founders of the firms and the controlling family members do not want to give full control of the firm to the outsiders, they retain some of the power and control by appointing themselves into the firm's board and executive positions. Here, the author employs a dichotomous variable as a proxy to measure the active family control, CRONY. CRONY represents family members who serve as director or commissioner in the firm boards. Ricardo et al. (2016) argued that family attachment increases with higher ownership under the influence of socio-emotional wealth of the family firms. Consequently, the adoption of compliance with more stringent governance practices could limit family interests and benefits owing to higher family-related control costs. Following the arguments, the proposed hypothesis as follows:

H4: There are associations between family controls and anti corruption and bribery mechanism.

2.3 Financial Characteristics

Financial characteristics of the firm consist of 16 variables including: firm size (in terms of assets and revenues/sales), firm age (older firm versus younger firm issue), firm profitability and values, and firm leverage ratio. Thus, the hypothesis to test the relationships between firm's financial characteristics and governance compliance is:

H5: There are associations between firm's financial characteristics and anti corruption and bribery mechanism.

2.4 Financial Crisis

The article will test whether during crises firms are likely to be more or less compliant compared with non-crisis periods. The author opines that firms might be more motivated to comply during crisis periods as a response to secure business and to maintain investor confidence level. Mitton (2002) reported that firms which practice accounting disclosure quality (proxied by the use of the six top audit agencies) and have higher outside ownership concentration are rewarded with superior performance. The results provide a firm-level evidence which consistent with the view that corporate governance helps explain firm performance during a financial crisis. Thus, this paper posits hypothesis:

H6: There is positive association between financial crisis and anti corruption and bribery mechanism.

3 METHODOLOGY AND DATA

3.1 Data Sample

The anti-bribery and corruption in this study are binary variables of "1" if the firm complies with the governance principle or fulfills the requirement or "0" otherwise. The sample consists of 135 Indonesian public listed companies and the observation period spans from 2003 to 2013 (11 years). Since the Indonesian firms' corporate governance data are not readily available, samples data were collected manually from corporate annual reports and financial statements, websites of the Indonesian Stock Exchange, the Indonesia Capital Market Institute, and other publicly available documents. Firms with missing data on financial reports and the financial sector are excluded from the dataset. Finally, this generates a total of 1,485 firm observations. Hence, the estimate of the anti-bribery and corruption mechanism is as follows:

Anti-Corruption and Bribery, $t = \text{Dummy of "1" or "0" to represent firm compliance in enacting anti-corruption and bribery policies, "0" otherwise.}$

Table 1 presents the definition of the variables employed in this study. Independent variables are progressively divided into four categories: firm type and ownership structures, firms' financial characteristics, family control, and binary variables of the crisis years (2008-2009).

3.2 Econometric Methodology

Following previous studies, this study applies the logistic regression model to assess the link between the governance index and its determinants (Aren et al., 2014; Samaha et al., 2012; Stone and Rasp, 1991). The logistic model has become more critical in recent financial management and corporate governance literature, especially when the researchers need to examine binary or dichotomous dependent variable (Hoetker, 2007). Hence, the present study formulates the dependent variable as firms with high index scores or low scores. The probability of a firm complies with the principles ($y=1$) can be written as follows:

$$P_{1} = E(y = 1) = \frac{e^{\beta' x}}{1 + e^{\beta' x}} \quad [1]$$

Following the model, the function of the probability that a firm discloses an in anti-bribery and anti-corruption mechanisms are as follows:

$$\text{Anti-Bribery and Anti-Corruption} = \alpha + \beta_1 \text{ Firm Type and Ownership Structure} + \beta_2 \text{ Crony} + \beta_3 \text{ Financial Characteristics} + \beta_4 \text{ Crisis} + \epsilon \quad [2]$$

The objectives of this study are divided into two parts, as follows: (1) to examine the determinants of high ICGI score, and (2) to examine the determinants of high sub-index score in the family-controlled firms and non-family firms.

Table 1 Definition of Variables.

Variables	Acronym	Explanation	Expected Sign
Anti Corruption and Bribery Policy	ANTICOR	A dummy variable that equals one if the firm has internal anti-corruption and bribery mechanisms, 0 otherwise	
Family Firm	FAMFIRM	Dummy variable that equals one if the family holds a minimum of 10% (or 30%) stakes and the family members hold any position in the boards, and zero otherwise	-

Family members in the boards	CRONY	Total number of family shareholders generations in the board of directors and board of commissioners	+/-
Age of the firm	AGE	The observation period minus the date of the establishment of the firm (in years)	+
Size	SIZE	Book value of total assets (in IDR billion)	+
Tobin's q	TQ	The market value of common equity plus the book value of total assets minus common equity and deferred taxes divided by book value of total assets (market valuation of a firm's assets)	+
Return on Assets	ROA	Net income divided by total assets	+
Price to Book Value	PBV	Price to book value ratio	+
Age of the firm	AGE	Years since inception	+
Size of the firm	SIZE	Assets per IDR 1 trillion	+
Sales	SALES	Annual sales (revenue) per IDR 1 trillion	+/-
Operating Expense	OPEX	The ratio of total operating expenses to sales	+/-
Debt to Equity Ratio	DER	The ratio of total debt to equity	+
Block holders	BLOCKSHARE	The percentage of shares in the hand of the largest shareholders	-
Family Shareholders	FAMSHARE	The ratio of the total shares owned by the controlling family	-
Financial crisis	CRISIS	Dummy variable that equals one for the year 2008 and 2009, and zeroes otherwise	+
Size of the BoC	COMSIZE	Total members of the board of commissioners	+
Size of the BoD	DIRSIZE	Total members of the board of directors	+/-
Independent Commissioner	INDCOM	Total number of independent commissioner(s)	+
Independent Director	INDDIR	Total number of independent director(s)	+

4 EMPIRICAL FINDINGS AND ANALYSIS

4.1 Descriptive Statistics and Logistic Model Results

Table 2 summarizes statistics descriptive for Indonesia listed firm-samples. The mean of the total firm-samples is 5.7%, indicating a very low compliance ratio of the firms.

The first research question is, "What are the determinants of firm-level anti-corruption and bribery mechanism in Indonesia?" Positive impacts of the firm's financial characteristic in Table 2 are represented by price to book value ratio, firm size, and age. These variables correspond significantly with higher anti-corruption and bribery policy. Corporate governance mechanism, as shown by the board of commissioner (supervisory boards), also presents a positive and significant coefficient. This finding highlights the importance of supervisory

board roles and function in monitoring the organs of the firms and the application of corporate governance provisions by the management of the firms.

Conversely, the size of the firm, and leverage ratio negatively influences the firm's behavior to comply with the governance provision. In addition, the independent commissioner also correlates negatively with the likelihood of the firm to set and manage anti-bribery and corruption policy. In addition, another important note taken from this article is that financial crisis negatively affects firms' efforts to introduce and enforce corruption and bribery prevention measures.

Table 3 summarizes results for three dummy variables of firm types (widely held firm, foreign firm, and state-owned firm). Results of these variables provide confirmation of the poor compliance by family-controlled companies. On the other note, coefficients of the foreign firm and state-owned firms are positive and significant, showing

that these two institutions are more likely to engage in the active anti-bribery and corruption implementation.

Findings from two sample groups (non-family versus family firms) are summarised in Table 4. In terms of family firms, the most important factor for high compliance to governance provisions is the firm size. This may translate into a conclusion that adherence to corporate governance may be costly; thus, bigger sized firms might be more resourceful to set up and manage anti-corruption and bribery prevention mechanisms. The negative influences come from family ownerships and revenues.

Non-family firms, on the other note, are more inclined to have anti-corruption and bribery mechanisms if they were highly valued, older, and bigger sized institutions. Higher valuations from the market have a positive influence on non-family firms to fully comply with the governance provisions set by the market regulator.

4.2 Robustness Test

The objective of the article is to find contributing factors of anti-corruption and bribery mechanism by utilizing the logistic regression. Logistic regression was selected to minimize the classic econometric problems found in the corporate governance studies, such as endogeneity and reverse causality. Previous literature has tested several robustness checks for logistic and probit models, and the results showed that bias and misspecification from both models are considered minimal or insignificant; thus, the results

of logit and model can be regarded as quite robust (Cramer, 2007).

In addition, unlike the linear mode, the robustness tests for non-linear probability model such as logit and probit are hard to construct since the coefficients of the logit and probit may change with the variation of the models. The interpretations of the coefficients of the logit are also different from the linear model (e.g., OLS, fixed-effect). To ensure model specification and the fitness of each model, the author runs several tests, e.g., link test, goodness-of-fit test (estat gof), and the classification statistics (estat classification) in the STATA operations.

Moreover, the author argues that there are significant characteristic differences between family and non-family businesses. It seems that non-family firms are concerned with market (equity) values than the family firms. Higher equity, a proxy of a firm's market value, positively influences non-family firms to comply more with the market regulations and policies. This study suggests that non-family firms are motivated to send a positive signal to investors and markets by adopting anti-corruption and bribery codes. In return, the market is willing to give a higher or premium price to the firm's share prices and assets. In the family companies, the level of concentrated ownerships owned by the family negatively correlates with anti-corruption provisions. During financial distress and higher market uncertainties, family firms are also less likely to engage in corruption and bribery preventive measures.

Table 2 Statistics Descriptive

Dependent Variable	Mean	St. Dev	Min	Max
Anti-Corruption and Bribery Policy	0.057	0.231	0.000	1.000
Independent Variables	Mean	St. Dev	Min	Max
Tobin's q	1.338	0.893	0.142	4.465
RoA	0.062	0.087	-0.310	0.310
PBV	2.040	5.472	-0.834	167.556
Age	33.985	19.455	4.000	154.000
Size	5.569	14.949	0.017	213.994
Sales	0.239	2.503	-0.862	95.380

Opex	4.900	13.143	0.000	193.880
Debt	0.259	2.337	0.008	89.400
Blockholder	1.616	2.531	0.000	27.547
Family shares	50.052	21.665	3.130	99.740
Crony	30.255	31.218	0.000	98.000
Crisis	4.422	1.944	2.000	14.000
Comsize	4.924	2.104	2.000	13.000
Dirsize	1.537	1.050	0.000	7.000
Indcom	0.127	0.535	0.000	7.000
Iddir	1.338	0.893	0.000	4.465

5 IMPLICATIONS OF THE FINDINGS

The logistic regression models presented in Table 3 shows the determinants of anti-bribery and corruption mechanism in the firm-level dataset. Taking into account the findings, the author argues that the key factors of governance are firm size, age, and the size of the board of commissioners. Bigger

and older firms (probably also the market leader in the industry) are more likely to comply with the regulations than smaller-sized corporations. Profitable and healthy firms also comply more, as shown by the coefficient of price-to-book value (PBV) ratio. In contrast to these results, sales, debt, financial crisis, and independent commissioners negatively influence firm's decision to be in compliant with the good governance provision.

Table 3 Logistic Regression Results of the Anti Bribery and Corruption

VARIABLE	Y=1 if a firm has anti-bribery and anti-corruption mechanisms, "0" otherwise				
	Coeff.	Std. Err.	Sig.	Odds Ratio	Std Err.
Widely-held Firm	0.0699	0.9317		1.0724	0.9991
Foreign Firm	1.8408	0.8473	**	6.3015	5.3390
State-owned Firm	4.3548	0.8926	***	77.8527	69.4893
Tobin's q	0.2209	0.2036		1.2471	0.2539
RoA	-1.9757	2.0487		0.1387	0.2841
PBV	0.0309	0.0109	***	1.0314	0.0112
Age	0.0199	0.0073	***	1.0201	0.0074
Size	0.1333	0.0227	***	1.1426	0.0260
Sales	-0.1574	0.0256	***	0.8543	0.0219
Opex	-0.0408	0.8022		0.9600	0.7701
Debt	-0.1315	0.0604	**	0.8768	0.0529
Blockholder	-0.0120	0.0085		0.9881	0.0084
Family shares	0.0135	0.0091		1.0136	0.0092

Crony	0.0350	0.0964		1.0356	0.0998
Crisis	-2.4955	0.6478	***	0.0825	0.0534
Comsize	0.3008	0.1179	**	1.3510	0.1592
Dirsize	-0.0928	0.1044		0.9113	0.0952
Indcom	-0.4051	0.2051	**	0.6669	0.1368
Inddir	-0.1423	0.2698		0.8674	0.2340
Year dummy	Included				
Log Likelihood function	-168.8384				
Prob (Chi2>value)	0.0000				
Pseudo r-squared	0.4633				
Chi-square	231.36				
Number of obs	1350				
Goodness of fit	Yes				
Link test	Yes				

Note: The table represents results of the logistic regression, showing variables that have significant influences on anti-bribery and corruption mechanism. Y equals 1 if the firm has an internal mechanism to prevent and deter corruption and bribery offenses.

Table 4 Differences between Non-Family Firms and Family Firms

VARIABLE	Model 1: Family Firms					Model 2: Non-Family Firms				
	Y=1 if a firm has anti-bribery and anti-corruption mechanisms, "0" otherwise					Y=1 if a firm has anti-bribery and anti-corruption mechanisms, "0" otherwise				
	Coeff.	Std. Err.	Sig.	Odds Ratio	Std Err.	Coeff.	Std. Err.	Sig.	Odds Ratio	Std Err.
Tobin's q	0.386	0.215		1.472	0.317	0.378	0.276		1.460	0.402
RoA	-0.009	2.397		0.991	2.376	-3.364	3.959		0.035	0.137
PBV	0.003	0.030		1.003	0.031	0.042	0.016	**	1.043	0.017
Age	0.010	0.007		1.010	0.007	0.047	0.011	**	1.048	0.012
Size	0.080	0.021	***	1.084	0.023	0.330	0.063	*	1.391	0.088
Sales	-0.080	0.025	***	0.923	0.023	-0.359	0.071	*	0.698	0.049
Opex	-0.015	0.048		0.986	0.047	-3.769	2.389		0.023	0.055
Debt	-0.107	0.080		0.899	0.072	-0.589	0.425		0.555	0.236
Blockholder	0.013	0.008		1.013	0.008	0.010	0.012		1.010	0.012
Family shares	-0.012	0.006	**	0.988	0.006					
Crony	-0.091	0.085		0.913	0.077					
Crisis	-1.693	0.847	**	0.184	0.156	-0.913	1.472		0.401	0.590
Comsize	0.349	0.144	**	1.417	0.204	-0.019	0.208		0.981	0.204
Dirsize	-0.010	0.120		0.990	0.119	0.010	0.154		1.010	0.155
Indcom	-0.364	0.228		0.695	0.158	-0.520	0.404		0.595	0.240
Inddir	-0.272	0.337		0.762	0.257	Omitted			omitted	
Year dummy	Included					Included				

Log Likelihood function	-124.85144	-49.137038
Probability (Chi2>value)	0.0000	0.0000
Pseudo R-squared	0.3412	0.5894
Chi-square	140.55	74.78
Number of observation	887	411
Goodness of fit	Yes	Yes
Link Test	Yes	Yes

In contrast, there is no evidence that financial performance (such as negative income or loss) might lower the probability of the firm to comply with market governance regulations. Regarding firm size, the finding depicts a positive relationship between firm size and compliance quality.

This study also identifies that impacts of family share ownerships and the block-holders are not significant, as well as the involvement of family shareholders (CRONY) in the boards.

The results of this study offer some policy implications for the academic community and policymakers. The short-term national agenda might be started by policymakers and regulators; they can design policies or specific anti-corruption and bribery programs for small-sized and young firms. The author expects that firm-level governance issues will soon be more vital; thus, a designated body or task force to monitor and evaluate governance practices and to design specific benefits for high-compliant companies will be beneficial in the long run.

6 CONCLUSIONS

The incidence of corporate failures and economic crisis in the past decades possibly was the major reason for the emerging phenomenon of ethical and transparent business practices in the global market. Scholars and large corporations have seen good governance as an effective mechanism to restore confidence and trust from the market and key stakeholders.

This study constructs a test to observe the determinants of firm-level anti-corruption and bribery mechanism. The anti-corruption and bribery index is constructed using the Indonesian public listed firms' datasets comprising 11 observation periods. The logistic regression model has been

chosen since the tested dependent variables are dichotomous or binary variables.

The purpose of this study is to present empirical findings on the determinants of firms' anti-corruption and bribery efforts in the context of the emerging Indonesian market. The author believes that this study will be beneficial for various parties, including policymakers, market regulators, and corporations in strategic decision making. Empirical results from the present study suggest that firm size, age, and supervisory board have sizeable and significant influences on bribery and corruption prevention system.

Results of the study support theoretical arguments that family businesses are plagued with issues of poor governance compliance. In the meantime, market and regulatory authority should design effective methods to promote and compensate for high compliance and engagement in a sound and transparent business environment. The author expects that the findings and discussion from this study to enhance the understanding of anti-corruption and bribery development and the actual adoption in Asia as the region with the most rapid corporate governance adoption.

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