

# The Informative Value of CG Code Voluntary Disclosure on Firm Performance When Moderated by External Auditors

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**Abstract:** - The study aims to empirically examine the voluntary disclosure of the corporate governance code (CG Code) of Thai-listed companies. It also examines the effects of the information value of the CG Code on firm performance and the moderating role of external audit quality in this effect. A disclosure specification comprising 137 voluntary items recommended by the OECD is employed to judgmentally evaluate the CG Code disclosed by the 95 fully implementing firms listed on the Stock Exchange of Thailand. The analysis is performed using multivariate regression techniques along with Hayes's regression-based analysis and shows that CG Code and audit quality have a statistically significant positive effect on firm performance. In addition, audit quality was found to moderate the positive effect of the CG Code on firm performance, such that the effect of the CG Code on firm performance is strengthened as the quality of audits increases. Specifically, the positive effect of CG Code on firm performance is stronger when the audit quality is at the average value and above, whereas CG Code shows no statistically significant effect on firm performance when audit quality is below average. The paper has contributed to the academic literature that managers should be motivated to voluntarily disclose the CG Code and also engage with high-quality auditors in general and Thailand in particular.

**Key-Words:** - Corporate Governance, SET, Tobin's Q, Firm Performance, Audit Quality, Moderating Effect

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## 1 Introduction

This study extends previous research on the voluntary disclosure of corporate governance using Thai-listed companies on the Stock Exchange of Thailand (SET). In 2017, with the recommendation of the OECD, the SET announced the Corporate Governance Code (CG Code) which was developed from the worldwide recognition of the Corporate Governance Principle. This is because the board responsibilities stated that the principles are too general and also do not state board responsibility in specific ways. Unlike 'Comply or Explain', the CG Code introduces 'Apply or Explain' to encourage Thai-listed companies to fully implement the Code voluntarily, [1]. The studies on the CG Code voluntary disclosure have not been carried out on a wide-range basis, especially in emerging markets.

This opens research opportunities that once the listed companies voluntarily comply with the CG Code, how the implementation creates any benefit to companies. Voluntary disclosure generally states the information beyond the obligatory content in publicly available information. Generally, voluntary disclosure is to reveal more information as management deems it appropriate, [2]. Previous studies have carried on voluntary disclosure for quite a while, [3], however, the voluntary disclosure of the CG Code is rare. This study proudly introduces the judgmental evaluation method of CG Code disclosure 137 checklists. In addition, the study extends previous studies by adding audit quality as a moderating role between CG Code voluntary disclosure and firm performance (Tobin's Q). In other words, companies are expected to

voluntarily disclose information when management perceives benefits over costs of doing so. Also, the engagement of qualified auditors, as an outside observer, should be considered as a monitoring party. These two vehicles should finally increase firm performance.

Consequently, the main objective of this study is initially to investigate the informative value of the new development of the CG Code voluntary disclosure. Furthermore, the study intends to extend the previous studies by introducing the moderating effect of audit quality on the affiliation between the CG Code and Tobin's Q. Presumably, the influence of the CG Code on firm performance will increase when moderated by audit quality. The study is based on 95 listed companies in SET. All of these companies have fully adopted the CG Code voluntarily in 2021. The voluntary disclosures of the 95 listed companies are critically reviewed. The inferential statistics show that audit quality moderates the impact of the CG Code on firm performance; firms with higher audit quality are more likely to have the impact of the CG Code contribute to higher firm performance. This study is the first to empirically examine the practice of voluntary disclosure CG of Thai listed companies. The study should reassure other listed companies in emerging markets to increasingly adopt the CG code.

## 2 Research Paradigms and Theoretical Orientation

### 2.1 Information Asymmetry Theory

Information asymmetry is a fundamental concept in security markets. It occurs when the management team has information more than outside parties (i.e. investors, creditors). Generally, information asymmetry has been a concern for capital market researchers because it indicates corporate integrity, and reliable traits for corporate transparency, [4]. However, corporate transparency is unable to be experiential directly, and with traditional measures, therefore stakeholders mostly focus on information disclosure and firm fundamentals, [5], [6]. Corporate disclosure is classified into voluntary and mandatory disclosure. Mandatory disclosure includes financial reporting, management meetings, and regulatory filing which are significant information that management shares information about their firm performance and corporate government with outsiders. On the other hand, voluntary disclosure is no pattern. It depends on

what the management team expects and what should be beneficial information disclosed to the public, [2]. The studies, [7], [8], inserted that if companies provide reliable disclosures about their value to the public, the companies will totally disclose information regarding how good or bad the information is. Previous studies have theorized that the purpose of voluntary disclosure is to control the interest conflicts among stakeholders: investors, creditors, and management, [9], [10]. The study, [11], concluded that the aim of voluntary disclosure is as follows: 1) to meet certain financial targets, 2) to get favor in stock markets, 3) to reduce the cost of litigation and 4) to show awareness of the economic environment of firms and enable rapid changes.

### 2.2 Agency Theory

Corporate governance is created under the agency theory stating that it is the method of designing contracts that can stimulate rational agents (management team) to operate on behalf of principals (shareholders) when the agent's benefits conflict with the principal's benefits. If both parties have conflicting benefits, where the agent does not operate according to the owner's benefits, this conflict can be reduced by the agent's cost. This means the total cost of control and supervision by the owner through the board of directors, institutional rights, and public rights in terms of dividend payments and supervising stock prices for organizational issues, [12], [13]. The notion of good corporate governance is expected to be a tool for building investor confidence that they will receive returns on their investments. In, [14], the authors state that good corporate governance involves the method of controlling managers by investors to provide benefits and act honestly in managing the company's resources. In, [15], the authors revealed that it is necessary to have a good corporate governance system so that managers can supervise and advise on investments and manage the resources of the organization. Finally, in, [16], the authors state that good corporate governance is important for business continuity and sustainability. Corporate governance provides transparency in responding to different stakeholders, such as business partners, customers, and creditors. The main objectives of corporate governance are to promote responsibility, transparency, fairness, and disclosure, which are fundamental values for the success of every business.

### 2.3 Auditor-inspired Confidence Theory

Auditor-inspired confidence theory describes an auditor as a confidential agent who expresses an expert judgment and opinion based on the audit work. This theory establishes a linkage between the financial statement users for reliable financial reports and the audit work's capability to meet those needs. As a result, auditors must be aware that the public expects audit failure rates to be low. As a result, auditors must plan and carry out their audits in such a way that the risk of unnoticed material misstatements is kept to an acceptable level. Therefore, auditors conduct their work in a way that does not deceive their trust, [17]. The main significance of this theory is that the auditor's duties and responsibilities are derived from the public's confidence and trust in the audit's success and the auditor's assurance. In, [18], [19], the authors concluded that society's trust in audited financial reporting is misled when the audit reports do not address misstatements and errors, resulting in a loss of the audit's informative value.

## 3 Development of Corporate Governance in Thailand

Since the 1997 economic crisis that occurred in Thailand, which has continued to cause damage to the capital market, it has seen an urgent need to recover the Thai capital market; therefore, the Master Plan for capital market development was established. At the conference, representatives from the private sector and government agencies provided many useful ideas. One of the key measures that the meeting paid special attention to was creating good corporate governance in the capital market in listed companies, intermediary institutions, as well as in regulators. Later, the government officially announced the year 2002 as the starting year of a good corporate governance campaign. The government has established the National CG Committee. This committee has a policy for various departments to promote good corporate governance and organize corporate governance as a National Agenda. Finally, at the beginning of 2004, Thailand participated in the World Bank's Corporate Governance Assessment Program. It is intended for both domestic and international investors to be well informed about the corporate governance development regarding the supervision of the capital market. The Thai Securities and Exchange Commission acts as a liaison between representatives of Thai banks and various agencies involved in the capital market. The criteria used by

the World Bank in assessing Thailand are based on the OECD Principles.

In 2006, the SET proposed corporate governance principles for listed companies that are comparable to the OECD's corporate governance principles. Later in 2012, it was revised again to follow the ASEAN Corporate Governance Scorecard, which is classified into 5 sections: 1) Rights of shareholders, 2) equitable treatment of shareholders, 3) roles of shareholders, 4) disclosure and transparency, and 5) board responsibilities. The Thai capital market has used good corporate governance principles set by the SET as an important mechanism for enhancing CG in listed companies from the beginning to the present, which has achieved great success for some time. However, many wrong-doing cases have become more serious relating to corporate governance scandals.

In 2017, SET adopted the concept of the Corporate Governance Code (CG Code) based on the OECD. SET stated that board responsibilities should take more important roles in setting policies and monitoring operations. Also, the 5 Principles are too general and do not state specific board responsibilities. Unlike 'Comply or Explain', the Code introduces the 'Apply or Explain' measure to the main concept of corporate governance under the context and suitability for Thailand specifically for the board of directors. The board can use its discretion to consider and apply the principle appropriately for the benefit of sustainable business value creation, not just comply with the regulatory requirements. The CG integrates social and environmental issues into business processes, from determining strategic directions, operational processes, monitoring, and reporting, ensuring long-term business performance, and creating reliability for investors, stakeholders, and people around, for the benefit of creating maintainable business values as the expectations of businesses, investors, capital market and society, [1]. In summary, the CG Code is a practical standard for the board of directors by aiming for the business to have good performance about long-term continuity responsibility to stakeholders as well as adaptability under various changes. The CG Code consists of 8 principles shown in Table 1.

Table 1. Corporate Governance Code (CG Code) category and its practical issues

	Items	Practical issues
Set objective	Principle 1: Establish clear leadership roles and responsibilities for the board	8
	Principle 2: Define objectives that promote sustainable value creation	10
Carry out the specified objectives	Principle 3 Strengthen board effectiveness	44
	Principle 4 Ensure effective CEO and people management	14
	Principle 5 Nurture innovation and responsible business	9
Follow up, evaluate performance, and disclose information	Principle 6 Strengthen effective risk management and internal control	21
	Principle 7 Ensure disclosure and financial integrity	14
	Principle 8 Ensure engagement communication with shareholders	17
	Total	137

## 4 Literature Review

### 4.1 Affiliation between CG and Firm Performance

Prior research has verified the affiliation between corporate governance and firm performance for many years. The latest studies still support the information content of CG on firm performance. For example, [20], found that obedience to corporate governance principles improved to firm's financial performance and added more intangible value to the firm; thus, good corporate governance safeguards the organization's board of directors to regularly operate business, preserve control over the business, and has transparency responsibilities. In addition, it assures a strong risk management system. In, [21], the authors pointed out that good corporate governance not only helps promote the company's activities, increasing the ability to access external financial resources but also encouraging the company to create business value and control systems in responding to risk events. In, [22], the authors stated that corporate governance balances interests between shareholders, management, and

other stakeholders. The approach was to reduce conflicts of divisions and increase investor trust, stable goodwill, shareholder wealth, and investment opportunities. Finally, [23], found that corporate governance and working capital had a positive effect on firm performance and also increased Tobin's Q.

Previous studies of CG in Thailand have been carried out for some time. In, [24], the authors studied corporate governance in Asia. The study showed that Tobin's Q in all countries (except Korea) has a median value equal to 1. In, [25], the authors inspected the influence of voluntary corporate governance initiatives on the value of the company in the context of emerging markets of Thailand, based on the "Comply or Explain" corporate governance approach. The results showed that a deviation depended on a firm size and also increased firm value. The results indicated that voluntary adoption in emerging markets had typically no substantial effect on firm value. The study, [26], examined whether or not companies leverage the flexibility of an information disclosure system based on the "Comply or Explain" approach to properly apply governance practices for the company's value-creating requirement according to the company's economic theory. The study found that audit measures had a positive relationship with the company's value and higher operational efficiency. In addition, the inspection results found that companies applying the "Comply or Explain" approach do not exercise discretion in avoiding improving the company's corporate governance compliance. It is concluded that the "Comply or Explain" approach provides tangible financial benefits to shareholders in terms of company value and higher return on investment in shareholders' shares. Finally, in, [27], the authors found a positive link between the ROE and ROA and the corporate governance of Danish companies under "Comply or Explain". In summary, previous studies have satisfied the information content value of CG over firm performance. However, the recent development of the CG Code in Thailand and all other emerging markets is not in wide-range consideration. Therefore, this study offers a new study hypothesizing as follows:

Hypothesis 1: CG Code is positively associated with firm performance (Tobin's Q).

### 4.2 The Informative Value of Audit Quality on Firm Performance

Auditing standards state that auditors are required to express their opinion on whether financial reporting

is presented fairly. Based on the requirement, auditors must obtain reasonable assurance that financial reporting as a whole is free from material misstatement of information whether due to fraud or error. This occurs when the auditor collects adequate and appropriate audit evidence to lessen the risk of auditing or the risk that the auditor expresses an improper opinion on the financial reporting, [28]. This means auditors have a direct responsibility to verify financial reporting whether the statements are presented fairly or not. In addition to the professional standards, economic development is specified in terms of investment activities which depend on the financial stability of companies. Therefore, financial positions and operational results representing financial stability are important information for stakeholder decisions. As a result, financial quality disclosed in financial statements is necessary to make the information transparent and to eliminate ambiguity. An audit report acts as a communication medium between investors and management. This means audit quality is very important to stakeholders, [29]. The study of audit quality was first presented by, [30]. In the study, the joint probability of a particular auditor detecting a violation of the accounting system of the clients and reporting this violation is given as the market value. In, [31], the authors expanded the definition of audit quality to the level at which the set of inherent characteristics of an audit meets the requirements. Therefore, the audit process will assess the probability of material misstatement and decline the possibility of misstatement to an appropriate level, [10]. Therefore, it is recognized that audit quality has an impact on financial reporting and has a strong effect on investor confidence, [32]. In addition, external auditors play an important and challenging role in ensuring the reliability of financial reports, [33], [34].

Previous studies have been carried out to investigate the informative value of audit reports. Proxies representing audit quality have been defined such as audit firm type (Big 4), and audit fees. In, [35], the authors used Malaysian listed companies to evaluate the impact of audit quality on firm performance. They used audit firm rotation and audit fees as audit quality proxies, while ROA and Tobin's Q were used for firm performance. The study concluded that audit quality was significantly related to ROA and Tobin's Q in a negative manner. In, [36], the authors examined the impact of the quality of firms' auditing and accounting standards on financial performance in Malaysia during 2010-2013. The study found that compliance with

financial reporting standards, disclosure of related information, and audit firm size are positively correlated with financial performance. In, [37], the authors conducted a study examining the impact of audit quality (i.e., multinational audit firms) on stock price. They found that high-quality auditors provided high-quality financial reports. In, [38], the authors found that the higher the audit fees charged, the better the reputation of an audit firm. The higher the quality of audit services, the more trustworthy the information provided to users of financial statements. Listed companies were more willing to pay above-average audit fees to reputable audit firms. To avoid the risk of material misstatement and thus harm to the company's reputation, a company with a high reputation would inevitably increase audit investment, which also led to an increase in audit costs. In summary, to provide clarity on whether audit quality has an impact on business performance, especially for companies listed in emerging markets, where social, political, and economic changes are expected to have a direct impact on the business. As a developing country, audit confidence is so important that investors cannot ignore it.

Although many researchers examined that audit quality has a significant relationship with firm performance, many other researchers found that it does not correlate with the company's firm performance. For example, [39], found that there were conflicts concerning the impact of the auditor's position on the audit quality. This study found that the relationship of the audit firm with customers and the size of the organization has a significant influence on the audit quality, while the higher auditor's position adversely affects the audit quality. When extending the auditor's operational period, the audit quality will decrease due to the growth in the scope of the accrual at the discretion. To increase the quality of the audit and the independence of the auditor, the organization should circulate the audit firm so that the audit can be done with care. Improving audit quality is important for companies to maintain investor confidence in financial performance.

In this study, audit quality refers to the audit fees in which the auditor has used the ability, skills, expertise, advanced consulting, and experience in auditing financial reports for the company to build credibility and confidence among users of financial reports. Audit fees also contain auditors applying audit processes and quality control procedures required by laws, regulations, and accounting and auditing standards. Previous studies show that

higher audit fees measured higher audit quality. Therefore, there is no unambiguous support hypothesis that audit quality is associated with firm performance as follows:

Hypothesis 2: Audit quality is positively associated with firm performance.

### 4.3 Moderating Effects of Audit Quality

As mentioned in Section 4.2 auditors have direct responsibility to verify financial statements whether the statements are presented fairly or not. Also, auditors have an indirect responsibility to verify financial statements. Because auditors must consider whether the audit of the financial reporting reveals any deficiencies in internal controls from the performance of the audit. If auditors discover any deficiencies in internal control as a result of performing the audit, auditors must consider whether individual deficiencies or combinations of deficiencies are causing significant deficiencies that affect financial statements or not. Then, auditors must timely inform, in writing, any substantial deficiencies of internal control identified during the audit to those charged with governance, [40]. This means that auditors have a moderating role via those charged with governance to management. Then, management uses the information to improve companies' operations. This is considered as a moderating role to improve firm performance.

Previous studies investigating the moderating role of external auditors are quite a few. For example, [41], aimed to find empirical evidence on the impact of shareholder activism on earnings management. It is specifically interested in the moderating role of external auditors. The study used a sample group of 77 firms from the French Stock Market from 2008 to 2012. The study found that external auditors played a moderating role between shareholder activism and earnings management. The study, [42], studied audit quality as an efficient control and monitoring mechanism that protects users from opportunistic behavior and management misconduct. The companies listed on the Stock Exchange of Tunisia from 2013 to 2016 were used for the study. The study found a negative relationship between CEO compensation and tax avoidance in well-audited companies. In addition, audit quality as a moderating role also supported the association between CEO compensation and tax avoidance.

From the review of the literature, audit quality could be considered as an independent variable (direct effect) and a moderate variable to firm performance. The direct effect means auditors

express opinions on whether financial statements are presented fairly, while auditors communicate deficiency of internal controls to those charged with governance (i.e. audit committees) to improve internal control deficiency; otherwise, these deficiencies will affect financial statements as a whole. This role can be considered as a moderating role of auditors to the relationship between internal controls to those charged with governance and firm performance. Thus, the hypothesis can be developed as follows:

Hypothesis 3: Audit quality influences the effect of the CG Code on firm performance, such that the effect of the CG Code on firm performance is stronger for firms with higher audit quality.

### 4.4 Control Variables

#### 4.4.1 Profitability

The profitability ratio indicates how successful a business is in generating profits during a given period. One way to evaluate performance is through profit, where the profit and loss statement is a financial statement that indicates the financial status of a company for a certain time period. The profitability ratio is important because it can attract investor interest when a business is profitable. When a business generates good profits, it shows investors that the company is likely to operate smoothly in the future, which can instill confidence and encourage investment. Generally, communities with a broader scope will measure the success of a company or organization based on the company's ability to manage efficiently, [43]. Therefore, in this research, we will use profitability as a control variable in the part of firm performance.

#### 4.4.2 Investments

Property, plant, and equipment (PPE) are long-term investments of companies. PPE is a measure of the efficiency of generating revenue and cash flow in the future. The higher the PPE, the more efficient our investment will be. Companies investing in PPE are considered as a good sign for investors because they are significant investments for future economic benefits. Purchasing PPE is a sign that management is confident in the long-term outlook and profitability of companies. Therefore, in this study, PPE is used as a control variable in the part of firm performance.

## 5 Research Design

### 5.1 Samples and Analysis

The total number of companies listed on SET is 575 companies as of 31 December 2021. These listed companies voluntarily and fully adopted the CG Code of 97 companies (16.5%). However, only 95 companies are used in the analysis regarding incomplete data. Then, data collection is performed based on publicly available information including annual reports, financial reporting, and all required reports as listed companies.

This study mainly focuses on the moderating effect of audit quality on the association between the CG Code and Tobin's Q. Presumably, the impact of CG Code on firm performance will increase when audit quality is considered as a moderating variable. A moderating variable is used because the study assumes that auditors play an important role in reviewing corporate governance to assess whether financial statements are presented fairly, and when they find deficiencies in corporate governance that affect the financial position and operations, they report these deficiencies to those responsible for governance. This means that auditors play a moderating role in improving corporate performance and should be considered as a moderating variable, [44], [45].

### 5.2 Scoring of CG Code Disclosure

In this study, the CG code is evaluated to match the more meaningful information with the more practical items. The level of practice is determined using the OECD-recommended guidelines for corporate governance principles (CG Code). The study covers all 137 practical aspects of the CG Code Manual and establishes evaluation criteria that focus on the company's disclosure results. Following the modified Likert scale, the results are classified into 5 levels: 5 = full disclosure, 4 = extensive disclosure, 3 = moderate disclosure, 2 = little disclosure, and 1 = least disclosure, [46]. Then, the voluntary disclosures of the 95 listed companies are subjected to a critical review, the results of which are presented in Table 4.

### 5.3 Measurement, Hypothesis and Regression Models

The information asymmetry is the fundamental concept of this study which adopts Tobin's Q as the dependent variable. Tobin's Q resulted from stock prices times the outstanding common shares. Therefore, once bad or good news is announced, stock prices should reflect from these events, [47].

Furthermore, the study aims to investigate the information value of voluntary disclosure as news announced to stock markets. In, [7], [8], the authors inserted that if companies provide reliable disclosures to the public, the companies will totally disclose information regardless of how good or bad the information is. The study, [11], concluded that one of the aims of voluntary disclosure was to get favor in stock markets. Recently, corporate governance, under the agency theory, has introduced a new development called the CG Code voluntary disclosure in the Stock Exchange of Thailand. This opens the opportunity to carry out a study on whether the CG code provides the information value to firm performance or not. Therefore, Hypothesis 1 is developed. In addition to the CG Code voluntary disclosure, the auditor-inspired confidence theory is employed. In, [18], [19], the authors stated that when audited financial reporting is misled because the audit reports did not address misstatements and errors, this resulted in a loss of the audit's informative value. This comes to Hypothesis 2.

Hypothesis 3 comes from the belief that when auditors plan their audit procedures, they are required to scrutinize all information relating to their clients to assess the overall risk. One of the sources of risk assessment information is corporate governance activities, [48]. In other words, the efficiency of auditors may or may not directly affect firm performance. They assess clients' risk using corporate governance information, as a result, the corporate governance disclosure reflects the stock price. Table 2 summarizes the variables in this study.

Table 2. Summary of variable, measurement, and expected sign

Variable	CODE	Measurement	Expected sign
Tobin's Q	TBQ	Market value of shareholders' equity and book value of total liabilities to total assets	
Corporate Governance Code	CG Code	Total weighted score to total scores	+
Audit Quality	AQ	Audit fee divided by total assets	+
Profitability	PROFIT	Profit (loss) before tax to total assets	+
Investment	INVEST	PPE to total assets	+

The following are the multiple regression models to assess the impact of independent variables on Tobin's Q and to test the related hypotheses:

Hypothesis 1: CG Code is positively associated with firm performance (Tobin's Q).

$$TBQ_i = \beta_0 + \beta_1 \text{CG Code} + \beta_2 \text{PROFIT}_i + \beta_3 \text{INVEST}_i + \varepsilon_i \quad (1)$$

Hypothesis 2: Audit quality is positively associated with firm performance.  $TBQ_i = \beta_0 + \beta_1 \text{CG Code} + \beta_2 \text{AQ} + \beta_3 \text{PROFIT}_i + \beta_4 \text{INVEST}_i + \varepsilon_i$  (2)

Hypothesis 3: Audit quality affects the effect of CG Code on firm performance, such that the effect of CG Code on firm performance is stronger for firms with higher audit quality.

$$TBQ_i = \beta_0 + \beta_1 \text{CG Code}_i + \beta_2 \text{AQ}_i + (\beta_3 \text{CG Code}_i \times \text{AQ}_i) + \beta_4 \text{PROFIT}_i + \beta_5 \text{INVEST}_i + \varepsilon_i \quad (3)$$

## 6 Findings

The following section is to explain the outcomes of this present study. The explanation begins with descriptive statistics indicating the characteristics of the variables. Next, correlation matrix and multicollinearity tests are shown. The result indicates simple correlations among independent variables. Then, multivariate regression outcomes are displayed. Finally, the outcome of the PROCESS macro to investigate the level of moderating effect of the interesting variable is scrutinized.

### 6.1 Descriptive Statistics

Descriptive statistics of variables are shown in Table 3. It is found that firm performance (TBQ) is averaged at 1.706 times and the standard deviation is equal to 1.183, maximum value is 5.900 times, the median value is 1.185 times and the minimum value is 0.465 times. Audit quality (AQ) is averaged at 0.638 times the standard deviation is equal to 0.398, the maximum level is 2.861 times, the median level is 0.398 times and the minimum level is 0.003 times. Profitability (PROFIT) is averaged at the level of 0.074 times the standard deviation is equal to 0.076, the maximum level is 0.507 times, the median level is 0.057 times and the minimum level is -0.061 times, Investment (INVEST) is averaged at the level 0.253 times the standard deviation is equal to 0.228 times, the maximum

level is 0.862 times, the median level is 0.226 and the minimum level is 0.001 times.

Table 3. Descriptive statistics for variables

	Variable	Mean	Med.	Std.	Min.	Max.
Firm performance	TBQ (times)	1.706	1.185	1.183	0.465	5.900
Moderator	AQ (times)	0.638	0.398	0.638	0.003	2.861
Control	PROFIT (times)	0.074	0.057	0.076	-0.061	0.507
	INVEST (times)	0.253	0.226	0.228	0.001	0.862

Table 4 shows all 8 principles of the CG Code of companies having a level of CG Code compliance. The overall mean is 3.88, and the standard deviation is 0.369, the median score of exposure is in the range of 3.86, the maximum is 4.91 and the minimum is 3.11. When considering the mean of each practice, the highest mean is in Principle 1 and Principle 2 under the Set objective category, while the lowest score is Principle 6, 7, and 8 under the Carry out the specified objectives category. The follow-up, evaluate performance, and disclose information category, Principle 3, 4, and 5 is in the middle.

### 6.2 Correlation Matrix and Multicollinearity Analysis

Multicollinearity has been analyzed through the analysis of correlation factors and Variable Inflation factors (VIF). The Correlation matrix of variables is illustrated in Table 5. The analysis found the highest simple correlation between profitability (PROFIT) and audit quality at .154, which indicates no multicollinearity concern, [49]. Also, Table 6 shows VIF ranging from 1.004-1.130, close to 1. This confirms that multicollinearity is not an issue, [50]. These results suggest that multicollinearity among the independent variables is not severe for interpreting the results of regression analysis.

Table 4. Descriptive statistics of the CG Code

CG Code		Mean	Med.	Std.	Min.	Max.
Set objective	Principle 1	4.47	4.50	0.55	3.00	5.00
	Principle 2	3.91	3.90	0.50	3.00	5.00
Carry out the specified objectives	Principle 3	3.82	3.82	0.50	2.73	4.95
	Principle 4	3.67	3.86	0.72	2.29	5.00
	Principle 5	3.75	3.67	0.65	2.00	5.00
Follow up, evaluate performance and disclose information	Principle 6	3.75	3.57	0.67	2.14	5.00
	Principle 7	3.88	4.00	0.71	2.07	5.00
	Principle 8	3.79	3.76	0.62	2.71	5.00
Total		3.88	3.86	0.37	3.11	4.91



Table 5. Correlation matrix of variables

Variable	CG Code	AQ	PROFIT	INVEST	TBQ
CG Code	1				
AQ	0.034	1			
PROFIT	0.014	0.154	1		
INVEST	0.058	-0.061	0.061	1	
TBQ	.234**	.452***	.439***	-0.168	1

Notes: \*\*  $p < .05$ , \*\*\*  $p < .01$

### 6.3 Inferential Results

Multivariate analysis results in Table 6 show the three regression models. Model I shows the main effects of CG Code and control variables on Tobin's Q. The findings indicate a goodness of fit as indicated by the coefficient of determination adjusted R<sup>2</sup> with a value of 0.264. The CG Code significantly relates to Tobin's Q in a positive manner ( $\beta = 0.240$ ,  $p < .01$ ). Also, the outcomes of the multiple regression test indicate statistically significant control variables influencing Tobin's Q positively included PROFIT, while INVEST significantly negatively relates Tobin's Q.

Model II shows the effects of CG Code, audit quality (AQ), and control variables on Tobin's Q. The findings indicate a goodness of fit as indicated by the coefficient of determination adjusted R<sup>2</sup> with a value of 0.397. The CG Code and audit quality (AQ), are both significantly positively related to Tobin's Q. Also, the outcomes of the multiple regression test indicated statistically significant control variables influencing Tobin's Q including PROFIT positively, while INVEST significantly negatively relates Tobin's Q.

Model III shows the moderating effects of audit quality on the impact of CG Code and control variables on Tobin's Q. The findings indicate goodness of fit as indicated by the coefficient of determination adjusted R<sup>2</sup> with a value of 0.432. The CG Code and audit quality (AQ), are both significantly positively related to Tobin's Q. Additionally, the interaction effect of CG Code and audit quality has a positive effect on Tobin's Q ( $\beta = 0.213$ ,  $p < .05$ ). Audit quality positively moderates the effect of CG Code on firm performance. Also, the outcomes of the multiple regression test indicated statistically significant control variables influencing Tobin's Q including PROFIT positively, while INVEST was significantly related to s Tobin's Q negatively.

Table 6. Regression results

Variables	B(t)	Beta	p-value
<b>Panel A</b>			
<b>Model I</b>			
<i>Dependent: Tobin's Q</i>			
Constant	1.461 (7.977)		.001***
<b>Main effect</b>			
CG Code	3.458 (2.703)	0.240	.008***
<b>Control variable</b>			
PROFIT	6.993 (5.052)	0.448	.001***
INVEST	-1.088 (-2.361)	-0.210	.020**
<b>Model summary</b>			
R Square		0.288	
Adj.R <sup>2</sup>		0.264	
$\Delta$ R Square			
VIF		1.004-1.007	
F-statistics		12.253***	
Durbin-Watson		1.406	
<b>Panel B</b>			
<b>Model II</b>			
Constant	1.495 (9.002)		.001***
<b>Main effect</b>			
CG Code	3.264 (2.861)	0.226	.006***
<b>Control variable</b>			
PROFIT	6.072 (4.784)	0.389	.001***
INVEST	-0.948 (-2.266)	-0.183	.026**
<b>Moderator effect</b>			
AQ	0.691 (4.586)	0.373	.001***
<b>Model summary</b>			
R Square		0.423	
Adj.R <sup>2</sup>		0.397	
$\Delta$ R Square		0.135	
VIF		1.005-1.031	
F-statistics		21.035***	
Durbin-Watson		1.779	
<b>Panel C</b>			
<b>Model III</b>			
Constant	1.477 (9.165)		.001***
<b>Main effect</b>			
CG Code	4.246 (3.576)	0.294	.001***
<b>Control variable</b>			
PROFIT	5.897 (4.766)	0.376	.001***
INVEST	-0.868 (-2.133)	-0.167	.036**
<b>Moderator effect</b>			
AQ	0.712 (4.862)	0.384	.001***
<b>Interaction terms</b>			
CG Code $\times$ AQ	6.295 (2.573)	0.213	.012**
<b>Model summary</b>			
R Square		0.463	
Adj.R <sup>2</sup>		0.432	
$\Delta$ R Square		0.040	
VIF		1.018-1.130	
F-statistics		6.619**	
Durbin-Watson		1.777	

Notes: t statistics in parentheses, \*\*\*  $p < .01$ ; \*\*  $p < .05$ ;  $n=95$  for all models

In summary, based on the three models, the analysis shows that CG Code positively relates to Tobin's Q. PROFIT and INVEST significantly relate to Tobin's Q positively and negatively, respectively. Audit quality (AQ) itself and an interaction term with CG Code positively relates to Tobin's Q. The models show a goodness of fit as indicated by coefficient of determination adjusted  $R^2$  with an increasing value: Model I = 0.264, Model II = 0.397, and Model III = 0.432 which indicates the change of  $R^2$  from Model I to Model II equals 0.135, while from Model II to Model III equals to 0.040. This means that each step considerably adds informative value to Tobin's Q.

### 6.4 Further analysis: How audit quality affects the effect of CG Code on Tobin's Q

As mentioned earlier, this study mainly focuses on the association between the CG Code and Tobin's Q when moderated by audit quality. Therefore, the analysis proceeds further on how audit quality impacts the association between the CG Code and firm performance. The study, [51], recommends the PROCESS macro for SPSS. The Hayes analysis shows an interaction impact and interpreting condition effect of the predictor at different moderators. Figure 1 and Figure 2 show the effect of the CG CODE on firm performance when moderated by the three-audit quality level: low (mean - 1SD), moderate (mean), and high (mean + 1SD). If audit quality as a moderating role is at a low level (MAQ = -.6345, AQ = .0030), audit quality has no significant impact on the association between the CG Code and firm performance ( $p = .8771$ , conditional effect = .2517). However, if audit quality is at a moderate level (MAQ = .001, AQ = .6380), and a high level (MAQ = .6384, AQ = 1.2764), it statistically and positively affects the association between the CG Code and firm performance, ( $p = .006$ , conditional effect 4.2456); ( $p = .004$ , conditional effect 8.2644), respectively. Explicitly, in firms with higher audit quality, the effect of CG code is more likely to contribute to higher firm performance. Specifically, for a firm with a high level of audit quality, the CG code affects its performance greater than the firm with moderate audit quality; whereas for a low level of audit quality firm, audit quality does not help CG code to enhance firm performance. Thus, H3 supports that audit quality affects the effect of CG code on firm performance, such that the effect of CG code on firm performance is stronger for firms with higher audit quality.

To investigate the significant interaction effect, the graph is plotted as shown in Figure 2. It demonstrates the significant interaction effect of audit quality on the association between the CG Code and Tobin's Q. If audit quality is too low, no moderating effect on the CG Code and firm performance; however, if audit quality increases to a certain level, significant effects are found as a moderating variable between the CG Code and firm performance.

Test(s) of highest order unconditional interaction(s):						
R2-chng	F	df1	df2	p		
X*W	.0400	6.6190	1.0000	89.0000	.0117	
-----						
Focal predict: MCGI (X)						
Mod var: MAQ (W)						
-----						
Conditional effects of the focal predictor at values of the moderator(s):						
MAQ	Effect	se	t	p	LLCI	ULCI
-.6345	.2517	1.6233	.1550	.8771	-2.9738	3.4771
.0000	4.2456	1.1873	3.5758	.0006	1.8864	6.6048
.6384	8.2644	2.2454	3.6806	.0004	3.8028	12.7260

Fig. 1: A statistical output of the association between the CG Code and firm performance when moderated by audit quality from PROCESS macro for SPSS by Hayes (2012)

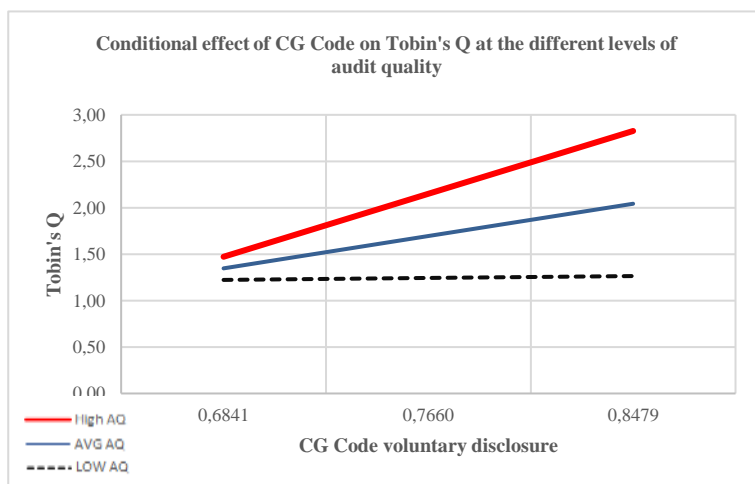


Fig. 2: A graph of the effect of the CG Code on Tobin's Q when moderated by audit quality

## 7 Discussion, Implementation, and Conclusions

The purpose of this study is to perceive the affiliation between the CG Code and firm performance (Tobin's Q), and also to observe the informative value of the CG Code on firm performance (Tobin's Q) when moderated by audit quality. The study employs the listed companies on

the SET as a representative of emerging markets. The 95 listed companies that fully and voluntarily implemented the CG Code. Multivariate regression analysis indicates significant findings.

The study initially and successfully developed the judgmental score of the CG Code disclosed by the companies. This result considers that listed firms are more likely to voluntarily disclose information that benefits their firms, [2], [7], [8]. The study also finds that the CG Code voluntary disclosure significantly positively relates to Tobin's Q. The result is in line with previous studies, [23], [27]. Furthermore, the analysis shows that the CG Code and audit quality significantly positively relate to Tobin's Q. This outcome also agrees with previous studies, [35], [37], [38]. Finally, audit quality could be considered as a moderating role of firm performance, [41], [42]. The overall conclusions are the CG Code, profit, investment, and audit quality are statistically and significantly associated with firm performance. In addition, auditors flash firm performance both in direct and moderating effects in a positive manner. The significant contributions of this study are as follows:

Firstly, the study finds that the CG Code is adopted by Thai-listed companies in a wide range of industries. The total score of the CG Code voluntary disclosure is quite high (3.88/5). Even if the CG Code score is considerably acceptable, the listed companies just focus on setting objectives. A lower score is on implementing and monitoring. This is not a surprise finding, "Talk no done". This result stimulates standard setters who do not just facilitate listed companies, on the other hand, they should monitor together with enforcement listed companies to pay attention to implementing and monitoring rules and regulations, rather than just introducing innovations, but no development.

Secondly, the result of the study agrees with many prior studies that corporate governance is a correct way to upsurge firm performance, [22], [23]. This result should be considered as good news. One of the reasonable arguments is the CG Code is considered a "rule base", not a "principle base" as mentioned in the Corporate Governance Principle. Management knows what to do and easily follows the rules. On the contrary, implementing according to the Principle framework may cause unfollowing. However, based on the high score of setting the objectives category mentioned above, the board of directors, regulators, and those in charge of corporate governance should encourage and/or force the management team to fully incorporate corporate governance into activities. This is to demonstrate

that corporate governance is appropriate for all countries rather than the countries in Anglo-Saxon and Europe.

Thirdly, the analysis shows that audit quality (proxied by audit fees) is still necessary for firm performance both the direct effect and the interaction effect with the corporate governance. This can reduce the degree of complaint that no economic usefulness of auditors. However, if higher audit fees are equal to higher audit quality, stakeholders, especially companies, should consider more appropriate ways to increase firm performance rather than pay more audit fees to get higher firm performance.

Lastly, the effect of corporate governance and audit quality on firm performance is a theme of scholarly interest. Nevertheless, previous findings are unconvincing and show contradictory results. This study expands the scope of current research on corporate governance, accounting, and finance. First, it enhances the current limited research on the impact of corporate governance and audit quality on firm performance by focusing on listed companies in emerging markets where corporate governance practices are highly different from those in developed markets. The finding highlights audit quality moderates the influence of the CG Code on firm performance; firms with higher audit quality are more likely to have the impact of the CG Code contributing to higher firm performance. Audit quality influences the effect of the CG Code on firm performance, such that the effect of the CG Code on firm performance is stronger for firms with higher audit quality. In particular, for companies with high audit quality, the CG Code has a stronger effect on company performance than for companies with moderate audit quality, while for companies with low audit quality, audit quality does not contribute to the CG Code improving company performance. Therefore, investors should consider high corporate governance firms together with high audit quality to get better performance firms.

This study pursues to empirically scrutinize the association between the voluntary disclosure of corporate governance and firm performance when moderated by audit quality. The dataset is the Thai-listed companies in 2021. The analysis shows that corporate governance voluntary disclosure of the listed companies is more likely to increase firm performance. Also, the fundamentals of financial positions including profitability and long-term investments are necessary. In particular, the study finds that audit quality itself increases firm performance. Furthermore, when auditors help

management to verify corporate governance systems, the interaction even increases firm performance. Outsiders, including investors and regulators, need assurance in financial reporting and corporate governance disclosures, which are essential elements in fulfilling their trust, and this study certainly conveys the message to various stakeholders in financial markets.

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