Information Transparency, Decision Making Quality and Firm Profitability: Evidence from Thai Listed Firms

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Abstract

This paper aims at examining the effects of information transparency on decision making quality and firm profitability of Thai listed firms through governance mechanism as a moderator. In this paper, 143 listed-firms in Thailand are the samples of the paper. The results indicate that information transparency has a positive effect on decision making quality. Decision making quality has a positive influence on firm profitability. Also, decision making quality is the mediator of the information transparency-firm profitability relationships. Likewise, governance mechanism is the moderator of the information transparency-decision making quality relationships. Then, the executives of organizations should support organizational resources and pay attention and search for guidelines in developing more transparent information. Theoretical and managerial contributions, conclusion and suggestions and directions for future research are highlighted.

Keywords : Information Transparency, Decision Making Quality, Governance Mechanism, Firm Profitability

Introduction

Nowadays, economic, social and political environments have dynamically changes in several aspects, such as corporate social responsibility, corporate governance mechanism, intense laws and regulations, technological growth, and competitive complexity. For micro aspects, changing demand pattern, short product life cycles, dynamic market, presence of multiple competitors, and customer demand for customized products are the characteristics of business operations (Wadhwa et al., 2010). Importance of transparency has been needed for both academics and practitioners under the business environments. Transparency could help clearly understand economic, social and political environments and their antecedents and consequences. With doing businesses in competitive intensity, firms must also provide the transparency of information, financial reporting and business processes in order to make reasonable and valuable decision making effectively for gaining superior competitive advantage, achieving excellent firm performance and enhancing stable business sustainability. Accordingly, information transparency is a key driver of supporting business excellence, firm success and organizational survival.

To efficiently collect business evidences, analyze competitive situations and respond to stakeholders, information transparency is of growing importance, increasing necessity and adding usefulness explicitly. Then, information transparency becomes a fundamental method of enabling firms' financial situations and operating results, organizational policies and strategies, and business profitability and success. Interestingly, information transparency refers to the

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widespread availability of relevant, reliable information about the periodic performance, financial position, investment opportunities, social responsibility, value, and risks related to publicly firms (Bushman, Piotroski, & Smith, 2004). It includes the degree of completeness of information, provided by each firm to the market, concerning its business activities (Vaccaro & Madsen, 2006) and the openness and access to information, the free flow of information, and the right to own some information (Al-Jabri & Roztocki, 2015). It plays a significant role in explaining, describing and determining firm profitability. Firms with more transparent information tend to critically provide greater decision making in business operations and outstandingly enhance better performance under dynamic environmental changes. Thus, information transparency increases stock liquidity, resulting in lower cost of capital, higher firm valuation, greater corporate creditability, superior business reputation, and better organizational image.

Within the existing literature, information transparency plays a significant role in explaining, describing and determining firm profitability. In this paper, information transparency becomes a main variable of driving firm profitability. It consists of disclosure timeliness, compliance disclosure, forecasted financial information disclosure, and financial and operating information disclosure (Chiang & He, 2010). Firms are likely to provide great information transparency for achieving the quality of decision making and enhancing their superior profitability. In this study, firm profitability is an outcome of business operations, activities and practices of an organization in the competitive markets and environments. It is generally employed to assess how well firms operate. Furthermore, decision making quality is defined as the extent to which a strategic decision is based on valid information, achieves its objectives and contributes to the overall effectiveness of the organization (Michie, Dooley, & Fryxell, 2006). In the business operations, decision making quality has a positive influence on firm profitability. It also helps link information transparency to firm profitability. Firm profitability is hypothesized as the dependent variable of the research relationships. It is to the outcomes of doing business operations and activities under the competitive situations, including the increasing rate of net profit, the comparison of operational profit with last period and overall financial performance. Likewise, governance mechanism is hypothesized as the moderator of the information transparencydecision making quality relationships, the information transparency-firm profitability relationships and the decision making quality-firm profitability relationships. It refers to the safeguards that firms employ to govern inter-organizational exchange, minimize exposure to opportunism and protect transaction specific investments (Jap & Ganesan, 2000). Firms with governance mechanism seem to do business practices with legislative promotion, compliance of laws and regulations, and operational ethics and morality (Yeh, Chen, & Wu, 2014). Governance mechanism matters in protecting the rights and benefits of stakeholders and in building the acceptance, reliability and creditability of outsiders. Then, it tends to positively moderate the aforementioned relationships.

Here, the objective of this study is to examine the effects of information transparency on decision making quality and firm profitability of Thai listed firms through a moderator of governance mechanism. The key research questions in this paper are (1) how information transparency has an effect on decision making quality and firm profitability, (2) how decision

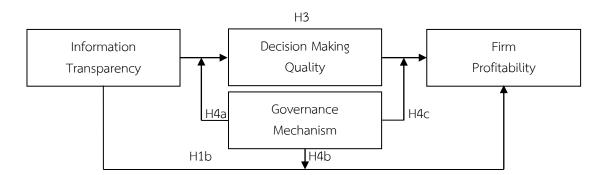


making quality has an influence on firm profitability, (3) whether decision making quality is the mediator of the information transparency-firm profitability relationships, and (4) whether governance mechanism is the moderator of the relationships among information transparency, decision making quality and firm profitability.

Informational Transparency and Hypotheses Development

The relationships among information transparency, decision making quality, governance mechanism, and firm profitability of listed-firms in Thailand are critically investigated. Thus, the conceptual and research models present the aforementioned relationships, as shown in Figure 1.

Figure 1 : The Relationship Model of Information Transparency, Decision Making Quality, Governance Mechanism, and Firm Profitability



Information Transparency

Committing with survival and sustainability in doing business operations, information transparency is a main determinant of decision making quality and firm profitability. It is defined as the widespread availability of relevant, reliable information about the periodic performance, financial position, investment opportunities, social responsibility, value, and risks related to publicly firms (Bushman, Piotroski, & Smith, 2004). In the competitive environments, information transparency is about the willingness of firms in providing organizational information to their stakeholders. More transparent information as a result of the abundance of transaction data available becomes easier for firms to obtain information that may allow them to analyze their customers' profile as well as infer their rivals' costs (Hung & Wong, 2009). Also, information transparency refers to the degree of completeness of information, provided by each firm to the market, concerning its business activities (Vaccaro & Madsen, 2006) and the openness and access to information, the free flow of information, and the right to own some information (Al-Jabri & Roztocki, 2015). Firms with transparent environments tend to share every kind of information concerning their business activities requested by the society. Accordingly, information transparency becomes a tool for firms in order to help achieve good outcome consequence and enhance their creditability, reputation and image in doing business operations. Likewise, information transparency consists of three dimensions, including information outcomes (the quantity of that information released), information processes (the quality of that information) and information infrastructure (the dissemination infrastructure available to citizens) (Williams, 2015). To enable stakeholders to understand business operations and responsibilities, information transparency includes disclosure timeliness, compliance disclosure, forecasted financial information disclosure, and financial and operating information disclosure (Chiang & He, 2010). More transparent information explicitly helps firms provide better decision making quality and achieve greater firm profitability. It is useful to improve decision making quality and generate superior profitability. It is likely to have a positive influence on decision making quality and firm profitability. Thus, information transparency is positively related to decision making quality and firm profitability. Therefore,

H1a: Information transparency has a positive effect on decision making quality.H1b: Information Transparency has a positive effect on firm profitability.

Decision Making Quality

Interestingly, information transparency is important and it encourages firms to provide a quality of decision making in business operations. Transparent information is useful for firms to identify problems and opportunities in the competitive environments. It explicitly helps firms make better decision making quality. Thus, decision making quality is a key outcome of firms' information transparency. Decision making quality is defined as the ability of firms to do the appropriate thing at the appropriate time with appropriate people in situation of uncertainty (Seo. Lee, & Lee, 2013). It encourages firms to have consistently good results, including performance, growth, survival, and sustainability. Firms with decision making quality are likely to perform their appropriate business operations fitting with competitive situations and meet their operational and strategic goals successfully that could lead them to achieve excellent outcomes, such as image, reputation, creditability, and profitability. In the existing literature, decision making quality includes objective metric and subjective metric. An objective metric focuses on decision accuracy as the average revenue of the location actually chosen by decision makers relative to the revenue of the optimal location and decision efficiency as the duration the decision maker needs to solve as tasks (Ozimec, Natter, & Reutterer, 2010). For a subjective metric of decision making quality, decision confidence of the decision maker is significant and it reflects to their perceived ease of tasks. Accordingly, decision accuracy, efficiency and confidence are important drivers of defining success of firms' business operations and determining their good organizational outcomes. Then, decision making quality seems to have a critical influence of firm's profitability. Moreover, decision making quality is possibly to link information transparency to firm profitability. While information transparency could not have a direct effect on firm profitability, decision making quality has a function and responsibility in connecting information transparency to firm profitability. Hence, decision making quality is also a mediator of the information transparencyfirm profitability relationships. Information transparency is not able to have an association with firm profitability if decision making quality does not play a significant mediating role. Thus, decision making quality is positively related to firm profitability and mediates the information transparency-firm profitability relationships. Therefore,

- H2: Decision making quality has a positive effect with firm profitability.
- H3: Decision making quality has a mediating effect on the information transparency-firm profitability relationships.

Governance Mechanism

While the aforementioned associations are reasonably discussed, governance mechanism could be a moderator of the associations. Governance refers to the organizational or structural arrangements designed to determine and influence the operations and activities of organizations that respect to the requirements and needs of the board of directors, managers, shareholders, creditors, auditors, regulators, and other stakeholders (Jarboui, Guetat & Boujelbene, 2015). It explicitly enhances firm to commit with social, regulatory and markets, align interests among stakeholders and monitor their actions, policies and decisions. Good governance is likely to have an effect on improving organizational efficiency, effectiveness and excellence, building corporate image, reputation and creditability and promoting superior performance. Thus, governance mechanism in an organization is important to drive firms in doings businesses, including business practices, organizational strategies and managerial decisions. It ensures firms to achieve the organizational goals. Here, governance mechanism is defined as the process of monitoring, controlling and reinforcing firms' behaviors that are concerned with stakeholder requirements and needs. It comprises formal governance mechanism as the systematic collection of firm behaviors and informal governance mechanism as the beliefs, knowledge and capabilities of firms (Storey & Kocabasoglu-Hillmer, 2013). It helps reduce the inefficiencies arising from moral hazards and adverse selection, take corrective actions to accomplish firms' goals, monitor their executives and employees' behaviors, and resolve conflicts of interest between shareholders and executives. Hence, governance mechanism is a safeguard that firms put in the place to govern intra- and inter-organizational exchanges. While governance mechanism has committed with business actions, operations, and activities following the stakeholders' requirements and needs, it possibly moderates the research relationships in this study. Greater governance mechanism supports firms to act more effective business practices in the rigorous competition. Thus, governance mechanism tends to positively moderate the information transparency-decision making quality relationships, the information transparency-firm profitability relationships and the decision making quality-firm profitability relationships. Therefore,

H4: Governance mechanism positively moderates (a) the information transparencydecision making quality relationships, (b) the information transparency-firm profitability relationships and (c) the decision making quality-firm profitability relationships.

Research Methods

Sample Selection and Data Collection Procedure

In this study, 570 listed firms in Thailand were selected as the sample. A mail survey procedure via questionnaire was used for data collection. The key informants were accounting executives of listed firms in Thailand, including chief financial officers, accounting directors and accounting managers because these accounting executives has the functions and responsibilities of preparing financial statements to internal and external users and providing accounting information and related information to top management and other executives. With regard to the questionnaire mailing, 45 surveys were undeliverable because some listed firms had moved to

unknown locations. Deducting the undeliverable, the valid mailing was 525 surveys, from which 162 responses were received. Of the surveys completed and returned, 143 were usable. The effective response rate was approximately 27.24%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey, with an appropriate follow-up procedure, if greater than 20% is considered acceptable.

To test potential and non-response bias and to detect and consider possible problems with non-response errors, the assessment and investigation of non-response-bias were centered on a comparison of sample statistics and known values of the population, including firm age and firm capital as recommended by Armstrong and Overton (1977). There were no statistically significant differences between first and second groups at a 95% confidence level as firm age (t = 0.153, p > 0.05), firm size (t = 0.139, p > 0.05) and firm capital (t = 0.141, p > 0.05). According to this regard, neither procedure explicitly showed significant differences.

Measures

All constructs were measured using a 5-point Likert scale (1 = strongly disagree to 5 =strongly agree), except from firm age, firm size, and firm capital. Here, firm profitability is the dependent variable of the study and five-item scale was developed to measure how well firms operate in the competitive markets and environments, including achievement of objective and goal settings, growth of net profit, market share, operational efficiency, and executive satisfaction. Information transparency is the independent variable of the study and five-item scale was initialed to assess how firms provide the presentation and disclosure of the periodic performance, financial position, investment opportunities, social responsibility, value, and risks related to publicly them. For the mediating variable of the study, five-item scale was implemented to evaluate decision making quality as how firms do the appropriate thing at the appropriate time with appropriate people in situation of uncertainty, including decision accuracy, efficiency and confidence. Lastly, governance mechanism is the moderating variable of the study and five-item scale was applied to gauge how firms monitor their actions, policies and decisions that commit with social, regulatory and markets and align interests among stakeholders. For the control variables of the study, firm age was firstly measured by the number of years a firm has been in existence (Zahra, Ireland & Hitt, 2000). Secondly, firm size was measured by the number of employees in a firm (Arora & Fosfuri, 2000). Finally, firm capital was measured by the amount of money a firm has invested in doing business performance (Ussahawanitchakit, 2007).

Methods

Factor analysis was implemented to assess the underlying relationships of a large number of items and to determine whether they can be reduced to a smaller set of factors. This analysis has a high potential to inflate the component loadings. Thus, a higher rule-of-thumb, a cut-off value of 0.40, was adopted (Nunnally & Bernstein, 1994). All factor loadings as values of 0.83-0.93 are greater than the 0.40 cut-off and are statistically significant. Also, discriminant power was utilized to gauge the validity of the measurements by item-total correlation. In the scale validity, item-total correlation is greater than 0.30 (Churchill, 1979). In the scale reliability,



Cronbach alpha coefficients are greater than 0.70 (Nunnally & Bernstein, 1994). The scales of all measures as values of 0.60-0.96 appear to produce internally consistent results; thus, these measures are deemed appropriate for further analysis as they express an accepted validity and reliability in this study. Table 1 presents the results for both factor loadings and Cronbach alpha for multiple-item scales used in this study.

Items	Factor	Item-total	Cronbach		
	Loadings	Correlation	Alpha		
Firm Profitability (FP)	0.92-0.93	0.76-0.92	0.91		
Information Transparency (IT)	0.92-0.93	0.77-0.93	0.91		
Decision Making Quality (DQ)	0.83-0.91	0.60-0.91	0.86		
Governance Mechanism (GM)	0.87-0.98	0.82-0.96	0.90		

Table 1: Results of Measure Validation

The ordinary least squared (OLS) regression analysis is conducted to test the hypothesized relationships among information transparency, decision making quality, governance mechanism, and firm profitability. Because all dependent variable, independent variables, mediating variable, moderating variable, and control variable in this paper were neither nominal data nor categorical data, OLS regression analysis is an appropriate method for examining the hypothesized relationships.

Results and Discussion

Table 2 presents the descriptive statistics and correlation matrix for all variables. Multicollinearity might occur when inter-correlation in each predict variable is more than 0.80, which is a high relationship (Hair et al., 2010). The correlations ranging from 0.42 to 0.77 at the p < 0.05 level, which means that the possible relationships of the variables in the conceptual model could be tested. With respect to potential problems relating to multicollinearity, variance inflation factors (VIFs) were also used to provide information on the extent to which non-orthogonality among independent variables inflates standard errors. The VIFs range from 1.14 to 1.41, well below the cut-off value of 10 as recommended by Neter, Wasserman and Kutner (1985), meaning that the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems encountered in this study.

Variables	FP	IT	DQ	GM
Mean	3.82	4.36	3.99	4.23
Standard Deviation	0.71	0.56	0.51	0.56
Firm Profitability (FP)				
Information Transparency (IT)	0.42***			
Decision Making Quality (DQ)	0.77***	0.58***		
Governance Mechanism (GM)	0.50***	0.66***	0.67***	

Table 2 : Descriptive Statistics and Correlation Matrix

***p<.01

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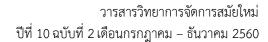
Table 3 shows the results of OLS regression analysis of the relationships among information transparency, decision making quality, governance mechanism, and firm profitability. Information transparency has a significant positive influence on decision making quality (b = 0.59, p < 0.01; b = 0.31, p < 0.39), but has no relationships with firm profitability (b = 0.21, p < 0.14; b = 0.15, p < 0.13). In the existing literature, transparent information is the widespread availability of relevant, reliable information about the periodic performance, financial position, investment opportunities, social responsibility, value, and risks related to publicly firms (Bushman, Piotroski & Smith, 2004). It enables firms to provide the quality of decision making through the degree of completeness of information concerning its business activities with the openness and access to information, the free flow of information, and the right to own some information. Firms with transparent information tend to make their decision making efficiently, effectively and excellently. Therefore, Hypothesis 1a is supported. However, information transparency has no direct effects on firm profitability because firms may need to do business actions in order to gain competitive advantage before they could achieve their profitability in the rigorous competition. It is useful for firms to identify problems and opportunities via making better decision making quality. It could not directly affect firm profitability. Accordingly, Hypothesis 1b is not supported.

Independent		Dependent Variable					
Variables	DQ	DQ	FP	FP	FP	FP	FP
IT	0.59***	0.31**	0.21	0.15			0.18
	(0.16)	(0.14)	(0.19)	(0.11)			(0.08)
DQ					0.78***	0.82***	0.77***
					(0.07)	(0.10)	(0.08)
GM		0.38***		0.32**		0.24**	
		(0.10)		(0.13)		(0.13)	
IT*GM		0.46***		0.05		0.11	
		(0.12)		(0.19)		(0.05)	
FA	0.18*	0.15*	0.16	0.14	-0.01	0.01	0.01
	(0.09)	(0.07)	(0.10)	(0.10)	(0.08)	(0.08)	(0.08)
FS	0.06	0.03	-0.02	-0.07	-0.07	-0.08	-0.07
	(0.07)	(0.05)	(0.08)	(0.05)	(0.06)	(0.06)	(0.06)
FC	0.13	0.13*	0.12	0.15	0.08	0.06	0.08
	(0.09)	(0.07)	(0.10)	(0.10)	(0.07)	(0.07)	(0.07)
Adjusted R ²	0.43	0.52	0.25	0.33	0.58	0.41	0.56

Table 3 : Results of OLS Regression Analysis ^a	Table 3 : Res	sults of OLS	Regression	Analysis ^a
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*p<.10, **p<.05, ***p<.01, ^a Beta coefficients with standard errors in parenthesis.

Next, the effects of decision making quality on firm profitability are empirically investigated. Within the research results, decision making quality has an important positive impact on firm profitability (b = 0.78, p < 0.01; b = 0.82, p < 0.01). It critically enhances firms to do the appropriate thing at the appropriate time with appropriate people in situation of uncertainty (Seo,



Lee, & Lee, 2013). Firms with the quality of decision making aspect likely perform their appropriate business operations fitting with competitive situations and meet their operational and strategic goals successfully that could lead them to have good results and achieve excellent outcomes consistently, such as image, reputation, creditability, and profitability. Hence, decision making quality is positively related to firm profitability. **Therefore, Hypothesis 2 is supported.** To test the mediating effects of the research relationships, information transparency plays a significant role in determining decision making quality according to the accepted hypothesis 1. Here, both information transparency and decision making quality as the independent variables are hypothesized to drive changes of firm profitability. In Table 3, only decision making quality is significantly interacted with firm profitability (b = 0.77, p < 0.01), but information transparency is not related to firm profitability (b = 0.18, p < 0.21). Thus, decision making quality is the full mediator of the information transparency-firm profitability relationships being congruent with Baron and Kenny (1986)'s study. **Therefore, Hypothesis 3 is supported.**

For the moderating effects of the research relationships, governance mechanism positively moderates the information transparency-decision making quality relationships (b = 0.46, p < 0.01). Within the existing literature, governance mechanism is the process of monitoring, controlling and reinforcing firms' behaviors that are concerned with stakeholder requirements and needs, including formal governance mechanism as the systematic collection of firm behaviors and informal governance mechanism as the beliefs, knowledge and capabilities of firms (Storey & Kocabasoglu-Hillmer, 2013). Firms with greater governance mechanism are likely to be aware with reducing the inefficiencies arising from business actions, taking corrective actions to accomplish their goals, monitoring their executives and employees' behaviors, and resolving conflicts of interest between shareholders and executives. In the greater governance environments, firms tend to have the information transparency-decision making quality relationships stronger. Thus, governance mechanism definitely has a positive moderating effect on the information transparency-decision making quality relationships. Therefore, Hypothesis 4a is supported, but Hypotheses 4b-4c.

Contributions and Directions for Future Research

Theoretical Contribution and Directions for Future Research

This study presents an attempt to provide a clearer understanding of the relationships among information transparency, decision making quality, governance mechanism, and firm profitability. It confirms the existing literature relating to (1) the information transparency-decision making quality relationships, (2) the decision making quality-firm profitability relationships, (3) the mediating effects of decision making quality on the information transparency-firm profitability relationships, and (4) the moderating effects of governance mechanism on the information transparency-decision making quality relationships. However, there are suggestions of and directions for future research. To verify and expand the current study, future research needs to do more literature reviews related with why and how (1) information transparency could not directly affect firm profitability and (2) governance mechanism does not moderate the information transparency-firm profitability relationships and the decision making quality-firm profitability relationships. Also, future research may collect data from larger population and/or comparative population or from other businesses and industries.

Managerial Contribution

According to the research results, executives need to support organizational resources and pay attention and search for guidelines in developing more transparent information. Greater information transparency will enhance firms to implement more decision making quality, and better decision making quality will affect their superior profitability. Also, firms must set their valuable goals and visions that relate to good governance practices. These good governance practices will help them survive and sustain in the competitive markets and environments and stay longer in doing businesses. Thus, a successful management of information transparency, governance mechanism and decision making quality explicitly drive an excellent outcome of business operations and practices within the rigorous competitive situations.

Conclusion

Information transparency explicitly focuses on the widespread availability of relevant, reliable information about the periodic performance, financial position, investment opportunities, social responsibility, value, and risks related to publicly firms. It plays a significant role in defining and determining great business outcomes. Here, the objective of this paper is to investigate the effects of information transparency on decision making quality and firm profitability of Thai listed firms. Also, decision making quality is hypothesized to mediate the information transparency-firm profitability relationships and governance mechanism is hypothesized to moderate the research relationships. In this paper, 143 listed-firms in Thailand are the sample of the paper. Within the research results, (1) information transparency has a positive effect on decision making quality, (2) decision making quality has a positive influence on firm profitability, (3) decision making quality is the mediator of the information transparency-firm profitability relationships, and (4) governance mechanism is the moderator of the information transparency-decision making quality relationships. For the research contributions, the executives of organizations should support organizational resources and pay attention and search for guidelines in developing more transparent information. Likewise, future research needs to do more literature reviews relating to the information transparency-firm profitability relationships and the moderating effects of governance mechanism on the information transparency-firm profitability relationships and the decision making quality-firm profitability relationships, and may collect data from larger population and/or comparative population or from other businesses and industries.

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