

# CHAPTER 1

## Introduction

### 1.1 Introduction

Accounting conservatism is one of the attributes of a firm's verified earnings reports. It has been a long-standing convention in accounting, with its influence spanning for the past 500 years (Basu 1997; Watts 2003). Accounting conservatism is defined as "the accountant's tendency to require a higher degree of verification for recognizing good news than bad news in financial statements" (Basu 1997, 4).<sup>1</sup> Conservatism can emerge either conditionally or unconditionally. The unconditional form of conservatism refers to accounting practices that reduce earnings and net assets in an unavoidable manner. Watts (2006, 52) defines conditional conservatism as "a higher standard of verifiability for the recognition of gains than for losses." In this form, earnings and net assets are reduced when negative news arise, although increases in these two figures do not necessarily occur when there is positive news (Basu 2005; Ryan 2006). Conditional conservatism is dependent on news and therefore assures that reporting is done in a timely manner when economic losses are expected, while announcements of gains are put on hold. It is this feature that makes conditional conservatism a reflection of quality in financial reports (Watts 2003; Francis et al. 2004; Ecker et al. 2006; Ball, Robin, and Sadka 2008; Dechow, Ge, and Schrand 2010; Kothari, Ramanna, and Skinner 2010).

Accounting literature suggests that conditional conservatism restrains the manager's opportunistic behaviors of accelerating the recognition of unrealized economic

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<sup>1</sup> This term is viewed as news-dependent and referred to as "conditional conservatism," as opposed to the more news-independent "unconditional conservatism." Unconditional conservatism refers to the advanced recognition of expenses and revenue deferrals (i.e., immediate expensing of research and development, and advertising expenses). In this study, the term "accounting conservatism or conservatism" is used to refer to "conditional conservatism."

gains. Instead, conservatism requires managers to timely recognize unrealized economic losses that may be of negative news in audited financial statements (Watts 2003; Kothari, Ramanna, and Skinner 2010). Both the disclosure of unrealized economic losses in a timely manner and the higher verifiability standards imposed for reporting gains help in the reduction of agency costs that may arise from inconsistencies in information, or what is referred to as information asymmetry, that exist between corporate managers and outside investors (LaFond and Watts 2008; Ball, Jayaraman, and Shivakumar 2012). From the standpoint of capital market investors, conservative reports hold several benefits. The first benefit is the enhancement of contract efficiency between corporate managers and shareholders, in which the latter demand that firms use conservatism to monitor and govern the firm's managers (Healy and Palepu 2001; Watts 2003, 2006; Armstrong, Guay, and Weber 2010). Conservatism keeps managers from overestimating net assets and cumulative earnings for their own personal gains (Watts 2003). Secondly, complementary to voluntary disclosure, conservative reports and voluntary disclosure information are significant in reducing the possibility of adverse selection and moral hazard problems. Both of these problems drive management to act in ways that may negatively affect the shareholder's utility (Watts 2006; Ball, Jayaraman, and Shivakumar 2012).

In addition to information contained in mandatory financial reports, particularly the conservative accounting, earnings forecasts issued by corporate managers are also used by market participants (i.e., shareholders and investors) to evaluate the future performances of firms. Voluntary earnings forecasts serve as an important channel for managers to communicate their firm's business prospects to capital market investors prior to the earnings announcement date.<sup>2</sup> Such forward-looking information (i.e., earnings per share forecasts) is a key voluntary disclosure mechanism that has both positive and negative effects on external investors' decision making (Hirst, Koonce, and Venkataraman 2008). On the positive side, it helps increase the firm's transparency and

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<sup>2</sup> Based on the categorization of the Stock Exchange of Thailand (SET), management earnings forecasts are classified as optional disclosures. Optional disclosures refer to publicly-released information or news related to firms' financial projections and probable important future events.

decrease information asymmetry between the company and equity investors. On the other hand, managers might make opportunistic use of their access to inside information in order to influence their firm's stock prices. Managers are motivated to disclose earnings forecasts due to several reasons - some of the reasons being that forecasts serve as a signal to investors that the firm has positive performance (Verrecchia 1983; Dye 1985a, 1985b; Lev and Penman 1990), they reduce the potential of corporate lawsuits (Skinner 1994; Kasznik and Lev 1995), they allow access to capital markets and decrease costs of equity capital (Frankel, McNichols, and Wilson 1995), they help adjust the expectations of financial analysts and equity investors (Ajinkya and Gift 1984), and they serve as a signal on managerial talent (Trueman 1986).

Literature on voluntary disclosures provide possible reasons to explain why managers bias their firm's forecasts. The theoretical concept on voluntary disclosure is based on the unraveling principle, which explains firms' decisions to fully disclose private information to the public (Grossman and Hart 1980; Milgrom 1981). According to the unraveling principle, firms fully disclose internal information in response to information asymmetry. This is because investors tend to perceive that the reason why a firm does not disclose information is because the value of the assets (firm) is low. However, empirical studies reveal that managers are selective over the information they disclose to the public (Atiase, Supattarakul, and Tse 2005; Kothari, Li, and Short 2009). Rather, they either choose to disclose the information or keep them from the public (Verrecchia 2001). It is found that managers choose to release or announce the firm's positive news while withholding less positive news from the public (Healy and Palepu 2001; Kothari, Li, and Short 2009), and instead bias their firm's earnings forecasts (McNichols 1989; Rogers and Stocken 2005; Ajinkya, Bhojraj, and Sengupta 2005). According to reviews of past literature and the conservatism principle, it is apparent that management forecast disclosure and conservative accounting share some common, albeit different, perceptions of managers. Therefore, the main purpose of this study is to examine such common perceptions by investigating the accounting conservatism and its potential effects on management earnings forecast biases.

Corporate managers have the incentives to overstate the firm's financial performance by delaying the announcement of bad news while expediting the disclosure of good news. These incentives are based on factors such as formal compensation contracts and career concerns (Ball 2009; Graham, Harvey, and Rajgopal 2005; Kothari, Li, and Short 2009). Management's asymmetry disclosure incentives may lead to optimistic forecast biases made by the manager. When conservative financial reporting is applied to accounting earnings and net assets, the negative economic events are incorporated into audited financial statements in a timely manner (Basu 1997; Beaver and Ryan 2005). Hence, conservatively audited earnings play a role in preventing managers from publicly disclosing unverified positive information about the firm to satisfy their personal benefits. Instead, managers are required to publicly announce realized economic losses to the capital market (Watts 2003; LaFond and Watts 2008). This limitation imposed on the manager's actions leads to less likelihood that the firm's forecast earnings will systematically overestimate the probability of good firm performance and underestimate the probability of poor performance.

Based on the rationale discussed above, this study expects management earnings forecasts to carry less optimistic biases<sup>3</sup> for highly conservative firms. Generally, a forecast bias is optimistic when forecasted earnings are greater than actual earnings. However, for firms with a higher degree of conditional conservatism, it can also mean that there is potential that the forecasted earnings will decrease to the same level as the audited actual earnings. Thus, this study hypothesized that a higher degree of accounting conservatism would be associated with less optimistic forecast biases.

Uncertainty in the business environment is a possible factor that affects the relationship between conservatism and managers' forecast biases. In situations when the economic environment is uncertain, errors from managerial forecasts and evaluations of business prospect increase (Hirshleifer 2001). A prior study on management forecast

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<sup>3</sup> Forecast bias (difference between actual earnings and forecast earnings) is considered as optimistic bias when forecast earnings is greater than actual earnings. On the contrary, it is considered to be a pessimistic bias or less optimistic bias when forecast earnings is less than actual earnings.

errors found that, because of uncertain business environments, managers tend to make less accurate assessments of their firm's future performances which results in high accounting accruals and more optimistic forecasts (Gong, Li, and Xie 2009). In a more recent research, Sun and Xu (2012) found that in the event of high uncertainty in operations, firms with a greater degree of conservatism experience a high instance of optimistic forecasts. Because uncertainties in the operating environment lead to difficulties for the manager to assess business prospects and evaluate future returns from project investments (Hirshleifer 2001; Gong, Li, and Xie 2009; Sun and Xu 2012), it is predicted that information acquired from conservative reports would not be completely added into the firm's earnings forecasts. Hence, conservatism would play a less significant role in decreasing management's overestimated forecasts while an effect of business uncertainty on earnings forecast bias is expected. As part of this study's main propose, operational uncertainty was examined to see if it would have any impact on the relationship between accounting conservatism and management earnings forecast biases. The hypothesis is that the impact of conservatism on reducing overestimated future earnings or optimistically forecasts bias would be attenuated for firms with high operational uncertainty.

Besides operational uncertainty factors, a growing number of empirical research found that firms with stronger corporate governance features show greater accuracy and are less optimistically biased when management issue their earnings forecasts (Karamanou and Vafeas 2005; Ajinkya, Bhojraj, and Sengupta 2005). Accounting literature suggested that stronger corporate governance is found to be positively related with conservatism in firms with high information asymmetry (Ahmed and Duellman 2007; Garcia Lara, Osma, and Penalva 2009; Ramalingegowda and Yu 2012). According to Garcia Lara, Osma, and Penalva (2007), conservatism and strong boards of directors work together in a complementary fashion to monitor activities and reduce agency problems caused by the manager's need to satisfy his or her own benefits instead of working for the firm's good performance. A firm's strong corporate governance structure is said to curtail the manager's forecast biases and force managers to disclose reliable and credible forward-looking information. Accordingly, this study predicted that the impact

of conservatism on reducing overestimated future earnings would be accentuated in firms with a stronger governance by the board of directors.

The second objective of this study was to investigate whether firms with different conservatism practices would show different effects of management forecasts on stock returns. In other words, this study expected that the reactions of investors on earnings forecasts by managers would be different for firms whose accounting practices are more conservatively-oriented. Conservatism has the potential of increasing abnormal (or excess) returns around the management earnings forecast disclosure date in three ways. First, the strict verification requirement of conservative reporting prevents unverified good news from being quickly released and ensures that managers commit to more timely disclosures of bad news by reporting these figures in financial statements (Watts 2003; Ball and Shivakumar 2005; LaFond and Watts 2008). Consequently, conservatism alleviates the agency costs related to asymmetric information by providing investors verified accounting information for monitoring corporate investment decisions and assessing the firm's future cash flows. These would enable all investors to better evaluate company value which would lead to higher stock returns.

Second, according to disclosure literature, conservatism compels for more timely recognition of bad news in reported earnings and net assets. This helps establish a better benchmark of the firm's current and future financial performance, as well as a more verified lower bound measure for earnings and net assets (Watts and Zuo 2011; Kim, Nekrasov, Shroff, and Simon 2013). In combination with management earnings forecasts of strategically disclosed economic events, conservative reports - which reports timely information about low realizations of earnings and net assets - provide investors with verified accounting information with the firm's true economic value. Consequently, investors can use both lower realizable value generated from conservative reports and forecast information related to the true economic value of the firms to optimize the pricing multiplier in evaluating the firm's value.

Third, confirmatory hypothesis explained that audited financial reporting provides investors with verified information that can be used as a baseline for evaluating the credibility of unverified voluntary information from alternative public sources (Ball

2001; Watts 2006; Ball, Jayaraman, and Shivakumar 2012), including management earnings forecasts. Firms that apply greater conservative accounting requires managers to commit to disclosing information regarding negative economic events in a timely manner (Watts 2006; Guay and Verrecchia 2007). This requirement pushes managers to be more honest when disclosing management earnings forecasts, resulting in the full disclosure of information related to the firm value. Full disclosures, in turn, yield higher average stock returns when management earnings forecasts are released.

Based on the reasons discussed above, conservatism was believed to improve manager-shareholders contract efficiency, help investors make more accurate expectations about a firm's earnings and future cash flows, and increase the credibility of a firm's management earnings forecast disclosures in the eyes of investors. If this is the case, it would be observed that an average level of conservatism would influence market reactions to management earnings forecast information. Thus, this study expected conservatism to be positively associated with cumulative excess returns around the period when earnings forecasts are announced by managers.

Further, this study intended to investigate the role of accounting conservatism in mitigating the negative relationship between information asymmetry and market reactions to management earnings forecasts. Information asymmetry between corporate insiders and outside equity investors would lead to negative stock price reactions. Because conservatism forces for more timely recognition of bad news events in reported earnings and net assets, in addition to strict verified gains, it reduces information asymmetry between corporate insiders and outside investors (LaFond and Watts 2008). This study predicted that the relationship between information asymmetry and negative stock market reactions to earnings forecasts would be smaller for firms with a greater degree of accounting conservatism.

The sample used in this study comprised of listed firms in the Stock Exchange of Thailand (SET) that issued management earnings forecasts during the testing period of 2005-2012. Management earnings forecast information for each fiscal year were obtained from the NEWSCENTER database. Other news events of listed firms were collected from the SET Market Analysis and Reporting Tool (SETSMART) on-line services.

Accounting and financial data were obtained from the DATASTREAM database from Thomson Financial. Firms' corporate governance structures and management data were collected from each company's Form 56-1, annual reports (Form 56-2) and the Securities and Exchange Commission (SEC) website.

The sample covered 1,016 firm-years over the period of 2000-2012 and were included in the analysis of the relationship between accounting conservatism and biases in management earnings forecasts of Thai listed firms. In examining the effects of conservatism on the stock market reactions to management earnings forecasts, and the effects of conservatism on the relationship between information asymmetry and market reactions to management earnings forecasts, 923 firm-years of Thai listed companies were obtained.

This study used Khan and Watts' (2009) firm-year specific measure, the *C\_SCORE*, to assess the degree of accounting conservatism. The *C\_SCORE* measures the degree to which reported earnings incorporate the firm's expected losses (negative returns) in a more timely fashion than expected gains (positive returns). It captures the cross-sectional and time-series variations in asymmetric earnings persistent in financial statements. In addition to the *C\_SCORE*, this study also used the scaled decile rank of *C\_SCORE* to corroborate the results acquired from the *C\_SCORE* measure. Furthermore, this study used the non-operating accrual approach by Givoly and Hayn (2000) to capture the degree of conservatism to make the research results more robust.

This study found that accounting conservatism was positively associated with management earnings forecast bias (measured as actual earnings per share subtracted by forecast earnings per share, divided by lagged closing share price), which was consistent with the prediction made earlier. In other words, the results suggest that management earnings forecasts possess less optimistic estimates of a firm's future performances when conservative accounting is relatively high.

The regression analysis revealed that the relationship between conservatism and management forecast bias was affected by the degree of operational uncertainty. Factors used to define business uncertainty included cash flow volatility, sales growth volatility



and operating cycle (Gong, Li, and Xie 2009). The findings provided evidence that the impact of conservatism on reducing the manager's ability to overestimate future earnings was attenuated when there were greater uncertainties in the business environment.

In testing the effects of corporate governance structure (i.e., outside directors, CEO/Chairman separation and board size), the results indicated that the relationship between accounting conservatism and management earnings forecast bias was more pronounced when the percentage of outside directors were high. These results were consistent with the predictions made. Conversely, the result presented that board size had negative impacts on the relationship between accounting conservatism and management earnings forecast bias, while no significance in the effects of CEO/Chairman separation was found.

To test the effect of conservatism on market reactions to management earnings forecast disclosures, this study used regression analysis. The sample covered 923 firm-years of Thai listed firms. The findings showed that the cumulative excess returns in a three-day window around the management earnings forecast dates were positively associated with conservatism. In addition, it was found that stock returns decreased at the time of management forecast disclosure when information asymmetry was more pronounced. When considering the interaction between conservatism and information asymmetry, the negative association between cumulative excess returns and information asymmetry measure was mitigated for firms with a greater degree of conservatism.

## **1.2 Motivation**

In 2005, the International Financial Reporting Standards (IFRS) – as mandatorily adopted by numerous listed firms in Europe and Thailand – went through significant changes. First of all, the terms “conservatism” and “prudence” were eliminated from the 2014 conceptual framework (revised IASB 2014). Instead, several mechanisms that guaranteed the use of conditional conservatism were included, such as, the lower costs or net realizable values for inventories (IAS 2), the recognition of probable liabilities versus the non-recognition of contingent assets (IAS 7), or the impairment for financial assets and long-lived assets (IAS 39 and IAS 36) (Barker and McGeachin 2014).

An example of a statement addressing conditional conservatism in the IAS 36 is “The objective of this standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. [...] If this is the case, the asset is described as impaired and all the standard requires the entity to recognise as impairment loss [in earnings].” Intangible assets that do not expire by nature, such as goodwill, are systematically tested for impairment. Because of this, Andre, Filip and Paugam (2015) and Barker and McGeachin (2015) suggest that from a conceptual view, the IFRS resembles conditional conservatism. In other words, the concept of conservatism is embedded in the accounting standard.

The long-debated concept of conservatism characteristics in financial statements, thus, is an interesting issue in accounting research. The International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) claim that conservatism is in conflict with neutrality and can cause bias in the understatement of net assets incorporated in financial statements, as stated in the Conceptual Framework for Financial Reporting (2010 revision). To date, in a revised publishing of the Exposure Draft: Conceptual Framework for Financial Reporting (May 2015), the IASB proposed the reintroduction of the concept of prudence (also termed “conservatism”) to increase the utility of financial statements for investors (IASB 2015).

Academic scholars suggested that the elimination of conservatism changes managerial behaviors and imposes significant costs on investors and the economy in general (Watts 2003, 2006; LaFond and Watts 2008; Kothari, Ramanna, and Skinner 2010; Francis, Hasan, and Wu 2013; Barker and McGeachin 2014; Andre, Filip and Paugam 2015). It was also argued that the removal of conservatism in firms would result in greater, instead of less, adverse selection resulting from information asymmetry that exist between managers and shareholders (LaFond and Watts 2008). In addition, Kothari, Ramanna, and Skinner (2010) and Francis et al. (2013) suggested that conservatism and financial statement verifiability are two important characteristics of the generally accepted accounting principles (GAAP) which, in turn, is shaped by equity market forces.

From a research literature perspective, the reason why unverified gains are treated in different manners is explained by the presence of motivation and information

problems. These complications result in inconsistencies between information properties from unverified gains with those from unverified losses (Watts 2006). Based on this, Barker and McGeachin (2015, 173) stated that “conservatism is a mechanism for enhancing the credibility of financial reporting by means of reducing the subjective, opportunistic reporting of gains.” This statement implies that the role of conservatism in minimizing subjectivity and opportunism in reporting gains contributes to the increase of credibility in financial reports.

Extant research provided evidence that conservative in a firm’s accounting policy is affected by the specific institutional settings, causing the degree of conservatism in each firm, industry and country to vary. However, additional in-depth investigations on accounting conservatism are still lacking. Further areas of study include conservative accounting and its information effects in the capital market, and the relationship between conservatism and disclosure – to see whether the two have a complementary or substitute relationship. Ball, Jayaraman, and Shivakumar’s (2012) confirmatory hypothesis explained that verified accounting information and voluntary disclosure both work in complementary ways to enhance the corporate’s information environment. Thus, the economic implications of both conservative financial reporting and voluntary disclosure can be meaningfully studied when considered together, not in isolation, because each has the potential to influence the firm’s information environment and both are critical to the functioning of an efficient capital market.

To date, few studies linking conservatism with management earnings forecasts are found (see, Hui, Matsunaga and Morse 2009; Sun and Xu 2012). In addition, the role of accounting conservatism is unclear in the capital market. There is currently no known study that examines the impact of conservatism on market reactions to voluntary disclosure information. The management earnings forecast disclosure context provides a new possibility for scholars to investigate the potential advantages that equity investors may receive from reported conservatism when stock returns are strengthened at the time management earnings forecasts are disclosed. This study filled the knowledge gap regarding the relationship between mandated financial reporting and voluntary disclosures, and their roles in alleviating the effects caused by motivations that drive the

management's disclosure behavior and adverse selection problems that result from information asymmetry in the capital market.

### **1.3 Research objectives**

This study aimed to examine the relationship between accounting conservatism and managerial bias in the earnings forecasts of Thai listed firms. In addition, this study sought to investigate the effects of accounting conservatism on stock market reactions to management earnings forecast disclosures. The findings were expected to provide more comprehensive knowledge and understanding on the implications of accounting conservatism and management earnings forecasts for capital market investors. To achieve these outcomes, this study had three main objectives:

1. To examine the relationship between accounting conservatism and biases in management earnings forecasts of Thai listed firms.
2. To examine the effects of accounting conservatism on the stock market reactions to management earnings forecast disclosures of Thai listed firms.
3. To examine the effects of accounting conservatism on the relationship between asymmetric information and the stock market reactions to management earnings forecast disclosures of Thai listed firms.

### **1.4 Theoretical contributions**

This study contributes to existing literature in several ways. First, this study provides additional knowledge to the theoretical concept of contract role of conservatism. Research scholars suggested that accounting conservatism is an efficient financial reporting mechanism that benefits users of the firm's financial statements (Watts 2003). Conservatism restrains managers from acting on their opportunistic behaviors when reporting the firm's accounting measures in contracts by imposing monitoring mechanisms, which include obliging managers to recognize losses in a timely manner and imposing stricter rules in verifying the firm's gains (Watts 2003; LaFond and Watts 2008; Kothari, Ramanna, and Skinner 2010; Francis, Hasan, and Wu 2013). This study provides empirical evidence that accounting conservatism is associated with less optimistic forecast bias, and accounting conservatism is positively associated with cumulative

excess returns around the disclosure date of management earnings forecasts. Thus, empirical findings from this study agrees on the informational effects of conservatism in minimizing information asymmetry, which in turn enhances agency-principal contracts.

Second, the finding that conservatism is positively associated with cumulative excess returns around the earnings forecast disclosure period provides empirical evidence that supports existing disclosure literature and confirmatory hypothesis. Confirmatory hypothesis explains the informational role of audited financial reporting by exploring the linkage between financial reporting and voluntary financial disclosure in enhancing the company's information environment (Ball 2001; Ball, Jayaraman, and Shivakumar 2012; Guay and Verrecchia 2007). It also suggests that financial reporting (as verified accounting information) influences the manager's disclosure decisions and is used as a benchmark in assessing the credibility of voluntary disclosure information (as unverified financial information) (Ball, Jayaraman, and Shivakumar 2012). The empirical evidence from this study, therefore, insists on the complementary role of conservative financial reporting in management earnings forecast information and in enhancing the corporate information environment.

Third, this study expands on current literature regarding management earnings forecasts and financial behaviors. Prior research has mainly focused on the occurrence or the frequency of management forecast disclosures, as well as on management's incentives to issue forecasts (Hirst, Koonce, and Venkataraman 2008). This study extends prior work by providing evidence that accounting conservatism impacts the manager's forecasting biases. The findings are of contribution by demonstrating if accounting conservatism is one of the determinants of forecast characteristics.

Fourth, the results add to current empirical research on the effects of conservatism on management earnings forecasts. Empirical findings from this study extend those of Li (2007), Hui, Matsunaga and Morse (2009), and Sun and Xu (2012) by providing evidence that the manager's forecasted optimism declines with conservatism. The findings offer additional evidence that the asymmetric verification requirement of conservatism offsets a manager's tendencies to withhold bad news and accelerate good news disclosure in managerial forecasts. Consequently, managers can convey expected

earnings information in accordance with financial conservative reports, which leads to less exaggerated estimates of a firm's future performances.

### **1.5 Managerial contributions**

The results of this study provides new knowledge to management about Thai listed firms, market participants (i.e., investors and analysts), the Securities and Exchange Commission (SEC), and accounting standard-setter bodies. Management of listed firms will have a better understanding of the informational effects of the firm's accounting conservatism on capital market investors and its complementary roles in earnings forecast disclosures. Moreover, the empirical evidence provides more details in managers' disclosure biases and accounting policy choices, which is a reflection of managerial disclosure decisions. These are beneficial to equity investors and financial analysts in a way that the accounting information can be used as a basis in estimating the earnings expectations and assessing the firm's economic value for making better decision.

The research findings is also expected to have a direct contribution to the capital market regulator. The empirical evidence on the relationship between conservative reporting and bias in management earnings forecasts is expected to provide more detail in the management's disclosure behaviors and accounting policy choices. These are beneficial to the SEC in issuing its future policies because the SEC and other regulators are concerned with the reliability of management earnings forecast information. The concern is due to the difficulties in observing forecasted bias and management's incentives in forecast earnings.

### **1.6 Structure of the dissertation**

This dissertation is divided into six chapters: the introduction part of research, the objectives, and theoretical and managerial contributions of the dissertation are explained in Chapter 1. Chapter 2 discusses on literatures related to the study. Chapter 3 presents the hypothesis development. Chapter 4 explains the research design, providing detail about sample selection, data, the regression model, and variables measurement. Chapter 5 shows the empirical findings. The conclusion and discussion of the findings, implications of the study and future research directions are concluded in Chapter 6.