

-RESEARCH ARTICLE-

THE RESEARCH AND DEVELOPMENT OF INFORMATION ASYMMETRY ASSESSMENT

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—Abstract—

An entity is less transparent when there is an information asymmetry. Depending on whether the stakeholders are informed of information essential to unequal decision-making, there are benefits and drawbacks to investing in the invested entity. The capital market cycle will suffer considerable damage as a result. This study aimed to create a data asymmetry assessment that would give the participants a stake in the choice-making process by applying the findings and analysis of the causal factors influencing the asymmetry of the research data. Both quantitative and qualitative research is used in this study. 301 companies listed on the Stock Exchange of Thailand made up the sample group for the study. For the quantitative study, the data were gathered between the years of 2015 and 2019 utilizing Path Analysis. Once the model has been developed using in-depth interviews and statistics based on quantitative research, qualitative research will be used to confirm it. Seven data users or data exploitation were interviewed with open-ended questions using a well-designed questionnaire. The study discovered that corporate governance, earnings management, and dividend payment directly impacted information asymmetry, and the quantitative results were consistent with the qualitative ones. As a result, it is transformed into an assessment of information asymmetry.

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1. INTRODUCTION

The information is crucial for the stakeholders who rely on it to make decisions. It is the most crucial first phase of any investment decision in the endeavor since it influences decision-making support. Gaining confidence and making judgments are made easier with useful information. Conflicts will arise if each stakeholder receives different information. Conflicts with other stakeholders, particularly investors, will result from those who acquire crucial information sooner or more quickly taking advantage of other stakeholders. These occurrences are known as information asymmetry ([Akerlof, 1978](#); [Jafari Seresht et al., 2015](#)). Information asymmetry results from the inappropriate and immoral selection of information. It obliterates objectivity.

One of the forms of information asymmetry connected to a business environment is the inappropriate choice, where a set of company stakeholders may get the knowledge that is more advantageous than another. The resulting information disparity may be the underlying cause of immorality. It is disadvantageous for some stakeholder groups to be aware of such information from the perspective of some stakeholder groups who should have been aware of certain information but were suppressed or not given some crucial information ([Scott et al., 2003](#)). Listed corporations are expected to make decision-making information available to inform users to disclose it. The disclosed information must be true, pertinent to the decision, adaptable, impartial, and timely. Information used in decision-making must be pertinent, thorough, and understandable. The dissemination of such information, however, is also crucial. If information is distributed inequitably, each recipient group will experience distinct outcomes. This illustrates how information asymmetry emerged ([Khodamipour, 2009](#)).

Stakeholders who use the data need to be aware of the various factors that influence the emergence of information asymmetry. This is so that damage caused by decisions based on investment choices can be avoided. Information used to make decisions should be transparent and trustworthy. The researchers were aware of its impact on information asymmetry so that stakeholders could use it as a decision-supporting tool and gain faith in the information presented before investing in actually making investments to create wealth. Earning management, Financial Reporting Disclosure Quality, Corporate Governance, and Dividend Payment are all factors that affect information asymmetry. The findings of this study can be used by investors and those who are just interested in investing to help them make informed investment decisions. Information asymmetry is one of the crucial metrics used in decision-making because the factors investigated by the researchers are causal.

The entity is susceptible to information asymmetry concerns if investors consider the choice. Suppose investors wish to invest in such ventures. In that case, they should seek

additional support to reduce the risk of information asymmetry, avoid making poor investment decisions, and gain an advantage. Previous studies examined the interaction and relationship between several variables and information asymmetry. Earning management through discretionary accrual items, deferring the recognition of income and expenses for various accounting periods, etc., are some of the influencing and related factors. The dividend payment and the quality of financial reporting disclosure, which measures how well decisions regarding corporate governance are informed by financial reporting, reflect influence and correlation in various directions. It influences and impacts how the company communicates information asymmetry to stakeholders and information users. Several additional factors significantly impact data transparency. The findings mentioned above prompt researchers to investigate the causes of information asymmetry. There are, in fact, several variables that directly and indirectly affect the occurrence of information asymmetry. Due to Corporate Governance, Financial Reporting Disclosure Quality, Earning Management, and the Dividend Payment of Listed Companies in the Stock Exchange of Thailand, which is a market that is a significant source of capital for Thailand and has many investors, management uses discretionary accrual items to distort actual numbers that are unknown to outside investors due to Information Asymmetry. To ensure fair and equitable use of information by internal and external stakeholders, the study identifies the causes and interconnected influences on information asymmetry. This information is used to aid in the analysis and decision-making of stakeholders and other stakeholders who wish to take advantage of the information published. Additionally, it helps regulators plan, monitor, and advance information dissemination to maintain a balance for investors in the capital market.

1. LITERATURE REVIEW

This research is based on the growth and study of agency theory since 1976 ([Jensen et al., 2019](#)), examining perspectives on the origin of conflicts between an entity's principals and agents from divergent objectives or interests and operations that benefit particular individuals or groups of stakeholders. The Positive Accounting Theory also examines the inclination, driving force, and explanation for the executives' self-serving actions that misrepresent the information asymmetry issue. To foster relationships between agents and stakeholders, according to [Watts et al. \(1986\)](#)'s study, the representative of the entity to its stakeholders presents work or reporting data to stakeholders based on the Stakeholder Theory notion. Information from the Thai Stock Exchange's rules and regulations was studied to explore the theoretical ideas connected to the Efficient Market Hypothesis. Its purpose is to investigate the type of corporate data used in the conceptual analysis. This is combined with a study of the literature and research on information asymmetry, which refers to a situation in which an entity's perspective of information varies among stakeholders, giving it an advantage over the use of different views of information. It may be advantageous when using various perceptions of information, such as the perception of inside information. Certain stakeholder groups may benefit if the information is acknowledged more slowly or

quickly (Nuryaman, 2014). Adverse selection may provide managers or internal stakeholders with better knowledge than external stakeholders, depending on two views. The stakeholders' decision-making depends on this information. It is a cause of moral hazard that some stakeholder groups do not obtain this information from the corporate executives. It is a dishonest act directed at stakeholders or discrimination that benefits particular stakeholder groups. The management has gone above its mandates to create information asymmetry and the power of representation. The utilization of discretionary accruals by the executives for earning management is a specific action. The discretionary accruals are the part of accruals that managers can pick from within the scope of accounting standards to modify a company's cash flows. It could mask the true performance or returns resulting from the business environment and other information that affects earning management. Different people perceive information about the company differently due to information asymmetry. The stakeholders can obtain the disclosed information accurately if the entity complies with good corporate governance.

Good corporate governance eliminates conflicts between the principal and agency, reducing information asymmetry. Suppose the board director or major shareholder who participates in the business management receives more than or significant information from the performance of duties. In that case, some stakeholders may be impacted by the implementation of the entity's policies. Financial Reporting Disclosure Quality exemplifies transparency in disseminating data to stakeholders that are important for making decisions. As a result, information asymmetry and financial reporting disclosure quality are related. The Financial Reporting Disclosure Quality is influenced by the Corporate Governance based on the Owner Structure or Board Structure, which is significant and affects the confidence of stakeholders. The correlation between information asymmetry and the Annual Dividend Policy view revealed that the executives would use the dividend policy to keep cash flow out of the company and highlight the wealth of shareholder returns to hide actions taken that might have resulted in mistakes or fictitious profits. To test the hypothesis that factors related to earning management, corporate governance, financial reporting disclosure quality, and dividend payment affect information asymmetry in this study, the researchers applied the factors that affect information asymmetry.

2. METHODS & METHODOLOGY

The researchers used the Stock Exchange of Thailand's Secondary Statistics database and the SETSMART database to compile various data using study data from 2015 to 2019. The variables of 301 businesses were used to collect the data. To test the research hypothesis, quantitative research was used. Results from the quantitative hypothesis testing were incorporated into additional in-depth interviews for qualitative study. They requested that seven data users or data usage experts create a model for assessing information asymmetries and empirically confirm research-based figures.

2.1 Quantitative Research Process

The researchers divided the research implementation process for this study into the following six steps to study the factors influencing information asymmetry:

The concept, various theories related to The Stock Exchange of Thailand, Agency Theory, Positive Accounting Theory, Stakeholder Theory, Efficient Market Hypothesis, and literature review related to Information Asymmetry were studied, improved, and understood in Step 1 to develop a conceptual framework for this research and a conceptual research framework.

The conceptual research framework is the second step. The researchers wanted to create relevant accounting information with this study. It is useful for those who read publicly traded companies' financial statements or are interested in investing in publicly traded companies in the future and for pertinent agencies like those looking into information asymmetry. This information can be utilized to design future research projects. The researchers wanted to create knowledge that was both valuable and crucial. The outcomes of research and study may be advantageous to the entire community, whether in academic form or a professional capacity relating to a newly established or enhanced industry. Step 3: To ensure that the measurement of the variables used in the research was consistent with the conceptual framework for the study, the researcher reviewed internal latent variables, external latent variables, and externally observable variables obtained from prior literature reviews. The research goals are pertinent to the scenario and useful for conducting a thorough data analysis.

The researchers collected and examined the data in step four. For this investigation, the researchers gathered data from sources using secondary data. According to the variables the researchers wanted to analyze for the statistical value used for hypothesis testing and summarizing the findings of additional research, the data collected for the study must appear accurate and complete. The method of presenting research findings in research investigations is step five. By presenting the research findings that demonstrate the justification following the accepted cause-and-effect theory's guiding principles, the researchers studied, analyzed, came to conclusions about, and discussed the findings of research studies. It is also an understandable form of information communication. Information asymmetry can be measured using a variety of different metrics. [Dierkens \(1991\)](#) and [Purwanti et al. \(2013\)](#), information asymmetry parameters were measured in this study. Abnormal return was used to measure the information asymmetry. What occurs in the interests of shareholders can be used to measure some of the information asymmetries. This is because shareholders' executives will have access to more inside information than outsiders. Executives or insiders typically have access to information before it is shared with the public. The share price signals only the stakeholder equity. A company's capital structure may occasionally change. According to [Sharp et al. \(1964\)](#), information asymmetry as measured by abnormal return is calculated using the market model and is as follows:

Abnormal Return (AR_{it}) = Real Return (R_{it}) – Expected Return ($E[R_{it}]$)

Whereas;

AR_{it} = Abnormal Return of Company I at t time
 R_{it} = Real Return of Company I at t time
 $E[R_{it}]$ = Expected Return of Company I at t time

The Abnormal Return of securities is the difference between the Company's Real Return and the Expected Return of the Company's Securities. The model reflects a linear relationship between the company's rate of return and the average market rate. This requires parameter estimation in the non-normal return model before implementation. The actual information during the publication of accounting information must be used to calculate the Expected Return rate. The test period was chosen to reduce the risk of security volatility and factors affecting the price of the securities. The Event Period is specified for 60 days before the publication of accounting data (+30, 0, -30). It will take approximately 60 days to test estimates for alpha (α) and beta (β) of the Estimation Period approximately 60 days from the Event Period. Because stock market prices are trading and capital circulating and fluctuating, using 60 days will reduce the impact of volatility from other factors (Dai et al., 2013; Monnakgotla, 2015; Sincharoonsak, 2018).

The information asymmetry variables are measured by cumulative abnormal return.

The factors that influence information asymmetry are as follows:

1) Earning Management factor in testing the influence on information asymmetry using the Kothari Model (Kothari et al., 2005) can be calculated from:

$$DAC_{i,t} = [TA_{i,t} / A_{i,t-1}] - [\alpha_1 (1/A_{i,t-1}) + \alpha_2 (\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + \alpha_3 (PPE_{i,t}) / A_{i,t-1} + \alpha_4 (ROA_{i,t}) + \epsilon_{i,t}]$$

Whereas;

$DAC_{i,t}$ = discretionary accruals of Company I at t year
 TA_t = Total accruals Company I at t year
 $\Delta REV_{i,t}$ = Change in Total Revenue Company I at t year
 $PPE_{i,t}$ = Value of Properties Plans & Equipment Company I at t year
 $ROA_{i,t}$ = Return on Assets Company I at t year
 $\epsilon_{i,t}$ = error

2) Financial Reporting Disclosure Quality factor uses the Voluntary disclosure Index of Petersen et al. (2006) categorized into 5 groups; 1. Strategy 2. Competition and Outlook 3. Production 4. Marketing Strategy 5. Human Capital in testing the influence on information Asymmetry.

3) Dividend Payment factor in testing the influence on information asymmetry (Alamdari, 2016) uses Dividend Payout Ratio = Dividends per Share / Earning Per Share

4) Corporate Governance factor in testing the influence on information asymmetry (Ajina et al., 2015; Man, 2013; Wang et al., 2008) is measured from Owner Structure, including Ownership Concentration = proportion of the 5 major shareholdings of the entity (Man, 2013), Family Ownership = proportion of the family shareholding (Am-ugsorn et al., 2022) and Institutional Shareholders = shareholding proportion of the Institutional Shareholders (Arafat, 2020) and Board Structure including Board Independent = proportion of board independent (Hazim et al., 2022) and Board Activities = proportion of times of the Board meeting (Hazim et al., 2022).

3. QUALITATIVE RESEARCH

After completing the quantitative study, the researchers discovered a dependable and pleasing model for determining the information asymmetry from the qualitative data analysis. Its design and development will be based on additional qualitative research. To develop the INFORMATION ASYMMETRY ASSESSMENT and to validate the results of the quantitative hypothesis tests from statistical studies, it is important to analyze the qualitative data. Stakeholders, data users, experts, and people who value publicly available information, as well as people with experience using information without bias or using opinions for personal gain, were all interviewed in-depth.

3.1 Key Informant

The researchers chose representative samples of information users or those with experience using the information in financial and other pertinent reports when choosing samples for their qualitative research, such as

1. Experts and academicians with academic knowledge in finance may also know accounting to disseminate knowledge and develop it into a body of knowledge.

2. Investment consultant who analyzes and makes investment recommendations using financial and business reports data.

3. An auditor who reviews and validates the signature on financial records that are available to the public.

4. Investors who do analysis and make investment decisions using the information that has been published.

The researchers fully analyzed the results of the in-depth interviews to support the findings of the hypothesis-based research and in conjunction with the creation of a model to evaluate information asymmetry. The researcher will use the uniform as an interview in the qualitative study. The interview form is divided into two sections: general information about the responders and interview questions. The interviewees' thoughts and experiences are separated into questions to verify the quantitative test's findings

following the hypotheses. Investors use the opinions that have been established as a tool to aid in decision-making. The model is used to evaluate information asymmetry.

3.2 Tools Used in Qualitative Research

The researchers used in-depth interviews, open-ended questions, and a structured questionnaire on the influence of corporate governance, earnings management, financial reporting disclosure quality, and dividend payment that influence information asymmetry to determine the tools for this qualitative study.

3.3 Data Validation

In-depth interviews and open-ended questions were used to gather the data for this study. It systematically investigated the causes of the information asymmetry among the companies listed on the Thai Stock Exchange. The researchers utilized the questionnaires created through quantitative research and literature review. The researchers spoke with financial journalists and specialists. Without speaking with those involved, information asymmetry will result in bias and discrepancies in the research findings. The researchers repeat the interview with the same questions to the subsequent interviewees without following the interviewers' lead. The information supported conclusions until they were appropriate and correct for this research.

3.4 Data Collection

The researchers did not identify the answers provided by each interviewee when compiling the data for the qualitative analysis or summarizing the findings qualitatively from the interview responses. The results of the interviews were compiled by categorizing the responses into the proportion of those who agreed with or disagreed with the research's hypothesis, which was separated into proportions for quantitative analysis. The information asymmetry evaluation model was developed with the help of suggestions and recommendations for the benefit of investors and data users in making wise decisions. To use the data for analysis, academic research, and public consumption, it must be ensured that it is symmetrical and fair to decision-makers.

3.5 Conclusion Drawing and Verification of Conclusion

The researchers broke down this process into two steps.

1. The method for concluding: This is a provisional conclusion that will be incorporated into the sub-conclusion following the hypotheses that will be considered jointly. These are the collections of research-based explanations pertinent to the research so that they can be understood and compared to real-world events from the literature and related studies. The actual events were examined to write the feature conclusion and follow the relevant research objectives and weight of focus.

2. Verification of conclusion: It links an abstract conclusion to a concrete conclusion in the context of recurring events to ensure it is correct, comprehensive, and pertinent. The researchers' and key informants' discussions support the qualitative research findings.

3.6 Developing Information Asymmetry Assessment Model

The researchers concluded from the steps mentioned above that it was necessary to investigate the causal elements affecting the companies listed on the Thai Stock Exchange information asymmetry. It included Earning Management, Financial Reporting Disclosure Quality, Dividend Payment, and Corporate Governance according to Owner Structure and Board Structure. The researcher created the INFORMATION ASYMMETRY ASSESSMENT, which applies the model and research findings, as well as several concepts and theories, to the conclusion of quantitative research based on the outcomes of hypothesis testing. The linear structural equation model and the Path Analysis were used to apply the study results. The factors that positively and negatively influence information asymmetry were used to create and derive the INFORMATION ASYMMETRY ASSESSMENT acquired from the above research. According to the model mentioned above, the weights were assigned depending on the outcomes of the hypothesis testing. To bring the INFORMATION ASYMMETRY ASSESSMENT above to have questions according to the proper assessment model accurately and completely, the qualitative study was undertaken by interviewing experts who had relevant expertise. It is possible to receive the full and correct assessment model. The INFORMATION ASYMMETRY ASSESSMENT will aid users of the business data in realizing the symmetry of the data that needs to be studied. Accurate information that does not present advantages and disadvantages to various information users can provide such benefits. According to the research objectives, the assessment model will address the variables driving information asymmetry. The assessment model will also be broken up into questions where the user must enter the relevant entity's data for self-calculation. The assessment described above will demonstrate the degree of information asymmetry present in the relevant entity. Based on the trust in the information that emerges, judgments are made on using the entity's information for the user's purposes.

3.7 Developing Information Asymmetry Assessment by Creating Tools Based on Quantitative Research

The researchers used the variables influencing Information Asymmetry from quantitative research hypothesis testing from the influence of Corporate Governance, Earning Management, Financial Reporting Disclosure Quality, and Dividend Payment to develop an equation. The such equation can be used to create the tool by design assessment to calculate such influence from INFORMATION ASYMMETRY ASSESSMENT. The level of Information Asymmetry that occurs with the test entity can be identified. It is divided into questions that weigh the influence values according to the equation. The weight value comes from quantitative research, and only the variables with significant influence were developed into the equation. It is derived from the following equation:

$$\text{INASYM} = -X_1(\text{DISCLOSU}) + X_2(\text{DIVIDEND}) + X_3(\text{EM}) + X_4(\text{ZSOWN}) \\ + X_5(\text{ZSFAM}) - X_6(\text{ZBIS}) - X_7(\text{ZBIND}) - X_8(\text{ZBACT})$$

3.8 Developing the Information Asymmetry Assessment Model by Building A Qualitative Research Tool

To assess the information asymmetry of the data from the quantitative research, the researcher used the variables and tools they had developed. The information asymmetry assessment model was developed with qualitative research data. It was developed into a question to respond to the assessment model and assist in identifying and calculating the asymmetry of the resulting data. Based on the information asymmetry assessment model, opinions and theories are applied to questions as recommendations. These can be broken down into inquiries about effective corporate governance, profit management, the standard of financial disclosure, and the elements of dividend payment.

The answers to the above queries will enable the quantitative research to calculate the variable weight corresponding to the qualitative research. The influence contributing to the information asymmetry is calculated at each of the five levels—lowest level, low level, moderate level, high level, and highest level.

The developed information asymmetry assessment model offers recommendations and explanations for why information asymmetry occurs due to the influences mentioned above, allowing users to use the assessment model for higher-quality decisions once the results of the information asymmetry assessment at each level are known.

4. RESEARCH RESULTS

The following can be drawn from the research findings of THE RESEARCH AND DEVELOPMENT OF INFORMATION ASYMMETRY ASSESSMENT:

It was discovered that the model was consistent and had a harmonic value with the empirical data based on the harmonization index of the factor model that influences and affects the asymmetry of the data. The Harmony Index is calculated using the following values: index value $2=9.2300$, $df = 6$, $p\text{-value} = 0.16109$, $CFI = 1.0000$, $GFI = 1.0000$, $AGFI = 0.9999$, $RMSEA = 0.0190$, and $SRMR = 0.0120$. The structural equation model is suitable, it can be said. It is harmonious and congruent with the empirical findings (Hair et al., 1998). The model is consistent and in harmony with the empirical data, as shown by the relative Chi-square ($2/df$) of 1.5383, which is less than 2.0000. The model is consistent and generally harmonious according to the Comparative Fit Index (CFI), which is 1.0000 and greater than 0.9000. Two index values are taken into consideration by the Absolute Fit Index. The Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) are 1.0000 and 0.9999, respectively. In light of the empirical data demonstrating that the GFI index and AGFI index values were more than 0.9000, it can be said that the resulting model was consistent and in harmony with the data. The model is coherent and in harmony with the actual data having an RMSEA index less than 0.0500, as indicated by the Root Mean Square Error of Approximation (RMSEA) value of 0.0190. The Standardized Root Mean Square Residual (SRMR), which displays

values less than 0.0500, is 0.0120, suggesting that the model is consistent and in harmony with the actual data.

Table 1. Shows the Observable Variable Element from Both Quantitative and Qualitative Research That Influences Information Asymmetry

The factor influencing INASYM ($R^2 = 0.32$) By Quantitative Research				Result of Qualitative Research
Factor	Beta	SE	T-value	
ZDISCLOSU	-0.10	0.02	-4.06**	Accept
ZDY	0.13	0.02	5.67**	Accept
ZEMYOON	0.13	0.02	5.46**	Accept
ZSOWN	0.19	0.02	8.05**	Accept
ZSFAM	0.15	0.02	6.47**	Accept
ZBIS	-0.01	0.02	-0.30	Accept
ZBIND	-0.04	0.02	-1.57	Accept
ZBACT	-0.15	0.02	-6.40**	Accept

According to research statistics, ZDISCLOSU stands for Financial Reporting Disclosure Quality, ZDY for Dividend Payment, ZEMYOON for Earning Management, ZSOWN for Ownership Concentration, ZSFAM for Family Ownership, ZBIS for Institutional Shareholders, ZBIND for Board Independence, and ZBACT for Board Activities. Accept means that the quantitative and qualitative research findings support the hypothesis test findings (explain table abbreviations).

The components revealed in Table 1 were the earning management (EM) factor, the dividend payment factor, and the corporate governance factor according to the Owner Structure as evaluated by the Ownership Concentration (ZSOWN). The Family Ownership (ZSFAM) had a direct positive influence of 0.13, 0.13, 0.19, and 0.15 on information asymmetry (INASYM). This is in line with qualitative research, in which most data consumers or experts in data exploitation concur with the test results and corporate governance measured by the Board Structure. Information asymmetry (INASYM) was negatively impacted directly by the Board Activities (ZBACT) and Financial Reporting Disclosure Quality (DISCLOSU), with direct negative influences of 0.15 and 0.10, respectively. This is in line with qualitative research, where most data users or individuals with experience in data exploitation concur with the findings. There was no statistically significant difference between the corporate governance factors and determinants according to Owner Structure as evaluated by Institutional Shareholders (ZBIS) and corporate governance according to Board Structure as measured by Board Independent (ZBIND). This fits with the principles of qualitative research. The test's outcomes exhibited a 32% predictive coefficient.

5. DISCUSSIONS & CONCLUSION

The information asymmetry is influenced by characteristics of excellent corporate governance, according to the results of quantitative research's hypothesis testing. It can be minimized if the organization has an owner structure that affects corporate governance. The board's organizational structure may be observed and produces transparency. This is in line with studies by (Elbadry et al., 2015), Kanagaretnam et al. (2007). An entity with good corporate governance will produce a direct positive influence leading to information asymmetry, which shows that the influence of such shareholder equity has a good corporate governance effect resulting in transparency. This is because ownership concentration and family ownership are characteristics of good corporate governance. This is consistent with the qualitative research of the experts who have offered their opinions on the likelihood of such a group of shareholders if they control a significant stake. The outcome will be applied to corporate management to foster information asymmetry (Davidson et al., 2005; Jamalinesari et al., 2015; Petersen et al., 2006; Sáenz González et al., 2014). The board's meetings or other activities will encourage transparency and serve as methods for monitoring it. The meeting minutes will include a report on the outcomes and topics discussed during the meeting. This allows the entity to function and accomplish its stated commercial goals. To lessen the possibility of information asymmetry, it leads to reporting and monitoring. This is in line with studies by Cai et al. (2015) and Ajina et al. (2015). However, there was no association between corporate governance and the owner structure's institutional shareholders. Qualitative research supports it. These institutional investors abstain from managing effective corporate governance. They are only a collection of investors looking to profit from the institutional investors' money. There is no connection between knowledge asymmetry and strong corporate governance, which has a board structure of many independent directors. This is so because the independent board, which participates in policymaking, is not impacted by the business. They take into account the application of strategies that are not specifically related to business management. According to qualitative research, the Earning Management component has a direct favorable impact on Information Asymmetry. The earning management misuses the financial reporting data that stakeholders rely on to make decisions. There is information asymmetry since performance data cannot be examined to establish the true business value (Abad et al., 2018; Cerqueira et al., 2015; Cormier et al., 2013). Dividend payments directly and positively impact information asymmetry. This is in line with the judgment of professionals drawn from qualitative research. Large dividend payments may not usually indicate that a corporation is extremely wealthy. The business lacks internal sources of funding for operations and significant dividend payouts due to the cash flow caused by the dividend payment. The stakeholders will not understand the true value of the performance, even when it is based on operating results.

This is because actual returns are not broken down by product performance. Those that need the information are only internal stakeholders. It agrees with studies conducted by Zare et al. (2013) and Zare et al. (2013). Disclosure of Financial Reporting Information

asymmetry was negatively affected directly by quality factors. According to qualitative research, the degree of disclosure in financial reporting contributes to transparency and improves decision-making. Information asymmetry will be lessened if the company has good disclosure quality. It helps the entity and its stakeholders develop stronger relationships. Research by Petersen et al. (2006), Wittenberg Moerman (2009), Saini (2010), and Palazzo et al. (2017) supports this. The researchers used the findings from their quantitative study to create the following INFORMATION ASYMMETRY, ASSESSMENT model:

$$\text{INASYM} = -0.10(\text{DISCLOSU}) + 0.13(\text{DIVIDEND}) + 0.13(\text{EM}) + 0.19(\text{ZSOWN}) + 0.15(\text{ZSFAM}) - 0.15(\text{ZBACT}) + \varepsilon$$

The results of the qualitative research, which focused on cause and effect and provided guidance for creating an INFORMATION ASYMMETRY ASSESSMENT, were combined with the model developed through the quantitative research to create this assessment. Such a model can be used to benefit from the consideration of investor decision-making and to have faith in using the data or information that interested businesses analyze before investing to increase investor wealth truly. To measure the influence of quantitative research models and hypothesis confirmation on qualitative research models, the INFORMATION ASYMMETRY ASSESSMENT contains assessment questions related to corporate governance, dividend payment, financial reporting disclosure quality, and earning management. The degree of asymmetry of the generated information separated into 5 levels can be calculated by the computer as follows.

Level 1, the bottom rung: This demonstrates that the company has the lowest amount of information asymmetry due to its strong corporate governance and financial reporting disclosure quality, which include an open owner structure and broad structure. The entity provides balanced information that is not advantageous to a particular user group.

Level 2, low level: This indicates little information asymmetry in the company's operations because it has good financial reporting disclosure quality, strong corporate governance, an open ownership structure, and low levels of earning management. Information supplied by the entity has a respectable level of information symmetry and is accurate. Level 3, moderate level: This level denotes a moderate degree of information asymmetry for the entity due to a low level of earning management and a moderate level of corporate governance with an owner structure and broad structure with moderate transparency. A Dividend Payment policy that does not permit a significant amount of information asymmetry can nonetheless be suitable in some circumstances. Because the entity may have an earning management and ownership structure that influences the information asymmetry, the entity has presented some potential information asymmetry. Included in this is the broad framework, which could keep the information asymmetry at a manageable level. Users of the evaluation should use the information with caution because the entity's Dividend Payment policy could also result in information

asymmetry. Level 4, advanced: Because the entity has a low level of financial reporting disclosure quality and corporate governance with an owner and broad structure, it suggests a high level of information asymmetry. It might have a dividend payment policy that makes information asymmetry more likely to occur. When an entity has a high level of earning management, it may also have a high level of information asymmetry, necessitating that the assessment model's users form opinions about how the entity uses information based on their own experiences and knowledge of the subject. This is due to the possibility that the entity has a high Owner Structure and Broad Structure in its Corporate Governance, which is influential and conducive to information asymmetry, as well as a moderate Financial Reporting Disclosure Quality. Large Dividend Payments may cause information asymmetry and businesses to present distorted information on earning management. The highest level is Level 5: It demonstrates that the object has the greatest information asymmetry. This is so because Corporate Governance has an Owner Structure and Broad Structure, and Financial Reporting Disclosure Quality is at the lowest level. It might have a dividend payment policy that promotes information asymmetry and high-level earning management. It demonstrates the entity's extreme information asymmetry. Information might not always be neutral, accurate, and trustworthy. The high dividend payment is unknown and influences the price or volatility of the securities because of the high level of earning management. Because of its impact on data transparency and equality in the perception of news and information, the company's corporate governance, which has an owner and broad structure, greatly facilitates information asymmetry. Additionally, the company's Financial Reporting Disclosure Quality is very poor. The interested parties or investors who want to invest in such businesses must have strong decision-making skills or be knowledgeable about crucial information.

6. RESEARCH LIMITATIONS

The researchers carefully laid out the research process for this study, examining theories, books, and textbooks, as well as numerous earlier studies. However, there are some restrictions on this research. The data of the samples were taken from LISTED COMPANIES ON THE STOCK EXCHANGE OF THAILAND. They presented incomplete data based on variables that did not submit the financial reports required for analysis or did not complete the required number of years. Therefore, it is impossible to analyze the sample of these companies. Secondary quantitative data makes up the information gathered. Thus, it was necessary to locate and apply the appropriate statistics. Because such analysis would reveal a cause-and-effect relationship to be used to support the hypothesis analysis, linear or rational correlation analysis was chosen in this study to analyze the hypothesis-based data. The outcomes of the quantitative analysis were verified by the researchers using qualitative research.

7. RECOMMENDATIONS FOR APPLYING THE RESEARCH RESULTS

According to the study, factors such as Earning Management factors, Financial Reporting Disclosure Quality elements, Corporate Governance factors, and Dividend Payment factors had a beneficial impact on information asymmetry. Information asymmetry will be produced if an entity has discretion over significant backlogs. Information asymmetry is negatively affected directly by factors relating to financial reporting disclosure quality. The information asymmetry is lessened if excellent financial disclosures are given. Because data distortion can lower the quality of disclosure, the Earning Management factor has a direct negative impact on the quality of financial reporting disclosure quality. This affects information asymmetry inadvertently. If a favorable relationship develops for entities with Corporate Governance Factors with a strong shareholder or management structure, then Corporate Governance Factors directly affect Information Asymmetry. If a well-managed organization is worried about its management in the capacity of a management representative, there is a risk of information asymmetry and a negative correlation. Earning management is directly impacted by the Corporate Governance aspect. Information asymmetry and the dividend payment policy are moving in the same direction. However, the Good Corporate Governance factor has the opposite impact of the Information Asymmetry component for the Financial Reporting Disclosure Quality factor. Information asymmetry is directly influenced favorably by Dividend Payments. Information asymmetry arises when an entity pays big and many dividends. The policy for dividend payments should be created, and the source of the return should be openly acknowledged. A significant dividend payment will result in a reduction in the company's free cash flow. According to Information Asymmetry, Earning Management has a direct, favorable impact on Dividend Payment because growth companies frequently reinvest free cash flows to build long-term wealth.

7.1 Interested Investors And Those Interested In Using the Information

Earning Management, Financial Reporting Disclosure Quality, Corporate Governance Quality, and Dividend Payment are all factors that affect information asymmetry. Investors can use the equations derived from this research to calculate the data adequacy of investment decisions. This is due to the causal relationships between the variables the researcher examined or that interested businesses use the INFORMATION ASYMMETRY ASSESSMENT they obtained from the research to test for information asymmetry. One of the crucial metrics for decision-making is information asymmetry. To make a decision, the investor should seek additional support if they determine that an entity carries risks related to information asymmetry. Investors should consider investing in companies with family ownership and ownership concentration if they want to do so in an entity with the risk of information asymmetry. This is because many such factors indicate the existence of information asymmetry. Information Asymmetry will be reduced if the entity holds numerous meetings or committee activities that can promote transparency in reporting. The amount of information asymmetry will rise if discretion is used on many unfinished businesses. Since dividend payments can reflect a wealth of information asymmetry in

making returns, an entity with a significant amount of dividend payments may reflect the emergence of information asymmetry. Although investors might not be aware of the true return, a company with good reporting quality will disclose important data for making decisions, giving investors peace of mind that information asymmetry has been minimized.

It is possible to use the INFORMATION ASYMMETRY ASSESSMENT obtained from this study after it has undergone testing based on quantitative and qualitative research that passes the hypothesis test. The Information Asymmetry Assessment was created with the help of the research objectives gleaned from the literature review, related studies, and experts' opinions. This assessment is confident and suitable for use in decision-making.

7.2 Relevant Agencies such as The Stock Exchange of Thailand and Corporate Governance

The agencies can use the study findings in their assessments to mitigate the risks associated with an investment in publicly traded firms. They can also use the research findings to help create useful investor education materials. To encourage investment and economic progress, emphasis is placed on providing trustworthy information to companies listed on the stock exchange. Investors from outside and domestically may be drawn to make investments. For those interested in investment, helpful information will be produced if the SET or the regulatory agency controls and generates transparent information. Working capital will be generated; as a result, resulting in the creation of an absolute market.

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From the research results, an INFORMATION ASYMMETRY ASSESSMENT program can be developed as follows:

NOTE : The following assessment has been prepared from the results of research on factors that influence and affect Information Asymmetry of companies listed on the Stock Exchange of Thailand

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1. Strategy

- 1.1 A statement of corporate goals or objectives is provided
- 1.2 A general statement of corporate strategy is provided?
- 1.3 Actions taken to achieve the coporate goal are discussed
- 1.4 A time frame for achieving corporate goals is provided
- 1.5 Attitude towards ethic questions is provided
- 1.6 Strategy towards environmental issues is provided
- 1.7 Detailed segment performance is provided
- 1.8 Changes in ROCE or EVA are provided
- 1.9 Commercial risk assessments are provided
- 1.10 Financial risk assessments are provided
- 1.11 Interest or exchange risks are discussed
- 1.12 Other risk assessments are discussed

2. Competition and outlook

- 2.1 The principal markets are identified
- 2.2 Specific characteristics of these markets are described
- 2.3 The market sizes are estimated
- 2.4 The competitive landscapes are discussed
- 2.5 Barriers to entry are discussed
- 2.6 The market growths are estimated
- 2.7 Change in market shares is discussed
- 2.8 Impact of barriers to entry on profits is discussed
- 2.9 Impact of barriers to entry on profits is discussed
- 2.10 A forecast of market share is estimated
- 2.11 The impact of competition on future profits is discussed
- 2.12 ผลกระทบต่อการแข่งขันที่มีต่อกำไรในอนาคต

3. Production

- 3.1 A general description of the business is provided
- 3.2 The principal products/services are identified
- 3.3 Specific characteristics of these products/services are described
- 3.4 Speed to market is discussed
- 3.5 R&D expenditures are discussed
- 3.6 Investments in production are discussed
- 3.7 Product development cycle is discussed
- 3.8 Ratio of inputs to outputs is discussed
- 3.9 New products are discussed
- 3.10 Rejection/defect rates are discussed
- 3.11 Volume of materials consumed is discussed
- 3.12 Changes in production methods are discussed
- 3.13 Changes in product materials are discussed

Enter Level

Found = 1 ,Not Found = 0

Found = 1 ,Not Found = 0

Found = 1 ,Not Found = 0

4. Marketing strategy

- 4.1 Marketing strategy is provided
- 4.2 Sales strategy is described
- 4.3 Distribution channels are described
- 4.4 Sales and marketing costs are provided
- 4.5 Brand equity/visibility ratings are discussed
- 4.6 Customer turnover rates are discussed
- 4.7 Customer satisfaction level is discussed
- 4.8 Customer mix is discussed
- 4.9 Revenues from new products/services are discussed
- 4.10 Order backlog is provided
- 4.11 Percent of order backlog to be shipped next year is provided
- 4.12 Amount of new orders placed this year is provided
- 4.13 Change in inventory is discussed

Found = 1 ,Not Found = 0

5. Human capital

- 5.1 Experience of management team is discussed
- 5.2 Description of workforce is provided
- 5.3 Amount spent on education is provided
- 5.4 Employee retention rates are provided
- 5.5 Average revenue per employee is provided
- 5.6 Average age of key employees is provided
- 5.7 Age of key employees is provided
- 5.8 Other Measurement of intellectual capital is provided
- 5.9 Investment in ERP is provided
- 5.10 Strategy for measurement of human capital is discussed
- 5.11 Strategy regarding ERP system is discussed

Found = 1 ,Not Found = 0

Auto

Total
Index

Corporate Governance Effects on Earnings Management		auto score	Effects on Information Asymmetry		auto score
		auto text			auto text
Level	SCORE		Level	SCORE	ASSESSMENT's auto reason text
Atleast	Level 1		Atleast	Level 1	
Small	Level 2		Small	Level 2	
medium	Level 3		medium	Level 3	
High	Level 4		High	Level 4	
Highly	Level 5		Highly	Level 5	

Level of Financial Reporting Disclosure Quality		auto score
		auto text
Level	SCORE	
Atleast	Level 1	
Small	Level 2	
medium	Level 3	
High	Level 4	
Highly	Level 5	