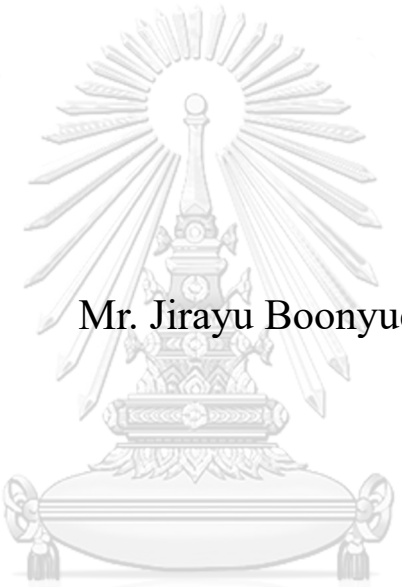
The Moderating Effect of Stock Price on the Relationship between Earnings Quality and Dividend Payments: A Study of Thai Listed Companies

Mr. Jirayu Boonyuen



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ผลกระทบปัจจัยของราคาหุ้นต่อความสัมพันธ์ระหว่างคุณภาพรายได้และการจ่ายเงินปันผล: การศึกษาบริษัทจดทะเบียนไทย

นายจิรายุ บุญยืน

สารนิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
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Independent Study Title	The Moderating Effect of Stock Price on the Relationship between Earnings Quality and Dividend Payments: A Study of Thai Listed Companies
By	Mr. Jirayu Boonyuen
Field of Study	Finance
Thesis Advisor	Associate Professor Dr. KANIS SAENGCHOTE, Ph.D.

Accepted by the FACULTY OF COMMERCE AND ACCOUNTANCY, Chulalongkorn University in Partial Fulfillment of the Requirement for the Master of Science

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This research paper has the objective to investigate and examine the basic relationship on the dividend policy and the earnings quality of companies in Thai stock market, by covering all the industries. The proxies for the earning qualities include a total of four proxies which are earnings persistence, accruals quality, earnings informativeness, and timely loss recognition. Moreover, this research paper also further examines the incentive of dividend policy of companies under Thai stock market by applying the dividend signaling Theory and the information content of dividends hypothesis. The incentive of dividend policy can be viewed as the signal sending by the corporation side. Moreover, this research paper classifies the companies into two major types of companies with stock price loser and company with stock price gainer. Later that, the examination leads to see the difference incentive to pay dividend between these major two types of company based on the dividend signaling theory, the information content of dividends hypothesis, and the catering incentives.

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Jirayu Boonyuen : The Moderating Effect of Stock Price on the Relationship between Earnings Quality and Dividend Payments: A Study of Thai Listed Companies. Advisor: Assoc. Prof. Dr. KANIS SAENGCHOTE, Ph.D.

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Field of Study:	Finance	Student's Signature .....
Academic Year:	2022	Advisor's Signature .....

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Jirayu Boonyuen

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1. INTRODUCTION

1.1 Background and significance of the problem

Once we mentioned the dividend policy, it is decision to companies whether to pay the dividend to external investors by considering the company strategy which it is actually no regulation to force company to pay at all. However, regarding the research paper about the relationship between dividend policy and company financial performance by **Ouma (2012)**, the dividend payment was a crucial aspect that had a beneficial impact on the firm's success. In conclusion, the dividend policy is crucial, and the company's management should devote adequate effort to developing a dividend policy that will increase business performance and, as a result, the shareholder value. The dividend policy can serve as a signaling mechanism since it informs the market about the financial health and future prospects of a firm. A company signals to investors its potential to create profits and preserve financial stability by increasing or cutting dividends. The dividend signaling theory by **Bhattacharya (1979)** and the information content of dividends hypothesis by **Miller and Modigliani (1961)** are one of the motivations of this research paper to test the association of the dividend policy and earnings quality by examining the moderating variable, which is the stock price movement of the company, to determine whether this can strengthen or weaken the link between dividend policy and quality of earnings. By concept, the company with a different situation of stock price will have a difference incentive to pay dividend to investor. To conclude, the companies whose stock prices are down, and which are attempting to convince investors that they are still a reputable company with promising future prospects. As a result, corporations with declining stock prices will not adhere to the previously specified dividend

payment incentive. As a consequence, another idea incorporating towards earnings quality and the dividend signaling theory is the earnings management concept. As the previous literatures about the dividend policy and earning management in Thailand, most of the studies are showing that the earnings management and dividend policy are consistent due to the company trying to manipulate the earnings in order to be able to pay the dividend to investors. In addition, accounting manipulation is the intentional misrepresentation of a company's financial performance by its managers through the use of false financial statements. With this concept as the foundation, this research will focus more on the signaling towards the quality of earnings. Furthermore, to incorporate the idea of dividend characteristic in Thailand, first concept is the evidence of dividend policy and earnings management in Thailand leads to the motivation to investigate the relationship between dividend policy and earnings quality in Thailand. Furthermore, another literature by **Dechow, Ge et al. (2011)** also shows the results of earnings management whether companies with high stock prices may engage in earnings management or other forms of financial manipulation in order to meet investor expectations or avoid negative market reactions. This can result in a decline in the quality of results, with significant severe repercussions for investors and other stakeholders. The second concept of research paper mentioned about the evidence of the dividend policy and catering incentive in Thailand from **Tangjitprom (2013)**. The characteristic between dividend policy and investor demand is shown that the investors still required dividend payout by companies in order to secure their earnings. As we already knew that, regarding the bird hand fallacy theory, this states that investors prefer dividends from stock investments rather than the future capital gains due to the inherent unpredictability of capital gains. As a result, the character of

investors in Thailand is more risk-averted and conservative. Consequently, this research paper is going to apply this significant evidence which already tested with Thai stock market as well as Thai investors, the company dividend policy is following the catering incentive to pay the dividend which means the company is compulsory to pay the dividend to satisfy the investor preference. Consequently, the relationship between dividend payout and quality of earnings will be more muted for companies that possess this trait. On the other side, companies with a good and rising stock price pay dividends in order to ensure that they can satisfy Thai investors with regard to the catering incentive of dividend payment. To incorporate and apply to Thai stock market regarding previous literature, the research paper about the relationship between the dividend policy and earnings quality has been conducted in the examination of the relationship is that the dividend paying company have a higher earnings quality than non-dividend paying company in the other market which is Chinese Stock Market from **Deng, Li et al. (2017)**, which can also present by all the proxies of earnings quality as mentioned earlier by indicating more persistent earnings, lower discretional accruals, greater earnings informativeness and lower timely loss recognition. However, the previous literature has investigated the relationship between dividend policy and earnings quality in China, but it is still unclear in the Thai market due to the presence of different market character in Thailand which already mentioned about the catering incentives. Moreover, with respect to the basic testing on the relationship between the dividend policy and earnings quality, most of the research still didn't test whether the incentive of the manager in company who is deciding to pay or not pay the dividend to investors. Moreover, with the decision of dividend payment, the payment amount is higher,

same, or lower than previous. All of these are purely related to the incentive to pay dividends of each company. On the other hand, there are lots of alternative incentives to pay dividends to investors. As we already acknowledged about the well-known dividend policy theory, the dividend policy with the agency theory from **Jensen (1986)**, this theory is related to the dividend policy and the agency cost. The manager who works internally in the company might use the excess cash to do some misbehavior activities to satisfy their own interests rather than the minority shareholder. As characteristic of big corporation, there are lots of minority shareholder number or major shareholder of company is the foreign shareholder which both are making the high possibility of the agency cost. Consequently, the external investor demands the company to payout the excess cash in the company out as the dividend payment once there is no any growth opportunity left in the company. Not to mentioned about another well-known theory to support the dividend policy and the incentive to pay, the dividend policy and the life cycle theory from **DeAngelo, DeAngelo et al. (2006)**, this theory is focusing more on the life cycle stage of corporation, which this is being used as criteria to pay dividends. Then, the different stages of corporation would have cash flow available on hand in the different situation. Therefore, this factor can be considered as one incentive to the dividend policy. As all theories mentioned earlier, this leads to another motivation for this research paper to examine the incentive for the company in order to decide paying the dividend to investors. Thus, the most of previous literature about the dividend signaling theory and the information content of dividend are only presenting the testing on the dividend policy in order to measure the signal sent by corporation for presenting the better prospect and good future for the earnings which all measured in

such a way of the quantity. For example, the better prospect and good future for the earnings can be interpreted as the company is confident to send the message to all investors that they can generate stronger earnings, which means higher amount, ever than previous periods. But interestingly, another perspective and that is very new to the academic world is the dividend signaling theory and the information content of dividend is being used as the measurement of the quality of the earnings instead. This introduction just wants to clarify based on the fact that the characteristic of earnings quality is totally different to the earnings or profit.

Therefore, the relationship between dividend policy and earnings quality is significant because high-quality earnings are more likely to stay steady over time, hence increasing the predictability of a company's dividend payments. Companies with a high quality of earnings are more likely to pay dividends because they have the financial resources to do so, and they are also more likely to continue paying dividends in the future. Conversely, organizations with low earnings quality are less likely to pay dividends because they may lack the financial stability to do so, or they may need to keep earnings for business investment purposes. The relationship between dividend policy, earnings quality, and stock price is also significant since dividend policy can influence the stock price of a corporation. When a firm announces a dividend rise, the market interprets this as a sign that the company's finances are robust. This good indication may result in an increase in the stock price of the company. After the explanations on all concept mentioned previously, this research paper focuses on testing sample of the company listed on the Thai Stock Exchange and explores the relationship between the dividend policy and the quality of the earnings. Regarding the proxy for earnings quality, there are four factors for

determining whether a corporation has strong earnings quality or not. These include earnings persistence, accruals quality, earnings informativeness, and timely loss recognition. Lastly, for the dividend policy, there are using both the dividend per share and the dividend payer vs non-payer for the companies' dividend policy.

1.2 Objective

This research paper has the objective to investigate and examine the basic relationship on the dividend policy and the earnings quality of companies in Thai stock market, by covering all the industries. The proxies for the earning qualities include a total of four proxies which are earnings persistence, accruals quality, earnings informativeness, and timely loss recognition. Moreover, this research paper also further examines the incentive of dividend policy of companies under Thai stock market by applying the dividend signaling Theory and the information content of dividends hypothesis. The incentive of dividend policy can be viewed as the signal sending by the corporation side. Moreover, this research paper classifies the companies into two major types of companies with stock price loser and company with stock price loser. Later that, the examination leads to see the difference incentive to pay dividend between these major two types of company. As currently, the number of companies in Thai stock exchange are around 455 companies and the period of collecting the sample is covering total 11 years from 2010-2020. The information source is using most finance figures from financial statements from SETSMART database. The statistical model used in this research paper to test the relationship between dividend policy and earnings quality is based on OLS regression analysis and MRA regression analysis. Therefore, this research paper has major two objectives which summarized detail as follows:

1) To examine the significant relationship between the dividend payout policy and the earnings quality
2) To examine the significant relationship between the dividend payout policy and the earnings quality and is this relation differently moderated by the company stock price movement (increase or decrease).

1.3 Research hypothesis

For this research paper, there are three research hypotheses as follows:

H1: Dividend payer indicates higher earnings quality than non-dividend payer.

Regarding the dividend policy, it is based on both dividends signaling theory and the information content of dividends hypothesis. According to these theories, the dividend policy of a company can signals information about the company's future financial performance and prospects to the market. Specifically, paying dividends is seen as a positive signal because it shows that the firm has a stable financial position and is able to generate consistent profits. Therefore, the stock market perceives dividend payer as having higher earnings quality compared to non-dividend payer.

H2: There is a positive relationship between dividend policy and earnings quality.

According to the dividend signaling theory, the company's decision to pay dividends sends a signal to the market about its future prospects. If a company is profitable and has a positive outlook, it is more likely to pay dividends, which serves as a signal to the market of the firm's financial strength and future earnings prospects. On the other

hand, if a company is facing financial difficulties, it is less likely to pay dividends, indicating to the market that the firm's financial health is not as strong. Therefore, this hypothesis posits that a higher dividend payout ratio is positively associated with higher earnings quality, as it signals to the market that the firm has strong financial health and future earnings prospects.

H3: The company stock price movement significantly moderates the relationship between the dividend payout policy and the earnings quality.

Since the first and second hypothesis mentioned about the basic relationship between dividend policy and the earnings quality, this hypothesis development is to examine on the incentive which also means the moderating factor to the relationship of independent variables and dependent variables. The concept of this hypothesis is to test the difference in incentive of two major types of company which are companies with the stock price loss and the company with the stock price gain. Then, the difference between stock price loser and gainer is the incentive factor to pay the dividend to the investors. According to dividends signaling theory and information content of dividend hypothesis, for stock price loser, those companies must send the credible signal to the investor by paying significant higher dividend than previous periods in order to make the expected future stock price recovery. Consequently, this can help increase the association of the relationship between dividend payout and earnings quality. On the other hand, for stock price gainer, this scenario might decrease the association of the relationship between dividend payout and earnings quality regarding the incentive factor to pay dividend might be different to the dividend policy mentioned including dividends signaling theory and information

content of dividend hypothesis. On the other hand, the stock price gainer might pay the dividend just considering the previous evidence from research paper conducted for dividend policy incentive covering companies in Thai stock market, that is the catering incentive of dividend policy.

Conceptual framework

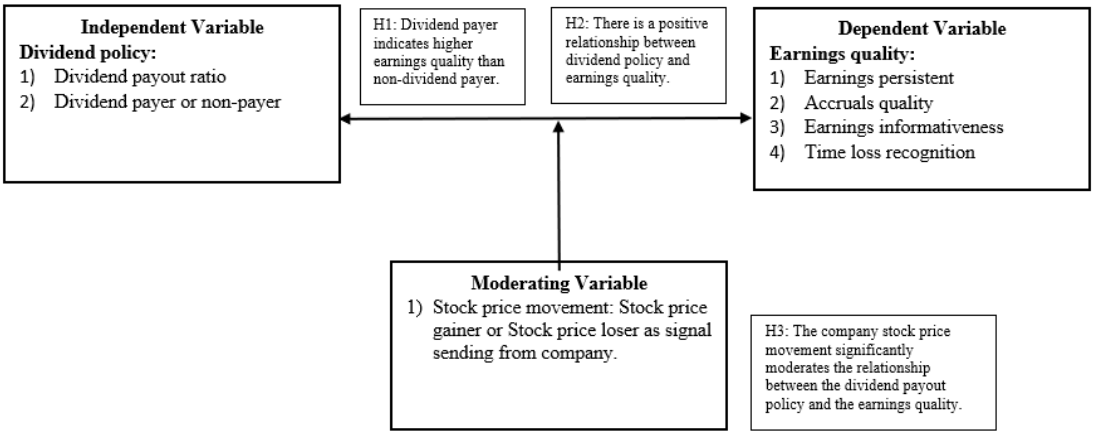

Figure 1.1 The conceptual framework of this research paper

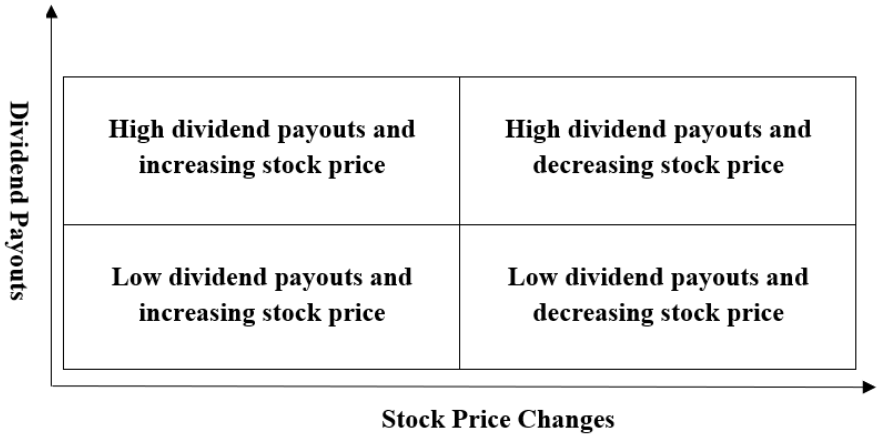

Figure 1.2 The 2x2 table explaining the relationship between dividend payouts and earnings quality, considering the moderating effect of stock price changes

From the above summary explanation table, the relationship between dividend payouts and earnings quality, considering the moderating effect of stock price changes, there are total four possible scenarios detail as follows:

Scenario 1: High dividend payouts and increasing stock price:

It is generally considered whether this could be due to the company following investor demand for dividends which follows the catering incentive theory. Moreover, the dividend payouts may not necessarily be indicative of high earnings quality. This is because the company may be using its earnings to pay dividends instead of investing in growth opportunities which follows the life cycle theory, and it is also possible showing negatively impact future earnings and the company's overall financial performance.

Scenario 2: High dividend payouts and decreasing stock price:

This scenario can show that a company's decision to pay dividends in the face of declining stock prices could be interpreted as a sign of confidence in its financial performance and future prospects. Moreover, it is also possible that the company may be paying dividends to signal stability and attract new investors which follows both concepts from the dividend signaling theory and the information content of dividends hypothesis. However, the other reasons for declining stock prices could be due to factors outside of the company's control or it is considered as external factors including macroeconomic conditions or industry trends or competitors.

Scenario 3: Low dividend payouts and increasing stock price:

It generally considers reflecting the company's choice to pay dividends based on the same concept of the catering incentive. In other words, the company may be paying dividends to satisfy the investors' demand, but this does not necessarily indicate high earnings quality.

Scenario 4: Low dividend payouts and decreasing stock price:

It is almost the same as the above scenario and it is also generally considered to reflect the company's choice to pay dividends based on the same concept of the catering incentive, which does not necessarily indicate high earnings quality.

1.4 Contribution

This research paper aims to provide a more comprehensive understanding of the relationship between dividend policy, earnings quality, and stock price in Thailand while accounting for the potential influence of catering incentives. In doing so, the study contributes to the existing literature in several ways. Firstly, the research provides empirical evidence on the association between dividend policy and earnings quality in Thailand. The results reveal that dividend-paying companies have a higher earnings quality than non-dividend paying companies. This finding is consistent with similar studies conducted in other emerging markets such as the Chinese, Vietnamese, and Indonesian stock markets. Secondly, the study confirms the robustness of the relationship between dividend policy and earnings quality in Thailand while considering the moderating effect of stock price change. This new knowledge provides valuable insights for investors and managers in making dividend-related decisions. Thirdly, this research paper acknowledges the unique character of catering

incentives in Thailand and includes this factor in the analysis. Specifically, Thai listed companies are known for catering to controlling shareholders and top executives who often have significant influence over the company's dividend policy. By accounting for this potential influence, the study provides a more comprehensive understanding of the dynamics between dividend policy, earnings quality, and stock price in Thailand. Overall, this research paper offers novel insights into the relationship between dividend policy, earnings quality, and stock price in Thailand and contributes to the existing literature by providing new empirical evidence on the impact of stock price movement as the incentive on the association between dividend policy and earnings quality.

2. LITERATURE REVIEW

As from the objective of this research paper, the relationship between the dividend payout policy and the earnings quality and is this relation differently moderated by the company stock price movement, which testing the companies in Thai stock market. Therefore, this chapter is explaining on the literature, theory and related research paper which separates into total four major parts detail as follows:

1.1 Literature review about the dividend policy

1.2 Literature review about the earnings quality

1.3 The background and history of Thai stock market

1.4 The related research papers

2.1 Literature review about the dividend policy

The meaning of dividend policy

When a firm has sufficient profits to generate a profit, it has two options, whether to reinvest or pay monthly dividends to its shareholders. A dividend policy outlines how extra cash will be distributed to shareholders, should the company choose to payout. It also specifies when, how much, and how frequently payments will be made. Typically, dividends are distributed in the form of cash, shares, or in-kind contributions. A company's dividend policy is an essential component of its overall strategy. If you are pursuing a business degree or want to start your own firm in the future, you should familiarize yourself with dividend policies, their many varieties, and how they operate.

How dividends operate

The value of a dividend is decided per share, and it is distributed equally to all owners of the same class (common, preferred, etc.). The payment requires the board of directors' approval. When a dividend is announced, it will be paid out on the due date. Moreover, there are a total of five steps in its operation by detail as follows: Firstly, profits and retained earnings are produced by the firm. Secondly, the management team determines that some surplus earnings will be distributed to shareholders (instead of being reinvested). Thirdly, the board approves the dividend payout. Fourthly, the dividend is announced by the corporation (the value per share, the date when it will be paid, the record date, etc.). Lastly, stockholders get the dividend payment.

Varieties of dividends

There are a variety of dividends that a corporation may pay to its shareholders. Below is a list and brief description of the most frequent forms of dividends received by shareholders. There is total seven types of dividends consist of:

1) Cash dividend: This is the most commonly given type of dividend, where the corporation transfers cash directly to its shareholders. This is usually done electronically, but can also be paid through cheques or cash.
2) Stock dividend: Shareholders receive stock dividends when the company issues new shares. These are distributed proportionally based on the number of shares owned by the investor.

3) Asset dividend: Although not a usual practice, a company's dividends to its shareholders can include other assets such as physical assets, investment securities, and real estate.
4) Special dividend: This type of dividend is issued outside of a company's regular dividend policy (i.e., quarterly, annual, etc.) and is often the result of having excess cash on hand.
5) Common dividend: This refers to the class of shareholders, typically common shareholders, who receive a dividend.
6) Preferred dividend: This type of dividend is given to the class of shareholders who receive the payout.
7) Other dividend: Less common forms of financial assets can also be paid out as dividends, such as options, warrants, shares in a new spin-off firm, etc.

Dividend payout schedule

Regarding the dividend payment information available on the website of the Stock Exchange of Thailand, there are two main types of dividend payout schedules. The first type is the annual dividend payment, which must be made within one month of approval at the shareholders' meeting. The second type is the payment of interim dividends, which should be announced at the next shareholders' meeting and must be made within one month after the board's resolution regarding the dividend payment.

Literature review of dividend policy theory and hypothesis

As the previous literature, there are several theories trying to explain about the dividend policy. In this research paper, it will explain the major five well known theories which are used to explain the companies' dividend policy. In conclusion,

after incorporating all mentioned theories, the concept of dividend signaling theory and the information content of dividends hypothesis are main theory applying into this research paper in order to explain the companies are using the dividend as the credible signal to the investors.

1) Dividend Signaling Theory

The dividend signaling theory, which was first introduced by **Bhattacharya (1979)**, implies that a company's decision to pay dividends is a signal to the market regarding the company's future earnings potential. The idea claims that when a firm announces an increase in its dividend payments, it indicates to the market that it anticipates stronger future earnings and cash flows, hence boosting investor confidence and the stock price of the company. In contrast, if a firm announces a decrease in its dividend payments or fails to pay dividends, it may signal to the market that the company's future earnings prospects are not as strong, leading to a decline in investor confidence and a decline in the stock price of the company. The dividend signaling hypothesis posits that investors evaluate a company's future earnings prospects based on its dividend payments, and that corporations may modify their payout policy to convey positive or negative news to the market. However, the idea has been subject to controversy and practical testing, and some scholars have questioned its relevance and accuracy in real-world settings. It is believed that internal executives are better informed than external investors. Therefore, the choice of capital structure indicates to investors that management is sensible. What is your opinion? If management believes the company has a bright future, they will choose a structure with a high debt ratio to avoid compensating new shareholders. Alternatively, if the

management predicts that the company will incur losses in the near future, they would attempt to expand the number of ordinary shares in order to entice new investors to share in the loss. Moreover, according to research from **Lintner (1956)**, executives concur that shareholders prefer a constant dividend rate and want to progressively pay more. The board of directors will only enhance the dividend if it feels that the firm will be able to maintain this greater payout in the long run. Forecasting future profitability is therefore crucial to the firm. The dividend distributions will decrease only if management believes it will be unable to remedy the issue soon. In addition, CEOs often dislike dividend cuts. Therefore, management requires a financial metric that enables them to make informed judgments regarding dividend payout modifications. Profit is a factor that management considers important. The dividend policy decision is crucially essential. Therefore, dividends are used as a technique of signaling the future performance of a corporation to investors interested in investing in it. Signals are sent by paying dividends. There is a similar notion of utilizing debt as a symbol of increasing liabilities when the firm or entity believes it can pay interest and other commitments. However, increased dividends may indicate that the firm or business is not well-structured for investment or that it has no development opportunities. Furthermore, the literature analyzed the impact of dividend announcements on stock returns in the Thai stock market by **Suwanna (2012)**. The study found that dividend announcements had a positive and significant impact on stock returns. Companies that announced higher dividends than expected experienced a higher increase in their stock prices than companies that announced lower dividends than expected or did not announce any dividends. The study also found that dividend announcements had a greater impact on the stock prices of smaller and less profitable

companies than larger and more profitable companies. Overall, the study suggests that dividend announcements provide information to investors about a company's future earnings prospects and investment opportunities, and that investors respond positively to companies that announce higher dividends than expected. However, the study is limited to the Thai stock market and may not be generalizable to other markets or contexts.

2) Agency Cost Theory

Agent cost theory is the management of the work of an organization's employees to ensure that they are carrying out missions that are beneficial to the organization. Typically, firms with a big number of employees bear a greater proportion of this expense than smaller organizations. The agency theory posits that humans are motivated to achieve everything for their own personal gain; hence, CEOs want to create value for their own corporate and personal gain. At the same time, they are also conducive to themselves. These executives are referred to as agents, and the owners of the business consent to the agent managing the arrangement of the corporation in exchange for pay with agents, despite the aforementioned relationship producing agency troubles. Therefore, the executives decide to employ earnings management in order to reach the anticipated earnings target which reference the concept from **Aungkasuko (2012)**. Furthermore, another research paper about the explanation of agency cost to dividend from **Easterbrook (1984)** concluded that corporations pay dividends to lower the agency cost. The agency's expenses have decreased as a result of the company's reliance on dividend payments as an indirect method of monitoring the performance of management. In addition, the organization

or business will examine the dividend payment at the optimal level, which is a level that does not create advantages and drawbacks for creditors and shareholders. In conclusion, dividends may be useful in reducing the agency costs of management, and this study suggests that dividends may keep firms in the capital market, where monitoring of managers is available at a lower cost and may be useful in adjusting the level of risk assumed by managers and the various classes of investors.

3) Business Life Cycle Theory

Regarding the concept of corporate life cycle, it is based on the research paper from **DeAngelo, DeAngelo et al. (2006)** stated that the company's life cycle which consists of total four stages: initiation, growth, maturity, and decline. During the period of growth, the company will need to invest heavily. Therefore, it is possible that the corporation cannot announce a dividend payment. However, the matured businesses are beginning to approach a point of saturation. And decline will restore returns to investors rather than retain earnings for investment, as do new and developing businesses. This reduces the likelihood of dividend payments from younger corporations. High dividends are declared as the business ages. Based on the evidence from **Benartzi, Michaely et al. (1997)** and **Grullon, Michaely et al. (2002)** identified the factors influencing the decision to pay dividends. These include return on investment, opportunity, and scale, which validate the life cycle idea. Generally, dividends are paid by companies that are substantially larger and more prosperous status. This is also consistent with the findings from the research paper from **Aungkasuko (2012)**, who determined that the longer a firm has existed, the more dividends it will issue to investors. Furthermore, the dividend policies of Thai

publicly traded corporations have been analyzed. It was discovered that firms having a high ratio of retained earnings to equity will also pay out a high dividend regarding the research paper which also tested in Thailand by **Thanatawee (2011).**

4) Free Cash Flow Hypothesis

Investment is another aspect that is likely to be linked with dividend distribution. According to the policy that was established in advance, business or company leaders often set aside adequate operational profits throughout the firm's working year for future growth. According to the stated policy, dividends may be declared. Particularly in enterprises or corporations with rapid asset expansion. or anticipate making future investments These businesses or endeavors will require additional funding. Therefore, it is vital to restrict the use of retained earnings and retained earnings that have been appropriated. Consequently, the corporation may be unable to pay dividends. Free Cash Flow is the financial statistic that best reflects the investment aspect. Since Free Cash Flow is likely to have a positive link with dividend payments. When a firm or organization has a large free cash flow, it necessarily results in the availability of funds for spending. Therefore, organizations or corporations with a large free cash flow tend to be more successful. The ability to declare dividends differs from a firm with relatively low free cash flow, suggesting that the company or business has relatively low cash flow liquidity and hence may be able to declare dividends during the period. The association between financial ratios, that is, cash flow and dividend announcements, has been discovered for the rate of dividend payout from **Aungkasuko (2012)**. However, it was discovered that there was no correlation between cash flow and dividend payout rate, and this pertains to the dividend announcement. Furthermore, another research paper which tested on the

free cash flow hypothesis, the study from **Thanatawee (2011)**, mentioned that results from the testing is contradicted the predictions of the free cash flow theory and put doubt on whether Thai corporations fund dividend payments with debt. It is intriguing to find a highly positive correlation between financial leverage and dividend distributions, which casts question on whether or not Thai companies finance dividend payments with debt.

5) Information Content of Dividends Hypothesis

The information content of dividends hypothesis from **Miller and Modigliani (1961)** implies that a company's payout policy provides investors with information about the company's future earnings potential and investment opportunities. According to this idea, a company's decision to pay dividends or retain earnings signals its future growth potential to the market. The hypothesis asserts that investors like dividends because they view them as a dependable indicator of the profitability and future prospects of a company. Consequently, corporations that pay bigger dividends may be seen more positively by investors, which can contribute to a rise in the stock price of the company. In contrast, if a firm does not pay dividends or pays a dividend that is lower than expected, investors may interpret this as a negative signal about the company's future prospects and modify their expectations, accordingly, resulting in a decline in the stock price. The information content of dividends hypothesis implies that investors use dividend payments to evaluate a company's future earnings potential and investment opportunities, and that corporations may alter their payout policy to signal positive or negative market news. As with the dividend signaling theory, this idea has been the topic of discussion and empirical testing, and its applicability to real-world settings has been questioned by some scholars. The MM

model permits the deployment of favorable informational material to promote the firm's successes on the stock market. When the market value of a company's shares improves, present and future investors of the company rejoice. This increase in the value of shares can be conveyed through informative material. Then, the MM model emphasizes that the value of a share grows with predicted future earnings and not dividends. Thus, firms may utilize indicators of future share price increase to promote their dividend distribution policies. Typically, a strong firm pays growing dividends over the course of continuous payment cycles to support the informative and promotional material it employs to increase its market share value. According to the MM model, the informative content is only a reflection of a company's investment philosophy and has no independent relevance. However, because the informative content is crucial for investors to explain a company's performance, they serve as a benchmark of success for companies that pay growing dividends to current shareholders. Moreover, the information content of dividends from **Watts (1973),** this research was conducted to test the concept that dividends carry information about a company's future profitability. All the experiments indicate, consistent with the information hypothesis, that the average connection between future earnings changes and present surprise dividend changes is positive. Nevertheless, all the studies indicate that the average absolute magnitude of future earnings changes that may be transmitted by unexpected dividend adjustments is rather tiny. In addition, an assessment of the link between surprise dividend changes and stock prices reveals that even if the future profits changes associated with unexpected dividend adjustments do communicate information to market participants, such information is negligible. It is insignificant because the profit from monopolizing the information does not outweigh

the transaction costs. The primary finding of the study is that the information content of dividends cannot be more than insignificant. This conclusion is strengthened by the fact that the findings were achieved despite the fact that the dividend expectations model and dividend period parameters were chosen to be most favorable to the information hypothesis. A further conclusion is that any inside knowledge used by management to determine payouts is lost in the dividend model's noise. Both the pace at which the business adjusts actual dividends to intended dividends and the firm's target dividends payment rate influence the impact of the information on future earnings. This change diminishes the influence of the information on dividends to the point that it cannot be separated from the noise in the dividend model.

2.2 Literature review about the earnings quality

The meaning of earnings quality

Earnings quality indicates how dependable a company's earnings are for evaluating its present and future performance. High earnings quality would typically indicate that results are not manipulated by management and are a solid predictor of future earnings or cash flows that the firm would create. Earnings quality may be assessed using a variety of methodologies and indicators which means there is no single formula for determining earnings quality. However, earnings quality analysis frequently involves a rigorous financial statement examination to identify nonrecurring items of income and cost, large noncash items of income and expense, and balance sheet items that are dependent on management assumptions. The cash conversion ratio and the accruals ratio are two of the most extensively employed indicators for evaluating quality of earnings. Firstly, the cash conversion ratio is the

amount of cash flow created per dollar of profits each year. Secondly, the accruals ratio compares the overall balance sheet accruals to the total operational assets. A low cash conversion ratio and a high accruals ratio indicate poor earnings quality, whereas a high cash conversion ratio and a low accruals ratio indicate excellent earnings quality.

The measurement of earnings quality

As there is no single method of evaluating the quality of earnings, it often entails a review of the financial statements to identify the following factors that might influence future earnings and cash flow projections. Firstly, the nonrecurring income and expenses, such as asset impairment costs and gains from asset sales. Secondly, the noncash income and expenditure elements, such as asset revaluations and provision releases. Thirdly, the items rely on management estimates, including inventory valuation and incurred expenses.

Importance of earnings quality

Earnings quality influences future earnings and cash flow expectations. The low earnings quality often results in lower future earnings and cash flow forecasts relative to present earnings. This will have an effect on debt capacity calculations and firm valuation. Earnings quality evaluation is consequently crucial in numerous aspects of financial analysis, such as credit evaluation for transaction structure or lending choices, due diligence for M&A, LBO, and IPO transactions, and valuation of stocks for equities research and of bonds for credit research.

The review of proxy of earnings quality

Regarding the research papers from **Tong and Miao (2011)** and **Deng, Li et al. (2017)**, the proxies use for measurement of the earnings quality are including earnings persistence, accruals quality, earnings informativeness. Therefore, the explanation about the concept as well as usage of that proxy in order to measure detail as follows:

1) Earnings persistence

Earnings persistence displays the profit quality of a company and demonstrates that a company can keep earnings over time as opposed to a single occurrence. Additionally, earnings persistence is a property revenue that describes a company's capacity to keep profits from the present moment into the foreseeable future. Therefore, the first proxy of earnings quality refers to earnings persistence, and this evaluates the influence of dividends on earnings quality. The rationale for using earnings persistence is that dividend payments are connected with permanent operational cash flows from **Jagannathan, Stephens et al. (2000)**, consequently businesses that pay dividends have more persistent earnings.

2) Accruals quality

The definition of accruals quality is the cash flow risk associated with misstatements, i.e., the risk that accounting earnings might not be transformed into cash flows. There may be a low correlation between earnings and future cash flows if financial statements are inaccurate or if accounting estimations or critical assumptions are not realistic. According to U.S. auditing standards, auditors are responsible for analyzing cash flow risk in financial statements and determining if serious

misstatements exist. Therefore, the second proxy of earning quality refers to the accruals quality, and this evaluates the influence of dividend on earnings quality. The accruals quality is calculated from the total current accrual model from the paper of **Dechow and Dichev (2002)**. Moreover, the rational for using accruals quality is that dividend distributions can reduce free cash flows and restrain managerial opportunistic behavior, hence limiting the discretion of constrained management over reported results. To conclude, the accrual quality is possible to reflect this judgment.

3) Earnings informativeness

The Earnings informativeness or stock price informativeness is generally defined as the relationship between stock returns and changes in earnings, which more informative stock price changes contain more information about changes in earnings by **Durnev, Morck et al. (2003)** and **Gelb and Zarowin (2002)**, which means that the information about changes in earnings (firm-specific information) is integrated into the prices of more informative stocks more quickly. However, a limited information set (firm-specific data) should not serve as the only foundation for evaluating the information environment. A stronger information environment is connected with more active trading, cheaper trading expenses, and a greater integration of information (firm-specific and market-wide information) into pricing. Therefore, the third proxy of earning quality refers to the earnings informativeness **Deng, Li et al. (2017)**, and this evaluates the influence of dividend on quality of earnings. The rational for using earnings informativeness is due to the earnings response coefficient, which measures how investors react to earnings (ERC). This research paper hypothesizes that if dividends are linked with higher-quality profits,

investors would regard dividend payouts to contribute extra information to reported earnings, thus the stock return of businesses paying dividends would be more sensitive to changes in earnings.

4) Timely loss recognition

Furthermore, with further research about the proxy of earnings quality, the research paper from **DeFond (2010),** another proxy for earnings quality, which is the timely loss recognition. This proxy is chosen to put as one of the measurements of earning quality due to it being mentioned in the paper whether this factor could contribute new knowledge regarding the variety that help explain the earnings quality. Regarding the research paper about "the effect of financial distress on timely loss recognition by **Kriengkai, Sillapaporn et al. (2021)**, the timely loss recognition is a component of the accounting principle of conservatism based on the qualitative characteristics of the financial accounts. According to the conceptual framework for financial reporting, the company is not required to report income. In contrast, a company does not understate costs or obligations (TFAC, 2020) such as salaries or rent. Revenue is recorded when it is likely to occur, while it is possible to estimate liabilities and costs, etc. In this manner, it is believed that the impact will be reduced in the event that the firm faces uncertain conditions. or in business, self-centered or too hopeful. For instance, companies with financial uncertainty issues frequently choose to show positive operating results, or management may adopt TFRS adopt new accounting practices or choose to use accounting practices to increase profits without regard to the principles of accounting conservatism, such as find that company Financially distressed earnings are quickly acknowledged to reflect strong

performance, which demonstrates that the organization is solvent. In preparing the financial accounts, the idea of accounting conservatism was not followed. This will result in a decline in the quality of accounting data. According to the research paper from **Basu (1997)**, the recognition of economic losses in financial statements is a crucial element of financial reporting, as it contributes significantly to the quality of reporting. While it only measures one aspect of reporting quality, it is still important because timely acknowledgment of losses can enhance the value of financial statements in areas such as corporate governance and debt arrangements. When managers promptly recognize losses, it can discourage them from investing in projects that may have a negative net present value (NPV) and prevent them from continuing to run projects with negative cash flows. This has a positive impact on governance, as well as on debt agreements, where accurate information on losses can aid in loan pricing and enable more prompt activation of debt agreement rights based on accounting ratios. The research paper argues that the timely acknowledgment of economic losses is a crucial characteristic of financial reporting.

2.3 The background and history of Thai stock market

1) SET historical background

SET is the first legally sanctioned and regulated securities exchange in Thailand, which began its operations on April 30, 1975, following the Securities Exchange of Thailand Act, B.E. 2517 (1974). The exchange is governed by the Securities and Exchange Act, B.E. 2535 (1992). Its mission is to facilitate trading of listed securities, promote financial planning, and provide related services to its members without any profit distribution. Its main functions involve managing

securities listing, monitoring listed companies and ensuring information disclosure, supervising member activities, facilitating trading, distributing information, and providing investor education.

The characteristic of SET and dividend policy

Firstly, regarding the character of the dividend policy and earnings management, Earnings management refers to the practice of manipulating a company's reported earnings in order to meet or exceed market expectations. This can be done in a variety of ways, such as delaying or accelerating revenue recognition, manipulating expenses, or using accounting techniques to create one-time gains or losses. While some levels of earnings management may be acceptable and legal, excessive, or fraudulent earnings management can be illegal and can lead to financial misstatements and other forms of financial fraud. Moreover, the literature presents the evidence of the dividend policy and earnings management in Thailand from **Chansarn and Chansarn (2016)** reveals that earnings management has a beneficial effect on the dividend yield of MAI-listed businesses. Therefore, a one percent increase in discretionary accruals as a proportion of total assets will result in a dividend yield fall of about 0.2 percent. In contrast, there is no correlation between earnings management and the dividend payment ratio. The dividend payout ratio is decided by profitability, cash flow from operations, business size, and sales growth, whereas the dividend yield is determined by profitability, liquidity, leverage, cash flow, company size, and sales growth. Moreover, another literature provides additional support for the earnings management evidence in Thailand by **Charoenwong and Jiraporn (2009)**. In this study, the authors examine earnings

management to surpass criteria in both Singapore and Thailand. The empirical data indicates that Singapore and Thailand practice earnings management to avoid reporting losses and negative profits growth. This earnings management approach differs, however, across financial and non-financial enterprises, Singaporean and Thai firms, and before and after the 1997 Asian financial crisis. Therefore, the structure of corporate governance is found to influence the amount to which earnings management exceeds thresholds in Singapore. Furthermore, this research paper presenting the evidence of earnings management in Thailand, it is the research from **Premarat, Pattanant et al. (2020)** through the concept of "Real Earnings Management and Accrual-based Earnings Management Implications for Future Profitability". This research study examines the connection between profit management and discretionary transaction generation. Business and profit management through accruals to the organization's future profitability. By profit management Through the use of discretion in generating business transactions, the assessment of expenditures takes into account outliers from the predicted cash flows from operational operations. Exceptions from estimated provision for questionable accounts accruals-based profit management is based on outliers from estimation of goods outstanding the sample group consisted of 51 financial industry businesses listed on the Thailand stock exchange, out of a total of 60 companies, and the statistics employed in the study were analysis of variance multiple regression. Therefore, the following are the study's key findings, all is future profitability can be managed by the use of judgment in constructing business transactions based on the estimation of cash flow aberrations from operating operations. In contrast, profit management through creative estimation of business things. Unusual costs at the discretion of management, reserve provision

for questionable accounts have an inverse link to future profitability. Then, earnings management based on accrual has no bearing on future profitability. Furthermore, there is also another literature presenting about the earnings management from **Dechow, Ge et al. (2011)** identifies key financial and non-financial factors that are related with higher probabilities of major accounting misstatements in publicly traded corporations. The study reveals that corporations with higher stock prices are more likely to misrepresent their financial statements, suggesting that companies with high stock prices may push companies to engage in earnings management or other forms of financial manipulation in order to fulfill investor expectations. Additionally, the analysis indicates high accrual levels and low cash flows as predictors of accounting misstatements. Overall, the study sheds light on the elements that may contribute to lower earnings quality and financial reporting fraud in publicly traded corporations. Therefore, the companies with high stock prices are frequently under pressure to satisfy investor expectations and preserve their market valuation. This can sometimes result in a concentration on short-term performance and an emphasis on hitting profits targets, which can lead to earnings management or other forms of financial manipulation. Secondly, regarding the research paper explained about the dividend policy and investors characteristic by **Tangjitprom (2013)**, the dividend payment from the corporate side still be appeared in Thailand which is not followed the theory of the “Disappearing dividends: changing firm characteristics or lower propensity to pay?” by **Fama and French (2001)** that show the evidence that the dividend payment become disappear significantly as in the USA side. Therefore, the dividend premiums are mostly positive, which also confirmed that Thai investor prefers the dividend payment, and it is also possible to conclude that investors in Thailand are more risk-

averted and conservative. Therefore, they favor dividends since dividends are definite and future capital gains are uncertain, despite the fact that dividend incomes are heavily taxed. In addition, the findings corroborate the catering theory of dividends. Consequently, this research paper also incorporates this evidence which already test with Thai stock market as well as Thai investors characteristic, which is questionable that the company with stock price which already in the good status, by meaning the stock price is increasing would adopts the catering incentive to pay the dividend rather than paying the dividend to investor because companies are really followed the dividend signaling theory.

2.4 The related research papers

The first research paper is about "Dividends and earnings quality: Evidence from China from **Deng, Li et al. (2017)**". The objective of this research is to investigate how dividend distributions and profit quality are related in institutional settings in China. Additionally, the study aims to identify the factors that influence enterprises' motivation to pay dividends and how these factors impact the correlation between dividend payouts and earnings quality. The research methodology involved a sample of all Chinese non-financial listed enterprises, comprising of 24,874 firm-year observations from the CSMAR database between 1999 and 2014. All businesses were required to provide data for the regression models and data to estimate accruals. The key finding of the study is that dividend-paying companies tend to have better earnings quality, as measured by earnings persistence, accrual quality, and earnings informativeness. However, firms undergoing equity refinancing may lose the ability of their dividends to communicate information about earnings quality. Additionally, state-controlled enterprises may use dividends to divert resources from the business,

resulting in less information available to forecast current earnings. The secondly research paper is about "Dividends and earnings quality: Evidence from India from **Mulchandani, Mulchandani et al. (2020)**". The objective of this research is to investigate the correlation between dividend payout and profit quality. The study focuses on four aspects of dividends, which include dividend paying status, dividend size, dividend changes, and dividend persistence. The research methodology involved a sample of 107 S&P BSE200-listed companies, with the analysis period spanning from 2004 to 2015. Multiple regression analysis was utilized for the analysis. The key finding of the study is that dividends provide valuable information about a company's earnings quality. Payment of dividends, variations in payouts, and dividend persistence all provide information on quality of earnings. However, the study found that dividend amount is not significantly related to earnings quality. The third research paper is about "Dividend policy and earnings quality in Vietnam from **Nguyen and Bui (2019)**". The objective of this research is to investigate the relationship between dividend policy and earnings quality among Vietnamese enterprises listed on the Vietnam Stock Exchange from 2010 to 2016. The research methodology involved using panel data analysis as a method of inquiry. The sample consisted of corporations listed on the Vietnam Stock Exchange during the mentioned period. The key finding of the study is that companies that pay dividends have higher quality earnings compared to those that do not pay dividends. The study found that dividends are a significant indicator of earnings quality. The finding remains robust even after accounting for firm-fixed effects. The fourth research paper about "What do dividends tell us about earnings quality? from **Skinner and Soltes (2011)**". The objective of this research is to examine the relationship between dividend policy and

earnings quality, as well as the relationship between earnings quality and stock buybacks. The study aims to determine whether payout policies of companies, which include both dividend payouts and stock repurchases, reveal the quality of reported earnings. The research methodology involved using a sample that includes all firm/year combinations for US-based companies listed on the NYSE, AMEX, or NASDAQ between 1974 and 2005. The study utilized firm-level data and generated regressions of future earnings on present earnings, conditioned in various ways on payout policy. The key finding of the study suggests that companies that pay dividends have a stronger relationship between present earnings and future earnings compared to those that do not pay dividends. The research also found that companies that conduct regular stock repurchases have more consistent earnings than those that do not make any stock repurchases, but stock repurchases are often a less reliable indicator of earnings quality than dividends. Furthermore, the study found that companies that pay dividends are less likely to incur losses than those that do not pay dividends. Overall, the study suggests that dividends provide valuable information on a company's future earnings potential, but not necessarily in the traditional sense of predicting future profit changes. The fifth research paper is about Dividend payment and earnings quality: evidence from Indonesia from **Sirait and Veronica Siregar (2014)**. The objective of this research is to examine the correlation between dividend distribution and the quality of earnings. The researchers analyze the dividend payment status, size, fluctuations, and persistence. The sample is composed of 90 manufacturing companies from 2005 to 2009. Multiple regression analysis is used to evaluate the hypotheses. The key finding suggests that dividend payment status, growth, and consistency are positively associated with earnings quality. However,

there is no evidence to support the claim that a larger dividend size corresponds to higher earnings quality. The study concludes that dividend-paying status, growth in dividend size, and consistency in dividend payments serve as indicators of better earnings quality.

3. DATA

Sample: The listed companies in Stock Exchange of Thailand (Total 455 companies)

Sample Period: From 2010-2020. It is a total of 11 years. The sample period was chosen to be prior to 2020 to avoid any potential impact from the COVID-19 pandemic on companies' dividend policy behavior.

Data Source: SETSMART is due to which is a comprehensive database of financial information and market data for the Thai stock market. Moreover, the Refinitiv is also another source to support other financial figures.

4. METHODOLOGY

In this research, the objective is to examine the significant relationship between the dividend payout policy and the earnings quality, and to determine the extent to which this relationship is moderated by the company stock price movement. The dependent variable in this research will be the earnings quality, while the independent variables will be the dividend payout policy and the moderating variable will be the stock price movement. The dividend policy has two proxies which are the dividend per share and the dividend payer and non-payer. For earnings quality, there are four proxies which are earnings persistent, accrual quality, earnings informativeness, and timely loss recognition. The research will be based on regression analysis, which is a statistical technique that is used to establish the relationship between one dependent variable and one or more independent variables.

4.1 Earnings Quality Proxies

In this section, it will discuss the proxies of earnings quality used in this study, along with the research hypotheses associated with each proxy. Starting with measurement of earnings quality, this research paper uses a set of four proxies that are commonly used in this literature.

Earnings persistence: The rationale for using earnings persistence is that dividend payments relate to permanent operational cash flows, hence companies that pay dividends have more persistent earnings from **Jagannathan, Stephens et al. (2000)**. In this equation, $Earnings_{i,t}$ and $Earnings_{i,t+1}$ are firm i's earnings per share for year t and year t+1. In order to determine the persistent measurement of earnings ($Persistent_{i,t}$) for each company over five-year rolling periods, it needs to measure the coefficient β_1.

$$Earnings_{i,t+1} = \alpha + \beta_1 \times Earnings_{i,t} + \varepsilon$$

Accruals quality: The accruals quality is calculated from the total current accrual model from **Dechow and Dichev (2002)**. The rational for using accruals quality is that dividend distributions can reduce free cash flows and restrain managerial opportunistic behavior, hence limiting the discretion of constrained management over reported results. In this equation, $TACC_{i,t}$ is the total current accrual estimated. $CFO_{i,t-1}$, $CFO_{i,t}$, $CFO_{i,t+1}$ is firm i's operational cash flow for year t-1, year t, and year t+1, by respectively. $\Delta Sales_{i,t}$ is the change in sales and $PPE_{i,t}$ is the fixed assets for year t. All the variables are scaled by the total assets in year t-1. This equation provides two measures for estimating the quality of accruals. The first measure is the absolute value

of the regression residuals ($AAQ_{i,t}$). The second measure is the standard deviation of the regression residuals over a five-year period ($AQ_{i,t}$).

$$TACC_{i,t} = \alpha_1 \times \frac{1}{TA_{i,t-1}} + \alpha_2 \times \frac{CFO_{i,t-1}}{TA_{i,t-1}} + \alpha_3 \times \frac{CFO_{i,t}}{TA_{i,t-1}} + \alpha_4 \times \frac{CFO_{i,t+1}}{TA_{i,t-1}} + \alpha_5 \times \frac{\Delta Sales_{i,t}}{TA_{i,t-1}} + \alpha_6 \times \frac{PPE_{i,t}}{TA_{i,t-1}} + \varepsilon$$

Earnings informativeness: The rational for using earnings informativeness is due to the earnings response coefficient, which measures how investors react to earnings (ERC) **Deng, Li et al. (2017)**. In this equation, $Ret_{i,t}$ is the 12-month buy-and-hold stock return in year t to in year t+1, adjusted by the market performance. $Earnings_{i,t}$ is the earnings per share, scaled by the stock price at the end of year t-1. $\Delta Earnings_{i,t}$ is the change in earnings per share, scaled by the stock price at the end of year t-1. In order to determine the informativeness measurement of earnings ($ERC_{i,t}$) for each company over five-year rolling periods, it needs to measure the coefficient β_2.

$$Ret_{i,t} = \alpha + \beta_1 \times Earnings_{i,t} + \beta_2 \times \Delta Earnings_{i,t} + \varepsilon$$

Timely loss recognition: The timely loss recognition highlights the importance of transparent and conservative financial reporting practices. Moreover, the timely loss recognition can be an important signal of a firm's financial health and future prospects from **Basu (1997)**. In this equation, the D_t is equal to 1 if $Ret_{i,t} < 0$, $Ret_{i,t}$ is the 12-month buy-and-hold stock return in year t to in year t+1, adjusted by the market performance, and $Earnings_{i,t+1}$ are firm i's earnings per share for year t+1. This equation provides the effect of losses and the interaction between losses and stock returns on earnings in the next period. If losses are recognized in a timely manner,

then the coefficient α_2 will be negative and significant, indicating that losses are more likely to be recognized immediately. The coefficient β_2 measures the extent to which losses affect earnings differently depending on the level of stock returns. Therefore, in order to determine the timely loss recognition measurement of earnings ($TLR_{i,t}$) for each company over five-year rolling periods, it needs to measure the coefficient β_2.

$$Earnings_{i,t+1} = \alpha_1 + \alpha_2 \times D_t + \beta_1 \times Ret_{i,t} + \beta_2 \times D_t \times Ret_{i,t} + \varepsilon$$

4.2 Research Hypothesis

Moreover, to test all hypotheses, it is a set of equations that describe the relationships between our variables of interest. In this section, it provides a summary of these equations and discusses the expected direction of the relationships between the variables. Specifically, the present of equations for all three hypotheses, which relate to the association between dividend policy and earnings quality, the impact of earnings quality on stock price, and the moderating effect of stock price change on the relationship between dividend policy and earnings quality. The following subsections describe each of these hypotheses in detail and present the corresponding equations.

For hypothesis 1: It can be tested using the OLS regression to examine the relationship between the dependent variable in the model would be earnings quality, which could be represented by one or a combination of proxies such as earnings persistence, accruals quality, earnings informativeness, or timely loss recognition. The independent variable in the model would be dividend policy, which could be represented by a dummy variable indicating whether the company pays dividends by

dividend payer = 1 or dividend non-payer = 0. Therefore, this equation expects to see β_1 with a positive coefficient reflects dividend payer increase earnings quality.

$$Earnings\ quality_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \varepsilon$$

For hypothesis 2: It can be tested using the OLS regression model by estimating the relationship between the dependent variable (earnings quality) and the independent variable (dividend policy). The coefficient of the independent variable represents the change in the dependent variable for a unit change in the independent variable, holding all other variables constant. A positive coefficient would support the hypothesis that there is a positive relationship between dividend policy and earnings quality, while a negative coefficient would indicate a negative relationship. Therefore, this equation expects to see β_1 with a positive coefficient reflects dividend per share increase earnings quality.

$$Earnings\ quality_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \varepsilon$$

For hypothesis 3: It can be tested using Moderated Regression Analysis (MRA). In MRA, the relationship between the independent variable (dividend policy) and dependent variable (earnings quality) is moderated by a third variable, which is stock price movement in this case. This model will test the hypothesis that the relationship between dividend policy and earnings quality is moderated by stock price movement, meaning that the effect of dividend policy on earnings quality will differ depending on the movement of the company's stock price. Therefore, this equation expects to see

β_1 with a positive coefficient reflects dividend payouts increase earnings quality, β_2 with a positive coefficient reflects the opposite result of increasing stock prices may lead companies to engage in financial manipulations to meet investor expectations, and β_3 with a positive coefficient reflects the signaling from high dividend payout company with decreasing stock price increase earnings quality.

$$Earnings\ quality_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \beta_2 \times PMF_{i,t} + \beta_3 \times Dividend_{i,t} \times PMF_{i,t} + \varepsilon$$

4.3 Summary of variable definition table

Variable	Definition
Dependent Variables	
$Persistence_{i,t}$	The persistence is the quantification for earnings persistence, which is computed coefficients from the model.
$AAQ_{i,t}$	The AAQ is the quantification for value of abnormal accrual, which is absolute value of the regression residuals estimated using model.
$AQ_{i,t}$	The AQ is the quantification for deviation of abnormal accrual, which is five-year standard deviation of the regression residuals estimated using model.
$ERC_{i,t}$	The ERC is the term for "Earnings response coefficient", which is estimated coefficients from model.
$TLR_{i,t}$	The TLR is the quantification for timely loss recognition which is estimated coefficients from model.
Independent Variables	
Dividend Per Share	The dividend per share is the total dividend amount issued by a company on a per-share basis.
Dividend Dummy	The dividend dummy is set up for dividend payout as dummy variable which equals to 1 if firms pay cash dividends in year t and 0 if firms are not pay cash dividends in year t.
Moderating Variable	
$PMF_{i,t}$	The PMF is the stock price movement equals 1 if company's' decreasing stock price or equals to 0 for company's' increasing stock price.

Variable	Definition
Other Variables	
EPS_{t+1}	Company i's earnings per share for year t+1, scaled by the stock price for year t+1.
EPS_t	Company i's earnings per share for year t, scaled by the stock price for year t.
$Ret_{i,t}$	12-month buy-and-hold stock return from Apr in year t to Mar in year t+1 adjusted by the market performance.
ΔEPS	Change in earnings per share, scaled by the stock price at the end of year t-1
D_t	D_t equals 1 if $Ret_{i,t} < 0$

Figure 4.1 The summary table of variable definition

Descriptive Statistics

Variable	N	Mean	S. D.	Min.	Max.
Persistence	1585	0.049	0.381	-0.641	0.896
AAQ	2275	0.257	0.214	0.019	0.830
AQ	2275	0.200	0.213	0.038	0.915
ERC	2275	-0.427	1.811	-5.633	2.967
TLR	2275	0.631	5.530	-12.161	16.257
DIV	2275	0.703	0.457	0.000	1.000
DPS	2275	0.884	2.487	0.000	30.358
PMF	1185	0.517	0.500	0.000	1.000
DPS_PMF	1185	0.399	0.735	0.000	2.801

Figure 4.2 The summary descriptive statistics of the main variables used in this research paper

5. EMPIRICAL RESULTS

5.1 The results on the association between dividends and earnings quality

This research paper examines the relationship between dividends and earnings quality with the total four proxies' measurement of earnings quality. The examination of first and second hypothesis which are dividend payer indicates higher earnings quality than non-dividend payer and there is a positive relationship between dividend policy and earnings quality, the results are reported in **Figure 5.1** to **Figure 5.4**.

	(1) EPS_{t+1}	(2) Persistence	(3) Persistence	(4) Persistence	(5) Persistence
EPS_t	0.879***				
	(34.81)				
DIV		0.068***		0.077**	
		(2.96)		(2.43)	
DPS			-0.002		-0.003
			(-0.54)		(-0.42)
Constants	0.062***	0.003	0.051***	-0.003	0.052***
	(3.05)	(0.13)	(3.33)	(-0.15)	(7.25)
adj. R^2	0.815	0.005	-0.001	0.003	-0.001
FE	NO	NO	NO	YES	YES
N	1660	1660	1660	1660	1660

This table presents the basic regression results of the earnings persistence model using random effects model (2) and (3) and fixed effects model (4) and (5). Persistence is estimated coefficients from model (1). DIV is dummy variable by Dividend payer =1 or dividend non-payer = 0. DPS is dividend per share. The T statistics are reported in parentheses. ***, **, and * denote coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively.

Figure 5.1 Dividends and earnings persistence – basic regression

Firstly, this research paper examines the association between dividends and earning persistence in **Figure 5.1.** Earnings persistence is a time series measure of earnings quality. The use of time series data in measuring earnings persistence is important because it helps to understand the trend of a company's earnings over an extended period. However, time series data requires the assumption of stationarity, which means that the statistical properties of the series do not change over time. When the earnings persistence coefficient exceeds 0.90, indicating possible non-stationarity, it can impact the analysis due to potential shifts in the mean and variance of the time series, which resulting in misleading correlations. Then, it becomes necessary to restrict the sample to companies with earnings persistence coefficients of 0.90 or below. As a result, the maximum value of earnings persistence coefficient in the sample is 0.896, which indicates that all companies in the sample have a stationary earnings series. This suggests that the impact of earnings in a given year gradually reduces over time, supporting the reliability and robustness of the findings. Furthermore, the coefficient for the DIV variable (Dividend Payer) in model (2) is 0.068 and it is statistically significant at the 1% level. The positive sign of the coefficient suggests that being a dividend payer is associated with higher earnings persistence. The magnitude of the coefficient indicates that shifting from a non-payer to a payer status increases earnings persistence by 0.068 units. Given the mean earnings persistence in the sample is 0.049, this change is significant, implying that dividend-paying firms exhibit more stable and predictable earnings. In the fixed effects model (4), the DIV coefficient is 0.077 and it is statistically significant at the 5% level. This result demonstrates that, even after controlling for company-specific effects, being a dividend payer is still associated with greater earnings persistence. In

model (3), the DPS variable (Dividend per Share) has a coefficient of -0.002, but it is not statistically significant. This suggests that an increase in dividends per share is not necessarily associated with higher earnings persistence. In the fixed effects model (5), the DPS coefficient is -0.003 and it is also not statistically significant. This indicates that, even after accounting for unobserved company-specific effects, there is no evident association between DPS and earnings persistence. The adjusted R-squared values in models (2) to (5) are very low, ranging from -0.001 to 0.005. These values imply that the models explain only a small fraction of the variation in earnings persistence.

In conclusion, the results support hypothesis 1 that dividend-paying companies have higher earnings persistence, demonstrating more stable and predictable earnings streams, which could be beneficial for investors as it indicates lower risk associated with the company's future profitability. This relationship persists even when company-specific effects are controlled for, enhancing the robustness of the findings. However, the results do not support hypothesis 2, as an increase in dividends per share is not associated with higher earnings persistence, whether company-specific effects are controlled for or not. The absence of a statistically significant relationship between dividend per share and earnings persistence implies that an increase in dividend payouts may come at the expense of earnings stability over time. Despite the evidence supporting hypothesis 1, the models' low explanatory power indicates the complexity of the relationship between dividend policy and earnings persistence. This suggests that other factors, not captured in these models, significantly influence earnings persistence.

	(1) AAQ	(2) AQ	(3) AAQ	(4) AQ	(5) AAQ	(6) AQ	(7) AAQ	(8) AQ
DIV	-0.070***	-0.028***			-0.008	0.004		
	(-5.52)	(-2.80)			(-0.59)	(0.45)		
DPS			-0.005**	-0.003***			0.001	-0.000
			(-2.45)	(-3.19)			(0.26)	(-0.21)
Constants	0.306***	0.219***	0.262***	0.203***	0.263***	0.197***	0.257***	0.200***
	(24.92)	(17.08)	(34.81)	(21.55)	(26.18)	(29.37)	(101.41)	(259.42)
adj. R^2	0.056	0.126	0.007	0.016	-0.000	-0.000	-0.000	-0.000
FE	NO	NO	NO	NO	YES	YES	YES	YES
N	2275	2275	2275	2275	2275	2275	2275	2275

This table presents the basic regression results of the accrual quality model using random effects model (1) and (2) and fixed effects model (3) and (4). AAQ is the absolute value of the regression residuals. AQ is a five-year standard deviation of the regression residuals. DIV is dummy variable by Dividend payer =1 or dividend non-payer = 0. DPS is dividend per share. The T statistics are reported in parentheses. ***, **, and * denote coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively.

Figure 5.2 Dividends and accrual quality – basic regression

Secondly, this research paper examines the association between dividends and accrual quality in **Figure 5.2**. The coefficient for the DIV variable (Dividend Payer) in models (1) and (2) for AAQ and AQ respectively, are -0.070 and -0.028, and both are statistically significant at the 1% level. The negative sign of the coefficient indicates that being a dividend payer is associated with higher accruals quality (since lower AAQ and AQ values indicate better accrual quality), suggesting these companies tend to have less earnings manipulation. The magnitude of the coefficients suggests that transitioning from a non-dividend payer to a dividend payer decreases

AAQ and AQ by 0.070 and 0.028 units respectively, which is a meaningful decrease given the average AAQ and AQ in the sample are 0.257 and 0.200. In the fixed effects models (5) and (6), the DIV coefficients for AAQ and AQ are -0.008 and 0.004 respectively, but they are not statistically significant. This suggests that when controlling for company-specific effects, the relationship between being a dividend payer and accruals quality becomes statistically insignificant. In models (3) and (4) for AAQ and AQ respectively, the DPS variable (Dividend per Share) has coefficients of -0.005 and -0.003, which are statistically significant at the 5% and 1% levels respectively. The negative coefficients imply that an increase in dividends per share is associated with better accruals quality. Specifically, a one-unit increase in DPS is associated with a 0.005 and 0.003 unit decrease in AAQ and AQ. In the fixed effects models (7) and (8) for AAQ and AQ, the DPS coefficients are 0.001 and -0.000, and are not statistically significant, suggesting that after controlling for unobserved company-specific effects, there is no clear relationship between DPS and accruals quality. However, there is a difference in the major significance of the coefficient for dividend policy between the random and fixed effects models. This might reduce from the fact that in the fixed effects model, the variation within companies over time is considered, while the random effects model focuses more on variation across companies. Therefore, this difference in results might be explained by low within-company variation in dividend payment behavior, meaning companies that tend to pay dividends continue to do so over time. The adjusted R-squared values in models (1) to (8) range from -0.000 to 0.126. These low values indicate that the models explain only a small portion of the variation in accruals quality. This suggests that there are other factors, not included in the models, that significantly influence accruals quality.

In conclusion, the results support hypothesis 1 that dividend-paying companies demonstrate better accruals quality, indicating less earnings manipulation. However, when controlling for company-specific effects, the relationship becomes statistically insignificant, suggesting that internal company factors may influence this relationship. The results partially support hypothesis 2 in the sense that an increase in dividends per share is associated with better accruals quality, but this relationship disappears after controlling for company-specific effects. Given the low explanatory power of the models, it is clear that there are other significant factors affecting accruals quality not captured in the models. This suggests that other factors, not captured in these models, significantly influence accruals quality.

	(1) RET	(2) ERC	(3) ERC	(4) ERC	(5) ERC
EPS_t	0.019*** (6.84)				
ΔEPS	-0.019* (-1.91)				
DIV		0.219* (1.86)		-0.008 (-0.05)	
DPS			0.042*** (4.96)		0.009* (1.85)
Constants	-0.012* (-1.68)	-0.581*** (-5.29)	-0.463*** (-7.28)	-0.421*** (-3.89)	-0.434*** (-105.56)
adj. R^2	0.014	0.009	0.005	-0.000	-0.000
FE	NO	NO	NO	YES	YES
N	2275	2275	2275	2275	2275

This table presents the basic regression results of the earnings informativeness model using random effects model (2) and (3) and fixed effects model (4) and (5). ERC is

estimated coefficients from model (1). DIV is dummy variable by Dividend payer =1 or dividend non-payer = 0. DPS is dividend per share. The T statistics are reported in parentheses. ***, **, and * denote coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively.

Figure 5.3 Dividends and earnings informativeness – basic regression

Thirdly, this research paper examines the association between dividends and earnings informativeness in **Figure 5.3**. The coefficient for the DIV variable (Dividend Payer) in model (2) for ERC is 0.219 and is statistically significant at the 10% level. The positive sign of the coefficient suggests that being a dividend payer is associated with higher earnings informativeness, as indicated by a greater earnings response coefficient (ERC). The magnitude of the coefficient suggests that a shift from a non-dividend payer to a dividend payer status increases the ERC by 0.219 units, which is a substantial change considering the average ERC in the sample is -0.427. However, in the fixed effects model (4) for ERC, the DIV coefficient is -0.008 and is not statistically significant. This implies that when controlling for company-specific effects, the relationship between being a dividend payer and earnings informativeness becomes statistically insignificant. In model (3) for ERC, the DPS variable (Dividend per Share) has a coefficient of 0.042 and is statistically significant at the 1% level. The positive coefficient suggests that an increase in dividends per share is associated with greater earnings informativeness, reflected by a larger ERC. Specifically, a one-unit increase in DPS is associated with a 0.042 unit increase in ERC. In the fixed effects model (5) for ERC, the DPS coefficient is 0.009 and is statistically significant at the 10% level. This suggests that, even after controlling for unobserved company-specific effects, there is a positive association between DPS and

ERC, albeit smaller than in the random effects model. The adjusted R-squared values in models (1) to (5) range from -0.000 to 0.014. These low values indicate that the models explain only a small portion of the variation in earnings informativeness. This suggests that there are other factors, not included in the models, that have a significant impact on earnings informativeness.

In conclusion, the results support hypothesis 1 that dividend-paying companies have more informative earnings, indicating that their earnings are more reflective of underlying business performance. However, this effect disappears when company-specific effects are controlled for, suggesting that internal company factors may influence the relationship between dividend policy and earnings informativeness. The results also support hypothesis 2, that an increase in dividends per share is associated with greater earnings informativeness, even when controlling for company-specific effects. This implies that a larger dividend per share provides a clearer picture of future earnings and overall financial health. Despite these relationships, the low explanatory power of the models points to the complexity of the relationship between dividend policy and earnings informativeness. This suggests that other factors, not captured in these models, significantly influence earnings informativeness.

	(1) EPS_{t+1}	(2) TLR	(3) TLR	(4) TLR	(5) TLR
DT	-0.018				
	(-0.24)				
RET	0.066				
	(0.65)				
DT_RET	0.430*				
	(1.88)				
DIV		0.376		0.061	
		(1.43)		(0.15)	
DPS			-0.069		-0.566***
			(-0.67)		(-3.03)
Constants	1.166***	0.367*	0.692***	0.588**	1.131***
	(9.86)	(1.81)	(3.97)	(2.07)	(6.86)
adj. R^2	0.041	0.002	0.001	-0.000	0.016
FE	NO	NO	NO	YES	YES
N	2275	2275	2275	2275	2275

This table presents the basic regression results of the timely loss recognition model using random effects model (2) and (3) and fixed effects model (4) and (5). TLR is estimated coefficients from model (1). DIV is dummy variable by Dividend payer =1 or dividend non-payer = 0. DPS is dividend per share. The T statistics are reported in parentheses. ***, **, and * denote coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively.

Figure 5.4 Dividends and timely loss recognition – basic regression

Fourthly, this research paper further examines the association between dividends and timely loss recognition in **Figure 5.4**. The coefficient for the DIV variable (Dividend Payer) in model (2) for TLR is 0.376 and is not statistically significant. This indicates that there is not a significant association between being a

dividend payer and the timeliness of loss recognition, opposite to the expectations of hypothesis 1. In the fixed effects model (4) for TLR, the DIV coefficient is 0.061 and is also not statistically significant. This means that when it accounts for company-specific effects, the relationship between being a dividend payer and the timeliness of loss recognition still does not exist. In model (3) for TLR, the DPS variable (Dividend per Share) has a coefficient of -0.069 but is not statistically significant. Thus, there is no significant relationship between dividends per share and timely loss recognition. In the fixed effects model (5) for TLR, the DPS coefficient is -0.566 and is statistically significant at the 1% level. The negative coefficient indicates that an increase in dividends per share is associated with less timely loss recognition. Specifically, a one-unit increase in DPS is associated with a 0.566 unit decrease in TLR. The adjusted R-squared values in models (1) to (5) are quite low, ranging from -0.000 to 0.041. These values suggest that the models do not explain a large proportion of the variation in timely loss recognition. This implies that there are other variables, not included in the models, that have a substantial impact on timely loss recognition.

In conclusion, the results contradict hypothesis 1 that being a dividend payer does not necessarily indicate superior earnings quality in terms of timely loss recognition. For hypothesis 2, the results show a negative association between the size of the dividend per share and the timeliness of loss recognition in the fixed effects model. This means that companies that pay larger dividends per share tend to recognize losses less timely, contradicting the expectations of hypothesis 2. Overall, the findings suggest that while dividends may signal certain aspects of earnings quality, they do not necessarily indicate the timeliness of loss recognition. These findings might be due to firms with larger dividends having more resources or incentives to delay loss

recognition. However, given the low explanatory power of the models. This suggests that other factors, not captured in these models, significantly influence timely loss recognition.

5.2 The results on the moderating effects of company stock price movement

This research paper further examines the moderating role of company stock price movement on the association between dividend payout policy and earnings quality. Regarding the above section, the company can freely make the decision of dividend policy as the result shown in all proxies of earnings quality. In order to test the difference in incentive of two major types of company, there are companies with the stock price loss and the company with the stock price gain. The difference between stock price loser and gainer is the incentive factor to pay the dividend to the investors. For stock price losers, those companies must send a credible signal to the investor by paying significantly higher dividends than previous periods in order to make the expected future stock price recovery. On the other hand, the stock price gainer might pay the dividend just considering the previous evidence from research paper conducted for dividend policy incentive covering companies in Thai stock market, that is the catering incentive of dividend policy.

In addition, in the analysis of earnings quality, first it is beneficial to utilize multiple proxies due to the ability to capture diverse aspects of the earnings quality. Each different proxy employed in this research paper includes earnings persistence, accruals quality (AAQ and AQ), earnings informativeness (ERC), and timely loss recognition (TLR). Earnings persistence is a measure of the consistency of earnings

over time. Stable and predictable earnings typically signify higher earnings quality, demonstrating a company's ability to maintain a consistent performance over time. This proxy helps with gauging the reliability of a firm's earnings across different periods. Accruals quality (AAQ) measures the abnormal accruals in a company's financial reporting. This proxy quantifies the absolute value of regression residuals estimated using a specific model. In essence, AAQ is an indicator of the magnitude of deviations from the expected accruals, based on the company's operational, financial, and investing activities. A high AAQ typically suggests that a company has larger abnormal accruals, which could potentially indicate aggressive earnings management and lower earnings quality. Accruals quality (AQ), on the other hand, focuses on the volatility of abnormal accruals over a given period (typically five years). This proxy calculates the standard deviation of regression residuals estimated using a model. AQ, therefore, provides an understanding of the consistency (or inconsistency) of the company's abnormal accruals. A higher AQ value represents a higher variability in the company's accruals over time, often seen as a sign of lower earnings quality due to increased unpredictability in earnings. Earnings informativeness (ERC) measures the relationship between a firm's equity returns and its reported earnings. A higher absolute ERC value indicates that earnings provide valuable information to stakeholders, thus suggesting higher earnings quality. ERC sheds light on how well earnings reflect the firm's performance and its stock market returns. Timely loss recognition (TLR) reflects the speed at which losses are incorporated into reported earnings. Firms that recognize losses promptly are often seen as having higher quality earnings, signaling a transparent and responsive financial reporting process. This proxy can provide insights into a company's financial health and management's

attitude towards risk and transparency. In addition, all of the proxies offer a unique perspective measurement on earnings quality. Then, the variations among these proxies not only underline the multidimensionality of earnings quality but also aid in capturing a comprehensive and nuanced view of the measurement of earnings quality. Lastly, the low correlation between these proxies suggests that each one contributes independently to the understanding of earnings quality. For instance, while Persistence is slightly positively correlated with ERC and TLR, the relationships are not very strong, implying that the consistency of earnings over time is not entirely explained by earnings informativeness or timely loss recognition. AAQ and AQ, while positively correlated, are weakly related to the other proxies, indicating that the quality of earnings in terms of cash versus accruals is a distinct aspect of earnings quality not fully captured by the other measures. Similarly, the very weak correlations of ERC with other measures suggest that the informativeness of earnings is a distinct facet of earnings quality. Finally, the negative correlations of TLR with AAQ and AQ highlight that the speed of loss recognition is a distinct component of earnings quality not entirely explained by accruals quality or the proportion of accruals in earnings. In conclusion, these variations among the proxies emphasize the multidimensionality of earnings quality, and the low correlation between them suggests that each one contributes independently to the understanding of earnings quality. This makes a strong case for using a multi-proxy approach when studying earnings quality, as it allows for a more comprehensive and nuanced understanding of this complex construct as **Figure 5.5**.

	Persistence	AAQ	AQ	ERC	TLR
Persistence	1.000				
AAQ	-0.026	1.000			
AQ	-0.051	0.335	1.000		
ERC	0.037	0.029	0.030	1.000	
TLR	0.079	-0.102	-0.080	-0.001	1.000

Figure 5.5 Correlation between each proxy of earnings quality

Moreover, the third hypothesis is the company stock price movement significantly moderates the relationship between the dividend payout policy and the earnings quality, the results are reported in **Figure 5.6**. To address the effect of price movement factor, this research paper includes a new variable for price movement factor (PMF) to test moderating effect of the company with decreasing or increasing stock price on the relationship between dividends and earnings quality for total four proxies' measures with the following regression models:

$$Persistence_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \beta_2 \times PMF_{i,t} + \beta_3 \times Dividend_{i,t} \times PMF_{i,t} + \varepsilon$$

$$AAQ_{i,t} \,/\, AQ_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \beta_2 \times PMF_{i,t} + \beta_3 \times Dividend_{i,t} \times PMF_{i,t} + \varepsilon$$

$$ERC_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \beta_2 \times PMF_{i,t} + \beta_3 \times Dividend_{i,t} \times PMF_{i,t} + \varepsilon$$

$$TLR_{i,t} = \alpha + \beta_1 \times Dividend_{i,t} + \beta_2 \times PMF_{i,t} + \beta_3 \times Dividend_{i,t} \times PMF_{i,t} + \varepsilon$$

Panel A	(1) Persistence	(2) Persistence
DPS	-0.006*	-0.010
	(-1.73)	(-1.39)
PMF	-0.018	-0.028
	(-0.57)	(-0.82)
DPS_PMF	-0.005	-0.007
	(-0.27)	(-0.35)
Constants	0.086***	0.100***
	(3.32)	(5.02)
adj. R^2	-0.001	0.001
FE	NO	YES
N	795	795

Panel A presents the result for earnings persistence model. Persistence is estimated coefficient from model (1) from **Figure 5.1.**

Panel B	(1) AAQ	(2) AQ	(3) AAQ	(4) AQ
DPS	-0.001	-0.001*	0.001	-0.001
	(-0.43)	(-1.84)	(0.16)	(-0.84)
PMF	0.014	-0.011**	0.014	-0.011**
	(1.25)	(-2.37)	(1.27)	(-2.50)
DPS_PMF	-0.007	0.006	-0.006	0.007*
	(-0.87)	(1.58)	(-0.65)	(1.84)
Constants	0.214***	0.142***	0.211***	0.141***
	(20.82)	(15.63)	(28.29)	(57.94)
adj. R^2	-0.000	0.001	-0.001	0.003
FE	NO	NO	YES	YES
N	1185	1185	1185	1185

Panel B presents the result for accrual quality model. AAQ is the absolute value of the regression residuals estimated from **Figure 5.2**. AQ is a five-year standard deviation of the regression residuals estimated from **Figure 5.2**.

Panel C	(1) ERC	(2) ERC
DPS	0.019** (2.31)	0.010 (1.37)
PMF	-0.090 (-0.76)	-0.034 (-0.27)
DPS_PMF	0.130** (2.25)	0.064 (1.06)
Constants	-0.311*** (-3.60)	-0.300*** (-5.83)
adj. R^2	0.011	-0.002
FE	NO	YES
N	1185	1185

Panel C presents the result for earnings informativeness model. ERC is estimated coefficient from model (1) from **Figure 5.3**.

Panel D	(1) TLR	(2) TLR
DPS	-0.144	-0.600***
	(-1.27)	(-2.81)
PMF	-0.624*	-0.228
	(-1.66)	(-0.58)
DPS_PMF	0.598	0.175
	(1.33)	(0.36)
Constants	1.087***	1.757***
	(3.12)	(4.45)
adj. R^2	0.003	0.018
FE	NO	YES
N	1185	1185

Panel D presents the result for timely loss recognition model. TLR is estimated coefficient from model (1) from **Figure 5.4**.

All tables present the basic regression results on the effect of stock price movement on the association between dividends and earnings quality using random effects model (1) and fixed effects model (2). PMF is dummy variable by company with decreasing stock price = 1 or company with increasing or same stock price = 0. DP is dummy variable by company with high dividend payout than last period = 1 or company with low or same dividend payout than last period = 0. The T statistics are reported in parentheses. ***, **, and * denote coefficients that are statistically significant at the 1%, 5%, and 10% levels, respectively.

Figure 5.6 Price movement factor, dividends, and earnings quality

In the above models, all the variables are the same as those defined above in the previous section. Then, the PMF is the dummy variable which the company with decreasing stock price = 1 or the company with increasing or same stock price = 0. As a result, the company with the decreasing stock price paying dividends, the incentive

to pay dividends will send a credible signal to the investor by paying significantly higher dividend than previous periods to make the expected future stock price recovery. Then, it is expected that the coefficient of the interaction terms of dividends and price movement factor will be the same sign to coefficient of the dividends. To be more clarified for all four models, it is expected that β_3 from Persistence, ERC and TLR to be positive sign, but the β_3 from AAQ and AQ to be negative sign. Therefore, the company with the decreasing stock price conveys more a credible signal about earnings quality than company with increasing stock price.

The empirical results for the effect of price movement factor are reported in **Figure 5.6**. For each proxy of earnings quality regression models, this research paper examines the role of price movement factor on earnings quality in Panel A, Panel B, Panel C, and Panel D. Therefore, the results present that the price movement factor indicators have not statistically significant coefficients for most of earnings quality proxies, which indicates the price movement factor itself cannot affect the earnings quality. In addition, this research paper further examines the moderating role of price movement factor on the association between dividend payout policy and earnings quality.

Firstly, for the earnings persistence in **Figure 5.6 Panel A**, the coefficient for DPS (dividend per share) is negative -0.006 in model (1) and -0.010 in model (2), indicating that as the dividend per share increases, the earnings persistence decreases. However, this relationship is only weakly significant in model (1) at the 10% level and not significant in model (2). This indicates that higher dividends do not necessarily lead to more persistent earnings. The coefficient for PMF (price

movement factor) is also negative in both models, but it is not significant in either, indicating that the direction of stock price movements does not significantly influence earnings persistence. The interaction term, DPS_PMF, also has a negative coefficient but is not statistically significant in either model. This suggests that the interaction between stock price movements and dividend payouts does not significantly moderate the relationship with earnings persistence. The adjusted R-squared values are negative in model (1) and barely above zero in model (2), suggesting that these models have low explanatory power for earnings persistence. When comparing the fixed effects model from model (2) and the model without fixed effects from model (1), it can observe a slight increase in the adjusted R-squared value. However, the change is so minimal, it is barely noticeable. This could mean that the company-specific effects do not substantially influence earnings persistence.

In conclusion, the findings for hypothesis 3 suggest that stock price movement does not significantly moderate the relationship between dividend payout policy and earnings persistence. These results suggest that investors may not directly associate changes in dividends or stock price movements with earnings persistence, particularly in the short term. This could be because earnings persistence is a long-term measure of earnings quality, while stock price movements and dividend payouts are more immediate, and potentially more influenced by short-term factors. As such, the impact of dividends and stock price movements on earnings persistence might not be as direct or substantial as initially posited.

Secondly, for the AAQ and AQ in **Figure 5.6 Panel B**, in all four models, the DPS (Dividend Per Share) coefficient is insignificant, suggesting that changes in

dividend per share do not have a significant direct impact on accruals quality. The only exception is in model (2) where DPS shows a weak negative association with AQ (Accrual Quality) at the 10% significance level. This implies that an increase in dividends per share is weakly associated with a small decrease in accruals quality e.g., poorer accruals quality. The coefficient for PMF (Price Movement Factor) is positive for AAQ and negative for AQ in both models, but it is only statistically significant at the 5% level for AQ in models (2) and (4). This indicates that companies with decreasing stock prices have lower accrual quality, but the relationship with accruals quality (AAQ) is not significant. The interaction term (DPS_PMF) is negative for AAQ and positive for AQ in all models. However, it is only statistically significant for AQ in model (4), suggesting that the moderation effect of stock price movements on the relationship between dividend policy and accrual quality is weak and only evident when considering firm-specific effects (FE) and Accrual Quality (AQ) as the measure of earnings quality. In terms of the R-squared values, they are very close to zero or slightly negative, indicating that the models do not explain much of the variability in accruals quality. The fixed effects (FE) models from models (3) and (4) take into account firm-specific effects, which could include any unobserved, time-invariant characteristics unique to each company. However, adding these fixed effects does not lead to any major changes in the significance levels or signs of the coefficients.

In conclusion, the findings for hypothesis 3 reveal that stock price movements do significantly moderate the relationship between dividend payout policy and accruals quality, particularly for AQ. The positive relationship between stock price movements and accruals quality, particularly for AQ in models (2) and (4), could potentially be

indicative of poorer accrual quality as a result of management's possible use of accruals to manage earnings and maintain dividends, thus signaling future cash flow confidence but resulting in poorer accruals quality. However, the evidence for this is relatively weak based on these results.

Thirdly, for the ERC in **Figure 5.6 Panel C**, the Dividend Per Share (DPS) coefficient displays a weak yet significant positive relationship with ERC in the model (1) at the 5% significance level, implying that an increase in dividends per share might be associated with an increase in earnings quality. However, this association becomes insignificant in the model (2), which incorporates firm-specific fixed effects (FE), indicating that changes in DPS do not have a robust impact on earnings quality. The Price Movement Factor (PMF) coefficient, which represents the direction of the stock price movement, is negative in both models but is not statistically significant. This suggests that the movement of stock prices, whether upwards or downwards, does not have a significant direct impact on earnings quality. The interaction term (DPS_PMF) is positive and statistically significant in the model (1) at the 5% level, indicating that the stock price movement does moderate the relationship between DPS and ERC. However, this significance disappears in the model (2) which includes firm-specific fixed effects. This implies that the moderation effect of stock price movements on the relationship between dividend policy and earnings quality is not stable when individual firm characteristics are considered. The adjusted R-squared values for both models (1) and (2) are extremely low, suggesting that these models do not account for a significant proportion of the variability in earnings quality. The fixed effects model (2) considers firm-specific effects, including any unobserved, time-invariant characteristics unique to each firm. The introduction

of these fixed effects does not substantially alter the coefficients' magnitude or significance.

In conclusion, the findings from hypothesis 3 provide support that the company's stock price movement significantly moderates the relationship between dividend payout policy and earnings quality, particularly in relation to earnings informativeness (ERC). The significant interaction in the model (1) supports the view that dividends can serve as a strong positive signal of good earnings quality, especially when a company's stock price drops. However, the statistical significance of this relationship diminishes when firm-specific effects are accounted for in model (2). Thus, the evidence supporting the hypothesis is relatively weak.

Fourthly, for the TLR in **Figure 5.6 Panel D**, the Dividend Per Share (DPS) coefficient, it is negative in both models (1) and (2). In the model (1), it is insignificant which implying that changes in DPS do not significantly affect TLR. However, in model (2), which includes fixed effects, the DPS coefficient is significantly negative at the 1% level, suggesting that an increase in DPS leads to a decrease in TLR e.g., less timely loss recognition. The Price Movement Factor (PMF) coefficient is negative in both models but is only significant at the 10% level in model (1). This suggests that companies with decreasing stock prices tend to recognize losses less timely, but this effect is not consistently significant across models. The interaction term DPS_PMF is positive in both models but is not significant in either, implying that the stock price movement does not have a significant moderating effect on the relationship between DPS and TLR. In terms of the adjusted R-squared values, they are both very low (0.003 and 0.018), suggesting that these models do not explain

much of the variation in timely loss recognition. The fixed effects (FE) models account for firm-specific effects, which could include any unobserved, time-invariant characteristics unique to each company. Incorporating these fixed effects does not significantly alter the sign of the coefficients, but it does affect their magnitude and significance. Most notably, the DPS coefficient becomes significant, and the PMF coefficient loses its significance.

In conclusion, the analysis of hypothesis 3 with respect to timely loss recognition (TLR) suggests that stock price movements do not significantly moderate the relationship between dividend payout policy and this aspect of earnings quality. The lack of a significant moderating effect by stock price movements on the relationship between DPS and TLR could suggest that investors do not strongly associate dividend policy changes and stock price movements with timely loss recognition, an aspect of earnings quality. It is also interesting to note the significant negative relationship between DPS and TLR in the model (2), suggesting that a higher dividend payout might be associated with less timely recognition of losses, particularly when firm-specific effects are taken into account.

Therefore, for hypothesis 3 in this research paper posits that the company's stock price movement significantly moderates the relationship between the dividend payout policy and earnings quality. This research paper uses a total of four proxies for earnings quality including earnings persistence, accruals quality (AAQ and AQ), earnings informativeness (ERC), and timely loss recognition (TLR). Upon interpreting the results, it appears that the interaction term between the Dividend Per Share (DPS) and Price Movement Factor (PMF), the hypothesis 3 has partially found

support, with evidence of significant interactions between dividend policy, stock price movements, and certain proxies of earnings quality, earnings informativeness (ERC) and accruals quality (AAQ and AQ). However, this is not consistent across all measures of earnings quality, indicating the complexity of the interplay among these factors due to each proxies reflecting a different aspect or characteristic of earnings quality. They each measure a distinct attribute of a firm's financial health or behavior, and as such, they can have differing relationships with dividend policy and stock price movements. For earnings informativeness (ERC), the significant relationship found between stock price movement, dividend payout, and earnings informativeness could be due to investors' reliance on earnings news in their investment decisions. Particularly when a company's stock price drops, investors pay close attention to earnings information. In this context, dividends can act as a strong positive signal of good earnings quality. This suggests that firms can influence investors' perception of earnings quality through their dividend decisions, particularly in times of stock price declines. However, the result from the accruals quality presents the opposite direction of negative signaling, the significant relationship found between stock price movement, it shows a significant positive relationship which suggests poorer accrual quality when firms maintain dividends during a stock price decline. This might be due to management's use of accruals to manage earnings and maintain dividends, thus signaling future cash flow confidence but resulting in poorer accruals quality. Then, the other two proxies present insignificant in the stock price movement can moderate the relationship between dividend payout policy and earnings quality, starting with the earnings persistence, the lack of a significant relationship might be due to the long-term nature of earnings persistence. Investors might not directly associate changes in

dividends or stock prices with earnings persistence, especially in the short term. As such, stock price movements might not significantly impact the perceived relationship between dividends and earnings persistence. Moreover, timely loss recognition is a valuable aspect of earnings quality as it reflects the company's willingness to quickly incorporate losses into reported earnings. However, its association with dividends and stock price movements may not be as direct or immediate in investors' minds as other aspects of earnings quality. Investors might see dividends more as a reflection of current or past profitability, rather than a signal of timely loss recognition. Consequently, these findings underscore the complexity of the relationship between dividend policy, stock price movements, and earnings quality. They highlight the need to consider the unique characteristics and measures of each proxy when analyzing their interaction with dividend policy and stock price movements. This research paper also implies that the effect of stock price movements on the relationship between dividends and earnings quality may vary depending on the proxy used to measure earnings quality.

6. CONCLUSION

This research aimed to deepen understanding of the complicated relationship between dividends and earnings quality. Utilizing data from companies in the stock market of Thailand, this research paper tested total four distinct hypotheses that explore the association between dividend payout policy, stock price movements, and earnings quality. Hypothesis 1 proposed that dividend-paying firms demonstrate higher earnings quality compared to non-dividend-paying firms. The findings support this hypothesis to some extent. Dividend-paying companies displayed superior earnings quality, observed across three of the four earnings quality proxies – earnings persistence, accruals quality (AAQ and AQ), and earnings informativeness (ERC). However, the timely loss recognition (TLR) proxy showed no significant relationship between dividend-paying status and earnings quality, indicating the complex relationship between these variables. Hypothesis 2 proposed a positive relationship between the dividend per share and earnings quality. A positive relationship was evident across three of the four earnings quality proxies - accruals quality (AAQ and AQ), earnings informativeness (ERC), and timely loss recognition (TLR), indicating that as the dividend per share increases, so does the quality of earnings in these respects. However, the earnings persistence proxy did not exhibit a significant relationship with dividends per share. This indicates that an increase in the dividend per share does not necessarily correlate with more stable earnings over time. Furthermore, contrary to expectations, the results revealed a negative relationship for two of the proxies - earnings persistence and timely loss recognition (TLR). This suggests that as the dividend per share increases, the earnings persistence and the timeliness of loss recognition decrease. The negative relationship could be due to the

concept that firms with higher dividends might focus on short-term financial performance, leading to less persistent earnings and delayed loss recognition. Hypothesis 3 proposed that a company's stock price movement significantly moderates the relationship between dividends and earnings quality. When examining the incentives for paying dividends, it is possible to see a divergence based on whether a company's stock price is increasing or decreasing. The findings suggest that, for companies experiencing a decrease in stock price, the decision to pay dividends could be a strategic choice grounded in the dividend signaling theory. These companies might increase their dividends as a show of confidence in their future prospects, potentially to attract new investors or reassure existing ones in the face of market volatility. In contrast, the companies with increasing stock prices, as per prior literature in Thailand, seem to be the evidence of catering to investor demand for dividends, as well known as the catering incentive. This decision to pay dividends does not necessarily correlate with high earnings quality. The results were varied across different proxies of earnings quality. While the earnings informativeness proxy presented a significant positive relationship and accruals quality presented a significant positive relationship, the earnings persistence and timely loss recognition proxies did not indicate a statistically significant relationship. However, this inconsistency suggests that the moderating effect of stock price movements might depend on the aspect of earnings quality under consideration. In addition, the uniformity of dividend behavior among companies in Thailand Stock Market, posed challenges for this research. Companies that typically pay dividends continue doing so, and non-payers persist in this decision, resulting in low variation over time. This consistency impacts the outcomes of different statistical models. For example, while

the random effects model suggested a positive correlation between dividend-paying firms and earnings quality, the fixed effects model, which accounts for individual firm characteristics, showed less statistical significance due to low within-firm variation in dividend policy over time. Finally, these findings carry implications for different stakeholders. Financial analysts and investors can gain insights into the dividend-earnings quality relationship, aiding stock evaluation. Academics can leverage these findings to extend research into earnings quality and dividend policies. Lastly, for corporates, these findings can reflect their dividend policies considering earnings quality and market responses.

REFERENCES

Aungkasuko, S. (2012). "Dividend policy, cash-flow uncertainty, and ownership structure: Evidence from Thai listed companies." Chulalongkorn business review **34**(131): 107-114.

Basu, S. (1997). "The conservatism principle and the asymmetric timeliness of earnings1." Journal of Accounting and Economics **24**(1): 3-37.

Benartzi, S., et al. (1997). "Do changes in dividends signal the future or the past?" The Journal of finance **52**(3): 1007-1034.

Bhattacharya, S. (1979). "Imperfect information, dividend policy, and" the bird in the hand" fallacy." The bell journal of economics: 259-270.

Chansarn, S. and T. Chansarn (2016). "Earnings Management and Dividend Policy of Small and Medium Enterprises in Thailand1." International journal of business and society **17**(2).

Charoenwong, C. and P. Jiraporn (2009). "Earnings management to exceed thresholds: Evidence from Singapore and Thailand." Journal of Multinational Financial Management **19**(3): 221-236.

DeAngelo, H., et al. (2006). "Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory." Journal of Financial economics **81**(2): 227-254.

Dechow, P. M. and I. D. Dichev (2002). "The quality of accruals and earnings: The role of accrual estimation errors." The accounting review **77**(s-1): 35-59.

Dechow, P. M., et al. (2011). "Predicting material accounting misstatements." Contemporary accounting research **28**(1): 17-82.

DeFond, M. L. (2010). "Earnings quality research: Advances, challenges and future research." Journal of Accounting and Economics **50**(2-3): 402-409.

Deng, L., et al. (2017). "Dividends and earnings quality: Evidence from China." International Review of Economics & Finance **48**: 255-268.

Durnev, A., et al. (2003). "Does greater firm-specific return variation mean more or less informed stock pricing?" Journal of Accounting research **41**(5): 797-836.

Easterbrook, F. H. (1984). "Two agency-cost explanations of dividends." The American economic review **74**(4): 650-659.

Fama, E. F. and K. R. French (2001). "Disappearing dividends: changing firm characteristics or lower propensity to pay?" Journal of Financial economics **60**(1): 3-43.

Gelb, D. S. and P. Zarowin (2002). "Corporate disclosure policy and the informativeness of stock prices." Review of accounting studies **7**: 33-52.

Grullon, G., et al. (2002). "Are dividend changes a sign of firm maturity?" the Journal of Business **75**(3): 387-424.

Jagannathan, M., et al. (2000). "Financial flexibility and the choice between dividends and stock repurchases." Journal of Financial economics **57**(3): 355-384.

Jensen, M. C. (1986). "Agency costs of free cash flow, corporate finance, and takeovers." The American economic review **76**(2): 323-329.

Kriengkai, B.-U.-T., et al. (2021). "The Effect of Financial Distress on Timely Loss Recognition: Evidence from Listed Companies on the Stock Exchange of Thailand." Thammasat Business Journal **Year 44, Issue 171, July - September 2021**: 1-21.

Lintner, J. (1956). "Distribution of incomes of corporations among dividends, retained earnings, and taxes." The American economic review **46**(2): 97-113.

Miller, M. H. and F. Modigliani (1961). "Dividend policy, growth, and the valuation of shares." the Journal of Business **34**(4): 411-433.

Mulchandani, K., et al. (2020). "Dividends and earnings quality: Evidence from India." IIMB Management Review **32**(2): 166-176.

Nguyen, T. T. N. and P. K. Bui (2019). "Dividend policy and earnings quality in Vietnam." Journal of Asian Business and Economic Studies **26**(2): 301-312.

Ouma, O. P. (2012). "The relationship between dividend payout and firm performance: A study of listed companies in Kenya." European scientific journal **8**(9).

Premarat, V., et al. (2020). "Real Earnings Management and Accrual-based Earnings Management Implications for Future Profitability." Accounting and Management

Journal Mahasarakham University **Year 12, Issue 3, Jul. - Sep. 2020**: 84-96.

Sirait, F. and S. Veronica Siregar (2014). "Dividend payment and earnings quality: evidence from Indonesia." International Journal of Accounting and Information Management **22**(2): 103-117.

Skinner, D. J. and E. Soltes (2011). "What do dividends tell us about earnings quality?" Review of accounting studies **16**: 1-28.

Suwanna, T. (2012). "Impacts of dividend announcement on stock return." Procedia-Social and Behavioral Sciences **40**: 721-725.

Tangjitprom, N. (2013). "Propensity to pay dividends and catering incentives in Thailand." Studies in Economics and Finance **30**(1): 45-55.

Thanatawee, Y. (2011). "Life-cycle theory and free cash flow hypothesis: Evidence from dividend policy in Thailand." International Journal of Financial Research **2**(2).

Tong, Y. H. and B. Miao (2011). "Are dividends associated with the quality of earnings?" Accounting horizons **25**(1): 183-205.

Watts, R. (1973). "The information content of dividends." the Journal of Business **46**(2): 191-211.

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