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Article

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Cogent Business & Management

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Suggested Citation: Nuansari, Shindy Dwita; Tandelilin, Eduardus; Setiyono, Bowo; Junarsin, Eddy (2023) : Catering incentives, sentiment investor, and dividend policy in six ASEAN countries, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 3, pp. 1-21, <https://doi.org/10.1080/23311975.2023.2278243>

This Version is available at:

<https://hdl.handle.net/10419/294723>

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To cite this article: Shindy Dwita Nuansari, Eduardus Tandelilin, Bowo Setiyono & Eddy Junarsin (2023) Catering incentives, sentiment investor, and dividend policy in six ASEAN countries, Cogent Business & Management, 10:3, 2278243, DOI: [10.1080/23311975.2023.2278243](https://doi.org/10.1080/23311975.2023.2278243)

To link to this article: <https://doi.org/10.1080/23311975.2023.2278243>



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Published online: 09 Nov 2023.



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Received: 26 August 2023
Accepted: 26 October 2023

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Reviewing editor:
David McMillan, University of Stirling,
United Kingdom

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BANKING & FINANCE | RESEARCH ARTICLE

Catering incentives, sentiment investor, and dividend policy in six ASEAN countries

Shindy Dwita Nuansari^{1*}, Eduardus Tandelilin², Bowo Setiyono² and Eddy Junarsin²

Abstract: Fundamentals alone are insufficient to explain why companies adopt a particular dividend policy. Dividend policy can also be seen from a behavioral perspective because companies serve investors who strongly prefer stocks that pay dividends, hereinafter referred to as dividend catering theory. This study employs a quantitative research design to investigate the theory of dividend catering in six ASEAN countries from 2012 to 2021. The research utilizes a dynamic panel regression approach with a Generalized Method of Moments (GMM) estimation system, drawing data from the Thomson Reuters database and The World Bank. This research produced several findings. First, we show essential differences in the dividend policies of companies across countries. Second, we find that low (high) sentiment tends to high (low) catering incentives, so companies decide to pay (not pay) dividends. Third, companies based in common-law countries exhibit a strengthened relationship between catering incentives and the likelihood of dividend payments. Our findings explain the factors that contribute to the increase and decrease of the catering dividend in the ASEAN region and contribute to the decision-making of a company's dividend payout by considering investor sentiment, which will ultimately increase firms' value.

Subjects: Economic Theory & Philosophy; Finance; Business, Management and Accounting;

Keywords: catering incentives; sentiment investor; dividend policy; law system; ASEAN region

1. Introduction

The variations in dividend policy implementation across different countries have prompted ongoing research into the underlying causes. In addition, dividend policy has been one of the most commonly observed issues in corporate finance. Furthermore, Modigliani and Miller (1961) who initially stated that in a perfect capital market, dividends have no relevance whatever to firm

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value, and this theory is known as dividend irrelevant. As an answer to the irrelevant dividend theory, Rock and Miller (1985) with their theory known as the signaling dividend theory, states that information asymmetry can make dividend policy relevant to firm value so that dividends can be a signal to investors about conditions within the company. Clientele can also make dividend policy affect firm value (Allen et al., 2000). Furthermore, the agency problem is also vital, creating relevance between dividend policy and firm value (Easterbrook, 1984; Jensen, 2009). Research on dividends is still a puzzle to date. Dividends can have a significant effect on share prices and company risk, so further observations are still needed (Hasan, 2021a, 2021b; Hasan et al., 2023). According to Ed-Dafali et al. (2023) based on the systematic literature review analysis they conducted, it was concluded that research related to dividend policy still needs to be carried out further. The puzzle about why companies pay dividends may indeed have been answered in the various classic studies above, but researchers want to examine it further by focusing on the determinants of dividend payments that cause dividend policies to differ between countries. Based on this, the question arises, do companies pay dividends if investors ask for dividends to be paid? And can the legal system also influence dividend policy? This question will be answered in this research.

A relatively new line of research concerning dividends in behavioral finance, namely the dividend catering theory, will be used as the main reference in this research (Byun et al., 2021; ElBannan, 2020; Gyimah & Gyapong, 2021; Takmaz et al., 2020). This dividend catering theory is based on the idea that managers will serve investors' requests whether they want dividends to be paid. It is then referred to as catering incentives. The discovery of the dividend catering theory originated with Fama and French (2001), who documented a decreased likelihood to pay dividends caused by an increase in the number of companies not paying dividends. Then, based on the findings of Fama and French (2001) motivated Baker & Wurgler (2004) to observe further by adding the variable investors' desire for dividend payments. It enabled Baker & Wurgler (2004) to find a new breakthrough that related dividend policy not to company fundamentals but based on investor behavior by looking at how much investors wanted dividend payments. The dividend catering theory is considered capable of providing a more satisfactory explanation regarding the causes of dividends appearing and disappearing in the capital market compared to several other dividend theories. Dividend catering theory uses proxy catering incentives to measure the extent to which a company responds to dividend payments. If catering incentives are positive, investors give a premium value to companies that pay dividends, and vice versa.

The catering incentives themselves cannot be separated from the role of investor sentiment. When investor sentiment is getting lower, meaning investors are pessimistic about the future of companies in that country, causing them to be more risk-averse, which then causes them to prefer high dividend payments, the lower investor sentiment in a country will cause catering incentives to be higher so that the company will decide to pay dividends (Byun et al., 2021). Meanwhile, in countries with high investor sentiment, shareholders expect higher capital gains than dividend payments due to the company's future success. It then causes the acquisition of catering incentives to be low, so the company will not pay dividends.

Furthermore, dividend policy can also be influenced by how investor protection mechanisms are implemented in a country. Countries that provide good investor protection will likely fulfill rights demanded by investors, including the right to demand whether to pay dividends. Dividend payments in common-law countries are higher than in civil-law countries because the former are afforded more protections (Porta et al., 1997). Additionally, according to Athari et al. (2016), even though in Islamic banks the results were found to support the substitution agency model, in conventional banks the results were found to support the outcome of the agency model, where when the company has good investor protection, dividend payments will be higher. Changes to investor protection may have an impact on the company's dividend policy (Moortgat et al., 2017). He et al. (2017) state that weak investor protection can strengthen the influence of earnings management carried out by companies that pay dividends and companies that do not pay

dividends. How investors feel about catering incentives may have an impact on the legal framework a country adopts as long as investor protection can affect the dividend policy the company uses.

This catering dividend theory has been developed by several other authors with various research subjects, such as Kumar et al. (2022), who observed the catering dividend theory and stated that investors seek more dividends when economic conditions are bad. Besides that, managers begin to increase (reduce) dividends when investors have a stronger (weaker) dividend sentiment with research subjects in the United States. Pieloch-Babiarz (2022) states that for a positive dividend premium, the companies analyzed dividend-related investor sentiment, suggesting that managers decide about dividends by analyzing stock market reactions. This research was conducted in the context of the Polish region. According to research by Bilel and Mondher (2021) on the MENA region, market behavior and reactions have an impact on investor demand for dividends. More specifically, investors favor dividends in bear markets (underperforming) over bull markets (well-performing). Yu et al. (2021) made observations for the China region. They stated that companies pay more dividends following the decrease in control shareholder dividend tax rates, and companies pay higher dividends upon encountering increased demand from controlling shareholders than minority investors. Byun et al. (2021) assert that investor sentiment is vital in catering to dividend effects, which are most felt when investor sentiment is low, with contexts around the world focusing on developed countries. Research on the dividend catering theory has also been conducted in Turkey, and it was found that companies serve them and distribute dividends when there is a positive dividend premium (Takmaz et al., 2020). Based on bibliometric analysis and systematic literature review, it was found that affiliate statistics show that most publications are carried out in the United States and Europe, especially the United Kingdom, and it is still very rare for research on dividends to be carried out in the context of emerging markets (Das Mohapatra & Panda, 2022; Pinto et al., 2020). Existing research has not extensively explored the role of dividend catering theory within the ASEAN region. Recognizing this gap, our study will specifically concentrate on this region.

Based on the explanation above, this paper studies dividend policy for the ASEAN region from 2012 to 2021. We only use six ASEAN countries, namely Thailand, Indonesia, Malaysia, Philippines, Singapore, and Vietnam, and do not observe the other four countries, namely Brunei Darussalam, Laos, Myanmar, and Cambodia, because these four countries do not have a large enough active capital market, so they cannot be adequately observed. We assume that the stock market in the Association of Southeast Asian Nations (ASEAN) is an excellent place to look at how catering incentives affect dividend policy and how investor sentiment can moderate the common law system. First, according to Lu et al. (2018), the ASEAN stock market is more speculative than the stock market in other developed countries, such as the US and Europe; since noise traders are more common in the ASEAN stock market, this situation presents an excellent chance to examine how behavioral factors affect policymaking dividends. Second, while Singapore is a developed market, the rest of ASEAN is still in the developing stages of economic growth. It allows us to investigate the function of divergent investor attitudes in the ASEAN region. As a final point, the ASEAN region's diverse legal systems allow us to inquire into how the law can amplify the effect of catering incentives toward dividend policy.

While this study is not the inaugural effort to explore the influence of catering incentives on dividend policy in light of investor sentiment and the legal system, it offers a unique perspective. Byun et al. (2021) previously delved into this area, focusing solely on several developed economies, leaving emerging markets largely uncharted. Most research on dividend catering in the context of investor sentiment predominantly employs the Baker index, which incorporates key proxies such as volatility premium, the natural logarithm of IPO counts, average first-day returns for IPOs, and the natural logarithm of turnover ratio (Andrikopoulos et al., 2020; Bilel & Mondher, 2021; Byun et al., 2021; Phan et al., 2023; Zhang et al., 2019). Some studies, like Kumar et al. (2022), utilize an investor sentiment index derived from the Search Volume Index. Others, like Shen et al. (2023),

have employed advanced techniques like the LSTM deep learning method to compile an investor sentiment index. Pieloch-Babiarz (2022) gauged investor sentiment using dividend premiums, terming the dividend premium in their study as “catering incentives.” Additionally, Andriosopoulos et al. (2021a) employed the Tobit standard model approach to discern the impact of catering incentives on dividend disbursements.

There’s a noticeable gap in research that constructs investor sentiment indices using technical metrics like RSI (Relative Strength Index), PLI (Psychological Line Index), ATR (Adjusted Turnover Rate), and LTV (Logarithm of Trading Volume). This study aims to bridge that gap, focusing on the relationship between catering incentives and dividend policy, and understanding the moderating influence of the common law system in emerging markets. The investor sentiment index by Seok et al. (2019), which utilizes daily company data, will be central to this analysis. This approach offers a fresh perspective compared to prior studies like Byun et al., which relied on the investor sentiment index by Baker et al. (2012). While Rochmah et al. (2020) examined catering dividends, their scope was limited to Indonesia and didn’t consider variations in the influence of the catering dividend theory based on investor sentiment nuances. Labhane (2019) also explored the catering dividend theory in the Indian context but didn’t account for potential endogeneity issues often associated with dividend observations.

This study’s novelty lies in its unique approach to formulating an investor sentiment index using technical metrics, its exploration of the link between catering incentives and the likelihood of dividend payment, and its use of the GMM approach to tackle endogeneity issues—a method seldom used in this context. Given the aforementioned gaps and the potential implications of catering incentives on dividend policy, there’s a compelling case for this research. It aims to provide insights into how companies can craft dividend policies that align with investor demands, factoring in innovation, investor sentiment, and the prevailing legal system. Such alignment can foster positive market reactions, potentially enhancing company value.

This research offers several contributions, such as theoretical contribution, it seeks to enrich the literature by validating the catering dividend theory, especially during periods of subdued investor sentiment. High catering incentives can spur companies to compete in dividend disbursements, aiming to satisfy investor demands and elicit positive market reactions, thereby augmenting company value. Methodological contribution, unlike most studies that rely on fundamentally measured indices, this research introduces an investor sentiment index based on market prices, using metrics like RSI, PLI, ATR, and LTV. This novel approach can offer a fresh methodological perspective for crafting dividend policies. Practical contribution, the findings can guide management in tailoring dividend policies that resonate with investor preferences, ensuring sustained positive market reactions, increased company value, and enhanced shareholder welfare.

2. Literature review and hypothesis development

2.1. *Catering incentives and dividend policy based on investor sentiment*

Observations on dividend policy have been going on for more than five decades and have become the object of empirical testing and intensive theoretical modeling. Several theoretical models have attempted to explain dividend behavior, and the results seem contradictory. The emergence of dividend theory begins with predicting stock price movements in response to dividends. Dividends can have a positive effect when investors perceive them as attractive. Hence, dividend payments can increase stock prices. However, some see dividends as unattractive, so the market responds badly, which then impacts the decline in stock prices. In addition, there is also the idea that dividend policy is irrelevant to stock valuation. Although many empirical studies have tested this idea, research on dividend policy is still attracting attention to this day and has also succeeded in finding many new findings.

Stock prices for both dividend and non-dividend-paying companies can be affected by shifts in investor demand for dividend-paying companies. Modigliani and Miller (1961) state a classical dividend theory, where dividend policy has no bearing on a company's value in an ideal capital market. Afterward, several other researchers, including (Grullon & Michaely, 2002), found that the losses experienced by investors due to taxes imposed on dividend payments could cause dividends to affect company value. Due to information asymmetry, dividend policies can affect a company's value, as discovered by (Rock & Miller, 1985). Clientele-based dividend policy can also influence the value of a company (Allen et al., 2000). Dividend policy and firm value are related to the agency problem (Easterbrook, 1984; Jensen, 2009; Porta et al., 1997).

After polling 384 financial executives, Brav et al. (2005) found that not even one put these ideas into practice. Then, the dividend theory perspective was proposed; it takes a psychological look at the situation because the firm's clients strongly prefer dividend-paying stocks (Baker & Wurgler, 2004). Dividend policy is seen from a behavioral perspective by Baker and Wurgler (2004), where they review dividends from a behavioral perspective in response to dividend payments made by the company, namely dividend catering theory. Then, Baker and Wurgler incorporate the research of Fama and French (2001), who found that catering incentives positively influence dividend payouts. Dividend payments as a proportion of companies' total revenue fell from 67% in 1978 to 21% in 1999 (Fama & French, 2001). Insufficient dividend payments and shaky management practices may have contributed to a precipitous decline beginning in the late 1970s (Kale et al., 2012).

Dividend catering theory, as a grand theory in this study, is built based on information asymmetry, which makes investors not have complete information about the company. Managers will serve investors' wishes for dividends; when investors respond well to dividend distribution, managers will decide to pay dividends, whereas investor responses to dividend distribution can reflect different market averages to the book ratio of dividend-paying and non-dividend-paying companies. If the average market-to-book ratio of the previous is higher than the latter, it can be concluded that investors provide premium values (in this study, known as catering incentives) to companies that pay dividends so that the company will decide to pay dividends. However, if it is found that the average market-to-book ratio of non-dividend-paying companies is higher than that of dividend-paying companies, then it is assumed that investors do not give a premium to companies that pay dividends, so the company will choose not to pay dividends. Managers will distribute dividends to shareholders when the stock price is highly regarded by those shareholders (Easterbrook, 1984). Dividend payments in the United States fell dramatically between 1978 and 1999 (Fama & French, 2001). Changing public company traits and a subsequent reduction in dividend-paying propensity are to blame for this trend. When managers see a premium placed on dividend payers compared to non-dividend payers, they tend to give in to investor demand for dividends, as stated by (Baker & Wurgler, 2004). Catering incentives are highly correlated with shifts in the dividend-paying trend.

There is empirical evidence regarding the theory of a variety of catering dividends. Kumar et al. (2022) observed the catering dividend theory and stated that investors seek more dividends when economic conditions are bad, and managers begin to increase (reduce) dividends when investors have stronger (weaker) dividend sentiments. Pieloch-Babiarz (2022) states that if there is a positive dividend premium, the company being analyzed satisfies dividend-based investor sentiment, which means managers analyze the reaction of the stock market to determine dividends. Investor demand for dividends is influenced by market behavior and reactions; more specifically, investors prefer dividends in a bear market (poor performing) to a bull market (good performing) (Bilel & Mondher, 2021). Yu et al. (2021) stated that companies pay more dividends following decreased shareholder dividend tax rates and increased demand from shareholders than minority investors demand. Investor sentiment is vital in catering to dividend effects, which are most pronounced when investor sentiment is low, with a worldwide context but a focus on developed countries (Byun et al., 2021). Research on other dividend catering theories also finds that

companies serve them and distribute dividends when there is a positive dividend premium (Takmaz et al., 2020).

Investor sentiment and the incentives offered to attract them fluctuate from one country to another. According to Baker et al. (2012), investor sentiment can capture both the propensity to speculate about the optimism or pessimism of investors in a country. The connection between investors' sentiment and the catering incentives dividend is analyzed using a country-specific investors' sentiment index. A low sentiment index means that investors in these countries are pessimistic about the company's future, so they are less willing to take risks and demand higher dividend payments. When confidence among investors is low, they often avoid speculative stocks that are difficult to evaluate objectively in favor of safer investments with proven track records of profitability, substantial assets, and reliable dividends (Byun et al., 2021). According to this theory, investors are more likely to seek out dividend stocks during periods of low sentiment. Similarly, risk-averse investors favor stocks that are more established, larger, more profitable, and have a track record of consistent dividend payments. Furthermore, managers will pay higher dividends in times of low investor sentiment because this is what investors want.

Investor sentiment can be measured more accurately by aggregating data from multiple proxies, as demonstrated by (Baker et al., 2012) Investor Sentiment Index. To draw their conclusions, they consider the turnover ratio, the number of initial public offerings (IPOs), the average return on an IPO's first day, dividend premiums, and the proportion of equity issues to total equity and debt. This study uses daily data from each company to create an index of investor sentiment because there is a dearth of data pertaining to initial public offerings (IPOs) in developing markets, where most ASEAN countries are. We characterize each company's stock trading using the relative strength index (RSI), the psychological line index (PLI), the adjusted turnover rate (ATR), and the logarithm of trading volume (LTV) as alternative proxies for investor sentiment. Finally, we utilize principal component analysis to the four variables to generate an index of investor sentiment.

Observations on how investor sentiment can affect dividend policy in all countries will be sorted by the sample countries into two main groups, namely the group of countries that have a low index of investor sentiment and the second group that has a high index of investor sentiment. Research by Byun et al. (2021) found that companies tend to pay dividends to groups of investors with low sentiment. According to the study, companies are more likely to comply with investors' requests for dividend payments during periods of low sentiment if investors prefer safer investments during low sentiment.

In the international context, the potential connection between investor sentiment and dividend policy is the subject of several ongoing studies. Using a country-specific investor sentiment index allows for a deeper dive into how investor sentiment plays a role in corporate dividend policy and provides insight into how dividend catering theory holds up in different regions (Byun et al., 2021). Low investor sentiment in a country can increase investor demand for dividend payments because countries with low investor sentiment tend to be more pessimistic and risk-averse. They will appreciate companies paying dividends more, which can be reflected in high catering incentives. In addition, low investor sentiment can also increase the manager's incentive to pay dividends. Low catering incentives and a negative impact on dividend policy result from high investor sentiment, which indicates that investors in that country are more optimistic about the company's future and are, therefore, not expecting dividend payments to be too high. The first hypothesis of this research is that investor sentiment influences the catering dividend theory and that these effects coincide.

- H1a: Catering incentives have a positive effect on the likelihood to pay dividends when investor sentiment is low.
- H1b: Catering incentives have a negative effect on the likelihood to pay dividends when investor sentiment is high.

2.2. State law, catering incentives, and dividend policy

This analysis also examines how investor sentiment relates to dividend policy in each jurisdiction's unique legal framework. This research will examine how investor sentiment varies across countries that offer varying degrees of legal protection for their investors. This study supports that of Moortgat et al. (2017), who found that the dividend policy is influenced by investor protection. This study is also consistent with research by Athari et al. (2016), which examined the banking industry and discovered that investor protection had a favorable effect on dividend policy in traditional banks. According to Porta et al. (1997), while there is a strong correlation between dividend rates and the legal system in place, investors' ability to request dividends varies greatly from country to country. Investors are typically better protected in countries using the common law system than the civil law. On the other hand, countries that follow a civil law system typically have lower dividend payouts than those that follow common law because of the lack of robust investor protections under civil law. This logic states that adopting the common law system is more likely to grant investors' requests. When investor sentiment is low, investors are more pessimistic about the company's future, so they are more risk-averse, which causes investors to expect more dividend payments. Then companies in common-law countries will fulfill investor requests by paying dividends. Conversely, high investor sentiment indicates investors who are more optimistic about the company's future in common-law countries and will comply with investor requests by not paying dividends.

In addition, the payout ratio was higher in common-law countries than in civil-law countries (Porta et al., 1997). As investor protection influences a company's dividend payment policy, the legal system may have a bearing on how investors feel about dividend-related incentives. It has been found by Byun et al. (2021), that low investor sentiment will lead managers in countries with stronger legal protection for shareholders (common law) to prefer satisfying investors by paying dividends to meet investor demand. However, companies in common-law countries are less likely to pay dividends when investors have a more positive outlook. This study's second hypothesis predicts that the law's influence on the impact of catering incentives on dividend policy based on investor sentiment will coincide.

- H2a: The common law system strengthens the positive relationship between catering incentives and the likelihood to pay dividends when investor sentiment is low.
- H2b: The common law system strengthens the negative relationship between catering incentives and the likelihood to pay dividends when investor sentiment is high.

3. Methodological issues

3.1. Data and sample

Our study encompasses six ASEAN nations: Indonesia, Malaysia, Singapore, Vietnam, the Philippines, and Thailand. The data utilized is sourced from Thomson Reuters and The World Bank. Our sampling methodology aligns with the procedures delineated by Fama and French (2001) and DeAngelo et al. (2004). Specifically, we exclude financial and utility firms, as well as those with negative book values of equity. We've opted for a country-level sample to holistically assess the influence of catering incentives on dividend policy.

To address potential endogeneity issues, this research employs dynamic panel data analyses, leveraging both the Arellano-Bond (or FD-GMM) and the Blundell-Bond (or Sys-GMM) generalized moment methods. The GMM approach is particularly apt for panel data with bounded time variables, especially when there's autocorrelation due to a lag in the dependent variable, rendering the data relationship dynamic. Such dynamics can introduce endogeneity problems when estimated via static panel data analysis, potentially leading to biased and inconsistent estimations. The inherent lag in the dependent variable implies the model's reliance on both current and preceding periods.

Table 1. Dicky Fuller unit root test results

	Likelihood to Pay Dividend	Catering Incentives	Common Law	Increase	Decrease
P-Value	0.0278	0.0474	0.033	0.0039	0.05
	Initiation	Omission	Inflation	Unemployment	Interest Rate
P-Value	0.0073	0.000	0.000	0.022	0.0073

While FD-GMM and SYS-GMM share similarities, they differ in their estimation of AR 1 and AR 2. In FD-GMM, estimates are confined to the first difference level, whereas SYS-GMM extends these estimates to encompass multiple levels. Given the critiques directed at FD-GMM in academic literature, Blundell and Bond (1998) advocated for the SYS-GMM estimation as a more comprehensive model, capable of estimating both the first difference and level. Nevertheless, our study incorporates both FD-GMM and SYS-GMM methodologies to ensure robust estimation outcomes. Prior to regression analysis using GMM, we conducted a unit root test to ascertain the stationarity of our data. This step ensures that our inferences remain accurate and aren't compromised by non-stationary data. These results confirm the stationarity of all considered variables, as they have a p-value less than 5%. Refer to Table 1 for details.

3.2. Measuring Sentiment Index (SENT)

This study employs Principal Component Analysis (PCA) on four indicators: RSI, PLI, ATR, and LTV, to derive an annual investor sentiment index for each country. PCA, a technique designed to emphasize variation and bring out strong patterns in datasets, is applied to the data sets of RSI, PLI, ATR, and LTV. By reducing the data dimensions to a primary component, this research constructs an investor sentiment index. The scores from this primary component serve as the index. Based on this index, the research sample is bifurcated into two categories: those above the median, representing high investor sentiment, and those below, indicating low investor sentiment.

$$Sent_{i,t} = \beta_1 RSI_{i,t} + \beta_2 PLI_{i,t} + \beta_3 ATR_{i,t} + \beta_4 LTV_{i,t}$$

The sample is categorized into two primary groups based on the investor sentiment index: countries with sentiment indices below the median (low investor sentiment) and those above (high investor sentiment). This sentiment index incorporates the Relative Strength Index (RSI), Psychological Line Index (PLI), Adjusted Turnover Rate (ATR), and Logarithm of Trading Volume (LTV), as informed by Seok et al. (2019). Subsequently, PCA is applied to these four metrics to determine the investor sentiment index.

Developed by J. Welles Wilder Jr., the RSI gauges whether a stock is oversold or overbought by comparing its bullish period gains to its bearish period losses over a specific timeframe. Wilder recommended a 14-day period for RSI calculations (Chong & Ng, 2008). Chen et al. (2010) utilized RSI as a proxy for emotional states.

$$RSI_{i,t} = \left[\frac{RS_{i,t}}{1 + RS_{i,t}} \right] \times 100, \text{ where } RS_{i,t} = \frac{\sum_{k=0}^{13} \max(P_{i,t-k} - P_{i,t-k-1}, 0)}{\sum_{k=0}^{13} \max(P_{i,t-k-1} - P_{i,t-k}, 0)} \quad (1)$$

The PLI, which reflects market conditions and momentum, counts up days over a set period, capturing short-term price reversals and investor confidence (Yang & Zhang, 2014).

$$PLI_{i,t} = \left[\frac{\sum_{k=0}^{11} \left\{ \frac{\max(P_{i,t-k} - P_{i,t-k-1}, 0)}{P_{i,t-k} - P_{i,t-k-1}} \right\}}{12} \right] \times 100 \quad (2)$$

Turnover rate, indicative of market liquidity, can serve as a proxy for investor confidence (Baker & Stein, 2004; Kim & Byun, 2010). A higher ATR suggests bullish sentiment.

Table 2. Variables' explanation

Variables	Explanations	Source(s)
Pay Dividend	Percentage of paying dividend firms	Thomson Reuters Database, Author Calculation
Catering incentives	Difference between the average log market to book value of dividend-paying and non-dividend-paying companies.	Thomson Reuters Database, Author Calculation
Common Law	Variable to store the value 1 if the country has a common law system and 0 otherwise	(La Porta et al., 2007)
Inflation	The rates of inflation (consumer prices index)	The World Bank
Unemployment Rate	The rates of unemployment rate (percentages of total labor force)	The World Bank
Interest Rate	The rates of interest rate (percentages of real interest rate)	The World Bank
Increase	Percentage of companies that increase dividend payments	Thomson Reuters Database, Author Calculation
Decrease	Percentage of companies that decrease dividend payments	Thomson Reuters Database, Author Calculation
Initiation	Percentage of companies that initiate dividends	Thomson Reuters Database, Author Calculation
Omission	Percentage of companies that omission dividend	Thomson Reuters Database, Author Calculation
RSI	Divide the average price increase by the average loss. Then the result will be multiplied by 100, to get the percentage value.	Thomson Reuters Database, Author Calculation
PLI	To calculate this, we divide the total number of rising periods in a given period by the ratio of rising periods to total periods. If a percentage is desired, the final figure is obtained by multiplying the calculation by 100.	Thomson Reuters Database, Author Calculation
ATR	Trading volume divided by number outstanding	Thomson Reuters Database, Author Calculation
LTV	Natural logarithm of trading volume	Thomson Reuters Database, Author Calculation

$$ATR_{i,t} = \frac{V_{i,t}}{\text{number of share outstanding}_{i,t}} \times \frac{R_{i,t}}{[R_{i,t}]} \quad (3)$$

where $V_{i,t}$ is the volume of shares traded at time t and $R_{i,t}$ is the return on shares of stock at time t , both expressed in percentage terms $R_{i,t} = \left(\frac{P_{i,t}}{P_{i,t-1}} \right) - 1$

Trading volume, another liquidity indicator, reflects investor opinions about the stock market (Baker & Stein, 2004; Liao et al., 2011).

$$LTV_{i,t} = \ln(V_{i,t}) \quad (4)$$

3.3. Catering incentives

The Dividend Catering Theory employs a dividend premium measurement, which can be viewed from both demand and supply perspectives. On the supply side, the dividend premium acts as a proxy for dividend catering incentives. These incentives arise because rational managers aim to cater to investors' preferences for dividends. Conversely, on the demand side, the focus is on discerning whether investors exhibit a preference for dividends by offering a higher bid price, as reflected in the market-to-book ratio. When investors value dividends, they express their appreciation by elevating the market-to-book ratio of companies that pay dividends. However, if dividends are not favored by investors, the catering incentives become negative. This is because the market assigns a greater value to shares of firms that do not pay dividends compared to those that do. The market's assessment of catering incentives is typically recalibrated annually, as outlined by (Baker & Wurgler, 2004). The calculation for catering incentives is as follows:

$$IC_t = \log(\overline{MTB}_{p,t}) - \log(\overline{MTB}_{np,t}) \quad (5)$$

$$MTB_{i,t} = \frac{\text{market equity}_{i,t} + \text{book debt}_{i,t}}{\text{book equity}_{i,t}} \quad (6)$$

Where IC_t is catering incentives year t at market aggregate level, $\overline{MTB}_{p,t}$ is average market to book ratio of companies paying dividends in year t , $\overline{MTB}_{np,t}$ is average market to book ratio of companies that do not pay dividends in year t , $MTB_{i,t}$ is market to book ratio of company i year t , $\text{book equity}_{i,t}$ is book value of company equity i year t , $\text{market equity}_{i,t}$ is market value of company equity i year t .

3.4. Likelihood to pay dividend

The possibility of profit serves as the dependent or independent variable in this analysis. The proportion of companies in each country that distribute dividends annually will be used in subsequent studies of this variable (Sun & Yu, 2022).

3.5. Law System

A dummy variable will be used to capture the moderating effect of the common law system in this investigation, with dummy 1 representing countries that use the common law system and dummy 0 representing countries that use the civil law system. In our research samples, Singapore and Malaysia adhere to the common law system, while the other four adhere to the civil law system and others (La Porta et al., 2007).

3.6. Control Variable

This study uses inflation, unemployment rate, and interest rate variables to control for information that may be related to proxies for catering incentives but not related to catering incentives (Baker et al., 2012). We only include country characteristics as a set of control variables in our analysis because this paper uses a country-level sample, so firm characteristics do not need to be controlled for in our analysis.

4. Empirical findings

4.1. Descriptive statistics

Table 3 provides a summary of all variables used in this study, complete with descriptive statistics such as means, standard deviations, minimums, and maximums. The research incorporates data from companies across six countries: Indonesia, Malaysia, Singapore, the Philippines, Thailand, and Vietnam, with respective company counts of 819, 770, 650, 284, 867, and 1598 for the period 2012–2021. However, the study employs country-level data, meaning each country contributes one observation per year. This applies to both the independent variable—catering incentives (defined as the difference between the logarithm of the average market-to-book ratio of dividend-paying companies and non-dividend-paying companies)—and the dependent variable (the percentage of companies that pay dividends). Consequently, the total number of observations in

Table 3. Descriptive statistics

Variables	Low Investor Sentiment						High Investor Sentiment					
	Obs	Mean	Std. Dev	Min	Max		Obs	Mean	Std. Dev	Min	Max	
Likelihood to Pay Dividend	30	0.719	0.556	0.626	0.792		30	0.607	0.103	0.458	0.782	
Catering incentives	30	0.031	0.638	-0.790	1.190		30	-0.194	0.201	-0.55	0.103	
Common Law	30	0.333	0.479	0	1		30	0.266	0.449	0	1	
Increase	30	0.366	0.120	0.066	0.567		30					
Decrease	30						30	0.1755	0.189	0.171	0.402	
Initiation	30	0.323	0.268	0.086	0.788		30					
Omission	30						30	0.096	0.758	0.023	0.139	
Inflation	30	1.079	1.394	-2.042	3.984		30	2.350	1.364	-2.97	4.978	
Unemployment	30	4.308	2.696	-0.656	8.878		30	2.708	1.780	-0.57	7.437	
Interest Rate	30	3.037	0.923	1.611	4.847		30	3.615	1.357	0.959	5.838	

Note: please see Table 2 for the description of variables.

the study amounts to 60, given that there are six countries observed over a 10-year period. When segmented based on investor sentiment, each group—low investor sentiment and high investor sentiment—comprises 30 observations.

For the low sentiment group, the average scores for dividend-paying potential, catering incentives, and common law were 0.719, 0.031, and 0.333, respectively. In contrast, the high sentiment group posted averages of 0.607, −0.194, and 0.266. A higher mean value for the dividend-paying probability indicates a predominance of dividend-paying companies. Companies with low investor sentiment are more inclined to pay dividends compared to those with high sentiment, implying a greater proportion of dividend-paying companies among the low-sentiment group. A high average value for catering incentives suggests a premium placed by investors on dividend-paying companies. The low investor sentiment group has a higher average value for catering incentives than the high sentiment group, indicating a stronger expectation of dividend payments among the former group.

4.2. Regression analysis

The initial hypothesis of our study examines the influence of catering incentives on the propensity to pay dividends. Specifically, for the group with low investor sentiment, catering incentives are posited to have a positive impact on the likelihood of dividend payments. Conversely, for the group with high investor sentiment, catering incentives are expected to negatively influence the probability of paying dividends. The preliminary findings of this analysis are presented in Table 4.

To ensure the validity of our model, we first employ the Sargan test to determine if the number of instrumental variables used might be excessive relative to the parameters estimated, a condition known as overidentification. As indicated in Table 4, both the FD-GMM and SYS-GMM methods satisfy the overidentification condition, given that the test's p-value exceeds 0.05. Additionally, to assess the correlation between the residual components in the FD-GMM and SYS-GMM models, we utilized the Arellano-Bond test.

In Table 4, the probability values for $AR(1) < 0.05$ and $AR(2) > 0.05$ indicate the absence of autocorrelation, affirming the consistency of estimations obtained through the FD-GMM and SYS-GMM methods. The OLS estimation result and the fixed effect estimator exhibit divergent tendencies. The unbiased estimation outcomes lie somewhere between ordinary least squares and functional equivalence. Thirdly, we discern from the data that the FD-GMM and SYS-GMM models yield a favorable L1 value within the low investor sentiment group. The trade-offs between FEM and OLS render it advantageous to secure dependable estimates from both methods. The FD-GMM and SYS-GMM models attain a commendable L1 value and yield dividends when investor sentiment is high. The synergistic benefit of combining OLS and FEM is apparent, as both methods prove to be robust. As previously elucidated, we employ both types of GMM (FD-GMM and SYS-GMM) to bolster the robustness of our analytical results.

Table 4 divides investors into two categories, sentiment values below the median (low sentiment investor) and sentiment values above the median (high sentiment investor). When investor sentiment is low, catering incentives are positively related to the likelihood of paying dividends (columns 1–2, Table 4) but significantly negatively concerning the possibility of paying dividends when investor sentiment is high (columns 4–5, Table 4). Low sentiment means a one percentage point increase in catering incentives is associated with a 6.07 percentage point increase in the likelihood of paying dividends and a 51.74 percentage point decrease in the likelihood of paying dividends.

The analysis validates the primary hypotheses of this study, specifically hypotheses a and b. The results underscore the proposition that during periods of low investor sentiment, catering incentives amplify the propensity to pay dividends, while during heightened investor sentiment, the likelihood diminishes. This aligns with Byun et al. (2021), who emphasized the pivotal role of

Table 4. Likelihood to pay dividend and catering incentives

Variables	Dependent variable : likelihood to pay dividend			
	low investor sentiment		high investor sentiment	
	Diff-GMM	Sys-GMM	Diff-GMM	Sys-GMM
L1. pay dividend	0.00063 (0.349)	0.6188*** (0.000)	0.0866 (0.178)	0.6029*** (0.000)
Catering incentives	0.0607*** (0.000)	0.0489 (0.497)	-0.5174*** (0.000)	-0.5536*** (0.000)
Inflation	-0.0923*** (0.000)	-0.0107 (0.366)	0.000066 (0.762)	0.00092*** (0.000)
Unemployment	-0.0613*** (0.000)	0.0027 (0.679)	0.001031** (0.029)	0.0174*** (0.000)
Interest_rate	0.3561*** (0.000)	0.0766* (0.073)	0.000101 (0.981)	0.0182*** (0.000)
Sargan test	3.488 (0.900)	9.169 (0.241)	11.558 (0.172)	16.201 (0.540)
AR(1) test	-1.135** (0.025)	-1.612** (0.010)	1.523** (0.013)	-1.108** (0.026)
AR (2) test	-0.966 (0.333)	0.727 (0.467)	0.922 (0.356)	-0.083 (0.934)
FEM	-5.29e-6 (0.248)	-5.29e-6 (0.248)	0.0783 (0.364)	0.0783 (0.364)
OLS	0.7255 (0.706)	0.7255 (0.706)	0.7401 (0.413)	0.7401 (0.413)
Observation	30	30	30	30
Anderson canon. Corr LM statistic	22.411*** (0.0001)	22.411*** (0.0001)	20.090*** (0.0002)	20.090*** (0.0002)
Cragg-Donald Wald F statistic	24.411	24.411	16.895	16.895
Endogeneity test	9.384*** (0.0022)	9.384*** (0.0022)	0.627** (0.043)	0.627** (0.043)
χ^2 Pagan-Hall statistic	19.524*** (0.0006)	19.524*** (0.0006)	2.841** (0.0047)	2.841** (0.0047)

Note: This Table presents regression results, respectively. Please see Table 2 for the description of variables. P-value in parentheses. Superscripts ***, **, and * denotes statistically significant at the 0.01, 0.05 and 0.10 levels, respectively.

investor sentiment in the dividend catering effect, noting its most pronounced influence during low sentiment phases. Our findings also resonate with Bilel and Mondher (2021), who observed that market dynamics and reactions shape investor dividend preferences. Specifically, in bear markets (characterized by underperformance), there's a heightened demand for dividends compared to bull markets (where performance is robust). This observation is further supported by Andriosopoulos et al. (2021b), suggesting that in times of waning investor confidence, firms are more inclined to bolster their dividend payouts.

Gyimah and Gyapong (2021) identified that firms with pronounced managerial entrenchment tend to disburse conspicuous dividends, particularly when there's external investor demand for such dividends. This is consistent with Pieloch-Babiarz (2022), who posited that when the dividend premium is positive, managers, gauging stock market reactions, opt for dividend payouts. This dividend catering phenomenon, having a positive influence on dividend policy, has been observed

in diverse contexts, including Indonesia, China, India, France, Sri Lanka, and Taiwan Dewasiri et al., 2019; Labhane, 2019; Rochmah et al., 2020; Teng & Liu, 2018; Trabelsi et al., 2019; Yu et al., 2021.

Conversely, for the high investor sentiment group, where catering incentives exert a negative impact on dividend policy, our findings are congruent with several studies. These studies have documented a negative correlation between catering incentives and dividend payments in regions such as China, Taiwan, India, Indonesia, and Korea (Budiarto et al., 2019; Dixit et al., 2020; Jiang et al., 2013; Teng et al., 2021; Wang et al., 2021).

We subsequently explored the theory by examining the potential influence of national legal systems on the efficacy of catering incentives concerning on dividend policy. Drawing from the insights of La Porta et al. (1997), it's posited that the quality of a country's legal system can shape dividend yields. Firms situated in common-law nations, known for offering enhanced legal protections to shareholders, are more predisposed to heed shareholder demands, such as those advocating for dividend disbursements. Building on La Porta's foundational work, our analysis delves into how common law might temper the effects of catering incentives on potential returns on investment.

Furthermore, our study incorporated several control variables, with inflation being a notable one. The findings underscore that inflation exerts a significant influence on dividend policy. Specifically, within the high investor sentiment cohort, employing the GMM system method revealed a positive and significant correlation between inflation and dividend payments. This aligns with the findings of Baker and Jabbouri (2017) and Basse and Reddemann (2011), both of whom highlighted the impact of inflation on dividend policy. While these results underscore the potential sway of inflation on dividend policy, in our study, we've controlled for inflation's influence, designating it as a control variable.

In Table 5, we also separate two groups, namely low sentiment and high. We use the same steps as those in Table 4, namely carrying out the Sargan test and Arellano-Bond test, the results of which show that the FD-GMM and SYS-GMM approaches under conditions of overidentifying restriction in the estimation of the model are valid. Besides that, based on the Arellano-Bond test approach, FD-GMM and SYS-GMM can be said to be consistent, and there is no autocorrelation. Furthermore, based on the analysis results, it is known that the Diff-GMM and SYS-GMM models have a value of L1 in the low sentiment group. Pay dividends are between FEM and OLS, so the second model is valid. While in high sentiment, the FD GMM model has a value of L1. Paid dividends differ between FEM and OLS, but SYS-GMM does not, so the FD GMM approach gives a valid estimation result compared to SYS-GMM.

Our experiments with the moderating effect of common law showed that it greatly bolsters the beneficial effect of incentives focusing on dividend-paying potential in times of low sentiment (columns 2–3, Table 5). The negative catering incentive impact on the likelihood of dividends when sentiment is high is further amplified by common law (columns 4–5, Table 5). The positive relationship between catering incentives and the likelihood to pay dividends under a common law system is strengthened when investor sentiment is low, and the negative relationship is strengthened under a common law system when investor sentiment is high, lending credence to our second hypothesis. Byun et al. (2021) found that low investor sentiment in countries with greater legal protection for shareholders leads managers to pay dividends to satisfy investors with a demand for dividend-paying shares, which is consistent with the study findings. In addition, our findings corroborate those of Kuo et al. (2013), who found that catering incentives are more likely to remain in place among companies based in common-law countries than in civil law countries. However, after controlling the risk, the catering theory still receives scant support, even among companies based in civil law countries. The findings of Ferris et al. (2009) are corroborated by other studies showing that, compared to their civil law counterparts, companies in common-law countries are better at satisfying the dividend demands of their investors. Apart from that, this research

Table 5. Likelihood to pay dividend, catering incentives, and common law

Variables	Dependent variable : likelihood to pay dividend			
	low investor sentiment		high investor sentiment	
	Diff-GMM	Sys-GMM	Diff-GMM	Sys-GMM
L1. pay dividend	−0.0844 (0.346)	0.386*** (0.008)	0.0197 (0.240)	0.3772*** (0.002)
Catering incentives	0.0131*** (0.006)	0.0468*** (0.008)	−0.5246*** (0.000)	−0.6751*** (0.000)
Law System	0.0331*** (0.001)	0.0011*** (0.001)	0.1762*** (0.000)	0.4065*** (0.000)
IC*Law System	0.0559*** (0.000)	0.0577*** (0.000)	−0.5786*** (0.000)	−0.6954*** (0.000)
Inflation	−0.00018 (0.984)	−0.0436*** (0.007)	−0.0014*** (0.000)	0.0016*** (0.002)
Unemployment	0.00589** (0.043)	−0.0164 (0.164)	−0.0012 (0.309)	0.0374*** (0.003)
Interest_rate	0.0463 (0.031)	0.1653 (0.002)	−0.0051 (0.000)	0.0266 (0.000)
Sargan test	2.727 (0.950)	2.861 (0.992)	2.727 (0.950)	7.805 (0.350)
AR(1) test	−1.272** (0.020)	−1.117** (0.026)	−1.272** (0.020)	−1.637** (0.010)
AR (2) test	−1.053 (0.292)	−1.079 (0.281)	−1.053 (0.292)	−0.354 (0.724)
FEM	−0.428** (0.017)	−0.428** (0.017)	−0.0162 (0.541)	−0.0162 (0.541)
OLS	0.756*** (0.000)	0.756*** (0.000)	0.0232 (0.412)	0.0232 (0.412)
Observation	30	30	30	30
Anderson canon. Corr LM statistic	27.261*** (0.000)	27.261*** (0.000)	21.199*** (0.001)	21.199*** (0.001)
Cragg-Donald Wald F statistic	69.666	69.666	16.057	16.057
Endogeneity test	9.345*** (0.0022)	9.345*** (0.0022)	0.147*** (0.015)	0.147*** (0.015)
χ^2 Pagan-Hall statistic	11.749** (0.0193)	11.749** (0.0193)	12.054** (0.0210)	12.054** (0.0210)

Note: This Table presents regression results, respectively. Please see Table 2 for the description of variables. P-value in parentheses. Superscripts ***, **, and * denotes statistically significant at the 0.01, 0.05 and 0.10 levels, respectively.

is also in line with research conducted by Moortgat et al. (2017) which states that investor protection has an impact on dividend policy. This research is also in line with research conducted by Athari et al. (2016), which was carried out in the banking context and found that in the context of conventional banks, investor protection had a positive impact on dividend policy.

Based on the study results, it can be stated that the first hypothesis in this study, both hypotheses a and b, are accepted. In contrast, catering incentives positively (negatively) affect the likelihood of paying dividends when investor sentiment is low (high). These findings support the catering dividend theory, especially with low investor sentiment, where companies pay dividends

Table 6. Increase, initiation, and catering incentives

Variables	Low investor sentiment			
	Dependent variable : Increase		Dependent variable : initiation	
	Diff-GMM	Sys-GMM	Diff-GMM	Sys-GMM
L1. dependent	0.0151 (0.445)	0.1214 (0.806)	2.750 (0.396)	0.0995 (0.292)
Catering incentives	0.5660*** (0.000)	0.5451*** (0.000)	0.1846*** (0.000)	0.0112** (0.042)
Inflation	-0.1086*** (0.000)	-0.0607 (0.126)	-0.0120 (0.206)	0.0264 (0.559)
Unemployment	-0.1677*** (0.000)	-0.1242*** (0.000)	0.0369*** (0.000)	0.0756* (0.055)
Interest_rate	0.3901*** (0.000)	0.2098 (0.118)	0.0561* (0.089)	-0.0204** (0.038)
Sargan test	11.447 (0.178)	17.024* (0.057)	11.578 (0.171)	18.331 (0.106)
AR(1) test	0.482** (0.030)	0.397** (0.041)	-1.097** (0.027)	-1.256* (0.092)
AR (2) test	-1.014 (0.310)	-0.059 (0.953)	-1.184 (0.237)	1.297 (0.195)
FEM	-0.0036 (0.847)	-0.0036 (0.847)	-6.920 (0.147)	-6.920 (0.147)
OLS	0.234 (0.691)	0.234 (0.691)	3.074 (0.406)	3.074 (0.406)
Observation	30	30	30	30
Anderson canon. Corr LM statistic	22.411*** (0.001)	22.411*** (0.001)	22.411*** (0.001)	22.411*** (0.001)
Cragg-Donald Wald F statistic	24.609	24.609	24.609	24.609
Endogeneity test	0.390** (0.032)	0.390** (0.032)	0.9685*** (0.002)	0.9685*** (0.002)
χ^2 Pagan-Hall statistic	23.780*** (0.001)	23.780*** (0.001)	11.749*** (0.019)	11.749*** (0.019)

Note: This Table presents regression results, respectively. Please see Table 2 for the description of variables. P-value in parentheses. Superscripts ***, **, and * denotes statistically significant at the 0.01, 0.05 and 0.10 levels, respectively.

according to investor demand, which is reflected in catering incentives. When investor sentiment is low, catering incentives will be high because investors are pessimistic about the company's future and expect dividend payments more than capital gains, so the company will decide to pay dividends. These findings align with research conducted by (Andriosopoulos et al., 2021a; Bilel & Mondher, 2021; Byun et al., 2021; ElBannan, 2020; Gyimah & Gyapong, 2021; Labhane, 2019; Rochmah et al., 2020; Takmaz et al., 2020; Trabelsi et al., 2019). However, this research contradicts research conducted by Kumar et al. (2022), which states that dividend payments occur when investor sentiment is high. It occurs because the investor sentiment index that we use is different. In addition, this study also found that the study results support our second hypothesis, both hypotheses 2a and 2b, namely that the common law system strengthens the positive (negative) relationship between catering incentives and the likelihood of paying dividends when investor sentiment is low (high). The study results follow research conducted by (Byun et al., 2021; Kuo et al., 2013).

Table 7. Decrease, omission, and catering incentives

Variables	High investor sentiment			
	Dependent variable : Decrease		Dependent variable : Omission	
	Diff-GMM	Sys-GMM	Diff-GMM	Sys-GMM
L1. Dependent	0.0242 (0.676)	0.9208** (0.015)	0.3884*** (0.001)	0.8206*** (0.000)
Catering incentives	0.9571*** (0.000)	0.6282** (0.043)	0.0758*** (0.004)	0.0291*** (0.009)
Inflation	−0.0021*** (0.000)	−0.00095 (0.261)	−0.00099 (0.486)	0.00010** (0.012)
Unemployment	−0.0360*** (0.000)	−0.00076 (0.973)	−0.0013** (0.032)	0.0016** (0.031)
Interest_rate	−0.0191 (0.109)	0.0028** (0.020)	−0.0030** (0.039)	0.0030*** (0.008)
Sargan test	4.879 (0.431)	10.459 (0.234)	6.518 (0.259)	11.315 (0.184)
AR(1) test	−0.939** (0.034)	−0.304** (0.012)	−1.330** (0.018)	−1.358** (0.017)
AR (2) test	1.046 (0.296)	−0.444 (0.657)	0.066 (0.947)	−0.373 (0.709)
FEM	−0.209 (0.287)	−0.209 (0.287)	0.3489*** (0.008)	0.3489*** (0.008)
OLS	0.736*** (0.000)	0.736*** (0.000)	0.8367*** (0.000)	0.8367*** (0.000)
Observation	30	30	30	30
Anderson canon. Corr LM statistic	20.090*** (0.002)	20.090*** (0.002)	20.090*** (0.002)	20.090*** (0.002)
Cragg-Donald Wald F statistic	16.895	16.895	16.895	16.895
Endogeneity test	2.266** (0.013)	2.266** (0.013)	0.810** (0.036)	0.810** (0.036)
χ^2 Pagan-Hall statistic	13.056** (0.011)	13.056** (0.011)	4.377** (0.035)	4.377** (0.035)

Note: This Table presents regression results, respectively. Please see Table 2 for the description of variables. P-value in parentheses. Superscripts ***, **, and * denotes statistically significant at the 0.01, 0.05 and 0.10 levels, respectively.

4.3. Robustness check

Robustness check in Table 6, we consider an alternative measure of dividend by observing the increase in dividend payments (increase) and dividend initiation (initiation) as our dependent variables for the low sentiment group. We want to test whether the catering incentives can help the company decide to increase dividends and initiate dividend. According to Byun et al. (2021), catering incentives have a positive correlation with an increase in dividends. The higher the catering incentives, the more companies will increase their dividend payments. In addition, Byun et al. (2021) also found that with the existence of catering incentives, companies that initially did not pay dividends then decided to pay dividends in the following year (dividend initiation). Table 6 shows that the coefficients of catering incentives for both the dependent variable increase and initiation are both significantly positive. This shows that the higher the catering incentives, the more company will increase dividend payments and initiate dividends. The results are consistent, the company will serve the demand for dividends with catering incentives and investors with low sentiment who tend to ask for dividend payments.

The next robustness check is described in Table 7, and we consider alternative measures of other dividends, namely by observing a decrease in dividend payments (decrease) and dividend omissions (omission) as our dependent variables for the high sentiment group. We want to test whether the catering incentives can influence the company's decision to reduce dividends and dividend omission when sentiment is high, where high sentiment indicates that investors are optimistic about the company's future. Hence, they tend not to want dividends. According to Byun et al. (2021), catering incentives positively correlate with decreased dividends and committed dividends in the high-sentiment group. Table 7 also shows that the coefficients of catering incentives for the dependent variables, decrease and omission, are both significantly positive. This shows that the company chooses to lower dividends when sentiment is high.

5. Conclusion

Between 2012 and 2021, the authors of this study analyze dividend catering theory in the context of six ASEAN countries: Indonesia, Malaysia, Singapore, Vietnam, the Philippines, and Thailand. We compiled indexes of investor sentiment for six countries and provided fresh evidence of regional variations, especially among ASEAN countries, in dividend policy. The empirical test we use in this study does not depend on fundamental analysis such as Baker et al. (2012), which is commonly used in the literature. We use technical analysis by monitoring the condition of the company's capital market to form an investor sentiment index. Instead, we use PCA analysis of RSI, PLI, ATR, and LTV to construct investor sentiment indexes in our research. Furthermore, the general moments of the Arellano-Bond or FD-GMM methods and the general moments of the Blundell-Bond or Sys-GMM methods are compared in this study using dynamic data panels. Our findings demonstrate the importance of investor sentiment in the effects of catering incentives, with the effect being most pronounced with low investor sentiment. In addition, we present data on how the law can influence the dividend policy decisions made by businesses. When investors are better protected under the common-law legal system, the catering effect tends to be stronger.

Using our measure of index investor sentiment, we provide direct evidence to support the view that managers meeting investor demands for dividends vary depending on a country's index investor sentiment over a given period. Specifically, we show that managers pay or increase (decrease) dividends when investor sentiment is weaker (stronger). Examining the legal system implemented by a country related to dividend policy, we show that there is a strong influence on dividend policy in countries that adhere to common law. Countries that adhere to the common law system will tend to comply with investors' requests, whether dividends are requested to be paid or not, so it is found that the common law system strengthens the positive (negative) effect of catering incentives on the likelihood to pay dividends when investor sentiment is low (high investor sentiment).

In addition to observing the company's decision whether to pay dividends, this research also observes the company's decision to increase, decrease, initiate, or omit dividends as a test of strength in our research. We find that when a country has low investor sentiment (high investor sentiment), the company's dividend policy will tend to initiate or increase (omit or decrease) dividend payments. It reinforces the view that when investor sentiment is low, which means investors tend to be pessimistic about the company's future, they will choose to pay, initiate, or even increase its dividends to meet investor demand (supporting the catering dividend theory). However, when investor sentiment is high, which means investors tend to be optimistic about the company's future and will prefer capital gains, then the company will tend not to pay, omit, or decrease dividends.

Our research offers several significant contributions to the field. To comprehend the influence of investor sentiment on the relationship between catering incentives and dividend policy, a thorough examination of the financial literature is imperative. This study aims to augment the existing literature, reinforcing the dividend catering theory. When investor sentiment is low, companies should consider paying, initiating, or even increasing dividends to get a positive response from

investors, which in turn could raise the company's value. This suggests that when catering incentives are pronounced, firms are inclined to engage in competitive dividend disbursements. Such strategic moves are geared towards meeting investor expectations and securing favorable market reactions, both of which can bolster a firm's valuation.

From a methodological standpoint, our study stands apart. While most research in the realm of dividend policy and investor sentiment predominantly relies on fundamentally derived indices, our study introduces a novel approach. We employ an investor sentiment index grounded in market prices, utilizing metrics such as RSI, PLI, ATR, and LTV. This innovative approach is expected to pave the way for future dividend policy determinations based on technical analysis. Lastly, on a practical front, the insights gleaned from this study hold tangible implications for corporate management. The findings can guide decision-makers in tailoring dividend policies that align with investor dividend preferences, ensuring sustained positive market reactions. Such strategic decisions not only enhance firm value but also contribute to the overall well-being of shareholders.

This study, while comprehensive, has its limitations. It primarily focuses on six ASEAN countries and considers the aggregate effect at the national level. Given these constraints, several avenues for future research emerge. Firstly, to provide a broader perspective, subsequent studies could adopt a global approach. Secondly, a deeper exploration could be undertaken to discern the variations in investor sentiment between developed and developing countries. Thirdly, future research could delve deeper by not just examining the national aggregates but also scrutinizing data at the individual company level. Fourthly, it would be compelling to construct an investor sentiment index by integrating both fundamental and technical analyses, or by juxtaposing insights from both analytical approaches, to offer more definitive insights into dividend policy. Lastly, it would be insightful to investigate how catering incentives might influence dividend policy during economic recessions.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Citation information

Cite this article as: Catering incentives, sentiment investor, and dividend policy in six ASEAN countries, Shindy Dwita Nuansari, Eduardus Tandililin, Bowo Setiyono & Eddy Junarsin, *Cogent Business & Management* (2023), 10: 2278243.

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