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Dividend-Timing Model: Risk and Return Strategy

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ABSTRACT

This study examines the effectiveness of the dividend-timing investment strategy by analyzing returns and risks across various buy–sell windows and comparing them against the IDX Composite. Using an event study method, the strategy involves purchasing shares on the cum-dividend date and selling them on the ex-dividend date across seven defined horizons, ranging from the ex-dividend opening price to five days post-dividend. The results indicate that the dividend-timing model consistently generates positive returns across all horizons, outperforming the IDX Composite, which recorded negative returns during dividend periods. Furthermore, the model exhibits lower risk and offers stability amidst market volatility. The novelty of this research lies in its emphasis on risk-adjusted performance, providing empirical evidence that dividend-timing in the Indonesian capital market is not only more profitable but also more efficient in risk management compared to the overall market index.

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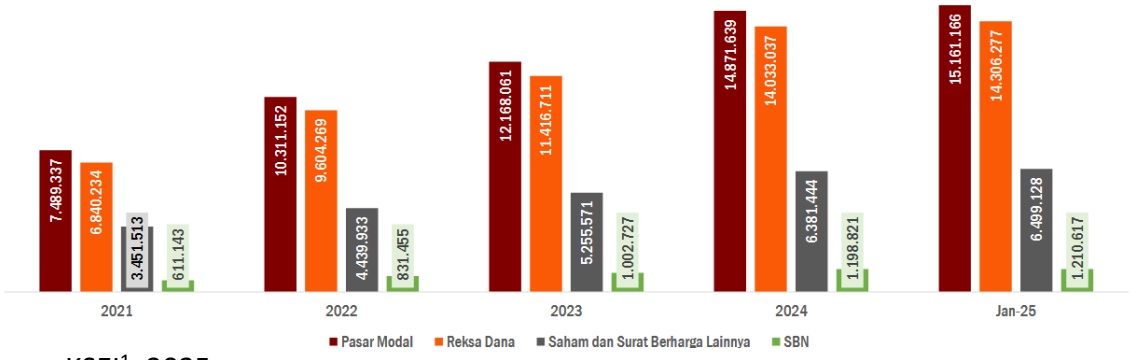
1. INTRODUCTION

Investment has become increasingly important from society's perspective in recent years. For many people, it has become an attractive option to generate additional income. There are various sources and platforms available for those who intend to invest. Among these, the capital market stands out as one of the main choices. This is evident from the growing number of retail investors in the Indonesian Capital Market.



Source: KSEI[1], 2025

Figure 1. Investor Growth

Stocks have become the primary choice because they provide potential gains from price appreciation as well as dividend payments, which can serve as a sustainable income stream. Stocks also offer opportunities for both investment and trading strategies (Ismail et al., 2024). Trading, however, carries higher volatility due to its short-term nature. Despite this, the right timing can make trading highly profitable. Such timing depends not only on market issues but also on corporate actions carried out by companies.

There are many types of corporate actions that companies may undertake, such as cash dividends, stock dividends, stock splits, reverse splits, mergers, and acquisitions. Some corporate actions are relatively rare (Desliniati et al., 2022b; Desliniati & Prasasti, 2022), in contrast to dividend distributions, which are carried out by the majority of companies (Desliniati, 2018; Desliniati & Hilaliyah, 2021).

Table 1. Number of Dividend-Paying Companies

Dividend	2018	2019	2020	2021	2022	2023	2024
Cash dividend	252	264	235	244	286	327	354
Interim dividend	41	33	31	58	73	82	91
Total	**293**	**297**	**266**	**302**	**359**	**409**	**445**

Source: Created by author, 2025

Dividends are the distribution of a company's profits to its shareholders (Tran, 2024b). According to the dividend mechanism, investors are entitled to receive dividends if they hold the shares until the cum-dividend date, which is usually followed by an increase in stock price. As a consequence, there will be a price adjustment on the ex-dividend date (Du et al., 2020;

[1] https://www.ksei.co.id/files/Statistik_Publik_Januari_2025_final.pdf

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Zhang et al., 2024) and the size of this adjustment is related to the dividend paid (Paudel et al., 2022).

These short-term price changes show that dividends only have a temporary effect on stock price movements (Kumari et al., 2024). If investors mistime their trades, they may end up earning very little, or even suffer losses compared to the dividend they received—a situation known as the dividend trap (Du et al., 2020; Paudel et al., 2020; Qadar et al., 2023). Sometimes, stock prices take a long time to rebound after the drop, leaving some investors stuck in this condition. This makes it very important to improve literacy about price movements around dividend events, especially for retail investors. Nevertheless, dividend-based trading can provide more stable returns compared to ordinary stock trading that relies purely on price fluctuations. This approach can also be applied by individuals who are new to the stock market, as it is relatively easier to implement.

Research on dividend-based stock investment has been widely conducted, but studies that specifically apply dividend-based stock trading are still limited. Mulya et al. (2020) examined a dividend-related strategy by constructing a portfolio based on an index of companies with the highest dividend payouts, using equal-weighted investments across different time models. Research focusing on cum-ex dates has also been conducted, with Wagner & Wei (2023) showing that this strategy, applied over a 30-day portfolio period, is consistent with efforts to maximize returns. However, most previous studies in Indonesia remain centered on event study analyses of dividend announcements, the impact of dividend policy determinants, and research objects that are still limited to specific sectors (Asnawi et al., 2022; Ifada, 2024; Mujilan, 2022; Toni et al., 2021).

This study offers several novelties. First, it focuses on the dividend-timing model as a strategy of buying shares on the cum-dividend date and selling them on the ex-dividend date, with variations in selling time from the ex-dividend date up to five days after. This shorter horizon is aligned with prior findings that trading activities are concentrated around ex-dividend dates and is particularly relevant for retail investors. Second, the study compares the risks across different selling horizons to identify the point of minimal risk within the dividend-timing model. Third, it contrasts the model's performance against the IDX Composite in terms of both return and risk. Finally, the research includes all firms distributing cash dividends between 2018 and May 2025, ensuring a comprehensive market-wide analysis.

This study carries high urgency as it aims to enhance financial literacy among the public and provide a more practical strategy for managing financial assets, starting with dividend-based trading timing. With the growing number of retail investors entering the capital market (Audrey, 2021), there is a need for deeper understanding of how dividend-based trading can serve not only as a profitable strategy but also as a more stable approach in dealing with market volatility.

Signaling theory explains the condition of mismatch, often referred to as information asymmetry, between what the company knows and what investors know (Connelly et al., 2011; Spence, 1978). This condition is reinforced by the limited access investors have to a company's internal information (Desliniati & Hilaliyah, 2021). Signals delivered by companies

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through various corporate actions therefore play a crucial role in shaping market perceptions. The application of signaling theory in the Indonesian capital market is reflected in how investors react to corporate actions, financial policies, and non-financial disclosures. The theory also provides a strong foundation for the empirical relevance of the dividend-timing model. Dividends are viewed by investors as signals, meaning that price movements around cum-dividend and ex-dividend dates not only reflect the mechanism of profit distribution but also represent investor responses to the information embedded in dividend announcements.

Dividend policy is one of the financial decisions made by a company (Aisyah et al., 2022; Desliniati, 2018; Hulaila & Prajawati, 2024). Miller & Modigliani (1961) argue in their theory that under perfect market conditions, dividend policy has no effect on firm value. However, factors such as taxes, transaction costs, and investor preferences give dividends an important role. The price drop on the ex-dividend date is usually close to the amount of cash dividend received (Boyd & Jagannathan, 1994; Elton & Gruber, 2011; Frank & Jagannathan, 1998; Tran, 2017). Nevertheless, the presence of market makers often causes the price decline on the ex-dividend day to be smaller than the dividend amount distributed (Frank & Jagannathan, 1998).

Dividend-based stock indexes have been launched in various markets (Viana et al., 2024), including the Jakarta *Stock Exchange High Dividend Index* (Mulya et al., 2020). Stocks with stable dividend policies tend to carry lower risks and deliver more consistent returns (Desliniati & Hilaliyah, 2021). From this, it can be inferred that investors may buy shares before the cum-dividend date and sell them after the ex-dividend date (Ainsworth & Lee, 2023). Edin & Korver (2017) applied two dividend strategies: the cum-dividend strategy and the ex-dividend strategy. The cum-dividend strategy begins one day earlier and ends one day earlier compared to the ex-dividend strategy.

Risk is not only viewed as the potential for loss but also as a measure of the return volatility associated with a strategy. On the ex-dividend date, stock prices typically decrease by the amount of the dividend paid. However, this decline can sometimes be greater than the dividend value itself (Elton & Gruber, 2011). When the drop is larger than the dividend received, traders will face losses. If the sharply declining stock price continues to fall and remains low, traders who hold onto their shares are likely to experience increasing financial pressure due to mounting losses (Chekhlov et al., 2005).

The IDX Composite is calculated by the IDX using a weighted average method. The larger a company's market capitalization, the greater its impact on changes in the IDX Composite (Febriani et al., 2022). IDX Composite return represents the rate of return from Indonesia's stock market index (Desliniati et al., 2022a; Febriani et al., 2022; Handayani & Kesuma, 2021; Rahel et al., 2022). The IDX Composite is a stock price index that is compiled and calculated to reflect trends, where the index value is processed in such a way that it can be used to compare events, such as stock price changes over time. The return of the IDX Composite itself

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reflects the overall return of all stocks listed on the Indonesia Stock Exchange (Desliniati & Hilaliyah, 2021).

Dividend policy has always been a major concern for investors, as it is considered both a source of income and a signal of a company's prospects. Based on signaling theory, dividend payments are viewed as positive signals that indicate earnings sustainability (Connelly et al., 2011; Spence, 1978). Investors who purchase shares before the cum-dividend date are entitled to receive dividends, and when selling shares after the ex-dividend date, they may potentially gain both cash dividends and capital gains. Empirical evidence by Frank & Jagannathan (1998) and Tran (2017) hows that stock prices on the ex-dividend date do not decline by the exact amount of the dividend, but instead by a smaller amount. This creates profit opportunities for investors who trade around these dates. Furthermore, Edin & Korver (2017) found that the ex-dividend strategy can be more profitable than the cum-dividend strategy in several European markets. H1: dividend-timing model generates positive returns at various selling points, with maximum gains occurring at a specific time after the ex-dividend date.

The main risk of this strategy is known as the dividend trap, a condition where the stock price drops more than the dividend received, causing investors to incur losses (Elton & Gruber, 2011). Qadar et al. (2023) found evidence in Indonesia of positive abnormal returns before the cum-dividend date, but negative abnormal returns after the ex-dividend date, indicating increased price volatility during this period. However, this volatility does not last permanently—after a few days, stock prices tend to stabilize. This suggests that there are specific points after the ex-dividend date when risk becomes lower compared to other periods. Therefore, the dividend-timing model is not only about the opportunity to earn profits but is also closely tied to risk management considerations in every investment decision. H2: dividend-timing model carries varying levels of risk across different selling times, with the minimum risk occurring at a certain point after the ex-dividend date

The IDX Composite serves as a primary benchmark that investors use to evaluate overall market performance and to gauge the average return generated by the Indonesian stock market. In contrast, the dividend-timing strategy exploits short-term price patterns that typically occur around dividend announcements, particularly the price adjustment on the ex-dividend date. These price anomalies are often not fully incorporated into broader market movements, allowing the strategy to capture return opportunities that the overall index does not reflect. Furthermore, companies that pay dividends tend to have stronger financial fundamentals, stable cash flows, and more disciplined corporate policies. Such characteristics generally make dividend-paying stocks more resilient and more likely to produce consistent positive returns, as noted by (Mulya et al., 2020). Empirical studies in global markets by Edin & Korver (2017) and Paudel et al. (2020) show that dividend-based investment strategies can deliver significant abnormal returns, particularly within short-term trading windows surrounding dividend events. Together, these insights suggest that the dividend-timing model

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has structural advantages that enable it to outperform the broader market. H3: dividend-timing model produces higher returns compared to the IDX Composite.

The broad composition of the IDX Composite implies that its overall movement is shaped by the performance of a diverse set of firms, including those with high volatility and significant price swings. As a result, the index naturally reflects a higher degree of market uncertainty. In contrast, firms that regularly distribute dividends are typically characterized by stronger financial fundamentals, stable and predictable cash flows, and relatively sound corporate governance practices. These attributes position dividend-paying companies as more resilient to market fluctuations, resulting in a lower overall risk profile when compared to the IDX Composite, which captures the full spectrum of market volatility. This stability helps mitigate excessive uncertainty—an observation consistent with Connelly et al. (2011) , who highlight the role of dividend policies in signaling corporate strength and reducing information asymmetry. Furthermore, empirical evidence supports the notion that dividend-focused strategies can reduce portfolio risk due to the defensive characteristics often exhibited by dividend stocks. Elton & Gruber (2011) similarly find that portfolios built around dividend-paying firms tend to display lower volatility, reinforcing the argument that dividend-based approaches offer a more risk-efficient alternative to market-wide investment strategies. H4: dividend-timing model generates lower risk compared to the IDX Composite.

2. METHODOLOGY

The approach used to address the research problem applies a quantitative method supported by statistical analysis (Basiroen et al., 2025) and an event study (Nyandeni et al., 2024) based on historical data. The pattern of stock price movements before and after the ex-dividend date will be analyzed. The event study approach is employed to evaluate whether these patterns provide opportunities for capital gains around the dividend dates. Statistical analysis is then applied to identify the best horizon for selling shares after the cum-dividend date in order to achieve optimal returns from the dividend-timing model with minimal risk. The analytical technique used in this research is a difference test.

Table 2. Research Horizons

Horizon	Strategy	
	Buy	**Sell**
1	*Cum (close)*	*Ex (open)*
2	*Cum (close)*	*Ex (close)*
3	*Cum (close)*	*Ex+1 (close)*
4	*Cum (close)*	*Ex+2 (close)*
5	*Cum (close)*	*Ex+3 (close)*
6	*Cum (close)*	*Ex+4 (close)*
7	*Cum (close)*	*Ex+5 (close)*
1a	*Cum (open)*	*Ex (open)*
2a	*Cum (open)*	*Ex (close)*

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Horizon	Strategy	
	Buy	Sell
3a	*Cum (open)*	*Ex+1 (close)*
4a	*Cum (open)*	*Ex+2 (close)*
5a	*Cum (open)*	*Ex+3 (close)*
6a	*Cum (open)*	*Ex+4 (close)*
7a	*Cum (open)*	*Ex+5 (close)*

Source: Created by author, 2025

The population in this study includes all companies from various sectors in Indonesia that were listed on the Indonesia Stock Exchange (IDX) from 2018 until May 2025. Based on the criteria set using the purposive sampling method, a total of 1,982 companies were selected as the research sample.

Table 3. Sample Determination

Criteria		Total
Companies distributing cash dividends		2134
Excluded from the sample:		
No longer listed on the IDX	10	
ETF	115	
Incomplete stock price data	27	
Total exclude		152
Final research sample		1982

Source: Created by author, 2025

The strategy applied in this study combines the cum-dividend and ex-dividend periods. The cum-dividend date is the last date on which shareholders are entitled to receive dividends, while the ex-dividend date reflects the point when new buyers of the stock are no longer eligible for dividends. A total of seven horizons are defined based on different buy-and-sell time combinations. The calculation of returns in the dividend-timing model uses the geometric method (Merton, 1974) which incorporates dividends as part of the total gain, not just capital gains or losses.

$$Return_{i,t} = \ln\left(\frac{P_{ex,h_i} + Dividend_{i,t}}{P_{cum_{i,t}}}\right) \quad (1)$$

Risk is operationalized as a dummy variable derived from the price drop ratio (PDR). The magnitude of the price decline during the ex-dividend period is obtained from the difference between the purchase price from five days before the cum-date (H-5) up to the cum-date, and the selling price from the ex-dividend date up to five days after (H+5). The comparison between this price difference and the dividend received is referred to as the price drop ratio (Tran, 2024a). The greater the decline, the higher the value of this ratio. If the ratio frequently falls below 1, then dividend-based trading would provide investors with two benefits: a

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combination of short-term capital gains and passive income from dividends. The value of this ratio can reflect risk. This ratio represents the stock price decline equivalent to the dividend amount without taking into account risks, transaction costs, and taxes (Qadar et al., 2023). The following is the measurement of the price drop ratio (Qadar et al., 2023; Tran, 2017).

$$Price\ drop\ ratio_{i,h} = \frac{P_{cum_{i,h}} - P_{ex_{i,h}}}{D_i}$$

After obtaining the PDR value, the next step is to determine the dummy variable based on that value. If the PDR is ≥ 1, it is assigned a code of 1; conversely, if the PDR is < 1, it is assigned a code of 0. A robustness check will be conducted using the Sharpe Ratio. The Sharpe Ratio is defined as the consistency of the dividend-timing model in generating returns. It is one of the measurements of risk and reflects the performance of the investment strategy (Sharpe, 1966, 1998). The higher the ratio, the better the performance of the strategy, indicating lower risk. This study does not use the risk-free rate due to the short event-window period used.

$$Sharpe\ ratio_i = \frac{R_i}{risk_h} \quad (2)$$

First, the standard deviation of returns for each company will be calculated, resulting in seven standard deviations corresponding to the defined horizons, which will then be used to obtain an aggregate standard deviation. Second, each aggregate horizon standard deviation will be divided by the return of each company within the same horizon. Third, the Sharpe ratio for each company will be determined.

The calculation of returns for the IDX Composite uses the geometric method (Merton, 1974). The IDX Composite return is computed according to the dates used to calculate the returns of each dividend-paying company.

$$Return\ IHSG_t = \ln\left(\frac{P_t}{P_{t-1}}\right) \quad (3)$$

This risk is defined as a measure of aggregate volatility or the average uncertainty faced by investors. IHSG risk is operationalized as a dummy variable derived from the price drop (PD). The magnitude of the price decline during the ex-dividend period is obtained from the difference between the purchase price from the cum-date up to five days before the cum-date (H-5) and the selling price from the ex-dividend date up to five days after (H+5). If the IHSG experiences a decline, it is assigned a code of 1; conversely, if the IHSG increases, it is assigned a code of 0. A robustness check will be conducted using the Sharpe Ratio. The Sharpe Ratio is a measurement of the performance of the investment strategy (Sharpe, 1966, 1998). This study does not use a risk-free rate due to the short event window employed.

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$$Sharpe\ ratio_{IHSG} = \frac{R_t}{risk} \quad (4)$$

The calculated data are then analyzed using statistical techniques with a difference test, comparing returns and risks for each horizon as well as comparing horizon returns and risks with the IDX Composite. Two types of difference tests are employed: the one-sample test and the paired-sample test. The criteria for the difference test are as follows:

Ho_1: $\alpha_1 \geq 0.10$, not significant, meaning no difference exists
Ha_1: $\alpha_1 < 0.10$, significant, meaning a difference exists

3. RESULTS AND DISCUSSION

Table 4. Descriptive Statistics of Dividend-Timing Model Horizons

Horizon	*Return* > 0	Average *Dividend-Timing*			IHSG		
		Return	Risk	SR	*Return*	Risk	SR
1	1768	0,033	0,108	0,406	-0,016	0,893	-0,503
2	1403	0,026	0,292	0,307	-0,024	0,833	-0,549
3	1271	0,023	0,358	0,254	-0,027	0,804	-0,472
4	1201	0,020	0,394	0,221	-0,030	0,793	-0,448
5	1187	0,021	0,401	0,218	-0,029	0,779	-0,397
6	1145	0,020	0,422	0,196	-0,031	0,754	-0,386
7	1136	0,019	0,426	0,186	-0,031	0,754	-0,376
1a	1479	0,032	0,253	0,364	-0,017	0,793	-0,382
2a	1293	0,025	0,347	0,273	-0,025	0,801	-0,461
3a	1178	0,021	0,405	0,226	-0,028	0,783	-0,430
4a	1130	0,019	0,429	0,199	-0,031	0,773	-0,428
5a	1142	0,020	0,423	0,195	-0,031	0,770	-0,378
6a	1141	0,019	0,424	0,179	-0,032	0,755	-0,377
7a	1107	0,018	0,441	0,168	-0,033	0,745	-0,368

Source: Created by author, 2025

Table descriptive statistics shows if purchases are made at the closing price at each selling point, the percentage loss is lower and the number of events generating positive returns is higher. This indicates that nearly 90% of the dividend-timing model-based strategies are able to generate profits for investors. The dividend-timing model also yields the highest returns at horizon 1, where investors gain an average of 3.3% per dividend event. From a risk perspective, the dividend-timing model at horizon 1 also exhibits the lowest risk, with only 0.108 or 10.8% of events having a PDR greater than one. This is supported by the Sharpe Ratio, which measures the performance of each event. The performance at this horizon is considered consistent in generating profits, with horizon 1 showing the highest performance compared to other horizons. In contrast, the IHSG shows losses at every horizon, resulting in negative performance, indicating that the IHSG is not consistent in generating profits during dividend events. The higher the performance or Sharpe Ratio, the lower the risk.

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The difference test used in this study is the t-test. The testing criterion applied is that the probability value is less than 10%; however, for more detail, the significance levels are divided into three: 1%, 5%, and 10%.

Table 5. Results of Return and Risk Tests for Dividend-Timing Model Horizons

Horizon	Return	Risk	Sharpe Ratio
1	0,033***	0,108***	0,406***
2	0,026***	0,292***	0,307***
3	0,023***	0,358***	0,254***
4	0,020***	0,394***	0,221***
5	0,021***	0,401***	0,218***
6	0,020***	0,422***	0,196***
7	0,019***	0,426***	0,186***
1a	0,032***	0,253***	0,364***
2a	0,025***	0,347***	0,273***
3a	0,021***	0,405***	0,226***
4a	0,019***	0,429***	0,199***
5a	0,020***	0,423***	0,195***
6a	0,019***	0,424***	0,179***
7a	0,018***	0,441***	0,168***

Source: Created by author, 2025

The table above presents a one-sample test, comparing the event data with the theory proposed by Miller & Modigliani (1961). Miller & Modigliani (1961) stated that dividend distribution has no impact, implying no risk for investors. After conducting the test, the results show that all horizons still involve risk, which indicates that dividend distribution introduces volatility in stock price movements. This volatility tends to manifest as a price decline; however, the dividends distributed are still sufficient to offset this decline. The table also shows that horizon 1 has the lowest risk and the highest Sharpe Ratio, followed by horizon 1a. The figure below further illustrates the comparison between returns and risk for each horizon.

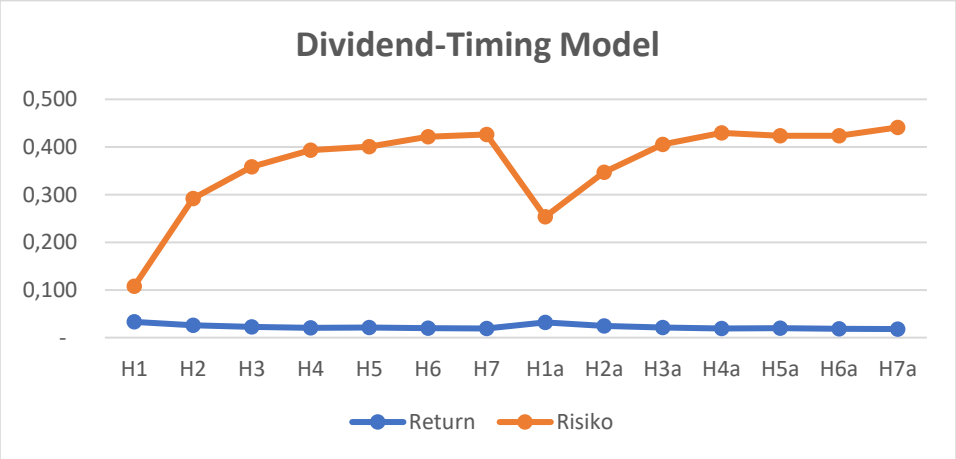

Figure 2. Comparison of Return and Risk Across Each Horizon

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Table 6. Results of Return and Risk Tests for Horizon 1

Horizon	Return	Risk	Sharpe Ratio
2	0,007***	-0,184***	0,099***
3	0,010***	-0,250***	0,152***
4	0,013***	-0,286***	0,185***
5	0,012***	-0,293***	0,188***
6	0,013***	-0,314***	0,208***
7	0,014***	-0,318***	0,220***
1a	0,001	-0,145***	0,042
2a	0,008***	-0,239***	0,132***
3a	0,012***	-0,297***	0,179***
4a	0,014***	-0,321***	0,207***
5a	0,013***	-0,315***	0,211***
6a	0,014***	-0,316***	0,227***
7a	0,015***	-0,333***	0,238***

Source: Created by author, 2025

Based on the results of the difference test shown in the table above, each horizon exhibits positive values, indicating that the return at horizon 1 is higher and significant at the 1% level, except for the t-test result of horizon 1a. The price declines at each horizon are still adequately offset by the dividends received, consistent with the trade-off theory of Miller & Modigliani (1961), which found that price declines are smaller than the dividends received. The risk test also shows that horizon 1 has lower risk. Therefore, it can be concluded that horizon 1 offers a higher level of returns compared to other horizons and demonstrates greater consistency in generating profits. Horizon 1 has the highest return and the lowest risk among all horizons. Accordingly, the first and second hypotheses are accepted.

Table 7. Results of Return and Risk Tests: Dividend-Timing Model vs. IDX Composite

Horizon	Return	Risk
1	0,0487***	-0,7851***
2	0,0493***	-0,5414***
3	0,0498***	-0,4460***
4	0,0501***	-0,3991***
5	0,0503***	-0,3779***
6	0,0504***	-0,3325***
7	0,0505***	-0,3274***
1a	0,0487***	-0,5399***
2a	0,0493***	-0,4536***
3a	0,0498***	-0,3774***
4a	0,0501***	-0,3436***
5a	0,0503***	-0,3466***
6a	0,0504***	-0,3315***
7a	0,0505***	-0,3042***

Source: Created by author, 2025

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As shown in the table above shows It shows that all horizons exhibit differences in returns between the dividend-timing model and the IHSG. The dividend-timing model consistently delivers higher returns compared to the IHSG. This is evident from the test results, which show positive values significant at the 1% level. The table also indicates that all horizons have differences in risk between the dividend-timing model and the IHSG. The dividend-timing model consistently exhibits lower risk compared to the IHSG, as shown by the test results with negative values significant at the 1% level. Therefore, the third and fourth hypotheses are accepted.

Discussion Results

Dividend-Timing Model Generates Positive Returns

Based on the test results, the dividend-timing model generates positive returns across all defined horizons. This indicates that the price drop on the ex-dividend date is smaller than the dividend received, consistent with previous studies by Tran (2017), Edin & Korver (2017), and (Frank & Jagannathan, 1998). The price decline being smaller than the dividend is statistically significant. Interestingly, the results show that investors achieve positive returns in every horizon, although the magnitude may vary. This suggests that the strategy is relatively consistent in creating profit potential. Investors do not need to hold stocks for the long term, as even short-term applications of this strategy can still yield profitable results.

Further analysis finds that Horizon 1 produces the most frequent gains. Therefore, buying shares at the closing price on the cum-dividend date and selling them on the ex-dividend date is the most profitable strategy for investors. In other words, the dividend-timing model provides a simple way to earn returns: purchase shares before the cum-dividend date and sell after the ex-dividend date. Investors only need to pay attention to the schedule and important dates during dividend events. Those engaging in dividend-based trading can effectively leverage the dividend-timing model. Investors still have the opportunity to gain because the dividend received exceeds the stock price decline.

Dividend-Timing Model has Minimal Risk

The test results indicate that each time horizon in the dividend-timing model carries different levels of risk. This risk is related to stock price movements, which do not remain consistent after a company distributes dividends. Qadar et al. (2023) found that in Indonesia, there are positive abnormal returns before the cum-dividend date, but these turn into negative abnormal returns after the ex-dividend date. This pattern indicates significant volatility or fluctuations in stock prices around dividend events. In other words, although there are profit opportunities, investors still face potential risk due to price uncertainty.

Furthermore, the study finds that horizon 1 has lower risk compared to other horizons. This horizon demonstrates that purchasing stocks at the closing price on the cum-dividend date and selling them at the opening price on the ex-dividend date is the most optimal

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strategy. With this strategy, investors not only achieve positive returns but can also minimize risk as much as possible. Therefore, horizon 1 can be considered the best strategic choice when applying the dividend-timing model to dividend events.

Dividend-Timing Model Generates Higher Returns than IDX Composite

The test results show that the dividend-timing model generates higher returns compared to the IDX Composite. This applies to all defined horizons. According to the data, during dividend events, the IDX Composite shows negative returns across all horizons. Studies by Edin & Korver (2017) and Paudel et al. (2020) indicate that dividend-based strategies can produce significant abnormal returns, especially in the short term. The test results confirm that the dividend-timing model provides higher returns than the IDX Composite. This finding is consistent across all analyzed horizons, reinforcing the reliability of dividend-based strategies.

The difference in results emphasizes that the dividend-timing model can outperform the overall market. One reason for its superior performance is that companies paying dividends generally have strong fundamentals. According to Mulya et al. (2020), companies that consistently pay dividends tend to be more stable and have clear business prospects. This factor makes their stock prices relatively more resilient to market fluctuations. In addition to offering profit potential, the model is also more stable because it is supported by fundamentally strong companies. Therefore, the dividend-timing model can serve as an effective alternative investment strategy, especially during periods of general market weakness.

Dividend-Timing Model Lower Risk than IDX Composite

The test results show that the dividend-timing model carries lower risk compared to the IHSG. This is evident from the negative risk values, indicating that the dividend-timing model not only generates positive returns but also demonstrates consistency in producing high returns. Positive performance during dividend events further supports the evidence that the dividend-timing model has lower risk. Comparisons with the IHSG also yield significant results, showing that the dividend-timing model has lower risk than the IHSG.

4. CONCLUSION

Based on the results obtained from the tests and discussion, the following conclusions can be drawn: First, the dividend-timing model generates positive returns across all defined horizons, with Horizon 1 showing the highest returns compared to other horizons. Second, the dividend-timing model exhibits varying levels of risk across different horizons, and Horizon 1 has the lowest risk compared to others. Third, the dividend-timing model produces higher returns than the IDX Composite in all specified horizons. Fourth, the model has lower risk than the IDX Composite across all horizons.

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This study has several limitations. First, it does not account for taxes and transaction costs. Second, it focuses only on cash dividends. Third, it does not compare the strategy of purchasing on the cum-dividend date versus the ex-dividend date. Fourth, the measures of return and risk are limited to geometric return, price drop ratio, and Sharpe ratio.

Future research is expected to address these limitations. First, by incorporating taxes and transaction costs. Second, by including all types of dividends. Third, by comparing strategies of buying on the cum-dividend date versus the ex-dividend date. Fourth, by adding abnormal return as an additional measure of return and drawdown as an additional measure of risk.

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