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The Dividend Trap Score Formulation: a Practical Approach in Dividend Investing

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A B S T R A C T

Dividends are a key element in investment strategies and are often considered an indicator of a corporate's health and stability. This study aims to develop the Dividend Trap Score (DTS), a quantitative tool for identifying potential dividend traps in stock investments. It distinguishes between Technical and Fundamental Dividend Traps, examining key indicators such as dividend yield ratio, payout ratio, debt levels, and profit trends. Using historical data, the DTS model is tested to assess its accuracy in identifying risky dividend-paying corporates. The findings show that DTS outperforms traditional metrics in evaluating dividend sustainability, offering investors deeper insights and reducing the risk of financial losses. This study contributes to more informed investment strategies by providing a systematic approach to detect dividend-related risks.

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INTRODUCTION

The Importance of Dividends in Investment Strategy

Dividends are a key element in investment strategies and are often considered an indicator of a corporate's health and stability. According to Baker and Powell (2012), dividends are cash or stock payments distributed by a corporate to its shareholders as part of the profits earned. For many investors, especially those seeking passive income, dividends are a primary source of returns from stock investments, alongside the potential appreciation of stock prices (Fama & French, 2001).

Consistent and increasing dividends can signal a solid and stable corporate, as they demonstrate the corporate's ability to generate profits and maintain healthy cash flow (Lintner, 1956). Additionally, dividends are often used by investors to evaluate the attractiveness of an investment. In the context of investment strategy, corporates that offer high dividends are often seen as appealing because they can provide steady income as well as potential growth in stock value in the future (Maio, P., & Santa-Clara, P. 2015).

However, dividend-based investments require in-depth analysis to ensure that the dividends paid are not only high but also sustainable (Corelli, A. 2017). Relying solely on dividends in investment decision-making without considering other aspects of the corporate's health can be risky.

The Concept of Dividend Trap and Its Impact on Investors

A dividend trap is a situation where investors are attracted to stocks due to the lure of high dividends, but the stock actually has underlying risks or issues that can be detrimental. According to Maio, P., & Santa-Clara, P. (2015), a dividend trap can occur when a corporate pays very high dividends using unsustainable profits or at the expense of necessary investments for long-term growth.

One of the main impacts of a dividend trap is the potential financial loss for investors. Although high dividends are attractive, if a corporate cannot maintain those dividend payments due to financial or operational issues, the stock value can decline drastically following announcements of dividend cuts or suspensions (Fama & French, 2001). This often leads investors to suffer significant losses, as they become trapped in investments that appear profitable but are actually risky.

Dividend traps can also add complexity for investors in analyzing corporates. Investors who are not cautious may overlook warnings that indicate high dividends are not sustainable. Therefore, it is essential for investors to have tools and methods to help them evaluate the risks associated with a corporate's dividend policy.

In this context, the development of tools like the Dividend Trap Score (DTS) can provide a practical approach to systematically identify potential dividend traps (Corelli, A. 2017). By using the DTS, investors can better assess the risks associated with high dividends and make more informed and measured investment decisions.

The main purpose of this article is to develop and formulate the Dividend Trap Score (DTS), a quantitative tool designed to identify the risk of dividend traps in stock investments. The Dividend Trap Score is a model that integrates

several key indicators to provide a comprehensive assessment of whether high dividends from a corporate could potentially be a trap for investors.

LITERATURE REVIEW

Dividend theory

Dividend theory has evolved significantly over the years, providing insights into why corporates distribute profits to shareholders. According to Lintner (1956), firms tend to follow a stable dividend policy to signal their financial health and to provide shareholders with predictable income. This signaling theory suggests that consistent dividend payments reflect a corporate's strong earnings potential, influencing investor perceptions and stock valuations (Miller & Modigliani, 1961). Recent studies further emphasize that dividends can act as a commitment mechanism for management, ensuring that excess cash is returned to shareholders rather than wasted on suboptimal investments (Fama & French, 2016).

Dividend policy, which encompasses the rules and guidelines governing dividend payments, plays a crucial role in corporate finance. A well-defined dividend policy can enhance shareholder value and align the interests of management with those of investors (Baker & Powell, 2012). Research indicates that firms with a history of increasing dividends often experience higher stock price appreciation and lower volatility, attracting a specific segment of investors focused on income generation (Gordon, 2018). However, corporates must balance dividend payouts with reinvestment opportunities to sustain long-term growth, a challenge that highlights the complexity of dividend policy decisions (Jensen, 1986).

In the context of dividend investing, the concept of a Dividend Trap emerges as a critical area of concern for investors. A Dividend Trap occurs when high dividend yields mask underlying financial distress, misleading investors about the true value of the stock (Maio, P., & Santa-Clara, P. 2015). This underscores the importance of developing tools like the Dividend Trap Score (DTS), which can systematically assess the sustainability of dividends by evaluating key financial indicators (Corelli, A. 2017). By integrating these insights, the DTS can provide a practical approach for investors to identify potential risks associated with high dividends, ultimately supporting more informed investment decisions.

Dividend Investing concept

Dividend investing is an investment strategy that focuses on purchasing stocks from corporates that regularly pay dividends to shareholders. The fundamental principle of dividend investing is that investors seek stocks that not only offer potential price appreciation but also provide steady income through dividend payments. Dividends are typically paid quarterly or annually from corporate profits and can be in the form of cash or additional shares (Hayes A, 2023). Investors who follow the dividend investing strategy are generally interested in corporates with a stable and consistent dividend payment history. This principle relies on the belief that corporates capable of paying steady or

increasing dividends tend to have healthy and stable cash flow. In dividend investing, there are several common strategies that can be used by investors:

1. Dividend Growth Strategy, focus on corporates that consistently increase their dividends over time. This strategy is based on the belief that stable dividend growth reflects financial strength and positive growth prospects (Morningstar, 2024).
2. High Dividend Strategy, look for stocks with high dividend yields. Although high dividends can be attractive, investors should be cautious because very high yields can indicate greater risks, such as potential dividend traps (Hayes A, 2023).

The Concept of Dividend Trap, Definition and Characteristics.

Dividend trap refers to a situation where investors are attracted to a stock because of its high dividends, but it turns out that these dividends cannot be sustained in the long term due to fundamental issues within the corporate. This phenomenon occurs when a corporate pays high dividends at the expense of important factors such as investment in growth, debt management, or even using unsustainable cash reserves (Hayes A, 2023; Hariyanto, 2024). Dividend trap often arises because investors are tempted by the allure of seemingly profitable dividends without considering the long-term financial health of the corporate. In many cases, corporates caught in the dividend trap may not have the capacity to continue paying high dividends if there is a decline in profits or operational issues (Nugroho, 2023).

Some of the key characteristics of dividend traps include:

1. Unsustainable Dividends, corporates that pay high dividends but do not have consistent profits or sufficient cash flow to support dividend payments in the long term. This is often seen from the very high dividend payout ratio (Hariyanto, 2024).
2. Decline in Financial Performance, although the corporate continues to pay high dividends, the financial statements show a decline in revenue or profit. This decline could indicate that the corporate is using its existing profits to pay dividends, not for investment and growth (Nugroho, 2023).
3. High Debt Levels, corporates with high debt may take on additional debt to pay dividends. High debt levels can increase financial risk and reduce a corporate's ability to maintain dividends (Hayes A, 2023).
4. Inconsistent Dividend Policy, sudden changes in dividend policy, such as the announcement of large dividends without a clear explanation, could be a warning sign that corporates may be trying to keep stock prices high by paying unsustainable dividends (Hariyanto, 2024).

METHODOLOGY

The development process of Dividend Traps Score (DTS) involves several important steps:

1. Identification of Key Components, this step will determine the main components to be included in DTS, including dividend yield ratio, dividend payout ratio, debt ratio, and profit decline. These components are chosen for their relevance in measuring the financial health of a corporate and its ability to sustain dividend payments.
2. Formulation of DTS Formula, based on the identified components, this research will formulate the DTS with appropriate weights for each component. The formula will be designed to ensure that DTS can provide an accurate and practical assessment of potential dividend trap risks.
3. Model Testing, after formulating the formula, DTS will be tested using historical data to ensure its accuracy in identifying corporates experiencing dividend traps. This test aims to refine the model and ensure that DTS can be used effectively in investment practices.

The evaluation of the effectiveness of DTS in identifying the risk of a dividend trap will be conducted through several steps:

1. Real Case Analysis, DTS will be applied to data from corporates known to have issues related to dividend traps. By analyzing the results of DTS in these cases, the research will assess how well DTS can identify corporates facing dividend trap risks.
2. Comparison with Traditional Indicators, The results of DTS will be compared with traditional indicators such as dividend yield and dividend payout ratio to assess the superiority of DTS in providing deeper insights into risks.
3. Model Performance Evaluation, this study will evaluate the performance of DTS under various market conditions and industry sectors to ensure that the model remains effective and relevant in various situations.

RESEARCH RESULT

This study seeks to divide the concept of Dividend Trap into two categories, namely Technical Dividend Trap and Fundamental Dividend Trap. This division is considered a good approach and can provide a deeper and more specific understanding of this phenomenon.

There are seceral reasons for the Division :

1. Difference in Analytical Perspective :
   a). The Technical Dividend Trap is associated with technical aspects such as stock price movements, trading patterns, and technical indicators that reveal anomalies or traps which may appear technically appealing but are not supported by strong fundamentals (Davis & Fagan, 2020).
   b). The Fundamental Dividend Trap focuses more on the financial condition and performance of the corporate. A corporate may seem attractive due to a high dividend yield, but it may have underlying issues such as unsustainable profits, excessively high dividend payout ratios, or high levels of debt (Johnson et al., 2021).

2. Simplification of Understanding: By dividing Dividend Traps into two categories, the explanation and identification of traps based on different analytical approaches become more straightforward, making it easier for investors to recognize warning signs (Smith & Brown, 2022).
3. A Practical Approach to Research and Investment: For investors and researchers, this division provides a more focused analytical tool. They can separate technical analysis from fundamental analysis or combine them to obtain a more comprehensive view before making investment decisions. This categorization also aligns with a more holistic approach to stock analysis, where both technical and fundamental aspects must be considered to avoid potential traps (Lee & Wong, 2023).

Technical Dividend Trap

The Technical Dividend Trap is a situation in which stock prices are significantly influenced by technical factors related to dividend announcements, such as General Shareholders' Meeting (RUPS) announcements, RUPS results, and important dividend dates (cum date, ex date, and dividend payment date). This trap occurs when a trader or investor buys shares before the cum date, attracted by the prospect of dividends to be distributed, but later finds that the stock price sharply declines after the ex date. If this price drop is greater than the received dividend value, then the investor or trader effectively experiences a loss, and this situation is referred to as the Technical Dividend Trap.

This trap often occurs because investors or traders focus too much on short-term dividend gains, without considering the potential risks of stock price movements after the ex date. Stocks that experience significant increases before the cum date often attract the attention of many traders, causing their prices to rise to their peak. However, when the ex date arrives, many investors sell their shares after receiving dividends, leading to a decrease in stock prices. This can be very detrimental for those who purchased the stock at its peak price, especially if the price drop is greater than the dividends received.

In the concept of the technical dividend trap, there are several influential factors :

1. Announcement of the Annual General Meeting (RUPS), the announcement of when the RUPS will take place often serves as an initial trigger for stock price movements. Investors and traders begin to speculate about the dividends to be distributed, leading to an increase in stock prices prior to the RUPS.
2. Outcome of the RUPS, the results of the RUPS, particularly decisions regarding dividend distribution, significantly impact stock prices. If the announced dividend is higher than anticipated, the stock price may rise further. Conversely, if the announced dividend is lower than expectations, the stock price may begin to decline even before the ex-dividend date.
3. Important Dividend Dates, there are several important dates that investors must pay close attention to :

   Cum Date: This is the last date on which investors must hold shares to be entitled to receive the dividend. Typically, stock prices tend to rise leading up to the cum date as many traders want to secure the dividend.

Ex Date: On this date, shares begin trading without the right to the dividend. A drop in stock price often occurs on the ex date since the shares no longer include the dividend rights.
Dividend Payment Date: Although stock prices usually reflect the dividend to be distributed, the payment date remains an important factor as investors begin to receive the promised dividends.

Fundamental Dividend Trap

The definition of the Fundamental Dividend Trap is a situation in which investors are lured by the high dividends offered by a corporate, but overlook or pay insufficient attention to the corporate's fundamental conditions. This trap occurs when investors focus too much on the potential income from dividends, without considering the risks associated with the corporate's financial and operational conditions. Although high dividends may seem attractive, they could indicate larger problems, such as the corporate's inability to sustain those dividends in the long term or financial pressures that threaten the corporate's business continuity.

The Fundamental Dividend Trap typically occurs in corporates with a very high dividend payout ratio, meaning that the corporate pays out most or all of its profits as dividends. This can indicate that the corporate does not have enough remaining funds for reinvestment in its business, which in turn could hinder its long-term growth. Additionally, corporates with high debt levels or consistent profit declines can also put investors at risk if promised dividends cannot be sustained. Investors who do not thoroughly assess the corporate's fundamental conditions are at risk of purchasing stocks that, despite offering high dividends, may experience significant value decline in the future.

There are several fundamental factors that investors should be cautious of :

1. Corporate Earnings, stable and growing earnings are a primary indicator of a corporate's financial health. A significant decline in earnings or sharp fluctuations can serve as warning signs. If a corporate consistently experiences declining earnings but continues to pay high dividends, this may indicate that those dividends are not sustainable.
2. Dividend Payout Ratio, a high dividend payout ratio, especially if it approaches or exceeds 100%, indicates that the corporate is paying out nearly all or more than its net earnings as dividends. This means the corporate may not have sufficient remaining earnings to reinvest or to cope with potential financial crises, which could threaten its business sustainability.
3. Corporate Debt, high levels of debt can be a heavy burden for a corporate, especially if that debt is used to finance dividends. If a corporate has a high debt-to-equity ratio, it suggests that the corporate may be using debt to pay dividends, which increases reliance on borrowing and threatens future financial stability.

4. Stability of Corporate Performance, stable corporates typically exhibit consistent performance over time. Instability in revenue, profit margins, or operating cash flow may indicate that the corporate is in an unhealthy state. Unstable performance is often accompanied by unsustainable dividend policies, which can lead to dividend traps for investors.

In the context of dividend investing, investors may encounter two distinct types of dividend traps: the Technical Dividend Trap and the Fundamental Dividend Trap. While both traps can result in financial losses, they arise from different underlying causes. The following table highlights the key characteristics that distinguish these two types of dividend traps.

Table 1. Comparison of Characteristics: Technical Dividend Trap Versus Fundamental Dividend Trap

Characteristic	Technical Dividen Trap	Fundamental Dividend Trap
Definition	Occurs when stock prices rise significantly before the ex-dividend date and drop sharply afterward.	Occurs when corporates maintain high dividend payouts despite poor financial health or unsustainable payout ratios.
Key Indicators	Price movements leading up to and following the ex-dividend date.	Dividend payout ratio, earnings quality, and growth prospects.
Investor Behavior	Investors often buy shares before the ex-dividend date to capture the dividend, ignoring potential price drops.	Investors focus on high dividend yields without considering underlying corporate fundamentals.
Risk Factors	Market volatility, sudden price drops post-dividend, and short-term trading strategies.	Unsustainable business models, weak earnings, and high debt levels leading to dividend cuts.
Impact on Investors	May lead to net losses due to capital depreciation exceeding dividend income.	Can result in loss of capital as dividends may not be sustainable, leading to eventual cuts or suspensions.
Example Scenarios	Buying a stock at its peak before dividend payment, then facing a significant drop on the ex-dividend date.	Holding shares of a corporate that consistently pays dividends but is experiencing declining revenue and profitability.
Investment Strategy	Caution against buying right before dividend payments; focus on price trends.	Emphasis on analyzing corporate fundamentals and long-term sustainability of dividends.

CONCLUSIONS AND RECOMMENDATIONS

1. Significance of Dividends: Dividends play a crucial role in investment strategies, serving as both a source of income and an indicator of a corporate's financial health. However, the allure of high dividends can lead investors into dividend traps, where underlying risks are overlooked.
2. Understanding Dividend Traps: Dividend traps can be categorized into two types: Technical Dividend Traps, driven by market behaviors and stock price movements, and Fundamental Dividend Traps, rooted in a corporate's financial instability. Both types can result in significant losses for investors who fail to recognize the warning signs.
3. Development of the Dividend Trap Score (DTS): The creation of the DTS is essential for providing a systematic approach to assess the sustainability of dividends. By integrating key financial indicators such as dividend yield, payout ratios, debt levels, and profit trends, the DTS offers a practical tool for investors to evaluate potential risks associated with high dividends.
4. Utilize the Dividend Trap Score: Investors should incorporate the DTS into their investment analysis to systematically evaluate stocks with high dividends. This tool can help identify potential dividend traps and facilitate more informed decision-making.
5. Conduct Comprehensive Analyses: Beyond relying solely on dividend yields, investors should perform thorough evaluations of a corporate's financial health, including an assessment of earnings stability, payout ratios, and debt levels. This comprehensive approach will mitigate the risk of falling into dividend traps.
6. Educate on the Types of Dividend Traps: Investors should be educated about the differences between Technical and Fundamental Dividend Traps. Understanding these distinctions will enable them to recognize the specific risks associated with each type and adjust their investment strategies accordingly.
7. Monitor Market Conditions and Corporate Performance: Regular monitoring of market conditions and individual corporate performance is crucial. Investors should remain vigilant about changes in dividend policies, financial reports, and economic factors that could affect dividend sustainability.
8. Encourage Holistic Investment Strategies: A balanced approach that combines both dividend investing with considerations of capital appreciation and corporate fundamentals is recommended. This strategy will not only enhance income generation but also support long-term growth potential and stability in investment portfolios.

ADVANCED RESEARCH

Future research could also investigate the psychological and behavioral factors driving investors into dividend traps. Exploring how biases, such as overconfidence or the allure of high dividend yields, influence investor decisions could provide a more nuanced understanding of why dividend traps occur. This

research could lead to the development of investor education programs aimed at mitigating these risks.

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