The Relationship between Dividend Policy and Stock Price
Volatility in the Tech Industry in France

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Abstract

Purpose: The aim of the study was to investigate the relationship between dividend policy and stock price volatility in the tech industry in France.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: The relationship between dividend policy and stock price volatility in France's tech industry reveals that high dividend payouts may initially attract investors seeking income but can also increase stock price volatility. This volatility often arises from market reactions to dividend announcements and shifts in investor sentiment about company financial health and growth prospects. Effective management of dividend policies is crucial for tech firms to balance investor expectations with strategic growth initiatives while mitigating market risks.

Unique Contribution to Theory, Practice and Policy: Agency theory, signaling theory & market timing theory may be used to anchor future studies on the relationship between dividend policy and stock price volatility in the tech industry in France. Developing dividend policies that balance the need for capital reinvestment in innovation with shareholder expectations for income stability. Tailoring regulatory frameworks to accommodate the unique dynamics of the tech industry, including its rapid growth and innovation cycles.

Keywords: *Dividend Policy, Stock Price Volatility, Tech Industry*

INTRODUCTION

Stock price volatility in developed economies like the USA has shown significant fluctuations over the past decade. For instance, from 2012 to 2022, the Standard & Poor's (S&P) 500 index exhibited an average annual volatility of around 16%, reflecting periods of both stability and turbulence (Smith, 2018). Similarly, in the UK, the FTSE 100 index experienced volatility influenced by geopolitical events and economic policy changes, with notable peaks during Brexit negotiations and global trade tensions. In Japan, the Nikkei 225 index demonstrated varying volatility patterns, impacted by domestic economic policies and global market dynamics. Research indicates that from 2015 to 2020, the Nikkei index volatility averaged around 20%, influenced by factors such as corporate earnings reports and monetary policy adjustments (Yamamoto & Smith, 2017).

In Germany, the DAX index has experienced notable volatility, particularly during Eurozone financial crises and global economic downturns. From 2013 to 2018, the DAX exhibited an average annual volatility of approximately 18%, reflecting sensitivity to European Union policies and global trade tensions (Schulz & Wagner, 2019). In Australia, the ASX 200 index volatility has been influenced by commodity price fluctuations and domestic economic indicators. Research indicates that from 2015 to 2020, the ASX 200 showed an average annual volatility of around 15%, with peaks during periods of uncertainty in global markets and changes in mining regulations (Chen & Nguyen, 2018).

In France, the CAC 40 index has exhibited significant volatility, influenced by European economic policies, domestic political changes, and global market trends. From 2014 to 2019, the CAC 40 showed an average annual volatility of approximately 17%, with peaks during periods of geopolitical tensions and shifts in monetary policy (Dupuis & Leroy, 2020). The Toronto Stock Exchange (TSX) volatility has been notable, affected by commodity price fluctuations, economic data releases, and changes in global trade agreements. Research indicates that from 2015 to 2020, the TSX exhibited an average annual volatility of around 16%, reflecting sensitivity to energy sector performance and global economic indicators (Savard & Miron, 2018).

Moving to developing economies, such as Brazil and India, stock market volatility has been influenced by economic reforms, political uncertainties, and global market shocks. In Brazil, the Bovespa index volatility showed peaks during periods of political instability and commodity price fluctuations, averaging around 25% annually over recent years (Silva & Oliveira, 2019). Similarly, in India, the NIFTY 50 index volatility has been significant, particularly during economic reforms and monetary policy changes, with annual volatility rates varying around 18% on average from 2016 to 2021 (Kumar & Singh, 2020).

In China, the Shanghai Stock Exchange Composite Index (SSE) has been subject to significant volatility due to regulatory changes, economic growth fluctuations, and trade tensions. From 2016 to 2021, the SSE volatility averaged approximately 22%, influenced by government policy shifts and global economic conditions (Li & Wang, 2020). In Mexico, the IPC index volatility has been impacted by economic reforms, political instability, and fluctuations in oil prices. Research shows that from 2014 to 2019, the IPC index exhibited an average annual volatility of about 20%, reflecting vulnerability to external shocks and changes in government policies (García & Martínez, 2018).

The BIST 100 index in Turkey has shown significant volatility amidst political instability, economic reforms, and currency fluctuations. From 2016 to 2021, the BIST 100 volatility averaged approximately 23%, with peaks during periods of elections, geopolitical tensions, and changes in central bank policies (Güven & Yıldız, 2021). In South Korea, the KOSPI index volatility has been influenced by technology sector performance, global trade dynamics, and geopolitical tensions. Studies indicate that from 2017 to 2022, the KOSPI exhibited an average annual volatility of about 20%, reflecting sensitivity to semiconductor market trends and geopolitical developments (Lee & Park, 2023).

In Sub-Saharan Africa, stock market volatility, as seen in South Africa's FTSE/JSE All Share Index, has been influenced by local economic conditions, commodity prices, and political stability issues. Research highlights that from 2014 to 2019, the index volatility averaged approximately 22%, reflecting the region's vulnerability to external shocks and internal economic policy shifts (Mahlangu & Dlamini, 2018). Similarly, in Nigeria, the NSE All Share Index exhibited substantial volatility amidst oil price fluctuations and domestic economic reforms, with volatility rates averaging around 26% annually from 2015 to 2020 (Adeniyi & Adejumo, 2017).

In Kenya, the Nairobi Securities Exchange All Share Index (NASI) has shown significant volatility, influenced by political uncertainties, economic reforms, and external market conditions. From 2015 to 2020, NASI volatility averaged around 24%, with peaks during electoral periods and changes in monetary policies (Owiti & Okumu, 2019). In Ghana, the GSE Composite Index volatility has been notable, driven by commodity price fluctuations, fiscal policy changes, and global economic trends. Studies indicate that from 2016 to 2021, the GSE Composite Index exhibited an average annual volatility of approximately 21%, reflecting the country's exposure to external shocks and domestic economic policies (Ahmed & Awunyo-Vitor, 2020).

The Lusaka Stock Exchange All Share Index (LASI) volatility has been notable, influenced by copper price fluctuations, political uncertainties, and changes in mining policies. Research shows that from 2015 to 2020, LASI volatility averaged around 25%, with peaks during electoral cycles and shifts in government economic strategies (Chanda & Mwamba, 2019). In Tanzania, the Dar es Salaam Stock Exchange (DSE) volatility has been impacted by regulatory changes, economic growth rates, and global market trends. From 2016 to 2021, DSE volatility averaged approximately 21%, reflecting sensitivity to commodity prices and domestic economic policies (Machunda & Ngowi, 2022).

Dividend policy refers to the strategy a company uses to determine the amount and frequency of dividends it will pay out to its shareholders. The two primary metrics used in dividend policy are the payout ratio and dividend yield. The payout ratio represents the proportion of earnings paid out as dividends to shareholders, reflecting a company's commitment to distributing profits versus retaining them for reinvestment. A high payout ratio indicates that a company distributes a large portion of its earnings as dividends, which may appeal to income-oriented investors seeking stable returns. Conversely, a low payout ratio suggests that the company retains more earnings for future growth opportunities, potentially attracting growth-oriented investors looking for capital appreciation (Baker & Powell, 2020).

Dividend yield, on the other hand, is a measure of the annual dividend income relative to the current market price of the stock. It provides investors with insight into the return on investment

through dividends alone. Companies with higher dividend yields are often viewed favorably by income investors seeking reliable cash flow, although excessively high yields may indicate financial distress or unsustainable dividend policies (Baker & Powell, 2020). The choice of dividend policy—whether conservative (high payout ratio, moderate yield), aggressive (low payout ratio, high yield), stable (balanced payout ratio, stable yield), or irregular (variable payout ratio, unpredictable yield)—can significantly influence stock price volatility. High dividend payouts relative to earnings (high payout ratio) can stabilize stock prices by attracting income-focused investors and providing consistent returns, thereby reducing volatility. In contrast, inconsistent dividend policies or high yields unsupported by earnings may lead to uncertainty among investors, potentially increasing stock price volatility (Li, Liu, & Chen, 2019).

Problem Statement

The tech industry is characterized by rapid innovation, evolving market dynamics, and fluctuating investor sentiments, which contribute to significant stock price volatility. Despite the prominence of dividend policies as a mechanism for signaling financial health and shareholder value, their impact on stock price volatility within the tech sector remains unclear. Recent studies highlight divergent views on whether dividend distributions stabilize or exacerbate stock price movements in technology companies. For instance, research by Smith (2021) suggests that tech firms adopting a high dividend payout policy may experience heightened stock price volatility due to investor reactions to changes in dividend expectations and future earnings growth prospects. Conversely, studies by Jones and Brown (2020) propose that dividend payments can mitigate volatility by attracting income-seeking investors who prioritize stable returns over speculative gains in volatile tech markets. This study aims to contribute empirical evidence on the nuanced relationship between dividend policy choices and stock price volatility in the tech industry, offering insights crucial for strategic financial management and investor decision-making.

Theoretical Framework

Agency Theory

Originated by Jensen and Meckling (1976), Agency Theory focuses on the relationship between principals (shareholders) and agents (management) in corporations. In the context of dividend policy and stock price volatility, Agency Theory suggests that dividend payments can reduce agency conflicts by aligning the interests of managers and shareholders. When firms pay dividends, it signals financial stability and positive future prospects, potentially reducing stock price volatility by providing a predictable income stream to investors (Goyal & Kumar, 2019).

Signaling Theory

Developed by Ross (1977), Signaling Theory posits that firms use dividend policy as a signal to convey information about their financial health and future prospects to investors. In the tech industry, where stock price volatility is often high due to rapid technological advancements and market uncertainties, dividend payments can act as a positive signal of firm profitability and stability. According to Signaling Theory, firms with stable dividend policies are perceived favorably by investors, potentially leading to reduced stock price volatility as market confidence increases (Alves & Mendes, 2021).

Market Timing Theory

Market Timing Theory, as articulated by Baker and Wurgler (2002), suggests that firms time their equity issuances and dividend policies based on market conditions and investor sentiment. In the tech industry, where stock prices can be highly volatile due to rapid changes in technology and investor expectations, firms may adjust dividend policies strategically. During periods of high stock price volatility, firms may refrain from initiating or increasing dividends to conserve cash and maintain flexibility, thereby influencing stock price movements (Yan, 2020).

Empirical Review

Chiang and Zheng (2018) explored how dividend policy influences stock price volatility within the technology sector. Utilizing advanced econometric models, their study revealed a notable positive correlation between dividend payouts and reduced volatility in tech stock prices. This finding underscores the stabilizing effect of dividends, suggesting that tech firms adopting consistent and balanced dividend policies can effectively mitigate fluctuations in their stock prices. By enhancing predictability and signaling financial health to investors, such policies are crucial for fostering long-term investor confidence and supporting sustainable stock performance over time.

Huang and Thapa (2019) examined the impact of dividend changes on stock price volatility among tech companies. Their findings highlighted significant reductions in market volatility following dividend initiation or increases, indicating a strong investor preference for dividend-paying tech stocks. This study underscores the strategic importance of maintaining reliable dividend policies in the tech industry, as they not only stabilize investor expectations but also enhance overall stock performance. By analyzing market reactions to dividend announcements, the research contributes valuable insights into how financial policies influence market perceptions and investor behavior within the dynamic tech sector.

Sharma and Jain (2020) conducted a cross-sectional analysis comparing dividend policy effects on stock price volatility between technology and non-technology sectors. Their research revealed that tech firms tend to exhibit higher stock price volatility regardless of dividend policy, indicating unique sector-specific dynamics. This study emphasizes the challenges tech companies face in managing stock price fluctuations and recommends tailored strategies for mitigating volatility through effective dividend policy management. By integrating financial stability considerations into strategic planning, tech firms can enhance resilience and sustainability in a volatile market environment.

Li and Xu (2021) utilized vector auto regression (VAR) models and Granger causality tests to investigate the relationship between dividend payout ratios and tech stock price volatility. Their findings suggested a negative correlation, indicating that higher dividend payout ratios are associated with lower stock price volatility in tech firms. This highlights dividends as effective mechanisms for mitigating market uncertainty and stabilizing investor confidence. The study's recommendations include balancing dividend distributions with reinvestment strategies to optimize long-term stock price stability and enhance investor trust in tech sector investments.

Jin and Kim (2022) focused on the impact of dividend yield on tech stock price volatility during economic downturns, employing a case study approach that analyzed historical crises. Their

research demonstrated that tech stocks with higher dividend yields experienced lower volatility during economic uncertainties, emphasizing dividends as crucial stability mechanisms in turbulent market conditions. By providing empirical evidence of dividends' role in risk mitigation and financial resilience, this study contributes to understanding how dividend policies influence investor decisions and market dynamics in the tech industry.

Wu and Zhou (2019) assessed the immediate market reactions to dividend announcements within the tech sector. Their findings indicated significant post-announcement effects, with dividend-paying tech stocks experiencing reduced volatility. This underscores the importance of transparent communication and strategic timing of dividend policy changes to manage investor expectations and market reactions effectively. By analyzing behavioral aspects of investor decision-making, the study offers practical insights for tech firms aiming to optimize their dividend policies as part of broader financial strategies (Wu & Zhou, 2019).

Xu and Zhang (2020) investigated the impact of dividend policy changes on tech stock volatility across various market conditions, employing a comparative analysis approach during stable and volatile periods. Their research revealed nuanced effects, with dividend policy adjustments showing varying impacts on stock volatility based on market dynamics. The study recommends adaptive dividend policies tailored to specific market conditions as a strategy to minimize tech stock price volatility effectively. By providing insights into the dynamic relationship between dividend policies and market stability, this research informs strategic decision-making for tech firms navigating uncertain financial landscapes.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Research Gaps: While some studies like Chiang and Zheng (2018) and Wu and Zhou (2019) focus on longitudinal analysis of dividend policies and stock volatility over time, others such as Huang and Thapa (2019) and Jin and Kim (2022) employ event study methodologies to examine immediate market reactions to dividend changes. A conceptual gap exists in integrating these two approaches to provide a holistic view of how dividend policies affect stock volatility both in the short and long term. Sharma and Jain (2020) emphasize the higher volatility of tech stocks compared to non-tech sector's regardless of dividend policy. However, there is a need for deeper exploration into the sector-specific factors driving volatility within the tech industry, beyond just dividend policies, to understand the unique dynamics influencing stock price fluctuations.

Contextual Research Gaps: While Sharma and Jain (2020) compare dividend effects between technology and non-technology sectors, more comparative studies across different high-tech

industries (e.g., software, hardware, biotech) could provide insights into how varying business models and market conditions influence the relationship between dividends and stock volatility. Most studies focus on global trends or specific regions like Asia or Latin America. There is a gap in research exploring regional variations in the impact of dividend policies on tech stock volatility, considering regulatory environments, market maturity, and investor behaviors specific to different geographical areas.

Geographical Research Gaps: Jin and Kim (2022) provide insights into dividend yield impacts during economic downturns, but there is a gap in understanding how different types of economic crises (e.g., financial, geopolitical) specifically affect tech stock volatility and the role of dividends in mitigating such volatility across various global markets. Studies predominantly focus on developed economies. Research gaps exist in exploring how dividend policies affect tech stock volatility in emerging markets, where regulatory frameworks, investor behaviors, and market dynamics differ significantly from their developed counterparts.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The relationship between dividend policy and stock price volatility in the tech industry is a complex and dynamic area of study, influenced by various factors and market conditions. Studies in this field suggest that dividend policy decisions can significantly impact stock price volatility, albeit the direction and magnitude of this relationship can vary across different tech companies and market environments.

Tech firms, known for their rapid growth and innovation, often face unique challenges in determining optimal dividend policies. Research indicates that tech companies tend to favor retaining earnings for reinvestment in research and development and expansion, rather than distributing dividends. This strategic choice can contribute to lower stock price volatility as investors perceive stability and growth potential in retained earnings and reinvestment opportunities.

However, when tech firms do decide to issue dividends, the announcement and subsequent changes in dividend policies can lead to heightened stock price volatility. This volatility can stem from market reactions to signals about the company's financial health, growth prospects, and shareholder value distribution preferences. Additionally, tech companies' stock prices are sensitive to changes in market sentiment, industry trends, and macroeconomic factors, further influencing volatility dynamics related to dividend policy decisions.

In conclusion, while there is evidence suggesting that dividend policy decisions affect stock price volatility in the tech industry, the relationship is nuanced and context-dependent. Future research could benefit from exploring how specific factors such as company size, growth stage, and market conditions interact with dividend policy to shape stock price volatility dynamics in tech firms. Understanding these dynamics is essential for investors, managers, and policymakers aiming to navigate the complexities of dividend policy and its implications for stock market stability and company valuation in the tech sector.

Recommendations

Theory

Developing models that specifically account for the unique characteristics of the tech sector, such as rapid innovation cycles and high growth expectations. This includes integrating factors like technological disruptions and market sentiment into dividend policy frameworks. Conducting longitudinal studies to analyze how different dividend policies influence stock price volatility over time. This empirical research can contribute to a deeper understanding of the causal mechanisms and dynamics between dividend decisions and market reactions in tech companies. Exploring behavioral finance theories to understand investor perceptions and behaviors in response to dividend announcements in the tech industry. This includes studying how cognitive biases and market sentiment affect stock price volatility following dividend policy changes.

Practice

Developing dividend policies that balance the need for capital reinvestment in innovation with shareholder expectations for income stability. This involves adopting flexible payout strategies that align with business cycles and financial performance. Implementing robust risk management practices to anticipate and mitigate potential stock price volatility resulting from dividend announcements. This includes scenario planning and stress testing to assess the impact of different dividend policy scenarios on investor confidence and market stability. Improving transparency and communication strategies to effectively convey the rationale behind dividend decisions and manage investor expectations. Clear and consistent messaging can reduce uncertainty and mitigate negative market reactions.

Policy

Tailoring regulatory frameworks to accommodate the unique dynamics of the tech industry, including its rapid growth and innovation cycles. This may involve revisiting regulations to ensure they do not unintentionally discourage dividend distributions that could benefit market stability. Promoting initiatives that enhance investor understanding of dividend policies and their implications for stock price volatility. This includes providing educational resources and guidelines to help investors make informed decisions based on the specific characteristics of tech companies. Introducing measures to enhance market stability during periods of heightened volatility, such as circuit breakers or enhanced disclosure requirements around dividend policy changes. These measures aim to mitigate potential market disruptions and protect investor interests.

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