THE IMPACT OF DIVIDEND POLICY ON SHARE PRICE VOLATILITY: EVIDENCE FROM LISTED COMPANIES IN GULF COOPERATION COUNCIL COUNTRIES

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Abstract

The volatility of share prices is of high importance to investors since it formulates the investment strategies that should be followed or even helps in deciding the right time and company to be selected for investment purposes. The Gulf Cooperation Council (GCC) investors should find this empirical study of high importance since it will highlight the main company characteristics that should be taken into consideration when formulating the expectations of future share prices. This study examines the impact of dividend policies on share price volatility, focusing on non-financial companies of GCC countries that were listed between 2010 and 2021. All non-financial companies (532) listed in Saudi Arabia, Oman, Qatar, the UAE, Kuwait, and Bahrain were collected but 380 companies were excluded due to unavailable data set for the period of study. The panel regression is used to test the impact (fixed and random effects techniques) but the Hausman test favored the fixed effects results. The dependent variable is share price volatility, while the independent variable is the dividend yield, which serves as a stand-in for dividend policy. The relationship between share price volatility and a set of controls, including size, growth, and leverage, is also examined in this paper. According to the results, size and leverage have a significant negative relationship with share price volatility, but growth has an insignificant positive impact. Dividend policy has no impact on share price volatility. In other words, dividend policy does not fluctuate share prices in GCC.

Keywords: Dividend Policy, Share Price Volatility, Qatar Stock Exchange, Fixed Effects Technique


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1. INTRODUCTION

The method a corporation takes to decide how much to pay out in dividends to its shareholders and how much to keep behind for reinvestment is referred to as dividend policy. Finance managers have this critical decision to make whether the company’s profits should be used to make dividend payments or retain the profits to invest in upcoming opportunities (Karlsson & Renteln, 2021). The effect of a company's dividend policy on the share price at which these shares are being traded is of great importance as its not only important to corporate officials who determine the policies but is also important to investors who want to maximize their portfolios and economists trying to understand and assess how the capital market functions (Al-Shawawreh, 2014; Nguyen et al., 2020; Khalaf, 2022). To achieve shareholder wealth, finance managers must choose the right policy. Choosing the right policy should not solely depend on shareholders' wealth but also on the company’s investment opportunities (Hashemijoo et al., 2012). According to Alam et al. (2021), most investors have a risk-averse mindset regarding their investments; thus, they are concerned about stock price volatility. The systematic nature of such risk tends to explain the risk associated with an investment. As a result, stocks are thought to be more desirable when their levels of volatility are at their lowest.

To better understand the connection between dividend policy and share price volatility, various hypotheses have been proposed. The connection remains unclear, with scholars such as Hussainey et al. (2011), Allen and Rachim (1996), and Baskin (1989) debating whether dividend policy influences stock price volatility (Kengatharan & Ford, 2021). Three conflicting theories regarding the relationship between stock price and dividend policy exist. The first theory, which is the "irrelevancy theory", contends that the firm’s value in a perfect capital market is unaffected by dividend policy because it has no impact on stock price (Miller & Modigliani, 1961; Black & Scholes, 1974). The second theory, called the "bird in the hand" hypothesis was developed by John Linter and Myron Gordon (Gordon, 1963). It argues that dividends are advantageous and will increase shareholders' wealth due to their impact on stock (Woolridge, 1983; Baskin, 1989). Finally, the “signalling theory” argues that managers have information that is not available to the shareholders, this gap of information sheds light on how managers utilize dividend declaration as a signal to alert investors about the firm's potential success in the future (Alam et al., 2021).

Share price volatility has garnered interest over time in both developed and developing economies. Previous studies consider other aspects in addition to how dividend policy affects share price volatility, including firm size, leverage, growth rate, and profit volatility (Khalaf, 2022). There is conflicting information about the impact of dividend policy and other control variables on share price volatility (Nguyen et al., 2020), therefore, this research will answer the question:

RQ: What is the impact of dividend policy on share price volatility on non-financial companies listed on the Gulf Cooperation Council (GCC)?

The main objective of this paper is to identify the impact of dividend policy on the share price volatility of listed companies in GCC using panel data (fixed and random effects techniques) and surely this will help the policymakers and institutions in GCC to understand and control the factors that will bring volatility to share price.

The remainder of this paper is structured as follows. Section 2 contains a literature review (theoretical background and previous studies). Section 3 explains the methodology which includes the hypothesis and research model for this study. Section 4 presents the empirical results and analysis of the study. Finally, the conclusion and recommendations were highlighted in Section 5.

2. LITERATURE REVIEW

2.1. Theoretical background: Signaling theory

Under the dividend signaling theory, a business decides to make its dividend distribution policy public to inform the market that it is now evaluating its prospects, which will cause a change in the stock price. Harlina and Khoiruddin (2018) stated that every piece of information the company releases is viewed as a signal by potential investors when making a choice. Financial statements are one form of internally generated information. Many businesses do not provide their financial information or reports in compliance with the criteria demanded by banking institutions. Returns are abnormally favorable when dividend raises are declared, and abnormally negative when dividend decreases occur. Many researchers build their dividend policies on the idea that management and investors do not have access to the same information. Investors can learn about projected company performance via dividends. Prior studies have shown that when a dividend payout increase is disclosed, the stock price should increase; in contrast, when a dividend payout reduction is disclosed, the stock price should decrease (Alam et al., 2021).  

2.2. Previous studies

Ahmad et al. (2018) examined the link between dividend policy and stock price volatility for companies listed on the Amman Stock Exchange. Two hundred twenty-eight (228) businesses that were listed on the Amman Stock Exchange between 2010 and 2016 provided a total of 1596 firm-year observations for the data used in the study. The relationship was examined using descriptive statistics, Pearson correlation, and panel generalized method of moments (GMM) estimations. The findings show a significant inverse association between stock price volatility and dividend yield and payout, the two key components of dividend policy. This implies that lower stock price volatility will be caused by companies’ higher dividend yield and dividend distribution.

Harlina and Khoiruddin (2018) investigated the relationship between stock price volatility and dividend policy. The sample selected was companies in the financial industry that were listed on the Indonesia Stock Exchange and Malaysia Stock Exchange in 2016-2017. For Indonesia, 58 companies were selected as samples, and 28 companies were...
used for Malaysia, using the purposive sampling method. Earnings per share served as a proxy for dividend policy, growth in assets and earnings volatility served as proxies for the micro variables, and, interest rates and exchange rates serve as proxies for the macro variable. The results concluded that earnings per share, exchange rates, and interest rates all have an impact on share price volatility in Indonesia. In Malaysia, share price volatility is only impacted by earnings per share and exchange rates.

Pelcher (2019) examined the relationship between dividend policy and share price volatility for companies listed on the Johannesburg Stock Exchange. Panel data analysis was performed on a subset of the top 40 publicly traded corporations between the years 2007 and 2016. The results showed that there was no association between share price volatility and payment ratio, but there was a positive and significant correlation between share price volatility and dividend yield. It was proven that dividends matter to shareholders and that their relationship with share price volatility was causal.

Nguyen et al. (2020) studied the relationship between the dividend policy and the share price volatility between 2009 and 2018 of 260 Vietnamese firms which were listed on the Hochiminh Stock Exchange. The general method of movement, the fixed effects model, and the random effects model were the three statistical methods that were employed for analysis. The study found a positive correlation between dividend yield and stock price volatility, but a negative correlation between dividend payout and volatility. Additionally, it was shown that a firm’s size had a negative impact on share price volatility while its growth rate, leverage, and earnings volatility all had favorable effects.

Alam et al. (2021) gathered sample data from 341 businesses, including financial and non-financial entities, listed under 32 sectors of the Pakistan Stock Exchange over a nine-year period, from 2010 to 2018, using Baskin’s empirical technique. According to the study, Pakistan’s non-financial sector’s stock price volatility is significantly influenced by dividend policy, which is consistent with the relevance theory of dividends. However, the dividend yield was more significant than the dividend payout ratio. However, it was evident that dividend yield had a significant impact on how stock prices were influenced in Pakistan’s financial sector. The study’s conclusions suggest that dividend policy could be an effective tactic for Pakistani companies to lessen significant swings in stock price volatility.

Kengatharan and Ford (2021) analyzed how dividend policy affects share price volatility on the Colombo Stock Exchange (CSE). Panel data analysis is used to evaluate 81 listed non-financial enterprises from the CSE in Sri Lanka over a five-year period from 2013 to 2017. The results showed that while dividend per share has a negative impact on share price movements, dividend yield has a positive impact on share price volatility. By demonstrating that a large company’s share price volatility is substantial, firm size demonstrates a major negative impact on share price volatility. However, their analysis found that neither dividend payout nor financial leverage had a substantial impact on share price volatility. As a result, it was determined that firm size, dividend yield, and dividend per share significantly affect price volatility in the Sri Lankan context. Their study’s findings were consistent with the dividend relevance theory.

Oke and Kwame (2021) examined the impact of dividend policy on the volatility of share prices in the Nigerian market. The sample collected covered the years 2016-2020 for seven firms listed on the Nigerian Stock Exchange. They estimated the model using the ordinary least squares (OLS) estimation technique and include variables that controlled for the relationship under investigation such as size and growth. They found that dividend policy affects the share price positively and this highlighted the importance that the investors in Nigeria should invest in companies that pay high dividends since this will increase the share price and lower the volatility of their investments.

Kolosho et al. (2022) studied how the dividend policy of certain businesses listed on the Nigerian Stock Exchange affected share price volatility. Ex-post facto research design and exponential general autoregressive conditional heteroskedastic (EGARCH) were used to quantify volatility. For the panel data, 49 listed companies were randomly chosen from Nigerian Exchange between 2010 and 2020. The study indicated that while financial leverage, dividend yield, and dividend per share had a negative and insignificant impact on share price volatility, the dividend payout ratio had a substantial connection with share price volatility. Their analysis came to the conclusion that dividend policy significantly influences share price volatility.

Kayode et al. (2022) investigated the movement of share prices when the dividend policy is announced in the Nigerian Stock Exchange, for the period of 2011-2020. They applied the GMM and found out that there is a negative impact between dividend payments and the movement of share prices in Nigeria. Also, they highlighted that the larger the company, the larger the movement in its share price since the large demand for its share will affect the share price accordingly.

In addition, Soukotta et al. (2023) examined the factors that affect the share price volatility during the COVID-19 pandemic for the listed firms in the Indonesian Stock Exchange. They concentrated their study on the consumer goods sector and applied the OLS estimation technique to data from 53 companies. The study found that the higher the dividend payment in the Indonesian market, the higher the stability of the share price and, therefore, it reduces the volatility of its share price.

In an interesting study, Grassetti et al. (2023) applied a dynamic framework and checked the impact of dividend policy on the expectations of different investors, specifically, they empirically investigated the interconnections between the financial market and the real economy. They found that the expectations of investors do not affect the stability of the economy, however, it affects the strategy the company might follow throughout the years.
3. METHODOLOGY

3.1. Sample used

To examine the relationship between dividend policy and share price volatility, the relevant information is gathered from the Refinitiv Eikon platform, and any missing data were collected from the published annual financial reports of the firms listed on the different stock exchanges in GCC from 2010 to 2021. This paper managed to collect the variables for 532 non-financial companies listed in GCC. Specifically, 20 companies in Qatar, 19 in Bahrain, 17 in Oman, 21 in the UAE, 32 in Kuwait, and 45 in Saudi Arabia. In total, 152 companies were included in our sample excluding all companies that do not have the data set for all years covered in this study. In addition, as financial institutions have a unique accounting system compared to the rest of the businesses, financial organizations were excluded from our sample.

3.2. Model development

Share price volatility (SPV): This statistical metric captures the variability of stock returns. The degree of fluctuation and uncertainty in projecting changes in stock prices is referred to as price volatility. The stock price could drastically fluctuate in either direction over a short period of time due to the high price volatility, which suggests that shares' values could theoretically be expanded to encompass a wide range of values (Al-Shawawreh, 2014). To measure price volatility, the difference between the highest price and lowest price of the year is divided by the average of the difference, raised to the second power, and then the square root is used to compute the share price volatility for a particular year.

Dividend yield (DY): Dividend yield is one of the main independent factors in this study. This variable is determined by dividing the total cash dividends paid to common shareholders by the market value of each company at the end of the year. Based on the previous literature, several papers argued that the higher the dividend, the more demand for shares since investors tend to invest more in high-return stocks. For example, Jahfer and Mulafara (2016) found that the share price volatility and dividend yield of a firm are significantly positively correlated. This result contradicts Baskin (1989) but agrees with Allen and Rachim (1996) and Hussainey et al. (2011). Therefore, we expect that there is an impact of dividend yield on the share price volatility (H1).

Size (SIZE): The size is measured by using the natural logarithm of the total assets (Hashemijoo et al., 2012; Kengatharan & Ford, 2021). According to Al-Shawawreh (2014), the size of the company showed a very weak positive link with price volatility, indicating that the less volatile the stock price, the bigger the company. Price volatility and stock repurchase have very little association. To determine this variable, a natural logarithm of total assets is used (Seissian et al., 2018). Previous research has revealed that there is a variable link between company size and share price volatility (Kengatharan & Ford, 2021). Business size and share price volatility were found to have a strong inverse association, according to Hashemijoo et al. (2012) and Shah and Noreen (2016). Ahmad et al. (2018) and Al-Shawawreh (2014) discovered a strong positive association. Consequently, this paper expects a negative relationship between firm size and share price volatility (H2).

Leverage (LEV): Leverage that exceeds the permitted level poses a danger to the company and may raise equity price volatility. It can be determined in several ways, but for this study, following Awad et al. (2022), Hashemijoo et al. (2012), and Shah and Noreen (2016), it is determined by dividing total debt by total assets at the end of the year. A study by Ahmad et al. (2018) revealed that leverage has a large favorable effect on share price volatility. On the other hand, Shah and Noreen’s (2016) research found a significant inverse relationship between leverage and share price volatility. As a result, we anticipate that leverage and share price volatility are negatively correlated (H3).

3.3. Research model

To examine the effect of dividend policy on share price volatility in nonfinancial companies listed on the GCC, the model below was created based on the previous section.

\[
SPV = \alpha + \beta_1DY_i + \beta_2\text{SIZE}_i + 
\beta_3\text{GROWTH}_i + \beta_4\text{LEV}_i + \epsilon_i
\]  

(1)

where, \(SPV\) is share price volatility; \(DY\) is dividend yield; \(LEV\) is leverage, and \(\epsilon\) is the error term.

Several estimation techniques were applied based on previous studies to investigate the impact of dividend policy on share price volatility, such as OLS, panel regression (fixed and random effects techniques), and GMM. This paper applies the panel regression (fixed and random effects techniques) and decides which results are favored using the Hausman test following Khalaf (2022).

4. RESULTS AND DISCUSSION

Table 1 shows the descriptive statistics of the variables that are used in this study. The companies listed on GCC have an average share price volatility of 0.7546 and a standard deviation is 0.9455 and varying from 0.2712 to 1.5247, it is in line with the findings of Ahmad et al. (2018), where the companies listed on Amman Stock Exchange
faced 0.8631 volatility in share prices. DY varies from 0.00 to 0.1275 and an average value is 0.0482 with a standard deviation of 0.0571. The standard deviation of SIZE is the highest of 1.4572 which suggest that the deviation is extremely high in GCC region, specifically for non-financial companies.

### Table 1. Descriptive statistics

<table>
<thead>
<tr>
<th>Statistics</th>
<th>SPV</th>
<th>DY</th>
<th>SIZE</th>
<th>GROWTH</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.7546</td>
<td>0.0482</td>
<td>9.5742</td>
<td>0.0105</td>
<td>0.2548</td>
</tr>
<tr>
<td>Median</td>
<td>0.7466</td>
<td>0.0474</td>
<td>9.4285</td>
<td>0.0098</td>
<td>0.2475</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.2712</td>
<td>0.0000</td>
<td>6.4825</td>
<td>-0.4251</td>
<td>0.0000</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.5247</td>
<td>0.1275</td>
<td>12.7548</td>
<td>0.1784</td>
<td>0.3624</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.0455</td>
<td>0.0574</td>
<td>1.4572</td>
<td>0.0845</td>
<td>0.1732</td>
</tr>
</tbody>
</table>

Table 2 indicates that the share price volatility is positively correlated with dividend yield (0.0154). This result is consistent with Allen and Rachim (1996), where the correlation was positive and this indicates that investors react to the dividend payments and tend to buy more shares in order to get higher returns. The above table also indicates that the size is negatively (-0.1654) correlated with share price volatility and is significant at 5%, this result is in line with Hashemijoo et al. (2012). This implies that the larger the company, the lower the stock price volatility. The growth is negatively (-0.0436) correlated with share price volatility, which indicates that high-growth companies tend to have lower volatility in its share price.

### Table 2. Correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>SPV</th>
<th>DY</th>
<th>SIZE</th>
<th>GROWTH</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPV</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DY</td>
<td>0.0154</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.1654*</td>
<td>-0.0864</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.0436</td>
<td>0.0467</td>
<td>-0.0736*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>0.0043*</td>
<td>-0.0754</td>
<td>-0.00467</td>
<td>-0.0134</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: * correlation is significant at 5%.

### Table 3. Fixed effects regression results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DY</td>
<td>-0.046</td>
<td>0.134</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.085*</td>
<td>0.000</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.075</td>
<td>0.241</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.147*</td>
<td>0.010</td>
</tr>
<tr>
<td>Constant</td>
<td>1.043</td>
<td>0.051</td>
</tr>
</tbody>
</table>

F-statistics 1.047 (0.000)
Adjusted R-squared 0.285
Hausman test 12.45* (0.000)

Note: * is the statistical significance levels at 0.01. Dependent variable: SPV.

According to the results presented in Table 3, the model is statistically significant at 1%. The fixed effects results provided in the above table also reveal that there is a negative relationship between dividend yield and share price volatility and is insignificant to GCC firms during the period 2010–2021. Baskin’s (1989) and Allen and Rachim’s (1996) findings showed a negative relation between share price volatility and dividend yield. This implies that companies giving out larger dividends can be viewed as an indication of company stability, which results in investors perceiving lower risk while investing in stocks (Nguyen et al., 2009). Specifically, the investors in the GCC region perceive higher dividend payments as the lower risk faced by the company and this in return reduces the variability in share prices.

In addition, share price volatility and size have a negative relationship (-0.085) and are significant at 1%. This suggests that larger organizations are typically more diversified and smaller companies have much less public information. The negative relation suggests that large companies disclose more information and this in return helps in increasing their transparency and having a well-diversified portfolio. Therefore, it is believed that larger firms will be less risky and have lower share price volatility (Koleoso et al., 2022; Hashemijoo et al., 2012).

Moreover, growth is insignificant to share price volatility and this result is in line with the results of Hussainey et al. (2011). Several papers discussed that a firm’s capital growth rate is likely to be connected with the rate of return and duration impact. As a result, we see that asset growth does not give us any proof of the effects of the rate of return and length (Karlsson & Rentleln, 2021).

In the above table, leverage and share price volatility have a significant negative relation. This implies that volatility in stocks may rise in response to negative information and fall in response to positive information due to the influence of leverage (Zakaria & Muhammad, 2012). Thus, we conclude that the negative relation of leverage with share price volatility indicates that as leverage increases, share price volatility diminishes. This result contradicts the results provided by the studies of Allen and Rachim (1996) and Baskin (1989). The main point that can be suggested based on this result is that higher leverage is considered good news in the GCC since investors assume the availability of positive net present value projects that can affect the performance of companies. This, in turn, affects the demand for non-financial companies’ shares.
5. CONCLUSION
This paper investigates how dividend policies affect share price volatility, concentrating on nonfinancial companies listed on GCC between 2010 and 2021. The impact is tested using the panel regression (fixed and random effects techniques) estimation method. Based on the Hausman test, the fixed effects estimation is favored due to the significance of the test. The model developed investigated the impact of dividend yield as one of the independent variables, which is a proxy to measure dividend policy on share price volatility being the dependent variable and including three control variables such as size, growth, and leverage. Based on the findings, dividend yield, and growth are insignificant to share price volatility; suggesting that whatever dividend policy is adapted in GCC countries, share prices usually do not volatile. Also, whatever growth stage companies in GCC countries face this usually does not affect share prices to vary.

Whereas, size and leverage are significantly negatively affecting the share price volatility. This result suggests that large companies and highly leveraged companies tend to face high share price volatility in GCC. In other words, larger companies tend to have better disclosure (higher transparency level compared to smaller companies) and well-diversified portfolios and this affects the share prices to be less volatile since the risk faced is lower.

In addition, high-leveraged companies are perceived as good news in the GCC region since investors believe that more net present value projects are available and this should enhance the performance and lower their risk.

Lastly, one of the limitations that should be considered is that our results may not be applied to other markets or cannot be generalised since the study has been applied in the GCC region. Another point that should be taken into consideration is the availability of data for the whole years under investigation. More specifically, the data collected from Refinitiv Eikon had some missing entries and the paper could not manage to collect all the missing data for all companies. Therefore, future research might look into collecting the whole years for the variables selected and then the results might be compared to developed markets.

REFERENCES