

The Role of Dividend Policy on Stock Price Volatility: An analysis and Evidence from Pakistan

Masroor Ali*¹ Muzamil Saeed² Muhammad Adeel Khalid³

¹*Lecturer, Department of Business Administration, Sukkur IBA University, Sukkur, Sindh, Pakistan.

²Campus Manager, Virtual University of Pakistan, Campus Ghotki, Sindh, Pakistan.

³Research Analyst, Baker Tilly-Pakistan, Lahore, Punjab, Pakistan.

Corresponding author: masroor@iba-suk.edu.pk

Key Words: Stock Exchange, Panel Data, Dividend Policy, Price Volatility

Article	History
Date of Submission:	
01-06-2023	
Date of Acceptance:	
30-06-2023	
Date of Publication:	
30-06-2023	

DOI No: 10.56976/rjsi.v5i2.106

This study looked at how dividend policies affected the partial in volatility price of firms that are registered on the Pakistan Stock Exchange (PSX). As a result, this research collected information from 15 organizations over 15 years, from 2004 to 2019, for three variables, using a second technique and a quantitative study design. The study's variables included the volatility in terms of price share as the left handed variables and on the right side the ratio of dividend payout, yield of dividend, and DPR. In E-Views software we employed the analysis of regression and correlation techniques. As this paper concluded, the overall impact of policy of dividend with regard to share price volatility was considerable. These factors were important on their own, with DY influencing price volatility in positive impact and DPR having a negative effect. Numerous earlier researches carried out in Pakistan and other places provided additional support for the findings.

1. Introduction

The stock exchange is a fundamental element of the commercial sector, which is a key opportunity for the economy of Pakistan. The share market may function as a significant division for an economy of any nation. For the economy to display, the share market must perform effectively. The progress of Pakistani economy is severely affected by stock market growth. In the long range, well-established share market can lift economic development. This work analyzed the effect of dividend policy and structure of ownership for Vietnam business fields for mutual impact for data sample 2010 t 2018 on rationale results of various econometrics tools (Tran & Le, 2019). Pakistan has three active stock exchanges: Karachi, Islamabad, and Lahore Stock Exchange. The Karachi is the largest of the three stock exchanges, Karachi is enhancing the economy by contributing investment opportunities towards indigenous and external investors. The impact of dividend policy making and pricing in volatility in Dow Jone US index and Islamic US index. In this research the working was done on the basis GMM and regression of quantile. (Suwanhirunkaul and Masih, 2018). Furthermore, according to the research done by Alrjoub and Alrabba (2018), the uncertainty felt by shareholders who possess common shares of the firm is what causes share price volatility. Because investors tend to be risk-averse, share price volatility is a concern for them as a result, which furthers their need to understand their level of exposure. Consequently, the stock market can encourage economic development by aiding as a roadmap for capital development.

In corporate finance, the word "dividend policy" refers to the rules that the firm uses to determine how to distribute its profits to its shareholders. It aids the business in deciding whether to pay shareholders on an annual, semi-annual, or quarterly basis. This study stated that there is important role of concentration in ownership and corporate risk aversion factor for the policy of performance. The evidence was taken from many firms for the real analysis in price market and volatility market (Tran & Le, 2017). Past research has examined good standard and level of research and policy making on the basis of current existing literature for future context on the one side and some other sorts of growth and development in financial context. This analysis told that the stock price volatility in the context of role of dividend policy is a real impact on actual financial crises for economy of Pakistan. The existing economy is not good at multiple financial indicators (Shah & Noreen, 2016). However, additional problems with ownership and control separation and information asymmetry are to blame for dividend policy's popularity in recent research for policy making in the context of above-mentioned concerns. This can be easily analyzed that the financial performance of any economy depends upon the real value analysis for Pakistani market as compare to other competitive markets of the world in current existing context for good and rational decision making. As a result, according to Hussainey et al. (2011), the firm's long-term financial plan includes its dividend policy as a key component. Additionally, it shows the company's financial health since a solid dividend policy promotes the company's image and attracts investors by sending out favourable signals to the business community. For larger corporations, it is regarded

as a contentious choice since it involves balancing short-range, speedy revenues with long-range gains from employee retention (Bhat, 2008). The dividend strategy has caused a number of business issues, including increased volatile share pricing (Okafor & Chijoke-Mgbame, 2011). The term "volatile share pricing" describes the rises or falls in stock values that impact the shareholders.

Stock price volatility, contrasted with is the organized risk that financiers who hold common stocks faced (Guo, 2002). Stockholders are risk averse obviously, thus the volatility of holding assets is crucial to them since it indicates how much risk they are exposed to (Hussainey et al., 2011). In comparison to advanced markets in world, the Pakistan financial and commercial Market, which is an under developed grounds, is unmoving showing definite structures of an backward market and having no appropriate market rules and regulations. Due to the market risk aversion and unexpected volatile nature, that may have a stimulus on sharing and pricing of particular firm, investors in such way of market intensity on the basis of specific share. It indicated to all the stakeholders about market fluctuation. However, researchers are consistent to discuss either dividend policy effects stock pricing or volatile nature that is always obscuring the connection between dividend observes and ordinary market volatility. Accordingly, the purpose of this research was to prove a connection amongst the policy of dividend and volatility pricing in the context of the context of different parts of Pakistan Stock Exchange. The analysis assumption is connected to basic the theoretical approach employed by other assessed markets (such as Baskin, 1989; Allen & Rachim, 1996; Hussainey et al., 2011), yet it differs in different marketing patterns of economy, businesses, periods and duration of the research. So that, in order to determine whether companies' dividend policies have an impact on changes in their stock prices, the Pakistan Stock Exchange in Pakistani market used various tools and techniques related to statistics and econometrics for the analysis of time series and cross sectional collectively panel data.

The assessment of different Pakistani markets found that paying out high dividends to stockholders lowers the risk to stock prices. While some research has claimed dividend policies have little effect on volatility of share strategy, it has been contended by a variety of study types that the policy values of dividend variables have an important effect on sharing and pricing on the basis of volatile terms. On the similar vein, Hashemijoo et al. (2012) analysis found no connection among share price volatility and the dividend procedure. Contrarily, the Ramadan (2013) assessment showed that it is a major relationship for policy of dividend and volatility's standard pricing. Consequently, it occurs problematic to determine either the dividend's strategy has a significant impact on the volatility price of stock that is why this analysis is carried out. Analysis for effect of division rule in the volatile pricing pattern of stock for Pakistani firms enlisted on the PSX (Pakistan Stock Exchange) is the study's main goal.

The purpose of this study is that we wanted to analyze the role of dividend policy on stock price volatility for the economy of Pakistan. This research is to investigate how dividend policies

affect the share price volatility of Pakistani companies listed on the PSX, or Pakistan Stock Exchange. However, there were certain obvious factors, such as time constraints, budgetary restrictions, and a lack of resources, that made it challenging to widen the study's scope. This piece of study serves as a clear directive for the creation of new regulations related to the subject at hand.

Following are the research question of the study.

1. To understand volatility's share price and the policy of dividend in Pakistan Stock exchange.
2. To research the factors that determine the policy of dividend and how it impacts share price volatility.
3. To examine how Pakistani firms listed on PSX's are connected to dividend policy effects and share pricing pattern.

2. Literature Review

In terms to understand the notions of the policy of dividend and prices of share in the line of volatility, this chapter reviews earlier works in which the research that had already been conducted had been critically examined. Additionally, the literature study identifies key aspects of the policy of dividend that influence volatility of the prices of shares. Overall, it was aided the scholar in reaching the study's goals and targets, like better consideration with reference to volatility for sharing and pricing and the policy dividend. Moreover, it has aided the examiner in the creation of literature for the policy of division and volatile structure of share price effect and also have viewed at in what ways the dividend policies affect volatility on the prices of shares, However the majority in terms of advanced study was conducted about the companies in established markets like the America.

2.1 Concept of Dividend Policy

This work analyzed the effect of dividend policy and structure of ownership for Vietnam business fields for mutual impact for data sample 2010 t 2018 on rationale results of various econometrics tools (Tran & Le, 2019). The impact of dividend policy making and pricing in volatility in Dow Jone US index and Islamic US index. In this research the working was done on the basis GMM and regression of quantile. (Suwanhirunkaul & Masih, 2018). This study stated that there is important role of concentration in ownership and corporate risk aversion factor for the policy of performance. The evidence was taken from many firms for the real analysis in price market and volatility market (Tran & Le, 2017). This analysis told that the stock price volatility in the context of role of dividend policy is a real impact on actual financial crises for economy of Pakistan. The existing economy is not good at multiple financial indicators (Shah & Noreen, 2016).

This is a real fact for initial policy making for the context of existing reviews and ratings of different financial, social and commercial markets of existing and future reviews of literature in the real sense.

2.2 Concept Of Share/Stock Price Volatility

The effect regarding the policy of dividend on the volatile nature of 2344 US general stocks from 1967 to 1986 is examined by Baskin (1989). His research demonstrates an enormous and specific indirect association for dividend yields and volatility of normal price, suggesting this policy of dividend may have an impact on volatility. In their study Allen and Rachim (1996) looked at 173 Australian listed companies' policies of dividend and volatility of stock price from 1972 to 1985. According to their research, no connection is found in respect to dividend yield and volatility in price share. Additionally, examiners discovered that volatility in price share had a negative association with the pay-out ratio but a positive link with earnings volatility. Since the data shows mixed causation, their results suggest that policy of dividend did not obviously affect stock market volatility. This is contrary to Baskin's (1989) findings.

2.3 Determinants of Dividend Policy

In their study, Hussainey et al. (2011) look at the connection for policy of dividend and changes in non-financial company share prices on the UK stock market between 1998 and 2007. Their research reveals a direct correlation in context to volatility of stock price and yield of dividend, but an adverse correlation for volatility of pricing of share and dividend-pay-out percentage. Their conclusions agree with those of Allen and Rachim (1996) but differ from those of Baskin (1989) in terms of the association between payout ratio and volatile patterns in market value of availability of stock.

Profilet and Bacon (2013) investigate in what ways 487 firms' volatility of stock price replaced for the years 2010 to 2012 in relation to respective policies of dividend. The results of their OLS regression study revealed a negative association to yield dividend and volatility of stock price, but a positive and negligible association towards volatility of stock price and dividend disbursement. Additionally, several researches were conducted in developing markets. The link towards policy of division and volatile patterns of stock pricing in the Malaysian stock market is examined by Hashemijoo et al., (2012) as well as Zakaria et al., (2012) in separate research. volatility of stock price has a opposite association with the metrics of policy of dividends (i.e., dividend pay-out and dividend yield), according to Hashemijoo et al. (2012) who focused on looking at a portion of 77 enlisted consumer goods businesses during the years 2005 to 2010. In contrast, Zakaria et al. (2012) focused over analyzing a share of 101 enlisted construction and natural resource companies for the years 2005 to 2010 and discovered a weak negative correlation towards yield of dividend and volatility of stock price of the firms however a positive connection towards dividend pay-out ratio and volatility of stock price. Hooi et al. (2015) also studied a portion of 216 firms of the

European stock exchange with a focus on the few established markets. They discovered a link towards yield of dividend and dividend disbursements and volatility of stock price.

2.4 Impact of Dividend Policy

With a portion of 66 firms and data spanning the years 2003 to 2008, Nazir et al. (2010) investigated an influence of policy of dividend in predicting the volatility of stock price on Pakistan's Karachi Stock Exchange (KSE). They discovered that whereas dividend pay-out ratio having an adverse link with volatility of stock price, yield of dividend having a direct connection. Focusing on the Nigerian stock market are Ilaboya and Aggreh (2013) and Sulaiman and Migiro (2015). Ilaboya and Aggreh (2013) study, during the years 2004 to 2011, the policy of dividend and volatility of stock price of 33 firms from various industries registered on the Nigerian Stock Exchange. They discovered a correlation towards yield of dividend and volatility of stock price, however, not for dividend pay-out and volatility, which is a negative correlation. From 2003 to 2012, 15 companies in the Nigerian stock market are examined by Sulaiman and Migiro (2015). Their findings demonstrate a strong positive link between changes in share price and incomes on each stock and dividends on each stock. Ramadan (2013) and AlQudah and Yusuf (2015) looked at the policy of dividend and volatility of stock price in the Jordanian share market in different studies. When 66 commercial corporations solicited on the Pakistan Stock Exchange were examined for 2000 to 2011, Ramadan (2013) discovered those yield of dividend and dividend disbursement had a important indirect impact on volatility of stock price, indicating that policy regarding dividend had an effect on volatility of stock price. AlQudah and Yusuf (2015) examined businesses recorded on the Pakistan Stock Exchange from 2001 to 2013 and discovered that yield on dividend and dividend disbursement mainly reduces volatility of stock price.

2.5 Impact of Volatility Terms

Different analysts have proven that policy on dividend had an influence on volatility of stock price in the Jordanian share market at the time they were doing their research. The goal of the current study is to offer fresh evidence of the effect of policy of dividend on volatility of stock price by focusing on all the firms listed on the Amman Stock Exchange from 2010 to 2016. Dividend policy is a financial strategy used by the organization to determine the quantity and timing of dividend payments, according to research by Kandpal and Kavidayal (2014). It is an important facet of corporate finance that significantly affects the firm's worth as well as the wealth of the shareholders. There are two sorts of dividend policies: controlled dividend policies and residual dividend policies. The dividends given on earnings following the use of net present value to make appealing investments are referred to as residual dividends. According to Ozuomba et al. (2016), the sustained policy on dividend helps the management set the dividend disbursement on the basis of specific size of profits and financing. Additionally, the research by Anvarkhatibi, Safashur, and Jamal (2012) suggests that a policy on dividend might be designed that is supported by the company's investors. According to Mamtha and Srinivasan's (2016) study, share price

volatility is defined as the fluctuation of share prices that either reduces or rises. The topic of share price volatility has received a lot of focus from analyzers and analysts since it is crucial for investors to comprehend it. The primary goal of an investor engaging in the stock market is to increase return, even if there are many dangers involved. The return on investment for investors increases as share price volatility rises.

Additionally, it has been recommended that investors be aware of the variables that lead to stock market volatility. The dividend policy is very important from the potent elements that have been discovered in creating volatility of stock price on the Karachi Stock Exchange (KSE), according to the study by Nazi et al. (2010). According to Oladipupo and Okafor's (2013) study, the dividend disbursement proportion is utilized to calculate the entire sum of dividend which must be paid towards shareholders in relation of the company's earnings. Retained profits are earnings that are not distributed to shareholders and are either applied to debt repayment or invested in additional business ventures. According to Gill et al. (2010) study, a list of numerous elements that affect the dividend payout ratio, include company profitability, taxes, growing value of sales, flow of cash, the obligation to equity ratio, and marketplace to recorded value. The dividend pay ratio is a component of the policy of dividend which have a significant impact on the volatility of stock price, as per the research by Nazir et al. (2010).

2.6 The Concept of Dividend Yield Ratio

The dividend yield ratio, according to research by Harris et al. (2015), is a component of the financial ratio that establishes the amount of dividend that a firm will pay every year depending on the stock price or market price of the share. Furthermore, in the view of Elton and Gruber (2011), businesses with small dividend yields tend to keep more of their earnings and income in spite of disbursing their shareholders, while businesses with great dividend yields will reduce their retained earnings while increasing their disbursements to shareholders, which will eventually draw in number of financiers. The influence and link towards the policy of dividend and volatility of stock price have been the subject of several studies and researches. The findings of the Habib et al. (2012) study showed that the dividend policy has a favourable and specific influence on stock price volatility. The dividend payout ratio and dividend yield are the variables that make up the dividend policy. Similar to this, Imran's (2011) study revealed that there are a number of ways that policy on dividend affects volatility of stock price, since it plays a crucial part in the principal arrangement of the company and signals stability and growth to investors.

2.7 Dividend Yield and Pay Out Ratio

Furthermore, the effects have been judged to be considerable over the organizations registered on the Pakistan Stock Market in bright of the learning undertaken by Al-Shawawreh (2014). Multiple linear regression using the variables yield and pay-out was the method they used. Additionally, the empirical investigation showed that yield has a modest but positive impact on volatility whereas pay-out has a small but negative impact. The work gracefully done by Nishat &

Irfan (2004) on Pakistani firms discovered a considerable impact of dividend policy on share price volatility. Additionally, Lashgari and Ahmadi (2014) studied the Tehran Stock Exchange and discovered a strong relationship, but a negative DPR. They utilized a multivariable regression approach with panel data and the Parkinson formula to calculate the volatility of the shares. The report went on to state that since volatility is a risk that cannot be managed, investors should plan ahead for it while making their investments. However, the study employed various control factors, such as asset growth rate or firm size, to analyze if the relationship or influence improves or not, and discovered a substantial link along with the effect on the volatility.

According to research done by Zakaria, Muhammad, and Zulkifli (2012) on the Malaysian stock exchange, the impact was appeared to be pertinent and important, but assessment also used some controlled factors, wherever the development of the investment and the volatility of earnings were calculated to be insignificant. In the case of Malaysian enterprises, the key predictor DY also seemed to be unimportant.

As a result, it appears that this study conflicts with previous investigations. In separate research on LSE businesses, Hussainey et al. (2011) used comparable variables including DPR, DY, and volatility as well as other control factors like asset growth and size. In this study, the empirical analysis showed that the results were significant. According to the research, the influence of policies related to dividends of various corporations has thus far proven to be considerable, having an impact on the volatility of stock price.

2.8 Econometric Model

$$\text{Price volatility} = \alpha + \beta_1 \text{DPR}_{it} + \beta_2 \text{DY}_{it} + \epsilon_{it}$$

Dividend payout ratio (DPR) and dividend yield (DY) are the two variables employed in the equation. Furthermore, the regression equation's intercept term and standard error are and, correspondingly. The regression model's coefficients 1 and 2 are also included. The researcher has established the following hypotheses to attain the objective at a 5% significance level because this study is empirical;

H0: The effect of dividend policy on share price volatility is insignificant

H1: DPR strongly affects share price volatility

H2: DY has a major impact on share price volatility.

3. Methodology

This part of the research article has explained the empirical framework used to derive results. The numerical results have been taken from different registered fifteen companies which are enlisted the record of Pakistan Stock Exchange (PSX). The study was done on Pakistani firms listed on Pakistan Stock Exchange (PSX) to see how dividend policy affected share price volatility. First, because of the variables used and to preserve the integrity of the numerical data, the study's

research design is quantitative. The use of numerical data, on the other hand, is inculcating positivism in this study, which is contrary to several other research a philosophy because positivism philosophy emphasizes objectivity and factual facts. Additionally, there are two major and secondary techniques for gathering data (Mohajan, 2017). The secondary information was gathered from reliable websites, such as Morningstar and investing in Pakistani businesses. Due to the restricted availability of data from some sources, data for 15 years, from 2004 to 2019, of 15 distinct Pakistani firms listed on the PSX, have been gathered. Deductive and inductive research methodologies are the two that are currently recognized (Soiferman, 2010). The hypothesis development for this study was based on the variables of dividend payout ratio (DPR), dividend yield (DY), and share price volatility, and as a result, the research is deductive in nature. Therefore, the method of inquiry is chosen to be explanatory owing to hypothesis development and variable explanation. However, another predictor of this study is the DPR that has been gathered from the websites listed before in this section. The method of data analysis adopted reflects the primary objective of the study, which is to evaluate the impact of policy of dividend on price volatility. Therefore, multiple linear regression, which is used to evaluate the linear dependency of predictors on the prediction and of the research (Gorard, 2012), is the most suitable approach. However, the correlation has been used to support this analysis.

4. Results and Discussion

The results of the correlation and regression tests performed on E-Views are shown and discussed in the next section. Here in the findings and analysis area, the results assessment has been carefully segmented. Additionally, this part has provided the discussion of the results in respect to earlier investigations. Additionally, the researcher has talked about how the study's research goals were met in this part.

In this section the research relevant to this research paper and also the relevance of past papers concluded on different parts of regions of world are added. In addition to this, it is also shown that the paper properly tried to express the concerned goals of this study. If we touch the studies of Tran and Le (2019), Suwanhirunkul, and Masih (2018), Tran and Le (2017) and Shah and Noreen (2016) which were conducted previously are relatively connected to same direction of existing variables.

4.1 Correlation Analysis

The under given table boons the findings of correlation assessment in thorough way together with a detailed consideration about every fact. The following information depicts correlation of the calculated financial variables.

Table 1: Correlation Analysis

	DPR	DY	Price Volatility
DPR	1		-0.088
DY	0.533	1	0.428
Price Volatility	-0.099	0.388	1

Correlation analysis is used, according to research by Gogtay & Thatte (2017), to examine the strength of linkages and relationships between the variables. The results of the study vary from -1 to +1, with -1 denoting a strongly negative correlation between two variables and +1 denoting a highly positive relationship between two variables moving in the same direction. This means that while the value itself shows the volume of link, the sign represents the direction. The correlation between the variables DPR and DY is 0.533, indicating that they are directly and discretely associated. According to this, the dividend payout ratio will rise if the dividend yield does.

Furthermore, the estimator's DPR has a -0.099 correlation with price volatility, which demonstrates that increasing DPR will have an impact on price volatility in a way that is directly related to average magnitude. According to this trend, the share price volatility will increase as the dividend yield of Pakistani companies rises.

5. Conclusion and Policy Recommendations

The goal of the research, which has been successfully completed, had to examine the impact of dividend policies on volatility of share price of Pakistani businesses registered on the PSX or Pakistan Stock Exchange. However, there were certain obvious factors that made it difficult to broaden the study's scope in terms of time, financial constraints, lack of availability of resources. This piece of research work is a strict indication for the development of new policies in the context of said topic. The researcher's time was constrained by the scant availability of data on Pakistani businesses. As a result, the research's sample size could not be increased to obtain a more comprehensive view because of certain direct and indirect restrictions. This analysis can thus be enhanced in the future by including more firms or years in existing pool of research for new corners to new researchers. It can easily be concluded that this is a valid indication for new entrants in the scope of existing research. The study may be improved by include more independent factors or controlled variables, such as the scope of the business or various potential factors, Moreover, the segmentations of firms and periods. The work can be done with more addition on the basis of direct or indirect research either on the basis of cause or effect. In the upcoming course of analysis, the researcher could do a comparative study of Pakistan with other nations that are permitted to developing or developed to evaluate variations in the policy dividend phenomenon. This demonstrates that there is space for improvement in this study going forward. In addition, it may be tailored to a particular sector to provide policymakers at corporations a clearer perspective and reduce volatility so they can earn a higher return. The decision-makers can then decide whether to adopt a conservative or progressive dividend policy in an appropriate manner. In conclusion, Pakistani businesses may select a growth plan that suits their needs and helps them generate profits, which in turn can raise dividends and give the business stability while lowering systematic risk and volatility.

6. References

- Ahmad, Z., Khan, A. A., & Tariq, A. (2012). Stock market development and economic growth: A comparative study of Pakistan and Bangladesh. *African Journal of Business Management*, 6(8), 2985.
- Allen, D.E. & Rachim, V.S. (1996). Dividend policy and stock price volatility: Australian evidence. *Applied Financial Economics*, 6(2), 175-188.
- Al-Malkawi, H.N. (2007). Determinants of corporate dividend policy in Jordan: An application of the Tobit model. *Journal of Applied Accounting Research*, 23, 44-70.
- Al-Najjar, B. & Hussainey, K. (2009). The association between dividend pay-out and outside directorships. *Journal of Applied Accounting Research*, 10, 4-19.
- AlQudah, A., Yusuf, D. & El-Deen, A.N. (2015). Stock Price Volatility and Dividend Policy in Jordanian Firms. *Research Journal of Finance and Accounting*, 6(22), 15-22.
- Alrjoub, A. M. S., & Alrabba, H. M. (2018). The Effect Of Dividend Policy On Stock Price Volatility: Empirical Evidence From Amman Stock Exchange. *Academy of Accounting and Financial Studies Journal*, 22(2), 23-45.
- Al-Shawawreh, F. K. (2014). The Impact of Dividend Policy on Share Price Volatility: Empirical Anvarkhatibi, S., Safashur, M. and Mohammadi, J., 2012. The effect of auditors' opinions on shares prices and returns in the Tehran stock exchange. *Research Journal of Management Sciences*, 1(1), 23-27.
- Asghar, M., Shah, S.Z.A., Hamid, K. & Suleman, M.T. (2011). Impact of dividend policy on stock price risk: Empirical evidence from equity market of Pakistan. *Far East Journal of Psychology and Business*, 4(1), 45-52.
- Baskin, J. (1989). Dividend policy and the volatility of common stock. *Journal of Portfolio Management*, 15, 19-25.
- Bhat, S. (2008). *Financial management: Principles and practice*. Excel Books India.
- Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*, 2, 5-8.
- Bloomberg. (2015). What's Next For Asia's Best-Performing Stock Market?
- Caporale, G. M., Howells, P. G., & Soliman, A. M. (2004). Stock market development and economic growth: the causal linkage. *Journal of economic development*, 29(1), 33-50.
- Catherine, S.F., (2011). Domestic Macroeconomic Fundamentals and World Stock Market Effects on ASEAN Emerging. *Int. Journal of Economics and Management* 5(1), 42-62.
- DeAngelo, H., DeAngelo, L. & Skinner, D.J. (1996). Reversal of fortune: Dividend policy and the disappearance of sustained earnings growth, *Journal of Financial Economics*, 40(3), 341-371.
- El-Nader, H. M., & Alraimony, A. D. (2012). The impact of macroeconomic factors on Amman stock market returns. *International Journal of Economics and Finance*, 4(12), 202-213.
- Elton, E. J., & Gruber, M. J. (2011). Marginal stockholder tax rates and the clientele effect. In *Investments and portfolio performance* (pp. 3-9).

- Evidence from Jordanian Stock Market. *European Journal of Business and Management*, 6(38), 133-143.
- Ezeabasili, V. N. & Alajekwe. (2012). Stock Market Liquidity and Economic Growth. *Economic Journal of A 2 Z*, 1(2), 25-39.
- Gogtay, N. J., & Thatte, U. M. (2017). Principles of Correlation Analysis. *The Journal of the Association of Physicians of India*, 65(3), 78-92.
- Gorard, S. (2012). Multiple linear regression. *Research methods and methodology in education*, 348-355.
- Hair, J.F., Black, B., Babin, B., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate data analysis. Baski. Upper Saddle River, NJ: Pearson Prentice Hall*. (Vol. 6)
- Harris, L.E., Hartzmark, S.M. and Solomon, D.H., 2015. Juicing the dividend yield: Mutual funds and the demand for dividends. *Journal of Financial Economics*, 116(3), 433-451.
- Hashemijoo, M., Mahdavi Ardekani, A., & Younesi, N. (2012). The impact of dividend policy on share price volatility in the Malaysian stock market. *Journal of business studies quarterly*, 4(1), 22-39.
- Hashemijoo, M., Mahdavi Ardekani, A., & Younesi, N. (2012). The impact of dividend policy on share price volatility in the Malaysian stock market. *Journal of business studies quarterly*, 4(1), 45-59.
- Hooi, S.E., Albaity, M. & Ibrahimy, A.I. (2015). Dividend policy and share price volatility. *Investment Management and Financial Innovations*, 12(1), 226-234.
- Hussainey, K., Oscar Mgbame, C. and Chijoke-Mgbame, A.M., 2011. Dividend policy and share price volatility: UK evidence. *The Journal of risk finance*, 12(1), 57-68.
- Ilaboya, O. J., & Aggreh, M. (2013). Dividend policy and share price volatility. *Journal of Asian Development*. 3(10), 273-289.
- Imran, K. (2011). Determinants of dividend payout policy: A case of Pakistan engineering sector. *The Romanian Economic Journal*, 41(14), 47-59.
- Jo, H. & Pan, C. (2009). Why are firms with entrenched managers more likely to pay dividends? *Review of Accounting & Finance*, 8(1), 87-116.
- Kanasro, H. A., Junejo, M. A., & Junejo, M. A. (2011). Analyzing the stock markets role as a source of capital formation in Pakistan. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 5(2), 273-282.
- Kandpal, V., & Kavidayal, P. C. (2015). A Study Of Dividend Policy And Its Effect On Market Value Of Shares Of Selected Banks In India. *IOSR Journal of Business and Management (IOSR-JBM)*, e-ISSN, 41-44.
- Lashgari, Z., & Ahmadi, M. (2014). The impact of dividend policy on stock price volatility in the Tehran stock exchange. Kuwait Chapter of the Arabian, *Journal of Business and Management Review*, 3(10), 273.
- Mamtha, D. and Srinivasan, K.S., 2016. Stock Market Volatility–Conceptual Perspective through Literature Survey. *Mediterranean Journal of Social Sciences*, 7(1), 208-223.

- Marseguerra, G. (1998). *Dividend policy and stock price volatility*. In Corporate Financial Decisions and Market Value (41-65). Physica-Verlag HD.
- Miller, M.H. & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares. *The Journal of Business*, 34, 411-433.
- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of economic development, environment and people*, 7(1), 23-48.
- Nazir, M. S., Nawaz, M. M., Anwar, W., & Ahmed, F. (2010). Determinants of stock price volatility in Karachi stock exchange: The mediating role of corporate dividend policy. *International Research Journal of Finance and Economics*, 55(55), 100-107
- Nazir, M.S., Nawaz, M.M., Anwar, W. and Ahmed, F., 2010. Determinants of stock price volatility in Karachi stock exchange: The mediating role of corporate dividend policy. *International Research Journal of Finance and Economics*, 55(55), 100-107.
- Nigeria. *Joined*, 9(1), 202-210.
- Nishat, M., & Irfan, C. M. (2004, June). Dividend policy and stock price volatility in Pakistan. In *Pide-19th annual general meeting and conference* (pp. 13-15).
- Okafor, C.A. and Chijoke-Mgbame, A.M., 2011. Dividend policy and share price volatility in Oladipupo, A.O. and Okafor, C.A., 2013. Relative contribution of working capital management to corporate profitability and dividend payout ratio: Evidence from Nigeria. *International Journal of Business and Finance Research*, 3(2), 11-20.
- Omran, M., & Pointon, J. (2001). Does the inflation rate affect the performance of the stock market? The case of Egypt. *Emerging markets review*, 2(3), 263-279.
- Ozuomba, C.N., Anichebe, A.S. and Okoye, P.V.C., 2016. The effect of dividend policies on wealth maximization—a study of some selected plcs. *Cogent Business & Management*, 3(1), .1226457.
- Phan T.K.H., & Tran, N.H., (2019) Dividend policy and stock price volatility in an emerging market: Does ownership structure matter? *Cogent Economics & Finance*, 7(1), 1637051, DOI: 10.1080/23322039.2019.1637051
- Proffitt, K.A. & Bacon, F.W. (2013). Dividend policy and stock price volatility in the US equity capital market. *ASBBS Proceedings*, 20(1), 219.
- Rahman M. M., & Salahuddin M., (2010). The determinants of economic growth in Pakistan: Does stock market play a major role, *Economic issue*, 15(2),95-109.
- Ramadan, I. Z. (2013). Dividend policy and price volatility. Empirical evidence from Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(2), 15-22.
- Ramadan, I.Z. (2013). Dividend policy and price volatility. Empirical evidence from Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(2), 15-22.
- Rashid, A. & Rahman, A.A. (2008). Dividend policy and stock price volatility: Evidence from Bangladesh. *The Journal of Applied Business and Economics*, 8(4), 71-91.



- Schwert, G. W. (1989). Why does stock market volatility change over time?. *The journal of finance*, 44(5), 1115-1153.
- Shah, S. A., & Noreen, U. (2016). Stock price volatility and role of dividend policy: Empirical evidence from Pakistan. *International Journal of Economics and Financial Issues*, 6(2), 461–472.
- Shiller, R. J. (1987). Investor behavior in the October 1987 stock market crash: Survey evidence.
- Soiferman, L. K. (2010). Compare and Contrast Inductive and Deductive Research Approaches. Online Submission.
- Sulaiman, L.A. & Migiro, S.O. (2015). Effect of dividend decision on stock price changes: Further Nigerian evidence. *Investment Management and Financial Innovations*, 12(1), 330-337.
- Suwanhirunkul, P., & Masih, M. (2018). Effect of dividend policy on stock price volatility in the Dow Jones US index and the Dow Jones Islamic US index: Evidences from GMM and quantile regression. MPRA Paper 93543, University Library of Munich, Germany
- Tran, N. H., & Le, D. C. (2017). Ownership concentration, corporate risk-taking and performance: Evidence from Vietnamese listed firms. Retrieved from <https://ssrn.com/abstract=3030405>
- Wuyts, G. (2007). Stock market liquidity: determinants and implications. *Review of Business and Economics*, (2), 279-316.
- Yartey, A.C. (2008), The determentnts of stock market development in emerging economies: is South African differnt?, IMF Working Paper No. 08/32.
- Zafar, M. (2013). Determinants of stock market performance in Pakistan. *Interdisciplinary journal of contemporary research in business*, 4(9), 1017-1026.
- Zakaria, Z., Muhammad, J., & Zulkifli, A. H. (2012). The impact of dividend policy on the share price volatility: Malaysian construction and material companies. *International Journal of Economics and Management Sciences*, 2(5), 1-8.