Dividend Policy and Stock Price Volatility: A Study on Indonesian Manufacturing Companies

Rizkia Duwi Putri ✉ , Vitradesie Noekent, Siti Ridloah, Achmad Nauval Waliuddin

Department of Management, Faculty of Economics, Universitas Negeri Semarang, Semarang, Indonesia

Abstract

The purpose of this study was to examine and analyze the effect of dividend policy on stock price volatility in manufacturing companies listed on Indonesia Stock Exchange from 2019-2020. This study also examines other factors that ar thought to have an effect on dividend policy and stock price volatility, such as: firm size, earning voolatility, and leverage. This research method uses a quantitative approach, using secondary data derived from the company's annual financial report. Purposive sampling method uses in this study. The sample used was 62 companies with a total of 124 observations. This study use multiple regression method. SPSS 16 is an analytical tool used in this study. The empirical findings of this study indicate that dividend policy has a negative effect on stock price volatility. If the dividends paid increases, the possibility of stock price volatility will decrease. The control variable of firm size dan leverage have no effect on stock price volatility. Furthermore, it is also found that there is a positive influence between the control variable of earning volatility and stock price volatility.

INTRODUCTION

There are several financial instruments traded in the capital market and one of the most popular is stocks (Rusiana & Kusumawati, 2019). Shares are evidence of a person's or business entity's investment in a company. One of the stocks that is considered to have a fairly good performance is the stock in the manufacturing industry sector (Winardi et al., 2017). According to the Central Statistics Agency (BPS) in 2019, the manufacturing sector was able to make a large contribution to increasing GDP. This is evidenced by the manufacturing sector is able to increase the value of GDP by 20.38% (Muslimah & Syarief, 2020).

Since the Covid-19 virus began to spread, causing the economy to experience a decline (Khatib & Nour, 2021). In addition, the CO-VID-19 pandemic has also had an impact on the stock market and other industrial sectors, inclu-

ding the manufacturing industry (Ashraf, 2020). Before the COVID-19 pandemic entered Indonesia, the utilization of manufacturing companies could reach 72.69% (Anwar, 2020). After the COVID-19 pandemic began to enter Indonesia, the utilization of manufacturing companies decreased, and in October 2020 it increased again to 55.30% (Anwar, 2020). The existence of these events prompted the Minister of Industry to take steps to transform the manufacturing sector so that the sustainability of the manufacturing sector can continue to run and avoid volatility. The transformation step is carried out, using all existing capabilities (Silviani & Noekent, 2020).

An investor in carrying out investment activities will pay attention to risk factors and return of profits (Setiawan & Wijayanto, 2017). In the context of stock investment, the profit that will be received by the owner of the fund is capital gains and dividends distributed according to the size of

© 2022 Universitas Negeri Semarang

the share ownership (Cahyaningdyah & Ressany, 2012). In addition to obtaining a return on profits, investors have the right to obtain information about the company's growth and the company's dividend policy (Khoiruddin & Faizati, 2014). Information about dividend policy is considered important because it can be used to predict the rate of return on profits (Noekent, 2018) and can indirectly affect stock prices (Clarensia et al., 2010).

Information about stock prices can be used by investors as a basis for making decisions when making investments, because it can describe the value of the company (Theresia & Arilyn, 2015). If the demand for shares increases, the share price will increase. Conversely, if investors trade stocks, the stock price will decrease (Ardiansyah & Isbanah, 2017). In this case, the fluctuations in stock prices that occur are referred to as volatility (Anastassia & Firnanti, 2014).

According to Hashemijoo et al., (2012) stock price volatility (VHS) serves as the basis for measuring risk. In addition, VHS can be a guide in taking steps to be used when making investments (Dewi & Suaryana, 2016). Fluctuations in stock prices indicate uncertainty, if the VHS is high, the return that will be received is increasingly uncertain (Ardiansyah & Isbanah, 2017). In addition, if a stock is said to be volatile, the company will have difficulty predicting the company's share price in the future (Profilet & Bacon, 2013). This can cause companies to experience difficulties in increasing their capital in the capital market (Kartika, 2016). One aspect that can affect stock price volatility (VHS) is dividend policy (KD) (Selpiana & Badjra, 2018). Dividend policy is a policy related to the distribution of profits as dividends or withholding these profits as retained earnings (Hussainey *et al.,* 2011). Retained earnings are the accumulated income earned by a company after deducting dividends (Kepramareni et al., 2021). Information about dividend policy can attract investors to invest in the company so that the demand for shares will increase (Selpiana & Badjra, 2018). If the dividend paid increases, then the investment risk of the owner of the fund in the event of stock price volatility will decrease (Selpiana & Badjra, 2018).

For a manager, information about KD can be used to find out the risk of shares that will be faced and the benefits that will be received on the portfolio owned by investors (Anwar *et al.,* 2015) the study has examined the effect of cash dividend announcements on stock returns (abnormal returns, if any KD can affect stock price volatility (VHS) because dividends will be a signal for investors (Yudiana & Yadnyana, 2016). In this study,

the KD variable was calculated using the dividend yield (DY) indicator. DY is a financial ratio that reflects the amount of return on profit that will be obtained in line with the proportion of shares owned by investors (Khurniaji & Raharja, 2013). If the value of dividends paid increases, then there is an indication that in the future the company will generate profits (Andiani & Gayatri, 2018) and the stock price will go up (Erfiana & Ardiansari, 2016). The purpose of this study was to elaborate the effect of dividend policy on stock price volatility in manufacturing companies listed on Indonesia Stock Exchange from 2019-2020. The research novelty is discover dividend policy on stock price volatility in manufacturing companies.

Hypothesis Development

Based on the behavior of investors who need information related to the company's prospects for investment purposes, the use of signal theory is very necessary (Harlina & Khoiruddin, 2018). A signal given by the company to investors is called a signal (Gumanti, 2009). Therefore, the given signal must contain an information (Gumanti, 2009).

According to Hashemijoo et al. (2012) sig-*naling theory* can be used to provide information to external parties related to the level of company profitability in the future. Therefore, the signal given needs to indicate that the company has good prospects or vice versa, that is, it has bad prospects (Gumanti, 2009). Information submitted by the company will get different reactions from investors (Dewi & Suaryana, 2016). The background for delivering this information is the information gap between management and stakeholders (Rokhlinasari, 2016).

The gap is a condition where the information held by a manager is more complete than that of investors (Gumanti, 2009). The occurrence of information asymmetry can generate uncertainty in ongoing transaction activities in a market and can indirectly cause market failure (Arkelof, 1970). So in this case giving a positive signal is needed to reduce the information gap (Gumanti, 2009). An information submitted by the company can be sourced from the value of dividends distributed by the company to investors (Bhattacharya, 1997) and can indirectly affect stock price movements (Rock & Miller, 1985). Theresia and Arilyn (2015) and Prasetyo (2013) states that if a company's dividend increases, it will be a signal for the owners of capital that in the future the company will have good prospects. On the other hand, if a company's dividend decreases, it will be a signal for investors that the company will experience difficulties in the future.

Furthermore, stock price volatility occurs due to the entry of new information in the capital market (Dewi & Suaryana, 2016). The occurrence of stock price volatility is considered a risk by investors, this is because the greater the volatility, the greater the possibility of substantial gains or losses (Profilet & Bacon, 2013). If the dividend paid increases, the profitability ratio will strengthen and the possibility of stock price volatility will decrease so that the risk of investors in investing will be reduced. On the other hand, if the dividends paid are less, the profitability ratio will weaken and the possibility of stock price volatility will increase, so that the risk of investors in investing will increase (Selpiana & Badjra, 2018).
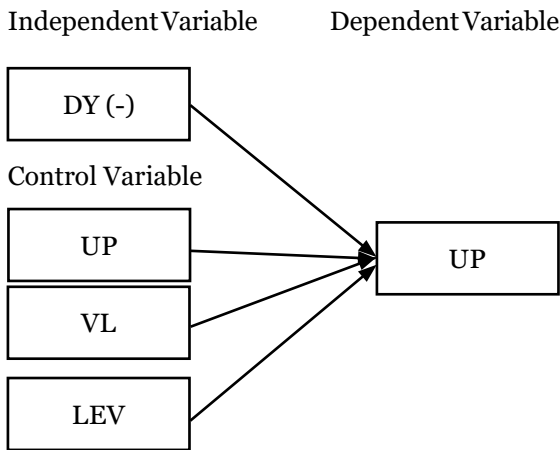H1: KD as measured by the DY indicator has a negative correlation with VHS.

Independent Variable   Dependent Variable

Figure 1. Research Model

Note:
DY   : Dividend Yield
VHS   : Stock price volatility
UP   : Size
VL   : Earning volatility
LEV   : Leverage

METHOD

This research will utilize quantitative methods. Quantitative research method is an observation conducted using data in the form of numbers (Syahrum & Salim, 2019). The research data that will be used is secondary data in the form of financial reports published annually by the company and the IDX through the website www.idx.co.id. This research was conducted over a period of 2 years, namely 2019-2020. The population in this research are public companies operating in the manufacturing sector, which are listed on the IDX. The total population that will be used in this investigation is 194 companies. The sample is part of the total population (Syahrum & Salim, 2019). The sample used in this observation is the manufacturing sector company in 2019-2020. The following are the criteria for determining the sample using a purposive sampling technique: (1) manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2019-2020 (2) manufacturing companies that had an IPO before 2019 (3) manufacturing industries that regularly publish annual financial reports and have complete research information during 2019-2020 (4) not in delisted status or being suspended (5) distribute dividends regularly in the 2019-2020 period.

This research uses analysis of difference test and multiple regression. This research uses analysis of difference test and multiple regression. The difference test is carried out with the aim of detecting whether or not there is a difference in the average of two samples that are correlated with each other (Santoso, 2014). Hypothesis testing in this study using multiple regression analysis. This test is carried out with the aim of detecting the influence between the independent variables on the dependent variable, it is necessary to perform multiple linear regression tests (Ghozali & Ratmono, 2013).

RESULT AND DISCUSSION

Descriptive Statistical Analysis

This study uses descriptive statistical analysis to describe each variable individually with the results can be seen in table 1.

Table 1. Descriptive Statistical Analysis

	DY	UP	VL	LEV	VHS
Mean	2.208	23.679	3.678	0.849	14.485
Std. Dev	1.850	5.709	5.756	0.655	2.621
Min	0.013	11.780	-4.565	0.070	9.327
Max	7.910	30.920	13.271	4.020	19.840

Based on table 1, it can be said that the minimum value of the DY (Dividend Yield) variable is owned by PT Unggul Indah Cahaya Tbk in 2019, while the highest DY score is owned by PT Phapros Tbk in 2019. The average value of UP (size) is higher than the deviation value, meaning that the possibility of data deviation is worth low. On the other hand, the mean value of VL (earning volatility) is lower than the standard deviation. This indicates that the data are not well distributed.

to the decline in automotive demand and the company's DY of 1,852 this value was lower than the previous year which was 2,103. Furthermore, in 2020 the performance of PT Indo Kordsa Tbk continued to decline. Based on the company's annual financial report, the company's DY value of 1,692 is lower than the previous year. In addition, the company's share price also decreased to Rp 5,200 per share. This value is lower than the previous year which was

Table 2. T Test

Variable	B	Std. Error	t	Sig.
C	15.493	0.354	43.725	0.000
DY	-0.461	0.126	-3.673	0.000

Table 3. T Test with Control Variable

Variable	B	Std. Error	t	Sig.
C	15.349	1.586	9.678	0.000
DY	-0.503	0.117	-4.320	0.000
UP	-0.012	0.058	-0.210	0.834
VL	0.173	0.057	3.008	0.003
LEV	-0.132	0.318	-0.414	0.679

Hypotheses Test

Based on the results of hypothesis testing without control variables presented in table 2, it can be seen that the value of the DY coefficient is negative. The conclusion that can be drawn is that KD has a negative effect on VHS. Furthermore, based on table 3 it can be concluded that DY has a negative effect on VHS. Furthermore, the control variables UP and LEV had no effect on VHS. Meanwhile, the control variable VL has a positive effect on VHS.

The Effect of Dividend Policy (DY) on Stock Price Volatility (VHS)

The results of hypothesis testing indicate that DY and VHS influence each other negatively or inversely. That is, if the amount of dividends distributed is high, investor confidence will increase and the tendency to face risk will be low. Conversely, if the dividend distributed is low, the level of investor confidence will decrease and the tendency to face risk will be high so that it can cause stock price volatility. The results of this observation are in accordance with the theory which states that KD (DY) has a negative effect on VHS.

As happened to PT Indo Kordsa Tbk in 2019 the company's shares decreased due

Rp. 10,800. In this case, it can be said that if DY declines, then investor confidence will also decrease so that the possibility of VHS will increase and vice versa.

The results of this study are in accordance with the findings of Khurniaji and Raharja (2013), Shah and Noreen (2016) and Zainudin et al. (2018). The results of this study are different from the findings of Anastassia and Firnanti (2014) which states that if the dividend paid increases, the probability of VHS occurring increases.

The Effect of Company Size (UP) on Stock Price Volatility (VHS)

Based on the results of the t-test presented in table 7, it can be said that the significance value of company size is > 5%. This means that the size of a company does not affect the volatility of stock prices, even though the company is large. These findings are supported by Khurniaji and Raharja (2013), Ardiansyah and Isbanah (2017), and Yulinda et al. (2020). There is no influence between UP and VHS because most investors have a tendency to only focus on the dividend value (Ardiansyah & Isbanah, 2017). The results of this study differ from the theory which states that UP has a positive effect on VHS.

The Effect of Earning Volatility (VL) on Stock prive Volatility (VHS)

The results of the hypothesis test shown in table 7 show that the significance value of earnings volatility is < 0.05. This value means that earnings volatility and stock price volatility are related to each other. The VL coefficient is positive.

The resulting positive value means that if the profits are inconsistent, then investor confidence in the company will decrease, resulting in stock prices moving and causing stock price volatility. The results of this study are supported by Shah and Noreen (2016). Different findings were produced by Asghar et al. (2011) and Ilaboya and Aggreh (2013).

The Effect of Leverage (LEV) on Stock Price Volatility (VHS)

Based on table 7 it can be said that the significance value of leverage is greater than 5%. That is, LEV and VHS do not affect each other. This is because, in estimating stock prices, investors tend to use information related to the company's ability to generate profits and not only look at the company's DER value (Dewi & Suaryana, 2016). In addition, companies that have a higher debt value cannot be concluded that the company has a poor performance.

The results of this study are supported by Ardiansyah and Isbanah (2017) which states that LEV has no effect on stock price volatility. Furthermore, different findings were found by Qudah and Yusuf (2015) which states that if the LEV of a company is high, the company's share price will decrease. The results of the opposite study were found by Jannah and Haridhi (2016)earnings volatility, and leverage on share price volatility of non financing companies listed in Indonesia Stock Exchange in 2010-2014. Dividend policy variabel using dividend payout ratio and leverage variabel using debt to equity ratio. Secondary data were sourced from the financial statements, published by the capital market reference center at the Indonesia Stock Exchange. The research type used in this research is hypothesis testing, by using simple random sampling method. There are 195 samples of the data that become the object to be researched. This research uses multiple linear regression analysis to test the hypothesis. The results of this research show that simultaneous of dividend payout ratio, earnings volatility, and leverage have effect on share price volatility.

CONCLUSION AND RECOMMENDATION

After analyzing the data and obtaining the results of observations in the previous chapter, related to the effect of dividend policy on stock price volatility using the control variables of firm size, earnings volatility, and leverage in manufacturing companies listed on the IDX. The conclusions from the results of this study are as follows:

Dividend policy has a negative effect on stock price volatility. That is, if the amount of dividends paid increases, the volatility of stock prices will decrease. Conversely, if the dividend decreases, the possibility of stock price volatility will increase. Firm size control variable has no effect on stock price volatility. This means that large or small company size has no effect on VHS, even though a company is categorized as a large company but the volatility of stock prices will be fixed. Earnings volatility has a positive effect on stock price volatility. This means that when the profit generated by the company is constant (consistent), the investor's confidence in the company will increase, causing the company's share price to remain stable and reducing the possibility of VHS. Leverage has no effect on VHS. This means that the large or small amount of debt used by the company to finance its operational activities will not affect the volatility of stock prices. This is because if the company is able to generate a higher rate of return on debt than the interest paid, the company will generate profits.

Based on the findings of research that has been carried out using the KD variable, the control variable UP, VL, and LEV, the researcher provides suggestions for further researchers, who will examine stock price volatility to add other variables that have the possibility of influencing VHS in addition to the variables that have been used in this study.

REFERENCES

Al Qudah, A., & Yusuf, A. (2015). Stock Price Volatility and Dividend Policy in Jordanian Firms. *Research Journal of Finance and Accounting*, 6(22), 149–159.

Anastassia, & Firnanti, F. (2014). Faktor-faktor Yang Mempengaruhi Volatillitas Harga Saham Pada Perusahaan Publik Non Keuangan. *Jurnal Bisnis Dan Akuntansi*, 16(2), 95–102.

Andiani, N. W. S., & Gayatri, G. (2018). *Pengaruh Volume Perdagangan Saham , Volatilitas Laba , Dividend Yield , Dan Ukuran Perusahaan Pada Volatilitas Harga Saham*. 24(3), 2148–2175.

Anwar, M. C. (2020). *Manufaktur RI Hancur Lebur Gegara Covid-19, Ini Buktinya*. CNBC Indonesia.

Anwar, S., Singh, S., & Jain, P. K. (2015). Cash Dividend Announcements and Stock Return Volatility: Evidence from India. *Procedia Economics and Finance*, *30*(15), 38–49.

Ardiansyah, I., & Isbanah, Y. (2017). Analisis Pengaruh Deviden, Pertumbuhan Aset, Ukuran Perusahaan, Dan Leverage Terhadap Volatilitas Harga Saham. *Jurnal Riset Akuntansi Dan Keuangan*, *5*(3), 1565–1574.

Arkelof, G. A. (1970). The Market For "Lemons": Quality Uncertainty And The Market Mechanism. *The Quarterly Journal of Economics*, *84*(3), 488–500.

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.

Ashraf, B. N. (2020). Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of Behavioral and Experimental Finance*, *27*, 1-9

Bhattacharya, S. (1997). Imperfect Information, Dividend Policy, and "the Bird in the Hand" Fallacy. *The Bell Journal of Economics*, *10*(1), 259–270.

Cahyaningdyah, D., & Ressany, Y. D. (2012). Pengaruh Kebijakan Manajemen Keuangan Terhadap Nilai Perusahaan. *Jurnal Dinamika Akuntansi*, *3*(1), 20–28.

Clarensia, J., Rahayu, S., & Azizah, N. (2017). Pengaruh Likuiditas, Profitabilitas, Pertumbuhan Penjualan, dan Kebijakan Dividen Terhadap Harga Saham (Studi Empirik pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2007-2010). *Jurnal Akuntansi dan Keuangan, 434*, 1–10.

Dewi, N. M. A. K., & Suaryana, I. G. N. A. (2016). Pengaruh Volume Perdagangan Saham, Leverage, Dan Tingkat Suku Bunga Terhadap Volatilitas Harga Saham. *E-Jurnal Akuntansi Universitas Udayana*, *17*(2), 1112–1140.

Erfiana, D., & Ardiansari, A. (2016). Pengaruh Masalah Keagenan, Kebijakan Deviden, dan Variabel Moderasi Growth Opportunity terhadap Nilai Perusahaan. *Management Analysis Journal*, *5*(3), 244–256.

Ghozali, I., & Ratmono, D. (2013). *Analisis Multivariat dan Ekonometrika Teori, Konsep, dan Aplikasi dengan Eviews 10*. Semarang: Badan Penerbit Universitas Diponegoro.

Gumanti, T. A. (2009). Teori Sinyal Dalam Manajemen Keuangan. *Manajemen Dan Usahawan Indonesia*, *September*, 1–29.

Harlina, V. R., & Khoiruddin, M. (2018). Dividend Policy and Economic Variable to Stock Price Volatility: Comparison of Indonesia and Malaysia. *Management Analysis Journal*, *7*(4), 506–515.

Hashemijoo, M., Ardekani, A. M., & Younesi, N. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal of Business Studies Quarterly*, *4*(1), 111–129.

Hussainey, K., Oscar Mgbame, C., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *Journal of Risk Finance*, *12*(1), 57–68.

Ilaboya, O. J., & Aggreh, M. (2013). *Dividend Policy and Share Price Volatility*. 2(2),109–122.

Jannah, R., & Haridhi, M. (2016). Pengaruh Kebijakan Dividen, Earning Volatility, Dan Leverage Terhadap Volatilitas Harga Saham Pada Perusahaan Non-Financing Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2014. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi*, *1*(1), 133–148.

Kartika, A. (2016). Volatilitas Harga Saham Di Indonesia Dan Malaysia. *Economica: Jurnal Ekonomi Islam*, *1*(2), 109.

Kepramareni, P., Pradnyawati, S. O., & Pratiwi, M. A. R. (2021). Laba Ditahan, Laba Operasi, Aliran Kas Operasi, Leverage, Profitabilitas Dan Pengaruhnya Pada Peringkat Obligasi. *WACANA EKONOMI (Jurnal Ekonomi, Bisnis Dan Akuntansi)*, *20*(1), 28–37.

Khatib, S. F. A., & Nour, A. N. I. (2021). The Impact of Corporate Governance on Firm Performance During The COVID-19 Pandemic: Evidence from Malaysia. *Journal of Asian Finance, Economics and Business*, *8*(2), 943–952.

Khoiruddin, M., & Faizati, E. R. (2014). Reaksi Pasar Terhadap Dividend Announcement Perusahaan Yang Sahamnya Masuk Daftar Efek Syariah. *Jurnal Dinamika Manajemen*, *5*(2), 171–182.

Khurniaji, A. W., & Raharja, S. (2013). Hubungan Kebijakan Dividen (Dividend Payout Ratio Dan Dividend Yield) Terhadap Volatilitas Harga Saham Di Perusahaan-Perusahaan Yang Terdaftar Di Bursa Efek Indonesia. *Diponegoro Journal of Accounting*, *2*(0), 113–122.

Muslimah, K. N. N., & Syarief, M. E. (2020). Pengaruh Manajemen Modal Kerja Terhadap Kinerja Keuangan Perusahaan Manufaktur di Indeks Saham Syariah. *Journal of Applied Islamic Economics and Finance*, *1*(3), 54–70.

Noekent, V. (2018). Relasi Pasar Keuangan Dan Kinerja Inovasi: Studi Pendahuluan Pada Pasar Keuangan Indonesia. *Jurnal Ekonomi Dan Bisnis*, *12*(23), 16–27.

Prasetyo, T. (2013). Dividen, Hutang, Dan Kepemilikan Institusional Di Pasar Modal Indonesia: Pengujian Teori Keagenan. *Jurnal Dinamika Manajemen*, *4*(1), 10–22.

Profilet, K. A., & Bacon, F. W. (2013). Dividend Policy And Stock Price Volatility In The U . S . Equity Capital Market. *Proceedings of ASBBS, 20*(1) 219-231

Rock, K., & Miller, M. H. (1985). Dividend Policy under Asymmetric Information. *The Journal of Finance*, *40*(4), 1031–1051.

Rokhlinasari, S. (2016). Teori-teori dalam Pengungkapan Informasi Corporate Social Responbility Perbankan. *Al-Amwal: Jurnal Ekonomi dan Per-*

bankan Syari'ah, 7(1), 1−11.

Rusiana, I., & Kusumawati, R. (2019). *Analisis Pengaruh Kebijakan Dividen, Leverage, Ukuran Perusahaan, Nilai Tukar Mata Uang, Tingkat Suku Bunga Dan Inflasi Terhadap Volatilitas Harga Saham.* Working Paper: Fakultas Ekonomi dan Bisnis, Universitas Muhammadiyah Yogyakarta.

Santoso, S. (2014). *Panduan Lengkap SPSS Versi 20 Edisi Revisi.* Jakarta: PT Elex Media Komputindo.

Selpiana, K. R., & Badjra, I. B. (2018). Pengaruh Kebijakan Dividen, Nilai Tukar, Leverage, dan Firm Size terhadap Volatilitas Harga Saham. *E-Jurnal Manajemen Universitas Udayana*, *7*(3), 1682-1712.

Setiawan, A. P., & Wijayanto, A. (2017). Estimasi Volatilitas Saham dengan Metode Momentum (The Methods of Moments) dan Estimasi Kemungkinan Maksimum (Maximum Likelihood Estimation). *Management Analysis Journal*, *6*(2), 1−9.

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.

Silviani, D. A., & Noekent, V. (2020). An Indonesian Empirical Study of The Relationship between Firm's Intellectual Capital, Financial Performance and Market Value. *Management Analysis Journal*, *9*(4), 451−458.

Sova, M. (2013). Pengaruh Ratio Leverage Terhadap Volatilitas Saham Pada Industri Barang Konsumsi di Bursa Efek Indonesia Tahun 2004-2008. *E-Journal Widya Ekonomika*, *1*(1), 7−11.

Syahrum, S., & Salim, S. (2019). *Metodologi Penelitian Kuantitatif.* Medan: Citapustaka Media.

Theresia, P., & Arilyn, E. J. (2015). Pengaruh Dividen, Ukuran Perusahaan, Hutang Jangka Panjang, Earning Volatility, Pertumbuhan Aset, Trading Volume, dan Kepemilikan Manajerial terhadap Volatilitas Harga Saham. *Jurnal Bisnis Dan Akuntansi*, *17*(2), 197−204.

Winardi, W., Priyarsono, D., Siregar, H., & Kustanto, H. (2017). Kinerja Sektor Industri Manufaktur Provinsi Jawa Barat Berdasarkan Lokasi di Dalam dan di Luar Kawasan Industri. *Journal of Technology Management, 16*(3), 241-257.

Yudiana, I. G. Y., & Yadnyana, I. K. (2016). Pengaruh Kepemilikan Manajerial, Leverage, Investment Opportunity Set Dan Profitabilitas Pada Kebijakan Dividen Perusahaan Manufaktur. *E-Jurnal Akuntansi*, *15*(1), 111−141.

Yulinda, E., Pujiastuti, T., & Haryono, S. (2020). Analisis Pengaruh Dividend Payout Ratio, Leverage, Firm Size, Volume Perdagangan, Earning Volatility Dan Inflasi Terhadap Volatilitas Harga Saham Pada Perusahaan Yang Terdaftar Dalam Indeks LQ45 Tahun 2014-2017. *Jurnal Ilmiah Indonesia*, *5*(5), 76−83.

Zainudin, R., Mahdzan, N. S., & Yet, C. H. (2018). Dividend policy and stock price volatility of industrial products firms in Malaysia. *International Journal of Emerging Markets*, *13*(1), 203−217.