

PERFORMANCE AND SOUNDNESS OF INDONESIAN BANKING DURING PANDEMIC PERIOD

Triwahyuni¹, Azizul Kholis², Indra Maipita³, Frans Kristanto⁴

^{1,2,3} Magister Akuntansi, Universitas Negeri Medan, Medan, Indonesia

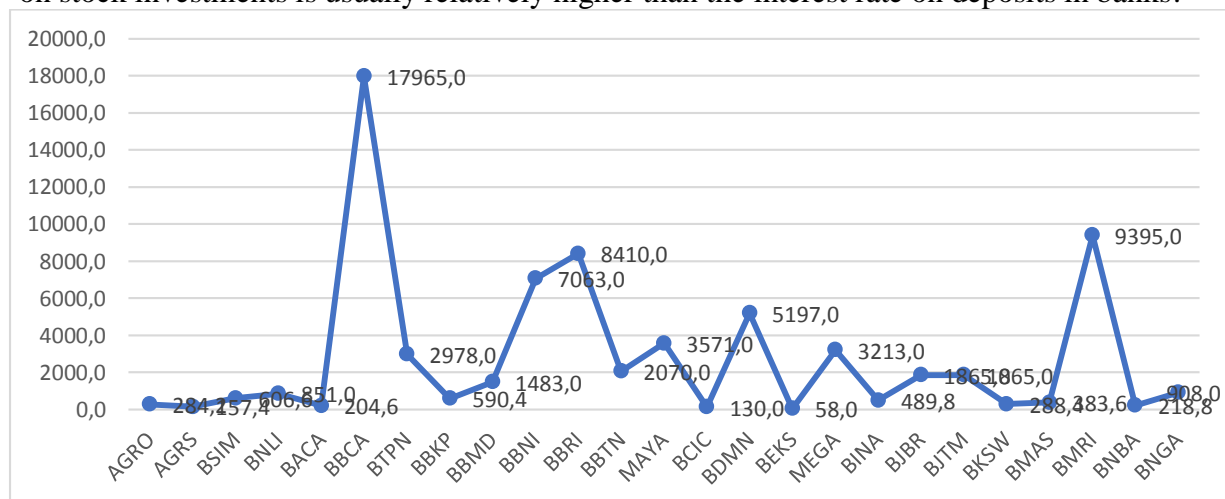
*Corresponding Author: franskristant92@gmail.com

Abstract: In this study, the measurement of the performance of banking companies is based on: ROE, EPS, and DER, while the measurement of bank health uses: NIM, CAR, NPL and GCG. The sample in this study is banking companies in Indonesia which are included in the book category 2-4, totaling 23 banking companies. The analytical method used in this research is panel regression analysis with SPSS 23. The results show that in measuring the performance of banking companies, only ROE and DER have a significant effect on stock prices. In measuring bank health, only NPL and GCG have a significant effect on stock prices.

Keywords: Performance, Bank Soundness, Stock Price

1. Introduction

The Covid-19 pandemic has harmed most industries, including the banking industry (Dunbar, 2021, 2022). So to survive during this pandemic, the majority of banks use a defensive strategy. Investors hope that the act of buying shares of a company is to benefit from the dividends given by the company from each share owned every year (Yuningsih, 2020). However, at the same time, investors also have to face the risk if the opposite happens. Investing in the capital market requires complex thinking and faces a relatively large risk compared to other forms of savings in the banking system. On this basis, the expected return on stock investments is usually relatively higher than the interest rate on deposits in banks.



Sumber: Bursa Efek Indonesia (2020)

Figure 1. Average Indonesian Banking Stock Price 2020-2021

The level of stock prices of banking companies at the beginning of the pandemic decreased relatively and in the fourth quarter of 2020 experienced an increase again. The increase that has occurred is still not optimal, as the factors that cause this to happen are that the banking performance is still not optimal from 2020 to 2021. The factors that affect stock prices are easy to identify. The problem is how to assign these factors into a scoring system to choose which stocks should be included in the portfolio. There are several studies that state that there are several variables that affect stock prices, including return on Equity (ROE), earnings per share (EPS), and debt-equity ratio (DER) (Nurhikmawaty et al., 2020; Riyana & Isdanti, 2021; Yuningsih, 2020).

In addition to these four factors, other factors fall into the category of bank soundness assessment, namely: Non-Performing Loans (NPL). NPL compares total non-performing loans and total loans extended to debtors. If the bank has a high level of NPL, it will affect costs. In other words, the higher the NPL will disturb the company. Research by Sasaki & Suzuki (2019) explained that the NPL could partially influence stock prices. Next, Net Interest Margin (NIM). NIM reflects the market risk that arises due to movements in market variables, which can cause losses for the bank. Based on Bank Indonesia regulations, one of the proxies for market risk is the interest rate, measured by the difference between the funding interest and the lending interest or the difference between the total cost of funding interest and the total cost of borrowing interest. Potential investors use the variable Capital Adequacy Ratio (CAR) to measure the strength of their capital compared to risk-weighted assets (RWA). If it is related to stocks, the tendency is that investors will be interested in a bank that has a high CAR level, as the research by Toby & Danjuma (2021) where the research results partially show that CAR contributes to stock prices. The good corporate governance (GCG) variable also influences stock prices, where GCG is believed to increase the company's performance or value, impacting stock prices.

2. Literature Review

Stock Price

The share price is the market price recorded every day at the closing price of a stock. The stock price reflects the value of a stock. In this study, the stock price in question is the average stock price for five days after the publication of the financial statements in the observation period. Stock prices that occur in the capital market constantly fluctuate from time to time (Ioannidis & Kontonikas, 2008). The forces of supply and demand will determine the price fluctuation. If the demand for a stock increases, the stock price will rise; otherwise, the stock price tends to fall if there is an excess supply. Many factors influence the formation of stock prices in the capital market, including company performance, risk, dividends, interest rates, supply and demand, inflation rates, government policies, and economic conditions. (Brigham & Houston, 2019).

Return on Equity

Companies that develop economic profitability are also high, and of course, companies dare to go into debt because they can pay debts. Because economic profitability is greater than the company's profit, the company uses foreign capital, which impacts increasing ROE. If shareholder profits increase, the price per share will also increase and impact increasing share prices (Damodaran, 2012; Levi, 2010; Özlen & Ergun, 2012).

Earnings per Share

Earning per share compares net profit after tax in one financial year with the number of shares issued (Wefi, 2020). An increase in earnings per share indicates that the company is in a growth

stage or that its financial health is improving, in other words, higher earnings per share indicates the company's potential to make net profits per share. Profit maximization is often seen as the right goal for a company. However, this has a drawback because profits can increase by simply issuing shares and using the proceeds to invest in non-risky securities (Personal & Archive, 2010).

Debt to Equity

This ratio can be used to determine the amount of funds provided by creditors to the company's owner or the amount of own capital used as collateral for loans. (Al Qaisi, F., Tahtamouni, A., & Al-Qudah, 2016; Hui et al., 2005; Trafalgar & Africa, 2019). A DER that is too high harms the company's performance because the higher the level of debt indicates the company's interest expense will be more significant and reduce profits. So the higher the debt (DER) tends to lower the stock price. Companies that are developing and growing almost certainly need a source of funding to fund the company's operations which cannot be met only from the company's capital. Companies that develop economic profitability are also high, and of course, companies dare to go into debt because they can pay debts. Because economic profitability is greater than the company's profit, the company uses foreign capital, which impacts increasing ROE. If shareholder profits increase, the price per share will also increase and will have an impact on increasing share prices (Bodla et al., 2016)

Non-Performing Loan

Non-Performing Loans (NPLs) are loans classified into several groups, namely current loans, doubtful loans, and bad loans. A non-Performing Loan (NPL) is a way to measure the percentage of non-performing loans in a bank due to non-performing customers making installment payments. The higher the NPL will affect the stock price of a banking company (Sasaki & Suzuki, 2019).

Good Corporate Governance

GCG is a method and structure for managing a business with the primary goal of maximizing shareholder value over time while also considering the interests of other bettors. In addition to fulfilling the interests of shareholders, GCG is intended to ensure sustainability. This definition shows that corporate governance can function to build trust, establish cooperation, and create a shared vision between all parties involved so that agency problems can be anticipated. (Dewi & Candradewi, 2018; Fadrul et al., 2021).

Net Interest Margin

NIM reflects the market risk that develops as a result of changes in market variables, which might result in bank losses. The gap between the funding interest and the lending interest, or the difference between the overall cost of financing interest and the total cost of borrowing, is one of the proxies for market risk, according to Bank Indonesia regulations. (Saksonova, 2014).

Capital Adequacy Ratio (CAR)

Potential investors use the capital Adequacy Ratio (CAR) to measure their capital strength compared to risk-weighted assets (RWA). If it is related to stocks, the tendency is that investors will be interested in a bank that has a high CAR level. (Thalassinos & Liapis, 2011; Tripathy et al., 2021). CAR contributes to stock prices. The good corporate governance (GCG) variable also influences stock prices, where GCG is believed to increase the company's performance or value, which has an impact on stock prices. (Toby & Danjuma, 2021).

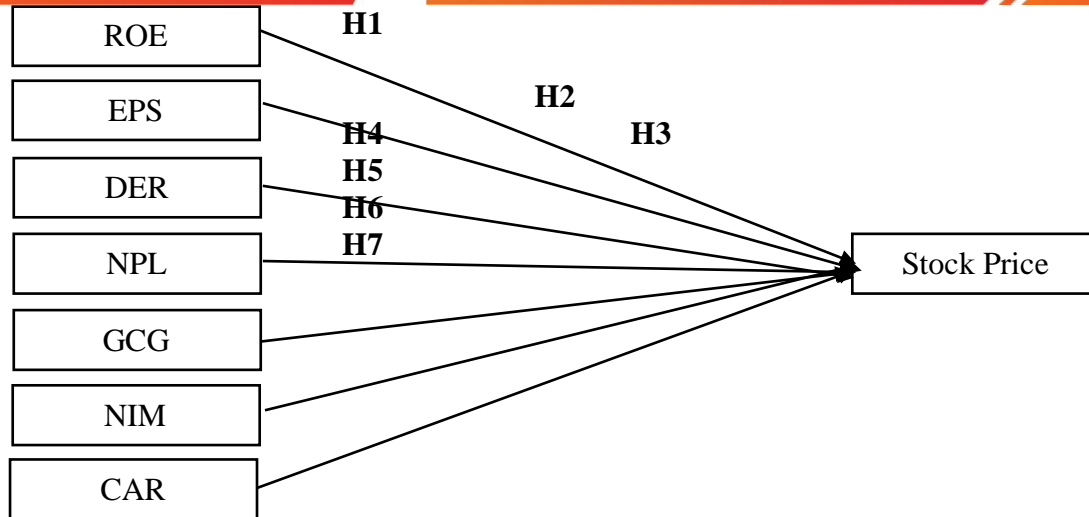


Figure 2. Research Framework

3. Method

This research is an associative method with a quantitative approach, which can be interpreted as a research statement asking for the relationship between two or more variables. Research in associative problems examines how a variable is related to other variables or whether one variable causes changes in other variables. (Malhotra & Hall, 2015). Sample collection method using purposive sampling with the following criteria:

1. Banking companies that go public and are listed on the IDX in 2015-2020.
2. Not liquidated or delisted in the research year.

Based on the purposive sampling criteria, 25 banking issuers from 44 banking issuers were listed on the Indonesia Stock Exchange. The sampling technique used in this research is purposive sampling, namely: the sampling technique with specific considerations/judgment sampling (Malhotra & Hall, 2015). Based on these criteria, the companies selected as samples in this study were 23 issuers. In contrast, the remaining 21 companies did not meet the specified sampling criteria. Furthermore, the analytical method used in this study is the panel data regression analysis using the SPSS statistical tool.

4. Result and Discussion

Before carrying out the analysis of the research hypothesis testing, then testing the level of normality of the data, autocorrelation, multicollinearity and heteroscedasticity was carried out. The test was carried out to ensure that the distribution of the data used in this study met the statistical measurement standards.

Table 1 Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		46
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4469.30936487
Most Extreme Differences	Absolute	.162
	Positive	.162
	Negative	-.099
Test Statistic		.162
Asymp. Sig. (2-tailed)		.074 ^c

Source: Statistical Data Processed Result (2022)

Based on the results of the Kolmogorov-Smirnov test, it was found that the Asymp value. Sig. (2-tailed) > 0.05, so it can be concluded that the data in this study meet the standard of normality.

Table 2 Autocorrelation Test Result

Durbin-Watson
1.954

Source: Statistical Data Processed Result (2022)

The results of the autocorrelation test show that the Durbin-Watson value is 1.954 or is in the criteria D_u (1.9315) > 1.954 < $4 - D_u$ (2.046). So it can be concluded that there is no autocorrelation in this research equation.

Table 3 Multicollinearity Test Results

Collinearity Statistics

Tolerance	VIF
.519	1.926
.877	1.140
.667	1.500
.803	1.246
.576	1.737
.620	1.613
.491	2.037

Source: Statistical Data Processed Result (2022)

In table 3, the results show that the tolerance value of each variable is greater than 0.1 and the VIF value is less than 10, so it can be concluded that there is no multicollinearity in the equations of this study.

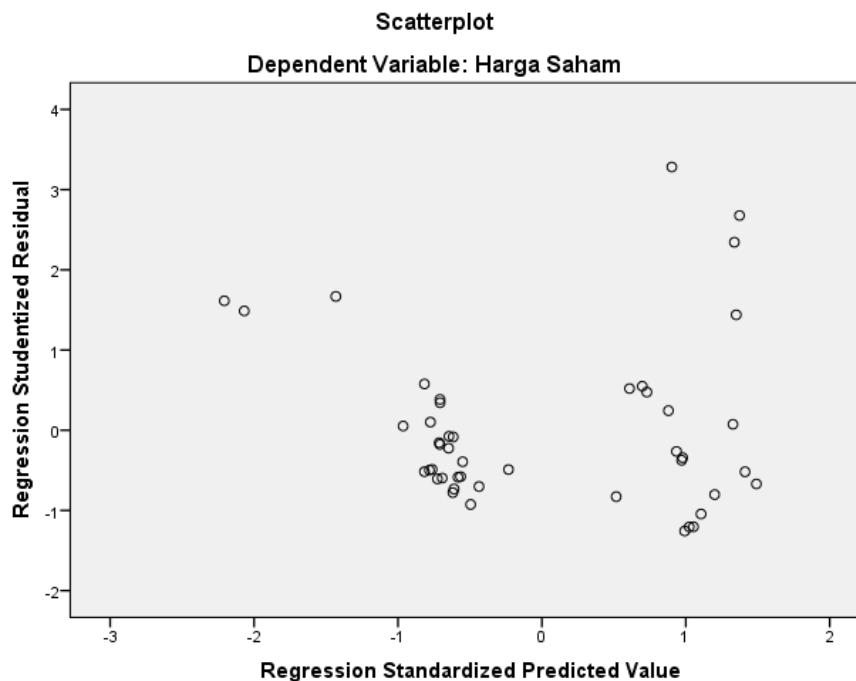


Figure 3. Heteroscedasticity Test Results

Based on the results of the heteroscedasticity test in Fig. 3, it can be seen that the plot spreads randomly and there is no indication of the formation of a uniform pattern. So it can be concluded that there is no heteroscedasticity in this research equation.

Table 4. Results of Panel Regression Test and Partial Hypothesis

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35243.324	8330.901		4.230	.000
	ROE	.011	.016	.097	4.708	.003
	DER	-.008	.002	-.085	-4.337	.009
	EPS	.001	.001	.085	.708	.483
	NIM	.787	.874	.030	.274	.786
	CAR	-.137	.773	-.023	-.177	.860
	NPL	-.006	.904	-.011	-4.091	.001
	GCG	.021	.092	.760	5.404	.000

Source: Statistical Data Processed Result (2022)

Based on the results in table 4, it is known that ROE has a positive and significant effect on stock prices ($\beta = 0.011$; $p < 0.05$) (H1 Supported). DER has a negative and significant effect on stock price ($\beta = 0.008$; $p < 0.05$) (H3 Supported). EPS has no effect on stock price ($\beta = 0.001$; $p > 0.05$) (H2 No-Supported). NIM has no effect on stock price ($\beta = 0.787$; $p > 0.05$) (H6 No-Supported). CAR has no effect on stock price ($\beta = -0.137$; $p > 0.05$) (H7 No-Supported). NPL has a negative and significant effect ($\beta = 0.006$; $p < 0.05$) (H4 Supported). GCG has a positive and significant effect on stock prices ($\beta = 0.021$; $p < 0.05$) (H5 Supported).

Table 5. Simultaneous Hypothesis Testing Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1536898701.051	7	219556957.293	9.282	.000 ^b
	Residual	898862678.949	38	23654281.025		
	Total	2435761380.000	45			

Source: Statistical Data Processed Result (2022)

In table 5 it is known that the F-count (9.282) > F-table (2.34) and the p value < 0.05, so it can be concluded that ROE, EPS, DER, NPL, GCG, NIM, and CAR have a simultaneous and significant effect on stock prices.

Table 6 R-Square . Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794 ^a	.631	.563	4863.56670

Source: Statistical Data Processed Result (2022)

Table 6 shows that ROE, EPS, DER, NPL, GCG, NIM, and CAR have an influence of 0.563 or 56.3% on stock prices of banking companies in Indonesia.

5. Conclusions

Based on the results of testing the effect of variables included in Bank Company Performance (ROE, EPS and DER), it was found that the ROE and DER variables had a significant effect on stock price (Al Qaisi, F., Tahtamouni, A., & Al-Qudah, 2016; Sasaki & Suzuki, 2019). These results indicate that an increase in company profits can encourage a significant increase in stock prices, while the greater the company's debt, the lower the stock price. While the variables classified as occupational health (NIM, NPL, CAR, GCG) it was found that only the NPL and GCG variables had a significant influence on stock prices (Saksonova, 2014; Sasaki

& Suzuki, 2019; Thalassinou & Liapis, 2011). These results also show that an increase in GCG can have an impact on improving the company's image which in the end will be able to increase the company's stock price, while an increase in NPL can reduce customer and investor confidence in a bank which has a direct impact on decreasing stock prices. The results of testing on the performance of banking companies (Book Categories 2-4) in 2020-2021 showed a decrease compared to 2019, but the decline did not last long because in the fourth quarter the performance of banking companies increased and until the end of 2021. banks that have relatively high DER levels. Meanwhile, on the results of testing the soundness of banks, all banks are still in the healthy category (according to the Circular Letter of Bank Indonesia Number 15/15/DPNP 2013).

References

- Al Qaisi, F., Tahtamouni, A., & Al-Qudah, M. (2016). Factors affecting the market stock price- The case of the insurance companies listed in Amman Stock Exchange. *International Journal of Business and Social Science*, 7(10), 81-90. *International Journal of Business and Social Science*, 7(10), 81-90.
- Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of Financial Management 15 Edition*. Cengage Learning.
- Damodaran, A. (2012). Investment philosophies. *Wiley Finance Series*, 609.
- Dewi, I. A. S. K., & Candradewi, M. R. (2018). Penilaian Tingkat Kesehatan Bank Metode Rgeg pada PT. Bank Tabungan Negara (Persero), Tbk. Periode 2014-2016. *E-Jurnal Manajemen Universitas Udayana*, 7(3), 1595. <https://doi.org/10.24843/EJMUNUD.2018.v7.i03.p17>
- Dr. Bodla, B. S., Garg, A., Ms. Verma, R., & Ms. Jindal, K. (2016). *Security Analysis and Investment Management*. 1-515.
- Dunbar, K. (2021). Pricing the hedging factor in the cross-section of stock returns. *North American Journal of Economics and Finance*, 56(February), 101376. <https://doi.org/10.1016/j.najef.2021.101376>
- Dunbar, K. (2022). Impact of the COVID-19 event on U.S. banks' financial soundness. *Research in International Business and Finance*, 59(September 2020), 101520. <https://doi.org/10.1016/j.ribaf.2021.101520>
- Fadrul, Budiyanoto, & Asyik, N. F. (2021). The Effect of Ownership Structure and Corporate Social Responsibility on Financial Performance and Firm Value in Mining Sector Companies in Indonesian. *International Journal of Economics Development Research*, 2(2), 394-411.
- Hui, E. C. M., Wong, F. K. W., & Chiang, Y. H. (2005). The impact of capital offering on real estate developers and construction sector stock return in Hong Kong. *Property Management*, 23(3), 204-216. <https://doi.org/10.1108/02637470510603547>
- Ioannidis, C., & Kontonikas, A. (2008). The impact of monetary policy on stock prices. *Journal of Policy Modeling*, 30(1), 33-53. <https://doi.org/10.1016/j.jpolmod.2007.06.015>
- Levi, K. (2010). Transfer of Innovation ,, Development and Approbation of Applied Courses Based on the Transfer of Teaching Innovations in Finance and Management for Further Education of Entrepreneurs and Specialists in Latvia , Lithuania and Bulgaria ”. *Education and Culture Lifelong Learning Programme*, 1-166. http://www.bcci.bg/projects/latvia/pdf/8_IAPM_final.pdf
- Malhotra, N. K., & Hall, P. (2015). *Student Resource Manual with Technology Manual Essentials of Marketing Research: A Hands-On Orientation Preface*.
- Nurhikmawaty, D., Isnurhadi, I., Widiyanti, M., & Yuliani, Y. (2020). The Effect of Debt to Equity Ratio and Return on Equity on Stock Return with Dividend Policy as Intervening

- Variables in Subsectors Property and Real Estate on Indonesia Stock Exchange. *International Journal of Multicultural and Multireligious Understanding*, 7(7), 255. <https://doi.org/10.18415/ijmmu.v7i7.1850>
- Özlen, Ş., & Ergun, U. (2012). Internal Determinants of the Stock Price Movements on Sector Basis. *International Research Journal of Finance and Economics*, 92(92), 111–116.
- Personal, M., & Archive, R. (2010). Munich Personal RePEc Archive Foreign Direct Investment: Analysis of Aggregate Flows Foreign Direct Investment: Analysis of Aggregate Flows. *Journal of Accounting*.21916.
- Riyana, D., & Isdanti, H. (2021). The Effect of Net Propit Margin and Debt to Asset Ratio To Stok Price and Earning Per Share as Intervening Variable. 4(1), 105–117.
- Saksonova, S. (2014). The Role of Net Interest Margin in Improving Banks' Asset Structure and Assessing the Stability and Efficiency of their Operations. *Procedia - Social and Behavioral Sciences*, 150, 132–141. <https://doi.org/10.1016/j.sbspro.2014.09.017>
- Sasaki, T., & Suzuki, K. (2019). Bank health and cash holdings: Evidence from a bank-centered financial market. *Pacific Basin Finance Journal*, 57(August), 101195. <https://doi.org/10.1016/j.pacfin.2019.101195>
- Thalassinos, J. E., & Liapis, K. (2011). Measuring a bank's financial health: A case study for the Greek banking sector. *European Research Studies Journal*, 14(3), 135–172. <https://doi.org/10.35808/ersj/331>
- Toby, A. J., & Danjuma, J. K. (2021). *Capital Adequacy Regulation and Financial Distress Resolution in the Nigerian Banking Industry: An ARDL Approach. 7(4), 95–100. <https://doi.org/10.11648/j.ijfbr.20210704.12>*
- Trafalgar, J., & Africa, L. A. (2019). The effect of capital structure, institutional ownership, managerial ownership, and profitability on company value in manufacturing companies. *The Indonesian Accounting Review*, 9(1), 27. <https://doi.org/10.14414/tiar.v9i1.1619>
- Tripathy, N., Wu, D., & Zheng, Y. (2021). Dividends and financial health: Evidence from U.S. bank holding companies. *Journal of Corporate Finance*, 66(March 2020). <https://doi.org/10.1016/j.jcorpfin.2020.101808>
- Wefi, A. B. D. (2020). *Manajemen Investasi dan Pasar Modal. https://www.academia.edu/42687275/MANAJEMEN_INVESTASI_DAN_PASAR_MODAL*
- Yuningsih, V. (2020). Pengaruh Net Profit Margin (Npm) Dan Earning Per Share (Eps) Terhadap Return Saham Dengan Struktur Modal Sebagai Variabel Intervening. *Entrepreneurship Bisnis Manajemen Akuntansi (E-BISMA)*, 1(1), 29–38. <https://doi.org/10.37631/e-bisma.v0i0.215>