

Assessment of Company's Financial Performance Using the *Economic Value Added* (EVA) Method

Case at PT. Bank Negara Indonesia (Persero), Tbk Period 2021

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Abstract. The objective of this study is to assess the financial performance of PT. Bank Negara Indonesia (Persero), Tbk for the period 2021, as measured by the *Economic Value Added* (EVA) method. This research is quantitative research, with the population used in this study is a banking sector financial technology company listed on the Indonesia Stock Exchange (IDX) in this study the subject used is PT. Bank Negara Indonesia (Persero), Tbk. In this study, the method used for data collection is the documentation method, by collecting the quarterly financial statements of PT. Bank Negara Indonesia (Persero), Tbk for the 2021 period. The measuring instrument used to measure research on this company is the *Economic Value Added* (EVA) method. This financial performance measurement can help investors in choosing and seeing which companies will provide benefits. The results of this study indicate that the EVA value is positive, which means that the management of PT. Bank Negara Indonesia (Persero), Tbk is able to increase and create profits even though it has not achieved maximum results.

Keywords: Economic Value Added (EVA) Method · Financial Performance

1 Introduction

The development of increasingly advanced technology makes all industrial sectors switch to more sophisticated technology. So that makes all industrial sectors compete to improve performance and also make the latest innovations. One of the technological developments that we really feel in the present is the development of technology in the financial sector. The technology that is felt in the financial sector is the ease with which people can carry out transactions carried out domestically and abroad.

Examples of technological advances in the financial sector that are currently felt are changes in payment methods from the use of *cash* or cash methods to non-cash or *cashless* methods such as using cards or *scanning* on supporting applications that are now widely available on *mobile phones*. This change began to be felt during the spread of the *Covid19 virus* which made people have to reduce direct contact. Making all people inevitably to participate and start learning to apply this technological sophistication. this technological advancement during a pandemic. This makes banks in Indonesia try to develop their systems so that people can continue to do shopping transactions or work comfortably and easily at home.

By considering the risks that will be borne by actors and users of the company, the Government anticipates by issuing its policies to regulate and supervise the course of money circulation, namely by creating an agency called the Financial Services Authority (OJK) to oversee and regulate the course of money [1].

One of the tools that PT. Bank Negara Indonesia (Persero) Tbk employs to assess its progress toward these goals and ensure that they are realized is the evaluation of the company's financial performance. On the basis of the firm's financial accounts, this measurement of financial performance is used to determine whether or not the company has achieved its objectives. The concept of economic value added, often known as *Economic Value Added*, is a method for evaluating a company's performance. This technique is known as *Economic Value Added* (EVA). Because it is measured using a weighted measurement of the initial capital structure, this method has a tendency to focus on efforts to create company value and assess financial performance fairly. This is because the method utilizes a weighted measurement.

Financial performance of mining businesses listed on the Indonesia Stock Exchange (IDX) was compared using the *Economic Value Added* (EVA) technique and the *Market Value Added* (MVA) approach, according to the conclusions of a study conducted by Siska Ardiani and Sriwardany. The Economic Value Added approach showed unsatisfactory results, showing that it was incapable of producing value additions. In lieu of this, the *Market Value Added* (EVA) approach was utilized [2]. Meanwhile, Rismayona's study of the *Economic Value Added* (EVA) approach for assessing financial performance at PT Perkebunan Nusantara IV demonstrates that it leads to good performance, can create added value, and can optimize income. That PT Perkebunan Nusantara IV used the EVA technique is evidence of this [3].

2 Literature Review

2.1 Financial Performance

Financial performance is a description of a company's financial status that is assessed using financial analysis techniques and yields information regarding a company's lack of or achievement during a specific time period. This is referred to as the financial performance of a corporation [4]. A company's success is judged by its financial performance, which is evaluated by comparing present ratios to historical ratios and projected ratios [5]. A reasonable definition of financial performance would describe a company's financial health over a specific time frame based on data gathered from a number of different sources and measured against predetermined benchmarks.

2.2 Financial Report

The financial report represents the culmination of an accounting procedure which contains various information and information about the economic data of a company consisting of lists that show the financial position and results of activities of a company in one period which includes a balance sheet, income statement and statement of financial changes [6]. In business, the term "financial report" refers to a document that summarizes an organization's financial health and performance [7]. Therefore, the financial report is a form of accountability report and as a communication tool for company managers to interested parties in which there is information related to the financial condition of a company as a basis for consideration for making a decision. Financial statements are reports that describe current finances or within specified periods [8].

2.3 Capital Structure

Capital structure is a right or part owned by a company in the form of share capital, profits or retained earnings or excess assets or assets owned by the company against all its debts [9]. Firm assets are financed through a mix of long-term debt, short-term debt, and cash on hand.

2.4 Capital Cost

The cost of capital is a cash flow required by a company to reimburse investors for the business risk of invested capital [10].

2.5 Economic Value Added (EVA)

The *Economic Value Added* (EVA) method is a measurement that is used to determine how much economic value an organization has added to the market [11]. EVA, or *economic value added*, is a measure of a company's financial performance that excels when other measures fail in explaining economic profit. The creation of additional value within a company that can be used to measure the return on investment for shareholders is kn own as *Economic Value Added* (EVA) [12].

2.6 Advantages and Disadvantages of the Economic Value Added (EVA) Method

The *Economic Value Added* (EVA) approach to evaluating business performance has the benefit of focusing on value addition. The *Economic Value Added* (EVA) technique has a number of benefits [13]:

- a. *The Economic Value Added* (EVA) method focuses on assessing added value by considering the expenses incurred as a consequence result of an investment.
- b. The concept of the *Economic Value Added* (EVA) method is to make the company a tool to measure desires in terms of economic value by taking into account the wishes of the funders or investors fairly, where the degree of justice is expressed by measuring the consideration of the capital structure that refers to market value.
- c. In calculating the *Economic Value Added* (EVA) method, as an evaluation idea, it can be employed independently without the need for comparable data such as industry standards or data on many other companies.
- d. The concept of the *Economic Value Added* (EVA) method can be used as a basis for assessing bonuses to employees, especially in the section that provides more EVA so that it can be said that the EVA method carries out *stakeholder satisfaction concepts*.

e. The easy application of the *Economic Value Added* (EVA) technique can demonstrate that the EVA notion is a practical, simple to calculate and straightforward to use metric that can be a factor in expediting decision making.

In addition to the above advantages, the concept of using the *Economic Value Added* (EVA) method has several weaknesses, among others [13]:

- a. *The Economic Value Added* (EVA) method only measures the final result, the concept in this method does not measure the determining activity.
- b. *The Economic Value Added* (EVA) method only relies on the belief that investors rely on a fundamental approach in reviewing and making a decision to sell or buy certain stocks where there may be other factors that are more dominant.



Fig. 1. Research Framework. Source: From processed data, 2022.

3 Theoretical Framework

The research framework in this study is shown in Fig. 1.

According to the study design presented above, the *Economic Value Added* (EVA) approach is used to process and evaluate the company's financial statements in order to draw conclusions about the company's financial performance.

4 Methodology

This study uses a type of quantitative research with the data collection method is documentation. This research is used to measure the growth value of PT. Bank Negara Indonesia (Persero), Tbk for the 2021 period.

4.1 Net Operating After Tax (NOPAT)

The term "net operational profit after tax" (NOPAT) refers to a company's profit value after adjusting for income tax but before subtracting for financial costs and non-cost bookkeeping entries like depreciation. When calculating a company's value, NOPAT is the amount of money it takes in as a result of its business activities. In the company's profit report, you can find details on the net operating profit after taxes [3]. NOPAT can be calculated using the formula [14]:

NOPAT = Net Profit After Tax + Interest Expense

4.2 Invested Capital (IC)

Invested Capital is investment capital based on the return from the source or acquisition of results in the investment that has been made [15]. Information from the financial statements of the sample companies is used to calculate PT. Bank Negara Indonesia (Persero) Tbk's Invested Capital for the year 2021. The following equation can be used to calculate the outcomes of this strategy [16]:

Invested Capital = Total debt and equity - short - term debt

4.3 Weighted Average Cost of Capital (WACC)

The *Weighted Average Cost of Capital* (WACC) is equal to the total of the costs of each component of shareholder equity, shareholder equity, and short-term loan capital, with each component's cost being weighted by its relative percentage in the company's capital structure at market value [17]. This analysis uses a subset of PT. Bank Negara Indonesia (Persero) Tbk's financial statements for the year 2021 to determine the firm's *Weighted Average Cost of Capital* (WACC). The following formula can be used to get the *Weighted Average Cost of Capital* (WACC) [18]:

$$WACC = Kd(1 - T) Wd + KeWe$$

Description:

Kd = Cost of debt T = Tax rate Wd = Total debt Ke = Interest cost of equityWe = Total equity

Where:

a. $Wd = \frac{Liabilities}{Liabilities + Equity} \times 100\%$ b. $Kd = \frac{Interest Cost}{Liabilities} \times 100\%$ c. $We = \frac{Equity}{Liabilities + Equity} \times 100\%$ d. $Ke = K_e = (D_1/P_0) + g$ e. $T = \frac{Tax}{EBT} \times 100\%$

4.4 Capital Changes (CC)

The cost of capital is the rate of return that must be generated by the company on project investment to maintain the market value of its shares [3]. The cost of *capital (Capital Changes)* can be calculated using the formula [19]:

Capital Changes = Invested Capital \times WACC

4.5 Economic Value Added (EVA)

Economic Value Added (EVA) is a way to measure the economic profit of a company to figure out how well it is doing in terms of meeting all of its operating costs and capital cost [3]. *Economic Value Added* (EVA) can be calculated using the following formula [19]:

EVA = NOPAT - Capital Changes

5 Results

5.1 Net Operating After Tax (NOPAT)

Based on the Table 1 that has been processed above, the amount of NOPAT at PT. Bank Negara Indonesia (Persero) Tbk for the 2021 period, namely in quarter 1 amounting to IDR 5,260,115,000,000.00 then in quarter 2 the company increased to IDR 10,166,116,000,000.00 then experienced another increase in quarter 3 to IDR 16,291,897,000,000.00 and in quarter 4 it rose to IDR 23,500,477,000,000.00.

5.2 Invested Capital (IC)

Table 2 calculation shows that PT. Bank Negara Indonesia (Persero) Tbk's Invested Capital for the first quarter of 2021 was IDR 406,315908,000,000.00 then in quarter 2 it decreased to IDR 402,085,752,000,000.00 then in quarter 3 it increased to IDR 428,815,762,000,000.00 and in quarter 4 it increased to IDR 438,808,013,000,000.00.

Quarterly	Profit After Tax	Interest Cost	NOPAT
1	2.299.307	2.960.808	5.260.115
2	4.191.984	5.974.132	10.166.116
3	7.467.224	8.824.673	16.291.897
4	11.721.321	11.779.156	23.500.477

Table 1. NOPAT Calculation Result In Millions Rupiah

Source: Processed data, 2022.

Table 2. Invested Capital Calculation Results In Millions Rupiah

Quarterly	Total Debt and Equity	Short-term Debt	Invested Capital
1	840.240.592	433.924.684	406.315.908
2	852.497.109	450.411.357	402.085.752
3	894.893.400	466.077.638	428.815.762
4	941.211.128	506.403.115	434.808.013

Source: Processed data, 2022.

5.3 Weighted Average Cost of Capital (WACC)

Based on Table 3, the WACC at PT. Bank Negara Indonesia (Persero) Tbk for the 2021 period has a proportion of debt in quarter 1 of 86.8% with a cost of debt of 0.41%. Then in quarter 2 it is known that the proportion of debt has increased to 86.85% with a cost

Description	Quarterly			
	1	2	3	4
Level Debt (Wd)	86,8	86,85	87,12	87,31
Cost Payable (Kd)	0,41	0,81	1,13	1,43
Level Equity (We)	13,2	13,14	12,87	12,69
Cost Equity (To)	5,8	6,1	6,1	5,9
Level Tax (T)	22,02	31,4	21,44	4,17
WACC	1,0	1,2	1,5	1,9

 Table 3.
 WACC Calculation Results In Percentage (%)

Source: Processed data, 2022.

Quarterly	WACC	IC	CC
1	1,0%	406.315.908	4.063.159
2	1,2%	402.085.752	4.852.029
3	1,5%	428.815.762	6.432.236
4	1,9%	438.808.013	8.337.352

Table 4. CC Calculation Result In Millions Rupiah

Source: Processed data, 2022.

of debt that has increased to 0.81%. Furthermore, in quarter 3 the proportion of debt increased to 87.12% and the cost of debt increased to 1.13%. While in quarter 4 the proportion of debt increased to 87.31% and the cost of debt rose to 1.43%.

The proportion of equity in quarter 1 amounted to 13.2% then in quarter 2 it increased to 13.14% then in quarter 3 it fell to 12.87% and quarter 4 decreased to 12.69%. While the proportion of the cost of equity in quarter 1 amounted to 5.8% then quarter 2 rose to 6.1% then in quarter 3 rose to 3.74% then quarter 3 rose to 6.1% and quarter 4 to 5.9%. Furthermore, the proportion of the tax rate for each quarter has different results, quarter 1 the proportion of the tax rate is 22.02% then quarter 2 rises to 31.4% then quarter 3 drops to 21.44% and quarter 4 drops to 4.17%. The WACC results for PT. Bank Negara Indonesia (Persero) Tbk for the 2021 period have increased in each quarter, namely in quarter 1 it was 1.0%, then quarter 2 it rose to 1.2%, then quarter 3 it rose to 1.5% and quarter 4 to 1.9%.

5.4 Capital Changes (CC)

Based on the results of the calculation of *Capital Changes* at PT. Bank Negara Indonesia (Persero) Tbk for the 2021 period, it can be seen that there is an increase every quarter, such as in quarter 1 amounting to IDR 4,063,159,000,000.00 then in quarter 2 it rose to IDR 4,852,029,000,000.00 then in quarter 3 to IDR 6,432,236,000,000.00 until quarter 4 reached IDR 8,337,352,000,000.00 (Table 4).

5.5 Economic Value Added (EVA)

According to the findings of the data used in the calculation of Economic Value Added (EVA) at PT. Bank Negara Indonesia (Persero) Tbk for the period 2021, which were presented in the previous paragraph, it shows that the results have increased in each quarter, such as in quarter 1 amounting to IDR 1,174,072,000,000.00 then increased in quarter 2 to IDR 5,233,381,000,000.00 then in quarter 3 to IDR 9,729,029,000,000.00 and in quarter 4 again increased to IDR 15,011,431,000,000.00. The increase in EVA value is due to the value generated in the calculation of *Capital Changes* increasing or it can be interpreted that the rate of return on funds generated is greater (Table 5).

Quarterly	NOPAT	CC	EVA
1	5.237.231	4.063.159	1.174.072
2	10.058.410	4.852.029	5.233.381
3	16.161.265	6.432.236	9.729.029
4	23.348.783	8.337.352	15.011.431

Table 5. EVA Calculation Results In Millions Rupiah

Source: Processed data, 2022.

6 Conclusion

For the 2021 time period, PT. Bank Negara Indonesia (Persero) Tbk's *Economic Value Added* (EVA) produces a positive value with an EVA > 0 value, indicating that PT. Bank Negara Indonesia (Persero) Tbk's management is capable of generating profits and that the company's financial performance as measured by *Economic Value Added* (EVA) has improved.

For further research, it is hoped that this research can be a reference and reference to research the same topic with different methods. So that the information that has been researched can help investors to see the financial performance of a company before investing. Researchers hope that this research can provide an understanding of the measurement of financial performance in terms of several indicators in the company PT. Bank Negara Indonesia (Persero) Tbk for the 2021 Period. In writing this study, researchers have limitations in only using the *Economic Value Added* (EVA) method and the research observations used are only limited to 2021 which is divided by quarter1, quarter2, quarter3 and quarter 4. Researchers hope that further research can use several periods and not only use the *Economic Value Added* (EVA) method.

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References

- 1. Tripalupi, R. I. (2019). Electronic Document Management of Financial Services Services Based on Financial Technology (FINTECH) *Revista CENIC. Ciencias Biológicas*, 1(3), 28.
- Siska Ardiani, & Sriwardany. (2021). Analisis Perbandingan Economic Value Added dan Market Value Added dalam Penilaian Kinerja Keuangan pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia. *Jurnal Multidisiplin Madani*, 1(1), 31–40. https:// doi.org/10.54259/mudima.v1i1.85
- 3. Rismayona, P. G. (2020). Analysis of the company's financial performance assessment using the Economic Value Added (EVA) method at PT. Perkebunan Nusantara IV (PERSEO) Medan in 2013–2017.

- Esomar, M. J. F., & Christianty, R. (2021). The Impact of the Covid-19 Pandemic on the Financial Performance of Service Sector Companies on the IDX. *Jkbm (Journal of Business and Management Concepts)*, 7(2), 227–233. https://doi.org/10.31289/jkbm.v7i2.526633 7-351. DOI: https://doi.org/10.1007/3-540-11494-7_22
- 5. Ichromi, L. D. (2017). Implentation Of Economic Value Added 7(2), 6-15.
- 6. Sidharta, T. K. (2020). Basic Financial Performance Measurement at Pt. X in Surabaya. 1-7.
- 7. Sanjaya Marlius. (2018). The Role of Financial Statements in the Wisdom of Lending to Prospective Customers at PT. BPR Batang Kapas. *Journal of the Academy of Finance and Banking*, 1–12.
- 8. Agustin, A. (2022). Financial performance analysis using economic valued added method on the sub sector of cigarette listed on the Indonesia Stock Exchange. 2(1), 50–60.
- Prabowo, R., & Sutanto, A. (2019). Analysis of the Effect of Capital Structure, and Liquidity on Profitability in Automotive Sector Companies in Indonesia. *Samudra Journal of Economics* and Business, 10(1), 1–11. https://doi.org/10.33059/jseb.v10i1.1120
- Hefrizal, M. (2018). Analysis of the *Economic Value Added* Method to Assess Financial Performance at Pt. Unilever Indonesia. *JOURNAL OF ACCOUNTING AND BUSINESS: Journal of the Accounting Study Program*, 4(1), 64–73. https://doi.org/10.31289/jab.v4i1. 1552
- Nasrianto, Idris, R., & Fajriah, Y. (2021). YUME: Journal of Management Analysis Using *Economic Value Added* (EVA) and Market Value Added (MVA) Methods to Assess Financial Performance at PT. *YUME: Journal of Management*, 4(1), 187–194. https://doi.org/10.37531/ yume.vxix.234
- Murwanti, S., & Dwiastuti, E. (2016). Comparative Analysis of the Company's Financial Performance Using Profitability Ratios and *Economic Value Added* (EVA) (Case Study at PT. Astra Otoparts Tbk. 2014–2016 Period). *National Seminar and The 4th Call for Sharia Paper*, 146–156.
- Cookson, M. D., & Stirk, P. M. R. (2019). Analysis of the Assessment of the Company's Financial Performance Using the *Economic Value Added* (EVA) Method at PT Bank Rakyat Indonesia (Persero) Tbk. *Journal of Business Administration (JAB)*, 6(3), 44–51.
- 14. Young, S., & O'Byrne, S. (2001a). Eva and Value Based Management: A Practical Guide to IMPL.
- 17. Yanto, D. (2022). The Effect of Inflation, Tax Rate, and Invested Capital on Weighted Average Cost of Capital where Invested Capital is Moderated by Audit Quality on Bonds in Manufacturing Companies. 1(3), 11–15.
- Muhajir, A. (2020). Analysis of Financial Performance with the *Economic Value Added* (EVA) Method (Study at PT. Behin Karya 2015–2019). *JES (Journal of Sharia Economics)*, 5 (2), 109119. https://doi.org/10.30736/jesa.v5i2.91
- 19. Longdong, N. G. F., & Tawas, H. N. (2021). Analysis of *Economic Value Added* (EVA) and Market Value Added (MVA) as Financial Performance Measuring Tools at PT Indofood Sukses Makmur Tbk. *EMBA Journal: Journal of Economic Research, Management, Business* and Accounting, 9(4), 1153–1164.
- 18. Marghareta, F. (2011). Financial Management for Non-Financial Managers.
- 19. Young, S., & O'Byrne, S.. (2001b). Eva and Value Based Management: A Practical Guide to IMPL.

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