Original Research Article

Comparative Analysis of Financial Performance Using the Economic Value Added (EVA) Approach in Banking Listed on the Indonesian Stock Exchange

Elis Listiana Mulyani[1], Dedi Rudiana[1*], Usman Mulja Kusumah[1]

[1]Faculty of Economics and Business, Siliwangi University, Indonesia

*Corresponding author: Dedi Rudiana
Faculty of Economics and Business, Siliwangi University, Indonesia

Abstract

Banking is a financial institution that carries out intermediary activities between people who own funds and people who need funds. Because of these activities, ongoing supervision is needed to avoid any party being harmed. One way to assess banking performance is to compare the financial ratios of one period with other methods. The aim of this research is to determine and analyze comparative financial ratios using liquidity ratios, solvency ratios, profitability ratios and economic value added (EVA) as a means of measuring financial performance in banks listed on the Indonesia Stock Exchange. The research method used is descriptive analysis with the data used is secondary data in the form of financial reports for the 2018 period. The results show that there is no difference between financial ratios in the form of Liquidity ratios, Solvency ratios and Profitability ratios with Economic Value Added (EVA) as a tool for assessing banking financial performance.
Keywords: Liquidity, Solvency, Profitability, Economic Value Added (EVA), bank.

BACKGROUND

Banks play a central role in a country's economy (Ahmad, 2016; Mohanty, 2013), becoming the main pillar in supporting financial activities, investment and economic growth. In the Indonesian context, rapid economic growth and financial sector transformation underscore the urgency of in-depth research into bank performance. The effective and efficient performance of these financial institutions has a direct impact on national economic stability.

Significant economic growth and dynamic changes in financial structures have placed the Indonesian banking sector at the forefront of change. Involving a number of large players and rapidly growing financial markets, research on bank performance is becoming increasingly important to understand these complex dynamics and provide in-depth insight into the macroeconomic implications (Singh *et al.*, 2013).

Bank Indonesia as the country's monetary authority continues to face challenges in formulating and implementing effective monetary policy. Through bank performance analysis, it can be revealed to what extent banks in Indonesia support these policies, and what impact they have on economic growth (Alam *et al.*, 2021; Zhongming & Bthuure, I.A., Guoping, 2020).

Globalization and technological revolution have changed the banking landscape significantly. Global connectedness makes Indonesian banks vulnerable to external changes, while technological innovation provides new opportunities and challenges in increasing efficiency and competitiveness. Bank performance analysis helps identify the extent to which the banking sector in Indonesia is able to integrate these changes and remain relevant in the global scenario.

The importance of bank performance lies not only in their contribution to the financial sector, but also in their role in supporting the growth of the real economic sector (Athaley *et al.*, 2020; Suprayitno & Sinansari, 2020). This analysis can explore the extent to which Indonesian banks help finance sectors such as manufacturing, agriculture and infrastructure, as well as their impact on job creation and inclusive economic growth.

By digging deeper into bank performance in Indonesia, it is hoped that more research can provide a

Citation: Elis Listiana Mulyani, Dedi Rudiana, Usman Mulja Kusumah (2023). Comparative Analysis of Financial Performance Using the Economic Value Added (EVA) Approach in Banking Listed on the Indonesian Stock Exchange. *Saudi J Econ Fin, 7*(12): 587-591.

587

more holistic view of the dynamics of the national economy and provide a basis for formulating more effective policies in supporting sustainable growth.

Economic Value Added (EVA) is a financial metric that is increasingly recognized as an important measure in analyzing bank performance (Jakub *et al.*, 2015; Sundari *et al.*, 2023). EVA provides a more comprehensive perspective than traditional financial metrics, such as net income or ROA (Return on Assets).

EVA focuses on creating added economic value, measuring the extent to which a bank is able to generate profits that exceed its cost of capital. By evaluating a bank's success in generating positive economic value, EVA provides a more complete picture of the bank's contribution to stakeholders and the economy as a whole (Sudha & Priyanka, 2019).

One of the main advantages of EVA is its ability to take into account capital costs (Ende, 2017). Banks are not only measured based on net profit, but also measured by the extent to which they can generate sufficient profits to repay the invested capital. Thus, EVA provides a more accurate indication of the efficiency of capital use by banks.

EVA provides incentives for bank management to make value-based decisions, focusing on projects and initiatives that can increase company value. This creates the impetus for wise capital allocation and business strategies that can generate long-term value.

EVA also aligns the interests of stakeholders, including shareholders, management and creditors. With a focus on value creation, EVA creates a framework that aligns with stakeholders' long-term goals, creating a more balanced and sustainable relationship.

Since EVA measures economic value added in the long term, it provides a stronger perspective on the sustainability of bank performance (Gonçalves *et al.*, 2023; Jankalová & Kurotová, 2020). This helps analyze whether the profits earned by banks are the result of good and sustainable strategies, not just temporary profits.

By utilizing EVA, bank performance analysis becomes more holistic and focused on long-term value creation, providing a more in-depth and relevant view for stakeholders in measuring and understanding the banking sector's contribution to the economy.

This research was conducted in Indonesia because it has deep significance in the context of the national economy and banking. This is because EVA allows a more holistic assessment of a bank's ability to create economic value (Donthu *et al.*, 2021). In the Indonesian context, where economic growth and business transformation are increasingly dynamic, research using the EVA approach can provide a better

understanding of the extent to which banks in Indonesia are able to make a sustainable contribution to the economy.

In the era of globalization, Indonesian banks need to compete globally. Financial performance research with EVA can help identify factors that influence the competitiveness of Indonesian banks (Octrina & Setiawati, 2019; Sari *et al.*, 2022) in international markets, ensuring that they can adapt and compete effectively at the global level.

Therefore, research on bank financial performance in Indonesia using the EVA approach not only provides an overview of the financial health of banks, but also provides an important contribution to a sustainable and efficient national economic development strategy.

METHOD
The method used in this research is a descriptive method, namely a research method that attempts to collect data, critically analyze the data and collect it based on facts during the research period or the present.

The sample used is banks listed on the Indonesia Stock Exchange for the 2021 period. The data used are bank financial reports and are used to calculate the following ratios:

Liquidity:
Cash Ratio (CR) $= \frac{cash+bank}{current\ ratio}$ x 100%

Loan Funding Ratio (LFR) $= \frac{credit\ distributed}{total\ of\ saving}$ x 100%

Solvability:
Debt to Equity Ratio (DER) $= \frac{Total\ Debt}{Total\ Equity}$ X 100%

Capital Adequacy Ratio (CAR) =
$\frac{total\ of\ equity}{total\ of\ Productive\ Asset\ by\ Risk}$ x 100%

Profitability:
Return On Asset (ROA) $= \frac{Earning\ After\ tax}{Total\ Asset}$ X 100%

Return On Equity (ROE) $= \frac{Earning\ After\ tax}{Total\ Equity}$ X 100%

Economic Value Added (EVA):
EVA = Net Operating Profit After Tax (NOPAT)+ WACC (Capital Charge)

RESULTS
Based on the results of research on the financial performance of 14 banks listed on the Indonesia Stock Exchange (BEI), the following results can be obtained:

a. Financial Ratio

Table 1 presents data on financial ratio calculations for 14 banks listed on the Indonesian Stock Exchange.

Table 1: Liquidity, Solvency, Profitability Ratios Banking listed on the Indonesian Stock Exchange (BEI)

Name of Banks	Liquidity		Solvability		Profitability	
	CR	LFR	CAR	DER	ROA	ROE
BBNI	6,5	88,8	18,5	6,33	0,025	0,14
BBRI	7,16	89,57	21,21	6,00	0,032	0,17
BBTN	6,61	103,25	18,21	6,18	0,012	0,07
BMRI	6,92	95,46	20,96	3,62	0,028	0,10
BBKP	6,52	86,18	13,41	10,13	0,002	0,02
BNGA	6,7	97,18	19,66	5,74	0,018	0,09
BDMN	17,2	95	22,2	3,45	0,026	0,09
BJBR	6,37	91,89	18,63	6,44	0,016	0,10
BJTM	7,49	66,57	24,21	6,40	0,028	0,15
BNII	6,57	96,46	19,04	6,08	0,017	0,09
BNLI	6,9	90,1	19,4	5,81	0,008	0,04
BTPN	6,6	96,2	25,3	4,26	0,030	0,12
NISP	6,51	93,51	17,63	6,11	0,020	0,11
MEGA	5,19	67,23	22,79	5,08	0,024	0,12

b. Economic value Added (EVA)

Economic Value Added is company performance that provides added economic value for investors/company owners. EVA is measured by adding economic value to company profits. The equation used is NOPAT - capital charge. Table 2 presents the calculation results obtained by EVA.

Table 2: Economic Value Added (EVA) Banking listed on the Indonesian Stock Exchange (BEI)

	EAT ($Rp\ 10^6$)	wd.kd(1-Tx)	we.ke	WACC	IC ($Rp\ 10^6$)	EVA ($Rp\ 10^6$)
BBNI	15.092	0,018	0,019	0,036	211.404	7.425,10
BBRI	32.418	0,020	0,025	0,045	674.576	1.858,33
BBTN	2.808	0,032	0,009	0,042	76.172	-357,54
BMRI	25.852	0,009	0,022	0,031	376.940	14.309,49
BBKP	190	0,050	0,002	0,052	14.468	-555,67
BNGA	3.482	0,022	0,013	0,035	68.567	1.110,16
BDMN	3.572	0,050	0,019	0,069	75.914	-1.646,51
BJBR	1.552	0,036	0,013	0,049	32.623	-47,65
BJTM	1.260	0,014	0,020	0,034	37.689	-17,37
BNII	2.262	0,010	0,013	0,022	56.503	1.004,56
BNLI	901	0,022	0,006	0,028	32.297	12,76
BTPN	2.258	0,033	0,022	0,055	22.633	1.012,56
NISP	2.638	0,030	0,015	0,045	48.022	453,98
MEGA	1.599	0,031	0,019	0,050	23.027	443,61

DISCUSSION

The analytical technique used to compare financial ratios and Economic Value Added in assessing company performance is a statistical technique in the form of an average difference test (independent sample t-test).

a) Cash Ratio with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test), the results obtained are F 9.453. Equal variances assumed is greater than α 0.005, meaning that the two population variances are identical, so the t test uses Equal Variance assumed with the value t count - (1.598) is greater than sig 0.122, meaning that there is no significant difference between the cash ratio and Economic Value Added (EVA) as a tool for measuring the company's financial performance.

b) Loan Funding Ratio with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test) between LFR and EVA, the results obtained are F 9.411. Equal variances assumed is greater than α 0.005, meaning that both population variances are identical, so the t test uses Equal. The assumed variance with the calculated t value - (1.524) is greater than sig 0.140, meaning that there is no significant difference between the Loan Funding

Ratio (LFR) and Economic Value Added (EVA) as a tool for measuring the company's financial performance.

c) Capital Adequacy ratio with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test) between CAR and EVA, the results obtained are F 9.488. Equal variances assumed is greater than α 0.005, meaning that both population variances are identical, so the t test uses Equal. The assumed variance with the calculated t value - (1.587) is greater than sig 0.125, meaning that there is no significant difference between the Capital Adequacy ratio (CAR) and Economic Value Added (EVA) as a tool for measuring the company's financial performance.

d) Debt to Equity ratio with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test) between DER and EVA, the results obtained are F 9.456. Equal variances assumed is greater than α 0.005, meaning that both population variances are identical, so the t test uses Equal. The assumed variance with the calculated t value - (1.599) is greater than sig 0.122, meaning that there is no significant difference between the Debt to Equity ratio (DER) and Economic Value Added (EVA) as a tool for measuring the company's financial performance.

e) Return On Assets with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test) between ROA and EVA, the result obtained is F 9.463. Equal variances assumed is greater than α 0.005, meaning that both population variances are identical, so the t test uses Equal. The assumed variance with the calculated t value - (1.605) is greater than sig 0.122, meaning that there is no significant difference between Return On Assets (ROA) and Economic Value Added (EVA).

f) Return On Equity with Economic Value Added

Based on the results of data processing using statistical techniques in the form of an average difference test (independent sample t-test) between ROE and EVA, the results obtained are F 9.463. Equal variances assumed is greater than α 0.005, meaning that both population variances are identical, so the t test uses Equal Variance. assumed with the calculated t value - (1.605) greater than sig 0.121, meaning there is no significant difference between Return On Equity (ROE) and Economic Value Added (EVA).

g) Comparative Analysis of Financial Ratios with Economic Value Added

Based on the overall processing results, all ratios used to assess financial performance provide results that are in accordance with the concept/theory, where measuring performance using financial ratios provides results that are in accordance with measuring financial performance using Economic Value Added (EVA). This indicates that there are similarities in the calculation results between financial ratios and Economic Value Added (EVA). This is in accordance with research conducted by Iriyanti Yuni Aningtyas entitled Comparative analysis between Financial Ratios using Economic Value Added (EVA), where EVA experiences a positive increase and can increase economic value for investors. Likewise with research conducted by Rendy AS Kaunang entitled Comparative Analysis of Financial Performance using Profitability Ratios and Economic Value Added (EVA), where the results show positive values so that they can improve investor welfare. This is in line with the concept that if financial performance improves it can provide returns for investors so that investor welfare also increases.

CONCLUSION

Based on the results of data processing, a conclusion can be drawn that measuring the Company's Financial Performance through the Liquidity Ratio which uses the Cash Ratio and Loan Funding Ratio (LFR) as parameters gives the same results as Economic Value Added (EVA). This means that banks can use both or just one of them to assess a company's financial performance because they do not provide different results from each other.

Measuring Financial Performance through Solvency using Debt to Equity Ratio (DER) and Capital Adequacy Ratio (CAR) as financial performance measurement tools provides the same results as Economic Value Added (EVA). This means that companies can use both or just one of them to assess the company's financial performance because they do not provide different results from each other.

The Profitability Ratio, which is measured by Return on Assets (ROA) and Return on Equity (ROE) as a means of measuring financial performance, also gives the same results as Economic Value Added (EVA). This means that companies can use both or just one of them to assess the company's financial performance because they do not provide different results from each other.

SUGGESTION

Based on the conclusions above, the author suggests the following:

1. Banks can use Liquidity Ratios, Solvency Ratios and Profitability Ratios to measure financial performance, because the processing method is easier and more practical.
2. Even though the processing is more complicated compared to Liquidity Ratios, Solvency ratios and Profitability ratios as tools for measuring financial performance, Economic Value Added (EVA) can be another alternative in assessing financial performance, because this

method measures economic added value for investors.

3. For other researchers, they can add other variables to complement previous research, or they can also provide additional data (more companies or more historical data, so the results can be even better.

REFERENCES

- Ahmad, P. R. (2016). Role of Central Banks in the Economy. *Polgari Szemle, 12*(August 2016), 1–15.
- Alam, M. S., Rabbani, M. R., Tausif, M. R., & Abey, J. (2021). Banks' performance and economic growth in India: A panel cointegration analysis. *Economies, 9*(1). https://doi.org/10.3390/economies9010038
- Athaley, C., Rastogi, S., Goel, A., & Bhimavarapu, V. M. (2020). Factors Impacting Bank's Performance : A Literature Review. *Test Engineering and Management, 83*(May-June), 7379–7398.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research, 133*(April), 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070
- Ende. (2017). Financial Performance Analysis Using Economic Value Added (EVA). *IOP Conference Series: Materials Science and Engineering, 180*(1), 54–64. https://doi.org/10.1088/1757-899X/180/1/012250
- Gonçalves, T. C., Louro, D., & Barros, V. (2023). Can Corporate Sustainability Drive Economic Value Added? Evidence from Larger European Firms. *Journal of Risk and Financial Management, 16*(4). https://doi.org/10.3390/jrfm16040215
- Jakub, S., Viera, B., & Eva, K. (2015). Economic Value Added as a Measurement Tool of Financial Performance. *Procedia Economics and Finance, 26*(December), 484–489. https://doi.org/10.1016/s2212-5671(15)00877-1
- Jankalová, M., & Kurotová, J. (2020). Sustainability assessment using economic value added. *Sustainability (Switzerland), 12*(1), 1–19. https://doi.org/10.3390/su12010318
- Mohanty, M. S. (2013). The role of central banks in macroeconomic and financial stability Monetary and Economic Department. In BIS Papers (Vol. 76, Issue 76). www.bis.org
- Octrina, F., & Setiawati, R. (2019). Competitiveness of Indonesian banking industry based on commercial bank business group: Panzar Rosse Model. *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah, 7*(1), 37–48. https://doi.org/10.22437/ppd.v7i1.7475
- Sari, S., Ajija, S. R., Wasiaturrahma, W., & Ahmad, R. A. R. (2022). The Efficiency of Indonesian Commercial Banks: Does the Banking Industry Competition Matter? *Sustainability (Switzerland), 14*(17), 1–16. https://doi.org/10.3390/su141710995
- Singh, S., Tripathi, L. K., & Arashar, A. (2013). A Study of Impact of Macroeconomic Variables on Performance of Nifty. *SSRN Electronic Journal*, March. https://doi.org/10.2139/ssrn.2236589
- Sudha, B., & Priyanka, T. (2019). Eva Analysis. International Journal of Research in Engineering, IT, and Social Sciences, November.
- Sundari, A., Rozi, A. F., Bilgies, A. F., & Muhajir, A. (2023). Financial Performance Analysis Using Economic Value Added and Market Value Added Methods. *Journal of Tourism Economics and Policy, 3*(1), 42–48. https://doi.org/10.38142/jtep.v3i1.546
- Suprayitno, G., & Sinansari, P. (2020). Analysis of Indonesia Banking Performance. 135(Aicmbs 2019), 233–236. https://doi.org/10.2991/aebmr.k.200410.036
- Zhongming, P., & Bthuure, I. A., Guoping, D. (2020). Banks Performance and Economic Growth : Evidence from West Africa Banks Performance and Economic Growth : Evidence from West Africa. *International Journal of Management Sciences and Business Research*, November 2019.