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ABSTRACT

The **purpose** of this study is to suggest an approach to analyzing the efficiency of telecommunications companies listed on the Indonesia Stock Exchange (IDX) using methods for determining Economic Value Added (EVA), Market Value Added (MVA), Financial Value Added (FVA), and Refined Economic Value Added (REVA). A summary of the relevant literature is formed on the bibliographic database. Statistical data based on information from the Indonesia Stock Exchange for four companies in the telecommunications sector over 5 years. Data from reports' balance sheets, including reports of profits and losses, is investigated. The **results** of the survey demonstrated that a telecommunications company had a positive EVA value, which meant that it succeeded in creating economic value. The three telecommunications companies had a positive MVA value, which meant that they provided value-added through market capitalization. In four telecommunications companies, a positive FVA indicated that management was successful in providing financial value-added for the company. One of the four telecommunications companies produced a positive REVA, which meant an increase in economic value after the company paid off all liabilities to creditors and shareholders. The use of various value-added measures to assess the performance of Indonesian businesses is a **scientific novelty** that contributes to the development of corporate finance theory.

Keywords: Financial Performance; Economic Value Added (EVA); Market Value Added (MVA); Financial Value Added (FVA); Refined Economic Value Added (REVA)

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INTRODUCTION

Indonesia's tech industry, particularly smartphones and the internet, is rapidly expanding with the advent of 5G. In early 2022, the country had an astonishing 210 million internet users, mainly accessing social media on mobile devices. According to the "Indonesian Internet Profile 2022" by the APJII, 99.16% of users were aged 13–18. With an estimated population of 272.68 million, the internet penetration rate in 2022 reached 77.02%, up from 73.7% in 2020, connecting 196.71 million Indonesians. Key internet usage drivers include information access (92.21%), remote work/study (90.21%), public services (84.9%), email (80.7%), online transactions (79%), entertainment content (77.25%), online transportation (76.47%), and financial services (72.32%) (www.kompas.com).

Tech advancements impact Indonesia's economy. Companies must strategize to enhance shareholder and investor values. As noted by A. Horton [1], investors seek revenue by providing capital from owners and creditors. Companies must improve quantity and quality for expected benefits. Regular financial statement evaluations are vital for assessing financial health and ensuring survival, according to D.E. Kieso et al. [2]. Financial performance measurement is vital for assessing a company's goal achievement. Utilizing financial ratios derived from historical data is common. Yet, it has limitations due to subjectivity in accounting data, potentially leading to inaccurate and imprecise measurements, according to E.R. Rahadjeng [3].

Financial ratio analysis, while useful for assessing financial performance and guiding decisions, does not guarantee an entirely accurate representation of a company's true financial condition, according to N. Yoshino, F. Taghizadeh-Hesary [4]. Financial ratio analysis neglects a company's risk exposure by disregarding the cost of capital. To address this limitation in financial performance measurement,

a value-based approach has emerged, according to a paper by J. Choi et al. [5]. EVA and MVA assess corporate performance, cost of capital, and capital investment. Law No. 36/1999 and a 2002 government regulation enabled foreign mobile operators in Indonesia, heralding telecom industry liberalization.

PT Telekomunikasi Indonesia Tbk accelerated digitalization in response to COVID-19, offering ICT services and solutions to aid the nation and government. Despite challenges, Telkom Group improves digital infrastructure and services for an excellent customer experience. If traced back, the average EVA value for the telecommunication industry in Indonesia listed on the IDX for 2014–2018 grew significantly. In detail, the result of Economic Value Added (EVA) calculation for the telecommunications industry in Indonesia listed on the Indonesia Stock Exchange (BEI) in 2014 was negative, amounting to –514,684,002,483. However, in 2015, the value turned positive and experienced an increase to 1,978,484,129,235. Subsequently, in 2016, there was a decline, but still with a positive value, which was 922,333,214,645. In 2017, there was an increase again, reaching 1,142,095,810,347 with a positive value. Moreover, it increased again in 2018, with a positive value of 3,005,894,766,520. The average EVA value for the telecommunications industry in Indonesia listed on the BEI from 2014 to 2018 was positive, amounting to 1,306,424,783,653.

R.A. Masyiyan's and D. Isynuwardhana's research found that the results of the MVA calculation, the significance value of the MVA variable is 0,091 > 0,05 [6]. Judging from the five telecommunications companies listed on the Indonesia Stock Exchange from 2015–2020, all companies have positive MVA values, so telecommunications companies for the 2015–2020 period have succeeded in increasing company wealth. The purpose of this study is to analyze financial performance using the Economic Value Added (EVA), Market Value Added (MVA), Financial Value Added (FVA), and Refined Economic Value Added (REVA) methods in telecommunications sector companies listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

This section provides some context on the concepts of theory behind multiple variables used in the present study. Such variables are composed of financial statements, economic value added, market value added, financial value added, and refined economic value added.

Financial Statements

Financial reports are reports that show the company's financial condition at this time or in a certain period, according to E. A. Osadchy et al. [7]. Financial statements present information about entities, which include: assets, liabilities, equity, income and expenses, including profits and losses, contributions from and distributions to owners in their capacity as owners and cash flows, as stated by R. Bergitta Sonia et al. [8]. According to C.E. Grigoras-Ichim et al. a complete financial report usually includes a Statement of Financial Position, a Profit and Loss Report, a Statement of Changes in Equity, and a Statement of Cash Flows [9].

Financial reports aim to inform stakeholders about a company's financial status and performance during a specific period. According to Statement of Financial Accounting Standards (PSAK) No. 1 (2015: 3), these reports serve the purpose of offering information on the financial position, performance, and cash flows that are valuable to most users for making economic decisions. The financial performance, found in a company's financial statements, can be evaluated through analytical tools: S. Cantele, A. Zardini [10].

Economic Value Added (EVA)

EVA, distinct from accounting profit, estimates economic profit by subtracting the cost of capital from profits. This objective measure reflects compensation levels. EVA is calculated using the following formula:

$$EVA = NOPAT - (WACC \times IC),$$

where EVA — Economic Value Added; NOPAT — Net Operating Profit After Tax (After operating profit tax); WACC — Weighted Average Cost of Capital (Average cost of capital weighted average); IC — Invested Capital.

Market Value Added (MVA)

MVA is the difference between the total market value of the company's equity and the amount

of equity capital invested by investors, as stated by R. Bergitta Sonia, Z. A. Zahroh, D. F. Azizah [8]. Market Value Added is the difference between the company's market value and the invested capital. The following is the formula for MVA:

$$Market\,Value\,Added = Market\,Value - Invested\,Capital.$$

In this case, the measurements according to Rudianto as cited in D.L. Moezaque, A. Daito [11] are as follows:

MVA value > 0 or positive MVA shows management has succeeded in providing added value through growth.

MVA value < 0 or negative MVA shows management is unable to provide added value through the growth of the market capitalization value of the shares issued.

Financial Value Added (FVA)

FVA is a method for measuring company performance and added value. This method considers the contribution of fixed assets in generating the company's net profit, according to O. M. Olarewaju, T. S. Msomi [12]. Here's the FVA formula:

$$FVA = NOPAT - (ED - D),$$

where FVA — Financial Value Added; NOPAT — Net Operating Profit after Tax; ED — Equivalent Depreciation; D — Depreciation.

In principle, the condition (FVA value > 0 or positive FVA) shows that the company's management has succeeded in providing financial value added to the company. In the meantime, the condition (FVA value < 0 or negative FVA) shows that there is no process of adding financial value to the company. Subsequently, the condition (FVA value = 0 or breakeven point) shows that the management is not successful in providing added value or financial reduction.

Refined Economic Value Added (REVA)

Considering stock market prices and abnormal returns formed by the difference between stock returns and market returns, while EVA is based on share value M. Pinochi et al. [13]. The formula used to calculate Refined Economic Value Added (REVA) is as follows:

$$REVAt = NOPATt - (MVt - 1 \times KW),$$

where REVA t — Refined Economic Value Added in the t-period; NOPAT t — Net Operating Profit After Tax in the t-period; MV $t - 1$ — Market Value of the business entity in period $t - 1$ (Market Value of Equity); KW — the cost of capital is the cost of borrowing interest and fees equity and calculated on a weighted average basis (WACC).

Using the Refined Economic Value Added (REVA) method can be interpreted as follows:

If $REVA > 0$, this indicates that there has been a process of economic added value for the company;

If $REVA < 0$, this indicates that the company does not process economic added value or is unable to pay its obligations to funders;

If $REVA = 0$, this indicates that there is no process of economic added value or economic reduction.

Several prior studies have investigated variables such as financial statements, economic value added, market value added, financial value added, and refined economic value added individually. In terms of the variable of financial statements, N. Ding et al. sought to see the extent to which the teams of top management are interconnected to the comparability of financial statements [14]. The study on experienced foreign CEOs (FCEOs) found that their financial and accounting expertise, coupled with international work experience, enhances financial statement comparability. This correlation weakens with rising economic policy uncertainty, emphasizing the critical role of financial reporting in understanding the FCEOs' impact on financial statement comparability. Subsequently, G. Salijeni et al. executed a study on the growth of Big Data and Analytics (BDA) tools. They revealed that BDA reshapes interactions among audit firm departments and with clients [15].

In terms of the variable of economic value added, A. Kordalska and M. Olczyk conducted a study to determine the factors that influence the development of global value chains (GVCs) in a few chosen Central and Eastern European (CEE) countries, with a focus on functional specialization (FS) [16]. This study, based on World Input-Output Database data, revealed a

distinct value-added pattern in Central and Eastern European countries (CEE). Poland and Slovakia's GVC positions are unfavorable due to their emphasis on low value-added manufacturing. The study highlighted wage convergence and strong GVC backward linkages as drivers of increased value-added in various business activities. Subsequently, L. Yang executed a study on testing the impacts of various trade standards on China's value-added and total exports in global value chains by using a gravity model [17]. The study highlights China's export advantages through international norm alignment and emphasizes strict regulation enforcement. Mandatory criteria have a greater impact than voluntary ones, particularly on overall exports. Value-added exports are negatively affected by voluntary country-specific requirements, while there is no statistically significant impact of voluntary global harmonized standards on either export category.

In terms of the variable of market value added, K. Blind et al. analyzed the influence of formal standards on commerce in global value chains (GVCs) in Europe [18]. Using a panel data gravity model, they examined the impact of national, European, and global standards on European trade. National standards impede European value chains, while European and international standards facilitate trade. European standards mainly affect intra-European value chains, and international standards enhance imports into Europe from third countries, ensuring information parity in the European Single Market. The interaction of national and European standards in European value chains positively influences trade, emphasizing the importance of national standardization. Subsequently, C. Lutz and G. Tadesse conducted a study exploring the difficulties encountered by smallholder producer cooperatives from developing nations in their pursuit of entry into agricultural global value chains [19]. They examined how incorrect selection and insufficient dedication affect competitiveness in farmers' market groups. The study challenged the prevailing assumption that open membership is universally beneficial, asserting that it can be problematic for innovative farmer's market organizations.

In terms of the variable of financial value added, A. Mirza et al. conducted a study to investigate, from the vantage point of a developing nation that has adopted the full complement of IFRS, how the value relevance of financial reporting has changed [20]. Their study, using the Ohlson pricing model, assessed financial statement relevance in the Malaysian capital market. It underlined the importance of operating cash flow alongside profits and the book value of equity for investment decisions. The study revealed a disparity between management bias in reported profits and book value of equity from 2012 to 2006 and the financial reporting framework, emphasizing earnings in investment decisions. These findings have regulatory implications for improving financial reporting reliability. Subsequently, H. Kaibuchi et al. worked on improving Value-at-Risk (VaR) estimation for extreme loss return distributions in financial risk management. They introduced GARCH-UGH, a two-step bias-reduced method for dynamic extreme VaR estimation. GARCH-UGH outperformed traditional methods in in-sample and out-of-sample backtesting across various financial time series [21].

In terms of the variable of refined economic value added, L. V. Dewri's research explored the interplay between corporate governance (CG), financial performance (FP), and refined economic value added (REVA) in predicting firm value (FV) and return on stock (RoS) using GMM estimation. The study identified strong correlations between FV and RoS and CG, FP, and REVA [22]. Effective CG practices can significantly enhance FP, sustain positive economic value, and ultimately improve FV and Ro S. Firms demonstrating consistent FV growth can provide a healthy return on investment (RoI) to shareholders, motivating managers to prioritize robust CG and providing investor confidence in stable FP and ongoing REVA growth [23].

Previous studies above examined individual variables and were conducted in different countries. In contrast, the current study, specific to Indonesia, integrates multiple variables (financial statements, economic value added, market value added, financial value added, and refined economic value added) simultaneously.

METHODOLOGY

This type of research is descriptive analysis with a quantitative approach. The data sources used are

Table 1

Sample Criteria

No.	Sample Selection Criteria	According to Criteria	Does Not Meet Criteria
1	Telecommunications Sector Companies Listed on the IDX	5	–
2	Companies that publish audited financial statements	4	–
3	Telecommunications Sector Companies Listed on the IDX Become Cellular Operators	4	–
4	Incomplete Telecommunications Sector Companies for Research	–	1
Number of Companies Used		4	
Total Data for 5 Years		20	

Source: Indonesian Stock Exchange, 2022

secondary data, namely the percentage level of financial inclusion in each province of Indonesia obtained from the Financial Services Authority through the website www.ojk.go.id, and the percentage of poverty, unemployment, and GDP to measure economic growth by presenting data covering each province in Indonesia published by the Central Statistics Agency through the website www.bps.go.id. Data analysis and hypothesis testing in this study used the Partial Least Squares (PLS).

Object of Research

The object of this research is a telecommunications sub-sector service company that is registered as a public company (issuer) on the Indonesia Stock Exchange (IDX). Telecommunications sub-sector companies are one of the most important industries for supporting the internet network in a country.

Population and Population Sampling Procedure

The populations of this study are telecommunications companies listed on the Indonesia Stock Exchange. The method of determining the sample in this study is purposive sampling (intentional sampling). The sample is presented in *Table 1*.

Based on the criteria that have been determined using the purposive sampling method, the number of sample companies in this research object is 4, according to predetermined criteria. Hence, the samples used in this study were 20 samples with annual reports, as displayed in *Table 2*.

The data used in this research is secondary data obtained through the websitehttps://www.idx.co.id/, in the form of a Statement of Financial Position (Balance Sheet) and a Profit and Loss Report, especially for telecommunications companies listed on the Indonesian Stock Exchange.

Analysis Techniques

The technique for analyzing financial performance in this study is to use the Economic Value Added (EVA), Market Value Added (MVA), Financial Value Added (FVA), and Refined Economic Value Added (REVA) methods, namely:

1. Economic Value Added (EVA)

According to M. Dewi [23], the steps used in calculating EVA are as follows:

a. Net Operating Profit After Tax (NOPAT)

$$Net\ Operating\ Profit\ After\ Tax + Interest\ Expense\ ,$$

Table 2

Research Sample

No	Code	Company name	Sector
1	EXCL	PT XL Axiata Tbk	Telecommunication
2	FREN	PT Smartfren Telecom Tbk	Telecommunication
3	ISAT	PT Indosat Tbk	Telecommunication
4	TLKM	PT Telekomunikasi Indonesia Tbk	Telecommunication

Source: Indonesian Stock Exchange, 2022.

b. Invested Capital (IC)

$$Invested\ Capital = Total\ Debt\ and\ Equity - short\ term\ Debt$$

c. Debt Capital Level (D)

$$Debt\ Capital\ Level\ (D) = \frac{Total\ Debt}{Total\ Debt\ and\ Equity} \times 100\%$$

d. Cost of Debt (rd)

$$Cost\ of\ Debt = \frac{Interest\ Expense}{Total\ Debt} \times 100\%$$

e. Tax Rate / Tax (t)

$$Tax\ Rate\ (t) = \frac{Tax\ Expense}{Profit\ Before\ Tax} \times 100\%$$

f. Capital Level of Equity (E)

$$Capital\ Level\ of\ Equity = \frac{Total\ Equity}{Total\ Debt\ and\ Equity} \times 100\%$$

g. Cost of Equity (re)

$$Cost\ of\ Equity\ (re) = \frac{Earnings\ Per\ Share\ (EPS)}{Stock\ Price} \times 100\%$$

h. Weighted Average Cost of Capital (WACC)

$$WACC = ((D \times rd(1 - tax)) + (E \times re))$$

i. Capital Charges (CC)

$$Capital\ Charges = Invested\ Capital \times WACC$$

j. Economic Value Added (EVA)

$$EVA = NOPAT - Capital\ Charge$$

According to F. Gómez-Bezares et al. [24], to assess the financial performance of a company, the EVA method can be grouped into 3 categories as follows:

1. If EVA > 0 or EVA is positive.

The company's financial performance can be said to be good because it can add business value. In this case, employees are entitled to bonuses, creditors still receive interest and shareholders

can get returns equal to or more than what was invested.

2. If EVA = 0.

Economically "break even" because all profits are used to pay obligations to funders, both creditors and shareholders, so that employees do not get bonuses, only salaries.

3. If EVA < 0 or EVA is negative.

The company's financial performance is said to be unhealthy because it cannot provide added value. In this case, employees cannot get bonuses, it's just that creditors still get interest and shareholders don't get returns commensurate with what they invested.

Market Value Added (MVA)

The steps used to calculate MVA, according to E.K. Zavadskas et al. [25] are as follows:

a. Market Value

$$Market\ Value = Stock\ Market\ Price \times Number\ of\ Shares$$

b. Invested Capital

$$Invested\ Capital = Nominal\ Value \times Number\ of\ Shares$$

c. Market Value Added (MVA)

$$Market\ Value\ Added = Market\ Value - Invested\ Capital$$

In this case, the measurements are as follows:

1. MVA value > 0 or positive MVA

It shows management has succeeded in providing added value through the growth in market capitalization value of shares issued or that the company is able to sell shares in the market at a premium price.

2. MVA value < 0 or negative MVA

It shows management is unable to provide added value through the growth of the market capitalization value of the shares issued or the stock price in the market below the book value (equity per share).

3. MVA value = 0

It shows that management has failed to provide added or reduced value through the growth of the market capitalization value of shares because the stock price in the market is the same as the book value (equity per share).

Financial Value Added (FVA)

According to Rodryguez, in A. Octaviani, A. Husaini [26], the steps used in the FVA calculation are as follows:

a. Net Operating Profit After Tax (NOPAT)

$$NOPAT = Net\ Profit\ After\ Tax + Interest\ Cost$$

b. Total Resources (TR)

$$TR = Long\ Term\ Debt\ (D) + Total\ Equity\ (E)$$

c. Equivalent Depreciation (ED)

$$ED = Weighted\ Average\ Cost\ of\ Capital\ (k) \times TR$$

d. Financial Value Added (FVA)

$$FVA = NOPAT - (ED - D)$$

The measurement results using the Financial Value Added (FVA) method, as suggested by A. Octaviani and A. Husaini [26] can be interpreted as follows:

4. FVA value > 0 or positive FVA

It shows that the company's management has succeeded in providing financial added value to the company or that there is more finance when the company's net profit is able to cover the Equivalent Depreciation (ED).

5. FVA value < 0 or negative FVA

It shows that there is no process of financial added value for the company or that the company's net profit and depreciation are unable to cover Equivalent Depreciation (ED).

6. FVA value = 0 or breakeven point

It shows that management has failed to provide added value or financial reductions because the company's net profit and depreciation have been used up to pay Equivalent Depreciation (ED).

Refined Economic Value Added (REVA)

The formula used to calculate Refined Economic Value Added (REVA), as suggested by A. Octaviani and A. Husaini [26] is as follows:

$$REVAt = NOPATt - (MVt - 1 \times Kw).$$

The measurement results using the Refined Economic Value Added (REVA) method can be interpreted as follows:

1. If REVA > 0, this indicates that there has been a process of economic added value for the

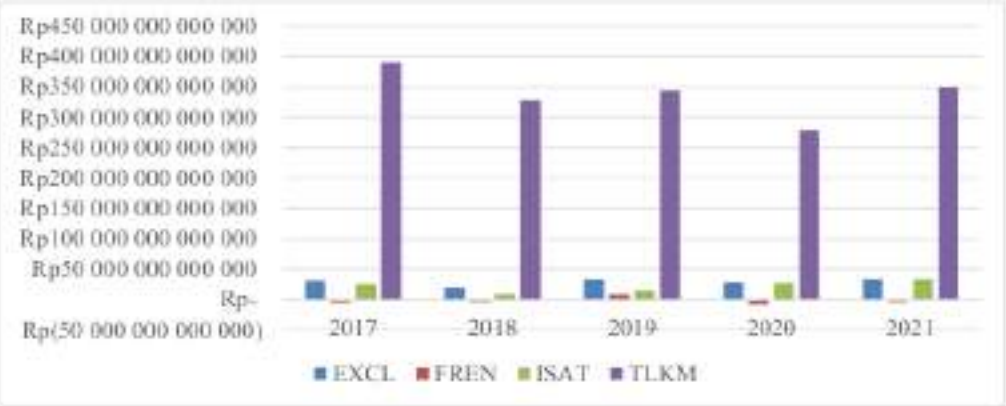

Fig. 1. **Market Value Added (MVA) (in IDN)**

Source: Indonesian Stock Exchange, 2022.

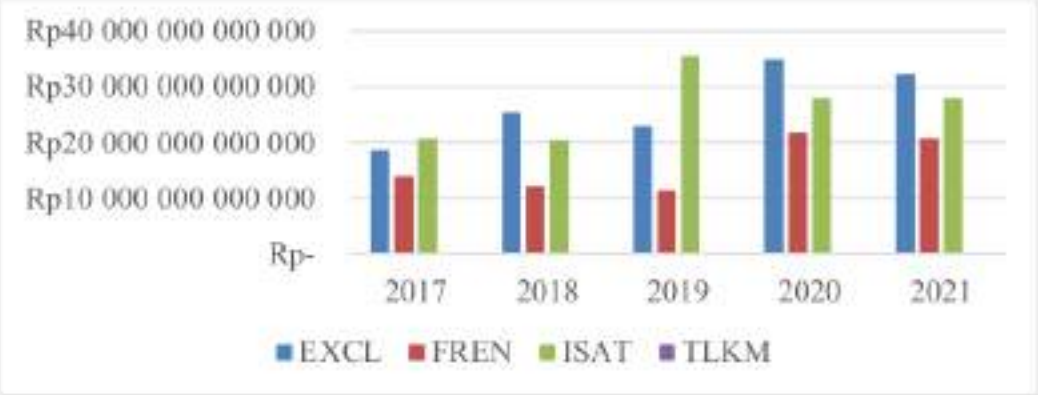

Fig. 2. **Financial Value Added (FVA) (In IDN)**

Source: Indonesian Stock Exchange, 2022.

company or that there is more economic value after the company has paid all obligations to the funders, both creditors and shareholders in the capital market.

2. If REVA < 0, this indicates that there is no economic added value process for the company or the company is unable to pay its obligations to the funders, both creditors and shareholders in the capital market.

3. If REVA = 0, this indicates that there is no process of economic added value or economic reduction because profits have been used up to pay obligations to funders, both creditors and shareholders in the capital market.

RESULT AND DISCUSSION

The telecommunications companies selected as samples in this study include:

1. **PT. XL Axiata Tbk (EXCL)**

PT. XL Axiata Tbk (formerly PT Excelcomindo Pratama Tbk) is a mobile telecommunications operator company in Indonesia.

2. **PT. Smartfren Telecom Tbk (FREN)**

PT Smartfren Telecom Tbk was established on 2 December 2002 under the name PT Mobile-8 Telecom based on Deed No. 11 dated 2 December 2002. PT Smartfren Telecom Tbk is one of the leading telecommunication service providers in Indonesia. Smartfren innovated by launching

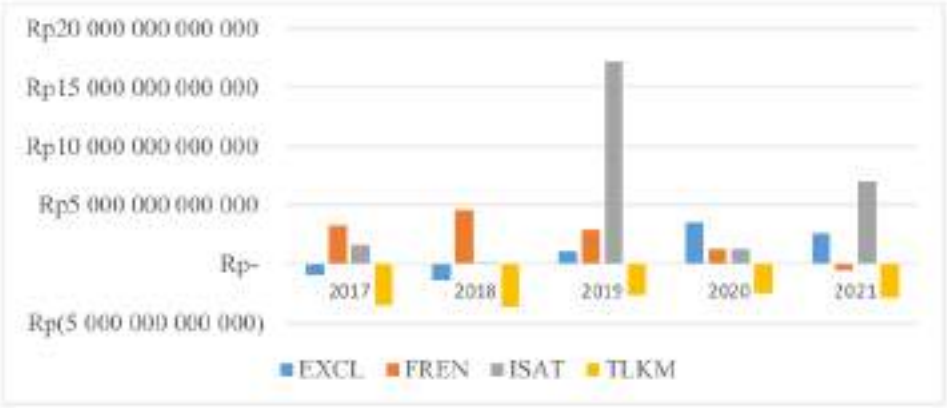

Fig. 3. **Refined Economic Value Added (REVA) (in IDN)**

Source: Indonesian Stock Exchange, 2022.

Table 3

Financial Value Added (FVA) (in IDN)

CODE	2017	2018	2019	2020	2021
EXCL	18,592,453,381,891	25,424,742,660,075	22,945,239,362,615	34,988,917,187,688	52,318,537,174,115
FREN	13,955,201,633,196	12,228,564,573,029	11,388,950,913,335	21,792,850,251,042	20,783,335,628,765
ISAT	20,708,077,341,973	20,357,786,244,802	35,503,950,196,509	27,980,072,436,540	31,369,050,027,658
TLKM	69,674,460,007	64,546,831,017	67,841,739,994	80,640,533,029	90,746,596,714

Source: Indonesian Stock Exchange, 2022.

Table 4

Refined Economic Value Added (REVA) (in Rupiah)

CODE	2017	2018	2019	2020	2021
EXCL	(898,193,420,745)	(1,403,485,350,769)	1,045,042,053,623	3,554,539,617,440	2,614,575,765,514
FREN	3,272,547,199,794	4,626,824,507,733	2,904,069,087,972	1,277,801,484,901	(540,220,425,594)
ISAT	1,627,683,127,606	121,188,267,780	17,164,876,477,116	1,281,952,284,288	7,020,433,499,586
TLKM	(3,519,427,059,425)	(3,656,834,714,811)	(2,631,501,427,737)	(2,488,592,893,509)	(2,837,561,088,982)

Source: Indonesian Stock Exchange, 2022.

the first commercial 4G LTE Advanced service in Indonesia in 2015.

3. **PT Indosat Tbk (ISAT)**

Established as a foreign capital company by the Indonesian government. Commenced commercial operations in September 1969 to build and operate the International Telecommunications Satellite Organization, or Intelsat, a ground station in Indonesia to access Intelsat's Indian Ocean Region satellites.

7 **PT Telekomunikasi Indonesia Tbk (TLKM)**

Telkom's majority shareholder is the Government of the Republic of Indonesia with 52.09%, while the remaining 47.91% is controlled by the public. Telkom shares are traded on the Indonesia Stock Exchange (IDX) with the code "TLKM" and the New York Stock Exchange (NYSE) with the code "TLK".

Economic Value Added (EVA) Calculation Results

The first step in determining EVA is finding net operating profit after tax (NOPAT). NOPAT is a measure of profit that does not include the tax costs and benefits of debt financing. It can be concluded that NOPAT is income before interest and tax (EBIT) adjusted for tax impact. The results of NOPAT can be seen in *Fig. 1* demonstrating the market value added (MVA).

The results of Market Value Added (MVA) research are in line with R.A. Masyiyan and D. Isynuwardhana's study, which determines that the MVA value in each company still has negative and positive values [6].

Financial Value Added (FVA) Calculation Results

The first step to determining FVA is finding net operating profit after tax. Net Operating Profit After Tax (NOPAT) is a measure of profit that does not include the tax costs and benefits of debt financing. It can be concluded that NOPAT is income before interest and tax (EBIT) adjusted for tax impact. The results of the FVA calculation are presented in *Table 3* and *Fig. 2*.

The results of Financial Value Added (FVA) research are in line with a study conducted by A. E. Bayraktaroglu et al. which found that the FVA value in each company still has negative and positive values [27]. In companies that produce a positive FVA value, it means that the company's management has been able to create added financial value for the company or the company's net profit and depreciation are able to cover Equivalent Depreciation.

Refined Calculation Results Economic Value Added (REVA)

The first step to determining REVA is finding net operating profit after tax (NOPAT). The results of REVA can be viewed in *Table 4* and *Fig. 3*.

The results of Refined Economic Value Added (REVA) research are in line with those of S. Geng et al., who determined that the REVA value in each company still has negative and positive values [28]. In companies that generate a positive REVA value, it means that there has been a process of economic added value for the company and more economic value after the company has paid all obligations to creditors, bank funders, and shareholders in the capital market.

CONCLUSION

The company's financial performance as measured by the Market Value Added (MVA) approach is profitable for PT XL Axiata Tbk, PT Indosat Tbk, and PT Telekomunikasi Indonesia Tbk. PT Smartfren Telecom Tbk has a negative market value added (MVA). A positive MVA indicates that business management has succeeded in generating added value. The company's financial performance uses the Financial Value Added (FVA) method for the 2017–2021 period, which has a positive value at PT XL Axiata Tbk, PT Smartfren Telecom Tbk, PT Indosat Tbk and PT Telekomunikasi Indonesia Tbk. A positive FVA means that the company's management has been able to create added financial value for the company or that the company's net profit and depreciation have been able to cover equivalent depreciation. The company's financial performance uses the Refined Economic Value Added (REVA) method, which has a positive value at PT Indosat Tbk. Refined Economic Value Added (REVA) has a negative value at PT XL Axiata Tbk, PT Smartfren Telecom Tbk and PT Telekomunikasi Indonesia Tbk. REVA, which has a positive value, has resulted in a process of economic added value for the company and more economic value after the company has paid all obligations to the funders, both creditors and shareholders.

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