



# The effect of EVA and REVA's financial performance on shareholder value creation in the healthcare industry during the COVID-19 pandemic

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## ABSTRACT

This study investigates the effect of value-added profitability metrics, specifically Economic Value Added (EVA) and Refined Economic Value Added (REVA), on shareholder value creation proxy by Market Value Added (MVA) in the Indonesia's healthcare industry before and during the COVID-19 pandemic. We employed ordinary least squares (OLS) panel data regression model, with variable dummy to accommodate the COVID-19 pandemic. It uses a sample size of 14 companies, including 4 healthcare service sector companies and 11 pharmaceutical sector companies. The result: 1) EVA and REVA have significant influence in explaining the shareholder value creation of the healthcare industry in Indonesia before and during the pandemic. EVA had a positive effect on MVA in two periods, while REVA is negatif during the pandemic. 2) EVA and REVA metrics are superior in explaining shareholder value creation over traditional accounting metrics (ROCE, ROE and EPS). The implications: for academics, the calculation of EVA and REVA must be done properly and correctly, especially in calculating the cost of capital in order to provide accurate results. While, for practisioners, the consistency of value-added metrics shows the urgency of its application in evaluating financial performance and shareholder value creation in Indonesia and specifically the healthcare industry.

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## INTRODUCTION

Academics and practitioners agree that the existence and sustainability of a business aim to create profits for shareholders (Dobrowolski et al., 2022). The primary concern of these shareholders lies in the company's value and the return it can provide in the form of dividends (S. Panigrahi et al., 2014). To support this perspective, value-based financial measures in creating shareholder value are considered more appropriate metrics compared to traditional accounting metrics (Dhani Laksana & Mayasari, 2020). For shareholders, the right financial performance measures can serve

as control over management performance and a measure for managerial pay (Fatemi et al., 2003; S. K. Panigrahi, 2017).

The measurement of Economic Value Added (EVA) contributes real profitability to the welfare of shareholders because it accommodates the cost of capital, which is not reflected in accounting profit (Tripathi et al., 2022). According to Subedi & Farazmand, (2020), the fundamental idea of EVA is that investors demand a certain level of return on the capital invested, opportunity cost, and the level of risk reflected in the cost of capital, which is not accounted for by other traditional accounting metrics. Therefore, the cost of capital should be taken into account as a deduction from the company's profitability after paying interest on debt and taxes to depict the actual creation of shareholder value (Bognárová, 2018).

In practice, even though Economic Value Added (EVA) is a reliable benchmark for investors in measuring shareholder value, its weakness lies in still using the book value of assets. According to Bacidore et al, (1997) the book value in EVA should be replaced with market value to accommodate the true value of shareholders. Therefore, Refined EVA (REVA) should be considered as a metric in measuring the creation of shareholder value. These findings emphasize the role of REVA as a suitable substitute for EVA in measuring a company's financial performance. Additionally, the use of REVA significantly influences the company's value and shareholder value. However, this should also be supported by adopting adequate corporate governance (CG) (Dewri, 2022). Research by Khan & Ahmad, (2022) also states that REVA has proven to be an excellent value-added metric to enhance and reassure investors about the financial performance of the company. Nevertheless, both of these metrics can be used in conjunction to assess the company's true financial performance.

The creation of value for shareholders is often represented by Market Value Added (MVA) as a measuring tool in shareholder value creation (Tripathi et al., 2022; Dhani Laksana & Mayasari, 2020; Berzakova et al., 2015; J. & M., 2014). MVA is not a performance indicator like EVA but rather serves as a measure of wealth, illustrating how much value has been accumulated by the company over time. To maximize value for shareholders, companies must strive to enhance MVA, which is not always proportional to their total market value. There is a belief that the best approach to achieving this goal is by maximizing EVA, which reflects the company's ability to earn returns above its cost of capital (Bognárová, 2018). Dhani Laksana & Mayasari (2020) found that EVA has an impact on MVA for non-financial companies listed on the Indonesian stock exchange during the period 2013-2017. However, Niresh & Alfred state that EVA does not influence MVA (J. & M., 2014). This research was conducted on private banks listed on the Sri Lanka capital market. Meanwhile, in another study related to the influence of REVA on MVA in Italian SMEs on the stock market, it was found that REVA has a better correlation with MVA compared to EVA (Quintiliani, 2018).

This study accommodates the use of the REVA metric as a comparison for EVA in explaining MVA as a shareholder value creation metric in the healthcare industry in Indonesia during the COVID-19 pandemic for the 2020-2022 period. Some motivations for this study: 1) The surge in COVID-19 cases has increased demand for healthcare. Hospitals and other health facilities are facing pressure to provide care for COVID-19 patients. Meanwhile, high demand for COVID-19-related personal protective equipment (PPE), medical equipment and medicines has created challenges in providing adequate supplies as well as opportunities for significant profits (Sanga & Hajanirina, 2023). This is in line with the results that health industry MSMEs in Visegrad Four (V4): Czech, Polish, Slovak, Hungarian experienced positive growth (+18%) during the COVID-19 pandemic (Vitéz-Durgula et al., 2023). These results turned out to be different from Indonesia. Yussof et al., (2022), Alisyah & Susilowati, (2022) found that the COVID-19 pandemic did not significantly affect the revenue and profitability of the healthcare industry in Indonesia. This study intends not only to measure profitability but also the effect of economic value added on shareholder value creation during COVID-19. This study also compares traditional accounting-

based profitability measurements and value-added economic based which have long been debated. 2) The outbreak of the pandemic has prompted investors to pay more attention to their personal well-being. As a result, most investors began to direct their attention to the health sector. The motivation behind this investment involves the hope that the health sector will continue to thrive to fight the pandemic and simultaneously reap financial benefits (Ren, 2022). Unfortunately, no studies have examined specifically the effect of profitability or company performance based on economic value added on shareholder value. The measurement of economic value added (EVA) enhances shareholder welfare by factoring in the cost of capital, a consideration which is not reflected in accounting profit. (Tripathi et al., 2022). According to Subedi & Farazmand (2020), the core concept of EVA is that it considers the investor's required return on invested capital, opportunity cost, and the risk level associated with the cost of capital, aspects overlooked by traditional accounting metrics. Therefore, the cost of capital should be taken into account as a deduction from the company's profitability after paying interest on debt and taxes to depict the actual creation of shareholder value (Bognárová, 2018). 3) According to Subedi & Farazmand, (2020), public company services in China have increased efficiency after adopting EVA as a performance evaluation metric to provide incentives to public administrators. Therefore, this study is expected to provide input for financial managers in Indonesia to consider EVA and REVA as financial metrics in determining incentive/bonus policies.

Based on the background and motivation, the purpose of this study: 1) examines the effect of EVA and REVA's economic value added on shareholder value creation in the healthcare industry in Indonesia before and during the COVID-19 pandemic; 2) to prove the superiority of value-added metrics over other traditional accounting metrics.

## RESEARCH METHOD

The method used in this study is descriptive and quantitative research. This research was conducted to examine the profitability of value-added based companies: EVA and REVA in the healthcare service industry, namely pharmaceuticals and health service providers listed on the Indonesia Stock Exchange (IDX) for the period 2017 – 2022. The research time cover the period before and during the COVID-19 pandemic in Indonesia. The determination of the initial number of sample members is done by purposive sampling. The sample requirements used are companies that have been listed on the Jakarta stock exchange before 2017 and has historical data on published stock prices. Table 1 displays the companies that meet the above criteria.

Table 1. Healthcare Industry Companies and their IPO Dates

Emiten Code	Company Name	Sub-Industry	IPO Date
MIKA	Mitra Keluarga Karyasehat Tbk.	Healthcare Service Provider	24-Mar-15
PRDA	Prodia Widyahusada Tbk.	Healthcare Service Provider	07-Dec-16
SAME	Sarana Meditama Metropolitan Tbk	Healthcare Service Provider	11-Jan-13
SILO	Siloam International Hospitals Tbk	Healthcare Service Provider	12-Sep-13
SRAJ	Sejahteraraya Anugrahjaya Tbk.	Pharmaceuticals	11-Apr-11
DVLA	Darya-Varia Laboratoria Tbk.	Pharmaceuticals	11-Nov-94
INAF	Indofarma Tbk.	Pharmaceuticals	17-Apr-01
KAEF	Kimia Farma Tbk.	Pharmaceuticals	04-Jul-01
KLBF	Kalbe Farma Tbk.	Pharmaceuticals	30-Jul-91
MERK	Merck Tbk.	Pharmaceuticals	23-Jul-81
PEHA	Phapros Tbk.	Pharmaceuticals	01-Jan-11
PYFA	Pyridam Farma Tbk	Pharmaceuticals	16-Oct-01
SIDO	Industri Jamu dan Farmasi Sido	Pharmaceuticals	18-Dec-13
TSPC	Tempo Scan Pacific Tbk.	Pharmaceuticals	17-Jun-94

This study uses secondary data from financial report and other sources like journal articles, books, and website of the company or linking information. Financial data was collected from the 14

companies above consisting of 4 health service providers and 11 from the pharmaceutical sector. To accommodate the effects of the pandemic, the research method adopted the Tripathi (Tripathi et al., 2022) research model which tested the performance of EVA in the consumables industry in India before and after the 2008 crisis. The operational variables involved in this study are shown as in table 2 below.

Tabel 2. List of dependent and explanatory variables

Variables	Calculate as	Sources
Dependent variables		
Market Value Added (MVA)	MVA = Market Value of Share - Book Value of Share	(Udiyana et al., 2022; Berzakova et al., 2015)
Independent Variables		
1. Economic value added (EVA)	EVA = NOPAT - (WACC x IC)	(Jankalová & Kurotová, 2020)
Net on Profit After Tax (NOPAT)	NOPAT = operating profit*(1 - t)	(Jankalová & Kurotová, 2020)
Cost of Debt (rd)	rd = Interest Expense on Debt/ Total Debt	(Dobrowolski, Drozdowski, Panait, & Babczuk, 2022)
Cost of Equity (re)	$r_e = r_f + \beta^*\{E(r_m) - r_f\}$	(Damodaran, 2015)
2. Refined Economic value added (REVA)	REVA = NOPAT - (WACC x MC)	(Jankalová & Kurotová, 2020); (Bacidore et al., 1997)
3. Return on equity (ROE)	ROE = Net Income/ Shareholder's Equity	(Damodaran, 2014)
4. Return on capital employed (ROCE)	ROCE = EBIT/ Capital Employed	(Damodaran, 2014)
5. Earnings per share (EPS)	EPS = Net Income/ Weighted Average Number of Common Shares Outstanding	(Damodaran, 2014)

Data analysis was carried out by using an ordinary least squares (OLS) data panel regression model. The regression model used was divided into two time periods, namely before COVID-19 entered Indonesia (2017 - 2019) and during the pandemic (2020 - 2022) to forecast the relationship between coefficients to MVA. Regression modeling is carried out in two stages. Regression panel data for the period 2017 - 2019 and regression of panel data during COVID-19, period 2020 - 2022. Both regression models use t-test samples to comparing the average scores of the two periods. The results can be interpreted as an indication of whether there are statistically significant differences among the averages periods, providing valuable insight into the nature of the data. Meanwhile, to accommodate regression panel data each model will be tested with the F-test for fixed effects, the Breusch and Pagan Langrangian Multiplier test for random effects and the Hausman test for selection between fixed and random effects. The pre-pandemic regression model is shown as in equation (1) below:

$$MVA = \beta_0 + \beta_1 EVA + \beta_2 REVA + \beta_3 ROE + \beta_4 ROCE + \beta_5 EPS + \beta_6 SIZE \quad (1)$$

This equation uses the company size (SIZE) as a control variable because it has strong influence to determine companies's profitability in Indonesia (Budisaptorini et al., 2019). Meanwhile, the regression model equation during the pandemic is as follows:

$$MVA = \beta_0 + \beta_1 \text{dummy}_{20} + \beta_2 \text{dummy}_{21} + \beta_3 \text{dummy}_{22} + \beta_4 EVA + \beta_5 REVA + \beta_6 ROE + \beta_7 ROCE + \beta_8 EPS + \beta_9 SIZE \quad (2)$$

Where,  $\beta_0$  is the constant;  $\beta_1 \text{dummy}_{20}$  is the variable for the year 2020;  $\beta_2 \text{dummy}_{21}$  is the variable for the year 2021;  $\beta_3 \text{dummy}_{22}$  is the variable for the 2022 year. Dummy variables for the years 2020, 2021, and 2022 were included to accommodate the impact of the pandemic period on shareholder value creation.

## RESULTS AND DISCUSSIONS

Table 3 show the descriptive statistic for the parameter financial performance from 2017 to 2022. The average EVA and REVA for the period 2017 - 2019 were negative. This implies that companies in the healthcare sector were unable to generate sufficient profits to offset the cost of capital expended for operations. In other words, healthcare sector companies did not succeed in creating value-added for their shareholders during that period. However, on average, companies had positive ROCE and ROE. This indicates that the industry was still making a profit from the total capital invested in its business and was efficient in managing working capital. This situation was slightly different when the COVID-19 pandemic hit Indonesia. The average EVA was positive at IDR 22 billion, although REVA remained negative. The significant decline in REVA reflects the economic pressure during the pandemic on the company's considerable economic value added. In addition, EPS also shows significant variation. This indicates that net profit for every outstanding share in the Indonesian healthcare industry decreased during the pandemic. However, the average EVA deviation was IDR 987 billion, indicating that the distribution of EVA values was uneven among healthcare sector companies.

Tabel 3. Statistic Descriptive

	Before the COVID-19 Pandemic (2017 -2019)					During the COVID-19 Pandemic (2020 – 2022)				
	N	Min.	Maks.	Mean	Std. Deviation	Min.	Maks.	Mean	Std. Deviation	
MVA*)	42	-480	946,435	87,531	193,425	-3,175	2,353,344	30,2672	516,945	
EVA*)	42	-1,341	686	-116	363	-2,136	4,802	22	987	
REVA*)	42	-94,132	160	-10,258	19,851	-266,734	118,005	-25,045	67,169	
ROCE	42	-0.23	0.49	0.11	0.13	-0.94	0.46	0.11	0.21	
ROE	42	-0.12	2.25	0.15	0.34	-4.96	0.62	-0.01	0.80	
EPS	42	-208.38	2,597	142.56	411.61	-138.25	659.01	104.65	156.26	
SIZE	42	25.80	30.64	28.58	1.21	27.56	30.94	29.09	0.94	

\*) in million rupiah

Based on table 4, the value of Adj. R-square for the 2017-2019 period is 0.728. This means that MVA can be explained by EVA, REVA, ROCE, ROE, EPS and SIZE by 72.8% while 27.2% is influenced by other factors outside the model. Economic value added and traditional accounting measures can explain shareholder value creation well. Meanwhile, during the pandemic the Adj. R-squared value was 0.539, or there was a decrease indicating the presence of irrelevant independent variables to explain shareholder value creation in this model during the pandemic. Both of these periods have fairly high F values, with the p-values associated with very low F values (0.000) indicating that these models have high statistical significance.

Tabel 4. Regression Statistics

Period	R Square	Adj. R <sup>2</sup>	F-value	p-value	Durbin-Watson
Before the COVID-19 Pandemic	0.768	0.728	19290	0.000	1.810
During the COVID-19 Pandemic	0.574	0.539	11096	0.000	1.849

Variable dependent: MVA

The effect of each of the value-added variables and traditional accounting on shareholder value creation (MVA) is shown in table 5. The COVID-19 pandemic which greatly affected the healthcare industry occurred in 2020 when this pandemic first entered Indonesia. This situation created a significant demand for healthcare industry services, increased use of medical devices, changes in healthcare company policies, and various other changes that affected value-added and traditional accounting factors in the year.

Table 5. Significance of coefficients before and during the COVID-19 pandemic

Variables	Before COVID-19 Pandemic			During COVID-10 Pandemic		
	Coef.	t	Sig.	Coef.	t	Sig.
Dummy20	-	-	-	0.238	2.744**	0.008
Dummy21	-	-	-	-0.046	-0.539	0.592
Dummy22	-	-	-	0.023	0.280	0.781
EVA	0.461	5.000**	0.000	0.248	3.649**	0.000
REVA	-0.714	-7.787**	0.000	-0.668	-8.165**	0.000
ROCE	0.026	0.219	0.827	0.516	0.752	0.454
ROE	0.007	0.058	0.954	-0.360	-0.265	0.792
EPS	-0.070	-0.763	0.448	-0.200	-0.474	0.637
SIZE	-0.111	1.310	0.194	0.138	0.360	0.335
Adjusted R <sup>2</sup>	72.8%			53.9%		
Observations	42			42		

Variable dependent: MVA

\*\* Significant at 0.05 level

#### *Before the COVID-19 pandemic period*

EVA significantly affects MVA and is positive ( $0.000 < 0.05$ ). This means, healthcare companies in Indonesia are able to generate enough profit to offset the capital costs incurred in operations. The healthcare sector company managed to create added value for its shareholders during this period. Meanwhile, the variable significance values of ROCE ( $0.827 > 0.05$ ), ROE ( $0.954 > 0.05$ ) and EPS ( $0.448 > 0.05$ ) did not significantly affect MVA. These results show that the financial performance of traditional accounting-based companies is not significant in explaining the added value creation of shareholders. This means value-added metrics have proven to be superior to traditional accounting. Healthcare industry in Indonesia have succeeded in creating shareholder value. The company's performance managed to exceed the cost of capital, reflecting investors' sacrifices in terms of capital invested. This result reinforces that EVA has a positive effect on MVA on non-financial companies in Indonesia for the period 2013 – 2017 (Dhani Laksana & Mayasari, 2020).

REVA also significantly affects MVA but the coefficient is negative ( $-7.787 < 0.05$ ). This means that as REVA increases, MVA tends to decrease. In this context, positive changes in REVA do not contribute positively to the increase in the market value of the company. Conversely, there are other factors that are more dominant in influencing MVA, which can lead to a negative association between REVA and MVA. In practice, this could mean that even if a company improves financial performance based on REVA metrics, investors or the market don't respond by increasing the company's market value. Value added assessment using the market value of assets in REVA can be challenging. This indicates the industry has created a lower market value than expected based on its cost of capital. This size looks more radical. Therefore, from the outset suggested the use of REVA to measure management compensation (Bacidore et al., 1997). REVA can show unequivocally the measure of feasibility of compensation given by the company to management in increasing the value of the company. In other words, even if it gains benefits or has a positive EVA value, management must not rashly make a decision to provide a salary increase or bonus if the REVA is negative. At the same time, the REVA value is superior in explaining MVA.

These results show: 1) value-added metrics in this period significant influence on shareholder value creation of healthcare industry in Indonesia albeit with different results. 2) value-added metrics are superior in explaining MVA in this period. It supports previous research stating that value added (EVA, REVA) is superior in explaining shareholder value creation (MVA) over traditional accounting-based metrics such as ROCE, ROE and EPS (Quintiliani, 2018; Yasir Ashraf, 2018).

### During the COVID-19 pandemic

During the COVID-19 pandemic, EVA ( $0.003 > 0.05$ ) and REVA ( $0.000 < 0.05$ ) values significantly affected MVA. The use of value-added metrics is powerful in measuring a company's financial performance and influential in explaining shareholder value creation. On the other hand, ROCE, ROE and EPS do not significantly affect MVA. These results suggest that value-added metrics are superior to traditional accounting metrics in explaining shareholder value creation. The REVA coefficient is negative (-0.668). This implies that as REVA increases, MVA tends to decrease. In this context, a positive change in REVA does not contribute positively to the increase in the healthcare's company market value in Indonesia. Instead, other factors are more dominant in influencing MVA, potentially resulting in a negative relationship between REVA and MVA. In practice, this could mean that even though a healthcare company improves its financial performance based on the REVA metric, investors or the market may not respond by increasing the company's market value. Evaluating value-added using market values in REVA can present its own challenges.

The measurement results during the pandemic show that it is consistent with the period before the COVID-19 pandemic where: 1) Value added metrics have had an important effect on shareholder value creation in the healthcare industry in Indonesia, despite yielding mixed results. 2) EVA and REVA metrics have a significant effect in explaining shareholder value creation over traditional accounting metrics. These results show that EVA and REVA's value-added metrics have a significant effect in explaining shareholder value creation in healthcare industry in Indonesia.

### Superiority EVA and REVA

Based on the comparison, EVA and REVA have shown the consistency influence on shareholder value creation indicating that these metrics are more relevant to use. This finding is in line with the results of the study Tripathi et al. (2022) states that EVA is an indicator of superior company performance. In addition, EVA also has the ability to capture both systematic and unsystematic risks both before the crisis and after the 2008 crisis. In this study, EVA also influenced shareholder value creation both before and during the COVID-19 pandemic. This proves that EVA is a consistent indicator of the company's performance. Meanwhile, REVA which uses market value turns out to have a different value during the pandemic which shows that investors still have doubts about the healthcare industry in Indonesia. Dependence on the supply of medicines and medical devices originating from abroad can be one of the reasons. Nevertheless, these two value-added metrics can be used together in measuring real company performance and holder value creation (Basalighe & Khansalar, 2016; Panahian & Mohammadi, 2011). EVA indicates that the company is able to generate profits that exceed its cost of capital both operational and financial performance (Goel & Oswal, 2020) while REVA indicates the company's performance in its industry (Lee & Kim, 2009).

These findings have provided input for both academics and practitioners. For academics: 1) EVA and REVA emphasize the superiority of value-added metrics in explaining shareholder value creation over traditional accounting metrics (ROCE, ROE, EPS). This means that the calculation of EVA and REVA must be done properly and correctly, especially in calculating the cost of capital in order to provide accurate results. According to Jankalová & Kurotová, (2020) one of the drawbacks of calculating EVA lies in how to determine the cost of capital. Therefore, academics are encouraged to find and provide calculations that are easily understood by many circles. 2) The findings also provide insight for practitioners, financial analysts or financial managers to emphasize the relevance of these metrics compared to traditional accounting measures. EVA and REVA calculations should be used to determine the true profitability of a company's or division's performance. The consistency of value-added metrics shows the urgency of its application in evaluating financial performance and shareholder value creation in Indonesia and specifically the healthcare industry.

## CONCLUSION

This research was conducted at Healthcare's Indonesia Industry period 2017-2022 with a sample size of 14 companies, including 4 healthcare service sector companies and 11 pharmaceutical sector companies using OLS regression data. Based on the results, EVA and REVA have significant influence in explaining the shareholder value creation of the healthcare industry in Indonesia. EVA had a positive effect on MVA in the period before and during the COVID-19 pandemic, while REVA is negatif during pandemic. This implies that a positive change in REVA does not contribute positively to the increase in the healthcare's company market value in Indonesia. From the other side, it is indicating that there were other dominant factors that influence MVA during the period. In addition, value-added EVA and REVA are superior in explaining MVA compared to traditional accounting metrics such as Return on Capital Employed (ROCE), Return on Equity (ROE), and Earnings per Share (EPS).

This study advises companies to use EVA and REVA as metrics to measure shareholder value creation proxy MVA in the healthcare industry in Indonesia. This argument supported by these two metrics that are able to explain the effect of value-added profitability on shareholder value creation even in times of crisis. Therefore, the use of this metric should be applied to companies in Indonesia and not just to the health sector. For further research, it is expected to use both of these metrics together to test other industries. In addition, to ensure the goodness of this model, researchers can then conduct a robustness test using other value-added variables.

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## References

- Alisyah, W. N., & Susilowati, L. (2022). Comparison of Financial Performance in Health Sector Companies Listed on the Indonesia Stock Exchange before and During the Covid-19 Pandemic. *Peer-Reviewed Article Jurnal Keuangan Dan Perbankan*, 26(1).
- Aswath Damodaran. (2014). *Applied Corporate Finance*, 4th Edition. In Wiley (Vol. 1, Issue 1).
- Bacidore, J. M., Boquist, J. A., Milbourn, T. T., & Thakor, A. V. (1997). *The Search for the Best Financial Performance Measure*. *Financial Analysts Journal*
- Basalighe, A., & Khansalar, E. (2016). A Review of the Relationship between Corporate Financial Performance and the Level of Related Party Transactions among Listed Companies on Tehran Stock Exchange. *International Journal of Economics and Finance*, 8(7), 330. <https://doi.org/10.5539/ijef.v8n7p330>
- Berzakova, V., Bartosova, V., & Kicova, E. (2015). Modification of EVA in Value Based Management. *Procedia Economics and Finance*, 26, 317-324. [https://doi.org/10.1016/s2212-5671\(15\)00859-x](https://doi.org/10.1016/s2212-5671(15)00859-x)
- Bognárová, K. J. (2018). The Effect of Leverage and Economic Value Added on Market Value Added. *Challenges of the Knowledge Society*, 812-816.
- Budisaptorini, A. T., Chandrarin, G., & Asih, P. (2019). The effect of company size on company profitability and company value: The case of manufacturing companies. *International Journal of Economics and Business Administration*, 7(2). <https://doi.org/10.35808/ijeba/241>
- Dewri, L. V. (2022). A Critical Assessment of Interrelationship Among Corporate Governance, Financial Performance, Refined Economic Value Added to Measure Firm Value and Return on Stock. *Journal of the Knowledge Economy*, 13(4). <https://doi.org/10.1007/s13132-021-00808-8>
- Dhani Laksana, R., & Mayasari, V. (2020). The Impact of Market Value Added to Shareholder Value: Evidence from Indonesia Firms. *SHS Web of Conferences*, 86. <https://doi.org/10.1051/shsconf/20208601029>
- Dobrowolski, Z., Drozdowski, G., Panait, M., & Babczuk, A. (2022). Can the Economic Value Added Be Used as the Universal Financial Metric? *Sustainability (Switzerland)*, 14(5). <https://doi.org/10.3390/su14052967>

- Fatemi, A., Desai, A. S., & Katz, J. P. (2003). Wealth creation and managerial pay: MVA and EVA as determinants of executive compensation. *Global Finance Journal*, 14(2), 159-179. [https://doi.org/10.1016/S1044-0283\(03\)00010-3](https://doi.org/10.1016/S1044-0283(03)00010-3)
- Goel, K., & Oswal, S. (2020). EVA-based financial performance measurement: An evidential study of selected emerging country companies. *Corporate Ownership and Control*, 18(1), 179-195. <https://doi.org/10.22495/cocv18i1art14>
- J., A. N., & M., A. (2014). The Association between Economic Value Added, Market Value Added and Leverage. *International Journal of Business and Management*, 9(10). <https://doi.org/10.5539/ijbm.v9n10p126>
- Jankalová, M., & Kurotová, J. (2020). Sustainability assessment using economic value added. *Sustainability (Switzerland)*, 12(1). <https://doi.org/10.3390/su12010318>
- Khan, Y. A., & Ahmad, M. (2022). Modern financial constituency instruments as market economic performance determinants. *International Journal of Financial Engineering*, 09(03). <https://doi.org/10.1142/s2424786322500013>
- Lee, S., & Kim, W. G. (2009). EVA, refined EVA, MVA, or traditional performance measures for the hospitality industry? *International Journal of Hospitality Management*, 28(3), 439-445. <https://doi.org/10.1016/j.ijhm.2009.01.004>
- Panahian, H., & Mohammadi, H. (2011). Relative and incremental information contents of economic value added (EVA) and refined economic value added (REVA) used for prediction of the income. *European Journal of Economics, Finance and Administrative Sciences*, 28, 96-103.
- Panigrahi, S., Bin Zainuddin, Y., Azlinna, N., & Azizan, B. (2014). Linkage of Management Decisions to Shareholder's Value: EVA Concept. In *International Journal of Finance & Banking Studies IJFBS* (Vol. 3, Issue 1). [www.ssbfn.com](http://www.ssbfn.com)
- Panigrahi, S. K. (2017). Economic Value Added and Traditional Accounting Measures for Shareholder's Wealth Creation. *Asian Journal of Accounting and Governance*, 8, 125-136. <https://doi.org/10.17576/ajag-2017-08-11>
- Quintiliani, A. (2018). The Relationship between the Market Value Added of SMEs listed on AIM Italia and internal measures of value creation: The role of corporate strategic planning. *International Journal of Financial Research*, 9(1), 121-131. <https://doi.org/10.5430/ijfr.v9n1p121>
- Ren, T. (2022). Research on the Investment Value of the Healthcare Industry: Analysis of Azenta, Universal Health Services, and Regeneron Pharmaceuticals. *Highlights in Business, Economics and Management*, 4. <https://doi.org/10.54097/hbem.v4i.3444>
- Sanga, M. H., & Hajanirina, A. (2023). Board Size and Leverage in Indonesian's Pharmaceutical Companies. The Moderating Role of Profitability. In *Journal homepage*. <https://doi.org/10.61106/jpms.v1i2.9>
- Subedi, M., & Farazmand, A. (2020). Economic Value Added (EVA) for Performance Evaluation of Public Organizations. *Public Organization Review*, 20(4), 613-630. <https://doi.org/10.1007/s11115-020-00493-2>
- The impact of COVID-19 focusing on Industries: Healthcare, Logistics and Transportation, and Tourism. (2022). *Asian Journal of Research in Business and Management*. <https://doi.org/10.55057/ajrbm.2022.4.1.28>
- Tripathi, M., Kashiramka, S., & Jain, P. K. (2022). Has EVA evolved to outperform conventional earnings measures in determining firm's value? A case of Indian consumer firms. *Asia-Pacific Journal of Accounting and Economics*, 29(2), 487-501. <https://doi.org/10.1080/16081625.2019.1584760>
- Vitéz-Durgula, J., Dunay, A., Thalmeiner, G., Vajai, B., & Pataki, L. (2023). Financial Analysis and Survival Research of the Visegrad Countries' Health Industries. *Sustainability (Switzerland)*, 15(16). <https://doi.org/10.3390/su151612360>
- Yasir Ashraf, Y. A. (2018). Is REVA a Better Predictor of Shareholders' Value? A Study of Pakistani Listed Cement Companies. *International Journal of Economics, Commerce and Research*, 8(2), 1-22. <https://doi.org/10.24247/ijecrpr20181>