Financial ratios and institutional ownership impact on healthcare firm's value: A moderation role of leverage

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ABSTRAK

Pandemi telah menyebabkan kontraksi ekonomi global. Di tengah perlambatan ekonomi, ada satu sektor yang masih mampu tumbuh, yaitu sektor kesehatan. Hal ini ditunjukkan dengan pertumbuhan PDB sektor kesehatan selama pandemi. Namun, data PBV pada perusahaan tersebut tidak menunjukkan hasil yang memuaskan. Penelitian ini dilakukan untuk menilai faktor-faktor yang dapat meningkatkan nilai perusahaan perusahaan kesehatan, seperti profitabilitas, modal kerja, aset berwujud, dan kepemilikan institusional yang dimoderasi oleh leverage pada nilai perusahaan. Penelitian ini akan menggunakan teknik analisis data panel, laporan keuangan triwulanan tahun 2020-2021 terhadap sembilan perusahaan subsektor jasa dan perlengkapan kesehatan dari sektor kesehatan yang terdaftar di tahun 2022. Hasil penelitian ini menunjukkan bahwa aset berwujud memberikan dampak negatif dan leverage memberikan dampak positif terhadap nilai perusahaan, sedangkan faktor lainnya tidak mempengaruhi nilai perusahaan. Leverage hanya dapat memoderasi aset berwujud untuk melemahkan efek negatif dari aset berwujud, sedangkan faktor lain tidak dapat dimoderasi oleh leverage. Hasil ini menunjukkan bahwa untuk memaksimalkan nilai perusahaan, leverage harus dioptimalkan untuk mengurangi efek negatif dari investasi pada aset berwujud.

ABSTRACT

The pandemic has caused a contraction in the global economy. Amidst the slowing of the economy, a sector still grows so-called healthcare. This is shown by the growth in the healthcare sector's GDP during the pandemic, but the PBV data on these companies didn't show a satisfactory result. This study assesses factors that might increase the firm's value of healthcare companies, such as profitability, working capital, tangible assets, and institutional ownership moderated by leverage on the firm's value. This

research uses a panel data analysis technique with moderated regression analysis (MRA) in E-views 12, quarterly financial statements from 2020-2021 of nine companies in the subsector of health services and equipment from the healthcare sector. The empirical results show that tangible assets have a negative impact, and leverage positively impacts a firm's value, while the other factors do not affect a firm's value. Leverage can only moderate tangible assets to weaken the negative effect of tangible assets, while other factors can't be moderated by leverage. This result shows that leverage must be optimised to maximize the firm's value to reduce the negative effects of an investment in tangible assets.

INTRODUCTION

According to Presidential Decree No. 11 of 2020, Indonesia began to experience the effects of the COVID-19 pandemic around the end of March 2020. The pandemic has harmed the economy of Indonesia and fuelled escalating corporate rivalry. It has caused stagnation and even failures in many commercial areas, yet some are still growing. Despite the precarious economic conditions brought on by this epidemic, the health business is nevertheless growing, as indicated by the increase in the Gross Domestic Product (GDP) of the health sector, which was 8.69 % in 2019, 11.56% in 2020, and 10.61% in 2021 (Central Bureau of Statistics Indonesia, 2022). The value of firms in the healthcare sector should increase due to this robust growth in health sector GDP (Jagric *et al*., 2022; Sartika *et al*., 2019). However, the above sectoral growth data does not reflect the market capitalization data for the health services business. People's apprehension about hospital visits during the epidemic may explain this fact.

In light of the disparities mentioned in the health sector, it is important to comprehend how to enhance corporate value as a key metric of exceptional organizational performance alongside robust profitability and the welfare of firm owners and shareholders (Hartati *et al*., 2021). To optimize firm's value, it is imperative to disseminate positive news on firm performance to investors, exerting influence and augmenting their total values. Financial managers must make prudent financial decisions to achieve better performance, arguably leading to improved firm performance and value (Aamir *et al*., 2022).

This research investigates the financial ratios that affect firm's value, especially those operating in the health service industry. Profitability is an element that affects firm's value. More profitable firms will arguably exhibit stronger corporate governance, thus motivating investors to invest in stocks that increase stock prices (Djashan & Agustinus, 2020). Further, working capital is frequently considered to affect firms' operating activities, which are critical to effective management. Effective working capital management affects profitability, business risks, and firm's value (Altaf, 2018).

Firm's tangible assets may also affect their values. Tangible assets help firms improve their values in two ways: as a catalyst for creativity and the creation of new business ideas (Saleh, 2018) and as a credit security that facilitates easier loan access (Ariyanti, 2019). Firm ownership arguably affects firm's value because institutional owners scrutinize firm performance closely. Thus, improving firm's value more effectively (Jentsch, 2019).

Managerial and institutional ownership are the two most common firm ownership investigated. Managerial ownership involves managers owning firms' shares to improve firm performance. Meanwhile, institutional ownership minimizes agency conflicts between managers and stakeholders (Tamala & Hermanto, 2021). Prior studies have suggested that firm ownership positively affects firm's value (Hasanudin et al., 2020; F. Putra, 2020; Tamala & Hermanto, 2021). However, other studies document that institutional ownership does not affect firm's value (Artamevia & Almalita, 2021; Setiany *et al*., 2020; Setyabudi, 2021; Sukmawardini & Ardiansari, 2018; Ulumi & Hermanto, 2020).

This study examines leverage as an independent moderating variable that directly and indirectly affects firm's value. Leverage offers tax advantages because it reduces taxes. However, debt also increases risks due to interest paid (Hidayat, 2018). As demonstrated by prior studies (Aamir *et al.*, 2022; Ariyanti, 2019), leverage may moderate profitability because reliance on debt can increase profitability, increasing firm's value.

The managerial balance sheet, which separates the right side as funding sources and the left side as allocation of investment funding, funding sources, especially long-term ones, can finance working capital and assets. However, the moderating effect of leverage on net working capital and tangible assets remains unknown. Working capital is important for long-term investments, but it stays on the managerial balance sheet while a company is in operation. Since net working capital is made up of current assets and liabilities, it could have a short term (Hawawini & Viallet, 2022).

Accordingly, this study investigates the impact of profitability, net working capital, tangible assets, and institutional ownership on firm's value with leverage as the moderating variable. This study is motivated by various factors, including the discrepancy between firm's growth and value in the health sector, prior studies' inconsistent results, and leverage's relatively understudied effect on the determinants of firm's value.

LITERATURE REVIEW

Signalling Theory

The signalling theory suggests that owners should be informed of managerial performance. This theory explains why businesses are motivated to disclose voluntary

financial information. In this respect, managers disclose financial information to serve investors (Akerlof, 1970), and they can use the information in investment decisions (Jogiyanto, 2010). Market participants will initially perceive and evaluate newly released information as either a positive signal or a negative signal (Suwardjono, 2005) and are motivated to invest when they consider the information positively.

Agency Theory

Agency theory focuses on a contract between managers as agents and owners as principals (Jensen & Meckling, 1976). Agency problems are the consequence of information asymmetry between agents and principals. In this respect, principals lack sufficient knowledge of managerial performance, while managers, acting as agents, have more firm-specific knowledge. Hence, principals must develop a mechanism to help them evaluate managerial performance. Costs associated with this activity include those for developing operating standards and accounting information systems, government oversight, and others. These costs are frequently labelled as agency costs.

Firm Value

Firms aim to increase their values to maximize owners' or shareholders' wealth (Syamsudin *et al*., 2017). Consequently, shareholders will improve their wealth when share prices increase. Various financial ratios measure firm's value, including price to book value (PBV). PBV measures how firms generate strong profits and cash flows to expand continuously. Investors arguably prefer firms with higher PBV to maximize their wealth due to their better growth potential (Brigham & Houston, 2019).

Profitability

Firms generate profits from their product sales. Profitability ratios refer to firms' capacity to utilize their resources effectively to generate profits (Aamir *et al*., 2022). Investors will appreciate more firms with greater profitability, resulting in higher stock prices and firm's value (Ariyanti, 2019). Profitability also refers to the outcomes of managing investors' funds. This issue is crucial because investors use firm's profitability to evaluate firm's ability to generate returns (Sukmawardini & Ardiansari, 2018). Prior studies Aamir *et al.* (2022); Artamevia & Almalita (2021); Detama & Laily (2021); Djashan & Agustinus (2020); Putra (2020) indicate that profitability positively affects firm's value. Therefore, we propose the following hypothesis:

H1: Profitability positively affects firm's value.

Net Working Capital (NWC)

Net working capital (NWC) constitutes a significant portion of firm's liquidity, consisting of current assets and liabilities (Jędrzejczak-Gas, 2017). NWC largely affects firm's profitability and values and is affected by inventory levels, trade payables, and trade receivables (Pandiangan & Sihombing, 2022). Higher inventory

levels increase NWC and profits by reducing supply costs and potential inventory depletion costs and hedging against changes in inventory prices.

Firms can fund their assets with short-term or current debt to reduce their average cost of capital and boost their returns (Altaf, 2018). Prior studies Awan *et al*. (2018); Kasim *et al*. (2021); Senan *et al*. (2022) argue that firms with greater NWC are likely to increase their stock prices. The preceding discussion leads us to propose the following hypothesis:

H2: Net working capital positively affects firm's value.

Tangible Assets

Assets refer to resources controlled by a firm, consisting of tangible, intangible, and other assets. Asset tangibility, or the percentage of fixed assets to total assets, can be used to calculate firm's tangible assets. Tangible wealth our senses can identify refers to tangible assets (Sugiama, 2008). Prior studies Ariyanti (2019); Artamevia & Almalita (2021); Djashan & Agustinus (2020) demonstrate that tangible assets (the ratio of a firm's tangible assets to its total assets) can increase firm's value. Therefore, we propose the following hypothesis:

H3: Tangible assets positively affect firm's value.

Institutional Ownership

Managers and owners may have different, even conflicting objectives (Jensen & Meckling, 1976). As a result, institutional ownership and other aspects of a sound ownership structure are essential to coordinating their goals (Setiany *et al*., 2020). Firms with institutional equity ownership are typically more valuable because institutional owners are more motivated to monitor managers' decisions and actions more closely. This argument is consistent with the idea that institutional shareholders are better at monitoring because they have more expertise and a superior financing structure than other shareholders (Jentsch, 2019). Prior studies Purba & Effendi (2019); Putra (2020); Sakawa & Watanabel (2020) demonstrate the beneficial impact of institutional ownership structure on firm's value. Thus, this study develops the following hypothesis:

H4: Institutional ownership positively affects firm's value.

Leverage

Financial leverage refers to firm's reliance on external funding sources that result in fixed costs, encouraging firms to pay incurred costs (Sihombing, 2018). Firms with lower (greater) debt ratios exhibit lower (greater) risks, and excessively leveraged

firms tend to exhibit lower market values (Harahap *et al*., 2020). This study uses leverage as an independent and a moderating variable simultaneously.

Debt to assets ratio (DAR) is a commonly used leverage ratio that measures the extent of a firm's assets funded by debt. Further, the efficiency and effectiveness of firm's asset utilization determine firm's value (Hidayat, 2018). Earlier studies Artamevia & Almalita (2021); Detama & Laily (2021); Harahap *et al*. (2020); Hidayat (2018) demonstrate that leverage positively affects firm's value. Accordingly, we propose the following hypothesis:

H5: Leverage positively affects firm's value.

Leverage as a Moderating Variable

Leverage may also moderate profitability, which measures firms' ability to generate profits from their assets or capital. Firms can use debt to increase their capital, and appropriate funding sources will arguably boost profitability, raising the company's market worth (Ariyanti, 2019). Prior studies Aamir *et al*. (2022); Ariyanti (2019) suggest that capital structure positively moderates the effect of profitability on firm's value.

H6: Leverage moderates the effect of profitability on firm's value.

Leverage may also moderate the impacts of tangible assets and NWC on firm's value. Funding current assets as the significant portion of NWC with debt offers several advantages, such as reducing the likelihood of refinancing and after-maturity credit risks. Consequently, firms do not have to pay additional interest from other funding sources. In this respect, DAR is frequently used as a proxy for these benefits. These benefits enable firms to exploit NWC debt financing to boost their values (Altaf, 2018).

H7: Leverage moderates the effect of net working capital on firm's value.

Meanwhile, tangible assets enable firms to acquire loans more easily and less costly through mortgages. Thus, firms can incur lower borrowing costs using tangible assets as collateral, resulting in higher leverage ratios (Ariyanti, 2019). Based on the above arguments, we propose the following hypothesis:

H8: Leverage moderates the effect of tangible assets on firm's value.

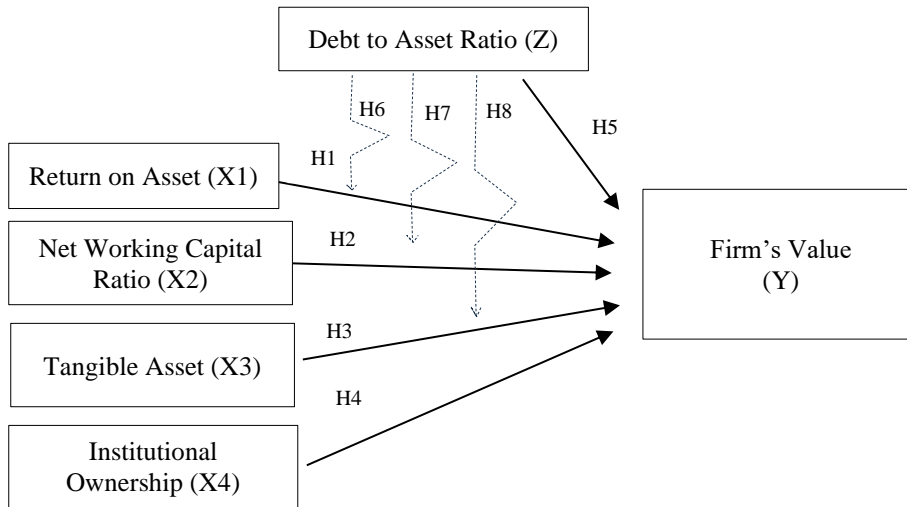Based on the above hypotheses, we develop a research framework as follows:

Figure 1
Research Framework

RESEARCH METHOD

Our population consists of seventeen publicly listed Indonesian firms in the healthcare industry in 2022. We use the purposive sampling technique based on several criteria to generate representative sample firms (Sugiyono, 2018). Specifically, the sampling technique generates nine firms with complete financial reports. This sampling data was limited to nine listed healthcare stocks with a complete financial report for 2020 – 2021.

Table 1
Process of Sample Selection

Information	Amount
The total amount of healthcare sector in the health services and health equipment sub-sector listed on the IDX market	17
Companies that have just conducted an Initial Public Offering (IPO) on the IDX market after the first quarter of 2020 or have been de-listed from the IDX market during the research period (2020-2021)	(8)
Number of Research Samples	**9**

Nine stock issuers out of the seventeen stock issuers with population statistics fulfilled the sampling criteria, such as Metro Healthcare Indonesia, Tbk (CARE), Medikaloka Hermina, Tbk (HEAL), Itama Ranoraya, Tbk (IRRA), Mitra Keluarga Karyasehat, Tbk (MIKA), Prodia Widyahusada, Tbk (PRDA), Royal Prima, Tbk (PRIM), Sarana Meditama Metropolitan, Tbk (SAME), Siloam International Hospitals, Tbk (SILO), and Sejahteraraya Anugrahjaya, Tbk (SRAI).

Panel data regression analysis was applied as the analytical technique to assess the relationship between the dependent and independent variables. We use Moderated Regression Analysis (MRA) through E-views 12 and Microsoft Office Excel. Quarterly data over two years (2020 to 2021) are used as time series data. An analytical

method known as inferential analysis is used to assess the degree of similarity between findings from a sample and those expected from the population at large.

Panel data multi-regression means a combination of data between the time series and the cross-section. There are three types of panel data multi-regression techniques. The common effect model with the ordinary least square (OLS) technique assumes the time series and the cross-section data, while the cross-section data has the same behaviour over time. The formula of the common effect model is as follows:

$$y_{it} = \propto_i + \beta_1 X_{it} + \varepsilon_{it} \dotfill 1$$

The fixed effect model with least squares dummy variable (LSDV) techniques assumes a differentiation between individual data is accommodated by intercept differentiation. This model uses a dummy variable technique to catch intercept differences and assume the coefficient (slope) will be constant between company and time-series, while intercept differentiates between companies. The formula of the fixed effect model is as follows:

$$y_{it} = (\propto_i + \mu_i) + \beta_1 X_{it} + \varepsilon_{it} \dotfill 2$$

The random effect model with generalized least squares (GLS) estimates the data panel, while the interference variable is related to constant coefficient assumptions, sample error, and times. Random effect models can remove heteroscedasticity and are formulated as follows:

$$y_{it} = \propto_i + \beta_1 X_{it} + (\varepsilon_{it} - \mu_i) \dotfill 3$$

Determining the best model by executing panel data has three statistical methods. The Chow test chooses the suitable model between a common or fixed effect model. The Chow test adds dummy variables to get a different intercept by checking the residual sum of squares (RSS) value. The Hausman test is examined to choose the best model between the fixed or random effect models. The Hausman test checks an error between an independent variable and others. The Lagrange multiplier test chooses the best model between the random or common effect models (Basuki & Prawoto, 2016).

The F-test analyzes multiplier regression analysis and describes the effect of all independent variables on the dependent variable simultaneously (Ghozali, 2018). T-statistic tests show how to affect an independent variable to explain a dependent variable (Ghozali, 2018). The significance level for hypothesis testing in this research uses an alpha value of 10% or 0.1. It indicates that the error tolerance is only 10%, and the findings are 90% accurate when concluding (Ghozali, 2018). The following describes the analysis model with the MRA approach used in this work.

$$PBV_{it} = \alpha_0 + \beta_1 ROA_{it} + \beta_2 NWC_{it} + \beta_3 TA_{it} + \beta_4 INST_{it} + \beta_5 DAR_{it} + \beta_6 ROA_{it} * DAR_{it} +$$
$$\beta_7 NWC_{it} * DAR_{it} + \beta_8 TA_{it} * DAR_{it} + e_{it} \text{.. 4}$$

Information:

α_0	: Constant parameter
$\beta_1 - \beta_8$	: Regression coefficients
PBV_{it}	: Price to book value (current stock price/book value) for firm i at time t
ROA_{it}	: Return on asset (net profit/total asset) for firm i at time t
NWC_{it}	: Net working capital (current active/current liability) for firm i at time t
TA_{it}	: Tangibility of the asset (total asset-intangible asset-total liability) for firm i at time t
$INST_{it}$	: Institutional ownership (institutional ownership/total listed stock) for firm i at time t
DAR_{it}	: Debt-to-asset ratio (total loan/total asset) for firm i at time t
$ROA_{it}*DAR_{it}$	: Interaction between Leverage and Profitability for firm i at time t
$NWC_{it}*DAR_{it}$	: Interaction between Leverage and Net Working Capital for firm i at time t
$TA_{it}*DAR_{it}$	: Interaction between Leverage and Tangible Assets for firm i at time t
e_{it}	: Standard error for firm i at time t

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Research variables that are represented by descriptive statistics are broad examples of data. The descriptive statistical analysis results will include the research data's mean, maximum, minimum, and standard deviation. The outcomes of this study's summary statistical analysis are listed in Table 2 below.

Table 2
Descriptive Statistics

	PBV	ROA	NWC	TA	INST	DAR
Mean	3.612	0.042	0.203	0.491	0.664	0.299
Maximum	14.700	0.229	0.698	0.936	0.927	0.718
Minimum	0.490	-0.229	-0.336	0.029	0.319	0.043
Std. Dev.	2.903	0.073	0.229	0.219	0.199	0.203

Source: Processed data (2023)

Based on Table 2, the PBV averages 3.612 and a standard deviation of 2.903. In the second quarter of 2020, SAME had the lowest score (0.49). In the fourth quarter of 2020, IRRA had the best score of 14.7. The ROA variable has a mean of 0.042 and 0.073 as standard deviation. In the third quarter of 2020, SAME reported the lowest value of -0.229. In the fourth quarter of 2021, PRDA reported the highest value of 0.229.

The NWC, measured by the Net Working Capital Ratio (NWCR), has a 0.203 mean and 0.228 standard deviation. The lowest value is -0.336, owned by SRAJ in the fourth quarter of 2021. Then, IRRA owns the highest NWC of 0.698 in the first quarter of 2020. The tangible asset is measured using the assets tangibility, which calculates the total of tangible assets compared to the total assets owned by the company. From the result, it could be perceived the mean is 0.491 and 0.219 standard deviation, and the lowest value is 0.029, owned by IRRA in the second quarter of 2021. Then, the highest is 0.936 owned by SAME in the second quarter of 2020.

The institutional ownership (INST) is known to have a mean of 0.664, with 0.199 as the standard deviation. PRIM owns the lowest ownership of 0.319 in the first quarter of 2021. The highest is 0.927 owned by SRAJ in the fourth quarter of 2021. The DAR as a moderating variable has a mean of 0.299 with 0.203 as standard deviation, with the lowest data of 0.043 at CARE in the second quarter of 2020. Then, the highest was 0.718 owned by IRRA in the second quarter of 2021.

Panel Data Regression Equation Results

Panel data regression analysis can be executed using three models: the common effect, fixed effect, or random effect model estimation test. Each model was tested to determine the most suitable model for the three-panel data models above. From the results of the Chow test, the researcher found a chi-square probability of 0.000, which is less than 0.1. Thus, the fixed effect model is more appropriate to use.

Table 3
Statistical Result of Chow Test and Hausman Test

	Characteristic	Statistic	d.f	Result	Decision
Chow	Cross-section F	14.340	(8.55)	0.000	The fixed effect model is suitable
Hausman	Cross-section random	114.716		0.000	The fixed effect model is suitable

Source: processed data (2023)

Furthermore, the Hausman test was carried out, and a chi-square probability of 0.000 was obtained, which returned less than 0.1. So, the fixed effect model is more appropriate than the random effect model. Because two tests have found that the fixed effect model is the best, the Lagrange Multiplier test is unnecessary.

Classical assumptions test

Using panel data benefits research because the data used are more descriptive, have greater variance, lower collinearity, greater degrees of freedom, and better efficiency. Therefore, it does not require testing the classical assumptions (Gujarati *et al*., 2012).

Hypothesis Test Results

After determining the best model, it is necessary to test the hypothesis through the R^2 test, F test, and statistical t-test.

Table 4
Coefficient Determination Test Result Using the Fixed Effect Model

Cross-section fixed (dummy variables)	
R-squared	0.869
Adjusted R-squared	0.830

Source: processed data (2023)

Table 4 explains that the R-squared is 0.8689. It means the dependent variable in this study will be affected by the independent variable of 86.89%. Meanwhile, the other 13.11% comes from the influence of other variables. The probability of the F-

statistic is 0.0000, which is lower than 0.1. So, it can be concluded that the independent variables will simultaneously influence the dependent variable.

Table 5
F-test Result Using the Fixed Effect Model

Cross-section fixed (dummy variables)	
Prob(F-statistic)	0.000
Durbin-Watson stat	22.787

Source: processed data (2023)

Table 5 explains that the F-test result has a probability value 0.000 (lower than 0.05). It means all independent variables simultaneously impact the dependent variable.

Table 6
t-partial Test Result Using the Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Note
ROA	6.752	5.567	1.212	0.230	H1 is rejected
NWC	-2.715	3.385	-0.802	0.425	H2 is rejected
TA	-6.127	3.510	-1.745	0.086	H3 is rejected
INST	-0.858	4.174	-0.205	0.837	H4 is rejected
DAR	15.117	4.119	3.669	0.001	H5 is accepted
ROA*DAR	-7.036	13.263	-0.530	0.597	H6 is rejected
NWC*DAR	12.855	10.967	1.172	0.246	H7 is rejected
TA*DAR	-16.094	5.724	-2.811	0.006	H8 is accepted
C	4.975	3.423	1.453	0.151	

Source: processed data (2023)

Based on Table 5, the coefficients of each variable that will form the model in this study are obtained as follows:

$$\widehat{PBV} = 4.957 + 6.752ROA - 2.715NWC - 6.127TA - 0.858INST + 15.117DAR - 7.036ROA*DAR - 12.855NWC*DAR - 16.094TA*DAR \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \ 5$$

The impact of profitability ratio on the firm's value

The panel data regression outcomes show that ROA has a coefficient of 6.752 with a probability value of 0.230. As such, H1 is rejected. The results show that profitability as a proxy for ROA does not affect the company value of the healthcare industry listed on the IDX in 2020-2021. This aligns with previous studies (Hidayat, 2018; Mauludi & Budiarti, 2019; Putra *et al*., 2017; Sukmawardini & Ardiansari, 2018), which stated that profitability does not affect firm's value. One possibility is that this paper was carried out during the COVID-19 pandemic, which would harm the company's income. If income decreases, then ROA will also decrease, which causes a reduction in the effect of ROA on firm's value. This also occurred in previous research Mauludi & Budiarti (2019) which used a sample of pharmaceutical companies listed on the IDX for 2014-2018. During that period, most pharmaceutical companies made losses, which caused the results of their research to show no effect on the profitability of firm's value.

The impact of working capital ratio on the firm's value

The results manifest that NWC has a coefficient of -2.716 with 0.426 probability value. So, H2 is rejected. It means NWC doesn't affect firm's value. In other words, working capital management proxied by NWC does not affect the company value of the healthcare sector listed on the IDX in 2020-2021. It is similar to a study by Putra *et al.* (2017) which stated that NWC does not affect firm's value. This seems to indicate that a lot of working capital to minimize operational risk is inversely proportional to the desired level of profitability. Management must consider to what extent working capital must be owned before sacrificing profitability and company value. Further studies on optimal working capital thresholds must be developed (Le, 2019).

The impact of tangible asset on the firm's value

The outcomes show that the tangible asset (TA) has a coefficient of -6.127 with 0.087 probability value. Therefore, H3 is accepted. This means that tangible asset variables have an effect, even though they have a negative influence. Tangible assets are proxied for the tangibility of assets, or the ratio between tangible assets and total assets harms company merit in the healthcare sector listed on the IDX in 2020-2021. It is similar to a study by Saleh (2018) which stated that tangible assets negatively affect company value. The tangible or fixed assets require very large funds to buy these assets. This will reduce retained earnings by the company because these profits will be used to finance expensive fixed assets. Companies will use retained earnings because it is the cheapest source of funding. However, reduced retained earnings will reduce profits distributed to investors. So, investors will be less interested in investing their money in the company, which will reduce the stock price and firm's value.

The impact of institutional ownership company on the firm's value

The outcomes manifest that INST has a coefficient of -0.858 with 0.838 probability. So, H4 is rejected. In other words, INST does not affect the company value of the healthcare sector listed on the IDX in 2020-2021. This aligns with earlier research, such as Artamevia & Almalita (2021); Setiany *et al.* (2020); Sukmawardini & Ardiansari (2018), that showed institutional ownership does not affect firm's value. According to Artamevia & Almalita (2021), high institutional ownership does not ensure that the supervision of company management is also more effective and optimal. There is also the possibility of agency problems due to information asymmetry between investors and management, which causes the oversight function of institutional investors to not be optimal.

The impact of leverage on the firm's value

The results above show that the leverage variable proxied by DAR has a coefficient of 15.118 with 0.001 probability value. Thus, H5 is accepted. It means that leverage proxied on the DAR positively affects company value in the healthcare sector

in the health services and medical equipment sub-sector listed on IDX in 2020-2021. It's similar to previous studies (Artamevia & Almalita, 2021; Detama & Laily, 2021; Harahap *et al*., 2020; Hidayat, 2018; Prabowo *et al*., 2016) that show leverage with various proxies has a positive effect on company value. It's related to the theory of Modigliani & Miller (1963), which stated that if a company uses debt to carry out operations close to 100%, the firm's value will also be close to the highest. Through debt, investors feel that companies can maximize profits with small sources of funds without depending on funds from investors (Harahap *et al*., 2020). The thing to remember is that high leverage alone will not be able to maximize the value of the company. Research by Detama & Laily (2021) showed a high level of leverage in companies in their study using pharmaceutical companies. It must also be balanced with an optimal capital structure to maximize company value.

The moderating effect of leverage in the impact of profitability ratio on firm's value

The outcomes show that the interaction variable between profitability and leverage proxied by the DAR has a coefficient of -7.037 with a probability of 0.598. In other words, H6 is rejected. It means that leverage cannot moderate the profitability effect on firm's value. The outcomes appear leverage cannot moderate the effect of proxied profitability on ROA on firm's value in the healthcare sector, particularly in the health services and medical equipment sub-sector listed on IDX in 2020-2021. Sources of capital derived from debt cannot always maximize profitability and even reduce the firm's value. Kraus & Litzenberger (1973) stated that there is a certain limit before debt reduces firm's value. This threshold can certainly change during a crisis such as the COVID-19 pandemic. Companies with high leverage ratios will make investors worry that the company will not be able to cover costs incurred due to debt and will experience bankruptcy.

The moderating effect of leverage in the impact of net working capital on firm's value

The results show that the interaction between net working capital and leverage has a coefficient of 12.855 with a probability of 0.246. Thus, H7 is rejected. Leverage cannot moderate the effect of net working capital on company merit in the healthcare sector in the health services and health equipment subsectors listed on the IDX in 2020-2021. This can be explained by referring to Altaf (2018); Le (2019) which showed that NWC negatively affects firm's value. As discussed above, investors value restrictive working capital policies more highly, and companies with too much working capital are undervalued. So, the company's value will certainly decrease if it is known that it only owes a lot of working capital.

The moderating effect of leverage in the impact of tangible assets on firm's value

The outcomes manifest that the interaction between tangible assets and leverage has a coefficient of -16.095 with a probability of 0.007. Therefore, H8 is

accepted. In this case, leverage can moderate the effect of tangible assets on corporate value in the healthcare sector in the health services and health equipment sub-sectors listed on IDX in 2020-2021. This is explained by referring to Saleh (2018) that tangible assets negatively affect firm's value. The tangible assets have a negative effect because funding for these assets requires very high costs, and the source of funds usually comes from retained earnings, which should be distributed to shareholders. Suppose these tangible assets can be funded with other funds, such as debt. In that case, the negative effect of tangible assets on company value can also be reduced because retained earnings distributed to shareholders are maintained to increase investors' evaluation of the company.

CONCLUSIONS

This study concludes that profitability does not affect company value due to decreased revenue during the pandemic. NWC does not affect firm's value because a high amount of working capital alone cannot increase company profitability. Tangible assets do not impact firm's value because the costs required to invest in this type of asset are very high. Investment judgment will be diminished if residual earnings are used to purchase it. Institutional ownership does not affect firm's value. There may still be agency problems due to information asymmetry between investors and management, which causes the oversight function of institutional investors to not be optimal.

Leverage is examined as one of the independent variables and a moderating variable. Leverage positively affects firm's value since it can reduce the tax charged to the company, thereby increasing its income to a certain extent. Leverage cannot moderate the profitability effect on firm's value. So, companies should not use too much debt to prevent interest expenses from being too large and compromising company value. Leverage cannot control the NWC effect on firm's value. Companies should not increase working capital using debt because it will further reduce firm's value. In contrast, leverage can moderate the effect of tangible assets on firm's value by weakening the negative effects of tangible assets. Therefore, companies should use debt to invest in tangible assets.

Our research has several limitations. The data are too short (two years taken during the pandemic crisis). Therefore, it will be difficult to apply in general. Future research could consider non-crisis periods such as the COVID-19 pandemic or compare the effects of these variables if economic conditions are normal. Further research needs to be carried out on whether it was caused by a decrease in profits during the pandemic or whether other reasons caused companies in the healthcare sector to have a company value not affected by profitability. Subsequent research can also change proxy variables. For example, profitability using return on equity, firm's value with price-earnings ratio, or company ownership with managerial ownership,

even changing the independent variable considering that there is still a 13.11% influence from variables outside this study.

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