Asset Management And Companies' Firm Value In Indonesia: Profitability Moderation

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Abstract. The impact of intellectual capital is examined in this study, debt policy represented as the ratio of debt to equity, and total asset turnover as a proxy for asset management on firm value moderated by profitability, where ROE is the proxy. The data for this study uses property and real estate sector company objects in Indonesia in 2016-2020 by testing using moderating regression analysis (MRA). The study's findings indicate that intellectual capital and total asset turnover positively and significantly affect firm value, proxied by price to book value. Meanwhile, No discernible impact of the debt-to-equity ratio exists on the price-to-book ratio. The influence of debt to equity ratio on significant value and the impact of intellectual capital on firm value can both be significantly strengthened by ROE but cannot enhance the effect of total asset turnover on firm value**.**

Keywords: intellectual capital; debt to equity ratio; total aset turnover; return on equity; price to book value

1 Introduction

The real estate and property industries are growing extremely quickly and will be even more significant. This is because there is a fixed supply of land and a rising population. Property and real estate development is considered among the industries that can withstand macro conditions. However, IDX data in 2020 noted that of the many property issuers (around 60 issuers in the Property and Real Estate sub-sector), eight property issuer shares recorded declining performance over the last 5 years. Some claims have fallen by up to 60% in that period. This is inversely proportional to the slogan investing in the capital market, which provides long-term benefits for Indonesia (www.cnbcindonesia.com).

The table above shows the company's stock price Agung Podomoro Land Tbk. Experienced fluctuations, namely in 2016 and 2017, of 210, decreased by 152 and increased until 2020 188, different from the company Alam Sutera Realty Tbk., which experienced a decline from 2017 to 2020 and experienced an increase from 2016 to 2017. Ups and downs in stock prices are commonplace because they are driven by the forces of demand and supply [43]–[21]. If the demand is high, the price will rise; otherwise, if the supply is high, the price will fall [39], [32]. In general, A number of things influence a company's stock price fluctuations.

sector is one of the sectoral indices that has experienced a decline amid the coronavirus pandemic. The founder and analyst of the Ellen May Institute stated that issuers working in the

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real estate and property industry had the most to decline, considering the current housing sales and purchases. He took the example of PT Bumi Serpong Damai Tbk, It had a dramatic drop in performance during 2020's first quarter. The BSDE-coded issuer's revenue for the first quarter of 2020 decreased by 57.1% in contrast to the 2019 fourth quarter. Meanwhile, a decrease was recorded at 8.2% on an annual basis or YoY. These stock price fluctuations pressure investors to decide to survive or leave their preferred issuers [44], [34].

Firm value, which is strongly correlated with a stock price of the corporation, is an investor's assessment of its degree of success. One measure of firm value is price book value [15]–[45]. An increase in PBV is the goal of companies going public because this shows increased shareholder welfare [36], [12]. According to (Radiman, 2018) states, Price to Book Value is a value that are suitable for comparison with other stocks [34], [15], [37]. The greater this ratio, shows that the market has more confidence in the future prospects of the company [12], [12].

The business will work to raise the worth of its company in the hope that it will provide good prospects in the future [25]. The management team's proficiency to successfully manage assets in order to make profits determines the worth of the business. The theory of resource-based states that if a business can effectively manage its tangible and intangible assets, it will have a competitive advantage. [22]. This asset management can be realized in the form of corporate financial reporting. Much information must be presented in a company's financial statements, which will later provide added value to the company [4], [1]. This additional benefit may take the shape of innovation, invention, knowledge, employee development, and good relations with consumers, which are frequently referred to as intellectual or cognitive capital [43], [25].

Research on the influence of Firm value and intellectual capital have been empirically proven by (Ahmed et al., 2019; Salvi et al., 2020) which assert that intellectual capital and corporate value are positively correlated. Nuryaman, (2015) research states that intellectual capital increases firm value and profitability. However, research states that no discernible impact exists between intellectual capital and firm value [34], [4]. Other research states that profitability can act as a mediator in the relationship between business value and intellectual capital [6].

The degree to which the company's assets are financed by debt in relation to its capital is indicated by solvability (leverage) (Weston dan Copeland,1992). debt policy determines how much a company's funding needs are financed by debt [7]. Interpreted through the debt-to-equity ratio, this study wants to determine how it affects the value of the firm [46], [18]. Based on the theory of capital structure [29] eliminating assumptions about the absence of taxes, debt can save taxes paid so that the company's value increases.

Companies with a high risk will be responded negatively by investors because the company is considered unable to distribute optimal dividends, so the company's stock price has decreased, negatively affecting the company's value [34]. This is supported by studies from [20]–[41] which state that the debt-to-equity ratio positively and significantly affects firm value. However, Other studies' findings differ from one another, which state that there is a negative effect between the debt-to-equity ratio on firm value [10], [13].

Real estate and property firms have total assets that grow yearly. This is because high sales will be able to increase the company's assets. This asset increase manifests in total asset turnover or total asset turnover [26], [28]. Developments in the average total asset turnover show that property and real estate companies experience a yearly decline. This causes net sales to be ineffective and the turnover of all assets to slow down, resulting in the financial performance of the company must be improved [9]. Suppose the percentage of total assets turnover is more significant. In that case, the effectiveness of using company assets will be better in generating income, which will also increase net profit and shareholder welfare through firm value [12],

[38], [31]. This is in line with studies which demonstrate a notable beneficial impact between total assets turnover on firm value [41], [28].
This study replicates previous research, which raises differences so that researchers find research gaps. As a differentiator from previous studies, Return on equity serves as a moderating variable in this study, which uses profitability as a proxy variable. The purpose of this research is to determine how the independent variables intellectual capital, debt to equity ratio, and total asset turnover on firm value directly and when moderated by partial and concurrent return on equity in Indonesian real estate and property firms.

2 Literature Review And Hypothesis Development

Resources based theory

The theory of resources explains how businesses able to utilize and manage their assets to gain a competitive edge. The resources of the company are diverse, not uniform. The resources that offer distinctive qualities to each organization are the source of the productive services that are available. [22] Depending on Resource Based Theory, Companies that possess, manage, and make use of vital strategic assets will outperform their competitors in the marketplace and generate positive financial results (tangible and intangible). [42] explains that combining tangible and intangible assets is one possible tactic to boost business performance. Intellectual capital is a company resource with the same important role as physical and financial capital. Therefore, intellectual capital can be used as a unique competitive strategy for business competition so that corporate value will be created [1].

Signalling theory

The signal theory states that When it comes to making financial decisions, investors and other interested parties can use the information disclosed in the disclosure as a signal. [29]. A disclosure is considered to include information if it has the potential to cause a market reaction, such as abnormal returns or changes in stock prices. Theory of pragmatic accounting, which emphasizes the impact of information on alterations in the behavior of information users, is the foundation of signaling theory [30]. An issuer's announcement is one of the data points that can be utilized as a signal. The rise and fall of the issuer firms' securities prices can be impacted by this news in the future [15].

Trade off theory

Trade-off theory discusses the connection between the value of the company and its capital structure. To balance the advantages and disadvantages of employing debt is the fundamental goal of the trade-off theory of capital structure. If the benefits outweigh the costs, further debt may still be taken on. Further debt is prohibited if the sacrifice resulting from the use of debt is more significant.. Based on this theory, companies maintain a targeted capital structure to maximize market value. The leverage exchange idea is a trade-off where businesses exchange the tax advantages of debt financing for the risk for bankruptcy-related issues (Brigham & Houston, 2011:183). This aligns with the proposed trade-off theory by Myers in Jahanzeb et al., (2013) It stipulates that businesses will only be able to borrow up to a specific amount of money before the cost of financial distress is equal to the tax savings (tax shields) from taking on further debt.

Intellectual capital

The definition considering intellectual property present in many works of literature is quite intricate or interconnected and varied. Galbraith first proposed intellectual capital in 1969 in Gajic, (2017) Intellectual capital is a certain kind of intellectual work, applying mental capacity, and basic or fundamental sources of business success to meet objectives. Various studies on intellectual capital gave birth to many different definitions from researchers. Bontis (2000) in Goh (2005) defines intellectual capital as well as any corporate and staff knowledge contributing to the company's sustainable competitive advantage. Public (2001) in Yuskar & Dhia, (2017) defines intellectual capital as all employees, companies, and their potential to raise the company's worth. An intangible resource with knowledge that can influence a company's success in making decisions for both immediate and long-term gains is called intellectual capital.

Considering the understanding put forward by experts, The total amount of knowledge and technology that the three main components of an organization-human capital, structure capital, and customer capital-produce and use to add value to the business and gain an organizational competitive advantage is known as intellectual capital. In general, Three components make up intellectual capital, according to academics, namely human capital (HC), structural capital (SC), and customer capital (CC). In simple terms, HC reflects the unique knowledge base that each person in a company possesses. This HC includes competence, commitment, and employee loyalty to the company. SC encompasses all of the organization's non-human knowledge repositories. Information that adds value to a corporation beyond its material worth is included in SC, include process manuals, organizational maps, and databases, plans, and routines. Meanwhile, CC is knowledge of customer interactions and marketing channels (Bontis, 2001 in A. J. Putri et al., 2019). In this study, the measuring of intellectual capital pertains to the assessment of the Value Added Intellectual Capital Coefficient (VAICTM) developed by Pulic, (1989) which was later modified by Ulum (2014) to become the Modified Value Added Intellectual Coefficient (MVAIC). This method appears based on research by Brinker (1998), Steward (1997), and Draper (1998) in A. J. Putri et al., (2019) state that Intellectual capital is comprised of three elements, namely, human capital (HC), structural capital (SC), and relational capital (RC). The addition of one component in the form of relational capital efficiency (RCE) confirms that VAIC have two components of capital are used in the computations., namely CEE (Capital Employed Efficiency) and ICE (Intellectual et al.), which are the addition of HCE, SCE, RCE.

Debt to equity ratio

The Debt to Equity Ratio (DER) is a proportion that is able to measure a company's leverage level so that it can be used to assess debt to equity in each period. This ratio is known through a comparison of all debts, including existing obligations, with all equity to the company owner. The Debt to Equity Ratio helps know the quantity of money that borrowers contributed (creditors) with company owners (Kasmir, (2014) in Karyatun & A, 2022). In other words, this ratio determines that the capital from company owners embedded in The business may be pledged as security for a loan. The higher the ratio of debt to equity, the more outstanding the loan capital will cause an even more significant burden of debt (interest costs) that the company must bear. Debt to Equity Ratio (DER) is additionally employed to calculate the ratio of total debt to assets. In other words, How much debt is secured by the company's assets? or how much debt the business has affects asset management? DER calculation is as follows:

$$DER = \frac{Total\ debt}{Total\ equity} \quad (1)$$

Total asset turnover

Ratio of total asset turnover to gauge the comparison between fixed assets owned to sales. This ratio helps evaluate a company's ability to efficiently utilize its fixed assets to increase Total Asset Turnover income[28] . If When turnover is low, It suggests that compared to the volume of sales, the amount of assets owned is excessive (Sugiyono, (2014) dalam Kaniawati et al., 2019). The company's size description can be seen from the company's total assets on the balance sheet of financial statements. Total Asset Turnover is also used to measure How well the business uses assets as a source of resources. If the ratio is low, which suggests that the business does not have sufficient volume potential for its investment capacity. From the several meanings that have been explained, Total Asset Turnover is an activity ratio that gauges the degree of efficacy and efficiency of every resource the business uses to boost sales. TATO calculation is as follows:

$$TATO = \frac{sale}{Total\ asset} \quad (2)$$

Return on equity

Profitability proxied by ROE. According to [43] Return on Equity (ROE) is the proportion of own capital to net profit after taxes used to measure shareholders' return on investment. The issue of profitability is more significant for businesses overall than the issue of profit since substantial profits on their own do not show that a business has run efficiently. The higher the ROE ratio indicates that the company's performance is getting better or more efficient, the company's equity value is expected to rise in parallel with the ROE ratio, and The capacity of the business to make a profit, which is connected to dividend disbursements, will increase. There will be a tendency for stock prices to rise [33]. The lower this ratio, the lower the company's profit. Below is the ROE formula, namely:

$$ROE = \frac{Net\ profit}{Shareholder\ Equity} \quad (3)$$

Firm value

Firm value (Value Of The Firm) is a certain state attained by a business to demonstrate the public's confidence in the business. The company's high or low value can symbolize shareholders' prosperity. The worth of the business rises with the stock price. Firm value is the amount that potential purchasers are prepared to make a payment to purchase the business if it is sold (Husnan, 2008). According to Harmono (2011), The public's evaluation of the company's actual performance is shown in the formation of the company's stock prices on the market, which may be used to measure a company's value, because the price is a meeting point of stability of the forces of demand and supply which in real terms sell transactions occur. Market equilibrium refers to the purchasing of securities in the capital market between sellers (issuers) and investors. This study calculates firm value using the price-to-book value (PBV) ratio. PBV is a ratio that illustrates the connection between a company's book value and the market price of its stock.

With this ratio, investors can find several multiples of the variation in the share price and book value. The PBV ratio can measure the value provided by financial markets, management, and the structure of the business as a developing enterprise [17].

Hypothesis Development

According to resource-based theory, businesses that possess, manage, and make use of vital strategic assets—both tangible and intangible—will do well in the marketplace and provide positive financial results. When resources are managed well, they can raise the company's value, which will ultimately result in higher business revenues and rewards for shareholders. Capital market investors will demonstrate their appreciation for the benefits of companies' intellectual capital by making investments in them, which will raise the value of the companies. Using intellectual capital increases the worth of the business in a direct proportion; If intellectual capital performs better and achieves more, the company's worth will rise as well.

Salvi et al., (2020) The impact of intellectual property on company value is being tested, and the findings for the three IC components in 110 multinational companies are significantly positive. The results of other studies state a noteworthy benefit between intellectual capital on firm value reseach [6]. As well as research from [25] states that The variable of intellectual capital positively impacts the value of the company.

Debt policy substituted by the debt to equity ratio has empirical evidence of its effect on firm value, one of which is research from [20], [41] which states that there is a significant effect on the debt to equity ratio on firm value. In addition to previous research that supports building the second hypothesis in this study, research from [23] states that debt policy harms firm value. High profitability can symbolize better company prospects. A company's growing profitability indicates a rise in its efficiency, which indicates that its performance is getting better. Companies with good performance are seen through the acquisition of profits, thus increasing the confidence of investors who want a return on the investment made.

Total asset turnover as a variable to build the 3rd hypothesis has an empirical study conducted by [28] which states that tattoos significantly influence firm value. As well as research from [26], [31] found that total asset turnover is a factor in increasing investor confidence which is significantly equivalent to price book value. To build the fourth hypothesis, there is research that states that profitability cannot significantly mediate the effect of intellectual capital on firm value [37], [27] as a differentiator from previous research, this study provides proximate profitability with ROE become a moderating variable that strengthens the impact of intellectual capital on firm value.

Debt policy is an example of the structure of a company's financial ratios, specifically the difference between owned capital, which originates from long-term debt, and own capital, which serves as a source of funding for the business, moderating profitability on the effect of debt policy interpreted by DAR on company value has been studied by [2] with the object of manufacturing sector companies in Indonesia with increased profitability results can increase the influence of DAR on PBV. This study adopts this research by building the fifth hypothesis using the dependent variable, DER, on PBV in firms in the property and real estate sectors. For the sixth hypothesis, According to study, a company's worth is greatly influenced by its overall asset turnover. However, moderation between the two using the variable profitability is still rare. So the researchers used the profitability moderating variable to determine whether the effect of total asset turnover on firm value is getting stronger when moderated by profitability.

From the explanations of the construct of the research model, the following is the research conceptual framework:

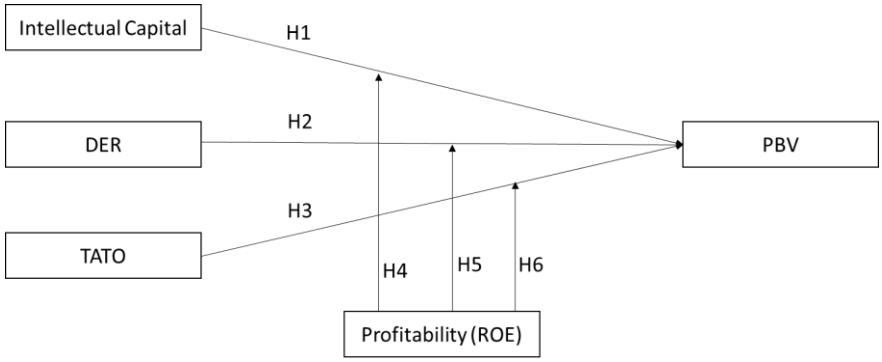

Figure 1. Conceptual Framework

The conceptual framework has shown that there are 6 hypotheses in this study, as follows:
H1: Intellectual capital has a considerable impact on the firm value of enterprises in Indonesia's property and real estate sectors.
H2: Debt to Equity Ratio partially has a major impact on the firm value of Indonesian enterprises in the property and real estate sectors
H3: Companies in Indonesia's property and real estate sectors find that total asset turnover has a considerable impact on company value to a lesser extent.
H4: In Indonesian enterprises in the property and real estate sectors, The value of intellectual capital moderating effect on profitability and a major impact on company value.
H5: In Indonesian enterprises in the property and real estate sectors, the debt to equity ratio has a moderating influence on profitability and a considerable impact on firm value.
H6: In Indonesian enterprises in the property and real estate sectors, profitability acts as a moderating factor, and total asset turnover has a substantial impact on firm value to a limited extent.

3 Research Method

This study used a quantitative methodology with comparative causal research and used secondary data collected by purposive sampling method. The subjects of this study were property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020. This study used total sampling with a total sample of 13 property and real estate sector companies. In this study, the traditional assumption test and descriptive statistical analysis were employed as data analysis methodologies; this research analysis used Moderating Regression Analysis (MRA), t-test, and F test. Data processing uses tools like SPSS version 25. This research is based on the following analytical model.:

$$PBV = \alpha + \beta 1IC + \beta 2DER + \beta 3TATO + \varepsilon \quad (4)$$

$$PBV = \alpha + \beta 1IC + \beta 2ROE + \beta 3IC * ROE + \varepsilon \quad (5)$$

$$PBV = \alpha + \beta 1DER + \beta 2ROE + \beta 3DER * ROE + \varepsilon \quad (6)$$

$$PBV = \alpha + \beta 1TATO + \beta 2ROE + \beta 3TATO * ROE + \varepsilon \quad (7)$$

Information:
PBV = firm value; α = constanta; β = coefisien
IC = Intellectual capital; DER = Debt to Equity Ratio; TATO= Total Asset turnover; ROE = Return On Equity,
IC*MOWN = interaction of Intellectual capital with Return On Equity,
DER*MOWN = interaction of Debt to Equity Ratio with Return On Equity
TATO*MOWN = interaction of Total Asset turnover with Return On Equity
ε = residual error

4 Results And Discussion

This study examines the impact of the independent factors VAIC, DER, and TATO on firm value and the moderating effect of ROE serves as a stand-in for profitability on the dependent variable's independent variable. The following is how the processed data is displayed:

Classic assumption test

Normality test results aim to determine if the model made has a normal distribution by using the One-Sample Kolmogorov-Smirnov Test. Based on the data processing results, the Kolmogorov-Smirnov Z result was 0.103, and the degree of relevance was Asymp. Sig. (2-tailed) of 0.188 > 0.05, consequently, one may say that the information have been dispersed normally.
The autocorrelation test uses the Durbin-Watson test result indicator and produces a DW value 1.842. Based on the Durbin-Watson table, the values for du and do with There are six independent variables, and sixty is the sample data. With the results Du < d < 4-du 1.639 < 1.842 < 4-1.639, thus, it can be said that autocorrelation does not exist.
For multicollinearity testing, look at the output value of the collinearity statistical test on the tolerance and VIF columns. The findings from the examination of multicollinearity testing is demonstrated in Table 1. These results indicate that all tolerance values for each variable are > 0.1, and the VIF value for each variable is < 10, so there is no multicollinearity in the data..

Table 1. Multikolinieritas Output Testing

Variable	Collinearity Statistics	
	Tolerance	VIF
IC	0.225	4.436
DER	0.344	2.908
TATO	0.123	8.156
IC*ROE	0.108	9.279
DER*ROE	0.124	8.044
TATO*ROE	0.160	6.654

Source : processed data, SPSS 25 output.

Testing the last assumption is to test heteroscedasticity with a significance test of more than 0.05 to ascertain how the independent factors affect the absolute residual. The outcomes of the heteroscedasticity tests are displayed in Table 2. Based on Table 2, it is known that all

significance values are more than 0.05 in order for the data to be free from the presence of heteroscedasticity.

T**able 2.** Heteroskedastisitas's Output Testing

Variable	Signifikansi
IC	.115
DER	.675
TATO	.597
VAIC*ROE	.242
DER*ROE	.337
TATO*ROE	.301

Source : processed data, SPSS 25 output.

Multiple Linear Regression Test

The analysis of multiple linear regression findings models without a moderating variable using the SPSS 25 application are presented in Table 3.

Table 3. Regression Model Test Results I

Variable	B	Std. Error	t	Probability	Hypothesis Decision
(Constant)	0,773	0,187	4,139	-	
IC	0,220	0,108	2,040	0,046	accepted
DER	0,022	0,114	0,189	0,850	rejected
TATO	0,465	0,259	1,796	0,048	accepted
R Square	0,345	Mean dependent variable		0,901	
Adjusted R Square	0,298				

Source : processed data, SPSS 25 output.

Based on the output table, the regression model without moderation is as follows:

$$PBV = 0{,}773 + 0{,}220IC + 0{,}022DER - 0{,}465TATO$$

The multiple linear regression model shows that the constant is 0.773, which indicates if the variable of interest remains constant, then the value of the PBV is 0.773. The regression coefficient of 0,220 indicates that if intellectual capital increases by 1 unit, The PBV Value is anticipated to increase by 0,220. The regression coefficient of 0.022 indicates that in the event that the DER rises by one unit, the PBV value will rise by 0.022. According to the regression coefficient of 0.465, if TATO rises by one unit, the PBV value will increase by 0.465.

The results of the Rsquare test in this study obtained a Rsquare value of 0.345. This indicates that intellectual capital affects Price to Book value, Debt to Equity Ratio (DER), and Total Asset Turnover (TATO) of 34.5%. Comparatively speaking, the remainder 65.5% is affected by other factors not covered in this research. To verify the study's hypothesis, as follows:

1. The t-test's statistical findings for the intellectual capital variable was given a significance level of 0.046 which is less than the inaccuracy tolerance $\alpha = 0.05$. Because the

significance value is smaller than 0.05. Then the hypothesis which states "intellectual capital has a significant effect on Price to Book Value" is accepted.

2. The statistical findings from the t-test for the Debt to Equity Ratio variable attained a significance level of 0.850, more significant than the error tolerance α = 0.05. Because the significance value is more significant than 0.05. Next, the theory which states "Debt to Equity Ratio has a significant effect on Price to Book Value," is rejected.

3. The statistical findings from the t-test for the TATO variable obtained a significance value of 0.048 which is less than the inaccuracy tolerance α = 0.05. Due to the significance value being smaller than 0.05. Then the hypothesis, "TATO has a noteworthy impact on Price to Book Value," is accepted.

For model 2, the outcomes of the multiple linear regression analysis models with a moderating variable are shown in Table 4.

Table 4. Regression Model Test Results 2

Variable	B	Std. Error	t	Probability	Hypothesis Decision
(Constant)	.742	.261	2.844	.006	
IC	.011	.236	.047	.963	
ROE	-1.059	2.494	-.425	.673	
IC*ROE	1.919	1.880	1.021	.012	accepted
R Square		0,229			
Adjusted R Square		0,082			

Source : processed data, SPSS 25 output

Considering the output table, the regression model without moderation is as follows:

$$PBV = 0{,}742 + 0{,}011IC - 1{,}059ROE + 1{,}919IC * ROE$$

The Rsquare The study's test findings yielded a Rsquare value of 0.229. This demonstrates how important ROE is moderation on the connection between intellectual capital and PBV is 22,9%, while not including other elements by this model affect the remaining 77,1%. To test the hypothesis in this study, the t-test statistic's findings for ROE moderation on the connection between intellectual capital and and PBV obtained a significance value of 0.016, which is less substantial than the error tolerance α = 0.05. Since less than 0.05 is the significance value, the hypothesis, which states "ROE can moderate the effect of intellectual capital on PBV," is accepted.

The multiple linear regression analysis models' outcomes in the presence of a moderating variable for model 3 are displayed in Table 5.

Table 5. Regression Model Test Results 3

Variable	B	Std. Error	t	Probability	Hypothesis Decision
(Constant)	.185	.247	.750	.456	
DER	.433	.189	2.292	.026	
ROE	6.177	1.960	3.151	.003	
DER*ROE	-3.781	1.465	-2.580	.013	accepted
R Square		0,653			

Adjusted R Square	0,507

Source : processed data, SPSS 25 output

Considering the output table, the regression model without moderation is as follows:

$$PBV = 0{,}185 + 0{,}433DER + 6{,}177ROE - 3{,}781DER * ROE$$

The outcomes of the Rsquare test received an in this investigation Rsquare value of 0,653. This shows that the influence of ROE moderation on the relationship between DER and PBV is 65,3%, while the remainder of 34,7% is affected by additional variables excluded from this model. To test the hypothesis in this study, the results of the t-test statistic for moderating ROE on the relationship between DER and PBV obtained 0,013 as the significance value, which is smaller than the error tolerance α = 0,05. Because the significance value is below 0,05, the hypothesis that states "ROE can moderate the effect of the debt to equity ratio on PBV" is accepted.

The multiple linear regression analysis models' outcomes in the presence of a moderating variable for model 4 are presented in Table 6.

Table 6. Regression Model Test Results 4

Variable	B	Std. Error	t	Probability	Hypothesis Decision
(Constant)	.840	.198	4.250	.000	
TATO	-.886	.599	-1.479	.145	
ROE	3.404	1.905	1.787	.079	
TATO*ROE	.021	4.429	.005	.996	rejected
R Square		0,210			
Adjusted R Square		0,167			

Source : processed data, SPSS 25 output

Considering the output table, it can be stated that the regression model without moderation is as follows:

$$PBV = 0{,}840 - 0{,}886TATO + 3{,}404ROE + 0{,}021TATO * ROE$$

The Rsquare test findings in this investigation were a Rsquare value of 0.120. This shows that the influence of ROE moderation on the relationship between TATO and PBV is 12%, while additional elements not addressed by this model affect the remaining 88%. To test the the study's hypothesis, the findings of the t-test statistic for ROE moderation on the relationship between TATO and PBV obtained a significance level of 0.996, greater importance than the error tolerance α = 0.05. Because The significance level exceeds 0,05. Then the hypothesis which states "ROE can moderate the effect of TATO on PBV" is rejected.

The Effect of Intellectual Capital on Price Book Value

In light of the test findings, Intellectual capital is proven to have a major positive impact on PBV, so, the theory is approved. This shows that when a company increases its attention to good intellectual capital management, it will be able to increase stakeholder trust and be in line with an increase in shareholders' welfare. These findings indicate that companies that can increase the added value of assets invested by stakeholders can attract new and retain old investors.

The stakeholder theory, which holds that investors are drawn to businesses that can increase the value of their investments, is supported by these findings, especially in managing intellectual capital [8]. Companies that can manage capital from labor, marketing, company management, and company funding sources effectively and efficiently can improve company performance from various sides and quickly get a good response from investors. The resource-based theory (RBT) is supported by the study's findings, it talks about the resources that businesses have and how they may use those resources to gain a competitive edge. Management of resources to highlight superior knowledge (knowledge/economic learning) so that they can rely on their intangible assets to compete and exceed their competitors. In addition, resource-based theory (RBT) focuses on resources and organizational management, ultimately creating corporate value.

It is also possible to draw the conclusion from the study's findings that Indonesian financial sector organizations have been based on knowledge-intensive high-tech firms in building their business. Financial sector companies have also considered what makes up intellectual capital, including consumer, structural, and human capital. For companies based on knowledge, A company's the capacity to produce, transform, and capitalize on Information is going to be essential to its success. Intellectual capital management economically and efficiently will give you a competitive edge.

The study's findings are consistent with the research that was conducted by Ahmed et al., (2019); Halim, (2021); Nguyen & Doan, (2020) dan Yuskar & Dhia, (2017) which state that companies with an increase in good knowledge assets will be able to increase added value and increase investor welfare. This research is different from the results of research from Norsewansyah & Rusqiati, (2019) dan Nuryaman (2015) which state that market awards are determined by a company's more on the physical resources owned by the company, and investors tend not to focus on the intellectual resources they have.

Effect of Debt to Equity Ratio on firm value

A policy with a high debt load suggests that companies tend to use debt as their capital structure so that if companies earn profits, these profits will be used to pay off their debts so that the increase in shareholder welfare cannot be enjoyed to the fullest [20]. Meanwhile, based on E. F. Brigham & Houston, (2017) companies that use debt to finance investments are expected to increase company value.

The test results indicate that PBV is positively, although not significantly, impacted by the debt-to-equity ratio, so the hypothesis is rejected. DER has a major beneficial impact since a high DER can provide value to the business, the higher DER can increase company production, ultimately increasing company profits. Increased leverage can show good news if management manages loans appropriately in order to make large profits, increasing the company's value.

The findings of this investigation support the conclusions made by Asril, (2021) and Karyatun & A, (2022) which state that the composition of company capital dominated by debt can improve shareholder welfare but not significantly. In addition, This study contradicts the

findings of research from Munandar & Alvian, (2022); Nuryani & Sunarsi, (2020) and Sony & Bhaduri, (2021) they assert that the debt-to-equity ratio greatly diminishes the value of the company.

Effect of total asset turnover on firm value

In light of the test results, it is recognized that total asset turnover has a positive but significant effect on PBV, so the hypothesis is accepted. An increase in the TATO value indicates implies the business is getting better at utilizing all of its resources to generate a profit. Growing business profits will have an impact on the company's worth and the well-being of shareholders.

Activity ratios make the assumption that sales and different asset components—stocks, receivables, fixed assets, and other assets—should be well balanced. Effective sales will affect corporate value, leading to high levels so that the prospects obtained can increase. Therefore, the company further increases sales in various ways, such as attracting consumers to buy by adding more quality products sold to consumers. The property and real estate industry is engaged in developing services by facilitating the development of integrated and dynamic areas with significant assets. When repeated sales are carried out, an enormous asset will very quickly increase revenue and company shareholders amid high competition among fellow companies.

This study is consistent with Bama et al., (2021) and Hasangapon et al., (2021) which state that efficient and effective asset management in generating sales can increase company value. Meanwhile, this study differs from the results of research from Karyatun & A, (2022) and F. K. Putri et al., (2018) which state that good asset management cannot significantly increase shareholder welfare but must be supported by profitability and other aspects.

The effect of Intellectual capital on firm value with profitability as a moderating variable

The test results indicate that the impact of intellectual capital on business value can be mitigated by profitability as determined by equity return (ROE). The study's findings demonstrate that a company's market worth can rise when its intellectual capital is revealed in its financial accounts, which the stock price of the company reflects. Intellectual capital, an intangible asset, is of particular concern to investors where companies willing to include intellectual capital reports have a unique attraction for investor sentiment that does not only pay attention to physical capital.

The market will provide more value to companies with good financial performance and voluntarily report on their intellectual capital. Investors will be assisted in making judgments about their investments and will feel more confident about the company's future prospects if intellectual capital statements are included in the annual report of the company. The company's development, which is constantly increasing, is not only reflected in the statement in monetary terms but its intangible assets are developed to support increasing profitability. In this regard, the property and real estate industry has shown that companies with a significant physical asset base continue to increase their attention to managing their intangible assets to support the improvement of shareholder welfare.

This research aligns with research from A. J. Putri et al., (2019) which asserts that raising a company's value and financial performance is thought to require intellectual capital. According to the resource-based idea, a business can gain a competitive edge and add value if it can manage its resources well. Businesses with effective intellectual capital management will see a rise in

market value. The market will give a higher valuation to companies that have high intellectual capital, therefore, stakeholders are oriented to intervene in corporate management in the hopes that effective administration of this intellectual capital can boost firm value. [14].

Effect of Debt to Equity Ratio on firm value with profitability as a moderating variable

In light of the test findings, it is known that profitability proxied by ROE can moderate the effect of the Debt to Equity Ratio on firm value so that the hypothesis is accepted. These results indicate that companies with good debt policies will improve their financial performance. Capital from external sources can expand sales reach so that profitability will increase. An increase in profitability will provide greater welfare to shareholders.

The loan capital increases with the Debt to Equity Ratio, hence it will result in an even more significant debt burden (interest costs) that the company must bear. However, productive debt management, in addition to providing interest expenses, will be able to increase higher returns on investment. Stated otherwise, the amount of the company's assets are dominated by debt will have the capacity to rise profitability and improve the development of the company's prospects to attract investor confidence.

Companies that use debt to finance investments are expected to increase company value [20]. The test results align with the theory put forward [29] which reveals that If a business must pay income taxes, using debt is the best course of action for it to pursue in order to raise its worth. This can happen because the repayment of interest on loans can lessen the load on the business. With the potential to reduce tax costs, this will indicate an increase in earnings after tax so that profits increase and shareholder welfare increases.

Effect of total asset turnover on firm value with profitability as a moderating variable

In light of the test findings, it is known that profitability proxied by ROE cannot mitigate the impact of total asset turnover on firm value, hence the theory is disproved. When investors see that a business can boost sales by managing its assets properly, this will entice investors to make an investment. Because the stock price is a significant component of company value, asset management can therefore possess an effect on the rise in company value, which is formed through investor demand. However, an increase in sales is only sometimes aligned with an increase in profitability when the company has a significant burden on the maintenance costs of its assets.

Property companies whose sales are in the form of movable assets have a relatively small turnover. In other words, when the company's assets are sold, the company cannot recognize these assets again because the ownership of the assets has been transferred to consumers [31]. So when sales increase, It will raise the worth of the business, not only through returns but through other aspects such as management policies in distributing profits or maintaining profits for the business's activities for the next period Bama et al., (2021).

5 Conclusion

Considering the outcomes of the experiments and the talks previously described, t is possible to draw conclusions. First, Firm value is significantly positively impacted by intellectual capital, meaning that the greater number of intellectual capital, the higher the firm value. Second, The The ratio of debt to equity is positive but insignificant effect on firm value, meaning that the size of the debt-to-equity ratio does not impact firm value. Third, A faster asset turnover rate will benefit the value of the company since total asset turnover has a positive but considerable effect on firm value. The four profitability can moderate intellectual capital's impact on corporate value, which means that the effect of intellectual capital on firm value will be more substantial if the company's profitability increases. Fifth, profitability can moderate the impact of debt-to-equity ratio on the value of the company, meaning that if company profits increase and are sourced from debt, the company value will also increase. Sixth, the impact of total asset turnover on company value cannot be substantially mitigated by profitability because as profitability rises, the effect of total asset turnover on firm value will increase but not significantly.

The advice from the research that has been carried out is that the first is for real estate and property firms to take notice to several factors tested in this study because they have been proven to affect company value. The factors referred to are intellectual capital, total asset turnover, and mediation of profitability. Companies that consider their intangible assets, sales, and profitability will be able to raise their company's worth. In contrast, companies that can reduce sources of funds from corporate debt will impact increasing company value. The next suggestion for the limitations of this study is for future researchers to add other factors that can affect company value, besides that the number of samples is increasing and not focused on one company, and extending the observation period is an input for subsequent research, in order for the results of our investigation to assist as a guide for further research.

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