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Analysis of Tobin's Q, Market to Book Value of Equity and Profitability (ROA), on Asset Growth in Property Companies on the Indonesia Stock Exchange (IDX)

Sari Bulan Tambunan
Universitas Medan Area, Indonesia
Correspondent: sari@staff.uma.ac.id

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ABSTRACT: This study aims to determine, analyze, and test Tobin's q, market-to-book value of equity and profitability (ROA), on asset growth in property companies on the Indonesia Stock Exchange (IDX). This study uses a quantitative descriptive approach with the support of a panel regression model, which is used as a predictive analysis tool. The sampling technique used a non-probability random sampling approach with a purposive sampling method. The results of this study indicate that the independent variables (Tobin's q (TQ), MBV, and ROA) both simultaneously or together and partially or individually have no effect on the dependent variable (asset growth). The R square value, or the coefficient of determination (R2), is 0.54. This shows the ability of Tobin's q (TQ), MBV, and ROA to explain the growth of assets of property companies listed on the Indonesia Stock Exchange by 54%, or, in other words, the ability of Tobin's q (TQ), MBV, and ROA to have an effect of 54% on asset growth variables. Meanwhile, the remaining 46% is influenced by other variables not discussed in this study.

Keywords: Tobin’s Q, Market to Book Value of Equity, Profitabilitas (ROA), Asset Growth, IDX

INTRODUCTION

Good company performance can be seen in the growth of assets. Growth and continuing asset increases become something that is desired by internal and external parties within the company. Growth asset is a variable considered by an external company in decisions about debt and investment (Saputra et al., 2014). Growth in assets will have favorable prospects for investment. Because the possible return that will be obtained is also high, that becomes a signal positive for investors and causes an increase in stock prices (Brigham & Houston, 2010; Hansen, 2014).

Growth assets have a powerful effect on companies, especially small and medium ones, because with an investment company or activity financing done, the rate of return can be predicted by investors. Because that is growth asset in matter count mark company one tool measure can use indicator *Tobins q*, *market to book value,* and profitability (return *on assets)* (Sudiyatno & Puspitasari, 2010).

Use indicators as tools for measuring something for which variables are indispensable. This is related to giving convenience in understanding meaning (D. Astuti, 2009; R. A. Astuti, 2014). No, of course, for determining something as an indicator as a gauge variable, because an indicator must be capable of representing a variable to be measured in a manner right, so in a manner scientifically accepted and accounted for the truth as the right indicator to measure a variable (Gitman & J., 2015).

An indicator used as a gauge variable must be tested, especially formerly. for the precision. *Tobin's q* as one indicator to gauge variable growth assets in a mark company from the perspective of investment has been tested on a wide range of management situations. *Tobin's q is a ratio that provides an explanation mark from something in which market the company is in a market value company should change its active.* If the value of Tobin's q is firmer than one, the mean company market value is more than the assets listed company. because the market will evaluate a good company that owns Mark Tobin*'s* high Q. Otherwise, if Mark *Tobin's q is* not enough from One, indicate that cost change assets are bigger than company market value, so the market will evaluate the company as not enough (Keown, 2010; Subramanyam & Wild, 2010).

Another measuring tool for growth assets is the *market-to-book value of equity* and profitability (*return on assets). The market-to-book ratio* is a capable ratio that estimates the influence between mark-to-book and *stock returns* and also determines whether investors will get *capital gain* (profit) or *capital loss* (loss) on investment shares that they have chosen. Counting *stock returns* in a cross-sectional *way* also uses the *market-to-book ratio*. Whereas *return on assets* (ROA) is a ratio used to measure profitability of assets as a whole. Because of that, the more positive (high) value *return on assets* (ROA), the better the ability of the company to exploit the assets it owns to produce profit, so that growth asset will be higher. Conversely, a negative *return on assets* (ROA) small) shows that of the total assets used, the company is not capable of making a profit, so that growth asset will be more than too small (Riyanto, 2012).

Based on the background behind the problem before, the researcher formulates the problem in the study. This, namely:

1. Formulation Problem Regression panels: does *Tobin's q, market to book value of equity,* and profitability (ROA) have an effect in a positive and significant manner on asset growth in the company's *property* on the Indonesia Stock Exchange (IDX)?
2. Formulation Problem Simultaneous: does *Tobin's q, market to book value of equity,* and profitability (ROA) have an effect in a manner simultaneous to growth assets in the company's *property* on the Indonesia Stock Exchange (IDX)?

Based on the formula problem above, the goals from study are:

1. Panel Regression Research Objectives: To identify and analyze positively and significantly the effect of *Tobin's Q, market to book value of equity,* and profitability (ROA) on the company's *property* on the Indonesia Stock Exchange (IDX).
2. Simultaneous Research Objectives: To identify and analyze simultaneously the influence of *Tobin's Q, market to book value of equity,* and profitability (ROA) on asset growth in *property companies* on the Indonesia Stock Exchange (IDX).

Benefit from studying This is as follows:

1. For investors, research This expected growth can serve as a foundation for investors and potential investors when making investment decisions.
2. For academics, research This can become a material reference. For study next related to *Tobin's q, market to book value of equity* and profitability (ROA) to growth asset
3. For researchers, research This will add insight and knowledge by connecting existing theory with phenomena and empirical experiences, all at once applying acquired knowledge in the study program of accounting inside practice and theory.
4. For researchers, next, research This is beneficial as information and comparison for the researcher next.

Literature review

Growth Asset

Assets are sources of expected economic benefit to the company in the future (Ezebilo, 2014; Horngren, 2019; Shuai, 2015). Assets are all owned by a wealth company and deliver economic benefits in the future (Reeves et al., 2014).

Increase and decrease asset effects on company *capital* Enhancement causes assets Because results performance companies can form profit from business companies, from matter This means that own capital will increase, and the capital ratio between capital and debt will change. The company wishes to increase its level of production by adding fixed assets; currently, the company's assets are insufficient. For continuity in production, the steps taken are to get additional funds from outside, form debt against the bank, or publish bonds. Acquisition of funds from outside: this will make a comparison between capital and debt changes (Prasetyo et al., 2016).

Variable assets every period give a unique view. For explored. Clear presentation of data with the assumption that the company publishes real data makes observation of assets more focused. Asset figures from period to period are capricious in accordance with performance. The company also makes management decisions. Growth trends in assets will have an effect on decisions made by management in determining the development of a company (Sudana, 2011).

$$\text{Growth} = \frac{\text{Total Asset}_t - \text{Total Asset}_{t-I}}{\text{Total Asset}_{t\text{-}I}}$$

Tobin’s q

Tobin's q, also known as the Q ratio or Q theory, was introduced for the first time by James Tobin in 1969. James Tobin is a successful American economist who reached the Nobel Prize in the field of economics with the hypothesis that a market-value company should be the same as a cost-replacement asset company, so that creates circumstances of equilibrium.

The definition of Tobin's Q is:

"*Tobin’s q is the ratio of the market value of a firm's assets (as measured by the market value of its outstanding stock and debt) to the replacement cost of the firm’s assets*".

Tobin's Q offers an explanation from something company. *Tobin's q model defines a mark company as a mark combination of tangible and intangible assets.* The value of *Tobin's q* low firm (between 0 and 1) indicates that cost change assets of the company are larger than the company's market value. This indicates that the market does not rate enough companies. Whereas if the value of Tobin's q of a company is high (more than 1), then mark company is bigger than mark assets listed company. This indicates that there are a number of assets in companies that aren't measurable or recorded.

Tobin's q formula :

Tobin's q = ME + PS + DEBT / TA

Where:

ME = The number of common shares of the company outstanding multiplied by the closing price of the stock

PS = Liquidation value of the company's preferred shares outstanding.

DEBT = (Total Payables + Inventories - Current Assets)

TA = Book value of total company assets

The *Tobin's q formula* with the financial transaction conditions of companies in Indonesia is as follows:

Tobin’s q = ME + DEBT / TA

Market to Book Ratio

Market to book ratio is size relatively from how much big growth for mark company compared to with asset his physique . With so , increasingly big expected growth and value on the ratio the , increasingly *the market to book ratio is* also high . (Mabelane et al., 2023; Penman, 2013; Ritonga & Suyanto, 2022) explains about *market to book ratio* , is as follows : " *Price, in the numerator of the P/B ratio, is based on the expected future earnings that investors buy. So, the higher the expected earnings relative to book value, the higher the P/B ratio* ."

From the explanation above , it is explained that mark seen of the P/B ratio , based on future earnings come what is expected by investors who invest capital in shares the . So, more and more tall profit relatively expected to mark books, increasingly tall also the P/ B ratio.

Formula For count *market to book ratio* :

$$\text{Market book ratio} = \frac{\text{Market price per share of common stock}}{\text{Book value per share of common stock}}$$

In *market to book ratio* is also calculated book *value per share* (value books per share). Book value per share measure mark book per sheet that becomes right holder share when all riches company sold and whole obligation paid . this value can counted with share the amount of own capital that becomes right holder share including retained earnings (*common stockholder's* equity) with amount sheet issued shares .

Profitability

Ratio profitability is a ratio showing the magnitude of profit earned. A company in a specific time period, how efficient is the management company in producing profit, focusing on costs, and utilizing funds to maximize profit (Deborah, 2015; Naur & Nafi, 2017). According to (Horne et al., 2012; Mishchenko et al., 2021), profitability (*profitability ratio*) consists of two types: ratios showing profitability in relation to sales and ratios showing profitability in relation to investment. In this study, the researcher chose a tool measuring *return on assets.* Where For measuring the ability of a company to obtain profit from assets, use the formula:

$$\text{Return on Asset} = \frac{\text{Net Income}}{\text{Total Assets}}$$

METHOD

Study This is a quantitativstudy aiminge aim for know the connection between two variables or moreor more. With study, this will build a working theory for explaining, predicting, and controlling symptoms (Russiadi, 2014).

Technique used For collecting data, i.e., with method documentation, researchers look for information and learn about various source documentation like books, journals, articles, magazines, the internet, and libraries.

Data analysis technique

1. Analysis Statistics Descriptive

Statistics descriptive is a method of research that tries to describe and interpret objects that exist. The goal is to describe facts, objects, or subjects that exist with an objective in a systematic manner. By and large, the object being described will be depicted through tables, graphs, diagrams, and pictodiagrams, accompanied by simple analysis statistics like frequency, size tendency central (mean, median, mode), size distribution (range, variance, standard deviation, interquartile range), and others from observed variables in object research (Buckley, 2018; Hurtado-Parrado et al., 2022).

2. Analysis Panel Data Regression

Study This uses regression double double. Analysis and regression aim For measuring the strength of the connection between two variables or more as well as showing the direction of the connection between variable independents and variable dependencies used in A research,

Estimation of multiple linear regression models: a study This uses a tool for analysis, namely Eviews 10 software. Research This uses panel data. Panel data is combined between coherent time series and cross-sectional data.

(Widarjono, 2010) identifies a number of profits earned by using panel data. First, panel data is a combination of time series data and cross-sectional data capable of providing more data, so that will produce more degrees of freedom. Second, combining information from time series data and cross-section can overcome problems that arise when there is a problem disappearance variable (ommited variable).

In testing hypothesis, research This uses panel data regression. Panel data used is intermediary data, time, and data between companies. Panel regression was used to get the results of the estimation of each characteristic individual separately. Testing panel regression with a formula:

$$GW_{it\text{-}p} = \alpha + \beta_1 \, TOBINS'Q_{it} + \beta_2 \, MBV_{it} + \beta_3 \, ROA_{it} + €$$

Description:

GW : Growth Assets (%)

TOBIN'S Q : *Tobin's q* (%)

MBV : Market to Book Value (%)

ROA : Profitability (ROA) (%)

€ : *term error*

? : coefficient regression

? : constant

p : optimum lag length

i : amount observation (12 Companies)

t : many time (5 years)

RESULT AND DISCUSSION

Influence *Tobins' q* to Growth Asset

Tobin's Q as one indicator to gauge variable growth assets in a mark company from a perspective of investment has been tested on a wide range of situations, including management peak. Research results This shows that *Tobin's Q* is influential in a manner significant to growth assets. This was showed with a t-count value of -0.652807 1.66298 (t-table) and a sig of 0.5175 > 0.05. Research results This is consistent with the results of studies by (R. A. Astuti, 2014; Hansen, 2014; Naur & Nafi, 2017; Nurohman et al., 2016), which reveal that *Tobins' Q* No is influential on growth assets. *Tobins' q* No can be used to measure growth assets in the company's *properties* because the market price of property companies varies every time depending on market, economic, and political conditions.

Growth The company is highly expected by internal and external parties because good growth is a sign of a developing company. of corner From an investor's point of view, growth in a company is a sign of the company's own favorable aspects, and investors will too expect a level return (*rate of return*) on investment made to show good development. But on the company *properties*, predicting profit is difficult because it is influenced by the external sector from within the company.

Research results can say that movement direction *tobin's q* against growth assets is compared to upside-down or not linear. Until we can conclude that when *Tobin's q* goes up, growth assets go down, and vice versa, when *Tobin's q goes* down, growth profits go up,

Company data property mark *tobin*'s *q-nya* below 1, value This inclusion in the low category (between 0 and 1) indicates that cost change assets in a company are more important than company market value. This means that the market does not rate enough companies.

Influence *Market of Book Value* (MBV) to Growth Asset

The market to book ratio reflects the appreciation or investors' assessment of a company's market value via price share with a balance sheet picture. Research results This shows that the market for book value (MBV) is not influential in a manner significant to growth assets. This showed a t-count value of 0.984346 1.66298 (t-table) and a sig of 0.3307 > 0.05. Research results This is consistent with the results of studies by (R. A. Astuti, 2014; Hansen, 2014; Naur & Nafi, 2017; Nurohman et al., 2016), which reveal that MBV is not influential on growth assets. MBV can't be used to measure growth assets in property companies because mbv is a relative size of asset growth, while in property companies, prices and asset growth are just fast increases, so it can't be measurable in a relatively meaningful manner.

Use more debt Lots of equity at source funding will have a negative impact on growth assets (Fadhilah, 2020; Gerdsri & Manotungvorapun, 2021; Oliinyk et al., 2021). From the trade-off theory explained, using debt after a certain point will lower growth assets. Addition of debt will increase the risk for the current income company. Where income company influenced factors external Besides that, more and more tall debt means that flower debt will increase more tall than savings tax, so that policy debt is influentially negative to growth assets.

From the results of the study, it can be said that movement MBV direction to growth asset is compared to straight or linear. So we can conclude that if MBV goes up, growth assets go up, and vice versa, when MBV goes down, growth profit goes down.

Value for market to book value equity for company property in category yag medium, approaching value 1. This indicates that investors will get capital gains (profits) on their investment in selected stocks.

Effect of Return on Assets (ROA) on Growth Assets

Profitability is a series of decisions taken by managers in a company to produce profit or profit on the management asset company at the time of walk operational company. Research results This shows that return on assets (ROA) is not influential in a manner significant to growth assets. This was showed with a t-count value of 0.627701 1.66298 (t-table) and a sig of 0.5337 > 0.05. Research results This is consistent with the results of studies by (R. A. Astuti, 2014; Hansen, 2014; Naur & Nafi, 2017; Nurohman et al., 2016), which reveal that ROA is not influential on growth assets.

Profitability proxy with ROA, no effect of ROA is suspected as investors tend to ignore existing ROA information in a manner maximum so that management too is not motivated to align profit through variable profitability.

Companies with high-growth assets will have higher ROA in the future. Growth is a great asset that shows potency and benefits the economy at the time front, so a company with a great asset trend has a large ROA also in the future front.

Other factors that have an impact and have implications for profit, i.e., factors external like influence policy, monetary and fiscal, developments in the sector, industry, and others, Factors in the economy, for example, inflation (an increase in prices), deflation (a decrease in prices), the rupiah exchange rate, and factors in the world economy

The value for return on assets (ROA) is reasonable, around 6.87%, p This indicates that the company has the ability to exploit the assets it owns for profit.

CONCLUSION

Based on the research findings and the previous discussion, the following conclusion was reached. Hypothesis test results in a manner simultaneous From the results of the regression analysis in the table above, a F count of 1.05 is more small than the F table, which is equal to 2.71, with a level of significance of 0.43, which is a remote more big 0.05, then it can be concluded that the Ha hypothesis is accepted, which means variable independent (Tobin*'s q* (TQ), MBV, and ROA) are not influential in a manner simultaneously or together with variable dependent (growth assets). Tobin's q, MBV, and ROA Hypothesis Test Results: partial, *Tobin's q*, MBV, and ROA, respectively. Partial No factor is influential in a manner significant to growth assets, and hypotheses that state Tobin's q, MBV, and ROA matter in a manner significant to growth assets can be rejected. From the results of the study, it can be said that the movement direction of Tobin's q, MBV, and ROA against growth assets compared backwards or was not linear. So we can conclude that if Tobin's q, MBV, and ROA increase, then growth asset goes down, and vice versa, if Tobin's q, MBV, and ROA decrease, growth profit goes up. In accordance with the conclusions obtained, any advice to be delivered is as follows: Suggestions for Companies, Improving function management company in growth assets to get apply asset management so management can maximize company for increase profit with various ratios performance finance and minimize possible factors lower profit company. Suggestions for Researchers Next, it is recommended for study to add variable macro like inflation, interest rates, or even different variables with variable in study so that more results can be obtained.

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