

THE INFLUENCE OF ACTIVITY RATIO, LEVERAGE, LIQUIDITY, AND PROFITABILITY ON FIRM VALUE

*(Empirical Study on Banking Sub-Sector Companies Listed on the Indonesia Stock Exchange for the
Period 2019-2021)*

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ABSTRACT

This study aimed to determine the effect of activity ratios, leverage, liquidity, and profitability on firm value in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2021. Price to Book Value is used as a measure of firm value as the dependent variable, while the ratio of activity, leverage, liquidity, and profitability as independent variables.

This research is a type of causality research with a quantitative approach method, which is analyzed using multiple linear regression based on panel data. The population of this study is the financial sub-sector companies listed on the Indonesia Stock Exchange (IDX) from 2019-2021. The sample was determined using the purposive sampling method. The number of samples used was 12 companies in the banking sub-sector, so this study's total sample was 36 observations.

The results show that activity and leverage have a positive and insignificant effect on firm value, while liquidity and profitability have a negative and significant impact on the value of the banking sub-sector companies listed on the Indonesia Stock Exchange (IDX) in the 2019-2021 period.
Keywords: firm value, activity, leverage, liquidity, and profitability

PENDAHULUAN

the securities they issue, as well as institutions and professions related to securities. community in share ownership, encouraging the community to raise funds, as well as distributing income. In the capital market, one of the most sought-after investment objects by investors is stocks.

A financial sector is a group of service industry companies that have been included in public companies that have been listed on the Indonesia Stock Exchange and are divided into several sub-sectors, including banks, financing institutions, securities companies, insurance, and other sub-sectors.

Banking is one of the sectors that play the most important role in building the economy of a country because banks function as financial intermediary institutions that channel funds from parties who have excess funds to parties who need funds. Ajuha

(2017:2) argues that "Banks channel capital from those who cannot use it profitably to those who can make it more productive for the benefit of society".

Company value is generally indicated by the *price book value* (PBV). (Brigham, 2011:152) , *price book value* (PBV) is the comparison between the stock price and the book value of the company, where the book value of the company is the ratio between total equity and the number of company shares outstanding. *Price book value* shows how far the company can create company value relative to the amount of capital invested. The ratio of a stock's market price to its book value indicates the investor's view of the company. As a result, the higher the *price book value*, the more successful the company is in creating value for shareholders. The higher the PBV means the market believes in the company's prospects. The value of the company can be increased by taking into account the company's internal and external factors.

Factors that can affect firm value include activity ratios, *leverage*, liquidity, and profitability



Source: www.idx.co.id (Data Processed, 2022)

Picture of the price book value phenomenon in banking sub-sector companies for the 2019-2021 period

The picture above shows that the *price book value* of the banking sub-sector companies listed on the IDX from 2019 to 2021 is very volatile. In 2019 – 2020 the *price book value* increased by 0.22 from 2.56 to 2.78. From 2020 to 2021, the *price book value* decreased significantly by 0.81 from 2.78 to 1.97.

It can be concluded that the *price book value* can increase or even decrease. The increase or decrease in the *price book value* can be influenced by external and internal factors within the company itself.

THEORETICAL BASIS

1. Financial Management

According to Brigham & Houston (2014:4) "*financial management, also called corporate finance focuses on decisions relating to how much and what types of assets to acquire, how to rise the capital needed to purchase assets, and how to run the firm to maximize its value*". This means that financial management which is also called corporate finance focuses on decisions related to how much and what types of assets to acquire, how to increase the capital needed to purchase assets, and how to run the company to maximize its value.

According to Kasmir (2016:16) "in carrying out its duties, the finance department

has many tasks to achieve its goals. These duties (obligations) are then outlined in various activities that must be planned, implemented, supervised, and controlled, so that this task is more of the responsibility of the finance manager or finance director as the highest leader in the finance department. In general, the activities of financial managers are:

1. Forecasting and planning finances
2. Capital, investment, and growth decisions
3. Carry out control
4. Relationship with capital market

According to Kasmir (2016:13). In practice, to achieve this goal, financial management has two objectives, namely:

1. *Profit risk approach*
2. *Liquidity and profitability*

2. Financial Report

According to Yadiati and Mubarak (2017:6) "financial reports are one of the various information used by users for decision making. These users are mainly users outside the company, namely investors and creditors. Investors have an interest in financial statements related to the amount of investment (capital) invested in the company. As for creditors, they are concerned with financial statements about the principal amount of the loan and the interest to be received."

According to Hery (2015:4) "the overall purpose of financial statements is to provide useful information for investors and creditors in making investment and credit decisions. The specific objective of financial statements is to present the financial position, results of operations, and other changes in financial position fairly and by generally accepted accounting principles.

The objectives of financial statements in general are:

1. Provide reliable information about the economic resources and obligations of the company

2. Provide reliable information about sources of net worth originating from for-profit business activities
3. Allows assessing the company's potential to generate profits
4. Provide other necessary information about changes in assets and liabilities.

3. Company Value

According to Husnan and Pudjiastuti (2012: 7) define company value as the price that prospective buyers can pay when the company is sold. For companies that go public or have offered shares to the public, then the value of the company is defined as an investor's perception of the company itself.

The company's management objective is to maximize the value of the shareholders' wealth. Harmono (2017 : 1). The value of the company can be measured by the value of the stock price in the market based on the formation of the stock price in the market company, which is a reflection of the public's assessment of the company's performance in real terms.

According to Harmono (2017:114) indicators that affect firm value can be done using:

a. PBV (Price Book Value)

Price Book Value is one of the variables considered by investors in determining which shares to buy. The value of the company can provide maximum shareholder profits if the company's share price increases. The higher the share price, the higher the shareholder wealth.

$$PBV = \frac{\text{Harga perlembar Saham}}{\text{Nilai Buku Saham Biasa}}$$

4. Activities

According to Brigham and Houston (2010:136), the activity ratio is a ratio that measures how effectively a company manages its assets.

Stephen et al (2015: 69) state that from this measurement, it will be known how

efficient or intensive a company is in utilizing its assets to generate sales.

a. Total Asset Turnover

Stephen et al (2015:71) stated that a total asset turnover is a form of activity ratio which is intended to be able to measure the sales rupiah generated for every Rp. 1 total assets. This ratio calculates asset productivity. The following is the formula used to calculate *total asset turnover* :

$$TATO = \frac{\text{Penjualan Bersih}}{\text{Total Aset}}$$

5. Leverage

According to Irham Fahmi (2014: 75), the *leverage* ratio is a ratio that measures how much the company can be financed with debt.

According to Stephen et al (2015:66) stated that the *leverage* ratio is a ratio intended to handle the company's ability to meet its financial obligations. Here is the *leverage ratio indicator* used

a. Debt-to-Equity Ratio

Stephen et al (2015:67) state that a debt-to-equity ratio is a form of *leverage ratio* which is intended to measure the ratio between total debt and total equity. The following is the formula used to calculate *the debt-to-equity ratio* :

$$DER = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

6. Liquidity

According to Kasmir (2016:128) states that liquidity is a ratio that shows the company's ability to pay its short-term debt that is due or a ratio to determine the company's ability to finance and fulfill obligations when billed.

According to Stephen et al., (2015:64) state that the liquidity ratio is used to measure the company's ability to pay short-term debt/liabilities.

Based on the above understanding, the liquidity ratio is a financial ratio that shows the company's financial ability to meet its short-term obligations on time to creditors. The following are the types of liquidity ratios that are often used:

a. *Current Ratio* (Current Ratio)

Stephen et al (2015:64) state that a current ratio is a form of liquidity ratio which is intended to measure the ability to pay short-term debt with current assets. The following is the formula used to calculate the *current ratio* :

$$CR = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

7. Profitability

According to Brigham and Houston, (2011:146) states that a profitability ratio is a group of ratios that show a combination of the effects of liquidity, asset management, and debt on operating results.

Hery (2016) stated that profitability is a ratio that describes the company's ability to generate profits through all the capabilities and resources it has.

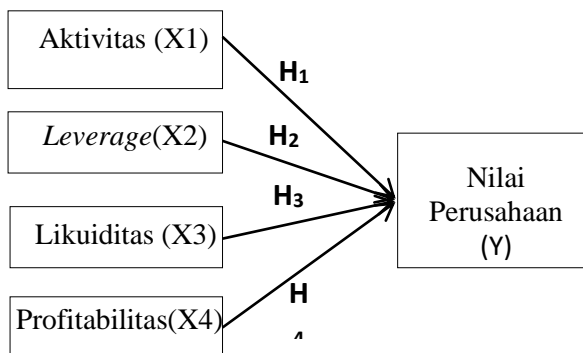
The following profitability ratio indicators are often used:

a. Return on Equity (ROE)

Stephen et al., (2015:73) stated that *return on equity* (ROE) is a form of profitability ratio which is intended to be able to measure what percentage of net profit is generated for each Rupiah of Equity Capital. The following is the formula used to calculate the *return on equity*

$$ROE = \frac{\text{Net Profit}}{\text{Total Equity}}$$

conceptual framework



Hypothesis

Based on the formulation of the literature review problem and the conceptual framework that has been described and described previously, the research hypothesis is formulated as follows:

- H1: Activities affect firm value
- H2: *Leverage* affects firm value
- H3: Liquidity affects Firm Value
- H4: Profitability affects firm value

RESEARCH METHODS

The design in this study refers to the causality model with a quantitative approach. Sugiyono (2017:8) states that quantitative research is a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative or statistical, to test predetermined hypotheses. . The analysis in this study uses panel data, which is a combination of *cross-section* and *time series data*.

Place and time of research

The location of this research was carried out in banking sub-sector companies listed on the Indonesia Stock Exchange in 2019-2021 through internet media on the website, This research was conducted for three months starting from March-May 2022.

Data Types and Sources

This study uses quantitative data types and data sources in this study using secondary data, namely data contained on the Indonesian stock exchange website and the company's official website.

Population and Sample

In this study, the population of the banking sub-sector companies listed on the Indonesian stock exchange for the period 2019-2022 is used. In this study, sampling uses the *purposive sampling technique*, which is where the technique of determining the sample with a certain consideration or criteria. The specific criteria used to determine the sample in this study are as follows:

1. Banking sub-sector companies *listed* on the Indonesia Stock Exchange in the 2019-2021 period
 2. Companies in the banking sub-sector that publish *annual reports* consecutively on the Indonesia Stock Exchange during the 2019-2021 period
 3. Companies that do not experience *delisting* during the 2019-2021 period
- Of the 47 banking sub-sector companies, 12 companies meet the above criteria. So, the

sample in the study is presented in the table below:

Table 1.1
Research Sample

NO.	KODE	NAMA PERUSAHAAN
1	BBNI	PT Bank Negara Indonesia (Persero) Tbk
2	BBRI	PT Bank Rakyat Indonesia (Persero) Tbk
3	BBTN	PT Bank Tabungan Negara (Persero) Tbk
4	BBYB	PT Bank Neo Commerce Tbk.
5	BDMN	PT Bank Danamon Indonesia Tbk
6	BJBR	Bank Pembangunan Daerah Jawa Barat dan Banten Tbk
7	BMRI	PT Bank Mandiri (Persero) Tbk
8	BNGA	PT Bank CIMB Niaga Tbk
9	BNII	PT Bank Maybank Indonesia Tbk
10	MEGA	Bank Mega Tbk
11	NISP	PT Bank OCBC NISP Tbk
12	SDRA	PT Bank Woori Saudara Indonesia 1906 Tbk

Source: Processed Data(2022)

Data collection technique

In this study, the data collection methods used by the author are:

1. Documentation method
2. Literature study method

Variable Definition and Operational Definition

This study reveals five variables, namely Activity, *Leverage*, Liquidity, Profitability, and Firm Value. Variables Activity, *Leverage*, Liquidity, Profitability as the independent variable (*independent*) and Firm Value as the dependent variable (*dependent*).

Table
Variable and Operational Definition

No.	Variabel	Definisi Variabel	Definisi Operasional
1.	Aktivitas (X1)	Rasio yang digunakan untuk mengukur seberapa efisien atau intensifnya suatu perusahaan dalam memanfaatkan aset yang dimilikinya untuk menghasilkan pendapatan.	$TATO = \frac{\text{Penjualan Bersih}}{\text{Total Aset}}$
2.	Leverage (X2)	Rasio yang digunakan untuk mengukur kemampuan perusahaan dalam memenuhi kewajiban keuangannya.	$DER = \frac{\text{Total Liabilitas}}{\text{Total Ekuitas}}$
3.	Liquiditas (X3)	Rasio yang digunakan untuk mengukur kemampuan perusahaan dalam membayar kewajiban jangka pendek atau utang yang segera jatuh tempo.	$CR = \frac{\text{Aktiva Lancar}}{\text{Utang Lancar}}$
4.	Profitabilitas (X4)	Rasio yang digunakan untuk mengukur kemampuan perusahaan dalam memperoleh keuntungan atau laba.	$ROE = \frac{\text{Laba Bersih}}{\text{Total Ekuitas}}$
5.	Nilai Perusahaan (Y)	Rasio yang digunakan untuk melihat peluang dalam menunjukkan kemungkinan pemegang saham melihat nilai perusahaan yang tinggi.	$PBV = \frac{\text{Harga Perlembar Saham}}{\text{Nilai Buku Per Lembar Saham}}$

Data Analysis Method

In this study to help simplify data analysis, this research uses *Microsoft Office Excel 2019* software applications and *statistical software Eviews 10*. According to Sugiyono (2017:260) regression analysis is to make decisions on whether the increase and decrease in the dependent variable can be done through an increase in the independent variable or not. The impact of this regression analysis can be used to decide whether the increase and decrease in the dependent variable can be done by increasing and

decreasing the state of the independent variable or to increase the independent variable/and vice versa.

Statistic analysis Descriptive

Descriptive research according to Sugiyono (2017:35) is: "This descriptive research method is carried out to determine the existence of independent variables, either only on one or more variables (stand-alone variables or independent variables) without making comparisons of the variables themselves and looking for relationships with variables. other." Data on descriptive statistics are usually presented in the form of tables, diagrams, graphs, circles, and so on other.

Data Regression Model Selection Method Panel

According to Nuryanto and Pambuko (2018: 50), to test the suitability or goodness of the three model suitability tests with the panel data model, namely the Chow test, Hausman test, and Lagrange multiplier test. The suitability test of the model used in this study is as follows:

a. Chow Test (Test chow)

According to Nuryanto and Pambuko (2018), the Chow test is carried out by compiling equations with *pooled least squares* (*common effect model*), compiling equations with *fixed effects models*, and choosing between *pooled least squares* and *fixed effects models* using the *Chow test* based on the hypothesis as follows:

H_0 : *Common effect model*

H_1 : *Fixed effect model*

Decisions are made based on compliance with one of the following statements:

a. Accept H_0 if the F test probability value > 0.05 then the model is selected *common effects models*.

b. Accept H_1 if the F test probability value < 0.05 then the model is selected *fixed effects models*.

b. Hausman Test (Test Hausman)

According to Nuryanto and Pambuko (2018), the Hausman test is carried out if the test results on the chow test accept H_1 , which is to determine the Hausman test of the *fixed effect model* which will then be compared with the *random effect model*. The hypothesis in the Hausman test is as follows:

H₀: *Random effect model*

H₁: *Fixed effect model*

Decisions are made based on compliance with one of the following statements:

- a. Accepting H₀ if the Hausman test has a probability value > 0.05 then the model chosen is a *fixed effect model*.
- b. Accept H₁ if the Hausman test has a probability value of <0.05 then the model chosen is a *random effect model*.

Data Regression Estimation Method Panel

Panel data analysis techniques in this study can be done using the *common effect model* (CEM), *fixed effect model* (FEM), and *random effect model* (REM) to determine which method is more suitable for this study.

1. *Common Effect Model (CEM)*

The *common effect model* in this approach will combine time series data with cross-section data. By combining these data, it is possible to use the OLS method as an estimate of the panel data model, this is done without looking at the difference between time and individuals. The *common effect model* ignores the differences in the dimensions of time and the same individual in various periods.

2. *Fixed Effect Model (FEM)*

This model is used to show the difference in constants between objects, even with the same regressor coefficient. This method assumes that there are differences in the intercepts between objects, but the intercepts between times are the same. This method also assumes that the slopes are the same between objects and over time. Then added generalization, in general, is often done to include a *dummy variable*. This model assumes that there are different effects between individuals. This difference can be accommodated through the difference in intercepts.

3. *Random Effect Model (REM)*

In this method, differences in individual characteristics and time are accommodated by the error of the model. Given that two components contribute to the formation of errors, namely (individual and time), this method needs to be broken down into errors from individual components, errors for time components, and combined errors.

Panel Data Regression Analysis

Panel data regression analysis is a regression using panel data, namely data that combines *time series* data with *cross-section data*.

From this analysis, the equations of all the variables in this study will be obtained. Through this equation, the model of the relationship between the dependent variable (Y) and the independent variable (X) is described. The panel data regression equation in this study can be formulated by:

$$PBV_{it} = \alpha + \beta_1 TATO_{it} + \beta_2 DER_{it} + \beta_3 CR_{it} + \beta_4 ROE_{it} + e_{it}$$

Description:

PBV	= Price-to-book value
a	= Konstantina
X ₁ , X ₂ , X ₃ ,	= Regression coefficient of each independent variable
TATO	= Total Asset Turnover
DER	= Debt-to-equity ratio
CR	= Current Ratio
ROE	= Return on Equity
e	= Estimated error (error)
i	= Entity i-th
t	= Period t-th

Test Hypothesis

Hypotheses are statements that describe a relationship between two variables related to a particular case and are temporary assumptions that need to be tested for truth in a study. Sugiyono (2014:63), states: "The hypothesis is a temporary answer to the research problem formulation, where the research problem formulation has been stated in the form of a question sentence. It is said to be temporary because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection.

Partial Test (Test t)

According to Ghozali and Dwi (2018:10), the t-test statistic is a test statistic that is often encountered in practical statistical problems. These statistics are used in hypothesis testing. The t-test is one of the tests used to determine whether or not there is a significant (convincing) difference between

the two sample means. A statistical t-test is usually a hypothesis testing:

H_0 = The independent variable does not affect the dependent variable.

H_a = The independent variable affects the dependent variable.

Indicators in making decisions are as follows:

- 1 Based on the value of t-count and t-table
 - a. If t-count > t-table, then H_0 is rejected and H_a is accepted. This states that the independent variable has a significant effect on the dependent variable.
 - b. If t-count < t-table, then H_0 is accepted and H_a is rejected. This states that the independent variable has no significant effect on the dependent variable.
- 2 Based on value probability
 - a. If the probability value < (0.05) then H_0 is rejected, and H_a is accepted. This states that the independent variable has a significant effect on the variable dependent.
 - b. If the probability value > (0.05) then H_0 is accepted, and H_a is rejected. This states that the independent variable has no significant effect on the variable dependent.

Coefficient of Determination Analysis (R^2)

(Ghozali, 2018:97) suggests that the coefficient of determination (R^2) aims to measure how far the model's ability to explain variations in the dependent variable (Ghozali, 2018). The value of the coefficient of determination lies at 0 and 1. Classification of correlation coefficients, namely, 0 (no correlation), 0-0.49 (weak correlation), 0.50 (moderate correlation), 0.51-0.99 (strong correlation), 1.00 (perfect correlation). A small value of R^2 means that the ability of the independent variables to explain the dependent variables is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

This study uses secondary data was obtained from the official website of the Indonesian Stock Exchange.

This study uses the dependent variable in the form of firm value with independent variables including Activity, *Leverage*, Liquidity, and Profitability. The following is a description of the data from each variable used in this study:

Table 4. 1
Descriptive Statistical Analysis

	PBV	TATO	DER	CR	ROE
Mean	1.628.889	1.362.167	6.477.778	1.202.778	0.059444
Median	1.015.000	1.507.000	5.590.000	1.185.000	0.060000
Maximum	1.450.000	2.249.000	1.820.000	1.350.000	0.140000
Minimum	0.420000	1.190.000	2.870.000	1.110.000	-0.240000
Std. Dev.	2.339.339	6.295.813	3.346.187	0.056599	0.060045
Skewness	4.815.127	-0.860385	2.028.808	0.784186	-3.455.974
Kurtosis	2.696.250	2.846.176	6.810.066	3.010.281	1.842.121
Jarque-Bera	1.000.415	4.477.063	4.647.128	3.689.840	4.283.831
Probability	0.000000	0.106615	0.000000	0.158038	0.000000
Sum	5.864.000	4.903.800	2.332.000	4.330.000	2.140.000
Sum Sq. Dev.	1.915.378	1.387.304	3.918.938	0.112122	0.126189
Observations	36	36	36	36	36

Source: Output Eviews 10, Data processed

Based on table 4.1, the Firm Value (Y) variable as measured by PBV shows an average value of 1,628,889, the highest value of 1,450,000 which occurred at PT Bank Neo Commerce Tbk in 2021, then the lowest value of 0.420000 at PT Bank Woori Saudara Indonesia 1906 Tbk in 2021 and with a standard deviation of 2,339,339.

The activity variable measured by TATO (X1) shows an average value of 1,362,167, the highest value of 2,249,000 which occurred at PT Bank Woori Saudara Indonesia 1906 Tbk in 2021, then the lowest value of 1,190,000 at PT Bank Danamon Indonesia Tbk in 2019 and with a standard deviation of 6,295,813.

Leverage variable as measured by DER (X2) shows an average value of 6,477,778, the highest value of 1,820,000 which occurred at PT Bank Tabungan Negara (Persero) Tbk in 2020, then the lowest value of 2,870,000 at PT Bank Neo Commerce Tbk in 2020 and with a standard deviation of 3,346,187.

The Liquidity variable as measured by CR (X3) shows an average value of 1202778, the highest value of 1350000 which occurred at PT Bank Neo Commerce Tbk in 2020, then the lowest value of 1110000 at PT Bank Tabungan Negara (Persero) Tbk in 2020 and with a standard deviation of 0.056599.

Profitability variable as measured by ROE (X4) shows an average value of 0.059444, the highest value is 0.140000 which occurs at Bank Mega Tbk in 2021, then the

lowest value is -0.240000 at PT Bank Neo Commerce Tbk in 2021 and with standard values, the deviation is 0.060045.

Panel Data Regression Model Selection Method

The most appropriate model selection method used in managing panel data, several tests can be done, namely: (1) *Chow Test*, and (2) *Hausman Test*.

1. *Chow Test (Common Effect vs Fixed Effect)*

The method to find out which model is better in testing panel data can be done by adding a *dummy variable* so that it can be seen that the intercepts are different and can be tested with the *Chow Test statistical test*. This test is used to determine whether the panel data regression technique with the *fixed effect method* is better than the panel data regression model without a *dummy variable (common effect)*. The calculation results from the *Chow Test* are presented in the following table:

Table 4.11
Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.633.096	-11,2	0.0001
Cross-section Chi-square	59.339.265	11	0.0000

Source: Output Eviews 10, Data processed

Based on these tests, it shows that the *Chi-square Probability Crosssection value* is 0.0000 whose value is < 0.05 then accepts H1 with the hypothesis:

H₀: *Common Effect Model*

H1: *Fixed Effect Model*

So it can be concluded that the *Fixed Effect Model* is more appropriate than the *Common Effect Model*.

2. *Hausman Test (Fixed Effect vs Random Effect)*

Hausman Test aims to compare the *Fixed Effect Model* and the *Random Effect Model*. The result of the test using this test is to find out whether the panel data regression technique using the *Generalized The Least Square method (random effect model)* is better than the panel data regression using

the *Least Square Dummy Variable method (fixed effect model)*. The calculation results from the *Hausman tests* are presented in the following table:

Table 4.12
Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.242.365	4	0.1818

Source: Output Eviews 10, Data processed

In the calculations that have been carried out, it can be seen that the *random cross-section probability value* shows a value of 0.1818 which means it is significant. So that the decision taken in testing this *Hausman Test* is to accept H1 ($P\text{-value} > 0.05$) with the hypothesis:

H₀: *Random Effect Model*

H1: *Fixed Effect Model*

Based on the results of the *Hausman Test*, it can be concluded that the *Fixed Effect Model* is more appropriate than the *Random Effect Model*.

Panel Data Regression Analysis

Based on the panel data regression model approach with *Eviews*, it shows that the more appropriate regression model to be used in this study is the *Fixed Effect Model*. The results of the panel data regression analysis are presented in the following table:

Table 4.3
Panel Data Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.830.776	5.506.773	3.324.590	0.0034
TATO	0.091627	0.044224	2.071.888	0.0514
DER	0.008480	0.095838	0.088479	0.9304
CR	-1.326.040	4.489.178	-2.953.859	0.0078
ROE	-3.419.333	4.776.951	-7.157.983	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.899819		Mean dependent var	2.448.299
Adjusted R-squared	0.824683		S.D. dependent var	2.226.177
S.E. of regression	0.882761		Sum squared resid	1.558.533
F-statistic	1.197.588		Durbin-Watson stat	2.296.501
Prob(F-statistic)	0.000001			
Unweighted Statistics				
R-squared	0.914894		Mean dependent var	1.628.889
Sum squared resid	1.630.107		Durbin-Watson stat	2.068.124

Source: Output Eviews 10, Data processed

Based on the regression results above, it can be obtained an equation of the regression line as follows:

$$PBV_t = 1.830776 + (0.091627) TATO_{it} + (0.008480) DER_{it} + (-1.326040) CR_{it} + (-3.419333) ROE_{it} + it$$

The above equation can be interpreted as follows:

1. The constant of 1.830776 states that if the variable X is constant, then the firm value variable is 1.830776.
2. The TATO regression coefficient of 0.091627 states that each addition of the Activity variable by 1% will increase the Firm Value variable by 0.091627 assuming the other independent variables are constant.
3. The DER regression coefficient of 0.008480 states that each addition of the *Leverage variable* by 1% will increase the Firm Value variable by 0.008480 with the assumption that the other independent variables are constant.
4. The CR regression coefficient of -1.326040 states that each addition of the Liquidity variable by 1% will reduce the Firm Value variable by -1.326040 with the assumption that the other independent variables are constant.
5. The ROE regression coefficient of -3.419333 states that each addition of the Profitability variable by 1% will reduce the Firm Value variable by -3.419333 with the assumption that the other independent variables are constant.

Hypothesis Testing

Partial Test (t-Test)

This test is used to show how far the influence of one independent variable individually in explaining the variation of the dependent variable. Based on Table 4.3, the research results obtained are as follows:

1. The first hypothesis (H1) the effect of activity (TATO) on firm value produces a significance value of $0.0514 > 0.05$ with a t-statistic value of -2.071888. This means that the activity has a positive and insignificant effect on firm value, so the hypothesis (H1) proposed by the researcher is rejected.
2. The second hypothesis (H2) the effect of *leverage* (DER) on firm value produces a significance value of $0.9304 < 0.05$ with a t-statistic value of -0.088479. This means that *leverage* has a positive and insignificant effect on firm value, so the

hypothesis (H2) proposed by the researcher is rejected.

3. The third hypothesis (H3) the effect of liquidity (CR) on firm value produces a significance value of $0.0078 > 0.05$ with a t-statistic value of -2.953859. This means that liquidity has a negative and significant effect on firm value, so the hypothesis (H3) proposed by the researcher is accepted.
4. The fourth hypothesis (H4) the effect of profitability (ROE) on firm value produces a significance value of $0.0000 > 0.05$ with a t-statistic value of -7.157983. This means that firm size has a negative and significant effect on firm value, so the hypothesis (H4) proposed by the researcher is accepted.

Coefficient of Determination Test (R^2)

Testing the coefficient of determination (R^2) is a number that indicates the degree of ability of the independent variable in the function concerned. The value of R^2 is between zero and one ($0 < R < 1$). If the value is close to one, then the model is good. The following table 4.13 presents the results of the coefficient of determination (R^2) test:

Table 4. 1
Coefficient of Determination Test Results

R-squared	0.899819	Mean dependent var	2.448.299
Adjusted R-squared	0.824683	S.D. dependent var	2.226.177
S.E. of regression	0.882761	Sum squared resid	1.558.533
F-statistic	1.197.588	Durbin-Watson stat	2.296.501
Prob(F-statistic)	0.000001		

Source: Output Eviews 10, Data processed

Based on the results of the research above, which are presented in Table 4.14, it shows that the *adjusted R square* is 0.824683. This means that 82.4% of firm value can be explained by the activity ratio (TATO), *leverage* (DER), liquidity (CR), and profitability (PBV), while the remaining 17.6% is explained by other variables not included in this research model. The standard error value of the regression model is 0.882761 which is indicated by the label *SE of Regression*. The standard error value is smaller than the standard deviation value of the response variable which is indicated by the *SD Dependent var label*, which is 2.226177 which means that the regression model is valid as a predictor model.

Discussion

1. Analysis of the Effect of Activities (TATO) on Company Value

The test results in this study indicate that the activity (TATO) does not affect firm value. This is evidenced by a significance value of $0.0514 > 0.05$, with a t-count value of 2.071888 which means that activity has a positive and insignificant effect on firm value.

The results of this test indicate that a high total asset turnover can increase the value of the company. This is a positive signal for the market. Prospective investors perceive that the composition of assets (total assets) is dominated by fixed assets, approaching extreme conditions. This condition causes *efficiency* for the company, which in turn creates positive sentiment for investors, which affects the stock price in the form of an increase so that the value of the company also increases.

This result is consistent with research conducted by Aruan *et al* (2022) and Tiana (2020) who said that activity did not affect firm value. The results show that the activity does not have a significant effect on firm value

2. Analysis of the Effect of Leverage (DER) on Firm Value

The test results in this study indicate that *Leverage* (DER) does not affect Firm Value. This is evidenced by a significance value of $0.9304 > 0.05$, with a t-count value of 0.088479 which means that *leverage* has a positive and insignificant effect on firm value.

These results can indicate that it is more likely that companies tend to use their capital from retained earnings and share capital rather than using debt. excessive use of debt will reduce the benefits received from the use of debt because the benefits received are not proportional to the costs incurred so the proportion of debt that is at a low level can increase the value of the company and vice versa an increase in debt can reduce the value of the company. Investors may also not see the size of *leverage*, because investors focus more on how the company manages its company management effectively and efficiently so that it affects high company value.

This result is consistent with research conducted by Adeliانا (2020), Humairah (2021), and Rio (2021) which say that *leverage* does not affect firm value. However, the results of this study are not in line with the research conducted by Khasana (2019) and

Aruan (2022) which states that *leverage* affects firm value.

3. Analysis of the Effect of Liquidity (CR) on Firm Value

The test results in this study indicate that Liquidity (CR) influences Firm Value. This is evidenced by a significance value of $0.0078 < 0.05$, with a t-count value of -2.953859 which means that liquidity has a negative and significant effect on firm value,

These results prove that high liquidity is a negative signal for the market/potential investors. Liquidity proxied by CR is the company's ability to pay current liabilities using current assets. High liquidity when viewed from the perspective of the company's creditors in this condition will be considered good. On the other hand, if viewed from the perspective of investors and potential investors, the company cannot rotate its working capital, as a result, many funds are unemployed, so the company's ability to earn profits is also low, this condition reduces investors' interest in investing, which then reduces the value of the company.

These results are consistent with research conducted by Adeliانا (2020), Sakdiah (2019), and Humairah *et.al* (2021) who say that liquidity affects firm value. However, the results of this study are not in line with the research conducted by Khasana (2019), Aruan *et.al* (2022), Ambarwati (2021), and Rio (2021) which stated that liquidity did not affect firm value.

4. Analysis of the Effect of Profitability (ROE) on Firm Value

The test results in this study indicate that profitability (ROE) influences firm value. This is evidenced by a significance value of $0.0000 < 0.05$, with a t-count value of -7.157983 which means that profitability has a negative and significant effect on firm value.

These results indicate that the company's management has not succeeded in increasing the value of the company for the owner of the company by the objective of financial management to maximize the value of the company. For this reason, the company must re-correct the prospects for activities carried out by the company to be more productive. So that the shareholders will feel the benefits are greater than the cost of capital.

These results are consistent with research conducted by Adeliانا (2020), Khasana (2019), Humairah *et.al* (2021),

Cahya & Riwoe (2018), and Ambarwati (2021) who say that profitability affects firm value. However, the results of this study are not in line with the research conducted by Tiana (2020), which states that profitability does not affect company value.

CLOSING

Conclusion

Based on the results of research on the effect of activity ratios, *leverage*, liquidity, and profitability on firm value in the banking sub-sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period, the following conclusions can be drawn:

1. Activities have a positive and insignificant effect on firm value in the banking sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period.
2. *Leverage* has a positive and insignificant effect on firm value in the banking sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period.
3. Liquidity has a negative and significant effect on firm value in the banking sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period.
4. Profitability has a negative and significant effect on firm value in the banking sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period.

Suggestion

Based on the results of research, discussion, and conclusions that have been put forward, the following are some suggestions as follows:

1. Further researchers can add other variables outside of this research variable, such as firm size, solvency, managerial ownership, and dividend policy, and further researchers who take the same research topic should use a larger sample size. A large sample will make the research results better. And it is hoped that further researchers will be able to expand the company

sector, to be able to contribute to the entire company.

2. Stakeholders (*investors*, government, creditors, etc.) should consider other material aspects outside of this research variable (such as considering the company's ability to earn profits). Because by considering other aspects, *stakeholders* can determine good corporate value,
3. For investors, other ratios can be used besides the ratios used in this study to be the basis for investing their capital and as a research tool to measure the company's performance in determining the value of the company in the future.

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