Jurnal Ilmiah Akuntansi dan Keuangan
http://jurnal.universitasputrabangsa.ac.id/index.php/jiak/index
ISSN: 2580-510X/ P-ISSN: 2548-9453

ARTICLE INFORMATION
Received June 27th 2022
Accepted December 5th 2022
Published December 21st 2022

The Effects of Company Size, Business Diversification, and Investment Decision on Firm Value with Capital Structure as a Moderating

Thia Margaretha Tarigan[1], Novia Utami[2*], Selvi Arifin[3]
[1,2)] Atma Jaya Catholic University of Indonesia
[3)] PricewaterhouseCoopers Indonesia
email: novia.utami@atmajaya.ac.id[2]

ABSTRAK

Penelitian ini bertujuan untuk menguji kembali apakah ukuran perusahaan, diversifikasi usaha, dan keputusan investasi berdampak terhadap nilai perusahaan dengan struktur modal sebagai mediator. Metode pengambilan sampel yang digunakan dalam penelitian ini adalah purposive sampling. Populasi yang menjadi kriteria sampel dalam penelitian ini adalah semua perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia selama 5 tahun yaitu periode pengamatan 2016-2020, kemudian dipilih berdasarkan kriteria-kriteria tertentu yang paling memenuhi. Analisis data menggunakan pendekatan kuantitatif dan analisis regresi liner berganda. Hasil penelitian menyimpulkan bahwa ukuran perusahaandan keputusan investasi berpengaruh positif dan signifikan terhadap nilai perusahaan. Hasil berbeda terjadi pada diversifikasi usaha yang memiliki pengaruh negatif dan signifikan terhadap nilai perusahaan. Kesimpulan hubungan antara variabel independen dengan variabel dependen ini diperkuat dengan variabel struktur modal.

Kata kunci: Diversifikasi Usaha, Keputusan Investasi, Nilai Perusahaan, Struktur Modal, Ukuran Investasi

ABSTRACT

This research aims at reviewing whether company size, business diversification, and investment decision affect firm value by using capital structure as a mediator. Samples were collected from a population (all manufacturing companies listed in Indonesia Stock Exchange within observation period of 2016-2020) using a purposive sampling method following specific criteria. Data were then analyzed using a quantitative approach and a multiple linear regression technique. Results show that company size and investment decision affect firm value positively and significantly. Meanwhile, business diversification negatively and significantly affects firm value. At the same time, capital structure variable makes the relationship between independent and dependent variables stronger.

Keywords: *Business Diversification; Capital Structure; Company Size; Firm Value; Investment Decision*

DOI: https://doi.org/10.32639/jiak.v11i2.122

INTRODUCTION

Firm value describes a company's current state, reflecting how much trust the public puts in it after years of activity process. Firm value is reflected by a share price that is stable but rising in the long term. Share price is the company's price in the stock market, which is highly critical to the company as it reflects the company's value as well as its success in managing business. If a company shows an excellent performance, its stocks will normally be favored by investors.

Share price is highly valuable, and is also considered one of indicators of a company's success. Often associated with high performance, high-priced stock attracts investors hoping for an increase in the price of the stocks, hence allowing the company to raise its investment. In contrast, a decrease in share price reflects company's unsatisfactory performance from investors' perspectives that will affect their trust and prevent them from investing in the company.

Increasing firm value is now companies' main goal, given the spread of Covid-19 virus, which began on December 1, 2019 in Wuhan, Hubei Province, China, and continued around the world, including Indonesia. Covid-19 has affected not only people's health, but also business sector. It has caused share price declines in the stock market, particularly after WHO declared Covid-19 a pandemic (AlAli, 2020), and negative abnormal returns (Narayan et al., 2021).

The Covid-19 pandemic in Indonesia has affected the country's capital market and changed the trading hours on Indonesia Stock Exchange, sending negative signals to investors before stimulating stock sell-off (Kusnandar & Bintari, 2020). On the other hand, companies need to raise capital to ensure continuity of their businesses. According to Indonesian Public Listed Companies Association (2020), issuers from hospitality, tourism, transportation, manufacturing, and agribusiness industries are most affected. Suffering from the impacts of the Covid-19 pandemic, many companies are pushed to maximize their values to survive, and most importantly to recover.

Companies must innovate in order to raise their values. Innovation can have impacts on companies' profit growth, an aspect that will benefit investors. Besides, it will also increase companies' size. A company is strong when it holds certain amount of revenue, assets, and capital. A large company tends to make use of its assets to innovate. Company size is determined by its assets, total sales, average total sales and average total assets, and is believed to have the ability to influence firm value, with larger companies being easier to raise finance. This easiness sends positive signals and shows good prospect, indicating that company size can influence firm value positively. In other words, how big or small a company is has direct effects on firm value. This is pursuant to results of a study conducted by Suryana & Rahayu (2018) showing that company size positively and significantly influences firm value. It means that the larger the company is, the higher its value will be.

Companies can also opt to implement a diversification strategy to grow their business. This strategy allows companies to produce products and services completely unrelated to the company's main competence. Diversification strategy is chosen by the company's manager to speed up business, improve the company's ability to generate profit, take up market opportunities, level up company's competitive advantage in the industry, speed up company's growth, and increase efficiency in allocation of company's resources and competencies (Salindeho et al., 2018). Similarly, Njuguna et al. (2018), and Mehmood et al. (2019) also stated that diversification strategy influences firm value.

Investment decision is extremely important considering how company's investment can help achieve company's goals. It is the overall process of planning and making decisions on the money spent on investment whose returns will be gained in no less than a year. Investment decision focuses more on a range of options such as buying assets, running a project, and other activities directed at procurement of infrastructure that supports operational activities. Signaling theory states that spending on investment sends positive signals, indicating company's growth in the future, and, hence, an increase in share price is an indicator of firm value. In line with the notion, research conducted by Widodo & Kurnia (2016), and Sudiani & Wiksuana (2018) found the influence of investment decision on firm value.

Companies must also take into account their capital structure, considering how it is related to company size, business diversification strategy and investment decision. Capital structure describes the proportion of company's financing sources, more specifically the ratio of company's debt to equity; therefore, its presence can strengthen company size, business diversification, and investment decision—factors determining valuation of the company. In companies where growth is high, larger capital is needed. On the other hand, when sales growth is low, the need for capital is lower. This explains why sales growth has positive influences. However, this implication will have different effects on capital structure, particularly in determining the types of capital to use.

When a company implements a business diversification strategy, it will need a significantly large amount of finance and take considerable risks, causing long-term debts. It shows that business diversification leads to greater capital structure. Similarly, when a company increases its investment, its need for finance rises. Companies must consider their capital structure, whether they want to source their funding internally or externally. In addition, they must also determine the proportion of debt and equity to use as this ratio will influence the cost of capital, the basis for calculating the required return.

LITERATURE REVIEW

Signaling Theory

Signaling theory arises from the fact that managers and shareholders do not have the same access to information related to the company (information asymmetry). Certain information is only available to the managers but not to the shareholders (Chod & Lyandres, 2021).Signaling theory describes how managers use financial statements to send positive signals to investors in order to reduce information asymmetry. According to signaling theory, only companies with good performances can send positive signals to the external parties. These positive signals are inimitable, making it difficult for companies with poor performances to copy. Signals can be sent through information disclosure or corporate actions determined by corporate insiders, which involve increases in debt financing and other financial decisions. Signaling theory also states that investment decisions made by companies send positive signals for growth in the future, and hence increases in share price in the capital market—one of the indicators of firm value. This signal will attract investors to invest in the company through stocks. If many investors invest in a company, trading volume for the company's stock will rises, and in such conditions, share price in the market or firm value moves up.

Firm Value

Firm value demonstrates company's conditions—a reflection of how much trust people put in the company after years of business process and activities since its establishment. An increase in firm value is something all business owners want to achieve. Firm value is highly important given how high value brings wealth to shareholders (Jihadi et al., 2021). Often associated with share price, firm value is investors' perceptions of a company's success levels in managing the resources it has. One of the ratios used to measure firm value is the price-to-book value (P/B). The price-to-book value describes the net worth of a company on its balance sheet, or a comparison between a company's share price and its book value. Book value is the total equity divided by shares outstanding.

Company Size

According to Indrawan & Damayanthi (2020), company size is closely related to financing decisions implemented by the company to optimize its value. It can be said that company size reflects the company's total assets. A large size sends positive signals to investors or creditors and attract them to invest in the company, leading to an increase in externally sourced financing and a decrease in financial distress. Furthermore, company size also influences investors' trust. The larger the company is, the better-known it is among people, and hence the easier access to information that will eventually increase firm value. A company with large total assets can attract investors to invest in the company.

Diversification

Diversification is a strategy that is used to develop businesses by expanding business segment or geographical scope of the company. Diversification can be done by aiming at new business segments, creating more uniform products, expanding marketing areas, opening branch offices, carrying out merger and acquisition to increase economies of scale (Salindeho et al., 2018).

Investment Decision

Investment decision can be described as the commitment on funds invested in one asset or more while expecting positive future returns whose value is higher than it is today along with low risks to optimize firm value. Investment decision is also referred to as capital budgeting; it is related to not only active assets, but also all decisions including commitment on relatively large funds today (Agung et al., 2021). It is expected that this decision can help the company generate more funds within a relatively long time in the future.

Capital Structure

Mardevi et al. (2020) defined capital structure as the ratio of total debt to total equity, and the value in the capital structure will rise if a company fails to factor in the cost of debt, namely interest. If this value moves up, default risk level increases.

Hypothesis Formulation

The influence of company size on firm value

Company size is considered one of factors influencing firm value given how larger companies can have more financing options available to help them achieve their goals (Antoro et al., 2020). Size affects company's flexibility and accessibility to capital market with larger companies having easier access and more opportunities to get into the capital market. Therefore, the larger the company is, the higher the firm value is.

H_1: Company size positively influences firm value.

The influence of diversification on firm value

Diversification is a strategy implemented to develop businesses by expanding company's business segments or geographical scope. It can be done by entering a new business segment, creating more uniform products, expanding marketing areas, opening branch offices, and carrying out merger and acquisition to increase economies of scale. One of the ways to measure how diversified a company has become is by seeing how many business segments or subsidiaries it has, and the more diversified a company is, the higher the firm value is (Yustyarani & Yuliana, 2020).

H_2: Diversification positively influences firm value.

The influence of investment decision on firm value

According to Triani & Tarmidi (2019), a high investment is a signal of company's revenue growth in the future. This signal is perceived as good news that will influence investors' perceptions of the company's performance, and affect firm value eventually. In short, it can be said that the more investment the company makes, the higher the firm value is.

H_3: Investment decision positively influences firm value.

The influence of capital structure as a moderating variable in the relationship among company size, diversification, investment decision and firm value

Capital structure is the ratio of total debt to total equity. A decrease in the capital structure as a result of a careful calculation of the cost of debt will lead to increase in firm value. At the same time, a large company size, diversification and the right investment decision, along with strong capital structure, will raise firm value and send positive signals to investors (Sudrajat & Setiyawati, 2021).

H_4: Capital structure is able to moderate the relationship between company size, diversification, investment decision, and firm value.

METHOD

Sample and Collection

Population of the study is all non-financial companies listed in Indonesia Stock Exchange within observation period of 2016-2020. Samples were selected using a purposive sampling method following specific criteria, which include:

1. Manufacturing companies listed in Indonesia Stock Exchange within observation period of 2016-2020.
2. Companies issuing a complete set of financial statement that has been audited from 2016 to 2020, with fiscal year ending on December 31.
3. Companies issuing financial statement maintained in rupiah.
4. Companies that recorded from 2016 to 2020.
5. Companies with positive total equity from 2016 to 2020.

Analysis Method

This study used secondary data. They were pooled data combining time series and cross-section data. The following is the regression formula used in the analysis:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_1*Z_1 + \beta_3 X_2 + \beta_4 X_2*Z_2 + \beta_5 X_3 + \beta_6 X_3*Z_3 + e$$

Where:

Y : Firm Value
A : Constant
B_{1-6} : Regression coefficient of each factor
X_1 : Company Size
X_2 : Diversification
X_3 : Investment Decision
Z_{1-3} : Capital Structure

Dependent Variable

Dependent variable of the study—firm value—was measured using price book value (PBV) ratio, calculated as:

$$\textbf{PBV} = \frac{\textbf{Market price per share}}{\textbf{Book value per share}}$$

Independent Variable

Independent variables of the study are company size, diversification, and investment decisions.

Company Size

In this study, company size is measured using companies' total assets. The formula used in the calculation is described below:

Size = Ln Total Asset

Diversification

Diversification is measured using Herfindahl Index (HERF) expressed below:
Where:
Segsales = Sales of each segment

$$H = \sum_{i}^{n} = 1 \; Segsales^{\;2} / (\sum_{i}^{n} = 1 \; Sales^{\;2}$$

Sales = Total sales

Investment Decision

Growth of total asset reflects how companies invest their funds in assets while expecting higher returns in the future. Total Assets Growth is calculated using the formula below:

$$\text{Total Assets Growth} = \frac{\text{Total Assets}_{(t)} - \text{Total Assets}_{(t-1)}}{\text{Total Assets}_{(t-1)}}$$

Moderating Variable

Capital structure is measured using the Debt-to-Equity ratio stated below:

$$\textbf{DER} = \frac{\textbf{Total Liabilities}}{\textbf{Total Shareholders' Equity}} \textbf{ x 100\%}$$

RESULT AND DISCUSSION

Classical Assumption Test

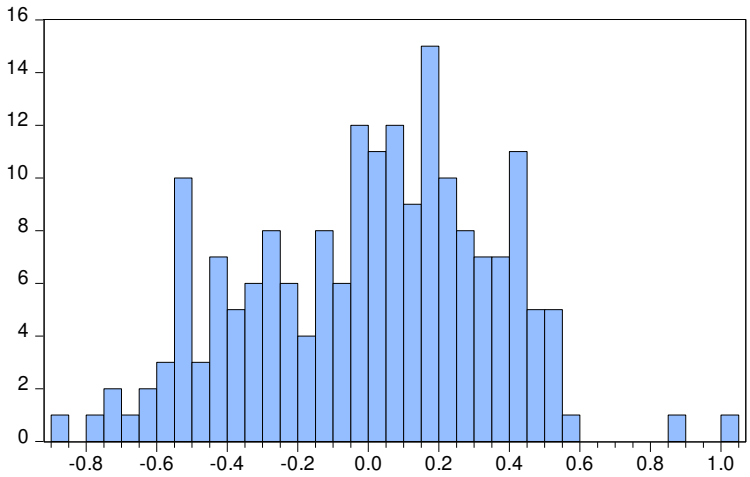

Figure 1. Normality Assumption

Referring to the test result, with Jarque-Bera value being greater than α = 5%, error term is normally distributed.

Table 1. Multicolinearity Assumption

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.339066	521.6557	NA
LNX1	0.000415	514.9551	1.408258
LNX2	1.89E-06	7.879112	1.230553
LNX3	0.000713	8.594367	1.358448
Z	0.000106	2.071326	1.706857
X1Z	1.56E-30	1.930760	1.680056
X2Z	2.25E-19	1.242260	1.222552
X3Z	0.006847	2.226051	1.824822

Source: Secondary data processed

Referring to the above table, there are no independent variables showing a VIF ≥ 10, an indicator for absence of multicollinearity among independent variables in the regression model.

Table 2. Heteroscedasticity Assumption

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.711491	0.327084	2.175257	0.0309
LNX1	-0.012311	0.011448	-1.075334	0.2837
LNX2	0.001646	0.000773	2.129434	0.0346
LNX3	-0.002034	0.015000	-0.135599	0.8923
Z	0.001356	0.005790	0.234161	0.8151
X1Z	-2.44E-16	7.03E-16	-0.347264	0.7288
X2Z	-7.22E-10	2.67E-10	-2.708320	0.0074
X3Z	-0.022803	0.046481	-0.490582	0.6243

R-squared	0.060651	Mean dependent var	0.278743
Adjusted R-squared	0.024121	S.D. dependent var	0.198769
S.E. of regression	0.196357	Akaike info criterion	-0.376145
Sum squared resid	6.940082	Schwarz criterion	-0.238424
Log likelihood	43.35762	Hannan-Quinn criter.	-0.320346
F-statistic	1.660289	Durbin-Watson stat	1.053304
Prob(F-statistic)	0.121428		

Source: Secondary data processed

The Glejser test was conducted to see presence of heteroscedasticity. Regression analysis using the Glejser method generated an Obs*R-squared of 11.40234 and a p-value of 0.1634 (greater than α = 0.05). Hence, it can be concluded that the residuals are homoscedastic, and that no heteroscedasticity is present in the model.

Table 3. Autocorrelation Assumption

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.017016	0.749976	-0.022688	0.9819
X1	6.02E-16	2.79E-14	0.021547	0.9828
X2	-1.31E-10	9.52E-08	-0.001377	0.9989
X3	0.006258	0.233355	0.026817	0.9786
Z	-0.000492	0.055185	-0.008910	0.9929
X1Z	1.04E-16	2.40E-14	0.004351	0.9965
X2Z	5.04E-10	4.53E-08	0.011123	0.9911
X3Z	-0.002569	0.128870	-0.019937	0.9841
RESID(-1)	0.080465	0.039500	2.037069	0.0421
RESID(-2)	0.042597	0.039599	1.075726	0.2825
RESID(-3)	0.022319	0.039509	0.564905	0.5723

R-squared	0.009716	Mean dependent var	-6.81E-16
Adjusted R-squared	-0.005733	S.D. dependent var	17.82609
S.E. of regression	17.87712	Akaike info criterion	8.621648
Sum squared resid	204858.1	Schwarz criterion	8.697231
Log likelihood	-2799.657	Hannan-Quinn criter.	8.650960
F-statistic	0.628885	Durbin-Watson stat	2.030396
Prob(F-statistic)	0.789710		

Source: Secondary data processed

Results of the autocorrelation test using the Breusch-Godfrey serial correlation LM test demonstrate an Obs*R-squared of 6.334623 and a p-value of 0.0964 (greater than α = 0,05). It can be inferred that the regression model does not contain any autocorrelation.

Hypotesis Test

Table 4. Common Effect Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.137550	0.051828	2.653946	0.0082
X1	3.72E-15	1.85E-15	2.012164	0.0446
X2	1.00E-08	6.14E-09	1.632994	0.1030
X3	0.098817	0.047330	2.087801	0.0372
Z	0.019551	0.009056	2.158934	0.0312
X1Z	-1.77E-15	1.61E-15	-1.095158	0.2739
X2Z	-5.35E-09	2.92E-09	-1.832317	0.0674
X3Z	-0.049416	0.026789	-1.844610	0.0656

R-squared	0.042160	Mean dependent var	0.206751
Adjusted R-squared	0.031276	S.D. dependent var	1.170993
S.E. of regression	1.152536	Akaike info criterion	3.134544
Sum squared resid	818.2571	Schwarz criterion	3.191418
Log likelihood	-969.9778	Hannan-Quinn criter.	3.156645
F-statistic	3.873399	Durbin-Watson stat	0.440521
Prob(F-statistic)	0.000387		

Source: Secondary data processed

Table 5. Fixed Effect Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.675375	0.735602	4.996416	0.0000
X1	1.81E-14	8.42E-15	2.150543	0.0320
X2	-1.23E-08	6.17E-09	-1.997389	0.0463
X3	0.443917	0.167740	2.646466	0.0084
Z	-0.009607	0.038316	-0.250732	0.8021
X1Z	4.06E-15	5.16E-15	0.787825	0.4312
X2Z	4.36E-09	2.20E-09	1.985002	0.0477
X3Z	0.285524	0.100290	2.846967	0.0046

R-squared	0.317104	Mean dependent var	3.361626
Adjusted R-squared	0.131708	S.D. dependent var	18.29796
S.E. of regression	17.05044	Akaike info criterion	8.697958
Sum squared resid	148847.4	Schwarz criterion	9.659930
Log likelihood	-2695.534	Hannan-Quinn criter.	9.071031
F-statistic	3.710415	Durbin-Watson stat	3.035145
Prob(F-statistic)	0.000014		

Source: Secondary Data Processed

Table 6. Random Effect Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.526229	1.015963	3.470824	0.0006
X1	-1.18E-14	1.06E-14	-1.111922	0.2666
X2	8.11E-09	2.35E-09	3.444977	0.0006
X3	-0.469686	0.161453	-2.909116	0.0037
Z	-0.001053	0.034021	-0.030937	0.9753
X1Z	7.58E-15	2.19E-15	3.459117	0.0006
X2Z	-8.55E-09	3.21E-09	-2.665268	0.0079
X3Z	0.329101	0.090172	3.649703	0.0003
Effects Specification				
			S.D.	Rho
Cross-section random			5.574853	0.0966
Idiosyncratic random			17.05044	0.9034
Weighted Statistics				
R-squared	0.048381	Mean dependent var		2.717563
Adjusted R-squared	0.038038	S.D. dependent var		17.36474
S.E. of regression	17.03146	Sum squared resid		186805.5
F-statistic	4.677392	Durbin-Watson stat		2.421239
Prob(F-statistic)	0.000040			
Unweighted Statistics				
R-squared	0.050631	Mean dependent var		3.361626
Sum squared resid	206929.1	Durbin-Watson stat		2.185776

Source: Secondary data processed

Table 7. Chow Test Result

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	3.512242	0.751845	4.671498	0.0000
X1	-1.28E-14	2.80E-14	-0.457301	0.6476
X2	1.40E-08	9.54E-08	0.147213	0.8830
X3	-0.478356	0.233912	-2.045029	0.0413
Z	0.002452	0.055320	0.044324	0.9647
X1Z	8.77E-15	2.41E-14	0.364579	0.7155
X2Z	-1.15E-08	4.54E-08	-0.252926	0.8004
X3Z	0.346421	0.129182	2.681658	0.0075

R-squared	0.050912	Mean dependent var	3.361626
Adjusted R-squared	0.040596	S.D. dependent var	18.29796
S.E. of regression	17.92271	Akaike info criterion	8.622208
Sum squared resid	206867.9	Schwarz criterion	8.677178
Log likelihood	-2802.840	Hannan-Quinn criter.	8.643527
F-statistic	4.935131	Durbin-Watson stat	2.188819
Prob(F-statistic)	0.000019		

Source: Secondary data processed

H_0 : Common Effect Model or pooled OLS

H_1 : Fixed Effect Model

The likelihood ratio test that aims to select between the common effect and the fixed effect models generated a p-value of 0.000<0.05. This result suggests that fixed effect is the best model.

Table 7. Hausman Test Result

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	6.406557	7	0.0432

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
X1	-0.000000	-0.000000	0.000000	0.9567
X2	-0.000000	0.000000	0.000000	0.7652
X3	-0.443917	-0.469686	0.012968	0.8210
Z	-0.009607	-0.001053	0.000783	0.7598
X1Z	0.000000	0.000000	0.000000	0.8106
X2Z	0.000000	-0.000000	0.000000	0.7967
X3Z	0.285524	0.329101	0.004037	0.4928

R-squared	0.317104	Mean dependent var	3.361626
Adjusted R-squared	0.131708	S.D. dependent var	18.29796
S.E. of regression	17.05044	Akaike info criterion	8.697958
Sum squared resid	148847.4	Schwarz criterion	9.659930
Log likelihood	-2695.534	Hannan-Quinn criter.	9.071031
F-statistic	1.710415	Durbin-Watson stat	3.035145
Prob(F-statistic)	0.000014		

Source: Secondary data processed

H_0 : Random Effect Model

H_1 : Fixed Effect Model

The Hausman test that aims at selecting between fixed effect model and random effect model generated a probability value of 0.0432 < 0.05. Pursuant to this result, fixed effect is considered the best model.

Table 8. Breusch-Godfrey Serial Correlation LM Test Result

F-statistic	2.986207	Prob. F(2,642)	0.0512
Obs*R-squared	6.009537	Prob. Chi-Square(2)	0.0496

Source: Secondary data processed

H_0 : Common Effect Model

H_1 : Fixed Effect Model

The LM test that aims at selecting between common effect model and fixed effect model generated a probability value of 0.0496< 0.05. Therefore, it can be concluded that fixed effect is the best model.

Table 9. Fixed Effect Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.675375	0.735602	4.996416	0.0000
X1	1.81E-14	8.42E-15	2.150543	0.0320
X2	-1.23E-08	6.17E-09	-1.997389	0.0463
X3	0.443917	0.167740	2.646466	0.0084
Z	-0.009607	0.038316	-0.250732	0.8021
X1Z	4.06E-15	5.16E-15	0.787825	0.4312
X2Z	4.36E-09	2.20E-09	1.985002	0.0477

X3Z	0.285524	0.100290	2.846967	0.0046
R-squared	0.317104	Mean dependent var		3.361626
Adjusted R-squared	0.131708	S.D. dependent var		18.29796
S.E. of regression	17.05044	Akaike info criterion		8.697958
Sum squared resid	148847.4	Schwarz criterion		9.659930
Log likelihood	-2695.534	Hannan-Quinn criter.		9.071031
F-statistic	3.710415	Durbin-Watson stat		3.035145
Prob(F-statistic)	0.000014			

Determination Test:

From the test, an R-squared of 0.131708 was generated, This number indicates that 13.17% of PBV can be explained the independent variables while the remaining (100% – 13.17% = 86.83%) is determined by other variables not included in this study.

F-Test

With 95% confidence level, df1 (the number of variables-1) = 7, and df2 (n-k) = 650, an F table of 2.023 was generated, with 0.048 significance level. Therefore, with an F-value being greater than the critical F-value in the table (3.710415 > 2.023) or $p<\alpha$ (0.000 < 0.05), H_0 is rejected. This finding indicates that independent variables simultaneously and significantly influence PBV.

t-Test

a) X1 symbolizes Ln Total Assets
   Results show that the coefficient of X1 is 1.18E-14, and its p-value is 0.0320 (less than α=0.05). It can be then concluded that X1 variable positively and significantly influences PBV.
b) X2 symbolizes Diversification
   Results show that the coefficient of X2 is -1.23E-08, and its p-value is 0.0463 (less than α=0.05). It can be then concluded that X2 variable negatively and significantly influences PBV.
c) X3 symbolizes Investment Decision
   Results show that the coefficient of X3 is 0.443917, and its p-value is 0.0084 (less than α=0.05). It can be then concluded that X3 variable positively and significantly influences PBV.
d) Z symbolizes DER
   Results show that the coefficient of Z is -0.009607, and its p-value is 0.8021 (greater than α=0.05). It can be then concluded that Z variable does not have any significant influence on PBV.
e) X1Z is the multiplication of X1 and Z
   Results show that the coefficient of X1Z is 4.06E-15 and its p-value is 0.4312 (greater than α=0.05). It can be then concluded that Z does not moderate the relationship between X1 and Y.
f) X2Z is the multiplication of X2 and Z
   Results show that the coefficient of X2Z is 4.36E-09, and its p-value is 0.0477 (less than α=0.05). It can be then concluded that Z moderates the relationship between X2 and Y.
g) X3Z is the multiplication of X3 and Z
   Results show that the coefficient of X3Z is 0.285524, and its p-value is 0.0046 (less than α=0.05). It can be then concluded that Z moderates the relationship between X3 and Y.

Discussion

Company Size Influences Firm Value

The hypothesis saying that company size positively and significantly influences firm value is accepted. This finding also supports the theory saying the bigger the companies, the better-known they become, and hence, the easier the access to information about the company. This availability of information will raise the company's value. Large company size sends positive signals to investors and creditors, attracting them to invest in the company, hence increase in external financing and lower financial distress.

Diversification Influences Firm Value

According to the test results, diversification strategy negatively influences company's performance. In other words, high (low) diversification levels can reduce (improve) the company's performance. Diversification strategy poses risks to the company considering how ineffective management of diversification will compromise the company's performance. On the other hand, low levels of diversification make it easier for the company's management to handle businesses, hence higher performance.

Investment Decisions Influence Firm Value

Investment decisions significantly influence the value of the company. When right decisions are made, positive signals are sent to investors, and this will eventually increase the value of the company. Similarly, Utami & Darmayanti (2018) stated that investment decisions positively and significantly influence company's value with better decisions leading to higher value of the company. A company that makes a good investment decision attracts investors, hence an increase in demand for its stocks.

Capital Structure Does Not Influence Firm Value

It has been found that capital structure has no influence on firm value. The agency theory acknowledges the role of external monitoring as a consequence of using debt. When debt takes up more space in the capital structure, stock financing decreases and agency costs of equity is minimized. However, the company is still obliged to make the required payment on its debt principal and interests periodically. In addition, using too much debt may lead to an agency problem between shareholders and debtholders, and thus agency cost of debt incurs. Agency cost does not change firm value. Growing debt will increase risks to company's revenue stream, which is highly influenced by external factors. Debt always comes with interests regardless of how big or small the revenue is. In addition, bigger debts come with higher interests, which can even exceed tax savings. Therefore, company's debt policy negatively and significantly influences firm value. If capital structure is dominated by debts, share price will move down, hence decrease in firm value.

The Influence of Company Size, Diversification and Investment Decision on Firm Value with Capital Structure as Moderating Variable

Raising capital in the capital market is easier for a well-established, large company than it is for the smaller one. Larger companies often gain greater trust when it comes to financing businesses, making it easier for them to find external capital sources. For creditors, large company size is seen as a positive signal to give credit. In addition, when companies have much debt, managers are 'forced' to provide free cash flow to pay for the debt; it prevents the company from spending money for things considered unnecessary (to minimize cash flow used by the company's management). When planning to implement a diversification strategy, a company will need to secure large funds and take a high risk; this can lead to a long-term debt. It can be seen that diversification increases the value in the capital structure.

CONCLUSION

While company size, business diversification and investment decision directly affect firm value, capital structure does not have any direct influence on firm value. This is because too much debt will increase the company's default risk and reduce profit. However, it turns out that capital structure strengthens the relationship among company size, diversification and investment decision because when a company

increases its assets, enters new business segments, expands its market and makes investment decisions, it needs a large additional amount of capital.

Recommendation

1. This study uses PBV to measure firm value; however, it is recommended that future studies can use Qtobin, Price-to-Earnings Ratio, or other proxies.
2. Future researchers can use other independent variables not included in the model but directly related to firm value.

REFERENCES

Agung, G., Hasnawati, S., & Huzaimah, R. A. F. (2021). The Effect of Investment Decision, Financing Decision, Dividend Policy on Firm Value. *Jurnal Bisnis Dan Manajemen*, *17*(1), 1–12.

Al Ali, M. S. (2020). The effect of who COVID-19 announcement on Asian Stock Markets returns: an event study analysis. *Journal of Economics and Business*, *3*(3), 1049–1054. https://doi.org/10.31014/aior.1992.03.03.261

Antoro, W., Sanusi, A., & Asih, P. (2020). The effect of profitability, company size, company growth on firm value through capital structure in food and beverage companies on the Indonesia stock exchange 2014-2018 period. *International Journal of Advances in Scientific Research and Engineering*, *6*(09), 36–43.

Chod, J., & Lyandres, E. (2021). A theory of icos: Diversification, agency, and information asymmetry. *Management Science*, *67*(10), 5969–5989.

Indrawan, A. S., & Damayanthi, I. (2020). The Effect of Profitability, Company Size, and Financial Leverage of Income Smoothing. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, *4*(2), 9–13.

Jihadi, M., VILANTIKA, E., HASHEMI, S. M., Arifin, Z., BACHTIAR, Y., & Sholichah, F. (2021). The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, *8*(3), 423–431.

Mardevi, K. S., Suhendro, S., & Dewi, R. R. (2020). Faktor-Faktor yang Mempengaruhi Nilai Perusahaan dengan Struktur Modal sebagai Variabel Moderasi. *JAE (JURNAL AKUNTANSI DAN EKONOMI)*, *5*(2), 36–47.

Mehmood, R., Hunjra, A. I., & Chani, M. I. (2019). The impact of corporate diversification and financial structure on firm performance: evidence from South Asian countries. *Journal of Risk and Financial Management*, *12*(1), 49.

Narayan, P. K., Phan, D. H. B., & Liu, G. (2021). COVID-19 lockdowns, stimulus packages, travel bans, and stock returns. *Finance Research Letters*, *38*, 101732.

Njuguna, V. N., Kwasira, J., & Orwa, G. (2018). Influence of product diversification strategy on performance of non-financial firms listed at the Nairobi Securities Exchange, Kenya. *International Journal of Economics, Commerce and Management*, *6*(6), 60–83.

Salindeho, A. O., Saerang, I. S., & Maramis, J. B. (2018). Effect Of Business Diversification Of Financial Performance And Return Stock Case Stock In Automotive And Component Manufacturing Company Listed In BEI. *Jurnal EMBA*, *6*(3), 1078–1087.

Sudiani, N. K. A., & Wiksuana, I. G. B. (2018). Capital structure, investment opportunity set, dividend policy and profitability as a firm value determinants. *Russian Journal of Agricultural and Socio-Economic Sciences*, *81*(9), 259–267.

Sudrajat, J., & Setiyawati, H. (2021). Role of firm size and profitability on capital structures and its impact over firm value. *Dinasti International Journal of Economics, Finance & Accounting*, *2*(1), 13–27.

Suryana, F. N., & Rahayu, S. (2018). Pengaruh Leverage, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan Industri Barang Konsumsi Sub Sektor Farmasi yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2016). *EProceedings of Management*, *5*(2), 62–70.

Triani, N., & Tarmidi, D. (2019). Firm value: impact of investment decisions, funding decisions and dividend policies. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *9*(2), 158–163.

Utami, A. P. S., & Darmayanti, N. P. A. (2018). Pengaruh Keputusan Investasi, Keputusan Pendanaan Dan Kebijakan Dividen Terhadap Nilai Perusahaan Food And Beverages. *E-Jurnal Manajemen Unud*, *7*(10), 5719–5747.

Widodo, P. M. R., & Kurnia, K. (2016). Pengaruh Keputusan Investasi, Pendanaan, dan kebijakan dividen terhadap nilai perusahaan. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, *5*(1), 1–16.

Yustyarani, W., & Yuliana, I. (2020). Influence of intellectual capital, income diversification on firm value of companies with profitability mediation: Indonesian banking. *Jurnal Dinamika Akuntansi*, *12*(1), 77–89.