THE INFLUENCE OF FINANCIAL INTERNAL AND EXTERNAL FACTORS ON FIRM VALUE THROUGH PROFITABILITY AS A MODERATING VARIABLE IN TECHNOLOGY SECTOR COMPANIES

Vincent Alain Surya1), Yeni Ariesa2b), Christian3), Albert Darmasaputra4), Nicholas Felim5)

12345Department of Management, Universitas Prima Indonesia, Medan, Sumatera Utara, Indonesia

Abstract
This study aims to examine whether the internal factor (cash flow) and external factor (leverage) affect firm value through profitability as a moderating variable in technology sector companies 2018-2021. The method used in this research was a deductive approach, quantitative types, and descriptive characteristics. The number of technology sector companies listed on the IDX is 27 companies which the amount of sample that is selected by using purposive sampling technique is 5 companies. The SmartPLS 3.0 application was used in this study to make it easier for researchers to analyze data. The conclusion obtained show that internal (cash flow) and external (leverage) factors do not affect firm value through profitability as a moderating variable. However, researchers can prove that external factor (leverage) can affect profitability which is evidenced by the p-values in the hypothesis test, namely 0,010<0,05 which indicates that external factor (leverage) have a significant effect on profitability.

Keywords: Internal Factor (Cash Flow), External Factor (Leverage), Profitability, Firm Value.
INTRODUCTION

Almost all people use technology to facilitate their daily activities. This of course encourages several parties to use technological media as their business idea. So that there are many companies that are specialized in the field of technology. The formation of a company also has a purpose behind it, namely to maximize the value of the company and maintain other factors that influence the value of the company.

The magnitude of a company's value can be seen from the impression investors have of the company in terms of its financial performance which is usually related to stock prices. The company has a high corporate value if it has good performance. Factors that affect the value of the company can come from its profitability. Profitability generally describes the amount of profit that can be obtained by a company in a certain period. Which can also be said that a high profitability value indicates that the company is profitable or profitable. In this study, researchers speculate that profitability is influenced by internal factors and external factors.

Internal factors / Cash Flow are generally described as the flow of cash flow into and out of the company from the results of running a business. Meanwhile, external factors / leverage are generally described as the use of funds or loan capital in increasing profits or returns in business. The high leverage ratio indicates the amount of debt burden borne by the company.

From chart 1 it can be seen that the DIVA company (PT Distribution Voucher Nusantara Tbk) has experienced a drastic increase in profits from 2020 to 2021, where in 2018-2020 there has not been a drastic increase or decrease. It can also be seen that the MTDL company (Metrodata Electronics Tbk) has experienced a steady increase in profit in 2018-2021. Meanwhile, the MCAS company (PT M Cash Integrasi Tbk) saw a decline in profits in 2018-2020 and an increase in profits in 2020-2021.

From chart 2 it can be seen that the DIVA company (PT Distribution Voucher Nusantara Tbk) has experienced a decline in share prices in 2019-2021, however in chart 1 it can be seen that it has experienced a quite drastic increase in profit. It can also be seen that the MCAS company (PT M Cash Integrasi Tbk) has experienced a drastic increase in share prices in 2020-2021, but in chart 1 it does not appear to have experienced a drastic increase in profit. Whereas in the MTDL company (Metrodata Electronics Tbk)
Electronics Tbk) it can be seen that the share price has experienced an increase in share prices in 2019-2021 which can also be seen in chart 1 experiencing a steady increase in profits.

From the phenomena that occur in graph 1, the researcher wants to know whether the phenomenon of profitability that occurs in the company is influenced by internal factors in this case cash flow and external factors in this case leverage. And from the phenomena that occur in graph 2, the researcher also wants to know whether the phenomena that occur in graph 1 participate in influencing the company value as indicated by the stock movement in graph 2. Therefore, the researcher wants to examine whether internal and external factors influence the value of the company through intermediaries profitability mediators.

This study can be formulated as follows:

a. How do Internal Factors affect Profitability?
b. How do External Factors affect Profitability?
c. How Does Profitability Affect Company Value?
d. How do Internal Factors affect Company Value through Profitability?
e. How do External Factors affect Company Value through Profitability?

THEORITICAL BASIS

According to Dana, Michael, Rizky (2018), a low amount of cash flow can disrupt the company's operational activities, but if the cash flow is too high, the company also cannot maximize the use of this cash to generate high returns.

According to Lietao, Serrasqueiro, Nunes, and Armada (2010), internal factors or cash flow are formulated as follows:

Cash Flow = \frac{EAIAT + \text{Depreciation}}{\text{Total assets in previous period}}

Where EAIAT is earning after interest and taxes.

According to Yangs Analisa (2011), leverage is directly proportional to investment risk, where a high leverage value means a high investment risk and vice versa.

According to Lietao, Serrasqueiro, Nunes, and Armada (2010), external factors or leverage are formulated as follows:

Leverage = \frac{\text{Total Liabilities}}{\text{Total assets in previous period}}

According to Hestin (2020), Profitability needs to be considered when determining the survival of a company. The company is said to have a high profitability ratio if the company is able to manage the
company's finances and also earn large profits.

According to Choirul, Fitri, and Nanik (2021), ROA (return on assets) is formulated as follows:

$$ROA = \frac{Net\ income}{Total\ asset}$$

According to Dea Putri Ayu (2017), the PBV value is used to determine whether the stock price is above or below the book value. A low PBV ratio indicates a decline in the quality and performance of the issuer's fundamentals. Meanwhile, a high PBV ratio shows an exaggerated impression of investors towards the company.

According to Choirul, Fitri, and Nanik (2021), the price book value is formulated as follows:

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

Where the book value per share is equal to the total equity divided by the number of outstanding shares.

The conceptual framework for this test is described as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technology companies listed on the IDX</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>Technology companies that do not publish complete financial reports in a row during 2018-2021</td>
<td>(17)</td>
</tr>
<tr>
<td>3</td>
<td>Technology companies that experienced losses during 2018-2021</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td>Total sample</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Number of periods</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Number of observations = 5 x 4 tahun</td>
<td>20</td>
</tr>
</tbody>
</table>

H1 : Profitability is influenced by Internal Factor.
H2: Profitability is influenced by External Factor.
H3: Firm Value is influenced by Profitability.
H4: Firm Value is influenced by Internal Factor by mediating Profitability.
H5: Firm Value is influenced by External Factor by mediating Profitability.

**METHOD**

The deductive approach is used in this study where the presentation is from general to specific scientific forms. This type of quantitative data is used because the data used is numerical in nature and is obtained from the financial reports of companies in the technology sector. And this presentation is descriptive in nature, where the data obtained will be tested, analyzed and illustrated through the help of tables and pictures.

The time to start this research is October 2021 to September 2022, where researchers use financial reports of companies in the technology sector that are downloaded from the IDX website.

The technology companies studied had a population of 27 companies and were selected using a purposive sampling technique. Considerations in determining
the sample can be seen in table 1 with the following conditions:

"Companies in the technology sector that are listed on the IDX website, publish complete financial reports and earn profits during the 2018-2021 period"

The type of quantitative data is used because it is numerical in nature and comes from a secondary source where the financial reports of technology sector companies for the period 2018-2021 are downloaded from the IDX website.

The table of operational definitions of the variables and their indicators can be seen in table 2.

The technique used in this study is SEM (Structural Equation Modeling) with a variant or component approach known as PLS (Partial Least Square).

The PLS analysis used is the measurement model (outer model) and the structural model (inner model).

Descriptive statistics used are a description of the subject of the study by using existing information and making conclusions so that the information can be understood in general.

In this test evaluated using CFA (Confirmatory Factor Analysis). Where CFA is carried out using the MTMM (MultiTrait-MultiMethod) approach to test convergent validity and discriminant validity. And also reliability testing was tested with Cronbach's alpha and composite reliability.

a. Convergent validity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Factor / Cash Flow (X1)</td>
<td>Cash Flow serves to track the company's income and expenses.</td>
<td>CF = (EAIAT + depreciation) / Total assets in previous period</td>
<td>Rasio</td>
</tr>
<tr>
<td>External Factor / Leverage (X2)</td>
<td>Leverage serves to measure the composition of capital originating from debt or loans.</td>
<td>Lev = Total liabilities / Total assets in previous period</td>
<td>Rasio</td>
</tr>
<tr>
<td>Profitability / ROA (Y)</td>
<td>ROA serves to measure a company's ability to generate net profit from its assets.</td>
<td>ROA = Net income / Total assets</td>
<td>Rasio</td>
</tr>
<tr>
<td>Firm Value / PBV (Z)</td>
<td>PBV is a useful metric for assessing the price of a company.</td>
<td>PBV = Market price per share / Book value per share</td>
<td>Rasio</td>
</tr>
</tbody>
</table>

Convergent validity is measured using a reflective index. Where the reflective indicator is said to be high if the correlation value of the indicator with the score of the latent variable is > 0.7.

b. Discriminant validity (Discriminant Validity).

The measurement method for measuring discriminant validity uses a comparison of AVE (Average Variance Extracted). The high value of the indicator with the construct shows that the latent construct predicts the indicator well.

c. Realibility

Reliability testing shows the accuracy, uniformity, and consistency of the instrument when measuring constructs. Reliability measurements were carried out using Cronbach's Alpha and Composite Reliability and it was said to be good if Cronbach's alpha > 0.6 while composite reliability > 0.7.
In this test based on substantive theory which shows how the relationship between variables.

a. R-Square
This test aims to explain the influence of exogenous on endogenous. If $R^2 \geq 0.75$ then it is strong. If $R^2 \geq 0.50$ and $<0.75$ then it is moderate. If $R^2 \geq 0.25$ and $<0.50$ then it is weak. And if $R^2 <0.25$ then it is very weak.

b. F-Square
This test aims to determine the goodness of the model. If the value is $> 0.02$ then it is weak at the structural level. If the value is $\geq 0.15$ then it is medium at the structural level. And if the value is $\geq 0.35$ then it is large at the structural level.

c. Hypotesis test
The bootstrapping process shows the p-value results of each related path. The p-value for alpha is 0.05. The following are the criteria for drawing conclusions:

a) If the p-values $<0.05$ then $H_0$ is rejected and $H_1$ is accepted
b) If the p-values $> 0.05$ then $H_0$ is accepted and $H_1$ is rejected

RESULT AND DISCUSSION

The number of observation data is 20 data which is 5 samples multiplied by 4 periods from 2018-2021.

In table 3 it can be seen that cash flow has a minimum value of 0.027195 obtained from PT. Distribution of Nusantara Tbk vouchers in the 2018 period and a maximum value of 0.699404 obtained from Sat NusapersadaTbk in the 2020 period.

The minimum leverage value is 0.183279 obtained from PT. Distribution of Nusantara Tbk vouchers in the 2021 period and a maximum value of 3.242741 obtained from Sat Nusapersada Tbk in the 2018 period.

The minimum ROA value is 0.005589 obtained from Sat Nusapersada Tbk in the 2019 period and the maximum value is 0.536586 obtained from PT. Nusantara Tbk Voucher Distribution in 2021.

The minimum PBV value is 0.816812 obtained from Metrodata Electronics Tbk in the 2018 period and the maximum value is 6.863648 obtained from PT. Multipolar Technology Tbk in 2021.

Measurement Test (Outer Model)

a. Validity test with Convergent Validity

Table 3: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>Missing</th>
<th>Mean</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>Standard Deviation</th>
<th>Excess Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF</td>
<td>1</td>
<td>0</td>
<td>0.28937340</td>
<td>0.24561850</td>
<td>0.027195</td>
<td>0.699404</td>
<td>0.186546714</td>
<td>-0.166</td>
<td>0.889</td>
</tr>
<tr>
<td>LEV</td>
<td>2</td>
<td>0</td>
<td>0.62768910</td>
<td>0.52977150</td>
<td>0.183279</td>
<td>3.242741</td>
<td>0.64939255</td>
<td>15.521</td>
<td>3.750</td>
</tr>
<tr>
<td>ROA</td>
<td>3</td>
<td>0</td>
<td>0.09020960</td>
<td>0.06633400</td>
<td>0.005589</td>
<td>0.536586</td>
<td>0.111618532</td>
<td>15.022</td>
<td>3.691</td>
</tr>
<tr>
<td>PBV</td>
<td>4</td>
<td>0</td>
<td>2.29354015</td>
<td>1.69591050</td>
<td>0.816812</td>
<td>6.863648</td>
<td>1.568083362</td>
<td>3.121</td>
<td>1.749</td>
</tr>
</tbody>
</table>

Source: Data processing
In this test using the evaluation of the measurement outer model where the value of the loading factor must be > 0.7 for the intended variable. The following can be seen in Figure 1 of the schematic and table 4 of the outer model.

**Table 4: Outer Model (Outer Loading)**

<table>
<thead>
<tr>
<th></th>
<th>External Factor</th>
<th>Firm Value</th>
<th>Internal Factor</th>
<th>Profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF</td>
<td>1.000</td>
<td></td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The outer loading value in table 4 is 1,000 for each variable. Where the variable is said to meet the conditions if the value is > 0.7.

b. Validity test with Discriminant Validity

In this test, discriminant validity uses the AVE (average variance extracted) value. Measurements in this model are measured based on cross landing with the construct. It is said that discriminant validity is good if the AVE value is > 0.5. The following can be seen in table 5 measuring the AVE criteria for all variables.

**Table 5: Measurement with AVE criteria**

<table>
<thead>
<tr>
<th></th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Firm Value</td>
<td>1.000</td>
</tr>
<tr>
<td>Internal Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Profitability</td>
<td>1.000</td>
</tr>
</tbody>
</table>

From the results of the AVE measurement, it can be seen in table 5 that the four variables have met the requirements because they have a value of > 0.5.

c. Reliability Test with Composite Realibility

In this test, if the composite realibility value is > 0.7, then the construct realibility is high. The following can be seen in table 6 of realibility test measurements with composite realibility.

**Table 6: Measurement with Composite Reliability**

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Firm Value</td>
<td>1.000</td>
</tr>
<tr>
<td>Internal Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Profitability</td>
<td>1.000</td>
</tr>
</tbody>
</table>

From the measurement results in table 6, it can be seen that the composite realibility value for all variables is > 0.7, which indicates that all variables are feasible to test for their effect on the dependent latent variable, in this case, Firm Value.

d. Realibility test with Cronbach’s Alpha

In this test, the realibility test was carried out with Cronbach’s alpha. Where it is said to be good if $\alpha > 0.6$. The following can be seen in table 7 of measuring the realibility test with Cronbach’s alpha.

**Table 7: Measurement with Cronbach’s Alpha**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Firm Value</td>
<td>1.000</td>
</tr>
<tr>
<td>Internal Factor</td>
<td>1.000</td>
</tr>
<tr>
<td>Profitability</td>
<td>1.000</td>
</tr>
</tbody>
</table>

From the results of the realibility test, it can be seen in table 7 that all variables have met the requirements because they have a value of > 0.6.
The results of the measurement in table 7 all the latent variable Cronbach's alpha > 0.6, it is said to be good.

Structural model test (Inner model)
1. R-Square
   R-Square serves to determine the variation of the dependent variable with the variation of the independent variable. The following is a table of inner model measurements using SmartPLS.

   Table 8: R-Square

<table>
<thead>
<tr>
<th>Source: Data processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Firm Value</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>0.007</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
</tbody>
</table>

From the test results in table 9 it can be seen that profitability which is influenced by external factors (cash flow) and internal factors (leverage) has a respective value of > 0.02 (weak effect), and firm value which is influenced by profitability has a value of < 0.02 (weak effect).

3. Hypothesis Test
   This test is carried out based on the results of the Inner Model. The T-Statistic value and p-value determine whether the hypothesis is accepted or not, where the value is obtained from the bootstrapping results. The significance level used in this test is 0.05. The following can be seen in table 10 testing using the bootstrapping process.

2. F-Square
   Table 9: F-Square

<table>
<thead>
<tr>
<th>Source: Data processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>F Square</td>
</tr>
<tr>
<td>External Factor</td>
</tr>
<tr>
<td>0.03</td>
</tr>
<tr>
<td>Firm Value</td>
</tr>
<tr>
<td>Internal Factor</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
</tbody>
</table>
Based on the results of the inner model total effects it is known that:

1. The first hypothesis examines internal factors on profitability. The result is a T-Statistic value of 0.719 < t-table and P-Values of 0.481 > 0.05 which indicates the results of the hypothesis have no effect on profitability.

2. The second hypothesis examines external factors on profitability. The result is a T-Statistic value of 2.834 > t-table and P-Values of 0.010 < 0.05 which indicates the results of the hypothesis have a significant effect on profitability. Also the sample coefficient shows negative value which indicates negative effect on profitability.

3. The third hypothesis examines profitability on firm value. The result is a T-Statistic value of 0.760 < t-table and P-Values of 0.456 > 0.05 which indicates that the results of the hypothesis have no effect on firm value.

4. The fourth hypothesis examines internal factors on firm value with profitability as a mediator. The result is a T-Statistic value of 0.434 < t-table and P-Values of 0.669 > 0.05 which indicates the results of the hypothesis that internal factors do not affect firm value through mediators of profitability.

5. The fifth hypothesis examines external factors on firm value with profitability as a mediator. The result is a T-Statistic value of 0.621 < t-table and P-Values of 0.542 > 0.05 which indicates that the results of the hypothesis External factors do not affect firm value through mediators of profitability.

The following are the results of the discussion obtained:

1. The Influence of Internal Factors on Profitability.

In this study, researchers proved that internal factors (cash flow) did not affect the value of profitability. This is also reinforced by the results of Sasongko & Apriani (2016) where the test results found that cash flow does not affect profitability at PT Mayora Indah Tbk. This is inversely proportional to what Sitepu, Purwanto, & Irwanto (2017) found, where cash flow effect profitability. According to Sitepu, Purwanto, & Irwanto (2017), positive cash flow can strengthen the company’s liquidity where indicates good company performance, and company with high profitability tend to show positive perspective of good company’s liquidity. There’s some case that cash flow doesn’t
affect profitability. It can come from several factors like inadequate cash flow management and large of uncollected receivables so that loans are made to cover operational activities.

2. The Influence of External Factors on Profitability.

In this study, researchers proved that external factors (leverage) affect negatively to the value of profitability. This shows that the higher the leverage value, the lower the profitability value. Leverage serves to measure the composition of capital originating from debt. If company’s debt is getting higher, the interest that must be paid by the company is getting bigger, so that the company’s profitability will decrease. Decreased profitability also results in investor withdrawing their capital. That’s why the use of debt need to consider the company’s ability to generate profits. This is also corroborated by Lamba & Atahau (2022) where leverage affects negatively to profitability and also similar to Syafi’i & Haryono (2021) but leverage affects positively to profitability on Islamic commercial banks in Indonesia.

3. Effect of Profitability on Firm Value.

In this study, researchers proved that profitability did not affect firm value. This is inversely proportional to what Ayu & Suarjaya (2017) found, where profitability affects firm value. According to Ayu & Suarjaya (2017), the higher the profitability obtained by the company, the higher the firm value. High profitability can build positive sentiment from investors so that it affects the increase in shares in capital market. But Rakhman, Bunfa, & Rifiyanti (2020) research found that there’s some case that profitability doesn’t affect firm value. It could come from several factors such as Indonesian economic conditions, inflation, changes in foreign currency exchanges rates, and company policies. Firm value not always be measured only from profitability. Company can still maintain their firm value by allocating the use of profitability for thing that do not affect firm value.


In this study, researchers proved that internal factors (cash flow) did not affect firm value through profitability mediators. Since in our case, cash flow did not affect profitability and profitability did not affect firm value. This shows cash flow still doesn’t affect firm value even through profitability as mediators.

5. The Influence of External Factors on Company Value Through Profitability.

In this study, researchers proved that external factors (leverage) did not affect firm value through profitability mediators. This also corroborated by Lamba & Atahau (2022) where leverage also doesn’t affect firm value through profitability mediators. Unlike our case, Lamba & Atahau (2022) case have positive affection between profitability and firm value. This shows that leverage has more influence on profitability than the indirect effect on firm value through profitability mediators.

CONCLUSIONS AND SUGGESTIONS

The conclusions obtained from the results of this study are:

1. The conclusion of the internal factor hypothesis test on profitability shows T-Statistic 0.719 <T-Table 2.353 and P-Values 0.456 > 0.05 so that the hypothesis results have no effect on profitability.
2. The conclusion of the external factor hypothesis test on profitability shows T-Statistic 2.834 > T-Table 2.353 and P-Values 0.010 < 0.05 so that the hypothesis results affect profitability.

3. The conclusion of the profitability hypothesis test on firm value shows T-Statistic 0.760 < T-Table 2.353 and P-Values 0.456 > 0.05 so that the hypothesis results have no effect on firm value.

4. The conclusion of the hypothesis testing of internal factors on firm value through profitability shows a T-Statistic 0.434 < T-Table 2.353 and P-Values 0.669 > 0.05 so that the hypothesis results have no effect on firm value.

5. The conclusion of the hypothesis test of external factors on firm value through profitability shows T-Statistic 0.621 < T-Table 2.353 and P-Values 0.542 > 0.05 so that the hypothesis results have no effect on firm value.

Suggestions for researchers who wish to continue or re-do research are advised to add or replace other independent variables from outside the variables to be studied so that the results obtained can be developed. In future research, it is recommended to update the financial statements listed on the Indonesia Stock Exchange after the 2021 period.

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