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*Peer-to-Peer (P2P) Lending, Interest Rate, Loan Times, MSME Performance.*

**Corresponding Author:**

**Aulyarizki Miahendita :**

**Tel.**

**E-mail:**

aulyarizkimiahendita@gmail.com

**The Effect of Fintech Peer-to-Peer (P2P) Lending on MSMEs Performance in Indonesia**

**Aulyarizki Miahendita**

*Faculty of Economics and Business, Universitas Sebelas Maret  
Jl. Ir. Sutami 36A, Surakarta, 57126, Indonesia*

**Abstract**

This study analyze the effect of Fintech loans *Peer-to-Peer (P2P) Lending* on MSMEs Performance in Indonesia. Data was collected using the technique *Snowball Sampling*, which is an online survey of MSME actors who have borrowed on the platform *P2P Lending* for business development and obtained as many as 70 respondents. The results of the study can be concluded that: 1) The size of the amount of funding received from *P2P lending* affects increased profits, but does not affect the increase in assets; 2) The interest rate has a negative and not significant effect on MSME Performance so that the lower interest rate can further increase turnover, profits, and business assets; 3) Loan Times affects MSME Performance positively and significantly. This study has several limitations, which include the number of samples, uneven coverage of the study area, and there are still many other factors that affect MSME performance.



# The Effect of Fintech Peer-to-Peer (P2P) Lending on MSMEs Performance in Indonesia

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## 1. INTRODUCTION

The role of Micro, Small, and Medium Enterprises (MSMEs) is very helpful in economic growth and development in a country, especially in Indonesia. Not only about the growth and development of the country's economy, but MSMEs in Indonesia is also a business group that has the largest number of economic actors and is resistant to economic crises and plays a role in the problem of unemployment. MSMEs are able to have a direct impact on people's lives, especially the lives of people who are in the lower community sector. This is indicated by the presence of new jobs and sources of income. That way, MSMEs participate in helping the government in poverty alleviation.

Compiled from data from the Ministry of Cooperatives and Small and Medium Enterprises (KKUMKM) of the Republic of Indonesia in 2012-2013, the number of MSMEs in Indonesia increased by 2.41% from 56,534,592 units to 57,895,721 units and in 2016-2017, the number of MSMEs in Indonesia increased by 2.06% from 61,651,177 units to 62,922,617 units. In 2012-2013, it had a 96.99% share of the total workforce in Indonesia and in 2016-2017 also, the share owned was 97.02% of the total workforce in Indonesia. This number is increasing and shows that MSMEs continues to increase and has a positive trend that is able to absorb labor, especially in Indonesia. In addition, MSMEs also have a sizable contribution to the Gross Domestic Product (GDP) in Indonesia. It was recorded that in 2016-2017, it increased by 9.92% from IDR 7,009,283 billion to IDR 7,704,635.9 billion. This shows that MSMEs have the

potential for economic growth and development in Indonesia.

Capital is a very influential and important factor to increase the production and business performance of MSMEs itself (Marcellina, 2012). Companies in carrying out their operations need funds. However, some companies choose to get funding from others because they are much larger (H. Kent Baker et al. 2017). Small and Medium Enterprises (SMEs) face many obstacles in procuring the necessary funds (Boocock, 2001). This capital is a fundamental structural problem for MSMEs. Head of the Digital Financial Innovation and Microfinance Development Group, the Financial Services Authority (OJK), Triyono in 2019, said that MSMEs in Indonesia still do not get 70% access to finance. Therefore, support is needed in the form of assistance with loans (Kreamer-Eis, 2012). Director General of Small, Medium, and Miscellaneous Industries (IKMA), Gati Wibawaningsih, said that MSMEs in Indonesia are still lagging behind in terms of technology utilization. In fact, according to the Indonesian Polling Study in collaboration with the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia increased by 10.12% from 2018. This means that out of a total population of 264 million Indonesians, there are 171.17 million people, or about 64.8%, are connected to the internet.

Currently, the financing that is currently being discussed is non-bank financing, namely *Financial Technology (Fintech)*. Fintech is technology-based financing that can make it easier to access various financial features. Bank Indonesia said that actually, banks in Indonesia had started introducing Fintech through online banking in 1998. Over time, Fintech has grown in existence and made it easier to use for the wider community. The convenience offered by

Fintech is far different from traditional payments. It is more effective and efficient because of easy-to-use technology and software.

In Indonesia, the potential for Fintech P2P Lending to enter the Indonesian market is huge. The P2P Lending financing model has been in use since late 2015 and was approved by the Financial Services Authority (OJK) in December 2016. Even though it is quite a distance from other countries such as China and the UK, Indonesia, as of May 2019, has 113 legal P2P Lending loan platforms that are supervised by OJK. This P2P Lending financing model can be used as a solution alternative to financing apart from the banking sector and other financial institutions (Andini, 2016). Especially if it is related to the problem of MSME capital in Indonesia due to difficulties in banking access. The Indonesian government also advised MSMEs to take something positive from developing P2P loans to increase their capital or to expand their business.

Chairman of the OJK Board of Commissioners Wimboh Santoso (Kontan, 2019) explained, as of April 2019, Fintech loan disbursement has exceeded IDR 37.01 trillion. This amount increased by 14.36% from disbursement in December 2018, which was IDR 22.67 trillion and continues to increase from IDR 25.92 trillion at the beginning of January 2019.

With the emergence of Fintech P2P Lending, the level of risk of P2P lending in Indonesia is still high, as reflected in the high-interest rates. Even though there are more borrowers than lenders. Therefore, it is also easy for borrowers to default or default on payments. According to Xu (2018), they were observing that the default ratio in

P2P lending is difficult to predict. But this can be avoided by finding Nowak A (2018) that loan descriptions written by prospective borrowers can be used to predict whether or not they have the potential to default.

Based on the description above, the formulation of the problem from this study is as follows:

1. How does Fintech P2P lending affect the performance of MSMEs in Indonesia?
2. How will Fintech P2P lending affect the sustainability of MSMEs in Indonesia?

## 2. LITERATURE REVIEW

According to Kraemer-Eis (2012), he views that capital is a fundamental structural problem for MSME actors. Capital is divided into 2, namely, own capital and foreign capital. Own capital in the form of capital that comes from the business owner himself is managed independently and does not have a deadline. Meanwhile, foreign capital comes from outside parties such as Banks, Rural Banks (BPR), Cooperatives, People's Business Credit (KUR), and the like but have a certain deadline so they must be returned on time and usually need a guarantee. Capital management is very important, considering the benefits that will be obtained later and make the business run smoothly as expected by business actors (Amirullah, 2005).

According to Hsueh (2017), P2P Lending is a lending platform that brings together lenders and borrowers via an internet connection. P2P Lending provides various credit and risk management mechanisms. This platform will help lenders and borrowers so that each can meet their needs and use money efficiently.

H. Kent Baker (2017), in his research entitled "Financing preferences and practices of Indian SMEs", said that SMEs in India need an understanding of the types of funding that they

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think is in accordance with the characteristics of their business. Lack of capital and difficulty in accessing funding is also a problem for them. Moreover, it was found that Indian SMEs tend to prioritize profit over their business expansion.

The existence of P2P lending makes it easier for business actors to access capital because of the difficulty of accessing capital in banks (Baker, 2017). Kumalasari (2019) in his research also stated that business capital has an effect on the performance of MSMEs in the districts studied. Hafsa (2004) explained that MSME players rely on their own capital with minimal amounts due to the difficulty of accessing loan funds from banks, even though Kumalasari (2019) states that business capital affects business performance. However, the level of risk of P2P lending in Indonesia is still high as reflected in the high-interest rates. This results in the capital of MSMEs themselves and the risk of default. Rosa (2019) in her research states that inflation and interest rates have a significant negative effect on MSME turnover.

### 3. Hypothesis

H1 : Fintech P2P lending improves the performance of MSMEs

H2 : The greater Fintech P2P lending funding will improve the performance of MSMEs

H3 : The greater the interest rate has a negative effect on improving the performance of MSMEs

### 3. DATA, VARIABLES, AND METHOD

#### Population and Sample

The community of MSMEs in Indonesia is the population in this study. The number of samples taken as many as 70 MSMEs that have received loans from Fintech P2P lending is the object of research. The sampling technique uses non-probability sampling techniques with the Snowball sampling technique.

#### Variable Measurement

This study uses three types of variables, namely; (1) the independent variable is a variable that causes changes in the dependent variable. The independent variable in this study is Fintech P2P lending, measured by a sample who has borrowed in P2P lending, which can be seen from the number of loans, interest rates given, and times of loans. (2) The dependent variable in this study is the performance of MSMEs which is measured by looking at the percentage of increase in operating turnover, operating profit, and business assets. Meanwhile, the control variables in this study were the length of business, product variation, and business domicile.

#### Method

This study used a descriptive analysis method that will describe the data obtained so that the information from the research results can be more easily understood. The second method is Ordinary Least Square (OLS) Regression. The Ordinary Least Square (OLS) method is used to present measuring data, formulated as follows:

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 - b_5 X_5 + b_6 D_1 + b_7 D_2 + e$$

$$(i) \text{ Increase in Turnover} = b_0 + b_1 \text{Submission} + b_2 \text{Interest Rate} + b_3 \text{Loan Times} + b_4 \text{Length of Business} + b_5 \text{Business Domicile} + b_6 \text{Dummy Product Variations} + b_7 \text{Dummy Business Expansion} + e_i$$

$$(ii) \text{ Increase in Profit} = b_0 + b_1 \text{Submission} +$$

$b_2$ Interest Rate +  $b_3$ Loan Times +  $b_4$   
Length of Business +  $b_5$ Business  
Domicile+  $b_6$ Dummy Product Variations +  
 $b_7$ Dummy Business Expansion +  $ei$

(iii)Increase in Assets =  $b_0$  +  
 $b_1$ Submission +  $b_2$ Interest Rate +  $b_3$ Loan  
Times +  $b_4$  Length of Business +  
 $b_5$ Business Domicile+  $b_6$ Dummy Product  
Variations +  $b_7$ Dummy Business  
Expansion +  $ei$

#### 4. Statistical Testing

##### F-Test (Simultaneous Test)

This F test is used to show whether the independent variables in the model jointly affect the dependent variable (Priadana HMS, 2009). If the test results show the probability value is greater than the 5% real level (probability value > 0.05), then  $H_0$  is accepted. This means that the independent variables simultaneously have no significant effect on the dependent variable. Meanwhile, if the results show that the probability value is smaller than the 5% real level (probability value < 0.05), then  $H_0$  is rejected. That is, the independent variables together have a significant effect on the dependent variable.

##### Partial t-Test

The partial t-test is used to show how far the influence of one independent variable on the dependent variable individually (Priadana HMS, 2009). If the value of the test is at a significance value > 0.05 and is in the critical area, then the hypothesis is rejected. This shows that the independent variable individually has no effect on the dependent variable.

Conversely, if the value of the test is at a significance value > 0.05 and is in the area of acceptance, then the hypothesis is accepted. This shows that the independent variable individually affects the dependent variable (Gujarati DN, 2013).

##### Determination Coefficient Test ( $R^2$ )

The coefficient of determination test is denoted by  $R^2$  (R-Squared), which is a measure that shows whether or not the estimated regression is good. The point of a regression equation is determined by  $R^2$  which has a value between zero and one, which means that the variable is able to explain the information needed by the dependent variable (Nachrowi DN., 2006). This test is conducted to measure how strong the influence of the proposed model is in explaining the variation in the dependent variable as seen from  $R^2$  and the significant level seen from the p-value.

#### 5. Classic assumption test

##### Normality test

The normality test is carried out to determine whether the data used in the regression model, the dependent variable and the independent variable are normally distributed or not. This test criterion is if the significance or probability value is > the real level (0.05), then the residuals are normally distributed.

##### Heteroscedasticity Test

Heteroscedasticity occurs when there is a variance of variables in different models. To find out whether the model in the study has heteroscedasticity or not, it can be seen by the graphic method. If the variance of the residual data from one observation to another is constant, it is called homoscedasticity. If the dependent variable increases, the error will also increase (Gujarati DN, 2013).

##### Multicollinearity Test

The occurrence of multicollinearity is due to the linear relationship between some or all of the independent variables in a multiple

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linear regression model (Gujarati DN, 2013). This test is used to determine whether a regression model has collinearity between independent variables or not. One of the commonly used multicollinearity tests is the Variance Inflation Factor (VIF) test. If the average VIF value is less than 10, then there is no multicollinearity in the model.

**6. RESULT**

In this chapter, there is a discussion of the results of data processing used in research along with hypothesis testing that has been formulated in the

previous chapter. Data processing in this study was carried out using STATA version 14 software.

**Classic assumption test**

**Normality test**

The normality test is carried out to determine whether the data used in the regression model, the dependent and independent variables are normally distributed or not. One method used to test it is the Skewness Kurtosis test, where the data will be normally distributed if the Prob> chi value is more than 0.05.

Table 1. Normality test

	<b>Obs</b>	<b>Pr(Skewness)</b>	<b>Pr(Kurtosis )</b>	<b>adj chi2 (2)</b>	<b>Prob&gt;chi2</b>
Model 1	<b>70</b>	<b>0,0000</b>	<b>0,000</b>	<b>36.25</b>	<b>0,0000</b>
Model 2	<b>70</b>	<b>0,0000</b>	<b>0,000</b>	<b>43.60</b>	<b>0,0000</b>
Model 3	<b>70</b>	<b>0,0000</b>	<b>0,000</b>	<b>43.50</b>	<b>0,0000</b>

Source: Data Processing Results STATA version 14

Based on table 1 above, it is the result of data that is not normally distributed. Judging from the value of

prob> chi2, the number is 0.0000, which means <0.05.

**Multicollinearity Test**

The occurrence of multicollinearity is a linear relationship between part or all of the independent variables in a multiple linear regression model (Gujarati DN, 2013). This test is used to determine whether a regression

model has collinearity between independent variables or not. One of the multicollinearity tests that are commonly used is the Variance Inflation Factor (VIF) test. If the mean VIF value is less than 10, it can be said that there is no multicollinearity in the model.

Table 2. Multicollinearity Test

	Model 1 (Increase	Model 2 (Increase	Model 3 (Increa

	in Turnover)	in Profit)	se in Assets)
Average of VIF	1.25	1.25	1.25

Source: Data Processing Results STATA version 14

Based on table 2, the results of the average VIF value are less than 10 (<10) of

1.25. Thus, the results of these data are free from multicollinearity.

**Heteroscedasticity Test**

The heteroscedasticity test was carried out to determine whether the linear regression model used in the study was free from heteroscedasticity

symptoms or not. One of the heteroscedasticity tests is the Breusch Pagan method. The regression model says there is no symptom of heteroscedasticity if the prob value > chi2 is more than 0.05 or (> 0.05).

Table 3. Heteroscedasticity Test

Modell	Chi2	Prob>chi2	Explanation
<b>Model 1 (Increase in Turnover)</b>	5.68	0.0172	There is heteroscedasticity
<b>Model 2 (Increase in Profit)</b>	8.67	0.0032	There is heteroscedasticity
<b>Model 3 (Increase in Assets)</b>	20.15	0,0000	There is heteroscedasticity

Source: Data Processing Results STATA version 14

Based on table 3 the results of the heteroscedasticity test, Model 1 shows a value of 0.0172, Model 2 shows a value of 0.0032, and Model 3 shows a value of

0.000. Therefore, from the three models there is heteroscedasticity because it has a value of 0.05.

**Regression Test**

Regression test is used to determine the causal relationship between one variable and another. In this study, the regression test used is the Ordinary Least Square (OLS) method, where this test is used to see the relationship of more than two independent variables with the dependent variable. The independent variables in this regression test are Submission, Interest Rate, and Times of Loan, Length of Business, Business Domicile, Product

Variation Dummy, and Business Expansion Dummy.

Judging from the results of the classic assumption test that the data in this study were not normally distributed, a Robustness check or resistance test was carried out to avoid bias in the identification of variables, model specifications, or endogeneity. (James et al., 2018). The data used in this test becomes 64 observations because it has experienced the outlier test. The following are the results of the OLS method regression test using the Robustness check:



Table 4. Robustcheck Regression  
Dependent variable: Increase in Turnover

Increase in Turnover	Coefisien	Robust Std. Err.	t	P> t
Submission	-0.3825659	0.1339627	-2.86	0.006
Interest Rate	-0.97006	0.1411986	-0.69	0.495
Times Loans	0.3105912	0.1122071	2.77	0.007
Length of Business	0.0785235	0.1262096	0.62	0.536
Business domicile	0.1679817	0.0945598	1.78	0.081
Product variations1	0.627584	0.2555651	2.46	0.017
Product variations2	0	(omitted)		
Business expansion1	0.1548122	0.33431394	0.46	0.645
Business expansion2	0	(omitted)		
_cons	0.438568	0.4027426	1.09	0.281
N				68
r <sup>2</sup>				0.2840
F				5.69***

Significance level: \*\*\*  $p < 0,01$

Based on the results of the regression test using the Robustness check in the table above, table 4 shows the coefficient of the independent variable for submission is negative by -0.3825659 and the value of  $p > |t|$  0.006 significant at the 0.01 (1%) level of significance. This shows that the independent variable Submission has a negative and significant effect on the dependent variable on Increase in Turnover. The coefficient of the independent variable Interest Rate is

negative at -0.97006, and the value of  $p > |t|$  amounting to 0.495 is not significant at the significance level of 0.01 (1%), 0.05 (5%), or 0.1 (10%). This shows that the independent variable Interest Rate has a negative and insignificant effect on the dependent variable Increase in Turnover. The coefficient of the independent variable Times Loans 0.01 (1%) significance level. This shows that the independent variable Times Loans has a positive and significant effect on the dependent variable on Increase in Turnover.

Table 5. Robustcheck Regression  
The dependent variable: Increase in Profit

Increase in Profit	Coefisien	Robust Std. Err.	t	P> t
Submission	-0.2260774	0.1038478	-2.18	0.034
Interest Rate	-0.0805412	0.1151563	-0.70	0.487
Times Loans	0.2690412	0.0756952	3.55	0.001
Length of Business	0.0536592	0.1007725	0.53	0.596
Business domicile	0.2226865	0.0680995	3.27	0.002
Product variations1	0.3538187	0.1790572	1.98	0.053
Product variations2	0	(omitted)		
Business expansion1	0.1882316	0.2351843	0.80	0.427
Business expansion2	0	(omitted)		
_cons	0.188768	0.2761164	0.68	0.497
N				66
r <sup>2</sup>				0.3104
F				8.96***

Significance level: \*\*  $p < 0,05$

Table 5 shows the coefficient of the independent variable submission is negative at -0.2260774 and  $p > |t| 0.034$  significant at the significance level of 0.05 (5%). This shows that the independent variable submission has a negative and insignificant effect on the dependent variable on Increased Profit. The coefficient of the independent variable Interest Rate is negative at -0.0805412, and the value of  $p > |t|$  amounting to 0.487 is not significant at the significance level of

0.01 (1%), 0.05 (5%), or 0.1 (10%). This shows that the independent variable Interest Rate has a negative and insignificant effect on the dependent variable Increased Profit. The coefficient of the independent variable Times Loans has a positive effect of 0.2690412, and the value of  $p > |t| 0.001$  significant at the 0.01 (1%) significance level. This shows that the independent variable Times Loans has a positive and significant effect on the dependent variable on Increased Profit

Table 6. Robustcheck Regression  
Dependent variable: Increase in Assets

Increase in Assets	Coefisien	Robust Std. Err.	t	P> t
Submission	-0.2814555	0.2112752	-1.33	0.188
Interest Rate	-0.0367003	0.0875237	-0.42	0.677
Times Loans	0.17616	0.0734009	2.40	0.020
Length of Business	0.0467708	0.0679775	0.69	0.494
Business domicile	-0.4096562	0.1353401	-3.03	0.004
Product variations1	0.3267543	0.1532743	2.13	0.037
Product variations2	0	(omitted)		
Business expansion1	0.5367859	0.2255612	2.38	0.021
Business expansion2	0	(omitted)		
_cons	0.8298789	0.2859098	2.90	0.005
N				64
r <sup>2</sup>				0.3646
F				8.03**

Significance level: \*\*\*  $p < 0,01$

Table 6 shows the coefficient of the independent variable submission is negative -0.2814555 and  $p > |t|$  0.188 is not significant at the 0.01 (1%), 0.05 (5%), or 0.1 (10%) significance levels. The coefficient of the independent variable Interest Rate is negative at -0.0367003 and the value of  $p > |t|$  amounting to 0.677 is not significant at the significance level of 0.01 (1%), 0.05 (5%), or 0.1 (10%). The coefficient of the independent variable

Times Loans has a positive effect of 0.17616 and the value of  $p > |t|$  0.020 is significant at the 0.05 significance level (5%). The regression test results show that the independent variable submission and interest rate have a negative and insignificant effect on the dependent variable Increase in Turnover. Meanwhile, the independent variable Times Loans has a positive and significant effect on the dependent variable on Increase in Turnover.

### Hypothesis test

#### Determination Coefficient Test (R<sup>2</sup>)

The coefficient of determination test is denoted by R<sup>2</sup> (R-Squared), which is a measure that shows whether or not the regression is estimated, it can be seen from the R<sup>2</sup> value and the significant level seen in the p-value. In table 4, namely the Increase in Turnover, the value of R<sup>2</sup> which can be seen in the attachment is

0.2840. The estimation results indicate the ability of the independent variable and control variable to jointly explain the dependent variable by 28.40%, while 71.6% is explained by other variables.

In table 5, the value of R<sup>2</sup> which can be seen in the attachment is 0.3104. The estimation results show the ability of the independent variable and control variable to

jointly explain the dependent variable by 31.04%, while 68.96% is explained by other variables.

In table 6, the value of  $R^2$  which can be seen in the attachment is 0.3646. The estimation results show the ability of the independent variable and control variable to jointly explain the dependent variable by 36.46%, while 63.54% is explained by other variables.

### **F Test**

The F test is used to show whether all the independent variables contained in the model jointly affect the dependent variable. In this study, using a significance level of 0.01 (1%) where in table 4, table 5, and table 6 both show the value of  $\text{Prob} > F$  of 0.000. This means that the p-value  $< 0.001$ , it can be concluded that all independent variables used in the study jointly affect the dependent variable Increase in Turnover, Increase in Profits, and Increase in Assets.

### **Partial t-test**

Partial t-test is used to show how much influence an independent variable has on the dependent variable individually (partially). If the value of the statistical test is at a significance value  $> 0.05$  and is in the critical area, then the hypothesis is rejected. This shows that the independent variable individually has no effect on the dependent variable. Conversely, if the value of the statistical test is at a significance value  $> 0.05$  and is in the area of acceptance, then the hypothesis is accepted. This shows that the independent variables individually have an effect on the dependent variable (Gujarati DN, 2013).

The t-Partial test in table 4 shows the independent variables of Submission, Loan Times, Business Domicile and Variation1 are individually significant to

the Increased Turnover variable. Meanwhile, the independent variables that are not individually significant are the interest rate, length of business, and expansion1.

The partial t-test in table 5 shows the independent variables of Submission, Loan Times, Business Domicile and Variation1 are individually significant for the Profit Increase variable. Meanwhile, the independent variables that are not individually significant are the interest rate, length of business, and expansion1.

The t-partial test in table 6 shows that the independent variables of Loan Times, Business Domicile, Variation1, and Expansion1 are individually significant for the Asset Increase variable. Meanwhile, the independent variables that are not individually significant are submissions, interest rates, and length of business.

### **Interpretation**

#### **The Influence of Variable Submission on MSME Performance**

In the regression results of tables 4 and 5, it shows that the Submission variable has a negative and significant effect on the Increased Turnover and Profit Increase variable. This is evidenced in Table 4 which shows a negative coefficient value of -0.3825659 and the p-value is 0.006, significant at the 0.01 (1%) significance level. Table 5 shows the negative coefficient value of -0.2260774 and the p-value is 0.034, significant at the 0.01 (1%) significance level. That is, the greater the submission (in this case the amount of funding obtained) will increase business turnover and operating profit.

Table 6 shows a negative coefficient of -0.2814555 and a p-value of 0.188 which is not significant at the level of 0.01 (1%), 0.05 (5%), or 0.1 (10%). This means that the size of the submission (in this case the amount of funding obtained) does not increase the amount of business assets.

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Therefore, the results of data processing are in accordance with the hypothesis which states that the greater funding obtained from peer-to-peer (P2P) lending platforms will increase the performance of MSMEs in terms of turnover and profit, then H2 is rejected and accepted.

### **The Influence of Interest Rate Variables on the Performance of MSMEs**

The regression test results of tables 4, 5, and 6 show that the Interest Rate variable has a negative and insignificant effect on the dependent variable Increase in Turnover, Increase in Profit, and Increase in Assets. This is evidenced by table 4 which shows the negative coefficient value of -0.97006 and the p-value of 0.495 is not significant at the level of 0.01 (1%), 0.05 (5%), or 0.1 (10%). Table 5 shows the negative coefficient of -0.0805412 and the p-value of 0.487 is not significant at the 0.01 (1%), 0.05 (5%), or 0.1 (10%) levels. Table 6 shows the negative coefficient of -0.0367003 and the p-value of 0.677 is not significant at the level of 0.01 (1%), 0.05 (5%), or 0.1 (10%). Therefore H3 is accepted, meaning that the greater the interest rate will hamper the performance of MSMEs, on the contrary, the lower the interest rate will improve the performance of MSMEs.

Funding that has a high interest rate will hamper the performance of MSMEs because business actors think about how much interest must be paid at the time of repayment. If the funding has a low interest rate, the business actor will focus on developing his business without thinking about burdensome interest.

### **The Influence of Variable Times of Loans on MSME Performance**

The regression test results in tables 4, 5, and 6 show that the Loan Times variable has a positive and significant effect on the dependent variable Increase in Turnover, Increase in Profit, and Increase in Assets. This is evidenced in Table 4 showing a positive coefficient of 0.3105912 and a significant p-value of 0.007 at the 0.01 (1%) significance level. Table 5 shows a positive coefficient of 0.2690412 and a p-value of 0.001, significant at the 0.01 (1%) significance level. Table 6 shows a positive coefficient of 0.17616 and a p-value of 0.020, significant at a significant level of 0.05 (5%). Therefore, H1 is accepted, meaning that loans through Fintech Peer-to-Peer (P2P) Lending can improve the performance of MSMEs by borrowing one or more times on the platform.

### **The Influence of Control Variables on the Performance of MSMEs**

The results of the regression test in Tables 4, 5, and 6 show that the control variable of Business Time has a positive and insignificant effect on the dependent variable: Increase in Turnover, Increase in Profit, and Increase in Assets. This means that the length of time the business has been run affects business performance.

In tables 4 and 5, the Business Domicile variable has a positive and significant effect on the dependent variable Increased Turnover and Increased Profit. Whereas in table 6, the Business Domicile variable has a significant negative impact on Asset Increase. That is, strategic or not the business domicile that is carried out will affect the Increase in Turnover, Increase in Profits, and Increase in Assets.

In the regression results of tables 4, 5, and 6, the variable Variation1 has a positive and significant effect on the dependent variable

Increase in Turnover, Increase in Profit, and Increase in Assets. This means that the increasing variety of products will further increase business performance, in this case an increase in turnover, profit and assets in the business.

In the regression results of tables 4 and 5 the expansion variable<sup>1</sup> has a positive and insignificant effect on the dependent variable Increased Turnover and Increased Profit. Whereas in table 6 the expansion variable<sup>1</sup> has a significant positive effect. This means that the more branches the business is running, the more it will improve business performance, in this case an increase in turnover, profits and assets in the business.

#### **The Influence of Fintech P2P lending on sustainability of MSMEs in Indonesia**

Based on the results of the regression test, the Submission variable, namely the number of loans obtained from peer-to-peer (P2P) lending platforms, shows significant results which mean that it can improve the performance of MSMEs in terms of increasing turnover and profits, but not in increasing assets. Therefore, it can be concluded that loans obtained from peer-to-peer (P2P) lending platforms can help MSME players who lack access to capital. Capital itself is a very influential and important factor to increase the production and business performance of MSMEs itself (Marcellina, 2012). This is also reinforced by research Nandita (2018) which states that the dependent variable for business sustainability is explained by three independent variables, namely Government Support, MSME Marketing, and Type of Business. One of the support from the government is access to capital acquisition which can affect the

development of MSMEs (Sanusi, 2015). Fatoki (2014) in his research also said that usually business growth is measured by using absolute or relative, changes in sales, assets, employment, productivity, profits. This stage is very important for the continuity of company growth and the success of MSMEs.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

This research was conducted to determine the effect of Fintech Peer-to-Peer (P2P) Lending on the performance of MSMEs in Indonesia. This research was conducted with an online survey of MSME players which was conducted from January 13, 2020 to March 13, 2020 and found 70 respondents who had borrowed from the Peer-to-Peer (P2P) Lending platform for business development. Based on the research conducted, it can be concluded:

1. The results of the regression test using the Robustness Check on the dependent variable, it can be concluded that the size of the amount of funding received affects the increase in turnover and increased profit on the business being run, but does not affect the increase in assets. So, the proposed hypothesis is accepted and rejected.
2. The results of the regression test using the Robustness Check on the dependent variable Increase in Turnover, Increase in Profits, and Increase in Assets, it can be concluded that the Interest Rate affects the Performance of MSMEs. The lower the interest rate, the higher the turnover, profit and business assets
3. Regression test results using Robustness Check on the dependent variable Increase in Turnover, Increase in Profits, and Increase in Assets. It can be concluded that the Loan Times affect the performance of MSMEs. So, lending through Fintech Peer-to-Peer (P2P)

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Lending can improve the performance of MSMEs by borrowing one or more times on this platform.

## Recommendations

Based on the results of this study, the suggestions given for further research are:

1. It is expected to add variables that can affect the increase in turnover, increase in profits, and increase in

assets that are not included in this study, because in the coefficient-determination test ( $R^2$ ) there are other variables that are not in the model.

2. Increase the sample of respondents who have borrowed from both MSMEs and Peer-to-Peer (P2P) Lending companies.
3. Can compare MSMEs that get loans from Peer-to-Peer (P2P) Lending companies and MSMEs that get loans from other financial institutions.

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