

## The Influence Of Fintech On Profit Growth In Umkm In Pangkalpinang City

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**Abstrak:** Penelitian ini bertujuan untuk menguji dan menganalisis ada tidaknya pengaruh yang positif dan signifikan antara variabel fintech terhadap variabel pertumbuhan laba pada UMKM di Kota Pangkalpinang, Provinsi Kepulauan Bangka Belitung. Metode yang peneliti gunakan dalam penelitian ini adalah metode kuantitatif dengan pendekatan kuantitatif yang menggunakan sumber data primer yang diperoleh melalui penyebaran kuesioner dengan skala likert. Jumlah reponden sebanyak 100 pelaku UMKM di Kota Pangkalpinang. Metode penentuan sampel yakni Nonprobability Sampling dengan teknik purposive sampling. Teknik analisis data menggunakan bantuan software SPSS versi 25. Hasil penelitian mengungkapkan bahwa variabel fintech berpengaruh positif dan signifikan terhadap pertumbuhan laba pada UMKM di Kota Pangkalpinang yang dibuktikan dengan nilai signifikansi fintech secara parsial dari (uji t) sebesar  $0,000 < 0,05$  serta nilai t hitung yaitu sebesar  $9,835 > t$  tabel 1,661.

**Abstract:** This study aims to test and analyze whether there is a positive and significant influence between fintech variables on profit growth variables in MSMEs in Pangkalpinang City, Bangka Belitung Islands Province. The method that the researchers used in this study was a quantitative method with a quantitative approach that used primary data sources obtained through the distribution of questionnaires with Likert scales. The number of respondents is 100 MSME players in Pangkalpinang City. The sampling method is Nonprobability Sampling with purposive sampling techniques. Data analysis techniques using the help of SPSS software version 25. The results revealed that fintech variables have a positive and significant effect on profit growth in MSMEs in Pangkalpinang City as evidenced by the partial fintech significance value of (t test) of  $0.000 < 0.05$  and the calculated t value of  $9.835 > t$  table 1.661.



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### INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) have become one of the sectors most affected by the *Covid-19* pandemic which has hit the whole world including Indonesia since 2020. Based on data from the Central Statistics Agency (BPS) for Pangkalpinang City in 2021 there has been a significant increase in economic growth in Pangkalpinang City, which was 9.27 percent (YoY) which was higher than the economic growth of Bangka Belitung Province which grew by 5.05 percent (YoY) due to the

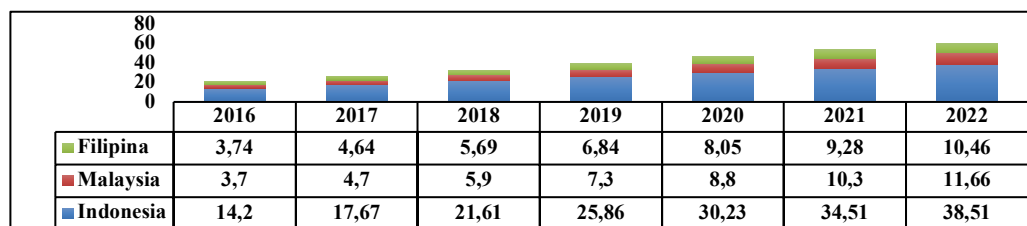
contribution of MSMEs in the aspects of processing and trade.

The revival of MSMEs after the *Covid-19 pandemic* was provoked by the digital era which is currently developing at lightning speed. The application of digitization to MSMEs is one of the solutions to improve the performance of MSMEs in terms of production, marketing and finance. Digitalization is important to do with MSMEs, because MSMEs are a vital tool for the economic growth of a region which even has an impact on economic growth for the country.

The growth and development of MSMEs after the *Covid* -19 pandemic was supported by the use and application of existing technology. Digitizing MSMEs does not only use technology to sell products, but also allows MSMEs to be able to manage various other business aspects, one of which is the financial aspect. Finance in a business is very important to *manage* as well as possible in order to minimize losses and maximize profits for the business.

The phenomenon of digital acceleration has penetrated the financial

services industry so that it has transformed the financial services industry globally and created a new phenomenon in the financial sector, namely *Financial Technology* or what is commonly called *Fintech*. *Financial Technology* is related to technology, *mobile*, internet and even *cloud computing* (Unsal & Rayfield, 2019). *Fintech* was born to be a stimulus for the growth of MSMEs in Indonesia through *Peer to Peer Lending*, *Equity Crowdfunding*, *E-Wallet* and *Personal Finance features* (Suryanto, *et al.*, 2020).



**Figure 1.**  
**Financial Technology Transaction Value for 2016-2022**

Source: Statista, 2022

Based on the data in Figure 1, it shows that Indonesia is the country with the highest projected value of *fintech transactions* during 2016-2022, with the value of *fintech transactions* in Indonesia projected to grow by an average of 15.5 per year during 2018-2022 and to USD 38.1 million in in 2022. This prediction is reinforced by the Indonesian *Fintech Association (Aftech)* which reports that the value of digital payment transactions in Indonesia is IDR 305.4 billion per year 2021.

Bank Indonesia explained that this *fintech* is a collaboration of financial services with technology that produces new products, services, technologies and business models that have an impact on monetary, financial stability, efficiency, smoothness and security in payment systems that are able to transform business into moderate. The presence of *fintech does not only provide banking facilities or services, but creates new business models to help the public to be protected and requires fintech operators to be registered with Bank Indonesia or the Financial Services Authority or OJK* (Rahma, 2018).

*Financial Technology (Fintech)* can create new opportunities for the economy to

increase economic activity to make it more effective and efficient (Afifah, 2018). *Fintech* is coveted to be able to help MSMEs to deal with business problems such as limited access to funds, minimal promotional *budgets*, preparation of difficult financial reports and inefficiencies in cash payment transactions ( Ariani & Utomo, 2017; Sutarmin & Susanto, 2017; Suryanto *et al.*, 2020).

lightning-fast development of *fintech certainly has positive and negative impacts on society*. The positive impact of *fintech* is that it can provide new opportunities and innovations for the efficiency of MSME operational activities and also positively integrates the capital lending activities of MSME actors. Meanwhile, the negative impact is that people who lack technology literacy will feel that they are not ready to accept economic changes from the existence of *fintech*, so that *fintech* is considered to be able to cause *creative destruction*.

Thus, directly or indirectly *fintech* has affected MSME activities, especially in the financial aspect, including MSMEs in Pangkalpinang City. This research will focus on the effect of *fintech* on MSMEs in

Pangkalpinang City and focus on the effect of *fintech* on profit growth in MSMEs.

## METHODS

This research method is a quantitative method with a quantitative approach using primary data which is then analyzed using statistical methods on the variables used in this study, namely the independent variable namely *fintech* (X1) on the dependent variable namely profit growth (Y) in MSMEs in Pangkalpinang City. The sampling technique in this study used the Nonprobability Sampling method with a purposive sampling technique with the following criteria: 1) The research will focus on MSMEs registered with the Pangkalpinang City Cooperative and PLUT Office; 2) The period studied is 2020-2023; 3) MSMEs that have used and carried out transactions with *fintech*.

This study uses primary data in the form of distributing questionnaires with a Likert scale. The data collection method was carried out by: 1) Distributing questionnaires to MSMEs offline (visiting MSMEs directly) and online (using Googleform assistance); 2) Give time to MSME actors to fill out the questionnaire; 3) Collecting data from the results of the questionnaire. The data analysis technique used in this study is quantitative analysis using the help of the Statistical Package for the Social Sciences (SPSS) version 25 software with: 1) Descriptive Statistical Analysis; 2) Validity test; 3) Normality test; 4) Multicollinearity test; 5) Heteroscedasticity test; 6) Test simple linear regression analysis; 7) t test.

## RESULTS AND DISCUSSION

### Results of Descriptive Statistical Analysis

**Table 1. Descriptive Statistics of Fintech and Profit Growth**

	<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
<i>Fintech</i>	100	15	25	2167	21.67	2,878
Profit Growth	100	31	50	4138	41.38	3,792
Valid N (listwise)	100					

Source: Research Results, Data processed, 2023

Table 1 shows that the amount of data or N used in this study is 100 which shows a description of *fintech* variables and profit growth. The two variables in the study show a mean value > standard deviation value, so

it can be concluded that the data deviations that occur are low and the deviation values are average for the *fintech* and profit growth variables.

### Validity Test Results

**Table 2. Validity Test Results**

Statement	R Count	Information	R Table	Conclusion
X1	0.910	>	0.165	Valid
X2	0.921	>	0.165	Valid
X3	0.904	>	0.165	Valid
X4	0.916	>	0.165	Valid
X5	0.872	>	0.165	Valid
Y1	0.737	>	0.165	Valid
Y2	0.667	>	0.165	Valid
Y3	0.721	>	0.165	Valid
Y4	0.231	>	0.165	Valid

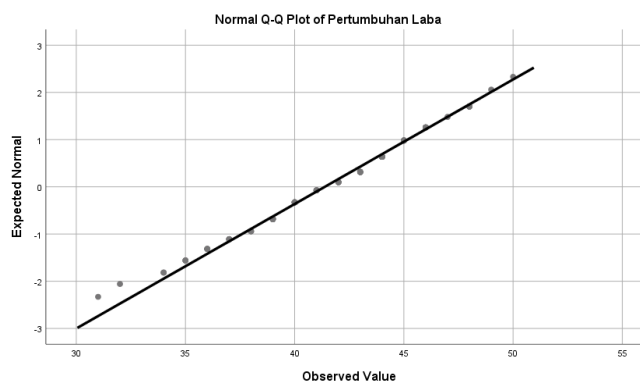
Y5	0.737	>	0.165	Valid
Y6	0.740	>	0.165	Valid
Y7	0.439	>	0.165	Valid
Y8	0.504	>	0.165	Valid
Y9	0.494	>	0.165	Valid
Y10	0.494	>	0.165	Valid

Source: Research Results, Data processed, 2023

The validity test is said to have passed if the calculated r value > r table. R table is obtained by the formula  $df = N - 2$ . Df is the number of respondents, then  $df = 100 - 2$ , then  $df = 98$  and obtained r tables at a significance of 0.05 or 5% with a one-tailed

test and obtained r tables of 0.165. Based on the test results in Table 2, it shows that all statements from the variables X and Y passed the validity test because all the r calculated values were greater than the r table values.

### Normality Test Results



**Figure 2.**  
**Normal Probability Plots**

In this study, researchers conducted a normality test using the *Normal Probability Plot method*. Decision making in this test is based on the criteria if the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram graph, then it shows a normal distribution pattern, so that the regression model meets the assumption of normality. Based on Figure 2, it can be seen that the points are spread out and follow the direction of the diagonal line so that it can be stated that the regression model

used in this study meets the assumption of normality. However, the normality test results using the *Normal Probability Plot method* tend to contain relative interpretations. So, in order to obtain more valid results, the researchers also used a normality test using the *Kolmogorov-Smirnov method* so that the interpretation related to the research results was further strengthened. Following are the results of the normality test with the *Kolmogorov-Smirnov method*.

**Table 3. Normality Test Results ( Kolmogorov-Smirnov )**  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residuals
N		100
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	2.69006232
Most Extreme Differences	Absolute	,079
	Positive	,075
	Negative	-.079
Test Statistics		,079
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Research Results, Data processed, 2023

In the *Kolmogorov-Smirnov method*, decision making is based on the criteria if significance > 0.05, then the data is normally distributed. Based on Table 3, it can be seen that the significance value of the *Kolmogorov-Smirnov test* is 0.079, which means that the *fintech variable* on

profit growth has data that is normally distributed because the significance value is 0.079 > 0.05. So, it can be concluded that the regression model residuals in this study are normally distributed. So that the residual normality assumption has been fulfilled.

### Multicollinearity Test Results

**Table 4. Multicollinearity Test Results**

		Coefficients <sup>a</sup>				Collinearity	Collinearity
Model		Unstandardized Coefficients		Standardized Coefficients		Statistics tolerance	Statistics VIF
		B	Std. Error	Beta	t		
1	(Constant)	21,258	2,064		10,301	,000	
	<i>Fintech</i>	,929	,094	,705	9,835	,000	1,000

a. Dependent Variable: Profit Growth

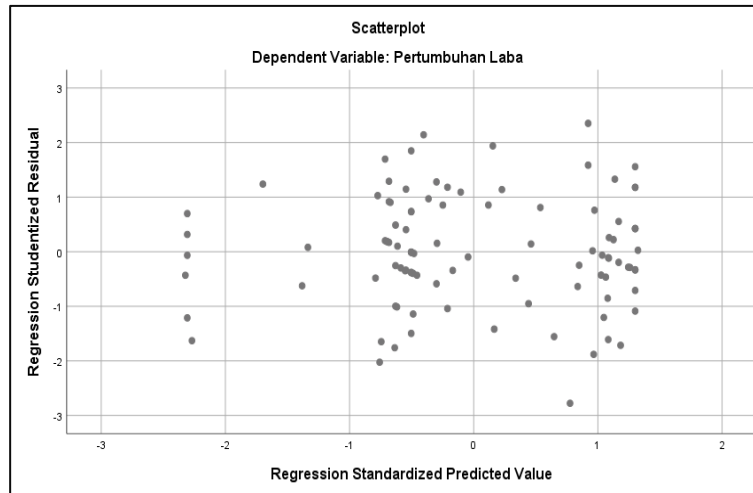
Source: Research Results, Data processed, 2023

The multicollinearity test can be declared passed if the *tolerance value* is > 0.1 and the VIF value is <10, so that it can be said that there is no multicollinearity or the regression model in this study is free from multicollinearity. Based on Table 4 it can be seen that the *tolerance value* of each independent variable is greater than 0.10, namely *fintech* (1.000 > 0.10) and the VIF value of the independent variable is less than 10, namely *fintech* (1.000 <10). So it can be concluded that the independent variables in this study do not occur

multicollinearity and non-multicollinearity assumptions for the regression model have been met.

### Heteroscedasticity Test Results

The heteroscedasticity test in this study was carried out using the *scatterplot* graph by looking at the pattern on the graph, if there is no specific pattern and it does not spread above or below the number 0 on the y axis, then there is no heteroscedasticity.



**Figure 3.**  
**Scatterplot Graph**

Source: Research Results, Data processed, 2023

Figure 3 shows that in the *scatterplot* graph the dots do not overlap and spread randomly or irregularly above and below the number 0 on the Y axis. So it can be

concluded that there is no heteroscedasticity problem in the regression model so that the regression model is feasible to use.

### Simple Linear Regression Analysis Test Results

**Table 5. Simple Linear Regression Analysis Test Results**

		Coefficients <sup>a</sup>				Q	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients			
		B	Std. Error	Beta			
1	(Constant)	21,258	2,064		10.301	,000	
	<i>Fintech</i>	,929	,094	,705	9,835	,000	

a. Dependent Variable: Profit Growth

Source: Research Results, Data processed, 2023

Based on the test results listed in Table 5, it can be concluded that the simple linear regression equation is as follows:  $Y = 21.258 + 0.929 X$ . A constant of 21.258 explains that if *fintech* (X) value is 0, hence profit growth (Y) the value is 21.258. The regression coefficient of the *fintech* variable (X) is 0.929 explaining that if the *fintech* variable (X) increases by 1%, the value of profit growth (Y) will increase or increase by 0.929% assuming the other independent variables are constant.

### T test results

The t test in this study is a simple regression coefficient test used to determine whether the independent variable (X) has a positive and significant effect on the dependent variable (Y). The t test was carried out to test the hypotheses in this study, namely as follows:

1. Determine the hypothesis
  - Ho: *Fintech* has no positive and significant effect on profit growth for MSMEs in Pangkalpinang City.

- Ha: *Fintech* has a positive and significant effect on profit growth for MSMEs in Pangkalpinang City.
- 2. Determine t count
  - Based on the output in Table 6, the t count is 9.835.
- 3. Define t table
  - T distribution table on  $\alpha = 5\%$  (one-sided test) with degrees of freedom (df)  $n-2$  or  $100 - 2 = 98$  (n is the number of respondents). With a one-sided test at significance = 0.05, the t table is obtained at 1.661.
- 4. Perform testing
  - Ho is accepted if t count < t table
  - Ho is rejected if t count > t table

The calculated t value is 9.835, while the t table value is 1.661, it can be concluded that because the t count > t table ( $9.835 > 1.661$ ) then Ho is rejected. This means that *fintech* has a positive and significant effect on profit growth for MSMEs in Pangkalpinang City.

## CONCLUSION

Based on the results of the research, it can be concluded that in this study a constant of 21.258 explains that if *fintech* (X) the value is 0, then profit growth (Y) value is 21.258. The regression coefficient value of the fintech variable (X) is 0.929 explaining that if the *fintech* variable (X) increases by 1%, the value of profit growth (Y) will increase or experience an increase of 0.929% assuming the other independent variables remain constant. The regression coefficient is positive, indicating that there is a positive relationship between *fintech* and profit growth. Based on the calculation results where the significant value of *fintech* is  $0.000 < 0.05$  and it is known that the t value is  $9.835 >$  from t table 1.661, *fintech* has a positive and significant effect on profit growth for MSMEs in Pangkalpinang City. So it can be

concluded that Ha is accepted and Ho is rejected. Based on statistical results, it can be concluded that it is very important for MSME actors to apply or use *fintech* or *financial technology* in their businesses so they can maximize the financial performance of their businesses and obtain maximum profits from their businesses.

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