



The Analysis of Small and Medium Enterprises and Tax Capital in Economic Regional Growth

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ABSTRACT

The objective of this research is to examine the significance of increasing capital in Small and Medium Enterprises development regional economy in the Asahan Regency. The method stages to be used in this research are the research flow chart, data collection, literature study, problem identification, preprocessing, data analysis used is multiple linear regression, normality test, classical assumption test, statistical tests or the coefficient of determination (R²), statistical F test, and statistical t-test), results of data analysis, final evaluation, research approach, location and time of research, and tools and materials. The independent effect on the dependent variable. From the results of statistical calculations that have been done, it can be seen that the F count > F table. Namely F count is 6.20 while the F table is 3.191. Thus, H₀ is rejected and the variables of capital and tax have an effect simultaneously and positive for the regional economy.

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1. Introduction

The contribution of Small and Medium Enterprises to growth and the role can still be improved, not only because of their resilience in facing various economic shocks, but also because of their great ability to provide jobs and overcome poverty. However, in developing their businesses, Small and Medium Enterprises face various obstacles both internally and externally, these problems include: 1) management, 2) capital, 3) technology, 4) raw materials, 5) information and marketing, 6) infrastructure, 7) bureaucracy and fees, 8) partnerships. From the various problems faced by SMEs, it seems that capital remains one of the important needs in order to run their business, both working capital and investment needs. To ensure optimism for the development of SMEs in the future, clearly requires strengthening the role and strategy of financing, especially from the government and the banking industry to support it. Therefore, the government is trying to find a solution, one of which is by asking for the commitment of banks in financing in their business planning and also by providing revolving funds from the APBD or the set aside of BUMN / D profits.

In addition, the government optimizes the role of the guarantee institution as credit guarantor proposed can still enjoy bank credit even though they cannot fulfill part of the requirements set by banks. Therefore, the researcher wants to test the significance of increasing capital in Small and Medium Enterprises in improving the regional economy in Asahan District. The problem faced in Indonesia today is capital. So that with the addition of capital, it is hoped that these be able to support the economy in underdeveloped villages, thereby increasing the standard of living of these villages with a multiplier effect. From the descriptions above, the authors argue that increasing the capacity of Small and Medium Enterprises through the provision of capital assistance and the effect of taxes on regional economic growth is very interesting to be studied academically. Regulations issued by the Government of Indonesia, the Financial Services Authority, Bank Indonesia, the Tax Office and Local Governments can help and further develop SMEs in Indonesia.

2. Review of Literature

2.1. Micro, Small and Medium Enterprises

In accordance with Law Number 20 of 2008 concerning Small and Medium Enterprises Micro definition as follows:



- a) Micro Business is a productive business owned by an individual and / or an individual business entity criteria of a Micro Business as regulated in this Law.
- b) Small Business is a productive economic business that stands alone, which is carried out by individuals or business entities are not a subsidiary or branch of a company that is owned, controlled, or is a part, either directly or indirectly of a medium or large business. criteria for Small Business as referred to in this Law.
- c) Medium Business is a productive economic business that stands alone, which is carried out by an individual or a business entity that is not a subsidiary or branch of a company that is owned, controlled, or is part of, either directly or indirectly, with a small or large business with total assets or annual sales proceeds as regulated in this Law.

The position of Small and Medium Enterprises Micro in the Indonesian economy can be seen from: (a) Their position as major players in economic activity in various sectors; (b) The largest employer; (c) An important player in the development of local economic activities and community empowerment; (d) New market creators and innovations; and (e) Contribution in maintaining the balance of payments through its contribution in generating exports. The existence and role of SMEs, which in 2008 reached 51.26 million business units, and constituted 99.99 percent of national business actors, in the national economic order, there is no doubt, given their employment contribution, formation of Gross Domestic Product (GDP) National, national foreign exchange, and national investment.

The Solow-Swan growth theory is broadly similar to the Harrod-Domar theory, where the assumptions underlying this model are:

- a) The workforce (or population) grows at a certain rate, for example P per year.
- b) The production function $Q = f(K, L)$ applies to each period.
- c) There is a tendency to save (propensity to save) by the community which is expressed as a certain proportion (s) of output (Q). Public savings $S = sQ$; if Q goes up S also goes up, and vice versa.
- d) All people's savings are invested $S = I = \Delta K$

An increase productivity raises both output and consumption per labor in two ways. First, it directly increases the amount that can be produced at each level of the capital-labor ratio. Second, by increasing the saving supply, the increase in productivity has also caused the long-term capital-labor ratio. Thus, productivity through Small and Medium Enterprises Micro has a beneficial multiplier effect on living standards , it can be concluded that in the long run the rate of increase in productivity is the dominant factor determining how fast the economy grows.

2.2. Economic growth

Economic growth is the development of activities in the economy that causes goods and services produced in society to increase and the welfare of society increases. Economic growth problems can be viewed as macroeconomic problems in the long run. The development of the ability to produce goods and services as a result of additional production factors is not always followed by an increase in the production of goods and services of the same magnitude. The increase in production potential is often greater than the actual increase in production. Thus economic development is slower than its potential.

Economic growth is the process of increasing per capita output in the long run. There are three aspects that need to be considered, namely process, per capita output and long term. Economic growth is a process, not a picture of the economy at a time. Here we can see the dynamic aspects of an economy, namely seeing how the economy develops or changes from time to time. Economic growth is associated with an increase in per capita output. There are two things that need to be considered, namely the total output side and the population side. Output per capita is the total output divided by the population. So the process of increasing per capita output, inevitably, must be analyzed by looking at what happened to the total output on the one hand, and the population on the other. The indicator used to measure economic growth is the growth rate of Gross Domestic Product (GDP). There are several reasons that underlie the choice of Gross Domestic Product (GDP) growth rather than other indicators such as the growth of the Gross National Product (GNP) as an indicator of growth.

3. Research Methodology

This research is quantitative methods to test hypotheses or to answer research problem. The location of this research will be carried out in the computer laboratory of the Muhammadiyah Asahan School of Economics. The research period starts from March 2020 to October 2020. Data collection is carried out to obtain the information needed in order to achieve the research objectives. Data were collected from a predetermined sample, the data collected is data on credit development of Microfinance Institutions which is sourced from the official website of the Financial Services Authority (OJK), the Tax Office as well as data on

economic growth measured by the development of Gross Domestic Product (GDP) sourced from the official website of Bank Indonesia (BI) from 2009 to 2018.

4. Result and Discussion

The dependent variable in this study is the regional economic growth of the Asahan Regency which fluctuated according to development.

Table 1.
The Gross Domestic Product from 2017 to 2019
Billion Rupiah

Years	2015	2016	2017	2018	2019
	26416,33	29206,70	32020,19	34664,89	37440,42

Source: BPS Asahan Regency

From the table data above, we can see that the lowest Gross Domestic Product (GDP) is 26416.33 billion rupiah and continues to increase until 2019, totally 37440.42 billion rupiah.

The independent variable in this study is a vital thing that must be owned by a company especially for developing small and medium enterprises micro, without business capital it will be difficult to carry out its activities.

Table 2.
The Capital, Taxes and Income of Small and Medium Enterprises Micro

Years	Capital	Income	Taxes
2017	Rp 72.333.000	Rp 123.120.000	Rp 615.600,00
2018	Rp 76.140.000	Rp 129.600.000	Rp 648.000,00
2019	Rp 84.600.000	Rp 144.000.000	Rp 720.000,00
2017	Rp 7.375.000	Rp 13.530.000	Rp 67.650,00
2018	Rp 7.604.000	Rp 13.951.000	Rp 69.755,00
2019	Rp 8.004.000	Rp 14.685.600	Rp 73.425,00
2017	Rp 30.800.000	Rp 40.176.000	Rp 200.880,00
2018	Rp 32.100.000	Rp 41.850.000	Rp 209.250,00
2019	Rp 34.500.000	Rp 45.000.000	Rp 225.000,00
2017	Rp 17.415.000	Rp 85.300.000	Rp 426.500,00
2018	Rp 18.330.000	Rp 89.787.800	Rp 448.939,00
2019	Rp 19.500.000	Rp 95.519.000	Rp 477.595,00
2017	Rp 104.620.000	Rp 214.410.000	Rp 1.072.000,00
2018	Rp 111.300.000	Rp 228.096.000	Rp 1.140.480,00
2019	Rp 123.666.000	Rp 253.440.000	Rp 1.267.200,00
2017	Rp 980.500.000	Rp 2.440.384.000	Rp 12.201.920,00
2018	Rp 1.054.300.000	Rp 1.548.800.000	Rp 7.744.000,00
2019	Rp 1.198.070.000	Rp 1.760.000.000	Rp 8.800.000,00
2017	Rp 45.127.000	Rp 155.610.000	Rp 778.050,00
2018	Rp 47.502.000	Rp 168.800.000	Rp 844.000,00
2019	Rp 52.200.000	Rp 180.000.000	Rp 900.000,00
2017	Rp 2.450.000	Rp 7.595.000	Rp 37.975,00
2018	Rp 2.716.000	Rp 8.440.000	Rp 42.200,00
2019	Rp 2.800.000	Rp 8.700.000	Rp 43.500,00
2017	Rp 90.137.000	Rp 112.358.000	Rp 561.925,00
2018	Rp 102.429.000	Rp 127.680.000	Rp 638.400,00
2019	Rp 107.820.000	Rp 134.400.000	Rp 672.000,00
2017	Rp 34.790.000	Rp 49.509.000	Rp 247.545,00
2018	Rp 37.816.000	Rp 53.815.000	Rp 269.075,00
2019	Rp 40.230.000	Rp 57.250.000	Rp 286.250,00
2017	Rp 360.871.000	Rp 446.440.000	Rp 2.232.200,00
2018	Rp 396.563.000	Rp 490.500.000	Rp 2.452.500,00
2019	Rp 440.625.000	Rp 545.105.000	Rp 2.725.525,00
2017	Rp 180.180.000	Rp 235.870.000	Rp 1.179.350,00
2018	Rp 200.200.000	Rp 262.080.000	Rp 1.310.400,00
2019	Rp 220.000.000	Rp 288.000.000	Rp 1.440.000,00
2017	Rp 318.870.000	Rp 355.090.000	Rp 1.775.450,00
2018	Rp 325.370.000	Rp 362.338.000	Rp 1.811.690,00
2019	Rp 369.748.000	Rp 411.747.000	Rp 2.058.735,00
2017	Rp 352.813.000	Rp 428.310.000	Rp 2.141.550,00
2018	Rp 367.513.000	Rp 446.157.000	Rp 2.230.785,00
2019	Rp 412.937.000	Rp 501.300.000	Rp 2.506.000,00



Years	Capital	Income	Taxes
2017	Rp 361.151.000	Rp 403.580.000	Rp 2.017.900,00
2018	Rp 380.160.000	Rp 424.820.000	Rp 2.124.100,00
2019	Rp 432.000.000	Rp 482.750.000	Rp 2.413.750,00
2017	Rp 158.800.000	Rp 189.030.000	Rp 794.000,00
2018	Rp 172.639.000	Rp 205.470.000	Rp 1.027.350,00
2019	Rp 189.714.000	Rp 225.798.000	Rp 1.143.990,00
2017	Rp 80.940.000	Rp 166.980.000	Rp 834.900,00
2018	Rp 87.033.000	Rp 179.550.000	Rp 897.750,00
2019	Rp 91.614.000	Rp 189.000.000	Rp 945.000,00

Source: Office of Cooperatives and Trade, Questionnaire (processed)

From the table above, it can be seen that the capital has increased every year. The increase in capital was followed by an increase in the tax provided by Small and Medium Enterprises Micro. With the increase in taxes, regional income will also increase automatically.

3.1. The Classic Assumption Test

Multicollinearity test aims to test whether the independent variables have a direct (correlated) perfect relationship.

Coefficients^a

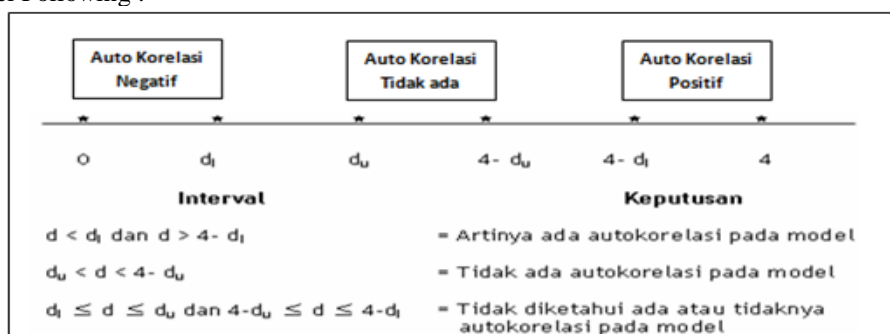
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-7.370E8	6.926E8		-1.064	.293		
Capita;	173.991	50.553	.447	3.442	.001	.984	1.017
Taxes	-46.620	155.602	-.039	-3.00	.766	.984	1.017

a. Dependent Variable: Economic Growth

Secondary research data is said to be free from multicollinearity problems if the colinearity statistics column shows the tolerance results above 0.1 and the variation inflation factor (VIF) value is not more than ten. The resulting tolerance results are all above 0.1 and the total results are not more than 10. it means that the research data is free from multicollierity problems. From the table above, it can be seen that the tolerance in the colinearity statistics column shows the number 0.984 for capital and taxes, which means the data is free from problems.

3.2. The Autocorrelation Test

The autocorrelation test aims to test whether there is an automatic relationship between the dependent variable and the independent variable. The results are free from autocorrelation problems. Tested with Durbin Watson model Following :



Model Summary^b

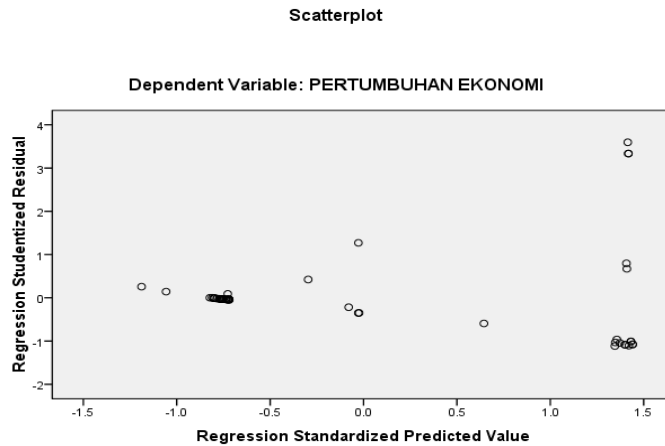
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.453 ^a	.205	.172	2.427E9	.514

a. Predictors: (Constant), Taxes, Capital

b. Dependent Variable: Economic Growth

3.3. The Heteroscedasticity

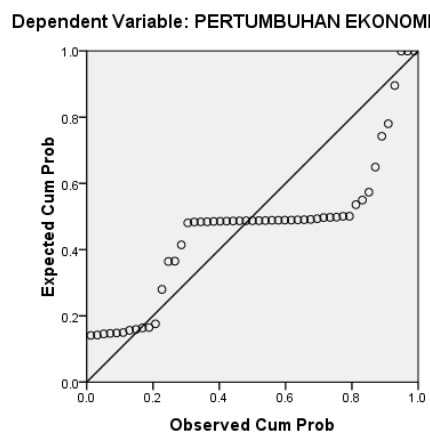
The heteroscedasticity test aims to ensure that the data is heterogeneous, generally does not have the same data movement properties, does not accumulate or does not form a certain line pattern. Taking into account the results of the image below, the data is still randomly distributed, and it can be concluded that the data is free from heteroscedasticity problems.



3.4. The Normality Test

The normality test can be seen from the movement of data that is still around the diagonal line means that the resulting regression equation will be BLUE (Best Linear Un Estimation).

Normal P-P Plot of Regression Standardized Residual



3.5. The Result of Partial Test (T test)

Partial regression test results, significant or not can be seen in two ways. The first method, Variable X has a significant effect on Variable Y if the results are Sig < 0.05 or below 5%.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-7.370E8	6.926E8		-1.064	.293		
Capital	173.991	50.553	.447	3.442	.001	.984	1.017
Taxes	-46.620	155.602	-.039	-.300	.766	.984	1.017

a. Dependent Variable: Ecomics Growth

The sig result for variable X1 is 0.01 or 1.0%. The sig result for variable X2 is 0.766 or 76.6%. So in this study only the X1 variable has a Sig < 0.05. Based on this first method, the variable X1 does not have a significant effect on the devendent variable Y. The second way is to compare t_{count} with t_{table} . Significant if $t_{count} > t_{table}$. The test results show that t for X1 is 3.442. The calculated t value for X2 is -0.300. While the t_{table} value is



1.68. The t_{table} result of 1.68 can be seen from the t distribution table for the two-way test, in column 0.05 or (5%) and on row 49 (total data 51 minus the number of independent variables 2). So the independent variable X1 has t_{count} greater than t_{table} . Thus, based on this second method, the variable X1 has a significant effect on Y.

3.6. The Results of Partial Test (Regression Equations)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-7.370E8	6.926E8		-1.064	.293		
Capital	173.991	50.553	.447	3.442	.001	.984	1.017
Taxes	-46.620	155.602	-.039	-.300	.766	.984	1.017

a. Dependent Variable: Economics Growth

The regression equation formed is: $Y = 3,370 + 3,442 X1 - 0,300 X2 + e$. That is, if X1 and X2 are zero, then the Y variable will be constant at 3,370. If there is an increase in X1 of 1, there will be an increase in Y of 3.442 and vice versa. If there is an increase in X2 by 1, then there will be a decrease in Y of 0.300 and vice versa.

3.7 The Results of Simultaneous Test (Test F)

Simultaneous test results can be viewed in two ways as well. The first way, simultaneously the variables X1 and X2 will have a significant effect on Y, if $Sig < 0.05$. The results in the ANOVA table below show the results of Sig 0.04, which means that simultaneously the variables X1 and X2 have a significant effect on Y.

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.302E19	2	3.651E19	6.200	.004 ^a
	Residual	2.826E20	48	5.888E18		
	Total	3.556E20	50			

a. Predictors: (Constant), Taxes, Capital

b. Dependent Variable: Economics Growth

The second way is, simultaneously the variables X1 and X2 will have a significant effect on Y, if $F_{count} > F_{table}$. The results in the ANOVA table below show that the F_{count} is 6.20. While the F_{table} is 3,191. The results of F_{table} 3,191 can be seen in the F distribution table, in column 2 (total of all variables 3 minus the number of dependent variables 1) in row 48 (total data 51 minus the number of variables 3) means that simultaneously the variables X1 and X2 have a significant effect on Y.

3.8. The Coefficient of Determination

The coefficient of determination is the ability of all independent variables to explain the dependent variable. The coefficient of determination adjusted R Square is 0.172 or 17.2%, which the ability of variables X1 and X2 in explaining variable Y is 17.2%. The remaining 82.8% is explained by other variables outside of this research variable.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.453 ^a	.205	.172	2.427E9	.514

a. Predictors: (Constant), Taxes, Capital

b. Dependent Variable: Economics Growth

R of 0.453 means that the multiple correlation is moderate. The error rate generated in the regression equation from the results of this study is 0.828 or 82.8%.

5. Conclusion

Based on the results of statistical tests, it can be seen that partially the independent variables affect the dependent variable. From the results of statistical calculations that have been carried out, it can be seen that F

$F_{count} > F_{table}$. That is, F_{count} is 6.20 while F_{table} is 3.191. Thus H_0 is rejected and the capital and tax variables have a simultaneous and positive effect on the regional economy. Thus, it can be seen the increasing capital owned by Small and Medium Enterprises Micro will help increase income and taxes. Paying taxes will help increase local income. Therefore, it is hoped that the government will pay more attention to the Small and Medium Enterprises Micro environment. Because the better Small and Medium Enterprises Micro will help create employment opportunities and also help improve the regional economy.

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