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Circulative Funds, Loans, Term Deposits And Savings In Gross Domestic Product

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ABSTRACT

Business activities in a country are greatly influenced by the conditions of that country. In Indonesia, with Covid-19, the amount of public loans for working capital, business and consumption has increased. However, before Covid-19, there was a decline from 2017 to 2020. So, with the decreasing increase in the number of loans, it can be interpreted that community business activities have decreased. With the decline in community businesses, funds for operational business activities are saved. So that deposits and savings will increase from 2017 to 2020. As a result of the decline in business operations in the business world, this will result in a decrease in Gross Domestic Product from 2017 to 2020. However, in reality the funds circulating in society have increased during this time. After the Covid-19 pandemic has passed, circulating funds will decrease again in 2022. Under these conditions, the research aims to determine whether there is a relationship between circulating funds, loans, deposits and savings on Gross Domestic Product in Indonesia.

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1. INTRODUCTION

Business activities in Indonesia are greatly influenced by the situation of the country(Mutia et al., 2019). This can be seen with Covid-19. Where Covid-19 is a very significant epidemic that can change the conditions of a country. As time goes by, Indonesia's population always increases(Cahyo, 2018). Even though Covid-19 has killed many lives, Indonesia's population is still increasing(Bastian, 2019). Likewise, the amount of public loans, both for working capital, for business and for consumption, has increased(Astuti, Marhanani T. & Noor, 2016). However, the amount of the increase has changed, namely decreasing from 38% in December 2017 to -31% in March 2020(Shadiq et al., 2020). So the decreasing increase in the number of loans can mean that people's business activities have decreased.

With the decline in community business, funds for operational business activities are saved. So deposits and savings will increase from 6,57% in 2017 to 10,42% in 2020. Due to the decline in business operations, this will result in a decrease in Gross Domestic Product from 9.58% in 2017 to 6,70% in 2020 However, the reality is that

funds circulating in the community are increasing, namely from 4,77% in 2017 to 18,54% in 2020 during the Covid-19 pandemic. Even last year the increase decreased to 2,54% for 2022(Yosefi, 2023).

According to Mankiw, Gross Domestic Product is a measure of economic performance(Irwansyah, 2019). Gross Domestic Product can be seen from the total expenditure on goods and services as well as the total income from the economy for each person. So Gross Domestic Product can measure the income of many people. And can measure economic expenditure on all products(Sitindaon, 2013).

Circulating funds are funds held by the public to be used to fulfill their needs in the form of consumption, investment and saving. So, with an increase in the amount of funds circulating in a country, the higher the level of the country's economy(Meyliana & Mulazid, 2017). Loans are funds prepared for use by the community according to their needs within a certain period of time and will be returned within the specified time. Loans include, among others, Working Capital Loans; Business Loans and Consumer Loans(Mentang et al., 2018).

Working Capital Loans are funds borrowed by the public to be used for additional business operational activities. Business Loans are funds borrowed by the community to be used in starting business operational activities. Funds borrowed by the community to be used in business operational activities(Meyliana & Mulazid, 2017). Term savings are savings from people who agree in advance on their deposit period. So the pick-up time has been determined in advance. This is used by depositors to provide loans to people in need(Meyliana & Mulazid, 2017).

Savings are public savings that do not have a specified periodic withdrawal period. Savings interest increases along with increasing savings. An increase in savings will improve the economy (Yulianti, Farida, 2019). In accordance with the Solow Growth Model which states that savings, population growth and technological progress will influence the level of economic output. The Solow Model also shows that the savings rate is the key to capital stock. If the savings rate is high, the economy will have a high level of funding. High capital preparation will advance the use of technology and increase productivity according to the resources used(Biaya et al., 2023).

The explanation above shows the cash flow in Indonesia which will indicate the size of gross domestic product(Menteri-Keuangan, 2019). In this way, it is hoped that in Indonesia the opinion of the Solow Growth Model can be fulfilled that savings, population growth and technological progress will influence the level of economic output. So that Indonesia can have high capital funding preparations to increase gross domestic product.

From this, a problem can be drawn, namely whether there is a partial or simultaneous influence relationship between Time Deposits, Savings, Circulating Funds and Loans on Gross Domestic Product (Y). Is there a partial and simultaneous influence relationship between Time Deposits (X_1) and Savings (X_2) on Circulating Funds (Z_1) and on Loans (Z_2). What is the direct and indirect relationship between Time Deposits and Savings on Gross Domestic Product with intervening Funds in Circulation and Loans.

2. RESEARCH METHODS

The research method uses a qualitative descriptive analysis study. The research data is secondary data sourced from Bank Indonesia reports in the form of Financial Reports from 2017 to 2022. This research is to discuss partial and simultaneous influence relationships so it will be analyzed using multiple linear regression analysis. To discuss direct and indirect relationships, they will be analyzed using intervening analysis through simple linear regression analysis and multiple regression analysis.

The research method uses quantitative analysis with research data in the form of secondary data on an interval scale issued by Bank Indonesia in February 2023. The analysis begins with descriptive statistical analysis in the form of data studies using the

Classical Assumption Test followed by inferential statistical analysis in the form of Simple Regression Analysis and Analysis. Multiple Regression and Intervening Analysis and hypothesis testing. The data analysis process uses the SPSS version 22 application. The conceptual framework for this research is as follows.

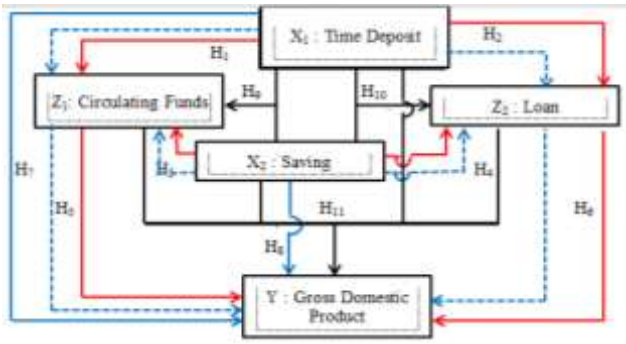

Figure 1. Conceptual Framework

Figure Description:

- Simple Regression
- Multiple Regression
- Direct Connection
- Indirect Relationships

Research with two Dependent variables, namely variable X_1 representing Term Savings and variable X_2 representing Savings. One independent variable, namely variable Y, represents Gross Domestic Product. And two intervening variables, namely variable Z_1 regarding Circulating Funds; variable Z_2 represents Loans.

In discussing what factors influence gross domestic income in a country, namely Indonesia. For this reason, this research will discuss the partial and simultaneous influence between: 1-4 & 9-10) Term Deposits and Savings have a partial and simultaneous influence on Circulating Funds and Loans. 5-8 & 11) Time Deposits, Savings, Circulating Funds and Loans influence Gross Domestic Product. 12-15) And closed with a discussion of the direct and indirect relationship between Term Deposits and Savings to Gross Domestic Product with intervening Funds in Circulation and Loans.

According to the problem formulation, there is a research hypothesis as follows. 5-8 & 11) Time Deposits, Savings, Circulating Funds and Loans have a partial and simultaneous effect on Gross Domestic Product. 1,3,9) Time Deposits and Savings have a partial and simultaneous effect on Circulating Funds. 2,4,10) Time Deposits and Savings have a partial and simultaneous effect on Loans. 12-13) Time Deposits and savings influence Gross Domestic Product by intervening Funds in Circulation. 14-15) Time Deposits and savings influence Gross Domestic Product with intervening loans.

3. RESULTS AND DISCUSSION

3.1 Test Research Data

The validity test is known as Karl Pearson's Product Moment correlation test on Gross Domestic Product which can be seen in the SPSS program results coefficient table as follows:

Table 1. Karl Pearson Product Moment Correlation Coefficient

	GDP	Deposito	Savings	Out Standing Fund	Loan
Pearson Correlation	1	0,707**	0,753**	0,535**	0,594**
Sig. (2-tailed)		0,000	0,000	0,000	0,000

N	64	64	64	64	64

**. Correlation is significant at the 0.01 level (2-tailed).

The table above shows that all calculated correlation coefficients are between 0,535 and 0,753. All of them are above the table coefficients. Meanwhile, the table coefficient for 64 samples with a significance level of 5% is row n-2, which is 0,203 for one side and 0,241 for two sides. This shows that all questionnaires are declared valid.

Meanwhile, the reliability test using the Cronbach's Alpha test has a coefficient of 0,650 for 4 variables, 0,683 for 3 variables and 0,348 for 2 variables. Because all Cronbach's Alpha coefficients were greater than 0.20, the entire questionnaire was declared reliable.

3.2 Classic assumption test

In this regression model there are several conditions that must be met so that the forecasting model is made valid as a forecasting tool, namely that the regression must not have biased estimates, which is called Best Linear Un] Estimation (BLUE).

Based on the normality test using the Kolmogorov Smirnov Z test, Asymp was obtained. Sig. of 0.200 which is much greater than 0.05 so that the data is declared to be normally distributed and regression analysis can be continued.

Tabel 2. One-Sample Kolmogorov-Smirnov Test

		GDP
N		64
Normal Parameters[a,b]	Mean	537762,3704
	Std. Deviation	59439,62766
Most Extreme Differences	Absolute	0,098
	Positive	0,098
	Negative	-0,075
Test Statistic		0,098
Asymp. Sig. (2-tailed)		0,200[c,d]

According to the Multicollinearity Test, it is designed to determine whether there is a high correlation between the independent variables in the multiple linear regression model. If there is a high correlation between independent variables, then the relationship between the independent variable and the dependent variable is disrupted. In accordance with the results of the SPSS program, it shows that according to the table below:

Tabel 3. Coefficiens

Model	Collinearity Statistics	
	Tolerance	VIF
Deposit	0,143	6,986
Saving	0,390	2,562
Out Standing Fun	0,411	2,430
Loan	0,339	2,949

The resulting tolerance coefficients range from 0,143 to 0.411, all of which are greater than 0,1. And VIF has coefficients between 2,430 and 6,986, all of which are below 10. So it does not show multicollinearity and can be continued for Regression Analysis. According to table 4 below, the Autocorrelation Test shown by the Durbin-Watson test has a coefficient of 0,667 at a significance level of 5%. This condition is located in a position between -2 to +2, meaning there is no autocorrelation. So that the regression analysis can be continued.

3.3 Multiple Linear Regression Analysis

a. Coefficient of Determination

All independent variables consist of the Time Savings variable; Savings variable; The Circulating Funds variable and the Loans variable together have a fairly strong relationship, symbolized by R of 78.1% of Gross Domestic Product.

Tabel 4. Summary of all variables on GDP

Model	R	R Square	Adjusted R Square	Change Statistics			Durbin-Watson
				R Square Change	F Change	Sig. F Change	
1	0,781[a]	0,610	0,584	0,610	23,088	0,000	0,667

a. Predictors: (Constant), Loan, Circulating Funds, Savings, Deposito
b. Dependent Variable: GDP

The coefficient of determination symbolized by R^2 is 0.61. It can be interpreted that all variables consisting of savings; Savings; Circulating Funds and Loans together have an influence of 61% on Gross Domestic Product. Meanwhile, the critical value, namely Adj R^2, is 0,584, indicating that there are other variables outside the four variables studied which will influence Gross Domestic Product by 41,8%.

Tabel 5. Summary for Time Deposit And Saving

Model For Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Out Standing Fund	0,794[a]	0,631	0,619	586083,88776
Loan	0,743[a]	0,553	0,538	786316,94076

a. Predictors: (Constant), Savings, Deposito
b. Dependent Variable: Circulating Funds; Loan

Meanwhile, the relationship between Time Deposits and Savings to Circulating Funds has a stronger coefficient of determination (R2), namely 63,1%. The critical value, namely Adj R^2, is 0,619, indicating that there are 38,1% other variables outside the two variables studied. And regarding the influence relationship between Term Savings and the Savings variable; Together, loans have a coefficient of determination (R^2) that is less strong, namely 55,3%. Meanwhile, the critical value, namely Adj R^2, is 0,538, indicating that there are 46,2% other variables outside the two variables studied.

b. Simple Linear Regression Coefficients

Simple Linear Regression which shows the relationship between one independent variable and one dependent variable. There are two equations that state the infuence on Circulating Funds according to the following coefficient table:

Tabel 6. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2843611,173	1145726,791		-2,482	0,016
Deposito	4,435	0,507	0,743	8,741	0,000
(Constant)	-280270,396	1376936,533		-0,204	0,839
Savings	3,366	0,623	0,566	5,406	0,000

The first equation $Z_1 = a + s\ X_1$ which shows that Circulating Funds = -2.843.611,173 + 4,435 Deposits. This means that without being influenced by Time Deposits, the Circulating Funds are already underloaded by 2.843.611,173 and by increasing one Time Deposit variable, the Circulating Funds will increase by 4,435 units.

The third equation $Z_1 = a + t\ X_2$ which shows that Circulating Funds = -280.270,396 + 3,366 Savings. This means that without being influenced by Savings, the Circulating Funds are already underloaded by 280.270,396 and by increasing one Savings variable, the Circulating Funds will increase by 3,366 units.

There are two equations that express the influence on borrowing according to the following coefficient table:

Tabel 7. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-4052877,202	854453,954		-4,743	0,000
Deposito	3,890	0,378	0,794	10,283	0,000
(Constant)	-1767892,270	1095489,328		-1,614	0,112
Savings	2,936	0,495	0,601	5,928	0,000

The second equation $Z_1 = a + t X_2$ which indicates that Loans = -4.052.877,202 + 3,890 Deposito. This means that without being influenced by Time Savings, the Loan is already underloaded by 4.052.877.202 and by increasing one Time Savings variable, the Loan will increase by 3,890 units.

The fourth equation $Z_2 = a + v X_2$ which shows that Loans = -1.767.892,270 + 2,936 Savings. This means that without being influenced by Savings, Loans are already underloaded by 1.767.892,270 and by increasing one Savings variable, Loans will increase by 2,936 units.

There are four equations that express the influence on GDP according to the following table:

Tabel 8. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	49605,077	62189,315		0,798	0,428
Deposit	0,217	0,028	0,707	7,878	0,000
(Constant)	31023,453	56513,131		0,549	0,585
Saving	0,230	0,026	0,753	9,001	0,000
(Constant)	341568,053	39847,181		8,572	0,000
Circulating Fund	0,027	0,006	0,535	4,987	0,000
(Constant)	363015,106	30671,074		11,836	0,000
Loan	0,037	0,006	0,594	5,811	0,000

The fifth equation $Y = a + q Z_1$ which shows that Gross Domestic Product = 341.568,053 + 0,027 Funds in Circulation. This means that without being influenced by Circulating Funds, Gross Domestic Product already has a load of 341.568,053 and by increasing one variable of Circulating Funds, Gross Domestic Product will increase by 0,027 units.

Equation six $Y = a + r Z_2$ which shows that Gross Domestic Product = 363.015,106 + 0,037 Loans. This means that without being influenced by loans, Gross Domestic Product already has a load of 363.015,106 and by increasing one Loan variable it will increase Gross Domestic Product by 0,037 units.

The seventh equation $Y = a + o X_1$ which shows that Gross Domestic Product = 49.605,077 + 0.217 Deposits. This means that without being influenced by term savings, Gross Domestic Product already has a load of 49,605,077 and by increasing one term savings variable, Gross Domestic Product will increase by 0,217 units.

The eighth equation $Y = a + p X_2$ which shows that Gross Domestic Product = 31.023,453 + 0,230 Savings. This means that without being influenced by Savings, Gross Domestic Product already has a load of 31.023,453 and by increasing one Savings variable, Gross Domestic Product will increase by 0,30 units.

c. Multiple Linear Regression Coefficients

Multiple Linear Regression which shows the relationship between several independent variables on one dependent variable.

In Multiple Liner Regression there are three further equations, namely: The ninth equation which is in accordance with the table below is $Z_1 = a + d_1 X_1 + d_2 X_2$. which shows that the Circulating Funds = -2.754.148,019 + 4,593 Deposito – 0,202 Savings. This means that without being influenced by the Time Deposits and Savings variables, the Circulating Funds are already underloaded by 2,754,148,019. And by increasing one Time Savings variable, the Circulating Funds will increase by 4,593 units. And by increasing one Savings variable, the Circulating Funds will decrease by 0.202 units.

Tabel 9. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2754148,019	1209216,862		-2,278	,026
Deposito	4,593	,816	,770	5,625	,000
Savings	-,202	,813	-,034	-,249	,804

The tenth equation that corresponds to the table below is $Z_2 = b + e_1 X_1 + e_2 X_2$. which shows that the Loans = -3.955.877,498 + 4,062 Deposito – 0,219 Savings . This means that without being influenced by the Time Deposits and Savings variables, the loan is already underloaded by 3,955,877,498. And by increasing one term savings variable, loans will increase by 4,062 units. And by increasing one Savings variable, Loans will decrease by 0.219 units.

Tabel 10. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-3955877,498	901293,718		-4,389	0,000
Deposito	4,062	0,609	0,829	6,675	0,000
Savings	-0,219	0,606	-0,045	-0,362	0,719

The eleventh equation is $Y = c + f_1 X_1 + f_2 X_2 + f_3 Z_1 + f_4 Z_2$ which shows that Gross Domestic Product = 23.547,499 + 0,043 Term Savings + 0,159 Savings + 0,004 Funds in Circulation + 0,008 Loans.

Tabel 11. Coefficiens of Simple Linear Regretion

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	23547,499	73115,313		0,322	0,749
Deposito	0,043	0,066	0,141	0,658	0,513
Savings	0,159	0,040	0,522	4,009	0,000
Circulating Funds	0,004	0,007	0,071	0,561	0,577
Loan	0,008	0,009	0,134	0,961	0,341

This means that without being influenced by the Time Deposits, Savings, Circulating Funds and Loans variables, Gross Domestic Product already has a load of 23.547,499. And by increasing one Time Savings variable, Gross Domestic Product will increase by 0,043 units. By increasing one Savings variable, Gross Domestic Product will increase by 0,159 units. By increasing one variable in Circulating Funds, Gross Domestic Product will increase by 0,004 units. And by increasing one Loan variable, Gross Domestic Product will increase by 0,008 units.

d. Partial Hypothesis Testing

At a significance level of 0,05 for 64 respondents the t-table is 2,29. So according to the results of the first analysis, it shows that the relationship between the influence of

Term Savings (X_1) on Circulating Funds (Z_1) has a t-count of 8,741 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect. The results of the second analysis show that the relationship between the influence of Term Savings (X_1) on Loans (Z_2) has a t-count of 10,283 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect.

The results of the third analysis show that the relationship between the influence of Savings (X_2) on Circulating Funds (Z_1) has a t-count of 5,406 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect. The results of the fourth analysis show that the relationship between savings (X_2) and loans (Z_2) has a t-count of 5.928 with a significance coefficient of 0.000 which is less than 0.05. This shows that the relationship between these two variables has a significant effect.

The results of the fifth analysis show that the relationship between the influence of Circulating Funds (Z_1) on Gross Domestic Product (Y) has a t-count of 4,987 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect. The results of the sixth analysis show that the relationship between the influence of Loans (Z_2) on Gross Domestic Product (Y) has a t-count of 5,811 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect.

The results of the seventh analysis show that the relationship between the influence of Time Savings (X_1) on Gross Domestic Product (Y) has a t-count of 7,878 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect. The results of the eighth analysis show that the relationship between the influence of Savings (X_2) on Gross Domestic Product (Y) has a t-count of 9,001 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these two variables has a significant effect.

e. Simultaneous Hypothesis Testing

At a significance level of 0,05 for 64 respondents the f-table is 2,66. So according to the results of the analysis, it shows that for Time Deposits and Savings in relation to Circulating Funds, the calculated f is 37,659 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these variables has a significant effect.

Tabel 12. F Test

Predictors	Dependent Variable	F	Sig.
Savings, Deposito	Circulating Funds	37,659	0,000[b]
Savings, Deposito	Loan	52,196	0,000[b]
Loan, Circulating Funds, Savings, Deposito	GDP	23,088	0,000[b]

Term savings and savings in relation to loans have a calculated f of 52,196 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these variables has a significant effect. Term Savings; Savings; Circulating Funds and Loans in relation to Gross Domestic Product have a calculated f of 23.088 with a significance coefficient of 0,000 which is less than 0,05. This shows that the relationship between these variables has a significant effect.

3.4 Path Analysis With Intervening Variables

Is an analysis of the strength of the relationship between two variables directly compared to the indirect relationship if there are other variables that bridge them. The

method is to determine the similarity of the paths and then study them using hypothesis testing by comparing the strength of the relationship.

Tabel 13. Model Summary

Model	R	R Square	Adj. R^2	Std. Error of the Estimate
For GDP (Y) as Dependent Variabel				
Deposito (X_1)	0,707[a]	0,500	0,492	42356,64667
Savings(X_2)	0,753[a]	0,566	0,560	39450,16557
Circulating Funds (Z_1)	0,535[a]	0,286	0,275	50618,87365
Loan (Z_2)	0,594[a]	0,353	0,342	48210,75413
For Cirulating Funds (Z_1) as Dependent Variabel				
Deposito (X_1)	,743[a]	,552	,545	780345,37789
Savings (X_2)	,566[a]	,320	,309	961199,15909
For Loans (Z2) as Dependent Variable				
Deposito (X_1)	,794[a]	,630	,624	581961,77202
Savings (X_2)	,601[a]	,362	,351	764729,08921

The equation is obtained with constants consisting of g; h; i; j; k; l; m; n will be obtained from the Coefficients Table according to the Standardized Coefficients Beta column which is the same as the correlation coefficient (R) in the Summary table. Meanwhile, the standard error (e) is obtained from the Determination coefficient (R^2) in the Summary table with a counter according to the formula.

Intervening relationship testing is obtained by comparing the constants in Direct Relationships to Indirect Relationships. For the Indirect Relationship constant, it is obtained by adding the constant value of the Direct Relationship by multiplying the constant for each Indirect Relationship. If it shows a smaller quantity then accept the Alternative Hypothesis.

a. Path 1 Equation

The direct relationship between variable X_1 and variable Y is shown by the twelfth equation, namely $Y = g X_1 + e = 0{,}707 X_1 + \sqrt{(1-0{,}500)} = 0{,}707 X_1 + 0{,}707$. It is shown that Gross Domestic Product = 0.707 Term Savings + 0.707. This means that without being influenced by Time Savings, the Gross Domestic Product already has a standard error of 0.707. And by increasing one Time Savings variable, the Gross Domestic Product will increase by 0.707 units.

Indirect relationship between variable X1 and variable Z_1 and variable Z_1 and variable Y. The relationship between variable X_1 and variable Z_1 is shown by the sixteenth equation, namely $Z_1 = h X_1 + e = 0{,}743 X_1 + \sqrt{(1-0{,}552)} = 0{,}743 X_1 + 0{,}669$. It is shown that Circulating Funds = 0,743 Term Savings + 0,669. This means that without being influenced by Time Deposits, the Circulating Funds already have a standard error of 0.669. And by increasing one Time Savings variable, the Circulating Funds will increase by 0,743 units.

The relationship between variable Z_1 and variable Y is shown by the fourteenth equation, namely $Y = i Z_1 + e = 0{,}535 Z_1 + \sqrt{(1-0{,}286)} = 0{,}535Z_1 + 0{,}845$. It is shown that Gross Domestic Product = 0,535 Funds in Circulation + 0,845. This means that without being influenced by Circulating Funds, the Gross Domestic Product already has a standard error of 0,845. And by increasing one variable in Circulating Funds, the Gross Domestic Product will increase by 0,535 units.

The indirect relationship between variables X_1 and Z_1 and then Y is equal to $m+(g*i) = 0{,}707 + (0{,}743 * 0{,}535) = 0{,}707 + 0{,}398 = 1{,}105$. So it is obtained that the Direct Relationship is 0.707 less than the Indirect Relationship of 1,105. This means that the Alternative Hypothesis is accepted so that there is an influence between Term Savings on Gross Domestic Products and intervening Funds in Circulation.

b. Path 2 Equation

The direct relationship between variable X_2 and variable Y is shown by the thirteenth equation, namely Y = h X_2 + e = 0,753 X_2 + √(1-0,566) = 0,753 X_1 + 0,659. It is shown that Gross Domestic Product = 0,753 Savings + 0,659. This means that without being influenced by savings, Gross Domestic Product already has a standard error of 0,659. And by increasing one Savings variable, Gross Domestic Product will increase by 0,753 units.

Indirect relationship between variable X_2 and variable Z_1 and variable Z_1 and variable Y. The relationship between variable X_2 and variable Z_1 is shown by the fifteenth equation, namely Z_1 = j X_2 + e = 0,566 X_2 + √(1-0,320) = 0,566 X_1 + 0,825. It is shown that Circulating Funds = 0,566 Savings + 0,825. This means that without being influenced by savings, Circulating Funds already have a standard error of 0,825. And by increasing one Savings variable, the Circulating Funds will increase by 0,566 units.

The relationship between variable Z_1 and variable Y is shown by the eighteenth equation above, namely Gross Domestic Product = 0,535 Circulating Funds + 0,845. This means that without being influenced by Circulating Funds, the Gross Domestic Product already has a standard error of 0,845. And by increasing one variable in Circulating Funds, the Gross Domestic Product will increase by 0,535 units.

The indirect relationship between variables X_2 and Z_1 and Y is equal to 0,753 + (0,566 * 0,535) = 0,753 + 0,303 = 1,056. So it is obtained that the Direct Relationship is 0,753 less than the Indirect Relationship of 1,056. This means that the Alternative Hypothesis is accepted so that there is an influence between Savings on Gross Domestic Products and intervening Funds in Circulation.

c. Path 3 Equation

The direct relationship between variable X_1 and variable Y is shown by the twelfth equation above, namely Gross Domestic Product = 0.707 Term Savings + 0.707. This means that without being influenced by Time Savings, the Gross Domestic Product already has a standard error of 0.707. And by increasing one Time Savings variable, the Gross Domestic Product will increase by 0.707 units.

Indirect relationship between variable X_1 and variable Z_2 and variable Z_2 and variable Y. The relationship between variable X_1 and variable Z_2 is shown by the sixteenth equation, namely Z_2 = k X_1 + e = 0,794 X_1 + √(1-0,630) = 0,794 X_1 + 0,608. It is shown that Loans = 0,794 Term Savings + 0,608. This means that without being influenced by Term Savings, the Loan already has a standard error of 0,669. And by increasing one term savings variable, loans will increase by 0.794 units.

The relationship between variable Z_2 and variable Y is shown by the nineteenth equation, namely Y = n Z_2 + e = 0,594 Z_2 + √(1-0,353) = 0,594Z_2 + 0,804. It is shown that Gross Domestic Product = 0,594 Loans + 0.804. This means that without being influenced by loans, the Gross Domestic Product already has a standard error of 0,804. And by increasing one Loan variable, Gross Domestic Product will increase by 0.594 units.

The indirect relationship between variables X_1 and Z_2 and Y is equal to 0,707 + (0,794 * 0,594) = 0,707 + 0,3471= 1,179. So it is obtained that the Direct Relationship is 0,707 less than the Indirect Relationship of 1,179. This means that the Alternative Hypothesis is accepted so that there is an influence between Term Savings on Gross Domestic Products and intervening loans.

d. Path 4 Equation

The direct relationship between variable X_2 and variable Y is shown by the thirteenth equation above, namely Gross Domestic Product = 0.753 Savings + 0.659. This means that without being influenced by savings, Gross Domestic Product already has a

standard error of 0.659. And by increasing one Savings variable, Gross Domestic Product will increase by 0.753 units.

Indirect relationship between variable X_2 and variable Z_2 and variable Z_2 and variable Y. The relationship between variable X_2 and variable Z_2 is shown by the seventeenth equation, namely $Z_2 = l\ X_2 + e = 0{,}601\ X_2 + \sqrt{(1-0{,}362)} = 0{,}601\ X_2 + 0{,}797$. It is shown that Loans = 0,601 Savings + 0,797. This means that without being influenced by savings, loans already have a standard error of 0,797. And by increasing one Savings variable, Loans will increase by 0,601 units.

The relationship between variable Z_2 and variable Y is shown by the nineteenth equation above, namely Gross Domestic Product = 0,594 Loans + 0.804. This means that without being influenced by loans, the Gross Domestic Product already has a standard error of 0,804. And by increasing one Loan variable, Gross Domestic Product will increase by 0.594 units.

The indirect relationship between variables X_2 to Z_2 to Y is equal to 0,753 + (0,601 *0,594) = 0,753 + 0,357 = 1,110. So it is obtained that the Direct Relationship is 0,yx753 less than the Indirect Relationship of 1,110. This means that the Alternative Hypothesis is accepted so that there is an influence between Savings on Gross Domestic Products and intervening Loans.

3.5 Discussion

In accordance with the framework of thinking that Term Savings will increase Gross Domestic Product. Likewise, increasing savings will also increase Gross Domestic Product. This is because the increase in the amount of term deposits and savings will be used by the public in the form of credit. This credit will be in the form of Circulating Funds.

Loans are funds prepared by the state as funds for use. So by increasing loans, the amount of funds in circulation will increase. So by increasing Circulating Funds, Gross Domestic Product will also increase.

4. CONCLUSION

Based on the problems and discussion, the conclusions obtained are: 1,3,9) Partially and simultaneously, Term Deposits and Savings have a significant effect on Circulating Funds. 2,4,10) Partially and simultaneously, term savings and savings have a significant effect on loans. 5-8,11) Partially and Simultaneously, Term Savings; Savings; Circulating Funds and Savings have a significant effect on Gross Domestic Product. 12,14) Term Savings influence Gross Domestic Product by intervening Funds in Circulation and by intervening Loans. 13,15) Savings influence Gross Domestic Product by intervening Funds in Circulation and by intervening Loans.

With several conclusions that the author can provide. So the author realizes that this paper still has many shortcomings and is far from perfection. Therefore, the author expects constructive criticism and suggestions to improve the writing of this paper.

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REFERENCES

Alice. (2021). Analisis Pengaruh Investasi Luar Negeri dan Investasi Dalam Negeri Terhadap Produk Domestik Bruto di Indonesia Tahun 2017-2021. Jurnal Ekonomi, Bisnis dan Manajemen, 1(3), 108–117.

Alice, Ekklesia, Sepriani, L., & Yohana Juwitasari Hulu. (2021). Pengaruh Investasi Penanaman Modal Terhadap Pertumbuhan Ekonomi Melalui Peningkatan Produk Domestik Bruto di Indonesia. WACANA EKONOMI (Jurnal Ekonomi, Bisnis dan Akuntansi), 20(2), 77–83. https://doi.org/10.22225/we.20.2.2021.77-83

Andriani, V., Muljaningsih, S., & Asmara, K. (2021). Analisis Pengaruh Penanaman Modal Asing, Ekspor, Utang Luar Negeri, Dan Tingkat Inflasi Terhadap Produk Domestik Bruto Indonesia. Equilibrium : Jurnal Ilmiah Ekonomi, Manajemen dan Akuntansi, 10(2), 95–104. https://doi.org/10.35906/je001.v10i2.777Astuti, Marhanani T. & Noor, A. A. (2016). Daya Tarik Morotai Sebagai Destinasi Wisata Sejarah Dan Bahari. *Jurnal Kepariwisataan Indonesia*, *11*(1), 25–45.

Astuti, Marhanani T. & Noor, A. A. (2016). Daya Tarik Morotai Sebagai Destinasi Wisata Sejarah Dan Bahari. *Jurnal Kepariwisataan Indonesia*, *11*(1), 25–45.

Bastian, I. (2019). Lingkup Akuntansi Sektor Publik. *Lingkup Akuntansi Sektor Publik*.

Biaya, S., Biaya, S. S., Lembaran, T., & Negara, T. L. (2023). *151/PMK.02/2022 tentang Standar Biaya Keluaran Tahun Anggaran 2023*.

Cahyo, I. D. (2018). Faktor-Faktor Yang Mempengaruhi Pertumbuhan Ekonomi Di Provinsi Daerah Istimewa Yogyakarta Tahun 2001-2015. *Dspace.Uii.Ac.Id*, 1–52. https://dspace.uii.ac.id/bitstream/handle/123456789/6518/revisi full warpingg.pdf?sequence=1

Chalid, A., Keuangan, D., & Makassar, N. (2023). Pengaruh Jumlah Uang Beredar, Dana Pihak Ketiga Dan Nilai Tukar Mata Uang Asing Terhadap Profitabilitas Sektor Perbankan Yang Terdaftar Di Bursa Efek Indonesia. Jurnal Business Technology and Science, I, 1–10. https://ojs.nitromks.ac.id/index.php/jurnal-bugisIrwansyah, R. (2019). *Pengaruh Tabungan dan Deposito Bank Umum terhadap Produk Domestik Bruto (Tahun 2014-Tahun 2018)*. *3*(2), 159–171.

Diniati, B. T. (2021). Pengaruh Bi Rate, Penanaman Modal Dalam Negeri, Produk Domestik Bruto, Jumlah Penduduk, Indeks Produksi Industri Terhadap Penghimpunan Dana Zakat Di Indonesia Tahun 2015.01-2019.12. Juornal of Economics and Policy Studies, 2(1), 44–55. https://doi.org/10.21274/jeps.v2i1.4670

Ekonomi, F., Muhammadiyah, U., & Utara, S. (2018). ANALISIS PERKEMBANGAN EKONOMI DIGITAL TERHADAP Scanned by CamScanner.

Faizal, A. D., Syapsan, & Widayatsari, A. (2020). Pengaruh Pertumbuhan Kredit Perbankan Dan Pertumbuhan Jumlah Orang Bekerja Terhadap Pertumbuhan Ekonomi Provinsi Riau. Jurnal Pendidikan Ekonomi Dan Bisnis, No.86/11/(3), 206–219.Menteri-Keuangan. (2019). *Peraturan Menteri Keuangan Republik Indonesia Nomor 78/PMK.02/2019 Tentang Standar Biaa Masukan Tahun Anggaran 2020*. *3*, 1–131.

Harun, I., & Mellita sari, C. P. (2021). Analisis Penanaman Modal Asing Dan Ekspor Terhadap Produk Domestik Bruto Sektor Industri Di Indonesia. Jurnal Ekonomika Indonesia, 10(1), 1. https://doi.org/10.29103/ekonomika.v10i1.4504

Haz, A. A., Restiawati, D., & … (2022). Pinjaman Sindikasi dan Pertumbuhan Ekonomi: Empiris Bukti Dari Negara-Negara G7. Senakota …. http://prosiding.senakota.nusaputra.ac.id/index.php/prosiding/article/view/64%0Ahttp://prosiding.senakota.nusaputra.ac.id/index.php/prosiding/article/download/64/75

Industri, M. T., Teknologi, I., & Tama, A. (n.d.). Analisa Efektifitas Penerapan Knowledge management dan Kepemimpinan Terhadap Keunggulan Daya Saing dengan Preferensi Konsumen dan Pemerintah sebagai Intervening (Studi Kasus : IKM Jawa Timur). 440–448.

Istinganah, A., & Hartiyah, S. (2021). Pengaruh Inflasi, Suku Bunga, Nilai Tukar Rupiah, Produk Domestik Bruto Dan Jumlah Uang Beredar Terhadap Indeks Harga Saham Gabungan (Ihsg) Di Bursa Efek Indonesia (Bei) Periode 2010 Sampai 2019. Journal of Economic, Business and Engineering (JEBE), 2(2), 245–252. https://doi.org/10.32500/jebe.v2i2.1739

Joker, C. V. A. (2021). Human Resources Development Strategy to Improve Knowledge Management (A Case Study on Online Transportation Services of. 80–86.

Juliani, H. (2021). Peranan Pinjaman Luar Negeri Dalam Mengatasi Defisit Anggaran Negara. Administrative Law & Governance Journal, 4(2), 17–18. https://ejournal2.undip.ac.id/index.php/alj/article/view/11389/5813

Kumalasari, N. A., Zulpahmi, Z., & Nurhayadi, Y. (2022). Pengaruh Inflasi, Tingkat Bagi Hasil, Non Performing Financing, Dan Produk Domestik Bruto Terhadap Deposito Mudharabah Pada Bank Umum Syariah Di Indonesia. Jihbiz: Global Journal of Islamic Banking and Finance, 4(1), 56. https://doi.org/10.22373/jihbiz.v4i1.12431

Oktaviana, Salsabila (2022) *Analisa Pengaruh Product Quality, Brand Image, dan Religiosity Terhadap Customer Loyalty Melalui Customer Satisfaction Sebagai Variabel Intervening pada Makanan Kemasan Halal di Kota Batam.* Undergraduate thesis, Universitas Internasional Batam

Program Studi Manajemen Fakultas Ekonomi dan Bisnis Universitas Islam Negeri Syarif Hidayatullah Jakarta 1444 H/2023. (2023).

Mentang, C. I. P., Rumate, V. A., Mandeij, D., Pembangunan, J. E., Ekonomi, F., & Bisnis, D. (2018). Pengaruh Kredit Investasi Dan Jumlah Uang Beredar Terhadap Produk Domestik Bruto Di Indonesia Effects of Investment Loan and Money Supply on Gross Domestic Product in Indonesia. *Jurnal Berkala Ilmiah Efisiensi*, *18*(02), 146.

Menteri-Keuangan. (2019). Peraturan Menteri Keuangan Republik Indonesia Nomor 78/PMK.02/2019 Tentang Standar Biaa Masukan Tahun Anggaran 2020. 3, 1–131.

Meyliana, D., & Mulazid, A. S. (2017). Pengaruh Produk Domestik Bruto (PDB), Jumlah Bagi Hasil dan Jumlah Kantor terhadap Jumlah Deposito Muḍārabah Bank Syariah di Indonesia Periode 2011-2015. *Economica: Jurnal Ekonomi Islam*, *8*(2), 263–283. https://doi.org/10.21580/economica.2017.8.2.1442

Metode Algoritma, P. A., & Penentuan Jalur Terpendek Dalam Pengiriman Barang Berbasis Mobile Hairul Agustian, U. (2023). Teknois : Jurnal Ilmiah Teknologi Informasi dan Sains [101]. 13(1), 101–109.

Mutia, K. A., Indrawati, L. R., & Sarfiah, S. N. (2019). Pengaruh Pengeluaran Pemerintah Dan Jumlah Uang Beredar Terhadap Produk Domestik Bruto Indonesia Tahun 2004-2018. *DINAMIC : Directory Journal of Economic*, *1*(1), 114–126.

Nisa, K. (2021). Analisa Pengaruh Jumlah Penduduk terhadap Jumlah Angkatan Kerja pada Kota Bekasi Menggunakan Metode Regresi Linear. INFORMATION MANAGEMENT FOR EDUCATORS AND PROFESSIONALS : Journal of Information Management, 5(2), 21. https://doi.org/10.51211/imbi.v5i2.1468

Nyblén, G., Burns, A. F., Mitchell, W. C., & Nyblen, G. (1948). Ekonometri. In Ekonomisk Tidskrift (Vol. 50, Nomor 2). https://doi.org/10.2307/3438487

Shadiq, F., Mayes, H. A., Richard, R., Jurusan, M., Ekonomi, I., Ekonomi, F., & Riau, U. (2020). *PENGARUH PRODUK DOMESTIK BRUTO (PDB) DAN SUKU BUNGA DEPOSITO BERJANGKA 1 BULAN TERHADAP JUMLAH SIMPANAN DEPOSITO BERJANGKA 1 BULAN PADA BANK CENTRAL ASIA (BCA) DI INDONESIA TAHUN 2010-2019 Email : fikri_shadiq10@yahoo.com The Effect Of Gross Domestic*. *7*, 1–15.

Silitonga, S. K. (2017). Pengaruh Produk Domestik Bruto Dan Inflasi Terhadap Jumlah Deposito Berjangka Pada Bank Panin Tahun 2011 - 2015. JOMF Fekon, 4(1), 1017–1029. https://media.neliti.com/media/publications/125589-ID-analisis-dampak-pemekaran-daerah-ditinja.pdfSitindaon, D. (2013). Faktor-Faktor yang Memengaruhi Pertumbuhan Ekonomi di Kabupaten Demak. In *Universitas Negeri Semarang*.

Sitindaon, D. (2013). Faktor-Faktor yang Memengaruhi Pertumbuhan Ekonomi di Kabupaten Demak. In *Universitas Negeri Semarang*.

Sri Rahayu, Ani. 2010. Pengantar Kebijakan Fiskal. Edisi Pertama. Jakarta: PT Bumi Aksara .

Statistik Bank Indonesia Tahun 2020-2023

Sukirno Sadono. Makro Ekonomi. Teori Pengantar. Edisi ke Dua Puluh Lima. PT Raja Grafindo Persada. Jakarta. 2019.

Supriyono. 2012. Akuntansi Manajemen: Proses Pengendalian Manajemen.,Yogyakarta: YKPN

Umami, G. F., Hadiani, F., & Purbayati, R. (2021). Pengaruh Produk Domestik Bruto, Tingkat Suku Bunga Tabungan Bank Konvensional dan Nisbah Bagi Hasil Terhadap Jumlah Tabungan Mudharabah. Journal of Applied Islamic Economics and Finance, 1(3), 677–687. https://doi.org/10.35313/jaief.v1i3.2617

Yosefi, S. W. | C. M. I. D. W. K. K. W. | N. S. A. I. P. | R. F. O. S. E. M. M. R. J. B. M. G. | R. W. J. | Y. F. N. (2017-2023). Data Statistik. *Bank Indonesia*, *1*(Produk Domestik Bruto), 1–14.

Yulianti, Farida, L. & P. (2019). Manajemen Pemasaran. In *Banjarmasin: Deepublish Publisher*.