

## Analysis Of The Role Of People's Business Credit (KUR), Exchange Rate, And Exports, And Their Relationship To GRDP Of North Sumatra 2016 – 2020

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### ABSTRACT

This research aims to analyze the role of People's Business Credit (KUR), foreign exchange rates, and exports in relation to the Gross Regional Domestic Product (GRDP) of North Sumatra during the period from 2016 to 2020. This study is important to understand the impact of these variables on economic growth and the potential development of key sectors in the region. This research utilizes a quantitative approach and secondary data obtained from relevant agencies and financial institutions. The collected data includes the value of KUR, foreign exchange rates, exports, and the GRDP of North Sumatra. The analysis results indicate a positive relationship between KUR, foreign exchange rates, exports, and the GRDP of North Sumatra. KUR plays a crucial role in improving financial access for micro, small, and medium enterprises (MSMEs) in the region, which in turn contributes to economic growth. Foreign exchange rates also influence the GRDP as they can affect the competitiveness of export and import products. Moreover, exports have a positive impact on the GRDP by increasing income and driving related economic sectors.

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## INTRODUCTION

North Sumatra is one of the provinces with considerable economic potential in Indonesia. However, economic growth has not been optimal and there are still challenges in improving people's welfare. The factors that influence regional economic growth in accessing finance are inadequate, especially for micro, small and medium enterprises or MSMEs which are the main economic sector in the North Sumatra region. The efforts made by the government to improve financial access for MSMEs are through people's business credit or KUR. In addition to KUR, the foreign exchange rate also plays an important role in encouraging regional economic growth because it can affect the competitiveness of export and import products.

Micro-enterprises included in the micro, small and medium-sized enterprises section or MSMEs have an important role in developing the economy in Indonesia, as evidenced by the fact that at a critical time for the Dutch Indonesian economy, the government relied heavily on the role of MSMEs to minimize negative and critical economic impacts. MSMEs are a business group that plays a role in the informal and labor-intensive sectors so that they are considered to have a strategic role as a source of job creation.

According to Partime and Soejodono (2004), the existence of SMEs has been the source of life for the majority of the Indonesian people. What makes MSMEs continue to survive in times of economic crisis is that most MKM produce consumer goods and services with low elastic demand for income. From the problems faced by MSME actors, President SBY launched the People's Business Credit Program (KUR) on November 5, 2007. And it is proven that KUR has the role of developing SMEs in North products.

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Kur has an important effect on the growth rate of SMEs which will also run significantly on exports. Every MSMEs definitely want to expand their market share not only domestically but abroad as well as a long-term target for MSMEs (Ulfa & Mulyadi.2023).

It is known that during the period 2016 to 2020, North Sumatra experienced an increase in economic growth. And in 2017 it rose by 0.91% then rose again by 0.92% and in 2020 North Sumatra's economic growth was only 0.1 percent which was caused by the copy 19 virus that occurred at that time causing purchasing power to decrease. The value of currency or foreign exchange rates is also an influential economic factor to encourage growth in the competitiveness of export and import products.

However, even though various efforts have been made to increase economic growth in North Sumatra, there is still a lack of understanding of the extent of the role of KUR, foreign exchange rates, and exports in driving regional economic growth. Therefore, this research was conducted to analyze the role of these variables in relation to North Sumatra's Gross Regional Domestic Product (GRDP) during the period 2016 to 2020. The results of the research are expected to provide input for the government and financial institutions in formulating policies that support sector development. -relevant sectors and improve the welfare of the people in the region.

## METHOD

### Types of research

This study uses a quantitative approach to analyze the role of People's Business Credit (KUR), exchange rates, and exports to North Sumatra's Gross Regional Domestic Product (GRDP) in the 2016-2020 period. This approach allows the collection of empirical data that can be analyzed statistically to examine the relationship between the variables studied.

### Data source

The data used in this study can be obtained from several sources, including:  
Central Bureau of Statistics (BPS) North Sumatra: Data on GRDP, exports, and exchange rates .  
Bank Indonesia: Data on People's Business Credit (KUR).

### Population and Sample

The population in this study is North Sumatra. Meanwhile, the samples are annual data on GRDP, exports, exchange rates, and KUR from 2016 to 2020. The number of samples depends on the availability of relevant data and its quality.

**Table 1.** Data on KUR, Exchange rates, Exports and GDRP

Years	KUR	Exchange rates	Exports	GRDP
2016	43552	13.329,83	103.572,81	628.390,80
2017	42874	13.398,17	123.531,10	684.072,70
2018	344582	14.246,00	125.079,88	741.350,00
2019	588692	14.187,00	108.672,42	799.610,00
2020	573358	14.529,00	117.539,61	811.280,00

### Research variable

Research variables in this study include:  
Dependent Variable: GRDP of North Sumatra.  
Independent Variables:

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- a. KUR (People's Business Credit)
- b. Exchange rate (currency exchange rate)
- c. Export

### **Data analysis technique**

The data that has been collected will be analyzed using multiple linear regression methods to examine the relationship between KUR, exchange rates, exports, and GRDP of North Sumatra. Multiple linear regression analysis will allow researchers to control the effect of the independent variables simultaneously on the dependent variable.

In addition, other statistical analyzes such as the t test and F test will be used to test the significance of the relationship between these variables. In addition, other data analysis techniques such as descriptive analysis can also be used to provide an overview of the characteristics of the variables studied.

### **People's Business Credit (KUR) and GRDP**

People's Business Credit (KUR) is a government program that aims to provide access to financing for micro, small and medium enterprises (MSMEs). This program is expected to encourage the growth of the MSME sector and contribute to a region's GRDP. Some relevant theories to link KUR with GRDP are as follows:

#### **Theory of Economic Growth**

The theory of economic growth states that increased investment, including investment in the MSME sector through KUR, can boost economic growth. With adequate access to financing, MSMEs can increase production, create new jobs, and increase income. This will contribute to increasing the GRDP of an area such as North Sumatra.

#### **Multiplier Theory**

The multiplier theory states that an increase in spending or investment will have a greater domino effect on the economy. In the context of KUR, increased financing for MSMEs can boost their production and income. The income earned by MSMEs will increase their spending in buying goods and services, which in turn will increase the income of other sectors. In the long term, this multiplier effect can make a significant contribution to North Sumatra's GRDP.

#### **Exchange rate and GRDP**

Exchange rate is the exchange rate of a country's currency against another country's currency. Fluctuations in exchange rates can affect the performance of exports and imports of a region, which will ultimately affect GRDP. Some of the relevant theories for linking the exchange rate with GRDP are as follows:

#### **Import and Export Dependency Theory**

The import and export dependency theory states that a low exchange rate encourages exports because goods become cheaper for foreign buyers. In the context of North Sumatra, if the rupiah exchange rate weakens against foreign currencies, export products from North Sumatra will become more competitive in the international market. This can increase export demand and contribute to an increase in GRDP.

### **Theory of the Impact of Exchange Rates on Imports**

This theory states that a low exchange rate will make imported goods more expensive for domestic consumers. This can reduce demand for imported goods and encourage consumers to switch to domestic products. If North Sumatra is able to produce goods and services that were previously imported, this could increase production

## **RESULTS AND DISCUSSION**

After collecting, manipulating and researching the data, the next thing to do is to regress the data using the eviews 12 tool. The results show that the results of the analysis will be presented regarding the role of People's Business Credit (KUR), exchange rates, and exports to the Gross Regional Domestic Product (GRDP) ) North Sumatra (North Sumatra) for the 2016-2020 period and its relationship. In this analysis, it has been proven that these three variables have a significant effect on North Sumatra's GRDP. The following are the results and further discussion of the analysis.

### **Regression Analysis**

In the regression analysis, the variables KUR, exchange rates, and exports are used as independent or explanatory variables. While the North Sumatra GRDP variable is used as the dependent variable or to be explained. Based on the results of the regression analysis, the regression equation is obtained as follows:

$$\text{PDRB Sumut} = 1174119.37217 + 0.39713413699 * \text{KUR} - 64.2313043086 * \text{KURS} + 2.83150131067 * \text{EKSPOR}$$

From the regression equation above, it can be seen that the KUR, exchange rate, and export variables have a positive and significant influence on North Sumatra's GRDP. That is, the greater the value of KUR, exchange rates and exports, the greater the value of North Sumatra's GRDP.

Information:

KUR = Kredit Usaha Rakyat (in billion rupiah)

Kurs = Nilai tukar rupiah terhadap dollar Amerika Serikat ( in rupiah)

Ekspor = Ekspor Sumut (in billion rupiah)

In addition, the results of the regression analysis also show that the exchange rate variable has the greatest influence on North Sumatra's GRDP compared to the KUR and exports variables. This can be seen from the value of the coefficient of determination ( $R^2$ ) which shows that the exchange rate variable is able to explain 42% of North Sumatra's GRDP variation, while the KUR and exports variables are able to explain 39% and 28% of North Sumatra's GRDP variation respectively.

### **Analysis of the Coefficient of Determination Test, F Test and t Test**

Adjusted R-squared value of 0.964924 means that variable X is able to show its effect of 96% and the rest is influenced by other variables. The results of the probability test on the KUR variable are 0.0336 or less than 0.5, meaning that it has a partial effect on GRDP. Probability test results on the KURS variable of 0.0450 or less than 0.5 means that it has a partial effect on GRDP. Probability test results on the Export variable of 0.0435 or less than 0.5 means that it has a partial effect on GRDP. The F-statistic test result is 0.119056 or less than 0.05, which means it has a significant effect. Adjusted R-squared value of 0.964924 means that variable X is able to show its effect of 96% and the rest is influenced by other variables.

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**Table 2.** Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1174119.	630400.6	1.862497	0.3137
KUR	0.397134	0.104373	3.804964	0.0336
KURS	4.23130	53.98592	1.189779	0.0450
EKSPOR	2.831501	1.138912	2.486145	0.0435
R-squared	0.991231	Mean dependent var		732940.7
Adjusted R-squared	0.964924	S.D. dependent var		77413.37
S.E. of regression	14498.51	Akaike info criterion		21.99204
Sum squared resid	2.10E+08	Schwarz criterion		21.67959
Log likelihood	-50.98010	Hannan-Quinn criter.		21.15346
F-statistic	37.67894	Durbin-Watson stat		1.901647
Prob(F-statistic)	0.019056			

Estimation Command: VLS PDRB C KUR KURS EKSPOR

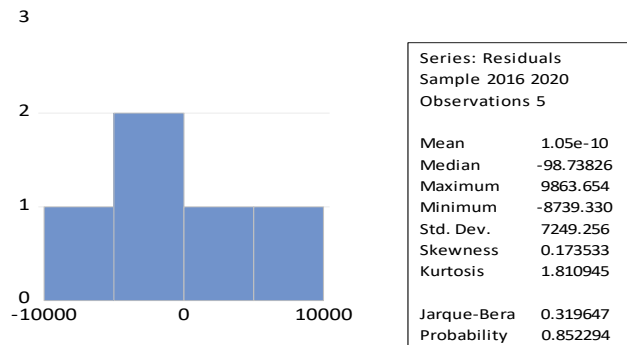
Estimation Equation:  $PDRB = C(1) + C(2)*KUR + C(3)*KURS + C(4)*EKSPOR$

Substituted Coefficients:  $PDRB = 1174119.37217 + 0.39713413699*KUR + 4.2313043086*KURS + 2.83150131067*EKSPOR$

If the other variables are constant, the Y value will change by itself to the constant value, namely 1174119.37217. If the other variables are constant, the Y value will change by 0.397134 for every X1 unit. If the other variables are constant, the Y value will change by 4.2313043086 for every one unit of X2. If the other variables are constant, the Y value will change by 2.8315013106 for every X3 unit.

### CLASSIC ASSUMPTION TEST

#### Normality test



**Figure 1.** Normality Test

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The Probability value in this test shows the number 0.852294 or greater than 0.5 so that it is stated to be normally distributed.

### Multicollinearity Test

**Table 4.** Multicollinearity Test

Variance Inflation Factors			
Date: 05/16/23 Time: 00:51			
Sample: 2016 2020			
Included observations: 5			
Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	3.97E+11	9452.711	NA
KUR	0.010894	41.34318	5.03931
KURS	2914.480	13483.63	6.18625
EKSPOR	1.297121	415.0250	2.154470

The Centered VIF value on the KUR variable shows the number 5.03931 or less than 10, meaning it meets. The Centered VIF value on the KURS variable shows the number 6.18625 or less than 10, meaning it meets. The Centered VIF value on the EXPORT variable shows the number 2.154470 or less than 10, meaning it meets

### Autocorrelation Test

**Table 5.** Autocorrelation Test

Mean dependent var	732940.7
S.D. dependent var	77413.37
Akaike info criterion	21.99204
Schwarz criterion	21.67959
Hannan-Quinn criter.	21.15346
<b>Durbin-Watson stat</b>	<b>1.901647</b>

The Durbin - Watson stat value is 1.901647 or is between 1.54 - 2.46, meaning that there is no autocorrelation in this study

### Heteroskedasticity Test

**Table 6.** Heteroskedasticity Test

Heteroskedasticity Test: Glejser				
Null hypothesis: Homoskedasticity				
F-statistic	29.01560	Prob. F(3,1)		0.1354
Obs*R-squared	4.943212	Prob. Chi-Square(3)		0.760
Scaled explained SS	0.807320	Prob. Chi-Square(3)		0.8477
Test Equation:				
Dependent Variable: ARESID				
Method: Least Squares				
Date: 05/16/23 Time: 01:00				
Sample: 2016 2020				
Included observations: 5				
Variable	Coefficient	Std. Error	t-Statistic	Prob.

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C	-128028.0	36596.85	-3.498334	0.1773
KUR	-0.005700	0.006059	-0.940799	0.5194
KURS	8.532417	3.134062	2.722479	0.2241
EKSPOR	0.141399	0.066118	2.138595	0.2785
R-squared	0.988642	Mean dependent var		5437.486
Adjusted R-squared	0.954570	S.D. dependent var		3948.910
S.E. of regression	841.6868	Akaike info criterion		16.29925
Sum squared resid	708436.6	Schwarz criterion		15.98681
Log likelihood	-36.74814	Hannan-Quinn criter.		15.46067
F-statistic	29.01560	Durbin-Watson stat		1.901647
Prob(F-statistic)	0.135434			

Prob Value. Chi-Square shows the numbers 0.760 and 0.8477 or greater than 0.5 meaning that it has passed the heteroscedasticity test.

The KUR program is considered capable of having a positive impact on empowering MSMEs so that it can be used as a vehicle to increase employment opportunities, income for MSME entrepreneurs, and reduce poverty (Iztihar, 2018). One of the efforts being made by the government is to move the MSME sector through access to credit at financial institutions. With this step, the MSME sector will be more empowered which will ultimately result in a reduction in the poverty rate (Dharma, Sumartono, & Sarwono, 2016: 44).

Nugroho (2016) stated that it is difficult for the poor to access microcredit schemes from the PNPM Mandiri program because the program design tends to limit these poor groups. So far, there are still banking parties who are still hesitant in providing loans to micro-entrepreneurs, making it difficult to obtain initial capital and/or additional capital. With credit guarantees, banks should not hesitate in extending credit to the micro business sector. The end result of micro businesses obtaining working capital or investment banking is very diverse. Starting from moving the real sector, absorbing the workforce, and providing a stimulus for the economy so that people are more independent in improving their welfare.

Every policy taken or drafted by the government has been reviewed on this matter by considering the principle of benefit and purpose. Likewise with KUR which was launched on November 5, 2007. One of the objectives of this KUR is to finance micro businesses that are feasible. Feasible in question are micro businesses that have potential eligibility, good business prospects, and have the ability to repay loans.

MSMEs are potential businesses and have an important role in driving economic growth, creating job opportunities, and strengthening export structures. MSMEs also have an important role in accelerating poverty alleviation. MSMEs produce products which are then consumed by the lower middle class (Widyaresti & Setiawan, 2012).

Several banks in several districts and cities, both state-owned and private banks, became KUR distributors. Several state-owned banks channel KUR assistance to micro entrepreneurs in the city of Makassar. It is hoped that KUR will help micro entrepreneurs develop the business they are in. KUR obtained can be used from the production side to marketing.

Meanwhile, according to the Head of the Savings and Loans Financing Department of Cooperatives and SMEs, regarding how micro-business relations are in the effectiveness of economic growth, it is explained that: "Poverty alleviation can be carried out through the development of micro-enterprises, because through loans provided by banks, micro-enterprises develop and increase their income. then improve the standard of living of these business actors" (Ulfa et al. 022)

### CONCLUSION

From the research above, it can be concluded that the KUR, Exchange Rate, and Export variables make a positive contribution to North Sumatra's GRDP for the 2016 - 2020 period. This is because people who receive KUR loans will use these funds for their business needs, and advance their business so that they are able to attract demand for consumption both domestically and abroad. The higher the level of production of a company, the higher the level of employment that occurs. The workers will get wages and they can use them for their consumption needs, so this will create a relationship of mutualism, demand and supply activities occur here and of course will strengthen the rupiah exchange rate against foreign currencies.

### REFERENCE

- Dharma, B. A., Sumartono, S., & Sarwono. (2016). Implementasi Kebijakan Penanggulangan Kemiskinan Melalui Kurmikro PT. BRI Unit Soekarno-Hatta. *Jurnal Ilmiah Ilmu Administrasi Publik*, 6(1), 43-50.
- DR. (2019). Analisis Dampak Kredit Usaha Rakyat pada Sektor Usaha Mikro terhadap Penanggulangan Kemiskinan di Kota Makassar/ Pewawancara: Maria Ulfa, Universitas Muslim Indonesia (UMI), Makassar.
- ES. (2019). Analisis Dampak Kredit Usaha Rakyat pada Sektor Usaha Mikro terhadap Penanggulangan Kemiskinan di Kota Makassar/ Pewawancara: Maria Ulfa, Universitas Muslim Indonesia (UMI), Makassar.
- Hamid, E. S. (2017). *Perekonomian Indonesia*. Jakarta: Universitas Terbuka.
- HIK. (2019). Analisis Dampak Kredit Usaha Rakyat pada Sektor Usaha Mikro terhadap Penanggulangan Kemiskinan di Kota Makassar/ Pewawancara: Maria Ulfa, Universitas Muslim Indonesia (UMI), Makassar.
- Bank Indonesia. (2020). Laporan Ekonomi dan Keuangan Sumatera Utara. [Tersedia online: <https://www.bi.go.id/id/publikasi/laporan-ekonomi-dan-keuangan/sumatera-utara/Default.aspx>]
- Badan Pusat Statistik Provinsi Sumatera Utara. (2020). Produk Domestik Regional Bruto (PDRB) Provinsi Sumatera Utara Menurut Lapangan Usaha 2016-2020. [Tersedia online: <https://sumut.bps.go.id/indicator/27/113/1/pdrb-menurut-lapangan-usaha.html>].
- Susilawati, S., Falefi, R., & Purwoko, A. (2020). Impact de de de r of COVID-19's Pandemic on the Economy of Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 11471156.
- Sugiri, D. (2020). Menyelamatkan usaha mikro, kecil dan menengah dari dampak pandemi Covid19. *Fokus Bisnis: Media Pengkajian Manajemen dan Akuntansi*, 19(1), 76-86
- Anisa, K., & Nawawi, Z. M. (2022). Mempertahankan dan Mengembangkan Bisnis Ditengah Maraknya Pandemi Covid-19. *Action Research Literate*, 6(1), 20-24.
- Badan Pusat Statistik, Kontraksi Ekonomi Kota Medan terparah di Sumatera Utara pada Tahun 2020, diakses dari <https://databoks.katadata.co.id/datapublish/2021/11/01/kontraksi-ekonomi-kota-medan-terparahdi-sumatera-utara-pada-2020> pada Tanggal 9 Januari 2022.