

# Analysis of the Role of Micro Small and Medium Enterprises in the National Economic Recovery Policy During the Covid 19 Pandemic

Fitrawaty<sup>1\*</sup>, Indra Maipita<sup>1</sup>

<sup>1</sup>Faculty of Economics, Universitas Negeri Medan, Indonesia

\*Corresponding author. Email: [fitrawaty@unimed.ac.id](mailto:fitrawaty@unimed.ac.id)

## ABSTRACT

This study aims to analyze the effect of the number of business units, the number of workers, and the number of exports of the Micro, Small and Medium Enterprises (MSME) sector on Indonesia's gross domestic product (GDP), then analyze the effect of the national economic recovery policy (PEN) on GDP in the future. the covid 19 pandemic. The data used are the number of MSME business units, the number of workers, the number of exports of the MSME sector and the total GDP of the MSME sector from 2000-2020. Using the VECM Model. it was found that the variables of the number of exports, the number of workers and the number of MSMEs did not have a significant effect on GDP in the short term, so rationally the increase in the number of GDP was the result of an increase in the number of exports of MSMEs, the number of workers and the number of MSMEs simultaneously. While in the long term, the number of exports of the MSME sector does not have a significant effect, in contrast to the number of workers and the number of MSMEs that have a significant effect on GDP. The PEN Policy Simulation was carried out by increasing the number of MSMEs by 10%, as an illustration of the success of the policy that did not have an impact on increasing the GDP of the MSME sector both in the short term and in the long term. This study illustrates that the PEN policy is not effective in increasing the GDP of the MSME sector. The limitation of this research is that it only focuses on the core variables that make up the GDP of the MSME sector, thus ignoring other supporting factors.

**Keywords:** *Micro, Small and Medium Enterprises, Labor, Exports, Gross Domestic Product, National Economic Recovery Policy.*

## 1. INTRODUCTION

The post-Covid-19 pandemic is a difficult time for economies around the world. Recessions are commonplace for now, Indonesia itself experienced a declining economic growth reaching -5.3% in Q2-2020, but then increased in Q4-2020 although still contracted by -2.19% (y-on-y). Many sectors contributed to the contraction of economic growth in the 4th quarter of 2020. Household consumption which gave the largest contribution to GDP decreased by -3.61%, exports of goods and services decreased -7.21%, imports contracted by -13.52%, and other sectors, as well as there were sectors that experienced growth such as consumption

government increased by 1.76% , but of course it cannot increase Indonesia's current economic growth. The trough of the decline in economic growth has been passed in the second quarter, but has not been able to increase economic growth in the third and fourth quarters 2020. One of the efforts made by the government to improve the national economy is to implement the National Economic Recovery (PEN) program which is expected to be effective starting in the third quarter of 2020. The PEN consists of 3 (three) main policies, namely increasing domestic consumption (demand), increasing business activity (supply) and maintaining economic stability and monetary expansion. These three policies must receive support

from Ministries/Agencies, local governments, BUMN/BUMD, business actors, and the community.

In an effort to support the National Economic Recovery (PEN) policy from the supply side, it is necessary to increase the business of Micro, Small and Medium Enterprises (MSMEs). MSMEs are one of the sectors affected by the Covid-19 pandemic, most of the people who are in this sector of course also feel the increasingly difficult conditions. The decline in income from this sector of course also affects the acquisition of national income in general. On the other hand, the MSME sector is also a large contributor to national income in addition to large entrepreneurs who are a minority group of Indonesian society.

The Ministry of Cooperatives and SMEs is optimistic that MSMEs will advance to class in 2021, targeting MSME GDP to be 62.36%, cooperative GDP 7.54%, MSME export contribution 15.21%, innovation and technology-based start-up growth of 900 units, 150 modern cooperative units, and 0.55% of SMEs are promoted [7]. Optimism from the cooperative ministry must be applauded and supported by all aspects of society because according to data from the Ministry of Cooperatives, Small and Medium Enterprises (KUKM) in 2018, the number of MSME actors is 64.2 million or 99.99% of the number of business actors in Indonesia. The absorption capacity of MSME workers is 117 million workers or 97% of the labor absorption capacity of the business world. Meanwhile, the contribution of MSMEs to the national economy (GDP) is 61.1%, and the remaining 38.9% is contributed by large business actors whose number is only 5,550 or 0.01% of the total number of business actors.

**Table 1.** Number of workers based on business

Year	2015	2016	2017	2018
Micro Enterprises	110.807.864	103.839.015	107.232.992	107.376.540
Small Businesses	7.307.503	5.402.073	5.704.321	5.831.256
Medium Enterprise	5.114.020	3.587.522	3.736.103	3.770.835
Big Business	4.194.051	3.444.746	3.586.769	3.619.507

Source: UMKM, 2018

From table 1, it can be explained how the contribution of the MSME sector in 2015-2018 in absorbing labor, there was an increase from year to year in the absorption of energy in the MSME sector compared to large businesses. In terms of numbers,

the MSME sector absorbs a larger number of workers than large businesses. The technology used by MSMEs is generally still simple and conventional so it requires more manpower than the workforce used by large businesses. The role of MSMEs is actually undoubted so far, not only in absorbing labor, the production produced also generates income for the state, this sizable contribution continues to increase, so that the existence of MSMEs so far can be a pillar in the Indonesian economy. It's no wonder that during the current pandemic the government still puts its hope in improving the economy in the MSME sector.

Can MSMEs meet the government's expectations, to increase the supply side and subsequently also have an impact on increasing the demand side, so that the final estuary of the National Economic Recovery Policy can be fulfilled? This study will analyze how the role of MSMEs in the National Economic Recovery Policy during the Pandemic-Covid 19. The resilience of MSMEs in facing crises during difficult times has not been doubted so far, but during the Covid 19 pandemic, MSMEs have never been tested, because this recession with a deep enough trough has damaged all sectors of the economy, not only domestically, including the economy of all countries in the world. This study tries to analyze whether the role of MSMEs is able to restore the Indonesian economy, so that the government can be said to be successful through the National Economic Recovery (PEN) policy that has been issued. How is the contribution of the number of MSME units, the number of MSME investments, the number of workers used in the MSME sector to increase Indonesia's Domestic Income?

One of PEN's policies is monetary expansion, the aim of which is to increase the number of MSME units and so that MSMEs can advance to class. When this is successful, it means that the resilience of MSMEs is unquestionable in the national economic recovery. This study will try to do a simulation by increasing the number of MSMEs by 5% as an illustration of the success of the monetary expansion policy and seeing its effect on national income, if there is an increase in national income, this means that the PEN policy is effective in overcoming problems during this pandemic. The approach used to answer this problem is to use the Vector Auto Regression Model and continue with the SVAR Model. VAR is an n-variable, linear equation model in which each variable is in turn described by its own lagged value, plus the current and past values of the remaining  $n \geq 1$  variables. This simple framework

provides a systematic way to capture rich dynamics over multiple time series, and the statistical tools that accompany VAR are easy to use and interpret. [26]. Furthermore, to analyze the effect of the relaxation policy on the level of consumption, investment, and net exports, it is continued by using the SVAR (Structural Checker Auto Regression) approach. This approach makes it possible to simulate a policy, and see how the policy simulation affects the independent variables [13].

The purpose of this research is to analyze the effect of the number of business units, the number of workers, the total non-oil and gas exports and the amount of investment on Indonesia's gross domestic product, to analyze the effect of the government's National Economic Recovery policy on increasing Indonesia's gross domestic product and to analyze the effect of the number of business units, the number of workers, the total non-oil and gas exports and the amount of investment in Indonesia's gross domestic product after the PEN policy simulation is carried out.

**2. LITERATURE REVIEW**

National income National income is the amount of income received by a family household in a country derived from the factors of production in a period, usually for one year. The output or output rotation current or commonly referred to as the rotational current economic activity is a diagram illustrating the interrelationships between various economic actors such as the household sector is one of the decision-making units that provide in the sense of selling or renting the factors of production to company [19], the corporate sector is an organization consisting of producers who produce or offering goods and services through product markets, the government sector i.e. organizations which has 2 main functions, namely providing goods and services to households and companies and redistribution of income and wealth, the last sector is abroad represented by export and import activities [5]. One approach in calculating national income is the approach from the expenditure side, national income is calculated by adding up the expenditure or expenditure from each economic sector, namely:

a) Consumption expenditure (C), includes all household and family expenditures individuals and non-company private institutions to purchase goods and services in meeting needs.

- b) Investment expenditure (I), includes all domestic (domestic) expenditures that carried out by the private sector to construct buildings, machinery, equipment, and company inventory.
- c) Government purchasing expenditures (G), including pension payments, scholarships, subsidies in various forms and government transfers.
- d) Net exports (X – M), includes the total number of goods and services exported and imported. If exports are greater than imports, net exports are positive (+), too otherwise

$$Y = C + I + G + NX \dots\dots\dots(1)$$

Small Micro and Medium Enterprises Micro, Small and Medium Enterprises (MSMEs) have various definitions according to agencies and several institutions, in accordance with Law No. 20 of 2008, concerning Small, Micro and Medium Enterprises, namely;

- a. Micro Enterprises are productive businesses owned by individuals or individual business entities that meet the criteria for micro businesses as regulated in this law.
- b. Small Business is a stand-alone productive economic business carried out by individuals or business entities that are not subsidiaries or branches. .
- c. Medium-sized business is a productive economic business that stands alone, which is carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned or controlled or become part either directly or indirectly with small businesses or large businesses with total net assets or annual sales proceeds. as regulated.

Based on wealth and sales proceeds, according to Law No. 20 of 2008 article 6, the criteria for micro-enterprises are:

- a) Have a net worth of at most Rp 50,000,000 (fifty million rupiahs) excluding land and buildings for business premises; or
- b) Have annual sales results of a maximum of Rp. 300,000,000 (three hundred million rupiah). The criteria for small businesses are as follows; a. Have a net worth of more than Rp 50,000,000 (fifty million rupiah) up to a maximum of Rp 500,000,000 (five hundred million rupiah) excluding land and buildings for business and or Have annual sales of more than IDR 300,000,000

(three hundred million rupiah) up to a maximum of IDR 2,500,000,000 (two billion five hundred million rupiah).

Exports, furthermore, the relationship between exports and economic growth there are 4 hypotheses. The first hypothesis is that exports are the drivers of economic growth (export-led growth (ELG)). The second hypothesis is that exports are the cause of the decline in a country's economic growth (export-reduced growth). The third hypothesis is that it is economic growth that drives a country's exports (internally generated exports). While the last hypothesis is that the economic growth of a country causes a decrease in exports from that country. Of the four hypotheses of the relationship between exports and economic growth as described above, the main focus of the research to be tested is the first hypothesis. This study wants to find out more about the influence of exports on economic growth in Indonesia.

### 3. RESEARCH METHODS

This study will observe the behavior of all components of Indonesia's national income, namely household consumption, government and private investment, government spending, and net exports in Indonesia. The data taken is monthly data, namely from July 2015 to July 2020. The data is taken from related institutions, such as the Central Bureau of Statistics, Bank Indonesia, the Ministry of Finance and other related institutions.

Vector Autoregression, Vector Error Correction Models Vector autoregression (VAR). Univariate autoregression is a linear equation, a single variable linear model in which the current value of a variable is described by its own lagged value. VAR is an n-equation, n-variable linear model in which each variable is in turn described by its own lagged value, plus the current and past values of the remaining  $n \geq 1$  variables. This simple framework provides a systematic way to capture rich dynamics over multiple time series, and the statistical tools that accompany VAR are easy to use and interpret. As Gujarati [11] and others argued in a series of influential early papers, VAR holds out the promise of providing a coherent and credible approach to data description, estimates, structural inference and policy analysis [26].

Vector Autoregression, Vector Error Correction Models Vector autoregression (VAR). Univariate autoregression is a linear equation, a single variable linear model in which the current value of a variable

is described by its own lagged value. VAR is an n-equation, n-variable linear model in which each variable is in turn described by its own lagged value, plus the current and past values of the remaining  $n \geq 1$  variables. This simple framework provides a systematic way to capture rich dynamics over multiple time series, and the statistical tools that accompany VAR are easy to use and interpret. As Gujarati [11] and others argued in a series of influential early papers, VAR is a method that treats all variables symmetrically without considering the dependent and independent variables [11]. Vector Autoregression (VAR) analysis in this study is used to analyze the impact of fluctuations in Government Expenditure (APBN) on household consumption levels, domestic and foreign investment, government spending and net exports. Furthermore, a simulation will be carried out by giving a shock to the APBN variable by 10%, and followed by analyzing its effect on the four sectors of the National Income, and finally how the impact on the National Income will be. From the variables used, the research model can be formed as follows:

$$\begin{aligned} \text{LnPDB}_t = & A + \beta_1 \text{LnTK}_{t-1} + \beta_2 \text{LnTK}_t \\ & + \beta_3 \text{LnEKS}_t + \beta_4 \text{LnEKS}_{t-1} \\ & + \beta_5 \text{LnUMKM}_t \\ & + \beta_6 \text{LnUMKM}_{t-1} \\ & + \beta_7 \text{LnPDB}_{t-1} + e_{1t} \end{aligned}$$

$\text{LnPDB}_t =$   
SME sector gross domestic product at time t

$\text{LnTK}_{t-1} =$  SME sector labour at time  $t_{t-1}$

$\text{LnTK}_t =$  SME sector labour at time t

$\text{LnEKS}_t =$  SME sector export at time t

$\text{LnEKS}_{t-1} =$  SME sector export at time  $t_{t-1}$

$\text{LnUMKM}_t =$  Total of SME at time t

$\text{LnUMKM}_{t-1} =$  Total of SME at time  $t_{t-1}$

The formulation of the Structural VAR model is less theoretical so that the economic interpretation of the VAR model is difficult to define. According to [11], SVAR modeling is formulated based on the framework of economic theory. In the VAR model, all variable grace periods are determinant variables for all-time series variables in the model. The

formulation of the SVAR model assumes that the number of variables is a (n Mt) vector, and Mt is the mean of structural innovation which is equal to zero. Therefore, the p-order SVAR model is formulated as follows:  $B[L]M_t = \mu_t$ ,

Where  $E[u_t u_t'] = D$ , and  $E[u_t u_{t+s}'] = 0, s \neq 0$  and for  $t = -[p - 1] \dots T$

.. The relationship between the VAR model and SVAR can be defined in the form of an equation  $A[L]M_t = \varepsilon_t$  Where  $E[\varepsilon_t \varepsilon_t'] = \Theta$ ,

$E[\varepsilon_t \varepsilon_{t+s}'] = 0 : s \neq 0, [\Gamma] = B_0^{-1} B[\Gamma], dan \Theta = [B_0^{-1}] D [E$

Perfect identification requires as many as parameters in  $B_0$  and  $D$   $[2n^2 - n]$ . If  $\Theta$  the parameter is  $[n^2 + n]/2$ . then we need as many restrictions on  $B_0$   $[2n^2 - n]$ ,  $[n^2 + n]/2$ . and diagonals as  $[n(n - 1)]$ . The two-step procedure of the ML estimator or the FIML estimator can be used. When model identification is over-identified then the two-step procedure of the FIML estimator is inefficient but still consistent. This does not mean that the two-step procedure of the FIML estimator cannot be used, but that the estimation results are inefficient or tend to be insignificant because the standard deviation of the parameter is high or large.

## 4. RESULT AND DISCUSSION

### 4.1. Result

Stationarity test can be done by unit root test developed by Dikey Fuller. An alternative to the Dikey Fuller test is the Augmented Dikey Fuller (ADF) which tries to minimize autocorrelation. The ADF value is also said to be stationary if the ADF test value is greater than the McKinnon critical value [12]. After doing the data stationarity test, from level, finally all the data has passed the stationary test at the first difference stage

This optimal lag length test is very useful for eliminating the problem of autocorrelation (correlation between t-period confounders and t-1 errors sorted by time) in the VAR system. So that by doing the optimal lag test, it is hoped that the autocorrelation problem will not appear again. Determination of the optimal lag length using the following information criteria: Likelihood Ratio

Test (LRT), Final Prediction Error (FPE), Aikake Information Crition (AIC) and Schwarz Crition (SC) and Hannan-Quin (HQ). Based on the provisions, the optimal use of lag is two.

**Table 2** Lag Optimal Test

VAR Lag Order Selection Criteria						
Endogenous variables: D(EKS) D(PDB) D(TK) D(UMKM)						
Exogenous variables: C						
Date: 06/21/21 Time: 17:35						
Sample: 1 23						
Included observations: 19						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1087.448	NA	9.25e+44	114.8892	115.0881	114.9229
1	-1073.197	21.00112	1.17e+45	115.0734	116.0675	115.2416
2	-1045.630	29.01801*	4.57e+44	113.8558	115.6452	114.1586
3	-1004.940	25.69859	8.30e+43*	111.2589*	113.8417*	111.6943*

\* indicates lag order selected by the criterion  
 LR: sequential modified LR test statistic (each test at 5% level)  
 FPE: Final prediction error  
 AIC: Akaike information criterion  
 SC: Schwarz information criterion  
 HQ: Hannan-Quinn information criterion

### 4.1.2. VAR Model Stability Test

Before entering the further analysis stage, the results of the estimation of the VAR system of equations that have been formed need to be tested for stability. The stability of the VAR needs to be tested because if the estimation results of the stability of the VAR are not stable, then the analysis of the Impulse Response Function (IRF) and Variant Decomposition (VD) becomes invalid. As for testing whether or not the VAR estimate is stable, the VAR Stability condition is checked in the form of roots of characteristic polynomials. A VAR system is said to be stable if all of its roots have a modulus smaller than one [11]. The following are the results of the VAR model stability test:

**Table 3.** Stability Model Test

Root		Modulus
0.709231 - 0.681334i		0.983476
0.709231 + 0.681334i		0.983476
-0.884959		0.884959
-0.130185 - 0.713069i		0.724855
-0.130185 + 0.713069i		0.724855
-0.251689 - 0.326536i		0.412278
-0.251689 + 0.326536i		0.412278
0.282160		0.282160

No root lies outside the unit circle.  
 VAR satisfies the stability condition.

4.1.2. Cointegration Test

As stated by Engle-Granger, the existence of non-stationary variables causes the possibility of a long-term relationship between variables in the system. Cointegration test was conducted to determine the existence of a relationship between variables, especially in the long term. If there is cointegration in the variables used in the research model, it can be ascertained that there is a long-term relationship between the variables.

Table 4. Co-integration Test

Date: 06/21/21 Time: 17:42 Sample (adjusted): 5 23 Included observations: 19 after adjustments Trend assumption: Linear deterministic trend (restricted) Series: D(EKS) D(PDB) D(TK) D(UMKM) Lags interval (in first differences): 1 to 2				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.977162	133.9562	63.87610	0.0000
At most 1 *	0.921142	62.14935	42.91525	0.0002
At most 2	0.421373	13.88738	25.87211	0.6669
At most 3	0.167912	3.492532	12.51798	0.8136
Trace test indicates 2 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level **Mackinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				

The cointegration test results indicate that between the movements of GDP, EKS, MSMEs and TK there is a relationship of stability or balance and similarity of movements in the long term. In other words, in each short-run period, all variables tend to adjust to each other, to reach their long-run equilibrium. Due to cointegration, the estimation of VAR in deference cannot be carried out, on the contrary, this study will use VECM estimation.

4.1.3 Gross Domestic Product (GDP) Model, Vector Error Correction Model (VECM)

Table 5. Estimation VECM Short Run and Long Run

Variable	Coefficient	t-statistic	Interpretation
Short Run			
CointEq1	-0.958939	[-1.03901]	not significant
D(GDP(-1),2)	-1.079335	[0.97422]	not significant
D(GDP(-2)2)	-0.439094	[-0.34624]	not significant
D(EXP(-1)2)	-3.827954	[-0.27402]	not significant
D(EXP(-2)2)	-8.999979	[-0.68575]	not significant
D(SMEs(-1)2)	-0.138999	[-0.20733]	not significant
D(SMEs (-2)2)	-0.019672	[-0.06439]	not significant

D(Labor(-1)2)	-0.188920	[0.85147]	not significant
D(Labor (-2)2)	0.034836	[-0.16030]	not significant
C	9931.917	[1.71164]	not significant
Long Run			
DGDP(-1)	1.000000	-	-
DEXP(-1)	-1.943196	[-0.74527]	not significant
SMEs(-1)	-0.993360	[15.1981]	Significant
DLabor(-1)	0.205696	[11.9215]	Significant
C	-2305839	-	-

The basis for significant testing on the VECM estimate was carried out by comparing the calculated statistical values with table statistical values with a significance level of 5 percent or 0.05. If the t-count value > the t-table value, it can be said to have a significant effect, and vice versa if the t-count value < the t-table value, it can be said to have an insignificant effect.

VECM estimation results with Lag-2 (table .6) for the observation period 1997-2020 the VECM model for the variables of GDP, EXP, SMEs and Labor following the long-term gross domestic income model in Indonesia;

$$D(\text{GDP}) = -2305839 + 1.000000 D(\text{GDP} (-1)) - 1.943196 D(\text{EXP}(-1)) - 0.993360D(\text{SMEs}(-1)) + 0.205696D(\text{Labor}-1)$$

4.2. Discussion

Hypothesis Testing on Each Independent Variable of Gross Domestic Product (GDP) in the long run

4.2.1. Interdependence of GDP in the past period to GDP in the current period

From the results of data processing using the eviews program, all variables in the long term provide different responses. The interdependence of current GDP on GDP (-1) has a positive effect, meaning that a 1% increase in GDP (-1) results in a 1% increase in current GDP, this is natural because GDP in the previous period is the basis for calculating GDP at the present time. If you look at data like this, it is possible to form a data trend, meaning that when the previous GDP data was low, then the current GDP data will be low, as well as when the previous GDP data is high, the current GDP data is also high. But of course the magnitude of the GDP figure is not only influenced by GDP

itself. The size of the contribution of the MSME sector's GDP is influenced by many other variables, for example the number of exports in the MSME sector, labor, and the number of MSME units. MSMEs have a low contribution to the formation of GDP, but not the case in the creation or absorption of labor. MSMEs have a great ability to absorb labor, the condition is due to the large number of MSMEs scattered from remote to urban areas, but the contribution of MSMEs to GDP is still relatively small [27] [28].

The low contribution of MSMEs to the total GDP nationally is due to the types of MSMEs in Indonesia which are MSMEs that apply conventional technology, so that the products produced are still simple and in small quantities, so that they only provide a small value or contribution to GDP, but this small contribution is not can be underestimated, because the MSME sector is the savior of the economy in this time of crisis. The potential of SMEs to GDP can be described as follows; the contribution of GDP from the large business sector is smaller than the contribution of the GDP from small businesses, while the contribution in general to the potential of small businesses is dominated by the agricultural, trade, hotel and restaurant sectors. GDP from the small business sector is smaller than the GDP contribution from the medium business sector. potential that In general, the contribution of small businesses to GDP is dominated by the agricultural, trade, hotel and restaurant sectors. The large business potential to GDP is dominated by the electricity, gas and clean water sector, the mining and quarrying sector and the processing industry sector. The potential for medium-sized businesses is dominated by the rental and corporate services sector. The government provides a fairly high target for the GDP of the MSME sector. This fairly high target was given because the government believes that Indonesia has a large GDP potential from the MSME sector. [20]

Covid-19 has an impact and threat to Indonesia's economic growth both in terms of consumption and in terms of the business world, as a result the contribution of the business world to GDP has also decreased, from the manufacturing sector 20%, trade 13.2%, transportation 5.2%, accommodation and food and beverage 2.8%, agriculture 2.8%, mining 6.8%, construction 6.7%. The decline in economic growth has an impact on increasing poverty and the number of unemployed. The government continues to strive so that economic conditions do not enter into a very severe scenario. Policy measures for handling economic recovery are directed at the

demand side and the supply side. For the business world, especially MSMEs, the government disburses assistance in the form of interest subsidies of 34.15 T, tax incentives of 28.06 T, guarantees for new working capital loans of MSMEs of 6 T. [15]. The government really hopes that the assistance provided can be targeted and effective in its use, so that the government's goal to increase the contribution of the MSME sector to GDP can be achieved. The subsidies provided are a stimulus that can be used for various things, such as increasing production capacity, increasing product variety, improving product quality from the MSME sector and many other things, so that accumulatively it will give maximum results. An increase in income for MSMEs will further reduce the poverty level [21] because an increase in the income of the Micro and Small Enterprises (UMK) group will lead to an increase in spending, which in turn can reduce inequality between MSME actors. Market, plus if you already have international access.

#### *4.2.2. Export Interdependence to GDP*

From the results of data processing using the *eviews* program, the number of MSME sector exports has an insignificant effect of -1.943196 on the MSME sector GDP, meaning that an increase or decrease in the number of MSME sector exports will not affect the increase or decrease in the MSME sector GDP. This condition may be due to the relatively small export value of the MSME sector so that the impact is not visible. Jakarta, CNN Indonesia - Minister of Cooperatives and SMEs Teten Masduki revealed that there are 3 sectors that promise large export opportunities for Micro, Small and Medium Enterprises (MSMEs). Although full of challenges, MSMEs still have hope and opportunities to increase their business scale through these 3 sectors. "The opportunity to increase exports is still wide open if MSME actors are willing to innovate products and design them with a touch of technology," he said in an official statement, describing the 3 sectors including food and beverage products, fashion, as well as furniture and handicrafts. Currently, he continued, the contribution of MSME exports only reached 14 percent compared to large businesses with a contribution of up to 86 percent of exports. [6]

Commodities that are the mainstay of MSME exports in Indonesia are food, beverage, fashion, furniture and handicraft products. These commodities are commodities whose raw materials are widely available in Indonesia, so the price of raw materials is also relatively cheap. Heckscher Ohlin's theory explains how the mechanism in exports

occurs, that exports occur because a country has abundant resources because this is one of the driving factors in export activities so that a country can compete in the international trade market [14]. In addition to the availability of raw materials, several determinant factors that affect exports include gross domestic product (GDP), production levels, exchange rates, communication facilities, indirect taxes, assistance [1] all of these factors are interdependent factors, meaning that when If one variable changes it will cause the number of exports to also change. Export is one source of income for a country, as well as in other countries in the world. Indonesia has various sectors as a source of exports. Data from the Indonesian Ministry of Trade explained that Indonesia's exports came from the agricultural sector, the manufacturing sector, the mining sector, and other sectors. by 2.66%, mining sector by 9.96%. Manufacturing exports did not have a significant effect on increasing economic growth in upper middle income countries in 2000-2008, so these countries need to develop the non-manufacturing sector which is expected to have an effect on economic growth. [8]

#### *4.2.3. The Interdependence of Micro, Small and Medium Enterprises to GDP*

From the results of data processing using the eviews program, the number of MSMEs has a significant effect of 15.2 on the GDP of the MSME sector, meaning that an increase in the number of MSMEs by 1% will increase the GDP of the MSME sector by 15.2% in the long term. The long-term meaning here is, if all the variables that affect the total GDP of the MSME sector in Indonesia change, then an increase in the number of MSMEs by 1% will increase the total GDP of the MSME sector by 15.2%, meaning more people

## **5. CONCLUSION**

From the results of the VECM analysis, it is found that, in the long term, all variables have a significant effect on GRDP, meaning that, as in the classical theory, in the long term, equilibrium conditions will always be achieved. In the short term, all variables give different results, some have a significant effect but some have a significant effect, as well as the resulting direction, some are in accordance with the theory, but some are not. For example, government spending itself has a negative effect on GRDP, this result illustrates that the expenditure provided has not been effective in increasing GRDP. Variance decomposition

illustrates that in addition to GRDP, another variable that is a contributor to changes in GRDP is government spending, although the resulting changes are not optimal, but they are the result of changes in government spending. The response impulse explains that when a shock is applied to the independent variable, it will have an effect on the dependent variable. . And the variable that gives the biggest shock is government spending, but unfortunately it has not given optimal results. After doing a simulation by increasing government spending by 10 percent, the results of the analysis generally give the same results. For the VECM analysis, it shows that in the long run it has a significant effect on GRDP. In the short term, some variables have a significant effect, but some are not significant.

### **5.1. Limitation**

The limitation of this research is that the data has not been optimally obtained due to the limited research time, furthermore it is hoped that further research can add data, so that the impact of the national economic recovery policy is more real, besides that the variables used are core variables, while many other supporting variables are not used even though able to contribute to national income

## **REFERENCES**

- [1] Ahmad, M. T. majeed and E. Determinants of Exports in Developing Countries. (Winter), 2006, 1265–1276.
- [2] Ari Mulianta Giinting, Analisis Pengaruh Ekspor Terhadap Pertumbuhan Ekonomi Indoensia An Analysis of Export Effect on the Economic Growth of Indonesia PENDAHULUAN Pembangunan ekonomi menurut Todaro dapat teori post neoclassical maka dikenal dengan teori endogenous economic gro. Buletin Ilmiah Litbang Perdagangan, Vol 11, 2017, 1, 1–20.
- [3] Aschauer, D. A. Is public expenditure productive? Journal of Monetary Economics. 1989. [https://doi.org/10.1016/0304-3932\(89\)90047-0](https://doi.org/10.1016/0304-3932(89)90047-0)
- [4] Badan Pusat Statistik. Pertumbuhan Ekonomi Indonesia Triwulan IV-2019. 2020. [www.Bps.Go.Id](http://www.Bps.Go.Id) .
- [5] Brueckner, M., Dabla-norris, E., & Gradstein, M. National Income and Its Distribution.

- International Monetary Fund, WP/14/101. 2014.
- [6] CNN. Tiga Sektor yang Janjikan Peluang Ekspor Besar bagi UMKM. CNN Indonesia. Retrieved from <https://www.cnnindonesia.com/ekonomi/20201009212101-92-556731/tiga-sektor-yang-janjikan-peluang-ekspor-besar-bagi-umkm>
- [7] Damanik, M. R. KEMENKOP UKM SIAPKAN ROADMAP UMKM NAIK KELAS. 2021.
- [8] Dao, M. Q. Exports, imports, government consumption and economic growth in upper-middle income countries. *Progress in Development Studies*, 14(2), 2014. 197–204. <https://doi.org/10.1177/1464993413517791>
- [9] Fitrawaty, F. The Analysis of Inequality on Economic Growth in Indonesia. *Randwick International of Social Science Journal*, 1(3), 2020. 499–512.
- [10] Geremewe, Y. T. The Role of Micro and Small Enterprises for Poverty Alleviation. *International Journal of Research Studies in Agricultural Sciences (IJRSAS)*, 4(12), 2018. 38–47.
- [11] Gujarati, D. N. *Gujarati: Basic Econometrics*, Fourth Edition. 2004. New York.
- [12] Gujarati, D. N., & *Econometrics*, B. As in the previous three editions, the primary objective of the fourth edition of. In New York. 2004. <https://doi.org/10.1126/science.1186874>
- [13] Hanck, C., Arnold, M., Gerber, A., & Schmelzer, M. *Introduction to Econometrics with R*. 2019.
- [14] Hassan, D. N., Aboki, H., & Audu, A. A. International Trade: a Mechanism for Emerging Market Economies. *International Journal of Development and Emerging Economies*, 2(December), 2014. 24–34.
- [15] Kacaribu, F. Media Briefing: Program Pemulihan Ekonomi Nasional. Kementerian Keuangan, 23. Retrieved from <https://www.kemenkeu.go.id/media/15116/media-briefing-kabkf.pdf>
- [16] Keuangan, K. *UMKM Bangkit, Ekonomi Indonesia Terungkit*, (2020).
- [17] Kholis, M. *INVESTASI DI INDONESIA (Suatu Kajian Ekonomi Makro dengan Model VAR)*. *Jurnal Organisasi Dan Manajemen*, volume 12, 2016.
- [18] M. Nasir, Diana Sari, Pengaruh Pengeluaran Pemerintah, Ekspor, Infrastruktur Jalan dan Jumlah Penduduk Terhadap Pendapatan Nasional Indonesia. *Jurnal Ekonomi Dan Kebijakan Publik Indonesia*, 2(2), 2015. 93–104.
- [19] Nelson, Charles R, *National Income. Macroeconomics: An Introduction*, Internet Edition, Chapter 2, 2005. 1–35.
- [20] Nurlinda. *Potensi UMKM Dalam Menyangga Perekonomian Kerakyatan di Masa Pandemi Covid-19: Sebuah Kajian Literatur*. 2020. 160–175.
- [21] Nursini, N. Micro, small, and medium enterprises (MSMEs) and poverty reduction: empirical evidence from Indonesia. *Development Studies Research*, 7(1), 2020, 153–166. <https://doi.org/10.1080/21665095.2020.1823238>
- [22] Padli, Hailuddin, Wahyunadi, Pengaruh Pengeluaran Konsumsi Rumah Tangga, Investasi Swasta dan Belanja Langsung Pemerintah Daerah Terhadap Pertumbuhan Ekonomi di Kabupaten Lombok Timur Tahun 2001-2017. 9(1). 2018, <https://doi.org/10.32639/jiak.v9i1.356>
- [23] Purwanto Antonius. *Potret Tantangan UMKM di Indonesia*. Kompas Pedia, 16 September 2020. Retrieved from <https://kompaspedia.kompas.id/baca/paparan-topik/potret-dan-tantangan-umkm-di-indonesia>
- [24] Sofyan, S. Peran UMKM dalam Perekonomian Indonesia. *Jurnal Bilancia*, 2017.
- [25] Statistik Perdagangan, P. *Perkembangan Ekspor Non Migas*. 2020. Retrieved from [statistikj perdagangan, portal website: https://statistik.kemendag.go.id/indonesia-trade-balance](https://statistik.kemendag.go.id/indonesia-trade-balance)
- [26] Stock, J. H., Watson, M. W., Stock, H., Larsen, E., & *Economy*, P. *Vector Autoregressions*. 15(4), 2001, 101–115.
- [27] Tambunan, T. Recent evidence of the development of micro, small and medium enterprises in Indonesia. 4, 2019.

- [28] Tambunan, T. T. H. Development of micro, small and medium enterprises and their constraints: A story from Indonesia. *Gadjah Mada International Journal of Business*, 13(1), 2011, 21–43.  
<https://doi.org/10.22146/gamaijb.5492>
- [29] UMKM, K. K. Data UMKM (K. K. dan U. RI, Ed.). 2018. Retrieved from <http://www.depkop.go.id/data-umkm>