

Macroeconomic Issues of the Digital Age: The Cashless Economy, Inflation and Consumption

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Abstract — Fiscal and Monetary policies require macroeconomic analysis to look at the consumption instrument, one of them is household consumption as one of the sources of national income, and inflation along with consumption. Knowing and analyzing the effect of cashless payments, digital payment, national income, and inflation in part on consumption. To make a good policy to be economic well-being, we need to conduct deeper research, and the authors have been conducted the research and tried to explain the macroeconomics issues in the digital age. The research data is secondary data in the form of a quarterly time series from 2010 to 2019 with quantitative analysis. The analysis technique used is the Double Linear Regression analysis technique using the Ordinary Least Square (OLS) model. The results showed that the cashless economy and inflation simultaneously affect the consumption in Indonesia.

Keywords — Digital Age; Consumption; Cashless; National Income; Inflation.

1. Introduction

Consumption activities can meet the needs of human life, both in meeting basic needs for food, clothing and boards, others. Consumption expenditure will be felt by every human being from he was born until he died, this means that everyone during his life will continue to fulfill consumption activities. Consumption has an important role to play in human life. The emergence of production activities due to consumption activities, as well as vice versa consumption activities arise due to the existence of production ice pros. In addition, household decisions in consuming can affect economic behavior both long-term and short-term.

The concept of consumption is interpreted as spending done by households on goods and goods, the goal is to meet the needs of humans who do or are often called income expenditures. By summing up the consumption of all human beings in a country, the result is called the expenditure of public consumption in that country. John Maynard Keynes (2013) explained, "A person's consumption is directly proportional to his income".

There is a minimum consumption on household consumption expenditures for these households, namely the amount of consumption expenditure that must be done, even though it has no income at all. Public consumption expenditure is basically triggered by several factors, both quantitative and qualitative. Factors that are quantitative are believed to trigger the state of society in consuming something, namely the amount of income, the price of

goods (which is determined by the amount of inflation that occurs), and others. The factor is a level of education as well as the taste of a consumer (Imron, 2021).

Table 1: Household consumption and growth in Indonesia in 2010-2019

Year	Household Consumption (Billions)	Growth (%)
2010	1.308.274	4,42
2011	1.369.882	4,7
2012	1.442.193	5,17
2013	4.423.417	4,86
2014	4.651.018	5,14
2015	4.881.631	4,95
2016	5.126.308	5,01
2017	5.379.629	4,94
2018	5.651.454	5,05
2019	5.936.400	5,04

Source: Indonesia Statistic, 2021

Table 1 above shows that household consumption increased from 2010-2019. In 2019, the highest consumption expenditure with a growth of 5.04% was due to the increasing number of people also agreeing with increasing society, the purchasing power of the community which promoted high consumer optimism to support increased consumption growth. This situation is in line with the theory that the development of national income tends to increase national income. There are two types of income. First national income, national income is income received

in amount (value listed on money). Both real incomes are amount of incomes that are inflationary with CPI at any given time. Factors that affect public consumption in this study are the development of technology in the form of cashless payments, national income, and inflation rates.

Aside from income that is also a trigger for consumption activities in the community, the development of technology becomes a factor in the occurrence of consumption activities. One of them is cashless payment which is currently an option to transact people in Indonesia. Over time cashless payment has become a reference for almost all people in Indonesia in making transactions. As well as the income that the community or wages received through transfers at the ATM / debit card that they already have. The use of cashless payment will cause someone to be consumptive. Because with easy use makes this cashless payment cause users to forget themselves and continue to shop without knowing the restrictions. From shopping to using a variety of services that can be done offline or online, many people prefer to use cashless payment rather than cash if they are everywhere. Because how to use it easily as a means of payment, but in practice it actually makes someone more wasteful and consumptive. This is true if there is an increase in goods and services in the event of inflation someone will still shop or transact using credit cards. Then there will be consumptive nature in one person. Along with the development of increasingly advanced technology, changes in the payment system are growing. One of them is to transact electronic cards.

Technological advances in payment systems are shifting the role of cash as a means of payment and replacing it with the use of cashless payments more efficiently and economically (Pramono, 2016). Cashless payment is made for the convenience of the community in transacting. Where it used to be if we want to transact, we have to meet directly with the parties who will be invited in the transaction, but with this cashless payment we can

reduce costs, or get practicality in transacting. Where in this case banks are racing to innovate on electronic payment systems, namely by issuing debit cards, ATM cards, credit cards, *smart cards*, e-money, and others. ATM cards and debit cards have almost the same meaning, namely a means of payment by using a card used to make cash withdrawals and or transfer funds where the cardholder's obligations are fulfilled immediately by reducing deposits. Cards at banks or institutions other than banks that can collect funds.

The role of the payment system by using the card will increasingly a development for the economy in a country. The effect of the development of payment technology on monetary policy depends on people's preferences in determining what means of payment to use in transactions (Pramono, 2016). Along with that, Bank Indonesia in 2006 had a work program theme aimed at improving the non-cash payment system with instruments of payment development using cards. This is done to reduce the cash circulating in the community. As well as encouraging the creation of a safe, efficient, and reliable payment system for the community, to improve the national economy better and reduce the cost of printing money circulating in the community.

Along with the pace of cashless payment is growing rapidly, the increase in cashless payment can spur economic activity and can even affect economic development in a region or country. Considering cashless payment has benefits that are quite practical, efficient and quite safe when transacting in large enough quantities and in line with the objectives of Central Bank that wants to realize *less cash society* (non-cash society) and encourage the community to be more using cashless payment, which is useful in reducing bribery and money laundering (*money laundering*). Cashless payments in Indonesia are circulating continues to increase in number. This can be seen in the development of the amount of cashless payment in the last ten years in table 2.

Table 2. Development of the Number of Cashless Payment Outstanding in Indonesia In 2010-2019 (in millions of IDR)

Year	Amount of Debit Card Transaction (millions of IDR)	User Frequency	Amount of Credit Card Transaction (millions of IDR)	User Frequency
2010	1.812.075.881	2.001.853.202	199.036.427	163.208.491
2011	2.679.647.157	2.931.403.471	245.867.456	215.324.143
2012	2.824.108.310	3.065.080.042	221.579.851	201.840.735
2013	3.797.370.438	3.510.208.660	223.369.577	239.098.519
2014	4.445.073.437	4.077.696.164	255.057.458	254.320.061
2015	4.897.794.435	4.574.387.633	280.543.930	281.325.840
2016	5.623.912.646	5.169.512.452	281.020.518	305.052.297
2017	6.201.437.636	5.693.226.552	297.761.229	327.377.665
2018	6.929.665.962	6.412.272.532	314.294.067	338.347.867
2019	7.474.823.816	7.026.962.690	342.682.828	349.211.920
Total	50.703.106.874	50.009.675.604	3.139.867.222	2.991.673.130

Source: Bank Indonesia, 2021

Table 2 explains that the use of non-cash payment systems is increasingly in demand by many people, can be seen from the frequency of transaction use every year increasingly increasing. As in the last two years, namely in 2018 to 2019, amount of debit card / ATM transactions from 6,929,665,962 million increased in 2019 to 7,474,823,816 million, experiencing an increase in the frequency of transaction users by 545,157,854 million. This shows that people to prefer to transact using cashless payment. Changes that occur in the volume of transactions can be used to see the economic development of Untoro et al (2014). Cashless payment based on previous research has a positive impact which means that if cashless payment increases it can reduce transaction costs, money exchange activities will also be faster so that it will spur higher productivity. Finally, it affects output and will also affect the consumption of Indonesian people.

Inflation is one of the economic phenomena that can occur in developing countries such as Indonesia. Inflation is a continuous increase in the price of coal that can result in a substitution effect. Someone will reduce his expenditure on something that is expensive and increase his expenditure on something that is cheap. This causes people to switch to the UK to consume from one goods to another, high inflation will reduce people's purchasing power towards a good and service. There are several factors that cause the author to examine household consumption more deeply. First, concussion house becomes one of the sources of income of national income. Second, household consumption can determine fluctuations in economic activity in a country. The purpose of this study is to know and analyze cashless payments, national income, and inflation simultaneously on consumption, and to know and to analyze the effect of cashless payments, national income, and partial inflation on consumption.

2. Research Methods

This research is one type of quantitative research because based on quantitative data or findings that are achieved are used with statistical procedures or other means of quantification (Sugiyono, 2013). This research was created using an associative paradigm whose purpose is to find out the relationship of two variables or more (Rahyuda, 2014). In this study, associative stingy is used to determine cashless payments, national income, and inflation against consumption in Indonesia.

The data sources in this study used secondary data. Secondary data is data collected and processed by other parties (Sugiyono, 2013). Secondary data is data obtained from the second source (Bungin, 2011). Secondary data on this study was obtained from the results of the official publication of the Central Agency of Indonesia, Bank Indonesia and literature books on cashless payments,

national income, inflation, and consumption in Indonesia. The method of collecting data for this study is to use secondary data obtained from data that has been published by Bank Indonesia through the official website on the internet. The data collected is then organized, arranged, and then presented in the form of numbers whose purpose is to get a clear picture of the set of data. This analytical technique for the research is a multiple regression technique. Multiple linear regression analysis techniques aim to determine the relationship of a dependent variable (Y) with two or more independent variables (X1, X2, X3, Xk). (Wirawan, 2017). The double linear regression analysis technique in this study was created in the following equation forms:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu \quad (1)$$

Information:

- Y = consumption
- α = constant
- X1 = cashless
- X2 = national income
- X3 = inflation
- $\beta_1, \beta_2, \beta_3$ = coefficient X1, X2, X3
- μ = confounding variable

The relationship between a dependent variable and an independent variable is shown in the following figure.

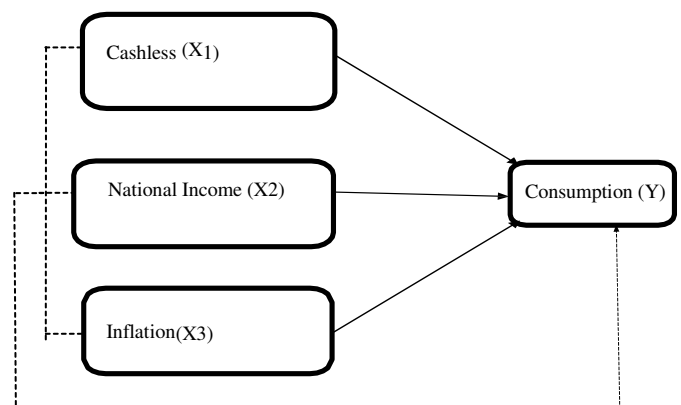


Fig. 1: Conceptual Framework for Analysis of the Effect of Cashless Payment of National Income and Inflation on Consumption in Indonesia

3. Result and Discussions

3.1 Descriptive Statistical Results

Descriptive statistical analysis in this study to analyze a data by describing the collected data seen from minimum, maximum, average(*mean*), and standard deviation. The results of the study was analyzed using the statistical tools, SPSS 26 which can be seen in Table 3 as follows.

Table 3. Results of Descriptive Statistical Analysis

	N	Mini mum	Maxi mum	Mean	Std. Deviation
Cashless	40	390.95	589.13	496.3912	11.00717
National Income	40	503.68	595.65	543.0015	12.13092
Inflation	40	2.17	8.82	4.9340	1.78000
Consum ption	40	294.95	385.65	366.8240	11.05208
Valid N (listwise)	40				

Based on the results of descriptive statistical analysis shown by Table 4.1 that the consumption variable has a minimum of 294.95 and a maximum value of 385.65 with an average value of 366.8240 and a standard deviation of 11.05208. cashless payment has a magnitude of 390.95 and a standard deviation of 589.13 with an average value of 469.3912 and a standard deviation of 11.00717. Variable of national income has a minimum value of 503.68 and a maximum value of 595.65 with an average value of 543.0015 and a standard deviation of 12.13092, and inflation variables have a minimum value of 2.17 and a maximum value of 8.82 with an average value of 4.9340 and a standard deviation of 1.78000. Multiple Linear Regression Analysis

From the results of the data process using SPSS 26 can be created multiple linear regression equations as follows:
 $\hat{Y} = 2,780 + 0.880X_1 + 0.800X_2 + 0.457X_3$

3.2 Statistical Test Results

3.2.1 F-Test

The F test is conducted to find out whether the variables of cashless payment, national income, and inflation have a significant effect simultaneously on the consumption variable. The results of the hypothesis test are simultaneously shown in table 4.

Table 4: Determination Coefficient Test Results (Model Summary^b)

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 ^a	0.763	0.839	1815.837

- a. Predictors: (Constant), X3, X1, X2
b. Dependent Variable: Y

F-test results show that the value of *R-square* is quite high = 0.839 which means that the consumption variable can be explained 83.9% of variables cashless payment, national income, and inflation.

3.2.1 t-Test

The t test aims to determine the effect of a husband's income, education level, and the number of family dependents partially on a woman's decision to work. The results of the t test on each free variable are shown at Table 5.

Table 5. t-Test Results (Coefficients^a)

Type		Unstandardized Coefficients B	Std. Error	Standardized Coefficients	T	Sig.
1	(Constant)	2.780	.008		3.186	.000
	Cashless	.880	.168	.415	4.712	.000
	National Opinion	.800	.282	.336	2.487	.016
	Inflation	.457	.143	.255	2.572	.012

a. Dependent Variable: Y

Table 5 obtained the results of the calculation of cashless payment variables obtained the value of t-calculated > t-table which is $4.712 > t(0.05,36) = 1.68830$ with a significance level of $0.000 < 0.05$ therefore H_0 is rejected and H_1 received this means the cashless payment positive and significant impact on consumption in Indonesia. Furthermore, the results of the calculation of national income variables obtained a value of t-calculated > t-table which is $2.487 > 1.68830$ with a significance level of $0.016 < 0.05$ therefore H_0 is rejected and H_1 received this means national income has a positive and significant effect on consumption in Indonesia. Aside from non-cash

transactions and national income, the results of the calculation of inflation variables are called the value of t-calculated > t-tables of $2.572 > 1.68830$ with a significance rate of $0.012 < 0.05$ therefore H_0 is rejected and H_1 is accepted which means inflation has a positive and significant effect on consumption in the country. Indonesian.

From the results of the analysis of data with using SPSS 26, it was found that the variable cashless payment (X1) has a positive regression coefficient value of 0.880 with a significance value of 0.000. Positive regression coefficient value and significance value < 0.05 indicates

that cashless payment has a positive impact and partially significant to consumption in Indonesia. The results are believed that the higher the cashless payment activism seen from the development of cashless payments, the higher the consumption of the community will rise as well. These results are in line with the hypothesis in this study that cashless payment has a positive and significant effect on consumption in Indonesia

The results of this study are strengthened by the results of Miftahul and Eddy (2019) research that explains that Cashless payment have a positive and significant effect on public consumption. This result is also corroborated by the theory of the hypothesis of living cyclical. Franco Modigliani explained that a person's consumption expenditure patterns are influenced by the times in his or her life cycle. Because most young people tend to spend more money compared to saving their income. In addition, Simarmata (2015) in his research mentioned that the theory of Technology Acceptance Model (TAM) was first initiated by Davis in 1986 through his research. TAM is a theory that explains the interest in behaving in using technology.

From the theory that the use of Cashless meets the perception of usefulness that explains the extent to which humans believe that by using technology, their job performance will increase. From this, the use of cashless payment will facilitate one's activities in a transaction and from this ease comes consumptive nature in humans. Therefore, the higher the use of Cashless payment, the higher the consumption of the community due to their lifestyles that have changed rapidly with the rapid development of technology.

Based on the results of the data analysis in this study, it was found that the national income variable (X2) has a positive regression coefficient value of 0.800 with a significance level of 0.016. The positive regression coefficient value and the p-value is of < 0.05 indicate that national income has a positive and partially significant effect on consumption in Indonesia. The result has if the higher the national income it will higher the consumption of the people. This has been in line with the hypothesis in this study is that national income has a positive and significant to consumption in Indonesia.

It has also been adapted to Keynes's theory of consumption, which is noted, if the greater a person's income, the greater the consumption expenditure. These results are in linewith the results of Kusuma's research in 2018 entitled "Analysis of Factors That Affect Consumption Expenditure in Indonesia in 1988-2015" using the ECM method (*Error Correction Model*) which states that the national agreement is positive and significant to the consumption. In line with research conducted by Arsad Raghandi (2012), Siregar (2019), Nurhayati dan Rachman

(2013) in his research stated that national income affects consumption. The increase in national income resulted in an increase in public consumption this is due to human dissatisfaction with consumption activities.

Aside from cashless payment and national income, there are also positive and significant influences from inflation on consumption in Indonesia. Based on the results of the t test, it was found that the inflation variable (X3) has a regression coefficient value of 0.457 with a significance level of 0.012. The value of the positive regression coefficient and the significance level of < 0.05 is calculated if inflation has a partially significant positive effect on consumption in Indonesia. These results mean that if there is a high inflation, the higher the consumption of the community. This is contrary to the hypothesis of this study that inflation has a negative and significant effect on consumption. However, this research is strengthened by the results of research conducted by Nurhayati and Rachman (2013), Kusuma (2018), and Arsad Aghandi (2012) who explained if inflation positive impact on consumption in Indonesia. Inflation has a positive effect on people's consumption because people who have adjusted their needs to the existing price level where the increase in inflation is caused by the high level of people's purchasing power. The price increase becomes a problem for the community, but the people inevitably must keep shopping.

In this study has results that are in line with research conducted by several previous researchers such as researcher conducted by Susanti (2010), Anwar (2011), Syahrudin (2011), Nurhayati and Rahman (2013), Kusuma (2018) and Siregar (2019), Arsad (2012), Miftahul (2019), where their research states that cashless payment, national income, and inflation have a significant effect on consumption. This result is also reinforced by the hypothesis theory of lifecycle. Franco Modigliani explained that a person's consumption expenditure is influenced by the times in his life cycle. Because most of the young people tend to spend their income rather than save their opinions. With the development of technology, one's income is no longer obtained in the form of cash or cash but has changed into card or *cashless* form.

With easy use makes this cashless payment often make a person forget themselves and continue to be shopping without knowing the restrictions. Therefore, more people like to use cashless payment than cash if they are everywhere. Considering how to use it is easy and practical, but actually

In practice, it makes humans more wasteful and behave consumerist. For example, if at first someone does not want to shop because they do not have enough money. However, with a credit card the person will choose to shop. This also applies if there is an increase in the price of good

and services or when there is inflation someone will still shop or transact using a credit card. Because of that someone will find it increasingly difficult to control the refrain of not shopping constantly and that in the end becomes a consumptive human behaving consumptively. The increase in inflation will go hand in hand with the increase in public consensus.

4. Conclusions and Suggestions

Based on the results of the data analysis and description described earlier, it can be concluded as follows: Cashless payments, national income, and inflation simultaneously and partially have a significant effect on consumption in Indonesia.

Based on the conclusions above, it can be put forward some suggestions in this research as follows: Cashless payment provides convenience and benefits for the people who use it. This can be an opportunity for Bank Indonesia in increasing innovation and services in realizing the National Non-Cash Movement. For the government should conduct supervision and control of the use of credit cards with the establishment of maximum individual rules for the use of credit cards and the number of credit cards to be issued by banks. Because consumption is a contributing factor to national income and the driver of economic growth in a country, the government should be able to create programs that can spur people's consumption patterns and be able to increase people's purchasing power, on the other hand the government is able to control the inflation rate where consumption patterns are Society must be regulated so as not to create a consumptive society that can cause inflation to rise.

References

- [1] Adiana, Pande Putu Erwin. 2012. Analysis of the Influence of Income, Number of Family Members, and Education on Consumption Patterns of Poor Households in Gianyar Subdistrict. Thesis. Denpasar: *Faculty of Economics Udayana University*.
- [2] Agus, Widarjono. (2019). Introductory etrika economist and its Application. Third edition. Ekonesia. Yogyakarta.
- [3] Arsyad, Lincoln. (2010). Economic Development. Yogyakarta: UPP STIM YKPN
- [4] Bank Indonesia. (2016). Impact of Non-Cash Payments on the Economy and Monetary Policy. Jakarta: Bank Indonesia.
- [5] Bank Indonesia. (2016). Perception, Preferences and Behavior of the Community and Service Provider Institutions towards Payment of Non Tunai. Bank Indonesia Payment System.
- [6] Bank Indonesia. (2020). Number of cashless payment Circulating in Indonesia in 2010-2019. Jakarta: Bank Indonesia.
- [7] BPS. (2020). Amount of Consumption Growth in 2010-2019. BPS Indonesia.
- [8] David, B Humprey. (2010). Payment Systems: Principles, Practice, and Improvement. Washington, D.C.: The World Bank, No. 263.
- [9] Dornbusch, Rudiger and Stanley Fischer. (2007). Macro Ekonomi. Mulyadi J Language Transfer, Jakarta: Erlangga.
- [10] Dumairy. (2006). Jakarta: Publisher Erlangga. Humprey, David B. (2005). Payment Systems: Principles, Practice, and Improvement. Washington, D.C.: The World Bank, 2(3) No. 1657.
- [11] Hatane, Samuel. (2015). Analysis of the Effect of Inflation, Interest Rates, and Exchange Rates on Gross Domestic Product (GDP) in Indonesia. Surabaya: Petra Christian University.
- [12] Kandel, Shmuan., Ofer, Aharon R. & Sarig Oded. (2016). Real interest rates and inflation: An ex ante empirical analysis. *The Journal of Finance*. 6(9), pp. 1-23
- [13] Kuncoro, Mudrajat. (2016). Economic Development. Publisher: Salemba Empat, Jakarta.
- [14] Lind, Douglas A, William G. Marhal and Samuel Adam Wathen. 2014. Basic Statistics for Business and Economics. Edition 5. England: McGraw-Hill.
- [15] Listfield, R and F. Montes-Negret. 2004. Modernizing Payment System in Emerging Economies. World Bank Policy Research Working Paper.
- [16] Mankiw, n. Gregory. (2020). Macroeconomics: 9th Edition. Pent. Fitria Liza and Imam Nurmawan. Jakarta: Publisher Erlangga.
- [17] Mardiasmo. (2019). Public Sector Accounting. Yogyakarta: ANDI.
- [18] Michael, James. (2011). Economic Development in the Third World. Jakarta: Ghalia.
- [19] Nugroho, Anton. (2018). Factors Affecting Consumer Interest In Electronic Money Usage With Theory Of Planned Behavior (Tpb). Bogor: Master of Management and Business, Business School Bogor Agricultural University, 3(2), p. 15-27.
- [20] Oyewole, Oginni Simon, J., Abba, M., & Onuh, M.E. (2013). Electronic Payment System and Economic Growth: A Review of Transition to Cashless Economy in Nigeria. *International Journal of Scientific Engineering and Technology*, Vol. 2, (No.9), pp. 23-34
- [21] Pohan, Aulia. (2018). Monetary Policy Framework and Its Implementation in Indonesia. Jakarta: PT Raja Grafindo Persada.
- [22] Pramono, Bambang, Tri Yuniarti. (2016). Impact of Non-Cash Payments on the Economy and Monetary Policy. Working Paper Bank Indonesia, 3(2), p. 145- 170.
- [23] Rahyuda, I. K. (2014). Methodological Research. Denpasar: Faculty of Economics Udayana University.
- [24] Ramadani, Laila. (2012). Effect of the Use of Debit Cards and Electronic Money (E- Money) on Student Consumption Expenditure. *Journal of Economics and Development Studies*. Vol. 8, No. 1, pp. 1-8.
- [25] Bank Indonesia. (2016). Perceptions, Preferences and Behaviors of the Community and Service Provider Institutions towards Non-Cash Payment System Payments. Bank of Indonesia.
- [26] Sugiyono. (2018). Business Research Methods, Bandung: Alfabeta.
- [27] Sivasakthi, N. R. & Nandhini, M. (2017). Cashless Transaction: Modes, Advantages and Disadvantages. *International Journal of Applied Research*, 3(1), 122-125.
- [28] Sugiyono. (2017). Quantitative, Qualitative, and R&D. Bandung Research Methods: Alfabeta.
- [29] Sukiaty. (2016). Research Methodology, Medan: Perdana Publishing.
- [30] Sukirno, Sadono. (2019). Modern Macroeconomics. Jakarta: PT. King Grafindo Persada.
- [31] Suparmoko. (2015). Quantitative Research Methods of Theory and Application on Research in the Field of Islamic Management and Economics. Jakarta: Prenada Media Group.
- [32] Todaro, Michael P. and Stephen C. Smith. (2020). Economic Development (11th Edition) Volume 1. Jakarta: Publisher Erlangga.
- [33] Wildan. (2021). Macroeconomic Factors Affecting Natural Gas Export Management. *International Journal of Energy Economics and Policy*, 2021, vol. 11, issue 1, 639-644
- [34] Imron, M. A. (2021). Economy in Times of Crisis: An Economic Analysis of the Energy Policy during COVID-19 Pandemic. *International Journal of Management Research and Social Science (IJMRSS)*, Volume 8, Issue 2, April – June 2021, pp. 85-90. DOI: 10.30726/ijmrss/v8.i2.2021.82011
- [35] Untoro, Priyo, and Arifin. (2014). Use of Payment System Instruments as Leading Macroeconomic Indicators. Jakarta: Bank Indonesia, 3(8), p. 185-189.
- [36] Waluyo. (2013). Taxation of Indonesia. Jakarta: Salemba Four.
- [37] Warjiyo, Perry., and Solikin. (2013) monetary policy in Indonesia. Jakarta: PPSK BI.