



ANALYSIS OF MONETARY INDICATORS DURING THE COVID-19 PANDEMY IN CIVITAL COUNTRIES (China, Indonesia, Vietnam, India, Thailand)

Rowiyah Asengbaramae¹, Rahul Ardian Fikri²

¹Financial Economics and Banking Dept., Fatoni University, Thailand

²Law Dept., Universitas Pembangunan Panca Budi, Indonesia

rowiyah1723@gmail.com¹, rahulardian@dosen.pancabudi.ac.id²

Abstract

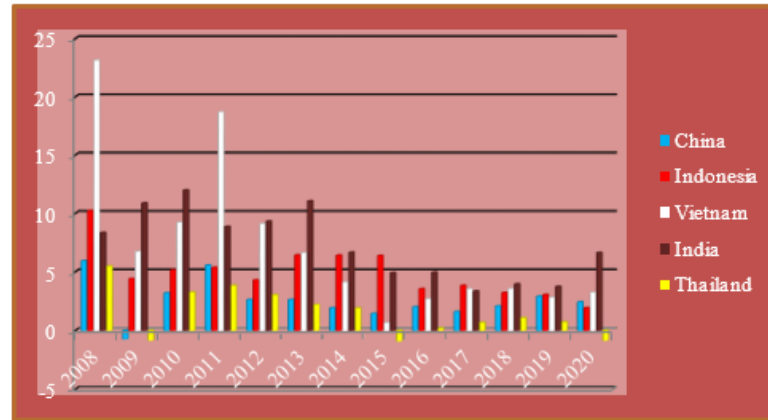
Inflation has become a major problem in the economy. The Indonesian government often uses a tight money policy by raising interest rates. Therefore, the interest rate becomes important, because it can be used to analyze inflation expectations. This study aims to analyze the contribution of variables from the interaction of monetary variables with macroeconomics. Where is the monetary policy variable (inflation, exchange rate, money supply, and interest rate). Then macroeconomics (GDP). This study uses secondary data or time series, namely from 2008 to 2020. The data analysis model in this study is the Simultaneous model, and the ARDL Panel. Simultaneous analysis results show that the exchange rate variable is significant to inflation, while the money supply and interest rate variables are not significant to inflation. The inflation variable has a significant effect on the exchange rate while the GDP variable has no significant effect on the exchange rate. Then the results of the ARDL Panel show that only Indonesia and Thailand are able to become leading indicators for the stability of the inflation rate, this is because all the variables or indicators in the study (exchange rate, GDP, money supply, interest rates) have a significant effect. against inflation. Suggestions in this study, namely to reduce or maintain the inflation rate so that it is at the level set by Bank Indonesia, it is better if Bank Indonesia, as the holder of the highest authority in monetary policy, must keep the BI rate at the right level in accordance with the level of inflation that occurs, so that the money supply in the community is maintained and does not cause inflation. And for the government, namely Bank Indonesia, to suppress the rate of inflation in implementing domestic monetary policy.

Keywords: Exchange Rate, Inflation, Monetary Policy

INTRODUCTION

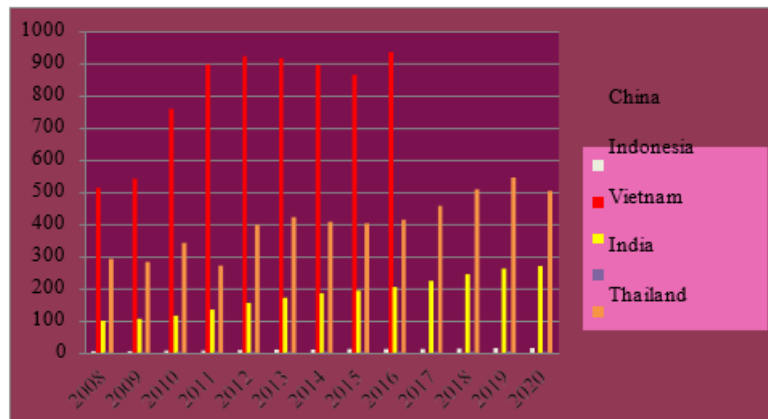
The effectiveness of monetary policy can be improved through effective communication, especially in conditions of increased uncertainty. Bank Indonesia as a monetary authority can only directly influence short-term interest rates, while long-term interest rates are more determined by expectations of future monetary policy that can be directed through policy communication. To manage and influence the development of the economy so that it can take place properly and stably, the government or monetary authorities usually take steps known as macroeconomic policies. The essence of the policy is basically to manage the demand side and supply side of an economy in order to lead to an equilibrium condition with a good level of economic growth. Monetary indicators provide monthly monetary data/statistics that are used to determine the development of monetary quantities in a concise and fast manner. Monetary indicators consist of primary money, net foreign position of the central bank, net domestic assets of the central bank, as well as foreign exchange reserves, Inflation rate, BI rate, money supply (JUB) and rupiah exchange rate against USD. The need for data/statistics and other monetary descriptions/explanations is available in Publications and Statistics presented on the Publications menu and Statistics menu.

Inflation rate of a country is one of the important variables of concern in the economy. Mitchel (1981) stated that erratic monetary and fiscal policies result in highly variable Inflation rates and cause Inflation uncertainty about future Inflation rates. Previous research explains how Inflation rate and Inflation uncertainty are interconnected. Inflation as a monetary phenomenon suggests that monetary policy has an important role in controlling the inflation rate. Based on the different views of Friedman (1977) and Cukierman Meltzer (1986) on Inflation uncertainty, as well as the important role of monetary policy in controlling Inflation, this study also discusses the effect of monetary variables and Inflation uncertainty on Inflation.



Source: data.worldbank.org

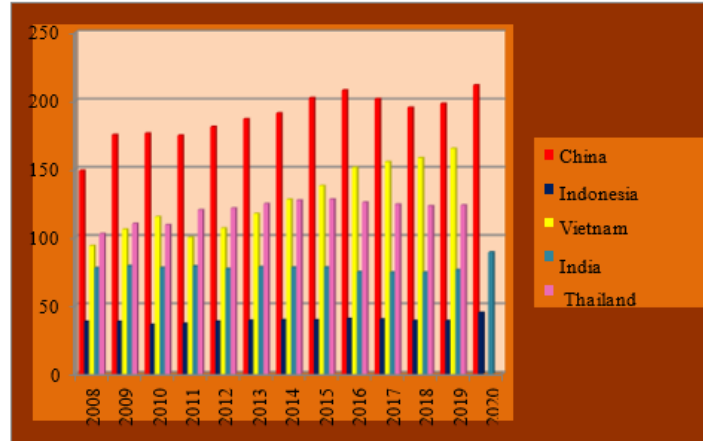
Figure 1. The Inflation of CIVIT Countries



Source: data.worldbank.org

Figure 2. The GDP of CIVIT Countries

There was a decline in GDP growth in the CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries in 2008. This decline was caused by the unclear global financial turmoil. The crisis experienced by the United States is referred to as the global economic crisis that affects the world economy. The impact of the global financial crisis will be different in each country, this is because each country has different policies and economic fundamentals. The decline in GDP levels will also reduce interest rates in CIVIT Countries. Muqrobi (2012) states that GDP has a positive influence on nominal interest rates and real interest rates, meaning that a decrease in GDP will also result in a decrease in interest rates.



Source: data.worldbank.org

Figure 2. The Money Supply of CIVIT Countries

There are various fluctuations in the development of money supply in CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries. The increase in 2008 occurred due to the impact of rising inflation as a result of the global economic crisis, thus making people more consumptive in buying goods or services. Mankiw (2006) states that countries that have high money growth will have high inflation rates as well, but conversely if countries have low growth rates will have low inflation rates as well.

Inflation rate shows diverse fluctuations from 2008-2020 in CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries which is the problem of this study, therefore the author determines the title "The Effectiveness of Monetary Policy during the Covid-19 Pandemic in CIVIT Countries (China, Indonesia, Vietnam, India, Thailand)".

LITERATURE REVIEW

Monetary Policy According to Nopirin (1987) monetary policy is one of the factors that can affect economic activity. There are many other factors that can affect economic activity but these factors are beyond the control of the government. Monetary policy is a factor that can be controlled by the government so that it can be used to achieve economic development goals. Monetary policy is conducted by the central bank to influence the money supply and credit, which in turn will affect the economic activities of the community. The effect of the amount of money in circulation on society is regulated by increasing or decreasing the money supply.

Following the IMF program (targeting regime, the Bank set domestic money supply targets using a financial programming approach in order to ensure macroeconomic consistency as well as to achieve the ultimate objectives of sustainable growth and price stability. The Bank would set quarterly monetary base and day-to-day targets, upon which daily liquidity management was based, the Bank conducted a broad reassessment of both the domestic and external environment and concluded that money supply targeting would be less effective than inflation targeting. The main cause of the change is that the relationship between money supply and output growth has become less stable over time, especially since the financial crisis.

Gross Domestic Product (GDP) is divided into two, namely nominal GDP (or GDP at current prices) and real GDP (or GDP at constant prices). Nominal GDP represents the value added of goods and services calculated using prices prevailing in each year. Nominal GDP does not reflect true economic prosperity, as it does not show the real availability of goods and services needed by consumers, companies, and the government. Real GDP, on the other hand, shows the value added of those goods and services calculated using the prices prevailing in a given year as the base. Real GDP is better than nominal GDP for measuring economic prosperity because it calculates expenditure on goods and services and will not be affected by price changes. GDP at current prices can be used to see shifts and economic structure, while constant prices are used to determine economic growth from year to year (Mankiw, 2007).



RESEARCH METHODS

Simultaneous equation where there are two equations in which to identify a simultaneous equation in this study using the Two Stage Least Square (TSLS) approach because it is to determine the level of correlation and influence that occurs in the model. The TSLS method is a commonly used method for estimating simultaneous equations. This method is used when the simultaneous equation model is overidentified (Widarjono, 2009). According to Gujarati (2012) the TSLS method is specifically made for overidentified models, but can still be used for correctly identified equations. But when it is, the result of TSLS is identical. The basic idea of TSLS is to replace stochastic endogenous variables with a linear combination of variables specified in the model. Thus forming an instrumental variable method where in the estimation the predetermined variables will act as instruments or proxies for the endogenous variables.

$$\text{Equation 1: } \text{LOG(INF)} = \text{C(10)} + \text{C(11)} * \text{LOG(JUB)} + \text{C(12)} * \text{LOG(SB)} + \text{C(13)} * \text{LOG(KURS)} \epsilon 1$$

$$\text{Equation 2: } \text{LOG(KURS)} = \text{C(20)} + \text{C(21)} * \text{LOG(PDB)} + \text{C(22)} * \text{LOG(INF)} \epsilon 2$$

Table 1. The identification test

Eq.	Variable	K-k ... m-1			
1.	INF (Pers. I)	3-3	1-1	0=0	<i>exact identification</i>
2.	KURS (Pers. II)	3-1	1-1	2>1	<i>over identification</i>

After regression testing, an evaluation is carried out. This evaluation is intended to determine whether the use of multiple linear regression models in analyzing has met the required classical assumptions. The classical assumptions used in this study are as follows: (1) The normality test; (2) The Multicollinearity test; (3) The autocorrelation test.

RESULTS AND DISCUSSION

As currently the global economic conditions are being shaken by the Covid-19 pandemic which comes suddenly without being able to be predicted beforehand. Thus, the impact of the spontaneity of this pandemic has damaged many economic foundations that had previously been built to strengthen the economy of each country in the world. Whereas previously the world economy was also being shaken by the negative effects of the US and China trade wars. Likewise, the CIVIT countries (China, Indonesia, Vietnam, India, Thailand) are also adversely affected by the pandemic itself. CIVIT countries (China, Indonesia, Vietnam, India, Thailand) are also countries with the highest number of Covid-19 cases in April 2021.

Thailand is an emerging Asian economy with one of the lowest unemployment rates in the world due to its agricultural sector, and it doesn't take long for Thailand's unemployed to end their gloom. In 2017, Thailand's economic outlook has improved. Growth is expected to be 3.9 percent in 2017, the fastest pace since 2013. But the base for this growth is not yet broad enough. According to the IMF in its latest annual assessment, to ensure growth that benefits everyone the country needs to implement key reforms to boost domestic demand and prepare for the impact of a rapidly aging population. as the IMF expects that Thailand's growth momentum will continue in 2018 and 2019. Strong growth in tourism and exports of manufactured goods, such as automobiles, are expected to maintain this momentum. Investment and consumption, which have been weak, are projected to recover only gradually. Tourism has been one of the main drivers of growth and a large part of Thailand's current account surplus, which reached 10.6% of GDP in 2017.

However, in 2019 Thailand's economic growth slowed down again. This was caused by the US and China trade war that suppressed exports, as well as the strengthening of the baht currency that made tourism sluggish. Thailand as one of the Emerging market countries whose economy is supported by the tourism sector is certainly very shaken by this trade war as its largest tourists are Chinese citizens. Economic growth reached 2.3% in the second quarter of 2019 and 2.8% in the first



quarter of 2019.

Thailand's economy has been hit hard by the disruption in the flow of goods due to the trade war, as the country is one of the Emerging Market countries whose economy is highly dependent on exports. However, the impact of the storm that hit the economy before is still felt, now Thailand must also face the next storm. The tourism sector is the only sector that has managed to lift the Thai economy. However, the sector was hit again by the covid 19 pandemic storm. Thailand still maintains its 2020 GDP growth projection of 1.9%. This is a reflection of Thailand's prediction that the economic slowdown will continue into 2020 as a result of the Covid-19 outbreak. The Bank of Thailand (BoT) predicts that it will cut the benchmark interest rate again, even though earlier this month the BoT had cut interest rates to a record low of 1%.

1. Normality test

To test the normality of the data, the Jarque- Bera test is used. The criteria used are if the probability value of the Jarque-Bera (JB) test $> \alpha 0.05$, then the data is said to be normal. In the table it is known that the probability value is $0.0000 < 0.05$ so that the normality assumption is not met.

2. Autocorrelation test

Based on the results of df is degrees of freedom for (approximate) chi-square distribution, it is known that the prob Q-Stat value on all indicators (0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000, 0.0000) < 0.05 , so all indicators of the movement of lags from time to time do not show an autocorrelation effect in the movement of data, so the data is declared not free from Autocorrelation problems.

$$\text{Equation 1: } \text{LOG(INF)} = C(10) + C(11) * \text{LOG(JUB)} + C(12) * \text{LOG(SB)} + C(13) * \text{LOG(KURS)} + \epsilon_1$$

$$\text{Equation 2: } \text{LOG(KURS)} = C(20) + C(21) * \text{LOG(PDB)} + C(22) * \text{LOG(INF)} + \epsilon_2$$

Equation 1: Prob JUB (0.5423) > 0.05 then not significant Prob SB (0.1733) > 0.05 then not significant Prob KURS (0.0384) < 0.05 then significant. Based on the estimation results, it is known that one variable is significant to INF, so H1 is accepted. This means that KURS has a significant effect simultaneously on INF.

Equation 2: Prob GDP (0.4173) > 0.05 then not significant Prob INF (0.0095) < 0.05 then significant. Based on the estimation results, it is known that one variable is significant to KURS, so H1 is accepted. This means that INF has a significant effect simultaneously on LESS.

Based on the overall results, it is known that the significant long-term variables affecting inflation in CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries are LESS, GDP, and SB. Then in the short term that affects inflation there are no variables that affect. Leading indicators of variable effectiveness in controlling stability in CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries seen from the stability of the short run and long run, where the variables of KURS, GDP and SB in the long run significantly control economic stability. While in the short term there are no significant variables in controlling economic stability. Leading indicators of the effectiveness of the state in controlling inflation stability CIVIT (China, Indonesia, Vietnam, India, Thailand) Countries, namely China (Money Supply and Interest Rates), Indonesia (Exchange Rate, GDP, Money Supply, and Interest Rates) while Vietnam (GDP, Money Supply and Interest Rates). India (Exchange Rate, Money Supply and Interest Rate), Thailand (Exchange Rate, GDP, Money Supply and Interest Rate). In the panel, it turns out that the country that is able to become a leading indicator for inflation stability is the Exchange Rate, GDP, Money Supply, and Interest Rates are also able to become a leading indicator for the control of China, Indonesia, Vietnam, India and Thailand, but its position is not stable in the short run and long run.

Discussion

The JUB variable shows a negative sign and has no significant effect on INF. The coefficient value of the JUB variable shows a negative sign, which means that if the JUB increases, it will reduce the INF level in CIVIT Countries, which this research is not in accordance with Hesti's research, (2021) which states that too much money supply can push up the price of goods in general (inflation). Conversely, if the money supply is too small, economic activity will recede.



The SB variable has a negative relationship and has no significant effect on INF. The coefficient value of the SB variable shows a negative sign. This means that if SB increases it will reduce the value of INF in CIVIT Countries which this study is in accordance with Marseto's research, (2014) which states that the SBI interest rate has no real effect (insignificant) on the level of Inflation. This is due to the rise and fall of inflation which is temporary and is only caused by certain situations and conditions such as the fasting month, Eid and the increase in the Consumer Price Index.

The LESS variable has a positive relationship and a significant effect on INF. The coefficient value of the LESS variable shows a positive sign. This means that if the RURSE increases, it will increase the INF level in CIVIT Countries, which this research is not in accordance with Suhesti's research, (2018) which states that the high level of inflation results in depreciation of the exchange rate because a high level of inflation will cause an increase in demand for foreign exchange rates. Theodoros, (2014) states that if the rupiah COURSE rate depreciates against the US Dollar, then Inflation will increase.

Based on the results of data analysis, it is known that GDP has a negative relationship and does not have a significant effect on KURS. The coefficient value of the GDP variable shows a negative sign. This means that if GDP increases, it will reduce KURS in CIVIT Countries. The INF variable has a positive relationship and has a significant effect on LESS. The coefficient value of the INF variable shows a positive sign. This means that if INF increases, it will increase the value of the COURSE in CIVIT Countries.

CONCLUSION

Money supply has a negative relationship and has no significant effect on inflation. The interest rate variable has a negative relationship and has no significant effect on inflation. The exchange rate variable has a positive relationship and significant effect on inflation in CIVIT Countries. GDP has a negative relationship and has no significant effect on exchange rates. Inflation has a positive relationship with exchange rates in CIVIT Countries.

REFERENCES

- Bodie, Kane, Marcus. 2006. *Investasi Buku 2*. Terjemahan Zuliani Dalimunthe Dan Budi Wibowo. Jakarta : Salemba 4
- Boediono. 1998. *Teori Pertumbuhan Ekonomi*. Seri Sinopsis Pengantar Ilmu Ekonomi No. 2. BPFE : Yogyakarta.
- Chairul Ihsan Burhanuddin, Muhammad Nur Abdi. "Krisis Ekonomi Global Dari Dampak Penyebaran Virus Corona (COVID-19)." Vol 17 No 1 (2020) 17 (2020).
- D. Zulverdi (1998), Dan Warjiyo, P. (2004) " Penggunaan Suku Bunga Moneter Sebagai Sasaran Operasional Kebijakan Moneter Di Indonesia", *Buletin Ekonomi Dan Perbankan*, Juli, Vol.1 25-58.
- Efni, Yulia. 2009. Pengaruh Suku Bunga Deposito, SBI, Kurs Dan Inflasi Terhadap Harga Saham Perusahaan Real Estate Dan Property Di BEI. Dalam *Jurnal Ekonomi*, Volume 17 No (01) Issn 0853 ± 7593. Pekanbaru : Universitas Riau
- Gilarso, T. 2004. *Pengantar Ilmu Ekonomi Makro*. Yogyakarta : Kanisius. Gujarati, Damodar, 1999, *Ekonometrika Dasar*, Erlangga, Jakarta.
- Gujarati, D. N Dan Dawn C. P. (2012). *Dasar-Dasar Ekonometrika*. Jakarta: Salemba Empat.
- Gujarati, D. N. 2013. *Dasar-dasar Ekonometrika*, Edisi Kelima. Mangunsong, R. C. penerjemah. Jakarta: Salemba Empat.
- Salvatore, Dominick, 1997. *Ekonomi Internasional*. Ahli bahasa Drs. Haris Munandar. Edisi Kelima, Jakarta: PT. Erlangga.
- Sumodiningrat, 2001, *Pengantar Statistika*, Jakarta: Penerbit Andi.
- Hervino, Aloysius Deno. 2011. *Volatilitas Inflasi Di Indonesia : Fiskal Atau Moneter?'*. *Finance And Banking Journal*. Jakarta : Universitas Katolik Indonesia Atma Jaya



- Husein Umar. (2008). *Metode Penelitian Untuk Skripsi Dan Tesis Bisnis*. Jakarta : PT Raja Grafindo Persada.
- Mahendra, A. (2016, Maret). Analisis Pengaruh Jumlah Uang Beredar, Suku Bunga SBI Dan Nilai Tukar Terhadap Inflasi Di Indonesia. *JRAK*, Volume 2 No. 1.
- Mankiw, N Gregory. 2000. *Teori Makroekonomi (Edisi Keempat)*. Imam Nurmawan [Penerjemah]. Jakarta : Erlangga.
- Mankiw, N. Gregory. 2003. "Teori Makro Ekonomi". Edisi Keempat. Terjemahan. Jakarta : Penerbit Airlangga.
- Mankiw. 2006. "Pengantar Ekonomi Makro". Edisi Ketiga. Jakarta: Salemba Empat. Mankiw, N. G. Dkk. 2007. *Makroekonomi*. Jakarta: Erlangga.
- Marseto. "Pengaruh Suku Bunga Indonesia (Sbi) Terhadap Inflasi, Kurs Rupiah, Dan Pertumbuhan Ekonomi." 2014.
- Mishkin, Frederic S. 2008. *Ekonomi, Uang, Perbankan, Dan Pasar Keuangan Buku 1 Terjemahan Lana Soelistianingsih Dan Beta Yulianita G*. Jakarta : Salemba Empat.
- Mitchell, D.W. (1981). Determinants of inflation uncertainty. *Eastern Economic Journal*, Vol. VII (April 1981), No. 2, pp. 111-117.
- Muqrobi, S., & Pujiati, A. 2011. Inflasi dan Pertumbuhan Ekonomi: Uji Kausalitas. *Jurnal Dinamika Keuangan dan Perbankan*, 3(1).
- Nanga, Muana. 2005. *Makro Ekonomi, Teori Masalah Dan Kebijakan*. Edisi -2 PT. Raja Grafindo Persada. Jakarta.
- Nopirin. 1987. *Ekonomi Moneter Buku Dua*. Yogyakarta: BPFE.
- Nopirin, (2000), *Ekonomi Moneter, Jilid 2*, Yogyakarta, Badan Penerbit Fakultas Ekonomi UGM.
- Nugroho, Primawan Wisda, Basuki, Maruto Umar. 2012. "Analisis Faktor-Faktor Yang Mempengaruhi Inflasi Di Indonesia Periode 2000.1 – 2011.4". *Diponegoro Jurnal Of Accounting Vol.I No.I*.
- Rahardja Prathama, Manurung Mandala, 2008, *Pengantar Ilmu Ekonomi (Mikroekonomi Dan Makroekonomi) Edisi Ketiga*, Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Rangkuty, D. M., & Sari, M. M. (2019). Analisis utang luar negeri dan inflasi Indonesia. *EKONOMIKAWAN: Jurnal Ilmu Ekonomi dan Studi Pembangunan*, 19(1), 57-66.
- Rusiadi, Nur Subiato, Rahmat Hidayat. "METODE PENELITIAN-Manajemen, Akuntansi, Dan Ekonomi Pembangunan Konsep, Kasus Dan Aplikasi SPSS, Eviews, Amos, Lisrel." Edited By Ade Novaliana. 2017.
- Rusiadi, Ade. N., & Sanusi, A. 2019. Brici State Monetary Transmission: How Strong Is The Ardl Panel Model Predicting The Final Goal?. *Journal Homepage: http://ijmr. net. in*, 7(08).
- Sugiyono. (2014). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta.
- Suhesti Ningsih, LMS Kristiyanti. "Analisis Pengaruh Jumlah Uang Beredar, Suku Bunga, Dan Nilai Tukar Terhadap Inflasi Di Indonesia Priode 2014-2016." Vol. 20, No. 2 (2018).
- Suhardi, Deddy A. 2007. Pergerakan Harga Saham Sektor Properti Bursa Efek Jakarta Berdasarkan Kondisi Profitabilitas, Suku Bunga Dan Beta Saham Dalam Jurnal Organisasi Dan Manajemen Vol. 3 No. 2 Hal 89-103. Jakarta : Universitas Terbuka.
- Sukirno, M.S. 1999. *Mekanisasi Pertanian. Pokok Bahasan Alat Mesin Pertanian Dan Pengelolaannya*. Diktat Kuliah. GM, Yogyakarta.
- Sukirno, Sardono. 2002. *Pengantar Teori Makroekonomi*. Edisi 1, Cetakan 13. Jakarta: PT. Grafindo Persada.
- Sukirno.(2004). "Makro Ekonomi Suatu Pengantar", Edisi Ketiga, Cetakan Keenambelas, Jakarta: PT Rajagrafindo Persada.
- Sukirno, Sadono. 2013. *Makroekonomi : Teori Pengantar*. Jakarta : PT. Raja Grafindo Persada.
- Sumodiningrat, 2001, *Pengantar Statistika*, Jakarta: Penerbit Andi.
- Tambunan, Tulus T.H. 2012. *Perekonomian Indonesia: Kajian Teoritis Dan Analisis Empiris*. Galia Indonesia. Jakarta.
- Theodores Manuela Langi, Vecky Masinambow, Hanly Siwu. "Analisis Pengaruh Suku Bunga Bi, Jumlah Uang Beredar, Dan Tingkat Kurs Terhadap Tingkat Inflasi Di Indonesia." Volume 14 no. 2 (2014).
- Pramaisela, Hesti. "Pengaruh Jumlah Uang Yang Beredar Terhadap Tingkat Inflasi Di Indonesia Priode 2015-2020." 2021.
- Perlambang, H. (2010, Agustus). *Media Ekonomi. Analisis Pengaruh Jumlah Uang Beredar, Suku*



- Bunga Sbi, Nilai Tukar Terhadap Tingkat Inflasi, Volume 19 No. 2.
- Pesaran, M. H., dan Shin, Y. (1995), "An Autoregressive Distributed Lag Modelling Approach to Cointegration Analysis," DAE Working Paper No. 9514, Department of Applied Economics (Cambridge: Cambridge University).
- Pesaran, M. Hashem and Pesaran, Working whit Microfit 4.0. Interactive Econometric Analisis, Oxford University Press, 1997
- Pesaran, M. H., Shin, Y., dan Smith, R.J. (2001). "Bounds Testing Approaches to the Analysis of Level Relagionships." Journal of Applied Econometrics
- Warjiyo, Perry, (2004). Bank Sentral Republik Indonesia, Pusat Pendidikan dan Studi Kebanksentralan, Jakarta.
- Winarno, Wing Wahyu. 2009. Analisis Ekonometrika dan Statistik dengan Eviews, Edisi Kedua. Yogyakarta: UPP STIM YKPN.
- Wiyani, Wahyu, Dan Andi Wijayanto. 2005. (Jurnal Keuangan Dan Perbankan) Pengaruh Nilai Tukar Rupiah Tingkat Suku Bunga Deposit Dan Volume Perdagangan Saham Terhadap Harga Saham
- Zakiah, Umaruddin Usman. "Hubungan Jumlah Uang Beredar, Inflasi Dan Nilai Tukar Terhadap Pendapatan Nasional Di Indonesia." Volume 02 Nomor 02 Agustus 2019, 2019.
- <https://www.hukumonline.com/berita/baca/lt5ecc9d6a57ca2/mengenal-skema-restrukturisasi-industri-fintech?page=all>.
- <https://www.indotelko.com/read/1590015207/new-normal-keuangan>.
- Undang-Undang Nomor 19 tahun 2016 tentang Perubahan Atas Undang-Undang Nomor 11 tahun 2008 tentang Informasi dan Transaksi Elektronik.
- Undang-Undang Nomor 21 tahun 2011 tentang Otoritas Jasa Keuangan.
- Undang-Undang Dasar 1945.