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THE IMPACT OF THE MONETARY POLICY'S INTEREST RATE TRANSMISSION ON INDONESIA'S REGIONAL ECONOMIC GROWTH

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A B S T R A C T

The trade conflict that persisted in 2018 put pressure on global trade volumes and reduced economic growth overall. The global economic downturn has hampered economic growth in a number of countries. The economies of the ASEAN region's member nations generally grow faster than those of developed and developing nations combined. Indonesia was able to post stronger economic growth in 2018 despite the world economy contracting and uncertainty rising, but regional economic growth in Indonesia does not correspond with Indonesia's economic growth, which is trending upward. An instrument that can impact a nation's macroeconomic stability and economic expansion is its monetary policy. This research aims to analyze the monetary policy transmission mechanism through which interest rates influence regional economic growth in Indonesia. The author uses the Vector Error Correction Model (VECM) to measure the impact of monetary policy shocks within the monetary policy framework set by Central Bank of Indonesia. The results show that the framework that has been established by Central Bank of Indonesia through the transmission of monetary policy through the interest rate channel does not provide a uniform response at the regional level.

Keywords: *Monetary policy; interest rate; regional growth.*

ABSTRAK

Ketegangan hubungan dagang yang berlanjut pada periode 2018 terus menekan volume perdagangan dunia dan memperlambat pertumbuhan ekonomi global. Ekonomi global yang melemah memberikan dampak terhadap pertumbuhan ekonomi pada beberapa negara. Pada negara-negara di kawasan ASEAN, secara umum angka pertumbuhan ekonomi berada di atas angka pertumbuhan ekonomi dunia, negara maju, dan negara berkembang, sedangkan Indonesia berhasil mencatatkan kenaikan pertumbuhan ekonomi pada 2018 saat ekonomi global melambat dan ketidakpastian global sedang meningkat. Pertumbuhan ekonomi Indonesia yang menunjukkan tren meningkat tidak diikuti oleh pertumbuhan ekonomi regional di Indonesia. Salah satu alat yang dapat memengaruhi stabilitas makroekonomi dan pertumbuhan ekonomi suatu negara adalah kebijakan moneter yang diterapkan. Penelitian ini bertujuan bertujuan menganalisis mekanisme transmisi kebijakan moneter jalur suku

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bunga berpengaruh terhadap pertumbuhan ekonomi regional di Indonesia. Penulis menggunakan model Vector Error Correction Model (VECM) untuk mengukur dampak guncangan kebijakan moneter dengan kerangka kebijakan moneter yang telah ditetapkan Bank Indonesia. Hasil menunjukkan bahwa kerangka yang telah ditetapkan Bank Indonesia melalui transmisi kebijakan moneter jalur suku bunga tidak memberikan keseragaman respon yang sama di tingkat regional.

Kata kunci: Kebijakan Moneter, Suku Bunga, Pertumbuhan Regional.

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INTRODUCTION

The trade tensions that persisted in 2018 suppressed global trade volume and slowed economic growth globally (Bloomberg, 2019). The weakening global economy has had an impact on economic growth in several countries. The world economic slowdown in 2018 occurred in both developed and developing countries, with a higher percentage of growth in developing countries. Developed countries showed fluctuations in economic growth trends during 2014-2018, from 2.1 percent in 2014 to 2.2 percent in 2018. Likewise, developing countries experienced ups and downs in economic growth, from 4.7 percent in 2014 to 4.5 percent in 2018.

The economies of the ASEAN region's member nations are often growing faster than those of the developed and developing worlds combined. While the global economy was slowing down and uncertainty was rising, Indonesia managed to record stronger economic growth in 2018, the average growth of ASEAN countries showed a positive trend, rising from 4.6 percent in 2014 to 5.1 percent in 2018. In comparison to the rise of 5.07% in the year prior, the economic growth in 2018 was recorded at 5.17%, which was the biggest growth since 2013. Stronger domestic consumption and investment encouraged this (Central Bank of Indonesia, 2018).

Economic growth is the key to macroeconomic economic goals based on three reasons (Hidayat, 2011).First, the population is always increasing. Second, as long as wants and needs are always unlimited, the economy must always be able to produce more goods and services to meet these wants and needs. Third, efforts to create economic stability through income redistribution will be easier to achieve in periods of high economic growth. According to Todaro & Smith (2006), increasing economic growth will have a positive impact on increasing national income both overall and per capita so as to be able to solve economic problems such as unemployment, poverty and income inequality.

Indonesia's economic growth, which shows an increasing trend, is not followed by regional economic growth in Indonesia. The economies of Java and Sumatra grew better, even Maluku-Papua (Mapua) grew higher. In contrast to the economic growth performance in Java, Sumatra and Mapua, the economic growth rate of Kalimantan, Sulawesi and Bali-Nusa Tenggara (Bali-Nusra) tends to decline (Central Bank of Indonesia, 2018). This causes differences in regional economic growth to become increasingly large, thus causing inequality between regions. This problem of economic growth is caused by differences in various factors that exist in each region, such as differences in inputs in the production process such as differences in the quality of labor and differences in natural resource potential, differences in

regional government policies, differences in geographical and political locations (Barro,1991;Dharmayanti, 2011; Okabe & Kam,2017;Xu et al.,2019). Other determining factors related to economic growth are demographics, education, trade and investment (Bruns & Ioannidis, 2020). Identification of the determinants of economic growth is an important issue for policy decision making (He & Xu, 2019). One of the big problems often faced by developing countries, including Indonesia, is the economic gap or inequality in income distribution between high-income community groups and low-income community groups (Tambunan, 2001). As a result of these differences, the ability of a region to encourage the process of accelerating regional economic growth also becomes different.

High and sustainable regional economic growth is the main target that must be achieved (Umiyati, 2012). High and sustainable economic growth is Indonesia's hope, because this condition is the main factor for continued economic development. High and sustainable economic growth is important for all regions in Indonesia, because it is a measure of the success of economic development. Economic growth is needed to fulfill several things. According to the Central Statistics Agency (2019a), economic growth is needed to fulfill regional economic development goals, accelerate the growth of regional economic structures, and encourage development in various fields which are also the main force for development in order to improve community welfare. Economic growth is defined as economic activity that must be thought about in the long term because it plays an active role in improving society's economic standards (Murni, 2013).

Achieving high and sustainable regional economic growth is the primary objective (Umiyati, 2012). Indonesia's optimism lies in high and sustainable economic growth, as this is the primary driver of further economic progress. Since it indicates how well economic development is going, high and sustained economic growth is crucial for all of Indonesia's regions. Economic expansion is required to achieve a number of goals. As per the Central Bureau of Statistics (2019a), economic growth is imperative to achieve the objectives of regional economic development, expedite the formation of regional economic structures, and foster development across diverse domains, which serves as the primary driver of development to enhance community welfare. Economic activity that needs to be considered over the long term is known as economic growth (Murni, 2013).

Understanding the direction of long-term economic growth is an important analysis for the central bank and the Indonesian government. This analysis is needed in order to ensure that economic growth can reach the potential output level in accordance with the long run growth path. Various economic theories and policies are applied in order to achieve and strive for common goals which are translated as welfare. Well-being is a concept of a better life, whereas to achieve it requires a set of policy instruments, targets and indicators (Konchitchki & Patatoukas, 2014). Economic policy in general and monetary policy in particular require future projections in order to reduce the worst possibility that will occur (Batini et al., 1998).

Therefore, to improve a country's economy, monetary policy making must be based on development and optimizing performance in the financial sector, especially banking institutions because banking has a very important role in driving a country's economy (Abimanyu & Megantara,2009; Gerko & Rey, 2017). Evidence from several studies in various countries shows that the economies of countries with more developed financial markets start to grow earlier, achieve higher growth rates and achieve higher levels of per capita income than countries with less developed financial markets (Mitchener & Wheelock, 2013). The banking market has a positive impact on economic growth (Cetorelli & Gambera, 2001). The banking market has a positive impact on economic growth seen from the growth of the manufacturing sector in the early twentieth century in the United States (Mitchener & Wheelock, 2013). A similar thing is also supported by Goldsmith (1969), McKinnon (2010) states that financial

markets have a positive effect on economic growth. Lucas (1988) considers financial markets to be an overestimated explanatory factor in the growth process.

Utilizing the flow of globalization poses its own challenges for monetary authorities as policy makers. The monetary authority must be more selective in determining its monetary policy. This is because the increasingly integrated domestic trade and financial markets have led to higher external risks and instability (Juhro & Warjiyo, 2016). The challenge of monetary policy is to interpret current data about the economy and financial markets with the aim of anticipating bad possibilities that will occur in the next period and making appropriate policies to prevent economic problems that will occur (Clarida, Gali, & Gertler, 1997; Fratzscher,2011; Ahmed & Zlate,2013). Transmission of monetary policy by increasing interest rates will reduce the level of economic activity where people are more encouraged to save than consume, so that demand for output and production will decrease and push inflation to a lower level. In addition, an increase in interest rates tends to reduce people's ability to borrow to meet investment or consumption needs. On the banking side, an increase in interest rates reduces the profits received by banks, thereby reducing loans provided. This condition encourages reduced economic growth and inflation to be at a lower level (Boivin *et al*., 2010; Cúrdia *et al*., 2015; McKay, Alisdair, Nakamura, & Steinsson,2016; Auclert, 2017).

Cecchetti & Ehrmann (1999) show that the relationship between output and interest rates can be explained in many ways. Changes in short-term interest rates are transmitted quickly to medium and long-term interest rates because money markets are very efficient at digesting and disseminating information (Boediono, 2003). Gertler, Hubbard, & Kashyap (1991) emphasize the role of interest rate dispersion in estimating real GNP. Movements in policy interest rates also appear sensitive to global financial shocks around the market crisis that emerged in the late 1990s and the global financial crisis of 2008. Eijffinger & Rixtel (1992) examined the impact of Bretton Woods which caused the Japanese economy to decline and inflation to be very high. The appropriate monetary policy used at that time was the interest rate monetary regulation, because interest rates were considered more flexible, when interest rates were increased it would encourage customers to save so that loanable funds increased and investment also increased.

The procedure for spreading monetary decisions by means of interest rate levels starts from transitions in interest rate levels in the short term which are distributed to various interest rate levels using the ratio procedure demanded and offered in the money market. Studies on the spread of monetary decisions with interest rate channels were initially carried out by Taylor (1995) who described a simple design for analyzing monetary spread procedures. In a study from Taylor (1995), there are strong findings that interest rates influence corporate investment behavior and household consumption behavior.

This research will focus on changes in the BI 7DRR interest rate in response to the implementation of monetary policy instruments, which will be transmitted to deposit interest rates, credit interest rates, inflation, and Gross Regional Domestic Product (GRDP) in order to see the response of the interest rate channel monetary policy mechanism. between provinces in Indonesia. This is due to the importance of understanding the effectiveness of the monetary policy transmission mechanism in the interest rate channel, starting from the impact of shocks from the implementation of monetary policy and variance decomposition on each variable to the final target variable.

In this research, the author uses the Vector Error Correction Model (VECM). The VECM approach to measuring the impact of monetary policy shocks seems to provide a lot of useful structural information, especially for such a simple method (Ben S Bernanke, Boivin, & Eliasz, 2005). The VECM approach is widely used to track the impact of various monetary policies on the economic system (Sims, 1992). These methods generally provide empirically sound assessments of the dynamic response of macroeconomic variables to monetary policy

innovations, and can assess the empirical suitability of structural models and policy applications (Christiano, Eichenbaum, & Evans, 1998; Boivin, Jean, & Giannoni, 2003)

LITERATURE REVIEW

One tool that can influence the macroeconomic stability and economic growth of a country is the monetary policy implemented. Monetary policy has a significant impact on the real sector of an economy (Endut & Morley, 2005). According to Mishkin (2010), monetary policy is the action of the central bank in influencing monetary variables (money flow, interest rates, credit and exchange rates) to achieve certain economic goals. Monetary policy aims to influence the direction of a country's economic activities. According to CHEN, Gao, HIGGINS, WAGGONER, & Zha (2019), monetary policy shocks contribute up to 45% of GDP volatility in a country. Monetary policy shocks are not easy to formulate. These shocks are about current policy attitudes or about future policy directions. Identification of shocks allows us to estimate the causal impact of monetary policy on macroeconomic and financial variables (Gerko & Rey, 2017). According to Corsetti & Pesenti (2005), we not only need to know how the transmission of domestic shocks changes, but also which types of shocks are the most important and influential on the economy. Aggregate shocks that move output and inflation in opposite directions create a tradeoff between output and inflation variability, forcing central banks to make choices (Cecchetti & Ehrmann, 1999).

In the US, monetary policy announcements about policy rates are accompanied by statements containing some information about future policy and the state of the economy (Gerko & Rey, 2017). Communication has become an increasingly important aspect of monetary policy because it moves financial markets, increases the predictability of monetary policy decisions and has the potential to help achieve central banks' macroeconomic goals (Blinder, Ehrmann, Fratzscher, Haan, & Jansen, 2008). Greater openness can actually improve the efficiency of monetary policy because expectations about future central bank behavior provide insight into the important relationship between short interest rates and long interest rates (Blinder et al., 2008).

Central Bank of Indonesia can use monetary policy through various monetary transmission channels to expand economic activities in accordance with the desired economic goals (Karras, 1999). The final goal or target desired by monetary policy is a reflection of price stability (low inflation rate), improved development of real output (economic growth), as well as sufficient breadth of available employment opportunities (Warjiyo, 2003). In achieving the objectives of monetary policy, the efficiency of monetary policy needs to be considered considering that this has an impact on the macroeconomic stability of a country.

Boivin, Kiley, & Mishkin (2010) explained that the monetary policy transmission mechanism is one of the most researched areas of economics for two reasons. Firstly, how monetary policy affects the economy is very important to assess the position of monetary policy at a particular point in time. Second, to optimize monetary policy decisions, policy makers must have an accurate assessment of how the timing and influence of policy affects the economy, so knowledge is needed about what channels work most effectively in the monetary policy transmission mechanism.

The influence of monetary policy is transmitted through several channels such as interest rates, credit, asset prices, exchange rates, and expectations channels (Gerko & Rey, 2017). Different monetary policy rules provide different results for the economy (John B. Taylor, 1999).. In Indonesia, since July 2005 monetary policy has used interest rates as operational targets within the Inflation Targeting Framework (ITF). Policy signals are channeled through the determination of interest rates called the reference interest rate (BI rate).

Changes in the reference interest rate will be transmitted through money market liquidity with movements in interest rates, credit, set prices, exchange rates, and expectations channels, so that they will influence the level of expenditure/consumption of companies and households (Mohanty & Turner, 2008).

In 2016, Central Bank of Indonesia issued a monetary policy in the form of changing the reference interest rate used by Central Bank of Indonesia from the BI rate to the BI 7 Days Repo Rate (BI 7DRR). Central Bank of Indonesia explained that the use of BI 7DRR aims to speed up the transmission of monetary policy implemented because the BI rate is considered slow to respond to the market and financial institutions. According to Warjiyo (2004), the monetary policy pursued by the central bank always attracts public attention. When the central bank raises interest rates, for example, banks and financial market players will respond by increasing market interest rates and adjusting their investment portfolios. This fact shows that there is a relationship between monetary stability and financial sector stability, so it is important to pay attention to this relationship in policy making. Monetary policy affects the real economy in part through its influence on financial institutions. Financial institutions have exposure to risk through their role as intermediaries between borrowers and savers (Borio & Zhu,2012; Chodorow-Reich,2014; Bruno & Shin, 2015; Coimbra & Rey,2017).

RESEARCH METHODS

A descriptive quantitative approach was applied in this research to provide answers to previously determined problem statements. In assessing the truth of the hypothesis, it is carried out through testing the variables using measurable data, and the analysis uses econometric steps and statistical testing, so the indicators are obtained from the transition of an economic variable which has an influence on other economic variables and the explanation is based on the premises of economic science. This approach is applied to obtain estimates of impulse response and variance decomposition between variables by applying analysis with VECM (Vector Error Correction Model). The Vector Error Correction Model (VECM) method is used to evaluate disequilibrium in the short term versus the longer term. VECM is an econometric analysis pattern that is applied to identify short-term or long-term factors caused by shocks.

VECM is a derivative of VAR, which is applied in a non-structural VAR model when time series data is not stationary at level level, but there is cointegration. The presence of cointegration in the VECM pattern makes the VECM pattern called VAR, unless it appears stationary. VECM must be stationary in the first differentiation (first difference) and all factors need to have stationarity that does not differ, that is, there is differentiation in the first derivative.

In VECM analysis the assumptions must be met, namely that all factors must be stationary. Data stationarity testing is carried out by testing whether or not there is a unit root in the Augmented Dickey Fuller (ADF) test factor. Cointegration needs to be considered and detected using the Johansen or Engel Granger method. If each factor does not have cointegration and stationarity in the order then you can use VAR, but if it is cointegrated then you can use VECM.

The data that has been collected is then analyzed using Eviews 10 software. Each variable in the VECM model is all treated symmetrically without separating the dependent variable and the independent variable, meaning that all variables are treated endogenously. Research variables used for the model include the BI 7DRR interest rate, deposit interest rate, credit interest rate, consumer price index, and gross regional domestic product. The selection of provinces in this study was based on the ordering of GRDP values in 2018, resulting in five provinces with the highest, lowest GRDP and five provinces in the middle of the ordering.

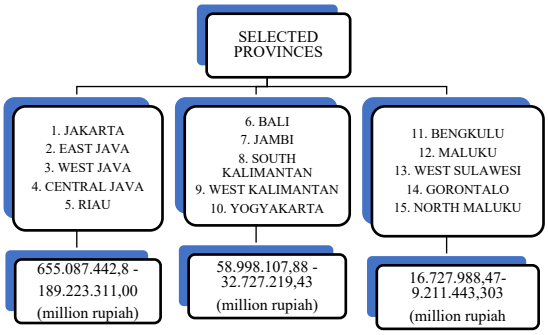

Figure 1**.** Characteristics of provincial classification

RESULTS AND DISCUSSION

In provinces belonging to the first characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, inflation variables, deposit interest rates and BI 7DRR interest rates significantly influence GRDP in the provinces of DKI Jakarta, West Java, Central Java and Riau. Meanwhile, in East Java province, only the BI 7DRR interest rate and credit interest variables significantly influence GRDP.

In provinces belonging to the second characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, there is no similar pattern regarding the influence of variables on the transmission of monetary policy through the interest rate channel to GRDP. In the province of Bali, the variables inflation, deposit interest rates and BI 7DRR interest rates influence the GRDP variable, for Jambi province the variables deposit interest rates and credit interest rates influence the GRDP variables, for the province of South Kalimantan the variables inflation, deposit interest rates and credit interest rates which influences the GRDP variable, for the province of South Kalimantan the variables are deposit interest rates, credit interest rates and the BI 7DRR interest rate which influence the GRDP variable and for the DI Yogyakarta province the inflation variables, deposit interest rates and the BI 7DRR interest rate which influence the GRDP variable.

In provinces belonging to the third characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, the inflation variables, deposit interest rates and BI 7DRR interest rates have a significant effect on the GRDP variables in the provinces of Bengkulu, West Sulawesi and North Maluku. In Maluku province, the variables deposit interest rate, credit

interest rate and BI 7DRR interest rate have a significant effect on GRDP, while in Gorontalo province the variables inflation, deposit interest rate and BI 7DRR interest rate have a significant effect on the GRDP variable.

CONCLUSION

In provinces belonging to the first characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, inflation variables, deposit interest rates and BI 7DRR interest rates significantly influence GRDP in the provinces of DKI Jakarta, West Java, Central Java and Riau. Meanwhile, in East Java province, only the BI 7DRR interest rate and credit interest variables significantly influence GRDP.

In provinces belonging to the second characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, there is no similar pattern regarding the influence of variables on the transmission of monetary policy through the interest rate channel to GRDP. In the province of Bali, the variables inflation, deposit interest rates and BI 7DRR interest rates influence the GRDP variable, for Jambi province the variables deposit interest rates and credit interest rates influence the GRDP variables, for the province of South Kalimantan the variables inflation, deposit interest rates and credit interest rates which influences the GRDP variable, for the province of South Kalimantan the variables are deposit interest rates, credit interest rates and the BI 7DRR interest rate which influence the GRDP variable and for the DI Yogyakarta province the inflation variables, deposit interest rates and the BI 7DRR interest rate which influence the GRDP variable.

In provinces belonging to the third characteristic, in the short term the estimation results show that there is a significant influence between monetary policy transmission through the interest rate channel and economic growth in the province. The variables BI 7DRR interest rate, deposit interest rate, credit interest rate influence significantly in the first and second periods. In the long term, the inflation variables, deposit interest rates and BI 7DRR interest rates have a significant effect on the GRDP variables in the provinces of Bengkulu, West Sulawesi and North Maluku. In Maluku province, the variables deposit interest rate, credit interest rate and BI 7DRR interest rate have a significant effect on GRDP, while in Gorontalo province the variables inflation, deposit interest rate and BI 7DRR interest rate have a significant effect on the GRDP variable.

REFERENCES

Abimanyu, A., & Megantara, A. (2009). Era Baru Kebijakan Fiskal: Pemikiran, Konsep dan Implementasi. Jakarta: PT. Kompas Media Nusantara.

Adisasmita, R. (2011). Manajemen Pemerintah Daerah. Yogyakarta: Graha Ilmu.

Agung, Astiyah, S., Sukowati, E., & Prastowo, N. J. (2003). Identifikasi Variabel Informasi dalam Framework Inflation Targeting. Buletin Ekonomi Moneter Dan Perbankan Bank Indonesia, Vol. 6, No(Desember), 59–68.

Ahmed, S., & Zlate, A. (2013). Capital Flows to Emerging Market Economies: A Brave New World? Board of Governors of the Federal Reserve System International Finance Discussion Papers, 1081(Washington, D.C.: Federal Reserve Board (June).).

Auclert, A. (2017). Nber Working Paper Series Monetary Policy and the Redistribution Channel. Retrieved from http://www.nber.org/data-appendix/w23451

Badan Pusat Statistik. (2019). Produk Domestik Bruto. Retrieved from Statistik Dasar website: https://www.bps.go.id/subject/169/produk-domestik-bruto--pengeluaran-.html#subjekViewTab3

Central Bank of Indonesia. (2013). Perekonomian Domestik. In Laporan Perekonomian Indonesia. https://doi.org/10.1007/s13398-014-0173-7.2

Central Bank of Indonesia. (2018). Laporan Perekonomian Indonesia 2018. Jakarta.

Central Bank of Indonesia. (2019a). Inflasi. Retrieved February 27, 2020, from LAPORAN INFLASI (Indeks Harga Konsumen) website: https://www.bi.go.id/id/moneter/inflasi/data/Default.aspx

Central Bank of Indonesia. (2019b). Kajian Ekonomi Regional. Retrieved from https://www.bi.go.id/id/publikasi/kajian-ekonomi-regional/Contents/Default.aspx

Central Bank of Indonesia. (2019c). Suku Bunga, Diskonto, Imbalan. Retrieved February 27, 2020, from Statistik Ekonomi dan Keuangan Indonesia (SEKI) website: https://www.bi.go.id/id/statistik/seki/terkini/moneter/Contents/Default.aspx

Central Bank of Indonesia. (2019d). Transmisi Kebijakan Moneter. Retrieved November 21, 2019, from Moneter website: https://www.bi.go.id/id/moneter/transmisi-kebijakan/Contents/Default.aspx

Barro, R. (1991). Economic growth in a cross section of countries. The Quarterly Journal of Economics, 106(2), 407–444.

Batini, N., Blake, A., Buiter, W., Fisher, P., Goodhart, C., King, M., … Wright, S. (1998). Forward-looking rules for monetary policy.

Berg, H. V. D. (2005). Economic Growth and Development. New York: McGraw-Hill.

Bernanke, B. S., & Gertler, M. (1995). Inside the Black Box: The Credit Channel of Monetary Policy Transmission. The Journal of Economic Perspectives, Vol. 09, pp.27-48.

Bernanke, Ben S, Boivin, J., & Eliasz, P. (2005). Measuring the Effects of Monetary Policy. Quarterly Journal of Economics, 120, 387–422. https://doi.org/10.1162/0033553053327452

Bilan, O., & Kryshko, M. (2007). Does Monetary Policy Transmission in Ukraine Go Through The Interest Tares? EERC Working Paper Series, 1–84.

Blinder, A. S., Ehrmann, M., Fratzscher, M., Haan, J. De, & Jansen, D.-J. (2008). Central Bank Communication and Monetary Policy: A Survey of Theory and Evidence. National Bureau of Economic Research, 13932.

Bloomberg. (2019). Bloomberg Markets. Retrieved from https://www.bloomberg.com/markets

Boediono. (1985). Ekonomi Moneter. Yogyakarta: BPFE UGM.

Boediono, B. (2003). Merenungkan Kembali Mekanisme Transmisi Moneter Di Indonesia. Buletin Ekonomi Moneter Dan Perbankan, Vol. 1, pp. 1–4. https://doi.org/10.21098/bemp.v1i1.157

Boivin, J., Kiley, M. T., & Mishkin, F. S. (2010). NBER WORKING PAPER SERIES HOW HAS THE MONETARY TRANSMISSION MECHANISM EVOLVED OVER TIME? How Has the Monetary Transmission Mechanism Evolved Over Time? Retrieved from http://www.nber.org/papers/w15879

Boivin, Jean, & Giannoni, M. (2003). Has Monetary Policy Become More Effective? NBER Working Paper, 9459.

Borio, C., & Zhu, H. (2012). Capital regulation, risk-taking and monetary policy: a missing link in the transmission mechanism? Journal of Financial Stability, 8(4), 236–251.

Bruno, V., & Shin, H. S. (2015). Capital ows and the risk-taking channel of monetary policy. Journal of Monetary Economics, 71, 119–132.

Bruns, S. B., & Ioannidis, J. P. A. (2020). Determinants of economic growth: Different time different answer? Journal of Macroeconomics, 63(December 2019), 103185. https://doi.org/10.1016/j.jmacro.2019.103185

Cecchetti, S. G., & Ehrmann, M. (1999). Does Inflation Targeting Increase Output Volatility? National Bureau of Economic Research, 20–21.

CEIC. (2019). CEIC Data. Retrieved from www.ceicdata.com/en/country/indonesia

Cetorelli, N., & Gambera, M. (2001). Banking Market Structure, Financial Dependence, and Growth: International Evidence from Industry Data. Journal of Finance 106(2), 617, 48.

CHEN, K., Gao, H., HIGGINS, P., WAGGONER, D. F., & Zha, T. (2019). Impacts of Monetary Stimulus on Credit Allocation and the Macroeconomy: Evidence From China. NBER Working Paper.

Chodorow-Reich, G. (2014). Effects of unconventional monetary policy on financial institutions. Brookings Papers on Economic Activity, Spring 201, 155–227. https://doi.org/10.1353/eca.2014.0003

Christiano, L. J., Eichenbaum, M., & Evans, C. L. (1998). Monetary Policy Shocks: What Have We Learned. NBER Working Paper Series.

Clarida, R., Gali, J., & Gertler, M. (1997). Monetary Policy Rules in Practice: Some International Evidence. The ISOM Conference.

Coimbra, N., & Rey, H. (2017). Financial Cycles with Heterogeneous Intermediaries. National Bureau of Economic Research, Working pa.

Corsetti, G., & Pesenti, P. (2005). International dimensions of optimal monetary policy. Journal of Monetary Economics, 52(2), 281–305. https://doi.org/10.1016/j.jmoneco.2004.06.002

Cúrdia, V., Woodford, M., Blanchard, O., Brainard, B., Chari, V. V, Defiore, F., … Tristani, O. (2015). Nber Working Paper Series Credit Frictions and Optimal Monetary Policy. Retrieved from http://www.nber.org/papers/w21820.ack

Dharmayanti, Y. (2011). Analisis Pengaruh PDRB, Upah dan Inflasi terhadap Pengangguran Terbuka di Provinsi Jawa Tengah Tahun 1991-2009. Jurnal Ekonomi Pembangunan, Vol.3(1), 26–31.

Eijffinger, & Rixtel. (1992). The Japanese Financial System and Monetary Policy. Japan and the World Economy, Vol.4, No., 291–309.

Endut, N., & Morley, J. (2005). Identifying the Transmission Mechanism of U.S. Monetary Policy. Weidenbaum Center on the Economy, Government, and Public Policy.

Erdogan, S., & Yildirim, D. C. (2010). Is there an interest rate channel for monetary policy in Turkey? METU Studies in Development, 37, 247–266.

Frank, R. H., & Bernanke, B. S. (2007). Principles of Macroeconomics (Third Edit). New York: The Mc Graw-Hill Company, Inc.

Fratzscher, M. (2011). Capital Flows, Push Versus Pull Factors and the Global Financial Crisis. NBER Working Paper Series, 17357.

Gerko, E., & Rey, H. (2017). Monetary Policy in the Capitals of Capital. NBER Working Paper Series, 23651.

Gertler, M., Hubbard, R. G., & Kashyap, A. (1991). Interest Rate Spreads, Credit Constraints, and Investment Fluctuations: An Empirical Investigation. NBER Chapters, (January), 11–32. Retrieved from http://ideas.repec.org/h/nbr/nberch/11481.html

Goldsmith, R. W. (1969). Financial Structure and Development. New Haven: Yale University Press.

Gujarati, D. N. (2003). Basic Econometric. New York: McGraw-Hill.

Gujarati, D. N. (2009). Basic Econometrics (5th Ed.). New York: McGraw-Hill.

He, Q., & Xu, B. (2019). Determinants of economic growth: A varying-coefficient path identification approach. Journal of Business Research, 101(June 2018), 811–818. https://doi.org/10.1016/j.jbusres.2018.12.013

Hidayat, K. (2011). Analisis Faktor-faktor yang Mempengaruhi Pertumbuhan Ekonomi dan Peran Karakteristik Regional di Jawa Timur (Periode 2000-2009). Jurnal Ekonomi Studi Pembangunan, Vol.5(1), 12–19.

Hirawan, F. B. (2007). Efektivitas Guantum Channel dalam Mekanisme Transmisi Kebijakan Moneter:Studi Kasus Indonesia Tahun 1993-2005. Jurnal Ekonomi Dan Pembangunan, 7(2), 53–73.

Ishioro, B. O. (2013). Monetary Transmission Mechanism in Nigeria: A Causality Test. Mediterrnean Journal of Social Sciences, Vol. 4(No. 13).

Iwata, S., & Wu, S. (2006). Estimating Moneterary Policy When Interest Rates are Close to Zero. Journal of Monetary Economics, 53, 1395–1408.

Jaya. (2014). Analisis Faktor-faktor yang Berpengaruh Terhadap Pendapatan Asli Daerah (PAD) Kota Denpasar. Jurnal Ekonomi Pembangunan Universitas Udayana, Vol.3 No.5.

Juhro, S., & Warjiyo, P. (2016). Kebijakan Bank Sentral Teori dan Praktik. Jakarta: PT. Raja Grafindo Persada.

Karras, G. (1999). Openness and the effects of monetary policy. Journal of International Money and Finance, 18(1), 13–26. https://doi.org/10.1016/S0261-5606(98)00037-0

Konchitchki, Y., & Patatoukas, P. N. (2014). Accounting Earnings and Gross Domestic Product. Journal of Accounting and Economics, 57(1), 76–88.

Lucas, R. E. (1988). On the mechanics of economic development. Journal of Monetary Economics, Vol. 22(Issue 1), 3–42.

Mankiw, N. G. (2003). Teori Makroekonomi (Edisi Keli). Jakarta: Penerbit Erlangga.

McKay, Alisdair, Nakamura, E., & Steinsson, J. (2016). The Power of Forward Guidance Revisited. American Economic Review, 106 (10), 3133–3158.

McKinnon, R. I. (2010). Money and Capital in Economic Development. Brookings Institution Press.

Mishkin, F. S. (1995). Financial Market, Institutions and Money. New York: Harper Collins Publisher.

Mishkin, F. S. (2010). The Economics of Money, Banking, adn Financial Market (8th Editio). USA: The Addison Wesley.

Mitchener, K. J., & Wheelock, D. C. (2013). Does the structure of banking markets affect economic growth? Evidence from U.S. state banking markets. Explorations in Economic History, 50(2), 161–178. https://doi.org/10.1016/j.eeh.2012.09.004

Mohanty, M. S., & Turner, P. (2008). Monetary Policy Transmission in Emerging Market Economies. BIS Papers, No.35.

Murni, A. (2013). Ekonomika Makro. Bandung: Refika Aditama.

Nopirin. (2000). Ekonomi Moneter (Edisi 1). Yogyakarta: BPFE UGM.

Okabe, T., & Kam, T. (2017). Regional economic growth disparities: A political economy perspective. European Journal of Political Economy, 46(November 2015), 26–39. https://doi.org/10.1016/j.ejpoleco.2016.10.009

Pohan, A. (2008). Potret Kebijakan Moneter Indonesia (Edisi Pert). Jakarta: PT. Raja Grafindo Persada.

Samuelson, P. A., & Nordhaus, W. D. (2002). Economics (17th ed.). New York: McGraw-Hill.

Sarwono, H. A., & Warjiyo, P. (1998). Mencari Paradigma Baru Manajemen Moneter dalam Sistem Nilai Tukar Fleksibel Suatu Pemikiran untuk Penerapannya di Indonesia. Buletin Ekonomi Moneter Dan Perbankan Bank Indonesia.

Setyowati, E. (2008). KAUSALITAS INVESTASI ASING TERHADAP PERTUMBUHAN EKONOMI : Error Correction Model. Jurnal Ekonomi Dan Studi Pembangunan, 9(1), 69–88.

Simorangkir, I. (2014). Pengantar Kebanksentralan Teori dan Praktek di Indonesia. Jakarta: PT. Raja Grafindo Persada.

Sims, C. (1992). Interpreting the Macroeconomic Time Series Facts: The Effects of Monetary Policy. European Economic Review, 36, 975–1000.

Sukirno, S. (2010). Makroekonomi: Teori Pengantar. Jakarta: PT. Raja Grafindo Persada.

Supartoyo, Y. H., Tatuh, J., & Sendouw, R. H. E. (2014). The Economic Growth and the Regional Characteristics : The Case of Indonesia. Buletin Ekonomi Moneter Dan Perbankan, 16(1), 3–18. https://doi.org/10.21098/bemp.v16i1.435

Tambunan, T. (2001). Perekonomian Indonesia: Teori dan Temuan Empiris. Jakarta: Ghalia Indonesia.

Tarigan, R. M. R. P. (2007). Ekonomi Reginal: Teori dan Aplikasi (Edisi Revi). Jakarta: Bumi Aksara.

Taylor, J. B. (1995). The Monetary Transmission Mechanism: An Empirical Framework. Journal of Economic Perspective, Vol.9(No.4), 11–26.

Taylor, John B. (1999). A Historical Analysis of Monetary Policy Rules. In NBER Chapters.

Todaro, M. P., & Smith, S. C. (2006). Pembangunan Ekonomi (Edisi Kese). Jakarta: Erlangga.

Umiyati, E. (2012). Analisis Tipologi Pertumbuhan Ekonomi dan Disparitas Pendapatan dalam Implementasi Otonomi Daerah di Provinsi Jambi. Jurnal Paradigma Ekonomi, Vol.1 No.5.

Waluyo, D. (2007). Ekonomi Makro (Edisi Revi). Malang: UMM Press.

Warjiyo, P. (2003). Kebijakan Moneter di Indonesia. Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia.

Warjiyo, P. (2004a). Mekanisme Transmisi Kebijakan Moneter di Indonesia. Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia.

Warjiyo, P. (2004b). Mekanisme Transmisi Kebijakan Moneter di Indonesia (Pusat Pend). Jakarta: Bank Indonesia.

Warjiyo, P., & Zulverdi, D. (1998). Penggunaan Suku Bunga sebagai Sasaran Operasional Kebijakan Moneter di Indonesia. Buletin Ekonomi Moneter Dan Perbankan Bank Indonesia, Vol. 1, No(Juli), 25–58.

Widarjono, A. (2007). Ekonometrika: Teori dan Aplikasi untuk Ekonomi Bisnis. Yogyakarta: Ekonisia Fakultas Ekonomi UII.

Wulandari, R. (2012). Do Credit Channel and Interest Rate Channel Play Important Role in Monetary Transmission Mechanism in Indonesia? A Structural Vector Autoregression Model. Procedia - Social and Behavioral Sciences, Vol. 65, pp 557-563.

Xu, S. C., Li, Y. W., Miao, Y. M., Gao, C., He, Z. X., Shen, W. X., … Wang, S. X. (2019). Regional differences in nonlinear impacts of economic growth, export and FDI on air pollutants in China based on provincial panel data. Journal of Cleaner Production, 228, 455–466. https://doi.org/10.1016/j.jclepro.2019.04.327

Yue, Y., & Zhou, S. (2007). Empirical Analysis of Monetary Policy Transmission. Chinese Business Review, 6(3), 6–13.