

## Economic Recession in 7EM Countries: Evidence Of 3P Capability and Impact Of Covid-19

Ade Novalina<sup>1</sup>, Ramli<sup>2</sup>, Murni Daulay<sup>3</sup>, Dede Ruslan<sup>4</sup>

Email: [adenovalina@gmail.com](mailto:adenovalina@gmail.com)

<sup>1</sup>Doctoral Program Students, Faculty of Economics and Business, Universitas Sumatera Utara

<sup>2,3</sup>Universitas Sumatera Utara

<sup>4</sup>Universitas Negeri Medan

### ABSTRACT

*This study aims to analyze the ability of three government policies and the strong impact of COVID-19 on the economic recession in seven emerging market countries (China, India, Indonesia, Russia, Brazil, Turkey, and Egypt). T-test and independent-sample t-test. This study resulted in the findings of the ARDL Panel model, proving that the leading indicators of state-based financial system stability are China, India, and Brazil. In contrast, the order of the top policy indicators of policy/variable financial system stability is fiscal policy (GOV), monetary policy (I.R.), and policy macroprudential (NPL). The leading indicators of state-based economic stability are Indonesia and Russia. In contrast, the order of leading indicators of policy/variable-based economic stability is macroprudential policy (LDR), fiscal policy (Tax), and monetary policy (JUB). During the Covid-19 pandemic, the effectiveness of financial system stability, apart from China, all countries experienced economic instability. On economic stability, apart from China and Turkey, all countries experienced economic instability after the Covid-19 Pandemic. Recommendation: the policies needed to control financial system stability focus on macroprudential policies and fiscal policies. In contrast, the effectiveness of the procedures necessary to maintain economic stability is through macroprudential policies.*

**Keywords :** *emerging market, monetary policy, fiscal, macroprudential*

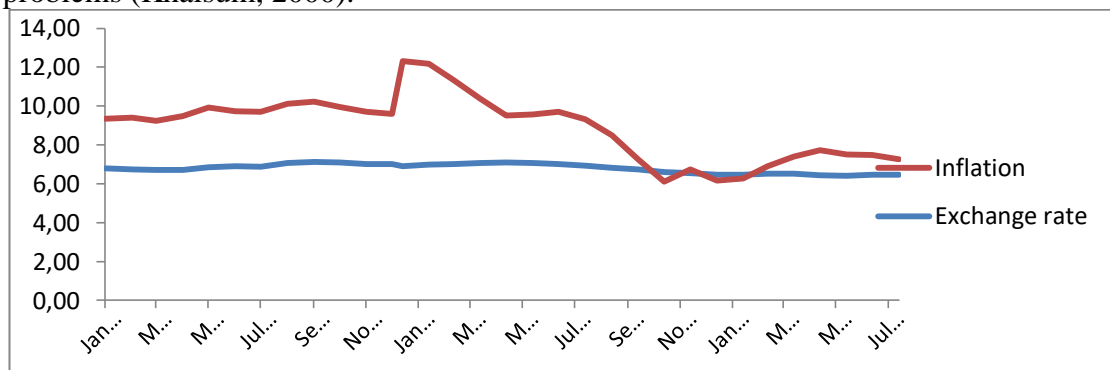
### INTRODUCTION

The global financial crisis in the United States in 2008 impacted the instability of the financial sector and the real sector (Agung, 2010). The financial crisis in America triggered by the credit bubble turned into a global problem and caused the economy to fall. Claessens et al. (2013), Hahm et al., (2014) The source of financial sector instability comes from the credit bubble that turned into a global crisis and caused a drastic decline in economic growth (Claessens and Kose, (2012), Purnawan and Nasir, 2015 ), (Hwa, 2015), (Wimanda, 2014), (Simorangkir, 2013).

The financial crisis originating from the financial sector weakened economic fundamentals such as exchange rates, inflation, and economic growth. Therefore, three policies are needed at once: fiscal policy, monetary policy, macroprudential policy, or the Policy Strength Combine (Posco). Fiscal policy, monetary policy, and macroprudential is integral part of macroeconomic stability, which has targets that must be achieved both in the short and long term (Annafanada, 2015), (Baasir, 2003), (Ade Novalina, 2017), (Bianchi, 2016). ), (Kuijs, 2012), (Rakhmawati, 2017), (Ansari, 2018). Macroprudential policy is made to support monetary policy. (Darmawan, 2017), (Siklos, 2018). Price stability does not guarantee financial stability; Wróbel (2013) a good and calm economic situation causes the financial system to become more vulnerable due to excessive risk-taking by business market players (Alegria et al.,

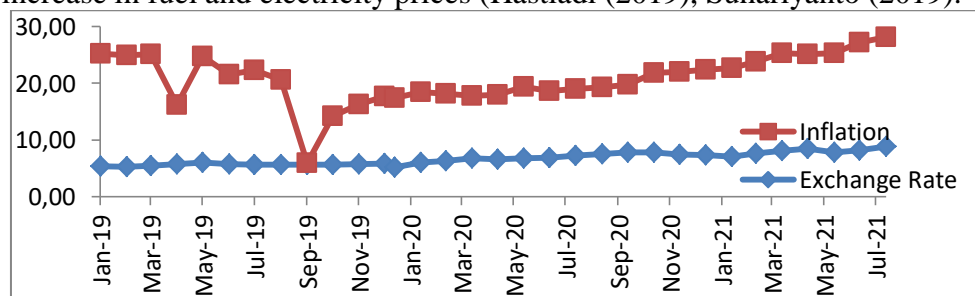
2017), (Arijo Hadi, 2016).

Monetary and fiscal policies must remain coordinated to support economic activities, especially to encourage economic growth and at the same time maintain the inflation rate (Saragih, 2015). The addition of the money supply and government income variables effectively influences inflation and output in the long run. Both policies (Policy Mix) effectively control inflation and economic growth in Nigeria if done with good coordination (Yakubu Musa, 2013). However, policy mix is not always effective in dealing with banking problems in Indonesia; sometimes these two policies (monetary and fiscal policies) are not appropriately coordinated, causing imbalances in the economy; even emerging market countries are also vulnerable to global problems (Khalsum, 2000).



**Figure 1. China Currency and Inflation**

China experienced the highest inflation increase in 2011, and there was another increase in China's inflation in 2018 and 2019. Turkey experienced a reasonably high inflation increase in 2018, which was around 4.93%. Inflation in India occurred in 2013, and there was a significant increase in 2019. There was a substantial increase in inflation in Indonesia in 2013. For Russia and Brazil, the highest inflation occurred in 2015 due to the economic recession. And for the country of Egypt itself, there was a very high increase in inflation in 2017 caused by the increase in fuel and electricity prices (Hastiadi (2019), Suhariyanto (2019)).



**Figure 2. China's Exchange Rate and Inflation**

The overall depreciation of the 7EM-Countries exchange rate occurred in 2015 and 2016. The exchange rate depreciation occurred due to the weakening of the export sector and the increase in U.S. interest rates. Weakening of several fundamental indicators such as GDP, inflation, and exchange rates as an indication of the need to strengthen complementary policies other than the policy mix, namely security policies in the banking sector, both micro and macroprudential (Hanson et al., 2005), (Bank of England, 2009; Arellano, 2011). ).

Macroprudential policies must be implemented effectively (Agung, 2010; De Nicolò, Gianni, 2012). Macroprudential policy communication should be clear (Galati and Richchild, 2011), (Antipa et al., 2011; Galati and Richchild, 2011, and Tovar et al., 2012). Some countries use instruments that vary depending on the level of economic and financial development, exchange rate regimes, and resilience to financial shocks (Unsal, 2011); Aiyaret al., (2012) and Tovar et al., (2012) macroprudential instruments are used to mitigating three categories of systemic risk, namely risks arising from too strong credit growth, liquidity risk, and risk due to high capital outflows. Macroprudential policies with various instruments have been carried out by Bank Indonesia such as Loan to Value Ratio (LTV) or Financing to Value Ratio (FTV) on property loans, determination of the amount of Down Payment on motor vehicle loans, setting limits on Net Performance Loans (NPL) and setting Countercyclical Capital Buffer (CCB) on bank capital is sufficient to reduce various potential risks in the financial system (Kiley and SIM, 2015). Galati and Richchild (2011) currently use macroprudential instruments to limit credit supply to specific sectors to prevent the procyclicality of credit growth. In line with Kiley and SIM (2015) and Cronin and Mcquinn (2016) in explaining the risks and problems of lending to value (NPL) is used to identify the soundness of bank credit.

Shim et al. (2013) explained a significant effect of DTI and housing tax on housing loan inflation prices on credit growth in 1980. In addition, the impact of NPLs on bank health in the housing market was also found. On the other hand, Zhang 5 and Zoli (2014), by examining 74 Asian banks, explain that macroprudential policies limit the supply of credit from banks in Asia. Furthermore, Akinci and Olmstead-rumsey (2015) find that macroprudential policies effectively reduce housing price inflation and credit growth. In Romania, to overcome the economic crisis, LTV and NPL instruments were also used. The result can reduce the possibility of losses between debtors and creditors. As a result, Romania stabilized the economy and avoided systemic risks (Oprea, 2012). LTV and NPL are intended to control bank exposure from debtors and creditors and prevent the impact of the crisis and the occurrence of the problem itself.

The next crisis that caused global financial shocks was the 2008/2009 crisis. The beginning of the crisis in 2008 with conditions of low-interest rates and inflation resulted in an increase in risk taken by banks in general through lending activities which then led to increased risk in the financial system (Chen et al., 2016). Increased risk in the financial system is caused by product innovation in the financial sector with many derivative products that are difficult to understand by the monetary policy transmission mechanism (Warjiyo & Juhro, 2016). The 2008 crisis opened the view of many parties that financial system stability is also essential in addition to price stability; financial system instability can affect macroeconomic stability, even though the inflation rate is low (IMF, 2013). Therefore, the central bank's focus on monetary policy is to maintain price stability so that it pays less attention to risks arising from macroeconomic linkages with the financial system (Warjio, 2016).

The balance analysis begins with the results of a purely discretionary policy or discretionary policy. Policymakers determine monetary and fiscal policy by minimizing equation (1.3), namely Phase 3. Minimization is obtained by FOC equation (1.3) against economic and budgetary targets [ $m^P$  dan  $g^P$ ] and random variable  $v$ ,  $\omega$ ,  $\theta$ . Substitute equations (1.4A) and (1.4B) into equation (1.3) to calculate control of imperfect policy instruments,

namely:

$$E_{\omega,\theta}(L) = E_{\omega,\theta} \left( \frac{1}{1+\alpha} [\omega m^P + \theta g^P - \alpha E(\pi) + v] \right)^2 + E_{\omega,\theta} \left( \frac{\alpha}{1+\alpha} \beta [\omega m^P + \theta g^P - E(\pi) + v] - \alpha \beta y_T \right)^2 \quad (1.5)$$

FOC equation (1.5) to  $m^P$  dan  $G^P$ . with expect operator  $\omega$  dan  $\theta$  will produce the following equation::

$$\begin{aligned} [\omega m^P + \theta g^P - \alpha E(\pi) + v] &= -\alpha^2 \beta [\omega m^P + \theta g^P - E(\pi) + v] + \alpha \beta y_T \\ (1 + \alpha^2 \beta) m^P + (1 + \alpha^2 \beta)(1 + \sigma_\omega^2) g^P &= \alpha \beta y_T + (\alpha^2 \beta + \alpha) E(\pi) \\ -(1 + \alpha^2 \beta) v & \end{aligned} \quad (1.6A)$$

$$\begin{aligned} [\omega m^P + \theta g^P - \alpha E(\pi) + v] &= -\alpha^2 \beta [\omega m^P + \theta g^P - E(\pi) + v] + \alpha \beta y_T \\ (1 + \alpha^2 \beta)(1 + \sigma_\theta^2) m^P + (1 + \alpha^2 \beta) g^P &= \alpha \beta y_T + (\alpha^2 \beta + \alpha) E(\pi) \\ -(1 + \alpha^2 \beta) v & \end{aligned} \quad (1.6B)$$

The solution of  $m^P$  and  $G^P$ . is obtained by substituting equation (1.6A) into (1.6B) or by applying the Cramer determinant method, namely:

$$m^P = \left[ \frac{\alpha \beta (1 + \alpha) y_T + (\alpha^2 \beta - \alpha) E(\pi) - (1 + \alpha^2 \beta) v}{(1 + \alpha^2 \beta) (\sigma_\omega^2 + \sigma_\theta^2 + \sigma_\omega^2 \sigma_\theta^2)} \right] \sigma_\theta^2 \quad (1.7A)$$

$$g^P = \left[ \frac{\alpha \beta (1 + \alpha) y_T + (\alpha^2 \beta - \alpha) E(\pi) - (1 + \alpha^2 \beta) v}{(1 + \alpha \beta) (\sigma_\omega^2 + \sigma_\theta^2 + \sigma_\omega^2 \sigma_\theta^2)} \right] \sigma_\omega^2 \quad (1.7B)$$

Forecasts (1.7A) and (1.7B) explain the FUNCTIONS of policymakers' reactions to shocks in aggregate supply and demand as well as inflation expectations. In Stage 1, the uncertainty of  $v$ ,  $\omega$  and  $\theta$  resulting in inflation expectations being :

$$E(\pi) = E_{\omega,\theta,v}[m^P + g^P] = E_{\omega,\theta,v}[\omega m^P + \theta g^P]$$

$$E(\pi)_{DIS} = \frac{\alpha \beta (1 + \alpha) y_T}{(1 + \alpha) + (1 + \alpha^2 \beta) \left[ \frac{\sigma_\omega^2 \sigma_\theta^2}{\sigma_\omega^2 + \sigma_\theta^2} \right]} \quad (1.8)$$

From equation (1.8), it is known that the uncertainty of fiscal policy instruments [ $\sigma_\theta^2$  tinggi] and the fate of monetary policy instruments [ $\sigma_\omega^2$  high] will increase inflation expectations. Therefore, substituting equations (1.8) into (1.7A) and (1.7B) will result in optimal fiscal and monetary policy with pure discretionary policy. The pure discretionary policy explains that the budgetary policy target [ $g^P$ ] and monetary policy targets [ $m^P$ ] optimal on :

$$m^P_{DIS} = [A - A^T v] \sigma_\theta^2 \quad (1.9A)$$

$$g^P_{DIS} = [A - A^T v] \sigma_\omega^2 \quad (1.9B)$$

Where :

$$A = \frac{\alpha\beta (1 + \alpha) y_T}{(1 + \alpha) (\sigma_\omega^2 + \sigma_\theta^2) + (1 + \alpha^2\beta) (\sigma_\omega^2\sigma_\theta^2)}$$

$$A^T = \frac{1}{(\sigma_\omega^2 + \sigma_\theta^2 + \sigma_\omega^2\sigma_\theta^2)}$$

Equations (1.9A) and (1.9B) explain that aggregate supply and demand shocks determine the optimal fiscal and monetary policy at pure discretion. Thus, positive aggregate supply and demand shocks will reduce monetary and fiscal policy targets, whereas negative aggregate supply and demand shocks will increase monetary and fiscal policy targets.

The first components of optimal fiscal and monetary policy are the constant A [non-contingent] and the slope of the Phillips curve [a]. The combination of aggregate supply and demand shocks [v] is a stabilizing component of each policy instrument. This means that the sum of fiscal and monetary policy stabilization components is the proportion of the total shock supply and aggregate demand. Therefore, aggregate demand and supply shocks will decrease if the uncertainty of monetary and fiscal policy instruments increases.

Inflation expectations, money stock growth, and government spending are determined by the precision of the combination of fiscal and monetary policy controls [ $\sigma_\omega^2, \sigma_\theta^2$ ]. Therefore, increasing uncertainty in policy instruments will reduce the use of a combination of fiscal and monetary policies. If monetary policy instruments can be controlled perfectly [ $\sigma_\omega^2 = 0$ ] then all policies will be controlled with monetary instruments [ $g^P = 0$ ], On the other hand, if fiscal policy instruments can be controlled perfectly [ $\sigma_\theta^2 = 0$ ] then all policies will be controlled with fiscal instruments [ $m^P = 0$ ]. The difference between a rule and pure discretion is crucial, where rule policy determines policy before inflation expectations are determined. Therefore, the type of rule policy is that policy adjustments affect expectations. Fiscal and monetary policy rules are  $G^P = G, m^P = M$  and  $\sigma_\theta^2 = \sigma_\omega^2 = 0$ . When the policy rule is applied, equation (1.8) changes to  $E(\pi) = M + G$ . From equation (1.8), we get :

$$E(\pi)_{RUL} = \frac{\alpha\beta (1 + \alpha) y_T}{(1 + \alpha) + (1 + \alpha^2\beta) \left[ \frac{\sigma_\omega^2 \sigma_\theta^2}{\sigma_\omega^2 + \sigma_\theta^2} \right]} = \alpha\beta y_T \tag{1.10}$$

This means that inflation expectations depend on the slope of the Phillips curve [ $\alpha$ ]and preferences of policymakers [ $\beta$ ]so that  $E(\pi)_{DIS} > E(\pi)_{RUL}$ . Minimization of expected losses on M and G results in optimal fiscal and monetary policies under  $M = G = 0$ . This implies that [ $m_R^P = 0$ ] and [ $g_R^P = 0$ ]or the inflation rate expectation on discretionary policy is always higher than the rule policy. The difference in inflation expectations on the discretionary approach of the rule policy is inflationary bias, so equation (1.8) can be defined as the inflationary bias of discretionary policy. The combination of aggregate demand and supply shocks in the rule policy is fully translated into aggregate output and the inflation rate, so the inflationary bias is zero in the rule policy.

## METHODS

The ARDL Panel equation for the prediction of Financial System Stability in each country in this study is as follows:

$$\begin{aligned}
 KURS_{China} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_1 \\
 KURS_{India} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_2 \\
 KURS_{Indonesia} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_3 \\
 KURS_{Rusia} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_4 \\
 KURS_{Brazil} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_5 \\
 KURS_{Turki} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_6 \\
 KURS_{Mesir} &= \alpha + \beta_1 TAX_{it} + \beta_2 GOV_{it} + \beta_3 INT_{it} + \beta_4 JUB_{it} + \beta_5 LDR_{it} + \beta_6 NPL_{it} + \beta_7 INF_{it} + \beta_8 GDP_{it} + e_7
 \end{aligned}$$

GDP = Gross Domestic Product e = error term  
 INF = Inflation = Regression coefficient  
 EXCHANGE = Exchange Rate = Constant  
 TAX = Tax I = Number of observations (7 countries)  
 GOV = Government Expenditure t = Number of time (11 years)  
 INT = Interest Rate n = 77 observations  
 JUB = Total Money Supply  
 LDR = Loan to Deposit Ratio  
 NPL = Noan Performance Loan

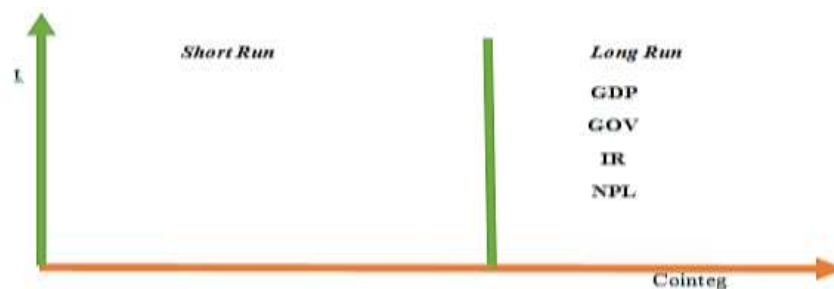
**RESULTS AND DISCUSSION**

3Policy's Ability Against Economic Recession. The summary of the results of the ARDL Panel model research is shown in the following table:

**Table 1. Panel ARDL Model**

Variable	CHINA	INDIA	INDONESIA	RUSIA	BRAZIL	TURKI	MESIR	Short Run	Long Run
GDP	1	1	1	1	1	1	1	0	1
GOV	1	1	0	1	1	1	1	0	1
IR	1	1	1	1	1	0	1	0	1
NPL	1	1	1	0	1	1	0	0	1

Source: Output Eviews 2021



Policy power's ability is proven to detect economic recession in 7 emerging market countries. China, Brazil, and India stabilized the economic recession through GDP, government spending, interest rates, and NPLs. India has stability in GDP, government spending, interest, and NPL. Indonesia's state stability focuses on GDP, welfare, and NPL. The Russian state is GDP, government spending, and sound. Turkey focuses on GDP, government spending, and NPL. The country of Egypt is GDP, government spending, and interest. The stability of the financial system and the economy is proven to be influenced by fiscal and macroprudential policies. The results of this study are supported (Levi, 2004), Wanaset (2008) conducted in Thailand; in this study, the movement of the Thai Bath currency exchange rate is influenced by CPI, GDP, Money Supply, and oil prices. Research by Anca Elena Nucu (2011) shows that the movement of Ron Romania's exchange rate against the Euro is influenced by GDP, inflation rate, money supply, interest rate, and balance of payments. Yunika Murdayanti's research (2012) concludes that the movement of the Rupiah exchange rate against the U.S. Dollar is influenced by GDP, Inflation, Interest Rates, Money Supply, Current Accounts, and Capital Accounts. Triyono's research (2008) shows that the movement of the Rupiah exchange rate against the U.S. Dollar is influenced by the Money Supply (JUB), Inflation, SBI interest rates, and imports (Chen et al., 2016). This is due to product innovation in the financial sector with many derivative products that are difficult to understand by the monetary policy transmission mechanism (Warjiyo & Juhro, 2016). The policy power formulated is the integration of monetary policy and macroprudential policy to maintain rupiah stability and financial system stability, implemented in 2010 (Warjiyo, 2010). In Brazil, monetary policy and macroprudential policy (capital and reserve requirements) worked together during the post-crisis period (2010-2011) to control risks from rapid credit growth. In Korea, fluctuations in housing prices have little correlation with inflation, and these fluctuations are controlled by Loan To Value and Debt to Income. At the same time, the central bank's monetary policy is used to achieve output and price stability (International Monetary Fund, 2013). Another country that has also adopted a policy mix is Turkey since 2010, designed to manage short-term capital volatility (Uysal, 2016).

I am judging from the short-run and long-run stability, where the variables GDP, GOV, I.R., and NPL in the long run significantly control Financial System Stability. The determination of GDP, GOV, I.R., and NPL as leading indicators in the Seven Emerging Market Economies Countries is also supported by the opinion (Wimanda et al., 2014). The main policy instrument used by Bank Indonesia is the B.I. The rate policy rate is the interest rate reference as a policy transmission in achieving the final price stability target—implementation of the B.I. Therefore, the rate policy instrument is effective in maintaining price stability. Chadwik, M. G. (2018) shows that macroprudential policies effectively support credit growth and reduce financial system vulnerabilities. However, monetary and macroprudential policy power will be more potent in maintaining credit growth and financial system stability—the B.I. Rate and LDR reserve requirements are based on previous literature studies, which show that the two policy instruments are the most effective in influencing price stability (Dana et al. (2017) and Wimanda et al. (2012).

### **Impact of Covid-19 on Financial and Economic System Stability**

The COVID-19 pandemic, which began in China in January 2020 and Indonesia on March 9, 2020, has had a significant impact on all aspects of the life of the world's people, particularly financial system stability and economic stability. One of the impacts of Covid 19, several countries in the world are experiencing a recession. Recessions occur in both developed and developing countries. Countries like France, Italy, Canada, Germany, the USA, and Japan. Indonesia also officially declared a recession after its economic growth was minus for two consecutive quarters.

Meanwhile, in France, in August 2020, its GDP contracted 13.8 percent. The Italian contracted 12.4 percent, while Canada 12 percent. Meanwhile, the German economy is said to have shrunk by 10.1 percent. The U.S. and Japan shrank 7.6 percent. Britain is said to be experiencing the worst recession at that time, namely by 20 percent. As the country that first reported the outbreak, the first three months of 2020 also experienced an economic downturn.

But figures released in July 2020 showed China's GDP grew 2.5 percent from April to June. One of the negative impacts of Covid-19 that is being felt in several countries is the increasing unemployment rate due to a wave of layoffs. Big countries like the U.S. also experienced this. In the U.S., at least from the start of the pandemic until August 2020, 30 million people lost their jobs and became unemployed. The U.S. is trying to deal with this problem by helping to provide unemployment benefits of 600 US dollars (Rp 8.8 million) every week.

**Table 2. Output Paired Samples Differences**

	Mean	Std. Deviation	T	Sig. (2-tailed)	Hasil
Pair 1 Rate_CNY_before_pandemic - Rate_CNY_after_pandemic	,00667	,30652	,075	,941	No Different
Pair 2 Rate_INR_before_pandemic - Rate_INR_after_pandemic	-3,64250	2,30015	-5,486	<b>,000</b>	There is a difference
Pair 3 Rate_IDR_before_pandemic - Rate_IDR_after_pandemic	-414,96000	575,99060	-2,496	<b>,030</b>	There is a difference
Pair 4 Rate_RUB_before_pandemic - Rate_RUB_after_pandemic	-7,33417	5,72872	-4,435	<b>,001</b>	There is a difference
Pair 5 Rate_BRL_before_pandemic - Rate_BRL_after_pandemic	-1,21083	,37406	-11,213	<b>,000</b>	There is a difference
Pair 6 Rate_TRY_before_pandemic - Rate_TRY_after_pandemic	-1,21667	,67753	-6,221	<b>,000</b>	There is a difference
Pair 7 Rate_EGP_before_pandemic - Rate_EGP_after_pandemic	1,00583	,60910	5,720	<b>,000</b>	There is a difference

Source: Output Reviews, 2021

The results of a different test show that the effectiveness of the policy mix on financial system stability is represented by the exchange rate of most countries affected by the Covid-19 pandemic, especially for countries such as India, Indonesia, Russia, and Brazil, Turkey, and Egypt. At the same time, China is the only country that has not been severely affected by its financial system's stability during the pandemic. China was the first country affected by the Covid-19 pandemic, but the country recovered quickly; only four months from January 2020 to April 2020, China was out of the Covid-19 pandemic crisis.

**Table 3. Output Paired Samples Differences**

	Mean	Std. Deviation	t	Sig. (2-tailed)	Hasil
Pair 1 Inflation_China_before_pandemic - Inflation_China_after_pandemic	,39167	2,80501	,484	,638	No Different
Pair 2 Inflation_India_before_pandemic - Inflation_India_after_pandemic	-3,14667	1,39368	-7,821	<b>,000</b>	There is a difference
Pair 3 Inflation_Indonesia_before_pandemic - Inflation_Indonesia_after_pandemic	,78417	,74587	3,642	<b>,004</b>	There is a difference



Pair 4	Inflation_Russia_before_pandemic - Inflation_Russia_after_pandemic	1,22417	1,51384	2,801	,017	There is a difference
Pair 5	Inflation_Brazil_before_pandemic - Inflation_Brazil_after_pandemic	,52917	1,31820	2,391	,043	There is a difference
Pair 6	Inflation_Turkey_before_pandemic - Inflation_Turkey_after_pandemic	1,89455	6,34907	,990	,346	No Different
Pair 7	Inflation_Egypt_before_pandemic - Inflation_Egypt_after_pandemic	4,31500	3,94298	3,791	,003	There is a difference

Source: Output Eviews, 2021

The results of a different test show that the effectiveness of the policy mix on economic stability as represented by inflation, most countries are affected by the Covid-19 pandemic, especially for countries such as India, Indonesia, Russia, Brazil, and Egypt. At the same time, China and Turkey are countries that are not severely affected by stability. The economy during a pandemic. Countries that do not have a severe economic impact, such as China and Turkey, indicate the strength of their country's economic fundamentals.

The average inflation rate in Indonesia before the COVID-19 pandemic was 2.86%, and after the emergence of this pandemic, the inflation rate decreased by 8.39% to 2.62%. This figure shows that the inflation rate is still not so worrying. Where this figure is not too far from the 2020 inflation target that must be achieved by Bank Indonesia, which is 3±1% as regulated in PMK No. 93/PMK.011/214 dated May 21 014 and PMK No. 124/PMK.010/2017 dated September 18, 2017. This inflation rate condition was influenced by the negative impact of the COVID-19 pandemic on the Indonesian economy. The pandemic limits the pressure of demand-pull inflation and creates the potential for a slowdown in the domestic economy.

Meanwhile, in terms of supply push inflation, the government's policy of imposing physical distancing and the potential for regional quarantine in several regions in Indonesia, especially on the island of Java, is likely to disrupt the distribution of goods and services in general. In addition, Hanoatubun's research (2020) states that the COVID-19 pandemic has made it increasingly difficult to find jobs, decrease income and fulfill daily needs. This condition certainly causes the low purchasing power of the people so that the volume of demand for goods and services decreases and causes a low level of inflation.

The impact of Covid-19 significantly affects the tourism and investment sectors (Haryanto, 2020), then has an effect on the economy on the health side (Susilawati, 2020). According to Mohammed (2020), the Covid-19 pandemic has significantly impacted the world economic recession and economic stability. According to Ligang Song (2020), the Covid-19 pandemic has an impact on global economic uncertainty. The COVID-19 pandemic broke out at a time of increasing global economic uncertainty. Understanding these uncertainties provides essential background for analyzing the effects of the pandemic on the worldwide economy, assessing the effectiveness of such policy measures in fighting the pandemic and reviving the global economy, and predicting the trajectory of economic recovery in the post-pandemic era. We analyze how COVID-19 is likely to deepen some of the existing problems in the global economy. The three fundamental factors that can lead to a solid recovery in the post-pandemic era are structural reforms, new technologies, and reintegration which can be managed through instituting a new "global social contract." Supported by solid public policies at all levels, especially at the national level, tripartite can serve as the safety of the global economy

recovering or re-emerging from this pandemic crisis.

Then the results of Prawoto's research (2020) also stated a strong relationship between the pandemic who tested positive for COVID-19 and the death rate with socioeconomic conditions with an average correlation coefficient above 0.80. The impact of COVID-19 on socioeconomic mobility has implications for government policies related to human life, economic policies to increase state spending (government spending), and tax incentives must be carried out. Furthermore, monetary policy that can accelerate production by reducing production costs through capital costs and reducing energy prices is an important option. The COVID-19 pandemic has made it increasingly difficult to find employment, a decrease in income, and fulfill daily needs in Hanoi (Hanoatubun, 2020). This condition certainly causes the low purchasing power of the people so that the volume of demand for goods and services decreases and causes a low level of inflation. The risk of stagflation resulting from the Great Lockdown during the pandemic should not be ruled out (Jaravel and O'Chonell, 2020). Inflation fell drastically after the start of the COVID-19 pandemic. (Shapiro, 2020). However, household inflation expectations are responding slowly, and inflation uncertainty persists (Armantier, 2020). An unstable economy during a pandemic causes a shift in price changes in trade (Toamain, 2020).

## CONCLUSION

The results of a different test show that the effectiveness of the policy mix on financial system stability is represented by the exchange rate of most countries affected by the Covid-19 pandemic, especially for countries such as India, Indonesia, Russia, and Brazil, Turkey, and Egypt. At the same time, China is the only country that has not been severely affected by its financial system's stability during the pandemic. The results of a different test show that the effectiveness of the policy mix on economic stability as represented by inflation, most countries are affected by the Covid-19 pandemic, especially for countries such as India, Indonesia, Russia, Brazil, and Egypt. At the same time, China and Turkey are countries that are not severely affected. Economic stability during the pandemic. Countries that do not have a severe economic impact, such as China and Turkey, indicate the strength of their country's economic fundamentals.

## REFERENCES

- Agung, J. (2010). Mengintegrasikan Kebijakan Moneter dan Makroprudensial: Menuju Paradigma Baru Kebijakan Moneter di Indonesia Pasca Krisis Global. Bank Indonesia *Working Paper*.
- Ade Novalina, R. S. (2017). Efektivitas Mekanisme Transmisi Kebijakan Moneter Melalui Jalur Suku Bunga Terhadap Stabilitas Ekonomi Indonesia. *Kajian Ekonomi dan Kebijakan Publik*, 1-12.
- Ahmed, Adesete (2018) Economics Of Nigeria And West Africa Population Growth: Panel Ardl Approach For West Africa. *Asian Journal of Economic Modelling* Vol. 6, No. 3, 327-355
- Alenso, A. and Rault, C. (2015). Monetary Policy Transmission: Old Evidence And Some New Facts From Brazil. *Discussion Papers D.P./67/2015*

- Annafanada. (2015). Analisis Penfgaruh Jumlah Uang Beredar Terhadap Inflasi di Indonesia Tahun 2004-. *eprints.umm.ac.id*, 1-4.
- Ansari, J. (2018). Macroprudential Policies in SEACEN Economies. *The SEACEN Centre*, 113.
- Antipa, Freixas, Xavier, Luc Laeven, and José-Luis Peydró, (2017) forthcoming, Systemic Risk, Crises, and Macroprudential Regulation, MIT Press.
- Ariefianto, M. D. (2012). *Ekonometrika esensi dan aplikasi dengan menggunakan EViews*. Jakarta: Erlangga.
- Akinci, O., & Olmstead-rumsey, J. (2015). How Effective are Macroprudential Policies ? An Empirical Investigation Board of Governors of the Federal Reserve System, (1136)
- Angelini, Paolo, Stefano Neri , dan Fabio Panetta. (2012). Monetary and Macroprudential Policies. Working Paper Series, No 1449, European Central Bank, Juli.
- Arnold, Bruce, Claudio Borio, Luci Ellis dan Fariborz Moshiran. (2012). Systemic Risk, Macroprudential Policy Frameworks, Monitoring Financial System, and the Evolution of Capital Adequacy, *Journal of Banking and Finance*, vol 36: 3125-3132
- Arijo Hadi, A. D. (2016). Bauran Kebijakan Fiskal-Moneter dan Dampaknya Bagi Anggaran Pertahanan. *Jurnal Pertahanan*, 145-170.
- Arsana, I. G. P. (2005). Vector Auto Regressive. Laboratorium Komputasi Ilmu Ekonomi FEUI, Universitas Indonesia, Depok.
- Aiyar, Shekhar, Charles W. Calomiris and Tomasz Wieladek, (2014), "Does Macro-Prudential Regulation Leak? Evidence from a U.K. Policy Experiment," *Journal of Money, Credit and Banking*, 46(s1), 181-214, 02.
- Arellano, Manuel, and Stephen Bond, (2011), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations," *Review of Economic Studies*,58(2), 277-97.. Bank of England, 2011, "The Role of Macroprudential Policy," Discussion Paper, November.
- Alegria, A., Alfaro, R., & Córdova, F. (2017). The Impact of Warnings Published in a Financial Stability Report on Loan-to Value Ratios. BIS Working Paper No. 633. retrieved from: <https://www.bis.org/publ/work633.htm>
- Asghar. (2016). Institutional Quality and Economic Growth: Panel ARDL Analysis for Selected Developing Economies of Asia. *International Journal Economic* , 34-45.
- Alper, K., Binici, M., Demiralp, S., Kara, H., & Özlü, P. (2014). Reserve Requirements, Liquidity Risk and Credit Growth. TCMB Working Paper 1416. Koc UniversityTUSIAD Economic Research Forum.
- Arnold, B., Borio, C., Ellis, L., & Moshirian, F. (2012). Systemic risk, Macroprudential Policy Frameworks, Monitoring Financial Systems and The Evolution of Capital Adequacy. *Journal of Banking and Finance*. Vol. 36(12): 3125–3132. doi: <https://doi.org/10.1016/j.jbankfin.2012.07.023>
- Asgar, R., & Ongena, S. (2016). Institutional Quality and Economic Growth: Panel ARDL Analysis for Selected Developing Economies of Asia. Vol. 30, No.2, July – December 2015, pp. 381-403.
- Auer, R., & Ongena, S. (2016). The Countercyclical Capital Buffer and The Composition. BIS Working Paper No. 593. Retrieved from: <https://www.bis.org/publ/work593.htm>
- Baasir, F. (2003). *Pembangunan dan Crisis*. Jakarta: Pustaka Harapan.

- Bank Indonesia (2019) *Kajian Stabilitas Keuangan*. Bersinergi Mendorong Intermediasi Berkualitas di Tengah Berlanjutnya Ketidakpastian Global No. 33, Sept 2019.
- Bappenas. (2008). *Stabilitas Ekonomi Makro*. pp. 1-32.
- Bappenas. (2014). *Pemantapan Stabilitas Ekonomi Makro*. Jakarta: bappenas.go.id.
- BI. (2019). *Stabilitas Sistem Keuangan*. Jakarta: bi.go.id.
- Blog, M. (2010, June 23). *Malqistitude's Blog*. Retrieved from Wordpress: <https://malqinstitute.wordpress.com/2010/06/23/stabilitas-ekonomi-dalam-berbagai-sistem/>
- Bank. <https://www.kompasiana.com/makenyok/59ad7518d1962e1e617bd4f2/mengenal-brics-dan-brics-new-development-bank?page=all>
- BBVA Research (2017). *Mengenal BRICS dan BRICS New Development Bank*. <https://www.kompasiana.com/makenyok/59ad7518d1962e1e617bd4f2/mengenal-brics-dan-brics-new-development-bank?page=all>
- Bianchi, A. C., Thwaites, G., and Vicondoa, A. (2016). *Monetary Policy Transmission In An Open Economy: New Data And Evidence From The United Kingdom*. European University Institute & Bank of England and CfM.
- Bahadir, B., & Gumus, I. (2016). *Credit Decomposition and Business Cycles in Emerging Market Economies*. *Journal of International Economics*. Vol. 103: 250-262. doi: <https://doi.org/10.1016/j.jinteco.2016.10.003>
- Baskaya, Y. S., Giovanni, J., Kalemli-ozcan, S., Peydro, J., & Ulu, M. F. (2015). *Capital Flows, Credit Cycles and Macprudential*. BIS Working Paper No. 86: 63-68. retrieved from: <https://www.bis.org/publ/bppdf/bispap86j.pdf>.
- Basten, C., & Koch, C. (2015). *Higher Bank Capital Requirements and Mortgage Pricing: Evidence from the Counter-Cyclical Capital Buffer (CCB)*. BIS Working Paper No. 511. retrieved from: <https://www.bis.org/publ/work511.htm>.
- Bauer, G. H. (2017). *International House Price Cycles, Monetary Policy and Credit*. *Journal of International Money and Finance*. Vol. 74: 88-114. doi: <https://doi.org/10.1016/j.jimonfin.2017.03.003>.
- Claessens, S., & Kose, M. A. (2013). *Financial Crises: Explanations, Types and Implications*. IMF Working Paper No. 65. retrieved from: <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Financial-Crises-Explanations-Types-and-Implications-40283>.
- Claessens, Stijn, Swati Ghosh, and Roxana Mihet, (2012), "Macprudential Policies to Mitigate Financial System Vulnerabilities," *Journal of International Money and Finance*, 39:153-185.
- Crowe, Dell'Ariccia, , Christopher W., Deniz Igan, Giovanni, and Pau Rabanal, (2011), "How to Deal with Real Estate Booms," IMF Staff Discussion Note 11/02.
- Dell'Ariccia, Cerutti, Eugenio, Jihad Dagher, and Giovanni, (2015), "Housing Finance and Real-estate booms: A Cross-Country Perspective," forthcoming IMF Staff Discussion Note.
- Darmawan, M. H. (2017). *Kemampuan Transmisi Kebijakan Moneter Dalam Menjaga Stabilitas Ekonomi 10 Negara Emerging Market*. 1-174.
- DetikFinance. (2008). *Masalah Likuiditas Bank Century Sudah Terjadi Sejak Lama*. <https://finance.detik.com › moneter › masalah-likuiditas-bank-century-sud...>

- Drehmann, M., & Tsatsaronis, K. (2014). The Credit-to-GDP Gap and Countercyclical Capital Buffers : Questions and Answers. BIS Quarterly Review, March 2014. retrieved from: [https://www.bis.org/publ/qtrpdf/r\\_qt1403g.htm](https://www.bis.org/publ/qtrpdf/r_qt1403g.htm).
- De Nicolò, Gianni, Giovanni Favara, and Lev Ratnovski, (2012), "Externalities and Macroprudential Policy". IMF Staff Discussion Notes, No.12/05.
- Endri, A. I. (2009). Penguatan Stabilitas Sistem Keuangan Melalui Peningkatan Fungsi Intermediasi dan Efisiensi Bank Pembangunan Daerah (BPD). *Jurnal Keuangan dan Perbankan* , 120-134.
- Enders, W. (1995). *Applied Econometric Time Series*. New York: John Wiley Sons, Inc: Canada.
- Fendoğlu, S. (2015). Credit Cycles and Macroprudential Policy Framework In Emerging Countries. BIS Working Paper No. 86: 17–25. retrieved from: <https://www.bis.org/publ/bppdf/bispap86d.pdf>
- Fleming, Debra Parker. (1962). Evidence on The Determinant of Taxpayer Compliance Examination of Effect Withholding Positions, Audit Detection Rates and Penalty Amount on Tax compliance Decisions. Thesis. Nova South Eastern University. USA.
- Fendoğlu, S. (2017). Credit Cycles and Capital flows: Effectiveness of The Macroprudential Policy Framework In Emerging Market Economies. *Journal of Banking and Finance*. Vol. 79: 110–128. doi: <https://doi.org/10.1016/j.jbankfin.2017.03.008>
- Galati, Gabriele and Richhild Moessner, (2011), "Macroprudential policy - a literature review," BIS Working Papers 337, Bank for International Settlements.
- Georgiadis, G. (2015). Determinants Of Global Spillovers From US Monetary Policy. European Central Bank (ECB), *Working Paper Series* No 1854 / September 2015.
- Greene A., (2003), "Econometric Analysis, Fifth Edition New York University.
- Gujarati, D. (2003). *Basic Econometrics Fourth Edition*. McGraw Hill. Singapore.
- Garcia-Herrero, Alicia** (2017). Mengenal BRICS dan BRICS New Development Bank. <https://www.kompasiana.com/makenyok/59ad7518d1962e1e617bd4f2/mengenal-brics-dan-brics-new-development-bank?page=all>
- Hastiadi, Fithra Faisal (2019). Penyebab Turunnya Pertumbuhan Ekonomi Indonesia. LPFE Universitas Indonesia.
- Herman, A., Igan, D., & Solé, J. (2017). The Macroeconomic Relevance of Bank and Nonbank Credit: An Exploration Of U.S. Data. *Journal of Financial Stability*. Vol. 32: 124–141. doi: <https://doi.org/10.1016/j.jfs.2017.06.009>
- Hsing. Y (2015). Monetary Policy Transmission And Bank Lending In China And Policy Implications *Journal Of Chinese Economics*, 2014 Vol. 2, No. 1, Pp 1-9
- Hahm, Cordella, Tito, Pablo Federico, Carlos Vegh, and Guillermo Vuletin, (2014), "Reserve Requirements in the Brave New Macroprudential World." World Bank Policy Research Working Paper No. 6793.
- Hanson, Samuel, Anil Kayshap, and Jeremy Stein, (2011), "A Macroprudential Approach to Financial Regulation," *Journal of Economic Perspective*, 25(1), 3–28.
- Hwa, T.B. (2015). The Transmission Of Financial Stress And Its Interactions With Monetary Policy Responses In The ASEAN-5 Economies. Bank Negara Malaysia. *Working Papers* WP6/2015.

- Igan, D., & Pinheiro, M. (2011). Credit Growth and Bank Soundness: Fast and Furious? IMF Working Papers No. W.P./11/278. retrieved from: <https://www.imf.org/en/Publications/W.P./Issues/2016/12/31/Credit-Growth-and-Bank-Soundness-Fast-andFurious-25390>.
- Igan, Deniz, and Heedon Kang, (2011), "Do Loan-to-Value and Debt-to-Income Limits Work? Evidence from Korea," IMF Working paper 11/297.
- Ikhsan, M. dan M.C! Basri, (1991), "Investasi Swasta dan Pemerintah; Substitusi atau K omplementer?: Kasus Indonesia", *Ekonomi dan Keuangan Indonesia*, Vol. 39, No. 4, Desember, halaman: 359-391.
- Jakarta, A. I. (2009). Penguatan Stabilitas Sistem Keuangan Melalui Peningkatan Fungsi Intermediasi dan Efisiensi Bank Pembangunan Daerah (BPD). *Jurnal Keuangan dan Perbankan*, 120-134.
- Jimenez g., Ongena S., dan Peydro J.L. (2012) Hazardous Times for Monetary Policy "What do Twenty Thre Million Bank Loans Say About the Effects of Monetary Policy on Credit Risk Taking , Bando de Espana working Paper No. 0833
- Kompasiana. (2017). *Kebijakan Fiskal dan Pengaruhnya Terhadap Perekonomian Nasional*. Jakarta: kompasiana.com.
- Kowalski, J.R., Mendoza-Blanco, X., Tu, M. dan Gleser, L.J., (1999). On the difference in inference and prediction between the joint and independent t-error models for seemingly unrelated regressions. *Communications in Statistics, Part A\_Theory and Methods* 28, 2119\_2140.
- Kuijs, L. (2012). Monetary Policy Transmission Mechanism And Inflation In The Slovak Republic. International Monetary Fund, *Working Paper*, WP02/80.
- Kuncoro,Sri.(2014)..Analisis Pengaruh Pertumbuhan Ekonomi,Tingkat Pengangguran Dan Pendidikan Terhadap Tingkat Kemiskinan Di Provinsi Jawa Timur 2009 - 2011.*Jurnal Ilmiah.Fe Muhammadiyah Surakarta*
- Karfakis, C. (2013). Credit and Business Cycles in Greece : Is There Any Relationship ?.*Economic Modelling*. Vol. 32: 23–29. doi:<https://doi.org/10.1016/j.econmod.2013.01.036>
- Kazanas, T., Philippopoulos, A., & Tzavalis, E. (2011). Monetary Policy Rules and Business Cycle Conditions. *The Manchester School*, 79( SUPPL.2): 73–97. doi: <https://doi.org/10.1111/j.1467-9957.2011.02267.x>
- Kiley, M. T., & Sim, J. (2015). Optimal Monetary and Macroprudential Policies : Gains and Pitfalls in a Model of Financial Intermediation. *Finance and Economics Discussion Series* 2015-78. Board of Governors of The Federal Reserve Systems.
- Kilin, M., & Tun, C. (2014). Identification of Monetary Policy Shocks in Turkey : A Structural VAR Approach. Working Paper No. 14/23. Ankara: Central Bank of The Republic of Turkey.
- Khalsum, Ummu. (2000). *Analisis Interaksi Fiskal dan Moneter Terhadap Produk Domestik Bruto Indonesia*. Medan: repository.usu.ac.id.
- Lim, Cheng H., Francesco Columba, Alejo Costa, Piyabha Kongsamut, Akira Otani, Mustafa Saiyid, Torsten Wezel, Xiaoyong Wu, (2011), "Macroprudential Policy: What

- Instruments and How Are They Used? Lessons from Country Experiences", IMF Working Paper 11/238.
- Lim, C., Columba, F., Costa, A., Kongsamut, P., Otani, A., Saiyid, M., Wu, X. (2011). Macroprudential Policy : What Instruments and How to Use Them ? Lessons from Country Experiences. IMF Working Papers No. W.P./11/85. Retrieved from <http://www.pfsprogram.org/sites/default/files/wp11238.pdf>
- López, M., Tenjo, F., & Zárata, H. (2014). Credit Cycles, Credit Risk and Countercyclical Loan Provisions. *Revue d'Epidémiologie et de Santé Publique*. Vol. 32(74): 9–17. doi: [https://doi.org/10.1016/S0120-4483\(14\)70024-7](https://doi.org/10.1016/S0120-4483(14)70024-7)
- McCarthy, Y., & McQuinn, K. (2017). Credit Conditions In A Boom and Bust Property Market: Insights For Macro-Prudential Policy. *Quarterly Review of Economics and Finance*. Vol. 64: 171–182. doi: <https://doi.org/10.1016/j.qref.2016.08.002>
- Mankiw, N.G. 2013. *Macroeconomics* Eight Edition. New York: Worth Publishers.
- Mag, A. (2015, March 19). *Hal-hal penting tentang stabilitas keuangan*. Retrieved from mag.co.id: <http://www.mag.co.id/stabilitas-sistem-keuangan/>
- Novalina, A. (2018). *Prediksi Stabilitas Ekonomi* (Vol. 5). Medan: Jega.
- Nugroho, A. C. (2019). *7 Negara Emerging Markets Pimpin Ekonomi Dunia di 2030. Indonesia Peringkat 4 The Rising Star Dunia*. Jakarta: Bisnis.com.
- Mundell, Robert A., (1963), "The Monetary Dynamics of International Adjustment under Fixed and Flexible Exchange Rates," *Quarterly Journal of Economics*, Vol. 74 (May), pp. 227–57.
- Mahendra, I Gede Yoga dan I Wayan Wita Kesumajaya. 2015. Analisis Pengaruh Investasi, Inflasi, Kurs Dollar Amerika Serikat, dan Suku Bunga Kredit terhadap Ekspor Indonesia Tahun 1992-2012. *E-Jurnal Ekonomi Pembangunan Universitas Udayana*, 4(5) : 525-545.
- Moawad, Rania Ramadan (2019) Financial Development and Economic Growth: ARDL Model. Vol. 4 Issue 7, July – 2019.
- Manurung, Manurung, J.J., Saragih, A.H., dan Ferdinand, D.(2005).*Ekonometrika*.Cetakan Pertama. Jakarta. Penerbit Elex Media Computindo.
- Mgadmi, N. and Chrigui, Z. (2015). Monetary Policy's Transmission Channels In Russia: SVAR Model Validation. *Journal of Business and Management Research*, 8 (2015) 189-200 p-ISSN : 2356-5756 / e-ISSN: 2356-5764.
- Pardede Raden (2017). BBVA EAGLEs: Negara Emerging Market Tujuan Utama Investor Global. <https://www.paramadina.ac.id/home/homepage-news/bbva-eagles-negara-emerging-market-tujuan-utama-investor-global.html#>
- OJK. (2017). *Definisi Stabilitas Sistem Keuangan*. Jakarta: ojk.go.id.
- Rakhmawati, I. (2017). Daya Tahan Sektor Rumah Tangga Dalam Rangka Menjaga Stabilitas Sistem Keuangan. *Jurnal Bisnis dan Manajemen Islam*, 65-92.
- Rahman, A. (2013). Analisis Efektivitas Kebijakan Fiskal Dan Moneter Terhadap Produk Domestik Bruto Indonesia. Medan.
- Rusiadi (2018) Transmisi Moneter Negara Emerging Market, Disertasi USU Medan
- Rosoiu (2015), A. (2015). Emerging Markets Queries Monetary Policy And Time Varying Parameter Vector Autoregression Model. The Bucharest University of Economic Studies, *Procedia Economics and Finance* 32 ( 2015 ) 496 – 502.

- Salikin, M. Y. (2016). Pengaruh Kebijakan Moneter Terhadap Inflasi Dan Produk Domestik Bruto (Pdb) Di Indonesia . *JUPE*, 1-7.
- Setiawan,I. (2009). Analisis Dampak Kebijakan Moneter Terhadap Perkembangan Inflasi Dan Pertumbuhan Ekonomi Di Indonesia. *Jurnal Ekonomi, Keuangan, Perbankan dan Akuntansi* Vol. 1, No. 1, Mei 2009, 15 - 31. Politeknik Negeri Bandung.
- Sheefeni, J.P., and Kalikeka. M. (2013). Interest Rate Channel And Monetary Transmission In Zambia. *Journal Of Emerging Issues In Economics, Finance And Banking* (Jeiefb) Volume:2 No.6 December 2013.
- Saragih, J. P. (2015). Bauran Kebijakan Moneter-Fiskal Terhadap Pencapaian Target Inflasi dan Pertumbuhan Ekonomi. *Kajian*, 163-182.
- Shenglin, N.Y.G. and Ben. (2016). Should Practice Simple Central Banking To Help Rmb Internationalizatio. *Journal Of Chinese Economics*, 2016 Vol. 4. No. 2. Pp. 35-46 (Online)
- Siklos, P. (2018). Monetary Policy, Financial Stability and The Macroprudential Illusion? *CIGI Papers*, 1-8.
- Schwartz, Stephen (2017). "Who are the EAGLEs: Driving Global Growth for the Next Ten Years. <https://www.paramadina.ac.id/home/homepage-news/bbva-eagles-negara-emerging-market-tujuan-utama-investor-global.html#.Santoso>,
- Teguh; Basuki, umar, maruto. 2009. "Dampak Kebijakan Fiskal Dan Moneter Dalam Perekonomian Indonesia: Aplikasi Model Mundell-Fleming".*Jurnal Organisasi dan Manajemen, Volume 5, Nomor 2, September 2009, 108-128*,
- Simorangkir, Iskandar (2013). *Koordinasi Kebijakan Moneter dan Kebijakan Fiskal di Indonesia: Suatu Pendekatan dengan Game Theory*. PPSK Bank Indonesia Working Paper.
- Rydland, Veslemøy & Grøver, Vibeke (2018). Argumentative peer discussions following individual reading increase comprehension. *Language and Education*. ISSN 0950-0782. s 1- 16 . doi: [10.1080/09500782.2018.1545786](https://doi.org/10.1080/09500782.2018.1545786)
- Park, Y. C. 2011. The Role of Macroprudential Policy for Financial Stability in East Asia's Emerging Economies. Asian Development Bank Institutuse Working Paper Series, (284)
- Pesaran, M.H., Y. Shin and R.J. Smith, (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3): 289-326.
- Pramono, B., Hafidz, J., Maulana, J. A., Muhajir, H., Alim, M. S., Adamanti, J., Alim, S. (2015). Dampak Kebijakan Countercyclical Capital Buffer Terhadap Pertumbuhan Kredit Di Indonesia (The Impact of Countercyclical Capital Buffer Policy to Credit Growth in Indonesia). Working Paper No. WP/4/2015. Jakarta: Bank Indonesia.
- Purnawan, M. E., & Nasir, M. A. (2015). The Role of Macroprudential Policy to Manage Exchange Rate Volatility, Excess Banking Liquidity and Credits. *Buletin Ekonomi Moneter Dan Perbankan*. Vol. 18(1): 21–44.
- Rubio, M., & Carrasco-gallego, J. A. (2014). Macroprudential and Monetary Policies : Implications for Financial Stability and Welfare. *Journal Of Banking Finance*. Vol. 49: 326-336. doi: <https://doi.org/10.1016/j.jbankfin.2014.02.012>



- Sáiz, M. C., Sanfilippo Azofra, S., Torre Olmo, B., & López Gutiérrez, C. (2017). Trade credit, sovereign risk and monetary policy in Europe. *International Review of Economics and Finance*. Vol. 52: 39–54. doi: <https://doi.org/10.1016/j.iref.2017.09.010>
- Shi, S., Jou, J., & Tripe, D. (2014). Can interest Rates Really Control House Prices ? Effectiveness and Implications for Macroprudential Policy. *Journal Of Banking Finance*. Vol. 47: 15–28. doi: <https://doi.org/10.1016/j.jbankfin.2014.06.012>
- Shijaku, G. (2017). Does Concentration Matter for Bank Stability? Evidence from the Albanian Banking Sector. *Journal of Central Banking Theory and Practice*. Vol. 6(3): 67–94. doi: <https://doi.org/10.1515/jcbtp-2017-0021>
- Shim, Kuttner, Kenneth N. and Ilhyock, (2013), "Can non-interest rate policies stabilise housing markets? Evidence from a panel of 57 economies," BIS Working Papers No 433.
- Suh, H. (2014). Dichotomy Between Macroprudential Policy And Monetary Policy on Credit and Inflation. *Journal of Economics Letters*. Vol. 122(2): 144–149. doi: <https://doi.org/10.1016/j.econlet.2013.11.012>
- Thanassoulis, J. (2014). Bank Pay Caps, Bank Risk, and Macroprudential Regulation. *Journal of Banking and Finance*. Vol. 48: 139–151. doi: <https://doi.org/10.1016/j.jbankfin.2014.04.004>.
- Tomuleasa, I. (2015). Macroprudential Policy and Systemic Risk : An overview. *Procedia Economics and Finance*. Vol. 20(15): 645–653. doi: [https://doi.org/10.1016/S22125671\(15\)00119-7](https://doi.org/10.1016/S22125671(15)00119-7)
- Tovar, C. E., Garcia-Escribano, M., & Martin, M. V. (2012). Credit Growth and the Effectiveness of Reserve Requirements and Other Macroprudential Instruments in Latin America. *IMF Working Paper 12/142*: 1–29.
- Uysal, M. European C. B. 2016. Financial Stability and Macroprudential Policy, (9), 349–364.
- Wimanda, R.E., Maryaningsih, N., Nurliana, L and Satyanugroho, R. (2014). Evaluasi Transmisi Bauran Kebijakan Bank Indonesia. *Working Paper WP/ 03/ 2014*, Bank Indonesia.
- Warjiyo, Perry. (2016). *Bauran Kebijakan Bank Sentral: Konsepsi Pokok dan Pengalaman Bank Indonesia*. Jakarta : BI Institute.
- World Bank, L. B. (2018). *Laporan Tahunan 2018*. Indonesia: Bank Dunia.
- Worldbank. (2019, September 3). *World Bank Open Data*. Retrieved from World Bank Group: <https://data.worldbank.org>
- Wróbel, Rafał (2019) 13th International Scientific Conference on Sustainable, Modern and Safe Transport (Transcom 2019), High Tatras, Novy Smokovec – Grand Hotel Bellevue, Slovak Republic, May 29-31, 2019 Dependencies of elements recognized as critical infrastructure of the state
- Vasile Cociuş & Anca Elena Nucu. (2014) Monetary policy and financial stability: empirical evidence from Central and Eastern European countries. Pages 75-98 | Published online: June 3 2014.
- Yakubu Musa, B. K. (2013). Effect Of Monetary -Fiscal Policies Interaction On Price and Output Growth in Nigeria. *CBN Journal of Applied Statistics*, 55-74.

**International Journal of Economic, Technology and Social Sciences**

**url:** <https://jurnal.ceredindonesia.or.id/index.php/injects>

Volume 2 Number 1 page 351 - 368

- Yogi ((2013, may 23). *Kerangka Konseptual*. Retrieved from WordPress:  
<https://yogipoltek.wordpress.com/2013/05/23/kerangka-konseptual/>
- Zhang, Cheng, W. And , D. (2015). How Might Northern Technology Benefit But Northern Money Hurt The South Through Trade. Department Of Economics, Monash University, Department Of Economics *Discussion Paper* 47/15.