JURNAL PENDIDIKAN EKONOMI, PERKANTORAN DAN AKUNTANSI
http://pub.unj.ac.id/index.php/jpepa

Effect of Macroprudential Policy Instruments on Credit Growth for Commercial Banks in Indonesia

Afidah Nur Aslamah[1], **Aditya Pratama**[2]
[1] *Universitas Negeri Jakarta, Indonesia*
[2] *Universitas Negeri Jakarta, Indonesia*

Article Info

Article history:
Received: Mei 04, 2021
Accepted:
Published: December 18, 2021

Keywords:
Statutory Reserves, Macroprudential Intermediation Ratio, Credit Growth, Capital Buffer

Abstract

The Indonesian economy experienced a deep contraction in 2020 due to the COVID-19 pandemic. The economic growth rate took a sharp dip at -5.32% in the first quarter based on data from BPS. One of the impacts is the decline in credit growth in the banking sector, which grew only 0.12% per August. The government is trying to control the rate of credit growth by introducing policies in the monetary sector, namely a change in the statutory reserve requirement (GWM) from 8% to 4% in order to maintain banking liquidity. The purpose of this study was to analyze the effect of the statutory reserve requirement, Macroprudential Intermediation Ratio (MIR), and capital buffer on the growth of commercial bank credit in Indonesia 2019-2020. The data used is monthly data from the Indonesian Banking Statistics on the website of the Financial Services Authority. The statistical method used in this study is the multiple linear regression method with E-Views SV.11 software to perform the three hypothesis tests. The results of the study partially show that the reserve requirement has a negative and insignificant effect on commercial bank credit growth. MIR and capital buffer have a significant effect, but MIR has a negative effect and capital buffer has a positive influence on commercial bank credit growth.

Abstrak

Perekonomian Indonesia terdistraksi cukup dalam pada tahun 2020 akibat adanya pandemi covid 19. Angka pertumbuhan ekonomi menukik tajam pada -5,32 % di triwulan pertama berdasarkan data dari BPS. Salah satu dampaknya yaitu terjadinya penurunan pertumbuhan kredit pada sektor perbankan yang tumbuh hanya 0,12% per Agustus. Pemerintah mencoba mengendalikan laju pertumbuhan kredit dengan menelurkan kebijakan pada sektor moneter yaitu perubahan ketetapan Giro Wajib Minimum yang semula 8% menjadi 4% demi menjaga likuiditas perbankan. Tujuan penelitian ini dilakukan untuk menganalisis pengaruh instrumen kebijakan makroprudensial Giro Wajib Minimum, Rasio Intermediasi Makroprudensial, dan capital buffer terhadap pertumbuhan kredit bank umum di Indonesia 2019-2020. Data yang digunakan adalah data bulanan dari Statistik Perbankan Indonesia pada laman Otoritas Jasa Keuangan. Adapun metode statistik yang digunakan pada penelitian ini yaitu metode regresi linear berganda dengan software E-Views SV.11 untuk melakukan ketiga uji hipotesis. Hasil penelitian secara parsial menunjukkan bahwa GWM berpengaruh negatif dan tidak signifikan terhadap pertumbuhan kredit bank umum. RIM dan Capital Buffer berpengaruh signifikan, namun RIM memberikan pengaruh negative dan Capital Buffer memberikan pengaruh positif terhadap pertumbuhan kredit bank umum.

How to Cite:

* Corresponding Author.

afidah930@gmail.com Afidah Nur Aslamah

ISSN

2302-2663 (online)

DOI: doi.org/10.21009/JPEPA.007.x.x

INTRODUCTION

The global financial crisis in 2008 was one of the causes for the birth of macroprudential policies in Indonesia. At that time there was an imbalance between the financial sector and the production sector due to the monopolistic practice of economic resources by large corporations and developed countries against poor countries. Capital for development is only owned by a group of large corporations and certain countries, while poor countries must borrow to obtain development funds with the obligation to carry out all the requirements of developed countries. This condition causes many people to lose their economic resources due to the economic structure that legitimizes monopolistic practices. Unfair economic control creates an acute poverty structure, which in turn reduces people's purchasing power.

The absence of purchasing power means the absence of a market which causes the financial sector to grow disproportionately with the production sector. The production sector does not provide large profits because the purchasing power of consumers does not exist. When the financial sector continues to grow while the production sector stagnates, a finance bubble occurs, which at any time can explode and cause a crisis.

In Indonesia, the term macroprudential has been implicitly used since early 2000 in response to the 1997/1998 financial crisis, which was marked by the preparation of the Indonesian financial system stability framework and the establishment of the Financial System Stability Bureau (BSSK) at Bank Indonesia. Based on this framework, Bank Indonesia seeks to maintain the stability of the Indonesian financial system through two approaches, namely microprudential and macroprudential (BI, 2007). This shows that since the early 2000s, Bank Indonesia has made efforts to examine macroprudential aspects in maintaining financial system stability. The role of Bank Indonesia in the macroprudential sector is enshrined in the Law (UU) of the Republic of Indonesia No. 21 of 2011 dated 22 November 2011 concerning the Financial Services Authority (OJK), in line with the shift of the regulatory and supervisory functions of banks (microprudential) to the Financial Services Authority (OJK). Ultimately, the objective of this macroprudential policy is to minimize the occurrence of systemic risk in the financial system.

In the implementation of macroprudential policies to maintain financial system stability through the banking sector in Indonesia with the instruments applied. The determination aimed at the credit growth of conventional commercial banks is expected to maintain the stability of the financial system as a whole. As happened in 2020, the presence of covid-19 in almost all countries resulted in quite pronounced economic turmoil due to a decline in economic growth of up to -5.32% in the second quarter and still growing negative -3.49% in the third quarter. This indirectly has an impact on the stability of the Indonesian financial system, which shows increased vigilance. Based on data from the Financial System Stability Committee Assessment Results in the second quarter of 2020, financial system stability in the second quarter of 2020 is in normal condition, although vigilance is still being increased. Various indicators show that financial system stability remains good, although the still high spread of Corona Virus Disease 2019 (Covid-19) demands increased vigilance and prudence because it could affect the economic outlook and financial system stability. To that end, policy coordination within the Financial System Stability Committee (KSSK) will continue to be strengthened in order to promote economic recovery and maintain financial system stability.

The banking credit sector is one of the sectors experiencing contraction in the financial system cycle. Since the monetary crisis in 1998, 2020 has become a dark history of repeating negative growth in bank credit. In September 2020, nominal bank lending was IDR 5,529.4 trillion, growing negative 0.4% YoY. The decline in credit rates occurred in line with the slowdown in credit to corporate and individual debtors.

Macroprudential policy as part of a policy tool capable of determining the direction of future financial system stability needs to be studied in depth how it affects the financial system in the midst of this pandemic. Thus, from the explanation of the problems that become the background of this research, the author takes the title The Effect of Macroprudential Policy Instruments in Statutory Reserves (GWM), Macroprudential Intermediation Ratio (RIM), and Capital Buffers on Credit Growth for Commercial Banks in Indonesia.

METHOD

This study uses quantitative research methods, with a descriptive approach. Descriptive method is used to determine the value of variables independently, either one or more variables, without making comparisons or connecting one variable to another (Sugiyono, 2014). The data analysis technique used is panel data regression.

This study has three variables that become the object of research where credit growth is the dependent variable (Y). While the independent variables are the number of Statutory Reserves (X1), Macroprudential Intermediation Ratio (X2), and Capital Buffer Policy (X3). The data used in this study is secondary data. The following is the contellation of variables in this study:

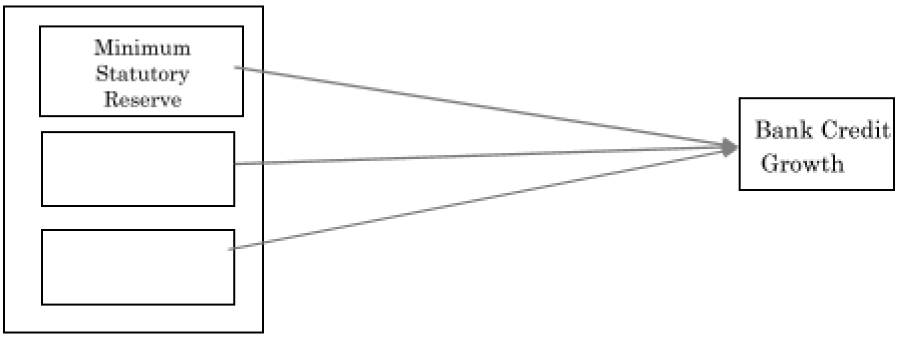

Figure 1. Research Constellation

Each variable uses monthly data with a time span of 2 years, from 2019 to 2020. The scope of this research is to examine the effect of the minimum statutory reserve requirement, macroprudential intermediation ratio, and capital buffer on credit growth of commercial banks in Indonesia. The commercial banks studied were classified as BUKU 1, BUKU 2, BUKU 3, and BUKU 4.

Results And Discussion

Tabel 1. Persamaan Estimasi Regresi

Dependent Variable: CG (Credit Growth)		
Variable	Coefficien t	Prob.
C	8.454695	0,0000
GWM	-0.058992	*0,0590
MIR	-3.329842	*0,0000
Capital Buffer	0.879493	*0,0000
R-squared	0.968182	
Adjusted R-squared	0.966036	
F-statistic	451.3530	
Prob(F-statistic)	0,0000	
Obs	96	

Sumber: Diolah dengan Eviews SV

Based on the table. 1, the results of the regression equation for the commercial bank credit growth model are as follows:

$$LogCG_{it} = 8.454695 - 0.058992GWM - 3.329842MIR + 0.879493CB + e$$

From the results of the above equation, it shows that the effect of Statutory Reserves on commercial bank credit growth of -0.058% is not significant with sig. 5%. This means that every 1% increase in Statutory Reserves causes a decrease in credit growth of 0.058%. The effect of MIR on commercial bank credit growth is -3.32%. This means that every 1% increase in MIR will cause commercial bank credit growth of -3.32%. and significant with sig. 5%. The effect of Capital Buffer on commercial bank credit growth is 0.2717 and is significant. This means that every 1% increase in capital buffer at 5% significance ($\alpha = 0.05$) will cause an increase in commercial bank credit growth of 0.87%.

Based on Table 1., the estimation results of the GWM variable have a probability value of 0.0590 with a coefficient of -0.058992. This value indicates that the reserve requirement variable has a negative effect on the credit growth of commercial banks. Based on the proposed hypothesis, Ho refuses to accept Ha, which means that statistically the Statutory Reserves has a negative effect on the credit growth of commercial banks.

Conceptually, the Statutory Reserves policy is a minimum mandatory fund that must be maintained in the form of a checking account balance at Bank Indonesia to maintain bank liquidity. The results of research conducted by (Eric Matheus, 2016) state that the reserve requirement has a positive effect on credit growth but the effect is different from the theory of macroprudential policy mechanisms on liquidity-based instruments. Statutory Reserves has no significant effect on credit growth for commercial banks based on the levels of BUKU 1, BUKU 2, BUKU 3, and BUKU 4. Likewise, the regression coefficient is negative. So it can be concluded that the increase in Statutory Reserves has a negative impact on increasing commercial bank credit growth. And vice versa. The reduction in Statutory Reserves has a positive impact on credit growth for commercial banks. This is in line with the results of Bank Indonesia's policy of loosening the reserve requirement for commercial banks to increase credit for commercial banks during the Covid-19 pandemic, which is slowly starting to improve from month to month.

The estimation results of the macroprudential intermediation ratio variable have a probability value of 0.0000 with -3.329842. This value indicates that the macroprudential intermediation ratio variable has a negative effect on commercial bank credit growth with sig. 5% (α = 0.05). Based on the proposed hypothesis, reject Ho and accept Ha, which means that statistically, the macroprudential intermediation ratio has a negative effect on credit growth for commercial banks.

The results of the research that have been carried out are similar to the research conducted by (Handayani, 2018) which found that the average MIR of the commercial banks studied had an unhealthy MIR because the ability of liquidity to anticipate needs and the application of liquidity risk management was very weak. . This indicates that credit growth has decreased significantly.

Basically, the RIM policy implemented is aimed at encouraging the banking intermediation function to the real sector in accordance with the capacity and targets of economic growth while maintaining the principle of prudence. However, based on the results of the regression on the MIR variable, there is a discrepancy with the expected positive growth of bank credit, but in fact there is a decline. The Covid-19 pandemic that hit the Indonesian economy was one of the factors that made Bank Indonesia relax the MIR policy by 92% for banks, but it does not seem to have a significant impact on increasing banking credit growth due to the total DPK in Indonesia. There are also no banking statistics reports from the OJK. accompanied by good growth.

The estimation results of the capital buffer variable have a probability value of 0.0000 with a coefficient of 0.879493. This value indicates that the investment variable has a positive effect on employment with sig. 5% (α = 0.05). Based on the proposed hypothesis, reject Ho and accept Ha, which means that statistically, capital support has a positive effect on credit growth for commercial banks. Basically, a capital buffer is an additional deposit capital that must be deposited by a bank to Bank Indonesia as a buffer to prevent the emergence or increase in systemic risk arising from excessive credit growth and is useful as a form of anticipation in the event of a loss in credit growth. In general, Bank Indonesia will increase the nominal value of the Capital Buffer when the Indonesian economy is in a period of expansion, on the other hand, Bank Indonesia will reduce the amount of the Capital Buffer when the economy is in contraction. In fact, this policy cannot be separated from the banking capital provisions issued by the Financial Services Authority (OJK), which are expected to strengthen the success of banking resilience.

CONCLUSIONS AND SUGGESTIONS

Based on the research results, the following conclusions can be drawn: (1) The easing of the mandatory statutory reserve requirement policy by Bank Indonesia can encourage the commercial banking sector to increase credit growth in the midst of a pandemic situation. However, this cannot continue to be implemented in the long term when Indonesia's economic conditions begin to improve. (2) The determination of MIR as the ratio for improving the LFR (Loan to Funding Ratio) which officially took effect in July 2018 has not yet been fully felt to be optimal in increasing credit growth because when the MIR policy was relaxed during the Pandemic, it was not in line with the government stimulus. to issue securities. and the actions of banks to purchase securities. (3) The Capital Buffer as a capital buffer for commercial banks shows that the determination of additional capital that must be maintained at Bank Indonesia can assist bank liquidity in channeling and increasing credit growth during the pandemic. The results of this study are expected to be taken into consideration and input for the government, especially the central policy makers, namely Bank Indonesia to analyze the implementation of macroprudential policy instruments on how to implement them in Indonesia during the post-pandemic economic recovery period. . Commercial bank data collected in this study comes from the statistical reports of the banking financial services authority which are classified as 4 BUKU commercial banks. Further research is expected to expand the bank's coverage to Islamic banks and provide

REFERENCES

Agung, J. (2010). Mengintegrasikan kebijakan moneter dan makroprudensial: menuju paradigma baru kebijakan moneter di Indonesia pasca krisis global. *BI Working Paper*, *7*, p1-42.

Ajija, S. R., & Setianto, R. H. (2011). *Cara Cerdas Menguasai Eviews*. Jakarta: Salemba Empat.

Anggitasari, A. A. (2013). Hubungan Simultan Antara Cspital Buffer dan Risiko. *Fakultas Ekonomi Dan Bisnis Universitas Diponegoro*, 102.

Ansofino, Jolianis, Yolamalinda, & Arfilindo, H. (2016). *Buku Ajar Ekonometrika* (1st ed.). Yogyakarta: DEEPUBLISH.

Aristya, Diah. 2010. "Analisis Pengaruh Ukuran Perusahaan, Kecukupan Modal, Kualitas Aktiva Produktif, dan Likuiditas Terhadap Kinerja Keuangan Bank Syariah". Semarang UNDIP.

Atici, G., & Gursoy, G. (2012). The Determinants of Capital Buffer in the Turkish Banking System. *International Business Research*, *6*(1). https://doi.org/10.5539/ibr.v6n1p224

Ayuso, J., Perez, D. dan Saurina, J. (2004). Are Capital Buffers Pro-Cyclical? Evidence from Spanish Panel Data. *Journal of Financial Intermediation* (13): 249–264.

Bank Indonesia (2012). *Booklet Perbankan Indonesia 2012*. Diunduh dari http://www.bi.go.id/id/publikasi/perbankan-dan-stabilitas/booklet-bi/Pages/bpi_2012.aspx

Bank Indonesia (2012). *Basel III: global regulatory framework for more resilient banks and banking systems*. Diunduh dari http://www.bi.go.id/id/perbankan/implementasi-basel/consultative-papers/Pages/cp_basel_III.aspx

Bank Indonesia. (2013). *Peraturan Bank Indonesia nomor 15/15/PBI/2013 tentang giro wajib minimum bank umum dalam rupiah dan valuta asing bagi bank umum konvensional*. Diunduh dari http://www.bi.go.id/id/peraturan/moneter/Documents/pbi_151513.PDF

Bank Indonesia. 2016. Mitigasi Risiko Sistemik dan Penguatan Intermedasi Dalam Upaya Menjaga Stabilitas Sistem Keuangan. Kajian Stabilitas Keuangan, No. 27, September 2016.

Bank for International Settlements (2012) "*A framework for dealing with domestic systemically important banks"*

Borio, C. (2003). Towards a macroprudential framework for financial supervision and regulation. *BIS Working Papers*, *128*.

Committee on the Global Financial System. (2012). Operationalising the selection and application of macroprudential instruments. *BIS CGFS Papers, 48*.

Cerutti, E., Claessens, S., & Laeven, L. (2017). *The use and effectiveness of macroprudential policies: New evidence*. Journal of Financial Stability. https://doi.org/10.1016/j.jfs.2015.10.004

Deriantino, Elis. (2011*) ”Prosiklikalitas Buffer Modal Bank di ASEAN*” –

Foncesa, A. R., Gonzales, F.,& Silva, L. P. (2010). Cyclical effects on bank capital buffers with imperfect credit markets: International evidence. *Banco Central Do Brasil Working Paper Series, 216*.

Fikri, M. R. (2012). Determinants of Commercial Bank’s Capital Buffer in Indonesia. *Diponegoro Journal of Management*.

Galati, Gabriele dan Richhild Moessner. 2011. *Macroprudential Policy - A Literature Review.Working Paper* No. 337. Bank for International Settlements

Gambacorta, L., & Lombardo, G. (2017). What are the effects of macroprudential policies on macroeconomic performance? *BIS Quarterly Review*, *September*.

Ginting, R., Murniadi, C., Wuryandani, G., Astiyah, S., Hidayat, W. Y., Dewi, K., Novriana, W. A., Hartini, P., & Kholilah, T. (2013). *Likuiditas Rupiah dan Valuta Asing*. 1–66.

Gujarati, D. N. (2007). *Dasar-dasar ekonometrika jilid 2*. jakarta: Penerbit Erlangga.

Handayani, A. S. (2018). *Pengaruh Rasio Intermediasi Makroprudensial (RIM) terhadap Return on Asset (ROA) pada Perbankan yang Terdaftar di Bursa Efek Indonesia (BEI)*.

Jokipii, Terhi and Milne Alistair. (2011). Bank capital buffer and risk adjusment decisions. *Journal of financial stability.*

Kardiansyah, M. F. (2017). *Analisis countercyclical capital buffer terhadap pertumbuhan kredit perbankan indonesia tahun 2007- 2016 skripsi*.

Kim, S., & Mehrotra, A. (2019). Examining macroprudential policy and its macroeconomic effects - some new evidence. *BIS Working Papers*, *No. 825*(825).

KSK 34 TAHUN 2019 Bank Indonesia. (2020). *KSK 34 TAHUN 2019 Bank Indonesia*.

Sarwoko. (2005). *Dasar-dasar Ekonometrika*. Yogyakarta: CV Andi Offset.

Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: CV Alfabeta.

Vinals, J. (2011). Macroprudential policy: an organizing framework. *IMF Paper*.

https://www.wartaekonomi.co.id/read311216/september-penyaluran-kredit-perbankan-alami-kontraksi *retrieved at 23 September 2020*