

JURNAL PENDIDIKAN EKONOMI, PERKANTORAN DAN AKUNTANSI

http://pub.unj.ac.id/index.php/jpepa

Analysis Influence Instrument Policy Macroprudential To Commercial Bank Liquidity in Indonesia in the 2018 Period

Maulidina Nur Budiastuti ¹, Harya Kuncara Wiralaga ², Siti Fatimah Zahra ³

- 1 State University of Jakarta, Indonesia
- ² State University of Jakarta, Indonesia
- 3 State University of Jakarta, Indonesia

Articles Abstract Info

Articles history: Received: May 23, 2022; accepted: Published:

Keywords: Statutory Reserves, Macroprudential Intermediation Ratio, Macroprudential Liquidity Buffer, Bank Liquidity

How to Cite:

Maulidina Nur Budiastuti . (2022). Analysis Influence Instrument Policy Macrorpudential to Commercial Bank Liquidity in Indonesia in the 2018-2021 Period . Journal of Economic, Office and Accounting Education s , 7 (2), 10 1 - 111 . h ttps://doi.org/10.21009/JPEPA.007.x.x

Liquidity is an important aspect that can be considered a bank's lifeblood. To maintain business continuity, banks must always manage liquidity effectively. Liquidity easing is one strategy to assist economic growth during the COVID-19 epidemic. Where macroprudential policies are used to ease liquidity restrictions. As a means of promoting economic growth, the government seeks to induce greater lending to debtors. This easing of liquidity, on the other hand, is thought to help maintain bank operations solvent. This easing of liquidity during the pandemic was carried out by reducing the reserve requirement followed by an increase in the MPLB ratio. In addition, Bank Indonesia strengthened RIM by adding an export money order in its calculations. The goal of this research is to look at how macroprudential policy, such as the Statutory Reserves instrument, the Macroprudential Intermediation Ratio, and the Macroprudential Liquidity Buffer, affects the liquidity of traditional commercial banks in Indonesia from 2018 to 2021. The monthly data utilized comes from the Financial Services Authority website, specifically the Indonesian Banking Statistics section. To evaluate the three hypotheses, the researchers employed a multiple linear regression approach utilizing EViews 10 software. First, the Statutory Reserves have a negative and minor influence on commercial bank liquidity, according to the findings. Second, RIM has a good and considerable impact on commercial bank liquidity. Third, PLM has a considerable negative impact on commercial bank liquidity. Simultaneously, the three independent factors are discovered to have an impact on commercial bank liquidity.

Abstract

Liquidity is a crucial factor that can be said to be the source of life for a bank. Liquidity must always be adept at being managed by a bank to maintain its business continuity. During the Covid-19 pandemic, easing liquidity was one way to support economic growth. Where liquidity easing is carried out through macroprudential policies. The government is trying to stimulate more credit distribution to debtors as a form of encouraging economic growth. However, this liquidity easing is also considered to keep bank operations liquid. Easing liquidity during the pandemic was carried out by reducing the GWM followed by increasing the PLM ratio. In addition, RIM was strengthened by BI by adding an export bill component to its calculations. The purpose of this study is to analyze the effect of macroprudential policies using Statutory Reserves instruments, Macroprudential Intermediation Ratio, and Macroprudential Liquidity Buffer on the liquidity of conventional commercial banks in Indonesia in the 2018-2021 period. The monthly data used is monthly data taken from the Financial Services Authority website, especially on Indonesian Banking Statistics.

INTRODUCTION

In business banking, one the most important risk for mitigated is risk liquidity. Banks have Duty main that is collect or collect funds from Public in form stash then after the funds are collected will return distributed in form financing to society. The nature of the funds obtained by the bank are: period short because of the funds could pulled every when. Funds raised distributed return in form credit by the bank. Credit is right for accept payment or obligation as well as with destination To do payment at the time requested or to be come because delivery of funds or goods now.

one problem in business banking is match period time ability for funding with financing (kemenkeu.go.id). Problem in banking is called *maturity mismatch* . because that banking in guard continuity the business must smart manage liquidity and ensure availability of funds when withdrawal of funds is made customer .

LDRs are used as indicator for measure as far as function intermediation run by institutions finance could achieved, besides it can too evaluate good level health and liquidity a bank. Where when LDR level is increasing high, indicates that the bank the more no liquid. Likewise otherwise, if LDR level is increasing low then the bank could said the more liquid. However, can stated that increasingly bank conditions liquid this indicates there is lots of idle funds or idle funds. In other words, function bank intermediation is not lived with good (Agustina & Wijaya, 2013).

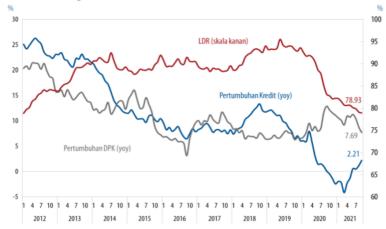
Inability a managing bank risk liquidity once Becomes problem in cases big banking . one the case that befell Indonesia is *bank rush* moment occur crisis of 1998. Although started by risk score swap however risk liquidity Becomes reason main current bank failure it . As response on crisis financial events that occurred in the year said , Bank Indonesia compiled framework stability system Indonesian finance and formed the Bureau of Stability System finance (BSSK). In effort guard stability system financial , aspect macroprudential by implicit already used by Bank Indonesia through second framework the .

Previously , term macropudential already introduced since in 1979, however post crisis global finance push policy macroprudential become very popular . Bank Indonesia joined contribute in the field contained macroprudential in Law (UU) of the Republic of Indonesia No. 21 of 2011 dated 22 November 2011 concerning Financial Services Authority (OJK). This goes hand in hand with switch function bank regulation and supervision (microprudential) to Financial Services Authority .

During the Covid-19 pandemic, growth Indonesia's economy had decrease even growth credit hit minus. As form response resolve presence this pandemic, government make liquidity as one Street for support growth economy through easing liquidity, one implemented policies for To do easing liquidity is policy macroprudential. Where with To do easing liquidity, the bank is expected capable for distribute excess funds to debtor as form push growth economy. However, on the side other permanent guard operational with capable provide liquid funds if customers interesting savings any time.

Incident Crisis Global Finance 2008 delivers impact on decline Rupiah liquidity in banks because descent Party Fund growth Third (DPK). Condition the threaten stability financial and require for prioritize possible steps taken To use reduce impact negative to stability system finance and maintenance continuity economy national . Various step conducted by Bank Indonesia as authority monetary for reduce pressure on the industry banking , for one is reduce the Statutory Reserves (GWM). Where GWM is used for the more increase flexibility management liquidity by banking , encouraging function intermediation , and support effort financial market recovery (Lupita & Lestari, 2020) .

Perkembangan Kredit dan DPK



Sumber: Bank Indonesia

During the Covid-19 pandemic, growth Indonesia's economy had decrease even growth credit hit minus. As form response resolve presence this pandemic, government make liquidity as one Street for support growth economy through easing liquidity with policy macroprudential. Where with To do easing liquidity, the bank is expected capable for distribute excess funds to debtor as form push growth economy. However, on the side other permanent guard operational with capable provide liquid funds if customers interesting savings any time.

Realize early , BI has use instrument macroprudential in resolve affected economy pandemic . one for example is with application policy integrated macroprudential including the reduction in GWM that followed with PLM upgrade for increase resilience Bank liquidity (Abubakar & Setiawan, 2022) . At the same time , second this instrument supports continuity fiscal purchasing program letter state value by banking funds originated from reduction in GWM in skeleton fulfillment increase PLM ratio . Besides In addition , RIM is also strengthened by BI with add component money order export in the calculations for push distribution credit and payment early , BI has use instrument macroprudential in resolve affected economy pandemic. one for example is with application policy integrated macroprudential including the reduction in GWM that followed with PLM upgrade for increase resilience Bank liquidity (Abubakar & Setiawan, 2022) . At the same time , second this instrument supports continuity fiscal purchasing program letter state value by banking funds originated from reduction in GWM in skeleton fulfillment increase PLM ratio . Besides In addition , RIM is also strengthened by BI with add component money order export in the calculations for push distribution credit and financing .

From various literature, found a number of capable factor influence liquidity. This research will focuses on Statutory Reserves, Ratio Intermediation Macroprudential, and one variable other that is Buffer Liquidity Macroprudential. Formulation and implementation policy macroprudential focus on effort push intermediation, guarding resilience system finance, and encourage inclusion economics and finance. Besides it's on the sector banking in Indonesia, policy macroprudential join guard liquidity as effort reach stability economy.

As for goals this research is for know:

- 1. Mandatory Current Account Pengaruh Mininum to liquidity of commercial banks in Indonesia in the period 2018-2021
- 2. Influence Ratio Intermediation Macroprudential to commercial bank liquidity in Indonesia in the 2018-2021 period

3. Influence Buffer Liquidity Macroprudential to liquidity of commercial banks in Indonesia against liquidity of commercial banks in Indonesia in the period 2018

METHOD

This study uses secondary data with method study quantitative and type approach descriptive . Study quantitative is study empirical where the data form numbers (Syahum and Salim, 2012:40). Besides that , approach descriptive used for describe object research and results research . Whereas for method study quantitative used for test hypothesis research already set . Data analysis technique used is data regression .

This research has three set variable as object research, that is public bank liquidity as variable bound (Y). On the side that is, variable free in this research consists of Statutory Reserves (X1), Ratio Intermediation Macroprudential (X2), and Buffer Liquidity Macroprudential (X3). The following are framework thinking theoretical this research:

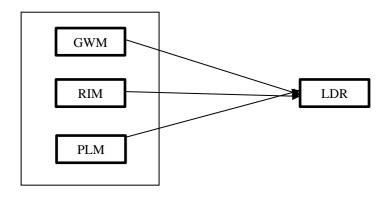


Figure 1. Framework Thinking Theoretical Study

Every variable study using monthly data During period 2018-2021 (4 years), ie from January 2018 to month December 2021. Data every variable study obtained from Financial Services Authority (OJK). Common bank used for study is a Commercial Bank Classified Conventional (BUK). as BOOK 1, BOOK 2, BOOK 3, and BOOK 4.

RESULTS AND DISCUSSION

Table 1. Estimation Results Regression

Dependent Variable: LOG(YLDR)		
Variables	coefficient	Probability
C	4.773125	0.0000
GWM	-0.005969	*0.4358
rim	0.692957	*0.0000
PLM	-0.032701	*0.0000
R-Squared	0.920638	
Adj. R-Squared	0.917933	
F-Statistics	340.2833	
Prob(F-Statistic)	0.000000	
Obs	183	

Source: Results of data processing on Eviews 10

From the results above equation $_$ show that GWM effect on public bank liquidity is of 0.0059% and no significant with sig . 5%, that is every increase in GWM by 1% causes drop liquidity by 0.0059%. RIM 's influence on public bank liquidity of 0.6929% and significant with sig . 5%, that is every RIM increase of 1% then will raise liquidity of 0.6929%. The effect of PLM on public bank liquidity of -0.0327% and significant , meaning PLM increase by 1% at significant 5% then will lower public bank liquidity by 0.6 9%

Based on table 1. variable Statutory Reserves has a minimum number coefficient regression of -0.005969 with score probability of 0.4358 > 0.05 (alpha). Based on the proposed hypothesis then H0 is accepted and H1 is rejected which means variable Statutory Reserves effect negative and no significant to public bank liquidity in Indonesia. kindly theoretically , the Statutory Reserves are the minimum amount of funds maintained by the bank and the amount determined by Bank Indonesia as well working for give flexibility Settings liquidity . Results of research conducted by (Samsurin, 2017) state that Minimum Statutory Reserves instruments do not take effect significant to Bank liquidity is caused by reserves liquidity owned by a sized bank small relatively a little so that exists trend GWM changes have influence against the bank . On the other hand , for large and medium banks , the Minimum Statutory Reserves policy does not take effect significant caused by backup liquidity held by these banks way above needs liquidity for activity operational and capable made buffers . However thus , from results estimation number coefficient regression show negative . because that concluded that each GWM increase will be lower public bank liquidity in Indonesia. Likewise otherwise , where each GWM decrease will be increase liquidity .

Estimation results on the variable Ratio Intermediation Macroprudential have number coefficient regression of 0.692957 with score probability of 0.000 < 0.05 (alpha). Based on proposed hypothesis then H0 is rejected and H1 is accepted which means variable Ratio Intermediation Macroprudential take effect positive by significant to liquidity of commercial banks in Indonesia. From coefficient regression RIM variable , then could said that every a 1% increase in RIM will raise liquidity by 69.29%. The results of research conducted by (Handayani, 2019) state that RIM is lacking healthy that is exceed limit on RIM's target which is above 92% due to ability liquidity for anticipate needs and implementation management risk very weak liquidity . kindly theoretically RIM has characteristic countercyclical, where will speed up growth moment economy currently contraction . Likewise otherwise .

Estimation results on variables Buffer Liquidity Macroprudential have number coefficient regression of -0.032701 with score probability of 0.000 < 0.05 (alpha). Based on the proposed hypothesis then H0 is accepted and H1 is rejected which means variable Buffer Liquidity Macroprudential take effect negative by significant to public bank liquidity in Indonesia. From the coefficients regression the PLM variable, then could said that every PLM increase of 1% will lower liquidity by 0.032%.

Results of research conducted by (Lupita & Lestari, 2020) that for guard Bank BRI's liquidity during the Covid-19 pandemic did not free from the role of Bank Indonesia namely with raise ratio Buffer Liquidity Macroprudential (PLM). Besides that's an increase from PLM ratio was assessed capable strengthen management liquidity banking with buy letter precious . In In this case , the application of PLM makes it possible for addition access bank funding if needed in skeleton management liquidity . Obviously , policy _ to this rule must support though in condition liquidity strict like moment the Covid-19 pandemic .

CONCLUSIONS AND RECOMMENDATIONS

Based on results study so could given conclusions, namely: (1) GWM has an effect negative and no significant to public bank liquidity in Indonesia period January 2018 - December 2021 which means GWM increase will be lower commercial bank liquidity in Indonesia, in line with with BI policy for strengthen public bank liquidity during the Covid-19 pandemic. (2) RIM easing is done To use maintain and relax proven bank liquidity with take effect positive by significant to public bank liquidity in Indonesia. (3) Buffer Liquidity Macroprudential take effect negative by significant to public bank liquidity in Indonesia, where PLM allows for addition access bank funding if needed in skeleton management liquidity especially during the Covid-19 pandemic.

From the results this research only show influence policy macroprudential to public bank

5

liquidity conventional . Expected for study next also use Islamic Commercial Banks (BUS) so could show influence policy macroprudential against commercial banks by thorough . Besides it , in research next expected could study classification of commercial banks with use range different time so that could obtained more results accurate and capable give more results good and comprehensive .

REFERENCES

- Abubakar, A., & Setiawan, Y. (2022). Central Bank Policy Mix: Issues, Challenges, and Policy Responses. In *Central Bank Policy Mix: Issues, Challenges, and Policy Responses*. Springer Singapore. https://doi.org/10.1007/978-981-16-6827-2
- Agustina, & Wijaya, A. (2013). Analysis of Factors Affecting Loan Deposit Ratio of National Private Banks at Bank Indonesia. *Journal of Microeconomic Wira*, 3 (2), 101–109.
- Aprilia, A., & Soebroto, NW (2020). Analysis of the Effect of Operational Efficiency Liquidity Ratios, and Solvency Ratios on Financial Performance at PT Bank Maybank Indonesia Tbk for the 2010-2018 period. *Keunis*, 8 (2), 167. https://doi.org/10.32497/keunis.v8i2.2115
- Bank Macroprudential Indonesia. (2021).Peeling Policy. from https://www.bi.go.id/id/edukasi/Documents/Mengupas-Kebijakan-Makroprudensial.pdf/ Retrieved 19. 2021, from Bank Indonesia https://www.bi.go.id/id /education/Documents/Revealing-Macroprudential-Policies.pdf
- Converse, N. (2018). Uncertainty, capital flows, and maturity mismatch. *Journal of International Money and Finance*, 88, 260–275. https://doi.org/10.1016/j.jimonfin.2017.07.013
- Dwiningsih, N. (2020). Analysis of the Use of Panel Data Regression Research Methods in Case Studies Thesis Guidance of Trilogy University Management Study Program. *Research Report*
- Ecb. (2008). Financial Stability Review. *Intellectual Property*, 110 (February), 1–190. http://www.eestipank.info/pub/en/documentid/publikatsioonid/seeriad/finantsvahendus/_20 04_1/fsy_504.pdf
- Fithriana. (2011). Bank Indonesia Regulation Regarding Statutory Reserves Relating to the Banking Intermediation Function. University of Indonesia, Depok (thesis). Retrieved from https://library.ui.ac.id/detail?id=20234436&location=lokal
- Handayani, AS (2019). Effect of Macroprudential Intermediation Ratio (RIM) on Return on Assets (ROA) in Banks Listed on the Indonesia Stock Exchange (IDX). 5, No. 1.
- Ibnuddin. (2016). Sharia Bank Liquidity Management Principles. Risâlah, Journal of Islamic Education and Studies, 3 (1), 70–77.
- Ichsan, N. (2013). Sharia Bank Liquidity Management. Nurul Ichsan 1. Dr. Hamka (Uhamka), Jl. Limes II, 82–103.
- International Monetary Fund. (2011). Macroprudential Policy: What Instruments and How to Use

 Them? Lessons From Country Experiences (Volume 2011: Issue 238).

- https://doi.org/https://doi.org/10.5089/9781463922603.001
- Kristiyanto, S., & Widodo, S. (2020). Macroprudential Intermediation Analysis on Banks with Systemic Impact in Indonesia. 3 (1), 40–53.
- Lekshmi, P., & Ganesh, C. (2015). Macroprudential Regulation and Bank Performance: Evidence from India. Cloud Systems in Supply Chains, 150–166. London: Palgrave MacMillan. https://doi.org/10.1057/9781137324245_9
- Lesmana, I. (2007). Bank Liquidity Risk and Asset Liabilities Management. *Gunadarma University*.
- Lupita, V., & Lestari, WA (2020). "Bank BRI's Strategy in Maintaining Liquidity During the COVID-19 Pandemic" "BRI's Strategy in Maintaining Liquidity in the Pandemic COVID-19". Journal of Competitive Business Covid-19 Edition, 1, 35–43.
- Manarung, Mandala & Prathama Rahardja. (2004), Money, Banking, and Monetary Economics (Indonesian Contextual Study). Jakarta: Publishing Faculty of Economics, University of Indonesia.
- Crockett, Andrew. (2008). Financial Stability Review: Market Liquidity and Financial Stability.

 Intellectual Property, 110 (February). No. 11.

 http://www.eestipank.info/pub/en/kodedid/publikatsioonid/seeriad/finantsvahendus/_2004_1

 /fsy_504.pdf.
- Pandiangan, HJ (2019). Deposit Insurance Corporation in Bank Liquidation in Indonesia. *To-Ra* , 5 (2), 49. https://doi.org/10.33541/tora.v5i2.1198
- Pangestika, S. (2015). Estimation analysis of the panel data regression model using the common effect model (cem), fixed effect model (fem), and random effect model (rem) approaches. Semarang State University.
- Purwanto, H. (2001). Aspects of banking risk management are reviewed from Indonesian banking law (Thesis). University of Indonesia, Depok. Retrieved from https://library.ui.ac.id/detail?id=20267517&location=lokal
- Radiyanti, R. (2020). Analysis of Bank Soundness Level Using the RBBR Method at Bank MANDIRI 2015 2019. *Scientific Polytechnic of Piksi Input Serang*, 7 (1), 19–34.
- Rush, P. (2018). Macroprudential Policy. *Real Market Economics* , 105–119. https://doi.org/10.1057/978-1-349-95278-6_6
- Sakti, I. (2018). PANEL DATA REGRESSION ANALYSIS.
- Santoso, AL, & Sukihanjani, T. (2012). Factors Affecting the Liquidity of Islamic Banking in Indonesia. *Eleven March University Journal of Economics*, 221–231.

- Samsurin, U. (2017). The Effect of Bank Indonesia Syariah Certificates, Statutory Reserves, and Profit Sharing Financing on Liquidity of Islamic Commercial Banks in Indonesia (2011-2015 Period). Syarif Hidayatullah State Islamic University, Jakarta.
- Singagerda, FS (2018). Data Panel Regression Model and Eviews Application. 2 , 1–19. https://doi.org/10.31227/osf.io/vkx2t
- Salim and Syahrum , (2012). Qualitative research methodology. Citapustaka Media, Bandung. ISBN 979-3216-66-2
- Tovar, CE, Escribano, MG, & Martin, MV (2012). Credit Growth and the Effectiveness of Reserve Requirements and Other Macroprudential Instruments in Latin America. *IMF Working Papers*, 12 (142), 1. https://doi.org/10.5089/9781475503999.001
- Wijayanti, R., Adhi, NMP, & Harun, CA (2020). Effectiveness of Macroprudential Policies and Their Interaction with Monetary Policy in Indonesia. *Ssrn*, 110, 31–50.
- Wuryandani, G., Ginting, R., Iskandar, D., & Sitompul, Z. (2014). Fund Management and Bank Liquidity. *Bulletin of Monetary Economics and Banking*, 16 (3), 247–276. https://doi.org/10.21098/bemp.v16i3.45
- Joel, Eric Matheus Tena. (2016). The Effect of Macroprudential Policy on the Credit Cycle: A Study on the Use of CAR and GMW Instruments in Indonesian Banking 2006-2013. *Journal of Economics, Faculty of Economics, Parahyangan Catholic University*.
- Yustina, W., Suryanto, T., Noviarita, H., & Anggraeni, E. (2021). Analysis of Factors Affecting Liquidity of Islamic Banking Listed on the Indonesia Stock Exchange. *Al-Kharaj: Journal of Sharia Economics, Finance & Business*, 4 (1), 47–61. https://doi.org/10.47467/alkharaj.v4i1.414