Exploring the role of financial ratio and interest rate on banking credit channelling: Data from Indonesia
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Received: 25-07-2021 | Revision: 10-09-2021 | Accepted: 20-10-2021
DOI: https://doi.org/10.22219/jiko.v6i03.17510

Abstract
This study explores the effect of financial ratio and benchmark interest rate on the determinants of credit channelling in Indonesia. The data in this study uses quarterly data during the 2010-2019 period; the analysis technique in data processing uses panel data regression. The results of this study indicate that the model is simultaneous significant. Third-party funds and loan to funding ratio partially have a significant positive effect. Operating expenses and operating income have a significant negative impact. The benchmark interest rate has not substantially influenced the determinants of bank lending in Indonesia.

Keywords: Financial ratio; benchmark interest rate; bank lending

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Introduction
Credit distribution is the heart of business in banking (Moussa and Chedia, 2016). Banking is a financial institution that can help increase the level of the economy in the community, both in collecting, distributing, and managing funds. According to (Ismail, 2010) citing Law No. 10 of 1998 concerning banking, which can be explained that banks have a role as intermediary financial institutions that collect funds from the public in the form of deposits such as demand deposits, deposits, and savings which then the bank will provide interest to the bank’s customers, and will be distributed back to people who lack funds in the form of credit.

In Indonesia, the source of financing from the business world is still dominated by the distribution of banking credit, which can encourage economic growth. Credit distribution is the main activity of banking in generating profits, but the most significant risk in banks also comes from lending activities. Research by Widiyanti (2014) regarding Third-party funds (TPF) has a positive and significant influence on credit distribution; these results are the same as the results studied by (GN Sari 2013), (Princess 2016), (Suprijati Jajuk 2017), (Febrianto 2013), and (Pratiwi, S. Hindasah 2014).

In the operational performance of banking, it is necessary to control operating costs against operating income to measure the level of efficiency in the performance of banking management (BOPO). In the main banking activities in the form of lending to the public where the smaller the value of the BOPO ratio owned by the bank, the more efficient it will be. In spending applicable expenses to earn income. In its operational activities, the collection of bank funds will provide interest to depositors, and the bank will receive interest derived from an interest in lending to the public. When the BOPO value in a bank is high, it can be indicated that the bank cannot operate efficiently, so that it will position the bank in a problematic condition (Febrianto, 2013). This finding is in line with the Liability Management Theory, which explains that to provide bank liquidity in the form of liabilities, in this theory, banks are strived to provide bank liquidity on the liability side such as short-term loans between banks (call money).

To maintain prudence in avoiding failure and maximizing in achieving maximum profitability in lending. According to (Chauzi 2011), The loan to deposit ratio or commonly called LDR is an indicator used as a measure of the intermediation function of banking in Indonesia, in addition to measuring the comparison between the amount of credit granted by banks and funds received by banks, which is used as a reference by banks in repaying funds by depositors—Relying on credit provided as a source of liquidity. LDR has a significant positive effect on lending to a bank because a high LDR value will indicate a high level of credit disbursed by banks that are useful in meeting short-
term obligations, and vice versa if the LDR value is low it will mean a low level of lending in banking (Chauzi, 2011).

Meanwhile, the BI Rate as benchmark interest rate influences lending when an increase in inflation is determined as a control for an increase in inflation; this is followed by an increase in deposit interest rates and followed by loan interest rates to avoid negative spreads (Osei-Assibey and Assenso 2015); this policy can produce a significant adverse effect on credit distribution (Tia 2018; Putra, Bagus Grahadika, 2014; and Hasanah, 2017).

This study contribute to understand how does internal factors of bank, such as financial ratio and macro indicators, especially benchmark interest rate can drive the credit channeling. For bank, this study can be a alternative consideration to drive higher credit channeling and risky less. Rest of this paper, we provide a method, empirical result and conclusion.

Method
This study to determine the effect of Third Party Funds (TPF), Operational Expenses on Operating Income (BOPO), Loan to Deposite Ratio (LDR) and BI Rate on credit distribution of Conventional Commercial Banks in Indonesia. The sample of this study used a saturated sampling method by using the panel data regression analysis method through the Eviews10 software program, where the best way is Fixed Effect using the Chow Test panel data regression test.

The time-series data use financial statement data for quarterly data of the 2010-2019 period which collected form the official websites of the Financial Services Authority (OJK) and the Central Statistics Agency (BPS). The panel data regression model has equation 1, with Y being Credit Distribution; X1 is TPF; X2 is BOPO; X3 is LDR; X4 is BI Rate, and e is error.

\[
\log Y = \alpha + \log \beta_1 X_1 - \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e
\]

(1)

Empirical Result
From the analysis results, the calculated F-value is 111321.4 with a probability level of 0.00 or below 0.05; So that it can be conclude that the model simultaneous significant (see Table 1). The results of this study are the same as the results of research conducted by Wulandari (2016), which states that the variables studied are CAR, ROA, NPL, SBI, inflation, and the exchange rate together have a significant influence on the determinants of credit distribution of commercial banks listed on the stock exchange. Indonesian securities for the period 2010-2014; this is the same as the research conducted by Putri (2016), which states that in his study that used the variables of TPF, BI Rate, and BOPO on bank lending, it resulted in a jointly significant effect on bank lending.

TPF has a positive and significant effect on lending, with t-count value of 226.0951 > 1.97011 with a probability value of (0.0000 < 0.05). It should be noted
that any increase in the value of the amount of TPF collected will have a considerable influence on the state of the banking system in which the amount of TPF will be redistributed to the public in the form of lending. Deposits as the main source most relied upon by banks whose value reaches 80% to 90% of the funds owned by banks. So that the greater the value collected, the greater the bank's ability to channel credit; the largest source of funds obtained by banks in lending is through the collection of TPF (Sari, 2016).

| Variable | t-count | t-table | Significant’s note |
|----------|---------|---------|--------------------|
| TPF      | 226.0951|         | Significant        |
| BOPO     | -2.524583| 1.97011| Significant        |
| LDR      | 77.88972|         | Significant        |
| BI RATE  | 0.036017|         | Not significant    |

In measuring the level of efficiency in banks, it is calculated using BOPO, which shows that the results of the t-test test are \(-2.524583 > 1.97011\) with a probability value \((0.0123 < 0.05)\). These results indicate that the BOPO has a significant and negative effect on the determinants of credit distribution; in this case, it can be seen that the higher the BOPO value, the lowering of credit distribution will occur. In other words, when the BOPO value is small, it will result in a high level of efficiency and be suitable for operating costs. In research by Panuntun (2018), high bank operating costs will lead to reduced lending. A high BOPO value will cause the profit in the bank to decrease, and if it exceeds 100%, it will cause a loss. BOPO, which has a significant negative effect on lending, indicates that the bank can maintain its operating income greater than its operating expenses by research conducted by (Haryanto 2017) and (Panuntun 2018).

Based on the LDR value, it is known that the significant value is 0.000 with a t-count value of 0.009921 > 1.97011 so that it can be seen that the LDR has a substantial and positive effect on credit distribution. In research (Chauzi 2011), LDR states the level of ability of the bank in distributing TPF collected at the bank to be channelled as credit. Here, the LDR will also interpret how far the bank can pay back the withdrawal of funds made by depositors with credit extended as a source of liquidity.

In theory, the higher the LDR value will reflect that the amount of credit extended by the bank will increase to increase the amount of income for the bank from loan interest. With a high LDR ratio, banks will receive additional funds other than TPF, which can eventually be redistributed in the form of credit.
Therefore, Bank Indonesia set the LDR standard ranging from 78% to 92%. This statement is by research (Desya, 2017; Chauzi, 2011)

Based on the BI RATE coefficient, it is known that the significant value is 0.9713 with the at-count value of 4.00E-05, so that it can be seen that the BI RATE value has no significant and positive effect on lending. The results of this study are not by the initial hypothesis research, which states that the BI Rate has a considerable impact. But the results of this study are by the analysis indicated in the Policy Brief Mollona et al. (2016), which states that the BI Rate does not affect lending; in several banks in Indonesia, the BI Rate has decreased due to a decrease in the inflation rate in Indonesia, not followed by a reduction in the interest rate on bank loans. As is the case now that the government has begun to take a firm stance on determining the number of interest rates in lending, the government feels that the distribution of credit extended by banks has not yet had a maximum impact on business actors.

Conclusions
TPF, BOPO, LDR, and BI Rate have a significant simultaneous effect on lending, and partially, some variables have a considerable effect, and some have an insignificant impact. TPF and LDR have a significant favourable influence on credit channeling, BOPO has a significant positive effect, and BI rates have no influence.

References
Chauzi, Ahmad Wirman. 2011. “Analisis Faktor-Faktor Yang Mempengaruhi Kebijakan Penyaluran Kredit Perbankan (Studi Kasus Pada Bank Umum Di Indonesia Periode Tahun 2005-2009).” Journal of Chemical Information and Modeling 53(9): 1689–99.
Desya, Aldhella Arcy, Etc. 2017. “Analisis Pengaruh Tingkat Suku Bunga , Non Performing Loan , Dan Loan Deposit Ratio Terhadap Penyaluran Kredit Umkm Studi Kasus Bank Umum Di Indonesia Periode 2008-2017.” 1: 75–87.
Febrianto, Dwi Fajar. 2013. “Analisis Pengaruh Dana Pihak Ketiga, Ldr, Npl, Car, Roa, Dan Bopo Terhadap Jumlah Penyaluran Kredit (Studi Pada Bank Umum Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2009-2012).” Diponegoro Journal of Accounting 2(4): 259–69.
Ismail. 2010. Manajemen Perbankan :Dari Teori Menuju Aplikasi. Predana Media Group.
Mollona, Edoardo et al. 2016. “Policy Brief.” (August): 14.
Moussa, Mohamed Aymen Ben, and Hedfi Chedia. 2016. “Determinants of Bank Lending: Case of Tunisia.” International Journal of Finance and Accounting 5(1): 27–36.
Osei-Assibey, Eric, and Joseph Kwadwo Asenso. 2015. “Regulatory Capital and Its Effect on Credit Growth, Non-Performing Loans and Bank Efficiency: Evidence from Ghana.” *Journal of Financial Economic Policy* 7(4): 401–20.

Panuntun, Bagus. etc. 2018. “Faktor Penentu Penyaluran Kredit Perbankan Studi Kasus Pada Bank Konvensional Di Indonesia.” *JAD: Jurnal Riset Akuntansi & Keuangan Dewantara* 1(2): 57–66.

Pratiwi, S. Hindasah, L. 2014. “Pengaruh Dana Pihak Ketiga, Capital Adequacy Ratio, Return Nn Asset, Net Interest Margin Dan Non Performing Loan Terhadap Penyaluran Kredit Bank Umum Di Indonesia.” *Jurnal Manajemen Bisnis Universitas Muhammadiyah Yogyakarta* 5(2): 192–208.

Putra, Bagus Grahadika, Wirathi. 2014. “Tujuan Dari Penelitian Ini Adalah Mengetahui Pengaruh LDR, BI.” : 603–12.

Putri, andini .etc. 2016. “Pengaruh Dana Pihak Ketiga, Bi Rate, Dan Bopo Terhadap Penyaluran Kredit Perbankan.” *Ekspansi* 8(2): 229–36.

Sari, Greydi Normala. 2013. “Faktor-Faktor Yang Mempengaruhi Penyaluran Kredit Bank Umum Di Indonesia (Periode 2008.1 – 2012.2).” *E-Conversion - Proposal For A Cluster Of Excellence* 1(3): 931–41.

Sari, Ni Made. etc. 2016. “Pengaruh Dpk, Roa, Inflasi Dan Suku Bunga Sbi Terhadap Penyaluran Kredit Pada Bank Umum.” *E-Jurnal Manajemen Universitas Udayana* 5(11): 7156–84.

Suprijati, Jajuk, Etc. 2017. “Pengaruh Variabel Makro Ekonomi Dan Dana Pihak Ketiga (Dpk) Terhadap Kebijakan Penyaluran Kredit Pada Bank Umum Di Jawa Timur.” : 45–62.

Tia, Ichwani etc. 2018. “Pengaruh Perubahan Bi Rate Menjadi Bi 7 Day.” (September 2018): 259–70.

Tita Marliani, Siti Hidayati, Yoko Tristiarto. “Determinasi Penyaluran Kredit Pada Perbankan Konvensional Di Indonesia Tita.” : 283.

Widiyanti, Etc. 2014. “Analisis Pengaruh CAR, ROA, NPL, BOPO Dan DPK Terhadap Penyaluran Kredit UMKM Di Indonesia (Studi Pada Bank Umum Yang Terdaftar Di BEI Periode 2010-2012.” *JOM FEKON* 1 no 2 okt. http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf.