

The Effect of Current Accounts, Savings and Time Deposits on Banking Credit: A Case Study of Regional Development Banks (RDB) in Indonesia

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Abstract - This study aims to examine the effect of Current Accounts, Savings, and Time Deposits on Banking Credit of Regional Development Banks (BPD) in Indonesia. The data in this study are in the form of quarterly reports from Regional Development Banks (BPD) in Indonesia. Current Accounts, Savings, and Time Deposits on Banking Credit of Regional Development Banks (BPD) in Indonesia is expected to be evident in 2019–2022. The research method used is the panel regression method. The outcomes show that current accounts, savings and time deposits influences the credit of bank BPD. R Squared 0.994461 current accounts, savings and time deposits factors influence bank credit. The Adjusted R Squared value of 0.994461 indicates that the independent variables can explain the dependent variable 99.44% of the time, while other factors not included in the model have an impact on the remaining 0.5539%. This means that 99.44% of the variable Savings and Time Deposits can predict bank credit, while the remaining 0.5539 percent is impacted by other factors not investigated in this study. This result serves as a warning to BPD banks in each province to be careful in extending credit to customers, because when credit increases, current accounts, savings and time deposits also increase. And if credit decreases, it's the other way around. This means that the higher the credit given to customers, the banking income will also increase with the help of increased current accounts, savings and time deposits. The significance and implications of the results of this research can provide an illustration that although regional banks (BPD) still have an impact on the Indonesian economy even though they only provide samples in the form of savings products.

Keywords - *Current accounts, savings, time deposits, credit*

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I. Introduction

According to observers, banking in Indonesia can still be streamlined because too many of them exist. As of October 2020 alone, there have been 110 commercial banks operating, of which 13 are the book I bank below IDR 1 trillion and 60 are book II banks. More than half of around 60-70% are relatively small banks. On the other

hand, it must be acknowledged that the banking business is capital-heavy, so one way to survive and develop is to have a large capital (Nastiti & Kasri, 2019).

One of the banks in each province and its shareholder in the Provincial Government is the Regional Development Bank, abbreviated as BPD. BPD is a state-owned enterprise that has existed since 1993 and still exists today. BPD is a state-owned commercial bank included in BUMN (Puteh et al., 2017). That is a bank whose development focuses on remote areas of Indonesia. Regional and provincial governments own shares in regional banks, such as East Java Regional Bank, which is owned by the East Java Provincial Government, and so on. This BPD is unique in that the bank's name includes the province's name, like Bank Riau Kepri, Bank DKI, Bank Jawa Barat Banten, and so on (Fauzi & Suryani, 2019).

Seeing the legal basis, establishing BPD refers to the regional regulations of each provincial. The rules for regional banks may vary, depending on the area where the bank regulates them. Even so, the purpose of developing this regional bank remains the same: to encourage economic growth and regional development in all existing fields. That way, the standard of living and income of the people in the area can increase (Ledhem, 2022).

The role of banking as an intermediary in mobilizing and channeling funds, directly or indirectly, gives this institution the ability to transform and distribute risk. That is, on the one hand, all economic activities contain risks. However, one economic activity may have a higher risk than others (Ozili & Ndah, 2021). On the other hand, savers or surplus units acting as lenders and investors or deficit units acting as borrowers are economic actors who are risk averse. However, savers (excess units) are usually more risk-averse than investors (deficit units). Likewise, perception regarding the risk-averse of an investor may be different compared to other investors (Siti-Nabiha & Adib, 2020).

According to (Suzuki et al., 2019), which retrieved NIM data from The World Bank, banking NIM in Indonesia is the highest among ASEAN countries. The bank studied in this research is BPD Bank. The reason for choosing BPD is that based on the Indonesian Banking Statistics report, NIM from BPD has the highest average compared to other banks. One of the banks that has a significant role in regional economic development is BPD because BPD opens service networks in the regions.

In 2020 the Supreme Audit Agency noted several problems from audits of regional banks or Regional Development Banks (BPD). These findings are contained in the 2019 Semester II Examination Results Summary, submitted to the government. The inspection objects were carried out at 10 BPDs, including West Sumatra BPD, Lampung BPD, DKI Bank, DIY BPD, Central Java BPD, East Java BPD, West Kalimantan BPD, South Kalimantan BPD, Bali BPD and NTT Bank (Farchah & Kusmargiani, 2020). From the examination results, it was found that there were problems with the weakness of the Internal Control System (SPI), non-compliance, and failure to meet the economic, efficiency and effectiveness (3E) aspects (Ghozi & Hermansyah, 2018).

The main problem highlighted by BPK is the non-implementation of SOP in providing credit facilities, as well as the failure to carry out a thorough credit analysis. Then, BPK also noted that several BPDs did not supplement credit with insurance or monitor the provision of working capital facilities (Puspita & Shofawati, 2017).

From the financial reports of the Financial Services Authority (OJK), the authors found that the number of demand deposits, savings and deposits was still fluctuating. One of the causes is competition with other commercial banks. One example is PT BPD West Java and Banten, Tbk. Receipts of demand deposits, savings and time deposits fluctuated but always increased in terms of the amount of credit disbursed (Ma'ruf, 2017).

Based on the description above, this study investigates the following questions:

RQ1. What is the effect of current accounts on credit extended to BPD in Indonesia?

RQ2. What is the effect of savings on credit extended to BPD in Indonesia?

RQ3. What does the effect of deposits on credit given to BPD in Indonesia?

RQ4. Which of the current accounts, savings and time deposits significantly influence the credit extended to BPDs in Indonesia?

The author is interested in examining current accounts, savings and time deposits and whether they significantly influence lending to BPD banks in Indonesia. The formulation of the problem to be discussed is whether demand deposits, savings and time deposits affect credit that will be channeled through BPD banks in Indonesia. This study analyses the effect of current accounts, savings and time deposits on loans.

II. Literature Review

Current Accounts

Current Accounts, savings, and deposits' effects on lending and profits in Indonesian commercial banks have been the focus of previous research. External factors include the policies of the local government, which is the largest shareholder in the BPD bank. Internal factors include the implementation of good corporate governance (GCG) and good banking management. The authors only provide a brief review of the relevant literature given the scope of this study.

According to research by (Dwiastuti, 2020), research related to investment credit, working capital credit and consumption credit positively influences economic growth. Meanwhile, a study from (Ismal, 2010a) also explains that channeling credit funds and operating capital financing will be able to contribute to the production value of goods and services when provided simultaneously, not partially. On the other hand, the production value of goods and services can significantly influence employment opportunities, although with an inelastic value.

Furthermore, there is research on financing in Islamic banks, which impacts profit. The more financing that is channeled will have an impact on Islamic banks. Murabahah financing is a popular form of financing among Islamic banking in Indonesia. The amount of murabahah financing disbursed by the bank will generate income in the form of margin/markup at the bank (Tlemsani et al., 2020). Markup income has the opportunity to gain even greater profits which will have an impact on increasing bank profitability as represented in the Return on Assets (ROA) (Atal et al., 2020).

In line with the research results (Hasan, 2021), research shows that the positive and significant effect of murabahah financing on Return on Assets (ROA) occurs because murabahah financing is a type of financing that is of great interest to the public. So the more murabahah financing is channeled, the higher the income will affect the Return On Assets (ROA). (Gundogdu, 2016) research shows that *Murabaha* financing has a positive and significant effect on profitability because the dominating portion of *Murabaha* financing is proportional to the acquisition of *Murabaha* margins at Islamic banks. Dominate financing Murabaha has the potential to contribute income to Islamic commercial banks, which will impact profitability.

Credit

Simply explained, credit is a form of financial service that allows a person or corporation to borrow money to purchase a product and repay it over time with interest. Meanwhile, (Wady & Kurniawan, 2018) explains the concept of credit as the obligation to pay on time or the right to receive payments. Kasmir proposed credit as financing provided by money or bills whose value could be exchanged for cash.

(Shaikh et al., 2018) as an intermediary institution, lending activities play a crucial role in the Indonesian economy and are the primary function of banking. Due to the nature of the bank's business as an intermediary between people who have excess funds and people who lack funds, one reason for the banking industry's focus on lending is Deposits from the general public and loans from banks both contribute to the community's financial resources (Asian Development Bank, 2021). Banks as financial intermediaries can collect public funds in the form of savings and distribute them back to the community in the form of credit (Ariffandi & Trinugroho, 2022).

A nation's economy is heavily influenced by the banking sector. Real sector productivity, capital accumulation, and overall growth can be boosted by banking's role as an intermediary institution in product asset investment (Jallali & Zoghلامي, 2022). Interest rates and the risk-adjusted distribution of credit affect how financial institutions act when offering customers credit. People will be less likely to apply for credit if interest rates are higher because they will use their funds for other purposes rather than paying interest on loans that cannot be repaid. High risk that the financial institution will reduce this risk when the credit supply is reduced, so the distribution of credit will reduce the amount of credit offered (Hanefah et al., 2020). Outsider Assets, also known as assets gathered from the general public, have an impact on credit offers as well (DPK). As the amount of money raised rises, so does the amount of credit that will be distributed (Field, 2017).

As a financial intermediary, banking makes it easier for people who have excess funds to distribute them to people who lack funds (Sulistiyowati, 2015). Conventional savings is a fascinating method because of how the bank and the customer work together to make money. Customers' savings in traditional banks are intended to maximize profits (Hasan, 2020).

Savings

Many studies have been conducted on savings in public banking, including the relationship between savings, income and public consumption. Research conducted by (Ayuniyyah et al., 2022) explains that the effect of income on Indonesian consumption is significant and positive. That means that the consumption of the Indonesian people will increase when income increases, and conversely, the consumption of the Indonesian people will decrease when the income rises income goes down. Partially, the effect of saving on the consumption of the Indonesian people is negative and not significant. That means that the consumption of the Indonesian people will decrease when savings increase, and conversely, the consumption of the Indonesian people will increase when savings fall (Field, 2017).

Meanwhile, research conducted by (Ismal, 2010b) explained a positive and significant influence between savings and profitability, meaning that if savings increase, it will increase bank profitability in carrying out its main tasks and functions as a bank fund manager. Research by (Xu et al., 2023) explained that his study's results showed that only two variables had an effect, namely the savings variable and the deposit variable. In contrast,

the current account variable had no effect partially. The three independent variables simultaneously affected profitability in conventional banking in 2018-2022.

The Covid-19 pandemic has had an impact on banking performance nationally. In the event of a pandemic in 2020, banks that are members of the Association of State-Owned Banks (HIMBARA) can demonstrate positive performance, ensuring that savings, demand deposits, and deposit rates continue to function effectively (Hasan & Syahira, 2022). Research results follow what (Hudaefi et al., 2021) discovered who stated that effectiveness is the connection between goals and output. Similarly, this study continues (Rahman & Anwar, 2014) findings. The ability to set and achieve the right goals or targets is a key component of workplace effectiveness. As a result, effectiveness demonstrates the connection between the output, what has been completed, the actual results achieved in relation to the goals, or the expected plan's implementation.

Therefore, the existing literature agrees that current accounts, savings and time deposits are important in increasing the amount of credit extended to BPD banks in Indonesia. For example, from other results, savings and guarantees have a sizeable impact on credit at BPD banks.

III. Research Methodology

The participants in this study are all Indonesian BPD banks. In the Financial Statements released by the Financial Services Authority (OJK), 24 BPD banks served as the research samples (Table 1). The data used are quarterly information for the years 2019–2022. Secondary data were used. The Financial Services Authority's (OJK) financial reports serve as the basis for the collection of the data. The panel regression technique was used for the analysis in this study (see Figure 2). EViews are utilized for data analysis (Khalifaturafi'ah, 2021).

Table 1. Research sample

No	Regional Development Banks	Asset Value (Per September 2022) (in million rupiah)
1	PT BPD Jawa Barat dan Banten, Tbk	IDR 160,603,472
2	PT BPD DKI	IDR 75,240,786
3	PT BPD Daerah Istimewa Yogyakarta	IDR 16,865,795
4	PT BPD Jawa Tengah	IDR 84,786,548
5	PT BPD Jawa Timur Tbk	IDR 98,477,208
6	PT BPD Jambi	IDR 13,836,328
7	PT Bank Nagari	IDR 29,879,981
8	PT BPD Riau dan Kepulauan Riau	IDR 31,442,568
9	PT BPD Sumatera Selatan Dan Bangka Belitung	IDR 34,224,813
10	PT BPD Lampung	IDR 11,808,797
11	PT BPD Kalimantan Selatan	IDR 18,523,423
12	BPD Kalimantan Barat	IDR 21,199,185
13	PT BPD Kalimantan Timur dan Kalimantan Utara	IDR 34,665,230
14	PT BPD Kalimantan Tengah	IDR 13,117,924
15	PT BPD Sumatera Utara	IDR 40,625,690
16	PT BPD Sulawesi Selatan Dan Sulawesi Barat	IDR 29,660,346
17	PT BPD Sulawesi Utara Gorontalo	IDR 20,007,393
18	PT BPD Bali	IDR 31,011,581
19	PT BPD Nusa Tenggara Timur	IDR 17,122,701
20	PT BPD Maluku dan Maluku Utara	IDR 10,165,371
21	PT BPD Papua	IDR 29,429,599
22	PT BPD Bengkulu	IDR 8,785,875
23	PT. BPD Sulawesi Tengah	IDR 11,772,935
24	PT BPD Sulawesi Tenggara	IDR 12,103,686

Source(s): OJK, 2022

The dependent variable used is credit at BPD banks in Indonesia. The independent variables used are demand deposits, savings and time deposits (Table 2).

Table 2. Operational definition and variable

Definition		Measurement
<i>Dependent variable</i> Credit	According to Law Number 10 of 1998, "the provision of money or bills that can be equated with it, based on a loan agreement or agreement between a bank and another party agrees to pay off his debt after a certain period by giving interest," bank credit is referred to as "the provision of money or bills that can be equated with it."	<ol style="list-style-type: none"> 1. Loan Interest Formula with a Flat System $\text{Interest} = (P \times I \times t) / \text{jb}$ 2. Loan Interest Formula with an Effective Interest System $\text{Interest} = SP \times I \times (30/360)$
<i>Independent variable</i> Saving	According to Banking Law Number 10 of 1998, a savings deposit is one that cannot be withdrawn using a check, billet giro, or any other comparable analysis tool, but can only be withdrawn under certain agreed-upon conditions.	<ol style="list-style-type: none"> 1. How to Calculate Savings Interest Based on Average Balance $\text{Savings Interest} = \text{Average Balance} \times (\text{Percentage interest rate} \times \text{number of days in the month}) / 365 \text{ Days}$ 2. How to Calculate Savings Interest Based on the Lowest Balance $\text{Savings Interest} = \text{Lowest balance} \times (\text{Percentage interest rate} \times \text{Number of days in the month}) / 365 \text{ Days}$ 3. How to Calculate Savings Interest Based on Daily Balance $\text{Savings Interest} = \text{Daily Balance} \times \text{Percentage of interest} \times \text{Distance of days} / 365 \text{ days}$
<i>Independent variable</i> Current Accounts	Current accounts are third-party deposits and funds, as defined by Banking Act Number 10 of 1998.	<ol style="list-style-type: none"> 1. Calculating Interest Using the Lowest Balance $\text{Interest} = \frac{\text{interest rate} \times \text{Lowest Balance}}{12 \text{ months}}$
<i>Independent variable</i> Time Deposits	Time deposits are defined as follows in Article 1 paragraph 7 (1998:7) of Law No. 10/1998.	<p>How to calculate deposit interest after deducting taxes</p> $\text{Deposit Interest Formula} = \text{Interest} \times \text{Fund Principal Deposit} \times 30 \text{ days} \times 80\% (\text{tax}) / 365 (\text{days})$

In this study, the factors that influence credit at BPD banks in Indonesia and the level of cost efficiency at banks were determined using the stochastic frontier method and the panel regression method, respectively (see Figure 1). With board information, a few techniques or models can be utilized to gauge model boundaries: 1) This approach is commonly referred to as the model of common effect or ordinary least squares. Because it doesn't take into account individual dimensions or time, this method can't see differences between people or in time. 2) An impact fixed model In this model, unpredictable captures reflect individual and time-subordinate varieties. 3) A random effects model: In this model, errors are used to account for time and individual differences. Additionally, this approach takes into account the possibility of correlations between errors throughout the time series (see Figure 2).

IV. Result

Descriptive research statistics for each variable between 2019 and 2022 are presented in Table 4. Each variable's average value is higher and lower than the standard deviation (SD) in Table 4. That demonstrates the heterogeneity and homogeneity of the variables. Current Accounts and Savings are homogeneous variables

because their SDs are greater than zero, indicating that the variable has a low rate of deviation. In contrast, the credit and deposit variables are heterogeneous when they are lower than the standard deviation, indicating that the data are heterogeneous with high bias or deviation. It can be seen from the table that N 360. This number is derived from pooled data from 24 samples for the 2019-2022 quarter.

Financial Services Authority Regulation No. 42/POJK.03/2017 concerning obligations for Preparation and Implementation of Bank Credit or Financing Policies for Commercial Banks, the Bank must have confidence in providing Credit or Financing based on an extensive analysis of the debtor's intention, ability, and ability to repay Credit or Financing as agreed upon. The Bank must practice sound credit or financing principles because its credit or financing carries risks. Banks need to pay attention to several important factors to reduce risk in banking, one of which is that the credit guarantee or financing provided by customers must be above the credit provided by the bank. Prior to giving Credit or Supporting, the Bank should cautiously assess the account holder's personality, capacities, capital, security, and business possibilities to acquire this confirmation.

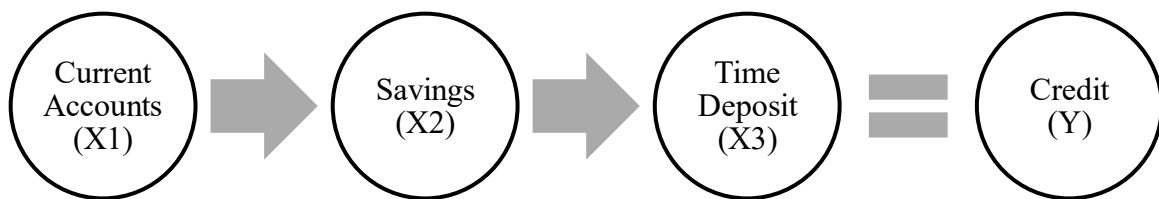


Figure 1. Framework

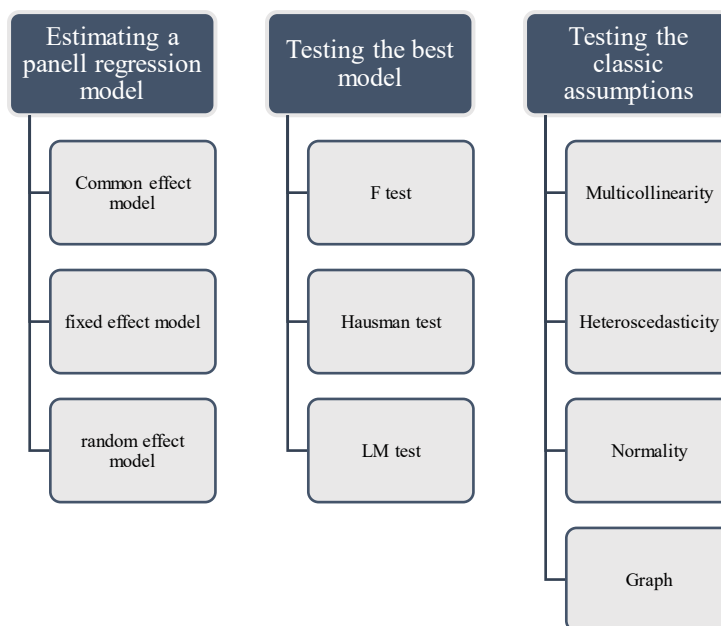


Figure 2. Stages of panel regression process

Table 4. Descriptive statistics of research

Variable	Mean	Maximum	Minimum	SD	Observ
Credit	18.28893	105.7680	3.468000	18.31628	360
Current Accounts	7.070542	34.02500	0.447000	6.558627	360
Savings	6.689314	24.89800	0.632000	6.083112	360
Time Deposits	10.50405	68.31200	0.917000	12.34964	360

Source(s): Processed data, 2023

To further support the provision of healthy credit or financing and contain elements of internal control starting from the early stages of the credit or financing activity process, in addition to the involvement of bank officials in credit or financing such as directors, commissioners, sharia supervisory boards, credit officers or other funding

and work units within the Bank's organization, each Bank must have a Credit Policy Committee or Financing Policy Committee (KKP) and Credit Committee or Financing Committee (KK).

Then the Bank must also be able to fulfil all feasible credit applications to be financed. Assessment of this aspect includes:

a. Call Money's net liability ratio to Current Assets

b. Credit ratio to funds received by banks such as KLBI, current accounts, savings, time deposits, etc.

The term "collectability" refers to the five categories of credit quality. The number 1 is the most collectible: actual credit. The categories of collectability that followed were: 2 (Unique Notice), 3 (Unacceptable), 4 (Dicey) and 5 (Misfortune). Credits with collectability 1 and 2 are arranged as current advances. In contrast, loans are categorized as non-performing loans (NPL) if they have a collectability of 3 to 5.

The total assets of the 26 BPD Banks by the end of the second quarter of 2022 were recorded at IDR 787.85 trillion, an increase from last year's position at IDR 730.97 trillion. PT BPD Jawa Barat and Banten Tbk have the highest assets compared to BPD banks throughout Indonesia. The total assets of PT Bank Pembangunan Daerah Jawa Barat and Banten Tbk (BJBR) were recorded at IDR 150.44 trillion, or almost one-fifth of the total assets of all BPD banks. BJB bank assets increased 6.75% from last year's Rp 140.93 trillion. Meanwhile, the second issuer was PT Bank Pembangunan Daerah Jawa Timur (BJTM), with IDR 95.47 trillion, an increase of 14.18% from the previous IDR 83.62 trillion.

Even though the total aggregate value of BPD bank assets has increased, there are four banks whose assets have shrunk. Bank DKI recorded the biggest shrinkage, which, based on the most recent financial report in the first quarter of this year, its assets fell 11.68% to Rp 55.68 trillion from Rp 63.04 trillion previously. The other three banks, respectively, were Bank BPD Southeast Sulawesi which fell 5.50%, Bank BPD Papua fell 2.29%; and Bank BPD Maluku experienced a 1.40% decline in asset value.

Furthermore, PT BPD Jawa Barat and Banten, Tbk are one of the BPD banks with the largest lending from 2019-2022, September 2022, the number of loans disbursed was IDR 133.40 trillion. This figure increased by 12% (yoy) compared to IDR 101.27 trillion previously. Credit growth was also followed by asset improvement, where the non-performing loan ratio was maintained at 1.1%. Until now, BPD Banks throughout Indonesia are still keeping their Non-Performing Loans (NPL) below 3%, according to the Financial Services Authority (OJK) records. The highlight is that BPD banking management throughout Indonesia always monitors when the restructuring ends. Even though it is still at 3%, BPD Banks throughout Indonesia are considered to be banks that are quite resilient in facing a pandemic like Covid19.

Table 5. The best model selection test

Test	Statistic	Prob	The best mode
Uji Chow	891.478598 Cross section Chi Square	0.0000	Fixed Effect Model (FEM)
Uji Hausman	115.243528 Chi Square Statistic	0.0000	Fixed Effect Model (FEM)
Lagrange Multiplier	Lagrange Multiplier test was not performed		

Source(s): Processed data, 2023

Table 6. Chow test

Effect Test	Statistic	d.f	Prob.	
Cross section F	157.777045	(23.333)	0.0000	
Cross section Chi Square	891.478598	23	0.0000	
Variable	Coefficient	Std.Error	t-Statistic	Prob
C	1.142569	0.380899	2.999663	0.0029
CA	0.468763	0.084175	5.568909	0.0000
S	0.490360	0.085847	5.712037	0.0000
TD	1.004544	0.040322	24.91301	0.0000

Source(s): Processed data, 2023

The chi-square cross-section has a statistical value of 891.478598 and a probability of 0.00000, as shown in the table above. this indicates a value of less than 0.05 (0.000 0.05), at which point H1 is statistically accepted and H0 is rejected. Therefore, the Fixed Effect Model (FEM) is selected.

Table 7. Hausman test

Test Summary	Chi-Sq.Statistic	Chi-Sq. d.f	Prob.	
Cross-section random	115.243528	3	0.0000	
Variable	Fixed	Random	Var (Dif.)	Prob
CA	0.270135	0.370564	0.000193	0.0000
S	0.714980	0.864587	0.000727	0.0000
TD	0.285576	0.308061	0.000025	0.0000
Variable	Coefficient	Std.Error	t-Statistic	Prob
C	8.596497	0.509317	16.87849	0.0000
CA	0.270135	0.051307	5.265096	0.0000
S	0.714980	0.074420	9.607340	0.0000
TD	0.285576	0.026329	10.84641	0.0000

Source(s): Processed data, 2023

Hausman's test. Based on the table above, the Chi-Square statistical distribution value is 115.243528 with a probability value of 0.0000. this means less than 0.05 ($0.000 < 0.05$) then statistically H1 is accepted and H0 is rejected. The Fixed Effect Model (FEM) is chosen.

Table 8. Fixed Effect Model (FEM)

Dependent Variable: Credit				
Sample 2019-2022				
Observations: 360				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
Credit	8.596497	0.509317	16.87849	0.00000
CA	0.270135	0.051307	5.265096	0.00000
S	0.714980	0.074420	9.607340	0.00000
TD	0.285576	0.026329	10.84641	0.00000
Effects Specification				
Cross-Section fixed (dummy variable)				
R-Squared	0.994461	Mean Dependent var		18.28893
Adjusted R-squared	0.994028	S.D dependent var		18.31628
S.E of regression	1.415417	Akaike info criterion		3.604764
Sum squared resid	667.1337	Schwar criterion		3.896221
Log squared resid	-621.8574	Hannan-Quinn criter.		3.720653
F-Statistic	2299.402	Durbin-Watson stat		0.526318
Prob (F-Statistic)	0.0000000			

Source(s): Processed data, 2023

$$\text{Credit} = 8.596497 + 0.270135\text{CA} + 0.714980\text{S} + 0.285576\text{TD}$$

The following can be described using these equations:

1. If the Current Accounts, Savings, and Time Deposits variables are constant, then the loans disbursed by banks are 8.596497, as the Constant value is positive, or 8.596497.
2. The Current Account variable has a positive Regression Coefficient of 0.270135. Assuming that the other independent variables remain constant, this demonstrates that the credit will increase by 0.270135% when demand deposits rise.
3. The Savings variable has a positive Regression Coefficient of 0.714980. That demonstrates that, assuming the other independent variables remain constant, credit will increase by 0.714980 if savings increase.
4. The Deposit variable has a positive regression coefficient of 0.285576. That shows that when stores increment, a credit will increment by 0.285576, it is steady to expect the other free factors.

The test results indicate that the F-Statistics Prob value is 0.000000. The fact that H_a is accepted and H_0 is rejected demonstrates that demand deposits, savings deposits, and time deposits all have a significant impact on bank credit. The deal is smaller than the significance level (0.05). The three factors affect the bank's credit offer.

Bank credit is influenced by current account, savings, and deposit variables. The independent variable is capable of explaining the dependent variable 99.44% of the time, as evidenced by the Adjusted R Squared value of 0.994461. On the other hand, other variables that are not included in the model have an impact on the remaining 0.5539%. This means that 99.44% of the Reserve money and Time Stores variable can anticipate bank credit, while the remaining 0.5539 percent is influenced by factors not considered in this assessment.

Hypothesis testing

1. The primary speculation expresses that Request Stores essentially influence the credit given, in view of the t-measurement test. H_0 is rejected and H_1 is accepted because current accounts have a significant impact on the amount of credit granted.
2. The statistical t-test serves as the foundation for the first hypothesis, which states that savings have a significant impact on credit granted. As a result, H_0 is rejected and H_2 is accepted.
3. According to the first hypothesis, deposits have a significant impact on credit extension. The t-test statistic indicates that deposits have a considerable impact on credit granted, hence H_0 is rejected and H_3 is accepted.

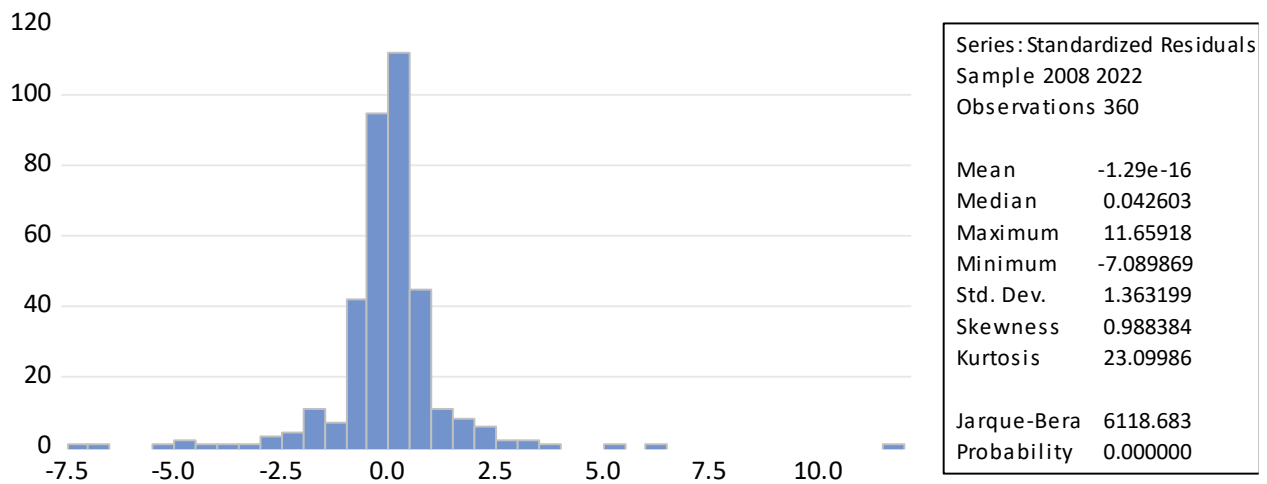


Figure 3. Classic assumption test

Source(s): Processed data, 2023

The probability value is 0.000000, which is lower than the predetermined significance level of 0.05 (0.000000 0.05), as shown in the image above. This indicates that the data are not normally distributed.

Table 9. Multicollinearity test results

	Current Accounts	Savings	Time Deposits
Current Accounts	1	0.85941274	0.84410135
Savings	0.85941274	1	0.82382813
Time Deposits	0.84410135	0.82382813	1

Source(s): Processed data, 2023

The correlation between Current Accounts and Savings is 0.85941274, as shown in the preceding table. The correlation between time deposits and current accounts is 0.84410135. The correlation between savings and deposits is 0.82382813. It is evident that all of the data are greater than or equal to 0.80. It is possible to draw the conclusion that *there is a multicollinearity issue.

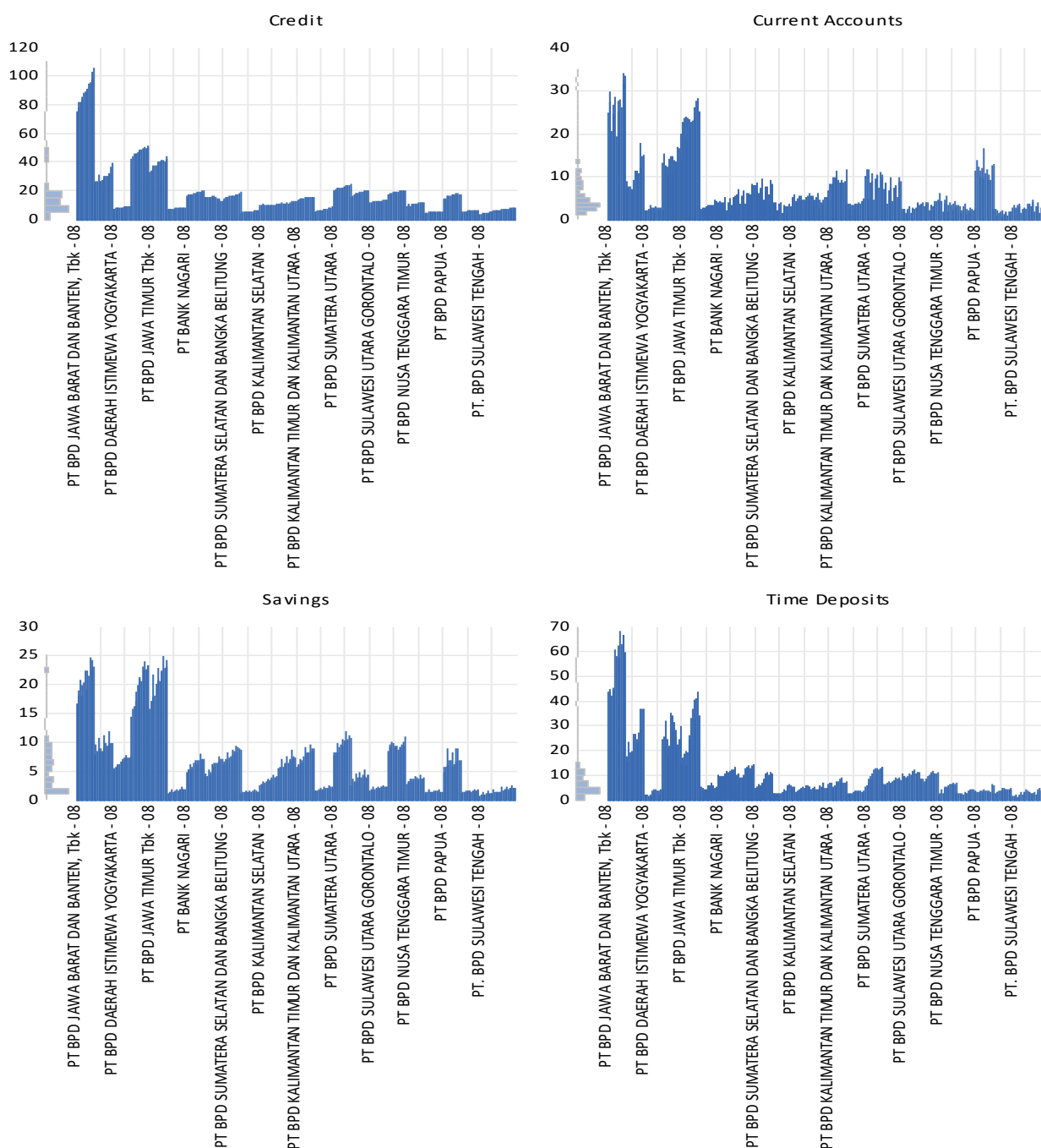


Figure 4. Graph of Indonesia's BPD banks' total credit, current accounts, savings, and time deposits
Source(s): Processed data, 2023

Table 10. Heteroscedasticity test

Sample 2019-2022 Observations: 360				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
Credit	-4.78707	0.295758	-1.618585	0.1065
CA	0.201146	0.029793	6.751376	0.00000
S	-0.004561	0.043215	-0.105541	0.9160
TD	-0.015206	0.015289	-0.994536	0.3207

Effects Specification

Cross-Section fixed (dummy variable)			
R-Squared	0.513978	Mean Dependent var	0.753278
Adjusted R-squared	0.476031	S.D dependent var	1.135475
S.E of regression	0.821921	Akaike info criterion	2.517695
Sum squared resid	224.9598	Schwarz criterion	2.809153
Log squared resid	-426.1850	Hannan-Quinn criter.	2.633584
F-Statistic	13.54441	Durbin-Watson stat	1.072629
Prob (F-Statistic)	0.0000000		

Source(s): Processed data, 2023

The results of the Gljejer Test-based heteroscedasticity test, as shown in the table above, indicate that there is no heteroscedasticity issue. H_0 is accepted for savings and time deposits with a value greater than 0.05, while H_1 is rejected. H_0 is rejected when Giro is less than 0.05, but H_1 is accepted.

From the graph above and Figure 2, the distribution of credit in all BPD Banks is still quite high compared to the number of third-party funds such as current accounts, savings and time deposits. Of the four variables studied that PT. Bank Jawa Barat Banten Tbk is one of the BPD banks, which is quite high in terms of credit distribution and the number of demand deposits, savings and deposits. PT. Bank Jawa Brat Bante's bank credit growth was also higher than that of the national, East Java, and Central Java. Credit growth reached 26.6 per cent. That is in line with the nationwide credit growth target. Another supporting factor is that West Java Province has a population of around 49 million people, with 361,805 Civil Servants (PNS)—in each province.

V. Discussion

The sample used in this research is BPD banks throughout Indonesia that already have financial statements from 2019 to 2022. Large BPD banks in terms of assets tend to extend credit to customers in their respective provinces easily. Apart from having a large population and many civil servants, it is one of the supporting factors in receiving third-party funds such as demand deposits, savings and time deposits. Among the large BPD banks in terms of assets are PT. Bank Jawa Barat Banten (IDR 161 trillion in assets), PT Bank DKI (IDR 75 trillion in assets), PT BPD Central Java (IDR 85 trillion in assets), PT BPD East Java (IDR 98 trillion in assets) and PT BPD North Sumatra (IDR 41 trillion assets).

Suppose the bank benefits from an increase in lending to the public. As a result, this will affect the number of third-party funds stored in the relevant bank. Large BPD banks also generally easily find customers, not only civil servants but also private employees besides all provincial budgets, at the intersection of BPD banks (Ma'ruf, 2017). With a large scale, BPD Banks very easily get high profits from the credit extended and the number of third-party funds. Banks with increased financial performance apply a system of what percentage of credit will be distributed to the public, especially Civil Servants. Almost all Provincial Government projects are deposited in BPD bank (Puspita & Shofawati, 2017)s. The three independent variables tested in this study significantly influence the credit extended at all BPD banks in Indonesia (Putri & Akmalia, 2016).

If current accounts are increased, credit will increase by 0.270135 if the other independent variables remain constant. The first hypothesis states, based on the t-statistic test, that current charges have a significant impact on the credit given. Due to the significant impact of the current Account on the provided credit, H_0 is rejected and H_1 is accepted. The Savings variable is positive with 0.714980 as its positive sign. This demonstrates that, assuming the other independent variables remain unchanged, an increase in savings will result in a credit increase of 0.714980. The first hypothesis states that savings have a significant impact on lending; The measurable t-test uncovers that reserve funds fundamentally affect loaning, so H_0 is dismissed and H_2 is acknowledged. With a value of 0.285576, the time deposits variable is positive. This demonstrates that as deposits rise, credit rises by 0.285576, provided all other independent variables remain constant. According to the first hypothesis, time deposits have an important effect on credit. Because the t-test suggests that time deposits have a large impact on lending, H_0 is rejected and H_3 is accepted.

In theory, the higher the credit at the bank, the higher the number of third-party funds. From the results of the study, the increasing population and the number of Civil Servants also influence the amount of credit that the BPS bank will channel (Dwiastuti, 2020). And conversely, when the population and number of civil servants are small,

the amount of credit is also small, where some of these provinces have a population of under 10 million people. The three variables studied positively and significantly influence the credit disbursed. In general, when current accounts, savings and time deposits increase, it indicates the ability of banks to extend credit to the public (Firnanda, 2022) (Dwiastuti, 2020). That will have an impact on increasing bank profitability and the profits that BPD banks will receive. In addition, the interest applied by the BPD bank also provides benefits to banks in addition to providing a good image for the provincial government (Afkar, 2017).

At BPD banks, the current account model indicates that savings and deposits have a positive and significant impact on credit. The bank can extend and maintain non-performing loans at a rate of about 3% with high credit. The obligation of a BPD bank to repay future debts is proportional to the amount of credit it provides. Credit is significantly impacted by demand deposits, savings, and time deposits as a whole. Savings accounts, deposits, and current accounts all have a positive and significant impact on credit. Current accounts also have a positive and significant impact on credit.

VI. Conclusion

This study looks at how demand, savings, and time deposits affect how much credit BPD banks in Indonesia give out. Demand, savings, and time deposits, according to the study and discussions, have a positive and significant impact on BPD banks' credit offerings.

This investigation reveals that Bank BPD's request stores, reserve funds, and time stores intend to expand credit distribution. The distribution of credit and third-party funds (current accounts, savings, and deposits) are also influenced by the population of a province and the number of Civil Servants (PNS). An expanded populace and the quantity of government employees will incredibly help the BPD bank's capacity to convey more credit and develop its all out resources, as per the discoveries of this review. Additionally, banks with the greatest investments, like PT. Banten, PT, West Java Bank PT. East Java Bank Because BPD banks work closely with the provincial government, which means that all local projects and the payment of civil servants' salaries are made through the BPD bank, Central Java Banks and several BPD banks with assets exceeding 40 trillion do not need to perform excessive socialization in order to increase third-party funds and the amount of credit disbursed. Collaboration with provincial and district/city offices must be improved if BPD banks with assets below 40 trillion are to increase lending and third-party funds. The relevant province's population size and the number of Civil Servants (PNS) are additional determinants despite this step's completion.

The practical implication is that these results warn bankers and the provincial government to be more careful in extending credit because non-performing loans at BPD banks are around 3% which will give a bad image to banks. To increase the number of third-party funds, the provincial government must be able to establish appropriate rules and standards regarding demand deposits, savings and time deposits, in addition to providing rewards to new customers and priority customers. In addition, through regulation on lending, the provincial government can also increase prudence so that bad loans at BPD banks are still in the very healthy category below 5%, and healthy banks will have a low NPL ratio of less than 5%. The smaller the NPL ratio, the lower the bank's credit risk.

It is anticipated that future researchers will be able to include not only BPD banks but also BUMN Commercial Banks, National Private Commercial Banks (foreign exchange), and foreign banks in their sample. In addition, adding an explanatory variable, such as other variables that determine the level of credit disbursement at BPD banks, will make it more complete. The findings indicate that the amount of credit granted is influenced by 0.5539 percent of various variables. Investors who invest in BPD banks can benefit from the information that this study is expected to provide. It is anticipated that investors will be able to support the BPD bank and pay it back.

For banks, this research is expected to be the right policy material for banking practitioners, especially BPD banks, how to be able to compete with large banks, which are categorized as BUKU 1,2,3 and 4. Based on the study's results, credit at BPD banks in Indonesia can increase by increasing the number of third-party funds (giro, savings and time deposits). For BPD banks with many assets, the increase in the number of loans will continue to occur in line with the large population. In addition, it requires concern from the public can save at BPD banks even though state-owned banks are better known to the public, and the number of ATMs at BPD banks is less than many.

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