

Determinants of Credit Disbursement by Multifinance Companies in Indonesia

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Abstract

Multifinance companies have the main business of providing credit to third parties, which is generally consumer credit but does not rule out investment credit. This paper aims to discuss credit disbursement in Multifinance companies for the period 2010 to 2023. Determinants of credit disbursed using panel data models. This study found the results that the interest margin significantly positively affects the loan disbursement. Operating costs significantly positively affect credit disbursed. Marketing costs significantly negatively affect the loan disbursement. Bond issuance significantly negatively affects credit disbursed. Economic growth significantly positively affects loans disbursed. Interest rate significantly positively affects loans disbursed. The COVID-19 period significantly positively affects loans disbursed. Risk significantly positively affects loans. Risk is a moderating variable in the Outstanding Loans model. Risk becomes a variable that strengthens the relationship between interest margins, marketing costs, bond issuance, and oil prices on loans. While the risk variable becomes a variable that weakens the relationship between the variables of operating costs, economic growth, interest rates, and the COVID-19 period on the loan disbursement variable.

Keywords: *Loans Disbursed, Interest Margin, Operating Costs, Marketing Costs, Bond Issuance, Economic Growth, Interest Rate.*

Introduction

A Multifinance company is a company or institution assigned by the government to assist banks in channeling funds to help the community in encouraging its economy. Financial Services Authority Regulation (POJK) No. 29/2014 states that a finance company is a business entity that carries out financing activities for the procurement of goods and/or services. The existence of financing institutions is stipulated in Article 1, paragraph 9, of Law N0 21 of 2011 concerning the Financial Services Authority. This company has contributed a lot to the people's economy, both directly and indirectly.

In fact, this financing institution is used by banks to assist them in channeling funds collected through deposits, savings and accounts. The following data in Figure 1 shows the development of the financing industry since 2000

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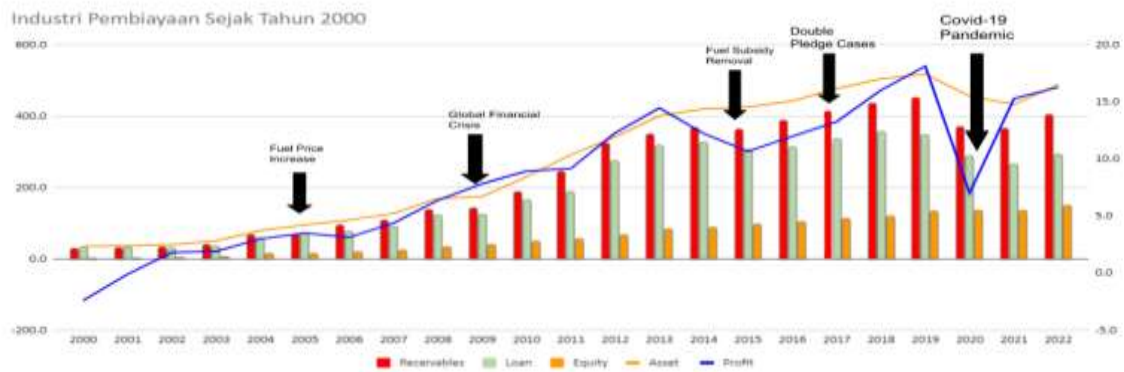


Figure 1. The Development of The Financing Industry Since 2000

Figure 1 shows several indicators of Multifinance companies, such as equity, receivables, loans, assets, and profits. The company's equity had very little growth from 2000 to 2020. The growth of the company's equity is due to the growth of net profit and the existence of newly established companies and net profit losses.

The company's loan portfolio has grown since 2000, but has fluctuated over the last five years. This loan growth is not as striking as shown in Figure 1. This loan fluctuation can cause issues for Multifinance companies and lead to financial distress.

Between 2000 and 2020, the loan parties' receivables experienced increasing fluctuations. These receivables decreased in 2020, nearly the same amount in 2021, and increased again in 2022. This situation will lead to the emergence of potential financial difficulties for Multifinance companies. Multifinance companies' net profits fluctuated between 2000 and 2022. The COVID-19 pandemic caused a significant decrease in net profit in 2020. This decline accelerated the following year, as did the occurrence of financial distress, necessitating this research.

As a supporting sector for banks, research on the Multifinance sector is very limited. Sukarno and Fardiansyah (2009) discussed the valuation of multi-finance firms. Rina et al. (2019) investigate the impact of financial performance on market reaction for Multifinance companies. Nasri et al. (2020) investigate the factors that influence consumers' decisions to use Multifinance products. Ariani and Danarsari (2021) explore the factors that influence efficiency in Indonesian multinational corporations. Istiqomah and Rohim (2020) discuss multi-finance company lending. Utami and Purnamasari (2023) discuss the impact of financial ratios and EVA on multi-finance companies. The study conducted is not as diversified as the research conducted before 2009, owing to the lack of attention paid to this multifaceted financial sector. Pangaribuan and Purba (2023) explain how to forecast the likelihood of Multifinance company failure. The scarcity of research in this field provides a major impetus for this research.

Loans disbursed by Multifinance companies drive their growth. In fact, a Multifinance company's distinguishing feature is the credit disbursed. Istiqomah and Rohim (2020) examine the credit distribution of Multifinance companies. Patriani et al. (2021) examine the analysis of bad debts in Multifinance companies. Suwandi and Dewi (2023) discuss the design and implementation of credit analysis in multi-finance companies. This is an intermediate variable in this study. One of the fundamental reasons for the study's limitations is the use of an intermediate variable.

A country's economic growth indicates the movement of business aspects. This study will use economic growth as an independent variable that influences credit and financial difficulties faced by businesses. Kartika and Manurung (2020) examine the impact of credit on economic growth. Tan and Floros (2012)

conducted research in China on the impact of economic growth on bank profits. The economic growth rate used is that of the following year. If economic growth accelerates in the coming year, the amount of credit disbursed will increase, and the likelihood of bankruptcy will decrease.

Oil is an important driver of industrial performance and especially macroeconomic discussions in many countries, especially in countries that are dependent on oil trade. Oil prices fluctuate greatly from 2010 to the end of 2023. The oil price fluctuates from US\$ 90 per barrel and drops to around US\$ 80 per barrel by the end of 2023.

Oil price fluctuations affect a country's entire economy, including banks, which are one of the financial industry sectors that drive the economy. Oil prices are one factor taken into account when evaluating bank performance (Manurung et al., 2020). According to Poghosyan and Hesse (2009), oil prices have direct and indirect effects on the economy. (1) Oil price movements or fluctuations may have a direct impact on bank profitability through oil-related loans, business activities, or excess liquidity in the banking industry. Then (2), as an indirect channel, oil revenues may be an important part of external and government revenues in those countries; thus, the outlook for oil revenues may then affect fiscal spending, which in turn affects firm and bank profitability through lending to the private sector.

The prevailing interest rate is an important indicator in the economy, especially in the financial sector. The increase or decrease in interest rates is a driving factor and also an obstacle for the Multifinance company sector. If the interest rate continues to rise, it can make it difficult to distribute credit and make mortgage companies ultimately experience financial difficulties.

The previous section discussed how external factors can influence loan disbursement and the probability of financial distress among Multifinance companies. In addition, important internal factors are investigated to influence loan disbursement and the risk of financial distress. Interest margin, operating expenses, and marketing expenses all represent important internal factors that influence the independent variables of loan disbursement and financial distress probability.

Margin (often called interest margin) in Multifinance companies is an important factor in Multifinance companies. The greater the interest margin makes the company's going concern higher, but the higher the interest margin causes, the smaller the loan disbursed. Hasan et al. (2020) found that interest margin has a positive effect on ROA and ROE. Manurung et al. (2020) also stated that NIM has a positive effect on bank performance as measured by RAROC. Widyastuti et al. (2017) also stated that interest margins have a positive effect on profitability. Therefore, interest margin is used as an independent variable in this study.

Financial institutions' operating costs include important variables associated with their operations. If this operational expense increases, the company might encounter problems and possibly corporate financial difficulties. Ariani and Danarsari (2021) discuss the factors that influence efficiency in Indonesian multifinance companies. The operating cost variable is used as an independent variable in this study.

Marketing costs are a variable cost that the company incurs when running its operations. This variable has a positive correlation with credit extension. According to Hasan (2013) and Swastha (2007), businesses must manage marketing costs in order to increase profits. Marketing costs are used as an independent variable in this study to predict loan disbursement.

A Multifinance company is one that provides funds to those companies or business in need. This company obtains funding from its own funds, the parent company (banking), and through collaboration with other banks. This company is very capable because it has access to its own funds and branding, as well as the parent company's. Banks, as institutions that support these companies business, have even made public bond offerings. This study also considers the holding company's role. Johan et al. (2013) discussed how parent companies influence subsidiary operations.

The research period will be from 2010 to 2023. This time period includes the Covid-19 pandemic, which began in Indonesia in March 2020 and lasts until the end of 2022. The negative news about the Covid-19

event spread quickly and had a huge impact on various industries and businesses, causing a sharp price drop in the investment market and a negative impact on stock performance and returns (Rakshit and Neog 2022). As a result, the COVID-19 pandemic variable is treated as a dummy variable in this dissertation study. Sullivan and Widodoatmodjo (2021) discuss the pandemic's impact on the financial sector, particularly banks.

Theory Review

Multifinance companies' main business is credit disbursement, which is funded by their own capital as well as partners such as banks and bond issuances. Banks will typically assist Multifinance companies as the parent company. Multifinance companies can increase their capital through profits ($\pi_1, \pi_2, \dots, \pi_n$), issue shares to other parties, including the public (Svitek, 2001), and issue long-term debt known as subordinate debts (Kleff and Weber, 2008). According to Jiang (2010), Manurung et al. (2020), Manurung and Hutahayan (2020), and Manurung and Kartika (2020), the profit of a multi-finance company can be calculated using the following equation:

$$\pi = (1 - T)[(r + m) * L - r * \{(1 - \alpha) * D + E\} + fb] \quad (1)$$

T = tax; L = loan; D = deposit; E = equity; r = cost of capital;

m = expected margin; α = reserve of requirement; fb = fee-based income

If equation 1 is rearranged into a loan disbursement equation, the equation becomes as follows:

$$\frac{\pi}{(1-T)} = (r + m) * L - r * TA + r * \alpha * D + fb \quad (2)$$

$$L = \frac{\pi}{(r+m)*(1-T)} + \frac{1}{(r+m)} [r * TA + r\alpha D + fb] \quad (3)$$

$$\frac{L}{D} = \frac{\pi}{D * (r + m) * (1 - T)} + \frac{1}{(r + m)} \left[r * \frac{TA}{D} + r * \alpha + \frac{fb}{D} \right] \quad (4)$$

According to equation (4), loans disbursed divided by loans made are a function of loan profit, Multifinance company leverage, fee base to deposits, cost of capital, and net interest margin. However, macroeconomic variables can be included as external variables in the model.

Model Data Panel

This study uses a model data panel to estimate relationships between some independent variables to determine the loan-to-deposit ratio as a dependent variable and the net interest margin, operational costs, marketing expenses, bond issuance, economic growth, interest rate, exchange rate, and COVID-19 era, all of which are independent variables. Risk is utilized as a moderating variable. Model Data Panel is appropriate for small datasets, short time series, and small company samples. Aside from that, the model data panel includes time and cross-section as samples. Gujarati (2003), Wooldridge (2002), Greene (2008), Biorn (2017), and Sul (2019) described the model data panel as follows:

Pooled Data Model

Pooled Data Model is model that data combine all together and the model is as follows:

$$Y_{i,t} = \beta_1 + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \mu_{i,t} \quad (7)$$

$$i = 1, 2, \dots, k; \quad t = 1, 2, \dots, n$$

X's are non-stochastic and $E(\mu_{it}) \sim N(0, \sigma^2)$

a. Fixed Effect Model

FEM is a model that μ_i and X's are assumed correlated.

$$Y_{i,t} = \beta_{1i} + \beta_2 X_{1i,t} + \beta_3 X_{2i,t} + \mu_{i,t} \quad (8)$$

$$i = 1, 2, \dots, k; \quad t = 1, 2, \dots, n$$

Random Effect Model (REM)

REM is a model that ϵ_i and X's are assumed uncorrelated.

$$Y_{i,t} = \beta_{1i} + \beta_2 X_{1i,t} + \beta_3 X_{2i,t} + \mu_{i,t} \quad (9)$$

$$\beta_{1i} = \beta_1 + \epsilon_i$$

$$i = 1, 2, \dots, k; \quad t = 1, 2, \dots, n$$

μ_i is a random error with a mean value of zero and variance of σ_{ϵ}^2 .

Judge (1982), Wooldridge (2002), Biorn (2017) and Sul (2019) stated on how we choose FEM or REM as follows:

When T (number of time series data) is large and N (the number of cross-sectional units) is small, FEM may be preferable.

When N is large and T is small, if we strongly believe that the individual, or cross-sectional, units in our sample are not random drawings from a larger sample, FEM is appropriate. If the cross-sectional units in the sample are regarded as random drawings, the REM is appropriate.

When individual error component ϵ_i and one or more regressors are correlated, FEM is an unbiased estimator.

REM estimators are more efficient than FEM Estimators, when N is large and T is small and if the assumptions underlying REM hold.

Data Sources

The data source of this study uses financial statement data obtained from the company's financial statements published annually either through the company's website or from the Indonesia Stock Exchange. Macro data is collected from Bank Indonesia (the central bank). The data period used is from year 2014 to 2023.

Discussion

The discussion is grouped into two major groups. The discussion begins with descriptive statistical analysis and continues with causality analysis.

Descriptive Statistics

As previously stated, the research variables used in the study to estimate loan disbursement were a variety of internal and external variables of the company, including interest margin, operating costs, marketing costs, economic growth, oil prices, interest rates, and risk.

Table 1. Some Financial Ratios and External Variables of the Company

	Kredit	Margin	Biaya	Biaya		Economic	OIL	
	Disalurkan	Bunga	Operasional	Marketing	Risk	Growth	PRICE	Interest
Minimum	210,475	-18,060	17,275	35	0.02364	-0.02070	37.13000	0.03500
Maximum	29,914,952	7,329,792	5,730,595	768,918	1.54372	0.06100	98.83000	0.07750
Average	6,167,172	1,224,375	958,062	45,992	0.50532	0.04724	69.54000	0.05732
Standard of Deviation	7077401.57	1,609,263	1,330,966	127,817	0.25442	0.02045	20.80000	0.01367
Skewness	1.81159	1.72569	2.21976	4.08057	1.07464	-3.21745	0.04905	5.26736
Kurtosis	2.57043	2.46038	4.46794	17.11225	1.95887	11.14443	-1.42420	-0.93131
Jarque Bera	85.41822	78.30401	140.29502	1705.29130	36.59634	691.32924	125.65893	811.29578
Sumber: Hasil Olahan Peneliti								

The Table 1 shows the minimum, maximum, average, standard of deviation, skewness, kurtosis, and Jarque Bera data for the research variables of loans disbursed, interest margin, operating costs, marketing costs, economic growth, oil prices, and interest rates.

According to Table 1, the lowest loan value is Rp. 210 billion, the highest is Rp. 29.9 trillion, and the average is Rp. 6.17 trillion, with a standard deviation of Rp. 7 trillion and a Jarque Bera value of 85.42. The data shows that loan disbursements vary significantly with a normal distribution.

Table 1 also shows the minimum value of the interest margin, which equals a loss of Rp. 18 billion, the maximum value of Rp. 7.33 trillion, the average of Rp. 1.22 trillion, the standard deviation of Rp. 1.33 trillion, and the Jarque Bera value of 78.304. The data show that the interest margin obtained by Multifinance companies varies greatly and follows a normal distribution.

The bank's operating costs are also included as an independent variable, as previously described. The Operating Cost has a minimum value of Rp. 17.2 billion loss, a maximum value of Rp. 5.73 trillion, an average of Rp. 958.06 billion, a standard deviation of Rp. 1.61 trillion, and a Jarque Bera value of 140.295. The data revealed that interest margins earned by Multifinance companies vary significantly, while operating costs follow a normal distribution.

The marketing cost of Multifinance companies, as an independent variable, has a minimum value of Rp. 35 million, a maximum value of Rp. 768 billion, an average of Rp. 45.99 billion, a standard deviation of Rp. 127.8 billion, and a Jarque Bera value of 1705.29. The data revealed that marketing costs incurred by Multifinance companies vary significantly and follow a normal distribution.

This study uses macro variables as external variables, namely economic growth, oil prices, and interest rates. Economic growth as an external factor in the model has a minimum value of -2.07%, a maximum value of 6.1%, an average of 4.72%, a standard deviation of 2.04%, and a Jarque Bera value of 691.3. The data revealed tells us that the economic growth variable obtained by Multifinance companies does not vary as previously described, and this economic growth variable follows a normal distribution. The oil price variable, which is an external variable and an independent variable in this model, has a minimum value of US\$ 37.13 per barrel, a maximum value of US\$ 98.83 per barrel, and an average of US\$ 69.54 per barrel, as well as a standard deviation of US\$ 20.80 and a Jarque Bera value of 125.65. The data reveals that the

oil price variable obtained by Multifinance companies does not vary significantly and has a normal distribution.

The interest rate variable, which serves as an independent variable in this model, has a minimum value of 3.5%, a maximum value of 7.75%, an average of 5.73%, a standard deviation of 1.37%, and a Jarque Bera value of 811.29. The data revealed that the interest rate variable obtained by Multifinance companies fluctuates very little and follows a normal distribution.

The variable risk of Multifinance companies, as an independent variable and moderation in this study, has a minimum value of 2.4%, a maximum value of 154.37%, an average of 50.53%, a standard deviation of 25.44%, and a Jarque Bera value of 36.6. The data revealed that the risk variables obtained by Multifinance companies vary significantly and follow a normal distribution.

The data described can also be explained in graphical form as below.

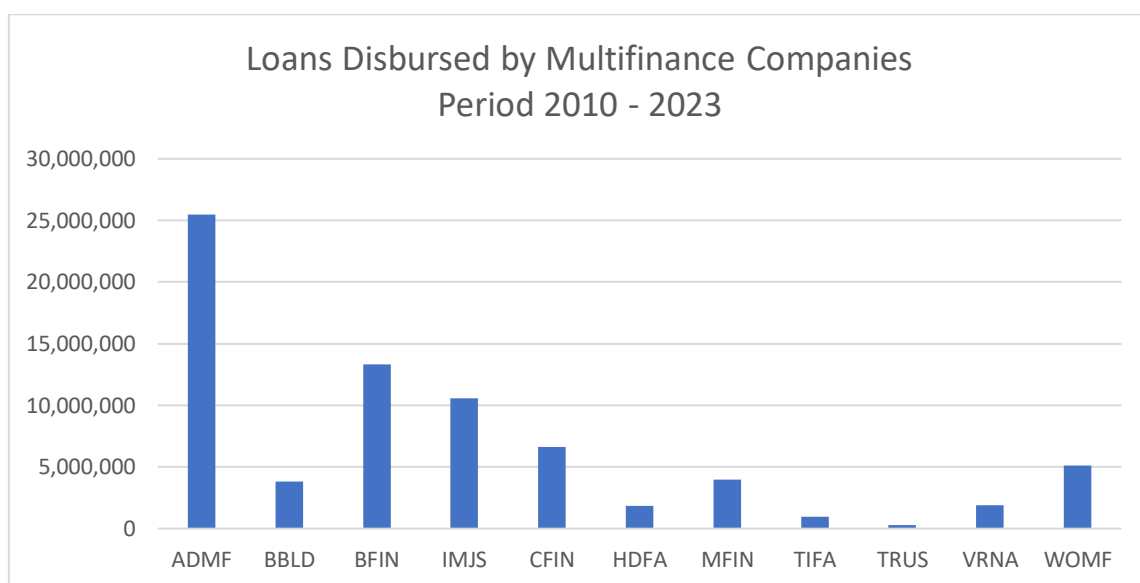


Figure 2. Loans Disbursed by Multifinance Companies Period 2010 - 2023

The lowest loan disbursement was made by TRUS, followed by TIFA, HDFA, and BBLD. Meanwhile, the company that disbursed the highest credit was ADMF, followed by BFIN, IMJS, and CFIN. This pattern is also an indication of the risks faced by Multifinance companies.

The interest margin earned by Multifinance companies is shown in the graph below.

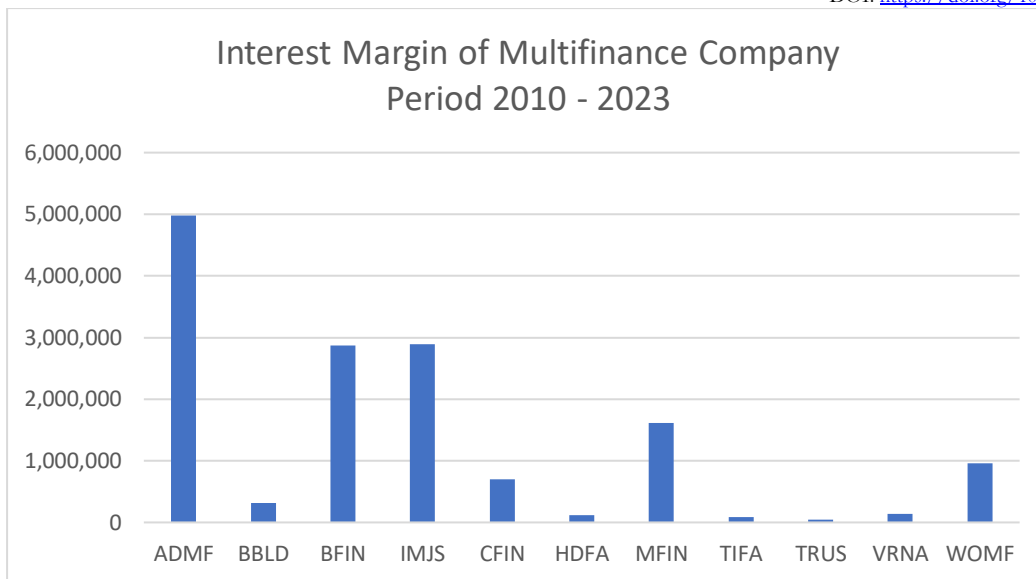


Figure 3. Interest Margin of Multifinance Company Period 2010 - 2023

The smallest interest margin is obtained by TRUS, followed by TIFAH DFA, VRNA, and BBLD. The largest interest margin was obtained by ADMF, BFIN, and IMKS with the same amount, followed by MFIN. This amount greatly affects the financial difficulties of Multifinance companies.

Furthermore, the operating costs of Multifinance companies vary from year to year as shown in the graph below.

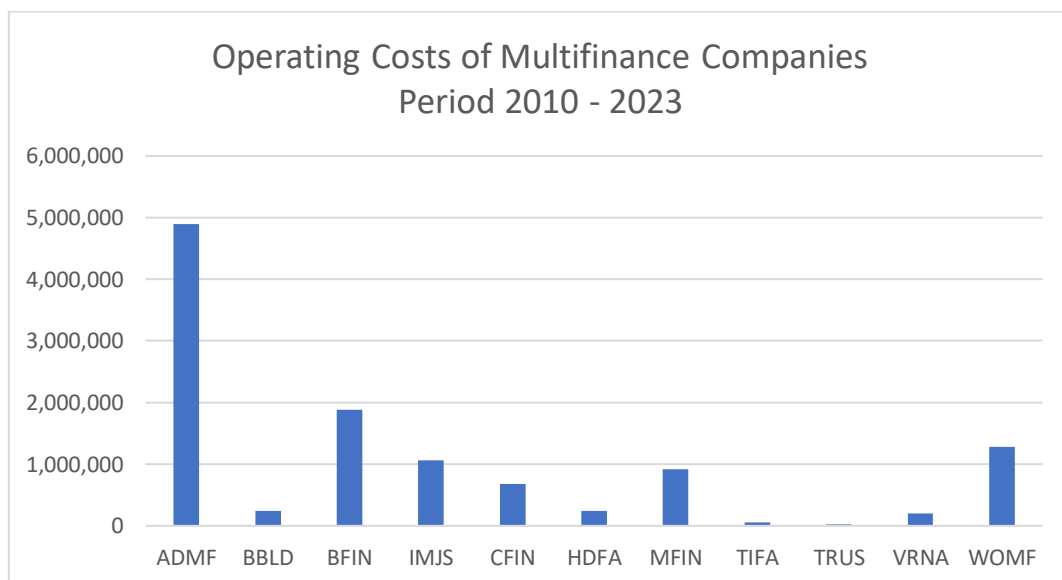


Figure 4. Operating Costs of Multifinance Companies Period 2010 - 2023

The lowest operating costs were obtained by TRS, followed by TIFA, VRNA, H DFA, and BBLD. While the highest operating costs were incurred by ADMF, followed by BFIN, IMJS, and MFIN. This result also determines that it can be an indicator of financial difficulties that each company will face.

The company also makes expenditures on marketing costs, as explained by the following graph below.

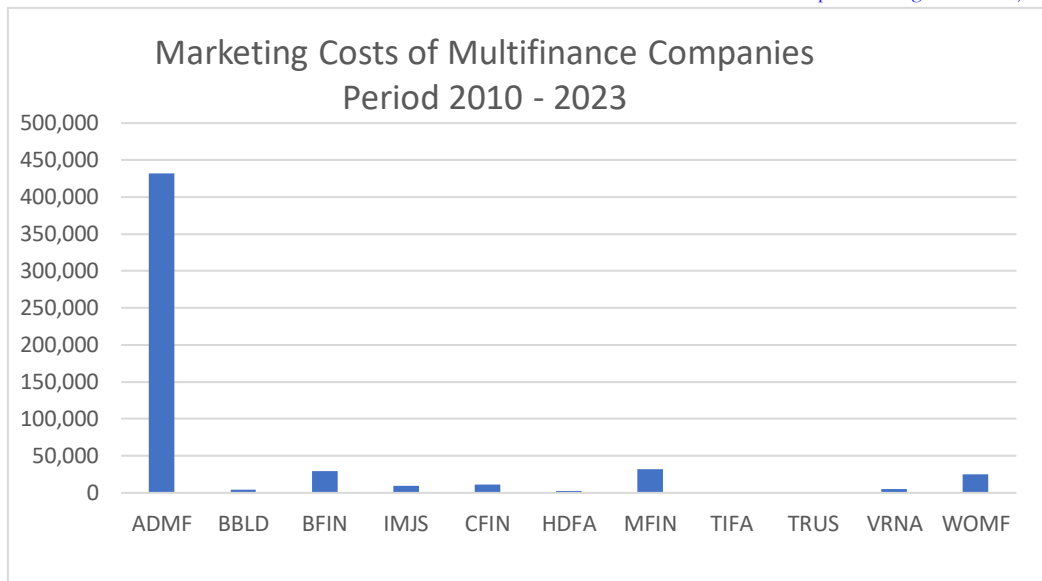


Figure 5. Marketing Costs of Multifinance Companies Period 2010 - 2023

The smallest marketing costs are incurred by TRUS and TIFA, followed by HDFA, VRNA, and BBILD. Meanwhile, the highest marketing costs were incurred by ADMF, followed by MFIN, FIN, and WOMF. This graph can also show the situation of Multifinance companies on performance and the possibility of financial difficulties and loans disbursed.

Risk is one of the important factors for Multifinance companies; the graph below will explain the related risks.

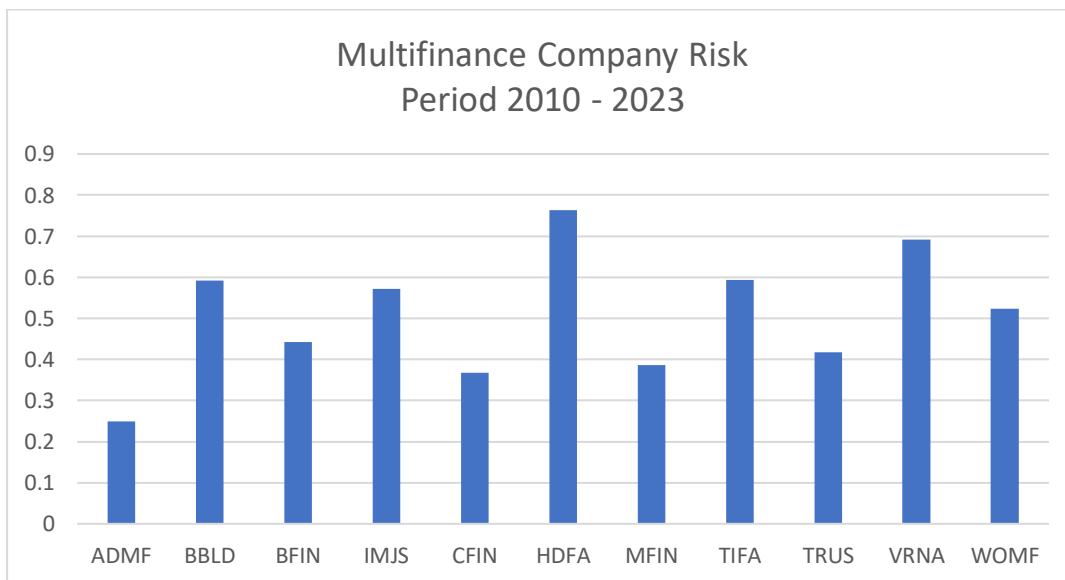


Figure 6. Multifinance Company Risk Period 2010 - 2023

According to the graph above, ADMF obtained the Multifinance companies with the lowest risk, followed by CFIN and MFIN. The greatest risks are HDFA and VRNA, followed by BBLD and TIFA. This graph also depicts the risk of Multifinance companies in terms of loans and financial difficulties.

The variables affecting credit disbursed by Multifinance companies will be addressed in the following section.

Loans disbursed in this study are viewed as mediating variables (intervening variables) and can be defined as characteristics of the banking industry as a phenomenon in this study. The model is as follows.:

$$\begin{aligned}
 KD_{i,t} = & 0,5872 + 0,14057 MB_{i,t} + 1,4034 BO_{i,t} - 4,6833 BM_{i,t} - 0,1234 PO_{i,t} \\
 & (0,0102) \quad (0,00) \quad (0,00) \quad (0,00) \\
 & + 0,94056 EC_t - 0,00779 OIL_t + 2,4903 INT_t + 0,05866 PND_t \\
 & (0,001) \quad (0,5391) \quad (0,00) \quad (0,00) \\
 & + 0,2915 RISK_{i,t} + 0,57447 (MB_{i,t} * RISK_{i,t}) - 3,2658 (BO_{i,t} * RISK_{i,t}) \\
 & (0,00) \quad (0,00) \quad (0,000) \\
 & + 20,7596 (BM_{i,t} * RISK_{i,t}) + 0,09457 (PO_{i,t} * RISK_{i,t}) - 0,65247 (EC_t * RISK_{i,t}) \\
 & (0,00) \quad (0,00) \quad (0,011) \\
 & + 0,03583 (OIL_t * RISK_{i,t}) - 3,5080 INT_t * RISK_{i,t} - 0,24487 (PND_t * RISK_{i,t}) \quad (4.1) \\
 & (0,0088) \quad (0,00) \quad (0,00)
 \end{aligned}$$

The number in parentheses states the Probability

$$R^2 = 99,20\%$$

$$F\text{-test} = 577,2121$$

This model states that all variables are jointly stated to significantly affect the loan disbursed; this is indicated by the F value, which is greater than the F Table value. All variables can explain the variation of the loan disbursed variable by 99.20%; the rest is given by other variables.

Multifinance companies, as one type of financial company, derive their primary revenue from the interest margin. The company is eager to obtain large sums of funds to be utilized for the company's ongoing operations. This interest margin variable is included as an independent variable to influence the loan amount disbursed. At the 10% level of significance, the interest margin variable (MB) has a positive effect on loan disbursement. If the interest margin increases by one point, the loan disbursed rises by 0.1406 points. This study's findings support previous research conducted by Hasan et al (2020) and Manurung et al (2020) and Hasan et.al (2023).

Operating costs for multi-finance companies are significant in terms of company performance. The more efficient a company is, the more likely it will be sustainable. Operating costs are also included as an independent variable that influences loan disbursement. At the 1% level of significance, the variable Operating Costs (BO) has a significant positive impact on loans disbursed. The higher the variable issued, the larger the loan disbursed. An increase in operating costs of one point will result in a 1.4 point increase in credit disbursed. This study complements the work of Ariani and Danarsari (2021), Zhang and Aboud (2019), Yao et al. (2018), Widyastuti et al. (2017), and Zarrouk et al. (2016).

Multifinance companies should incur marketing costs to increase loans disbursed. Marketing cost is also included as an independent variable in order to influence the loan disbursed. Marketing cost (BM) is significant in negatively affecting loans disbursed at the 1% significance level. This result states that an

increase in marketing costs will reduce credit disbursed. This means that the result obtained is different from the desired expectation, which should be positive. It is possible that the negative result is due to the fact that the loan disbursement may have reached its peak and therefore does not require marketing costs. This research is somewhat different from previous research, which always has a positive sign. This study supports previous research by Hasan (2013) and Swastha (2007).

The economic growth of a country encourages credit distribution, so this variable is included as a factor that influences it. The variable Economic Growth (EC) is significant and positively influences credit disbursement at a significance level of 1%. The research results state that an increase in economic growth of 1 point will influence an increase in disbursed credit of 0.91 points. The results of this study support previous research by Sinha and Sharma (2016); Athanasoglou et al. (2008); Dietrich and Wanzenried (2011); Trujillo-Ponce (2013); Tan and Floros (2012); and Yao et al. (2018).

Multifinance companies are not permitted to collect funds in order to distribute credit as part of their duties. The most common alternative is to obtain credit from the bank and then, based on the data collected by the bank, to obtain funds from the bank. As a result, this study emphasizes bond issuance as a source of funding. The bond issuance variable is implemented as a dummy variable. This variable is treated as an independent variable in this study. Bond issuance (PO) has a 5% negative impact on disbursed credit. The findings of this study contradict the expectation or theory that bond issuance would increase the amount of credit distributed. This study builds on previous work by Rakshit and Neog (2022) and Sullivan and Widodoatmodjo (2021).

External factors in this research include the interest rate variable. This interest rate is very important for the company and other parties. The existence of a policy of increasing interest rates will affect the credit distributed, so this variable is included as an independent variable to influence the credit distributed. The interest rate (INT) is significantly positive in influencing credit disbursed at a significance level of 10%. This research supports previous research.

This research period uses the period of year 2010 to 2023, where during this period there was the COVID-19 period. This period is known to cause some businesses to experience a decline and some to experience an increase. The COVID-19 period is also included as an independent variable to influence credit disbursement. The COVID-19 variable has a significantly positive influence on credit disbursement. The results of this study support previous research from Rakshit and Neog (2022).

This study also includes risk as a moderating variable, but according to Sharma et.al (1981), the moderating variable must also be made independent. At a 1% significance level, the risk variable as an independent variable has a positive and significant impact on credit disbursement. According to the findings, a one-point increase in this risk variable increases the disbursed credit variable by 0.29 points. This study's findings support previous research. The significance of this variable influencing disbursed credit means that it cannot be a pure moderating variable (Sharma et.al 1981).

The existence of the risk variable moderates independent variables such as interest margin, operational costs, and other independent variables on the disbursed credit variable, so we also want to pay attention to its contribution as moderation. The risk variable can positively moderate the interest margin on credit disbursed at a significance level of 1%. These results state that the risk variable strengthens the relationship between interest margin and disbursed credit. Another variable that can be moderated is the operational cost variable, which negatively affects disbursed credit at a significance level of 1%. This means that the risk variable weakens the relationship between the operational cost variable and the disbursed credit variable. The results of this study support previous research.

Furthermore, this research also tested risk variables as moderation (Manurung, 2020). The results obtained show that risk can positively moderate marketing costs (BM) on disbursed credit at a significance level of 1%. These results also state that the risk variable is a pure moderating variable (Sharma et al., 1981). This research supports previous research.

Risk is also used to moderate the relationship between bond issuance and disbursed credit. This research finds that risk can positively moderate bond issuance on disbursed credit at a significance level of 1%. The results of this study support previous research.

Just like the previous description, risk is also used to moderate the relationship between economic growth and disbursed credit. The results of this research show that risk can negatively moderate economic growth when credit is disbursed at a significance level of 5%. These results suggest that risk weakens the relationship between economic growth and disbursed credit. The results of this study also support previous research.

Then, risk is also analyzed as a variable that moderates the relationship between oil prices and disbursed credit. The results of this study found that risk can positively moderate oil prices on disbursed credit at a significance level of 1%. This means that risk can strengthen the relationship between oil prices and disbursed credit. This research also supports previous research.

In this study, it was also analyzed whether risk variables could moderate the relationship between interest rates and disbursed credit. The research results found that risk can negatively moderate the interest rate on credit disbursed at a significance level of 1%. This means the risk of weakening the relationship between interest rates and disbursed credit. The results of this study support previous research.

This research also looks at the risk variable as a moderating variable for the Covid-19 variable. The results obtained show that the risk variable can negatively moderate the COVID-19 period on credit disbursement at a significance level of 10%. The negative coefficient value indicates that the risk variable weakens the relationship between COVID-19 and the credit disbursement variable. Based on Sharma et al. (1981), risk is not a pure moderator of the relationship between COVID-19 and disbursed credit. This research supports previous research by Neog and Rakshit (2022) and Sullivan and Widodoatmodjo (2021).

This study also includes oil as an independent variable for disbursed credit. This is an external variable in this study. The study discovered that oil prices had no impact on credit disbursement.

Summary

Based on the previous description, the research provides the following conclusions:

- The interest margin has a significantly positive effect on credit disbursement.
- Operational costs significantly positively influence credit disbursement.
- Marketing costs significantly negatively affect credit disbursed.
- Bond issuance significantly negatively affects credit disbursement.
- Economic growth significantly positively influences credit disbursement.
- Interest rates have a significantly positive effect on credit disbursed.
- The COVID-19 period has significantly positively influenced credit disbursement.
- Risk significantly positively influences credit disbursement.
- Risk is a moderating variable in the distributed credit model.
- Risk being a variable strengthens the relationship between interest margins, marketing costs, bond issuance, and oil prices on disbursed credit. Meanwhile, the risk variable is a variable that weakens the relationship between the variables operational costs, economic growth, interest rates, and the COVID-19 period on the credit disbursement variable.

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