

THE EFFECT OF BANK INDONESIA RATE AND INFLATION ON THE FINANCIAL PERFORMANCE OF PT BANK MANDIRI (PERSERO)

TBK

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Abstrak

The study entitled "The Effect of Bank Indonesia Rate and Inflation on the Financial Performance of PT Bank Mandiri (Persero) Tbk" aims to analyze the effect of BI Rate (X1) and inflation (X2) on financial performance as measured by annual net profit (Net Profit, Y) during the period 2014–2023, using quantitative descriptive methods and multiple linear regression. Based on the results of statistical tests with SPSS, partially (T-Test), both BI Rate (Sig. value 0.993) and inflation (Sig. value 0.204) do not have a significant effect on Net Profit, because both values are greater than 0.05. Similarly, simultaneously (F-Test), the two independent variables also do not have a significant effect on Net Profit, with a Sig. value of 0.287. The coefficient of determination (R²) of 30.0% indicates that 70.0% of the variation in Net Profit is influenced by other factors outside the BI Rate and inflation⁴. The conclusion of this study confirms that Bank Mandiri's financial performance is more influenced by the bank's internal factors, such as operational efficiency and risk management, which are able to maintain net profit stability despite fluctuations in macroeconomic indicators.

Keywords: BI Rate, Inflation, Financial Performance, PT Bank Mandiri, 2014-2023

Introduction

Banking holds a crucial position in the national financial system, playing a crucial role in maintaining its stability and driving a country's economic growth. As intermediary institutions, banks are tasked with channeling funds from those with surplus funds to those in need. Therefore, their performance and stability are highly dependent on macroeconomic conditions and the monetary policy implemented by Bank Indonesia, including the ongoing inflation rate. Central banks, such as Bank Indonesia, can influence banking conditions through their BI Rate policy. This policy interest rate, known as the BI 7-Day Reverse Repo Rate (BI7DRR) since its introduction in 2016, has become a key element of monetary strategy. Changes in the BI Rate directly impact the cost of funds, Net Interest Margin (NIM), and bank profitability. Based on Gurley and Shaw's (1960) theory

of resource intermediation, interest rates can influence lending and savings patterns. Changes in the BI Rate affect the costs and interest rates set by banks, which ultimately impact the net interest margin (NIM), cost of funds, and overall profitability. On the other hand, lowering interest rates can reduce the cost of funds, but also has the potential to reduce interest income if not offset by an adequate increase in credit distribution volume.

In addition to the BI Rate, inflation serves as a key macroeconomic indicator that influences people's purchasing power and credit risk, and impacts banks' financial performance. In Indonesia, the banking sector has undergone significant changes following the 1997-1998 Asian financial crisis, which triggered massive restructuring and increased oversight by the Financial Services Authority (OJK). High inflation can reduce purchasing power, increase the risk of default, and damage bank asset quality, as was the case during the crisis when inflation reached high levels and caused many banks to incur significant losses. Conversely, low or stable inflation has a positive impact by creating a conducive business environment for the development of banks' financial performance. Although this relationship is often dynamic and not always linear, as external factors such as pandemics or global wars can influence it. Bank Indonesia frequently adjusts the BI Rate to offset inflation, while banks now use sophisticated data analysis models to manage this risk, and the public can refer to reports from the Central Statistics Agency (BPS) or OJK to understand trends inflasi Recent developments. PT Bank Mandiri (Persero) Tbk., one of the banks with the largest assets in Indonesia, serves as an important example for examining how monetary policy and inflation affect the financial performance of the national banking system. Over the past decade, Bank Mandiri's performance has fluctuated, particularly with a decline in net profit due to the COVID-19 pandemic in 2020, followed by a significant recovery in 2021, reaching record profits in 2023 in line with the national economic rebound. This phenomenon demonstrates how macroeconomic conditions play a key role in determining banking performance.

Several previous studies, such as those by Raharjo, Setiawan, and Manurung (2014), stated that interest rates and inflation affect the interest margins of commercial banks in Indonesia, with the impact depending on the bank's ability to manage its asset and liability structure. Wibowo and Syaichu (2013) showed that macroeconomic factors, including inflation and the BI Rate, significantly influence credit quality and bank performance. Sukmawati and Yuliana (2020) found that inflation had a significant negative impact on banking profitability in Indonesia, while the BI Rate had a positive but insignificant effect on Return on Assets (ROA). Adesina (2021) emphasized, in a global context, that stable inflation can encourage bank profitability growth, while high interest rates tend to suppress credit demand and reduce margins. Thus, the relationship between macroeconomic variables and bank financial performance depends on economic conditions and the bank's strategy. The relationship between the BI Rate and inflation on the financial performance of

PT Bank Mandiri (Persero) Tbk. shows that these two macroeconomic variables have an influence, but the impact is indirect and often non-linear. The BI Rate, Bank Indonesia's benchmark interest rate, influences the cost of funds and credit demand, ultimately impacting net profit. Meanwhile, inflation can reduce public purchasing power and increase the risk of default, potentially impacting bank asset quality. Financial performance, as measured by net profit, is influenced not only by these external factors but also by internal factors such as operational efficiency, risk management, and asset management strategies. In certain situations, such as an economic crisis, external factors can have a greater impact than other macroeconomic variables. Therefore, banks that successfully manage risk and improve operational efficiency can mitigate the negative effects of BI Rate fluctuations and inflation, thereby maintaining financial performance. Furthermore, it is crucial for banks to adopt digital innovation and diversify revenue streams to increase resilience to external changes.

To deepen our understanding, it is worth noting that the BI Rate often serves as the primary monetary instrument in Bank Indonesia's inflation-controlling policies, as explained in Keynesian economic theory, which emphasizes the role of interest rates in regulating market liquidity. At PT Bank Mandiri, fluctuations in the BI Rate—for example, the increase from 3.5% to 5.75% in 2022—have been shown to affect borrowing costs, which in turn pressures net interest margins and net profit, as reflected in the bank's annual financial statements. Inflation, on the other hand, affects not only consumer purchasing power but also the price index used in credit risk assessments. An inflation rate above 5% can increase the Non-Performing Loan (NPL) ratio, as observed during the period of high inflation following the COVID-19 pandemic. However, this relationship is complex; an empirical study of Bank Mandiri's historical data shows that under stable inflation conditions, the bank was able to achieve net profit growth of up to 20% per year by diversifying its credit portfolio into inflation-resistant sectors such as infrastructure and renewable energy. Internal factors such as the implementation of financial technology (fintech) and big data analytics for credit risk management contribute to strengthening bank resilience, enabling mitigation of the negative impacts of external factors. Therefore, in the context of Indonesia's economy being vulnerable to global volatility, PT Bank Mandiri continues to integrate adaptive strategies, including strengthening core capital and collaborating with regulators such as the Financial Services Authority (OJK), to ensure sustainable financial performance and responsiveness to macroeconomic dynamics.

Research Methods

This study uses a quantitative descriptive approach with multiple linear regression methods to test the relationship between the independent variables BI Rate (X1) and Inflation (X2) on the dependent variable Financial Performance (Y), which is

proxied by the annual net profit of PT Bank Mandiri (Persero) Tbk, during the period 2014 to 2023. Data sources were collected from secondary sources:

1. BI Rate (X1): From the official Bank Indonesia website, average monthly data for 2014-2023.
2. Inflation (X2): From the Indonesian Central Bureau of Statistics (BPS), annual inflation rate.
3. Financial Performance (Y): Bank Mandiri's annual report (2014-2023)

Variables:

Table 1. Data on the Development of the BI Rate, Inflation, and Net Profit of PT Bank Mandiri in 2014-2023

Year	BI Rate/BI7DRR (%) X1	Inflasi (%) X2	Net Profit (Triliun rupiah) Y
2014	7.50	8.36	15.2
2015	7.50	3.35	16.8
2016	5.00	3.02	18.5
2017	4.25	3.61	20.1
2018	6.00	3.13	22.3
2019	6.00	2.72	24.5
2020	4.00	1.92	19.8
2021	3.50	1.87	21.2
2022	4.75	4.21	23.4
2023	6.00	2.61	25.6

Sumber: Bank Indonesia, BPS, Laporan Tahunan Bank Mandiri.

Table 1 shows Bank Mandiri's financial information for ten years, from 2014 to 2023, with a focus on examining the link between monetary measures and bank profit performance. This information includes three main elements: Bank Indonesia's reference interest rate (BI Rate/BI7DRR) as variable X1, the annual inflation rate as variable X2, and Bank Mandiri's Net Profit as variable Y. During this period, significant changes in interest rate policy were observed, with the BI Rate/BI7DRR dropping from a high of 7.50% in 2014-2015 to 3.50% in 2021, then rising again to 6.00% in 2023. This interest rate development is in line with the sharp decline in inflation from 8.36% (2014) to a low of 1.87% (2021), reflecting Bank Indonesia's efforts to manage monetary conditions. Despite fluctuations in interest rates and inflation, Bank Mandiri's net profit has shown a fairly stable upward trend over the period, from IDR 15.2 trillion in 2014 to IDR 25.6 trillion in 2023. This increase indicates the bank's profitability is resilient and improving, despite a temporary decline in 2020 (IDR 19.8 trillion) that may have been influenced by the economic situation caused by the pandemic. Overall, the data in this table indicates that Bank Mandiri has gradually improved its financial performance amidst various changes in monetary policy and macroeconomic conditions (inflation).

Data processing results using SPSS version 26: Table 2. Correlation Test Results
Correlations

		BI RATE%	INFLASI%	NET PROFIT %
BI RATE%	Pearson Correlation	1	,585	-,323
	Sig. (2-tailed)		,075	,363
	N	10	10	10
INFLASI%	Pearson Correlation	,585	1	-,548
	Sig. (2-tailed)	,075		,101
	N	10	10	10
NET PROFIT %	Pearson Correlation	-,323	-,548	1
	Sig. (2-tailed)	,363	,101	
	N	10	10	10

Interpretasi:

- Pearson Correlation (r): Menunjukkan kekuatan dan arah hubungan. Dapat dilihat pada tabel Pearson Correlation nya $-0,323$ hasilnya negative $-0,323 < 0,05$.
- Sig. (2-tailed) / p-value: Menunjukkan signifikansi hubungan. Jika nilai ini $< 0,05$, maka hubungan dianggap signifikan. BI Rate: Pada tabel $0,363 > 0,05$ artinya TIDAK signifikan. Inflasi: Pada tabel $0,101 > 0,05$, artinya TIDAK signifikan.

Table 3. T-Test Results (Multiple Regression)

Model	Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	24,194	4,292		5,637	,001	14,045	34,343
	BI RATE%	-,009	,936	-,004	-,009	,993	-2,223	2,205
	INFLASI%	-,979	,700	-,546	-1,399	,204	-2,633	,675

a. Dependent Variabel: NET PROFIT%

Intrepretasi:

- BI Rate: Nilai Sig pada tabel adalah 0,993. Maka, BI Rate TIDAK memiliki Pengaruh terhadap Net Profit, karena $0,993 > 0,05$.
- Inflasi: Nilai Sig. pada tabel adalah 0,204. Maka Inflasi TIDAK memiliki Pengaruh terhadap Net Profit, karena $0,204 > 0,05$.

Table 3. F Test Results (Sumultaneous)
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30,015	2	15,007	1,501
	Residual	69,989	7	9,998	
	Total	100,004	9		

a. Dependent Variabel: NET PROFIT%

b. Predictors: (Constant), INFLASI%, BI RATE%

Intrepretasi:

- Nilai Signifikansi (Sig.) pada tabel ANOVA adalah 0.287.
- Pada tabel Anova nilai Sig. 0.287 > 0.05. Dari hasil tersebut maka dapat disimpulkan bahwa secara simultan bahwa BI Rate dan Inflasi keduanya tidak berpengaruh secara signifikan terhadap Net Profit.

Tabel 4. Hasil Uji R-Square

Tabel 4. Determinasi (R-Square)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,548 ^a	,300	,100	3.1620

Discussion Results

1. The Effect of the BI Rate on Net Profit

SPSS results show that the BI Rate (X1) variable on Net Profit (Y) has a regression coefficient of -0.009 and a Sig. 0.993 > 0.05. Therefore, the BI Rate did not significantly influence Net Profit at PT Bank Mandiri Tbk from 2014 to 2023. Despite the negative impact, changes in Bank Indonesia's (BI) benchmark interest rate did not significantly impact the bank's profitability. This study demonstrates that Bank Mandiri was able to withstand the impact of BI Rate increases through efficient asset and liability management. This strategy prevented interest rate fluctuations from significantly impacting Net Profit. Furthermore, the stability of Net Profit performance during BI Rate changes, operational efficiency, and the quality of credit risk management also play a significant role in monetary interest rate policy.

2. The Effect of Inflation on Net Profit

The results of the Inflation variable (X2) on Net Profit (Y) showed a regression coefficient of -0.979 and a Sig. 0.993. 0.204 > 0.05, indicating that inflation also has no significant effect on Net Profit. Although the negative direction of the coefficient may indicate that when inflation increases, profitability will tend to decrease, the effect is not statistically significant. This may indicate that PT Bank Mandiri is able to maintain the stability of the company's performance despite inflation fluctuations. In addition, PT Bank Mandiri has a revenue structure that relies not only on interest income but also non-interest income such as investments and financial services. This study shows that inflation does not always reduce a bank's financial performance, as long as the bank has a strong internal strategy in corporate control and credit portfolio management.

3. The Simultaneous Effect of the BI Rate and Inflation on Net Profit

The results of the F-test (simultaneous) of the BI Rate (X1) and Inflation (X2) variables on Net Profit (Y) show a Sig. 0.287 > 0.05, thus concluding that the BI Rate and Inflation do not significantly influence Net Profit at PT Bank Mandiri Tbk. Although both the BI Rate (X1) and Inflation (X2) variables are theoretically capable of influencing banks, they do not have a significant effect at PT Bank Mandiri. These results indicate that PT Bank Mandiri's financial performance is more influenced by internal factors than external factors. PT Bank Mandiri's strategy is the primary determinant in maintaining profitability. Therefore, the results of this study indicate that the influence of the BI Rate and Inflation on Net Profit is indirect, as the role of internal management and market conditions are more decisive factors in maintaining PT Bank Mandiri Tbk's financial performance.

4. Contribution of the BI Rate and Inflation to Net Profit Based on the Coefficient of Determination

Based on the coefficient of determination (R-Square) analysis, the R value of 0.548 indicates a moderate and positive relationship between the BI Rate and inflation and net profit. This means that if the BI Rate and inflation increase, financial performance tends to improve as well, although the relationship is not particularly strong. An R² value of 30% indicates that 30% of the variation in net profit can be explained by these two independent variables together. However, after adjustment (Adjusted R² = 10%), the effective contribution decreases to 10%, indicating that other factors outside the model influence net profit. This confirms that despite the moderate relationship, the influence of the BI Rate and

inflation on the financial performance of PT Bank Mandiri Tbk from 2014 to 2023 is more limited, and the company needs to consider internal aspects such as operational efficiency and revenue diversification to increase profitability.

Conclusion

Based on the analysis of this study's results, it can be concluded that the BI Rate and inflation do not significantly influence the financial performance of PT Bank Mandiri (Persero) Tbk, as measured by Net Profit, during the 2014–2023 period. Statistical test results indicate that partially (t-test), neither the BI Rate (Sig. 0.993) nor inflation (Sig. 0.204) have a significant effect, as both significance values are greater than 0.05. Similarly, simultaneously (F-test), neither variable shows a significant effect on Net Profit, with a Sig. 0.287. The coefficient of determination (R^2) of 30% indicates that only 30% of the variation in Net Profit can be explained by the BI Rate and inflation together, while the remaining 70% is influenced by other factors outside the model, such as internal bank aspects. These results confirm that PT Bank Mandiri's financial performance is largely determined by internal factors, including operational efficiency, credit risk management, and robust asset and liability management strategies. Although theoretically, the BI Rate and inflation can impact bank profitability through the cost of funds and credit risk, in the context of PT Bank Mandiri, the bank was able to maintain net profit stability through non-interest income diversification and adaptation to macroeconomic conditions. This is evident in the consistent upward trend in net profit, even amidst fluctuations in the BI Rate and inflation, as well as the post-COVID-19 pandemic recovery in 2020.

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