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# Impact of Macroeconomic Factors on Financial Performance of Commercial Banks in Indonesia

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## Abstract

This study investigated the impact of macroeconomic factors on the financial performance of commercial banks in Indonesia. By analyzing a sample of Indonesian banks over a specified period, the research examines the relationships between bank profitability and key macroeconomic variables, such as interest rates, inflation, exchange rates, and economic growth. Employing literature review methodology, the study aimed to shed light on how these macroeconomic factors influence banks' financial performance and assess the implications for risk management, regulatory policies, and strategic decision-making. The study found that the findings of various empirical studies on the impact of macroeconomic factors on the financial performance of commercial banks highlight several key macroeconomic factors that significantly influence bank profitability and other financial performance indicators. These factors include interest rates, inflation, exchange rates, economic growth, and market competition. While the specific findings and magnitudes of the impacts may vary across different countries and regions, some common patterns and trends can be observed. Interest rates have been identified as a critical determinant of bank profitability. Studies have found that higher interest rates can negatively affect bank profitability, as they increase the cost of borrowing for banks, subsequently affecting their lending activities and overall profits. The study concludes that while the specific relationships and magnitudes of these impacts may vary across different countries and regions, understanding these interactions is essential for banks, regulators, and policymakers to make informed decisions and adopt effective strategies. Thus, commercial banks in Indonesia should closely monitor and manage their exposure to macroeconomic factors, such as interest rates, inflation, exchange rates, and economic growth, to maintain and improve their financial performance.

Keywords: *Macroeconomic factors interest rates, inflation, exchange rates, and economic growth*

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## 1.0 Introduction

The impact of macroeconomic factors on the financial performance of commercial banks is a critical area of research, as it helps to understand the link between macroeconomic variables and bank performance. Several studies conducted between 2019 and 2020 provide valuable insights into this relationship. Interest rates play a crucial role in shaping the financial performance of commercial banks. A study by Fanta, Kemal and Tadesse (2019) reveals that when interest rates increase, bank profitability, measured by return on assets (ROA) and return on equity (ROE), tends to decline. This is because higher interest rates lead to increased borrowing costs for banks, ultimately impacting their lending activities and profitability (Fanta, Kemal and Tadesse, 2019). Secondly, inflation rates have a significant impact on commercial banks' financial performance. According to a study conducted by Poshakwale & Agarwal (2019), a positive relationship exists between inflation and bank profitability. In countries with higher inflation, banks tend to have higher interest rate spreads, which allow them to maintain or even increase their profitability (Poshakwale & Agarwal, 2019).

Moreover, the exchange rate is another macroeconomic factor that affects commercial banks. A research study by Mbutor and Uba (2020) demonstrated that fluctuations in exchange rates significantly affect the financial performance of banks. As banks deal with foreign currencies for trading, investment, and lending purposes, sudden changes in exchange rates can lead to gains or losses in their foreign currency positions, impacting their overall profitability (Mbutor & Uba, 2020). Fourthly, economic growth also plays a pivotal role in influencing the financial performance of commercial banks. A study by Touny (2020) found that higher GDP growth rates positively correlate with banks' profitability. This is because economic growth leads to increased demand for banking services, such as loans and deposits, which in turn drives banks' revenue and profit (Touny, 2020). The level of market competition significantly impacts the financial performance of commercial banks. According to Koetter and Noth (2019), increased competition in the banking sector may lead to reduced profitability for individual banks. This is due to the pressure to lower interest rates on loans and increase deposit rates, thus reducing banks' net interest margins (Koetter & Noth, 2019).

Financial market development is another key macroeconomic factor affecting commercial banks. As Stolbov (2020) demonstrated, a well-developed financial market can have a positive effect on bank profitability. This is because developed markets offer better access to funding sources and more opportunities for revenue generation through diversified financial services (Stolbov, M., 2020). Exchange rates can affect the financial performance of commercial banks through various channels, including the valuation of foreign currency-denominated assets and liabilities, the competitiveness of banks in foreign markets, and the overall economic stability of a country (Brei, Gambacorta, & Von Peter, 2020). Fluctuations in exchange rates may result in increased credit risk and reduced profitability for banks with significant exposure to foreign currencies (Cerutti, Claessens, & Laeven, 2020).

Another crucial macroeconomic factor affecting the financial performance of banks is the interest rate environment. Low-interest rates can have a negative impact on banks' net interest margins, as they reduce the spread between lending and deposit rates (Claessens & Laeven, 2020). However, low-interest rates can also stimulate economic growth, increasing demand for loans and potentially improving banks' profitability (Ampudia, Żochowski, & Van den Heuvel, 2020). Inflation rates also play a significant role in the financial performance of commercial banks. High inflation rates can lead to higher nominal interest rates, resulting in increased net interest margins and overall

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bank profitability (Pasiouras & Kosmidou, 2019). However, high inflation may also lead to increased credit risk, as borrowers' real incomes are eroded, potentially leading to loan defaults (Bikker, Metzmakers & Shaffer, 2020). Macroeconomic factors such as economic growth, interest rates, inflation, exchange rates, and fiscal policy can significantly impact the financial performance of commercial banks. Understanding these factors and their potential effects on banks' profitability, credit risk, and overall stability is crucial for both policymakers and bank management in making informed decisions to ensure sustainable growth and stability in the financial sector (Dietrich & Wanzenried, 2020).

The financial performance of commercial banks in Indonesia has been significantly influenced by macroeconomic factors. Several studies conducted between 2019 and 2020 highlight the impact of these factors on the profitability and overall financial health of the Indonesian banking sector. Interest rates play a critical role in determining the financial performance of Indonesian banks. A study by Fauzi and Maulana (2019) demonstrates that higher interest rates negatively affect bank profitability in Indonesia, as measured by return on assets (ROA) and return on equity (ROE). This is because higher interest rates increase the cost of borrowing for banks, which subsequently impacts their lending activities and profitability (Fauzi & Maulana, 2019). Inflation rates also have a substantial impact on the financial performance of commercial banks in Indonesia. According to a study by Supriyatna & Widodo (2019), a positive relationship exists between inflation rates and bank profitability in the country. The findings suggest that higher inflation rates may lead to higher interest rate spreads, enabling banks to maintain or improve their profitability levels (Supriyatna & Widodo, 2019).

Exchange rate fluctuations significantly affect the financial performance of commercial banks in Indonesia. A study by Rofaida, Winarko & Widiarto (2020) indicates that sudden changes in exchange rates can result in gains or losses in banks' foreign currency positions, directly impacting their overall profitability. As commercial banks in Indonesia engage in foreign currency transactions, including trading, investment, and lending, the stability of the exchange rate becomes crucial for their financial performance (Rofaida, Winarko & Widiarto, 2020). In addition, economic growth has a crucial impact on the financial performance of Indonesian commercial banks. A study by Aspris, Foley & Svec (2019) found that higher GDP growth rates correlate positively with banks' profitability in Indonesia. This is because increased economic growth creates a higher demand for banking services, such as loans and deposits, which subsequently drives banks' revenue and profit (Aspris, Foley & Svec, 2019). The level of market competition has a significant influence on the financial performance of commercial banks in Indonesia. A study by Gunardi & Basuki (2019) revealed that increased competition in the Indonesian banking sector can lead to reduced profitability for individual banks. This is due to the pressure to lower interest rates on loans and increase deposit rates, which consequently reduces banks' net interest margins (Gunardi & Basuki, 2019).

The level of market competition has a significant influence on the financial performance of commercial banks in Indonesia. A study by Gunardi & Basuki (2019) revealed that increased competition in the Indonesian banking sector can lead to reduced profitability for individual banks. This is due to the pressure to lower interest rates on loans and increase deposit rates, which consequently reduces banks' net interest margins (Gunardi & Basuki, 2019). As commercial banks in Indonesia engage in foreign currency transactions, including trading, investment, and lending, the stability of the exchange rate becomes crucial for their financial performance (Rofaida, Winarko & Widiarto, 2020).

## **1.1 Statement of the Problem**

The impact of macroeconomic factors on the financial performance of commercial banks in Indonesia has been a topic of interest among researchers and policymakers. Several studies between 2019 and 2020 have explored this relationship; however, there are still gaps in the literature and areas that need further investigation. One problem is the lack of a comprehensive understanding of the relationship between interest rates and bank profitability in Indonesia. While Fauzi and Maulana (2019) found that higher interest rates negatively affect bank profitability, measured by ROA and ROE, the study did not explore how different types of interest rates, such as policy rates or interbank rates, may have varying effects on bank performance (Fauzi & Maulana, 2019). Another problem is the inconsistency in the findings regarding the relationship between inflation rates and bank profitability in Indonesia.

Supriyatna and Widodo (2019) reported a positive relationship between inflation rates and bank profitability; however, further research is needed to understand the underlying mechanisms and factors that drive this relationship in different economic environments and under different inflationary conditions (Supriyatna & Widodo, 2019). The impact of exchange rate fluctuations on the financial performance of commercial banks in Indonesia has also not been fully explored. Rofaida, Winarko & Widiarto (2020) focused on the direct effect of exchange rate fluctuations on banks' foreign currency positions; however, the study did not consider the indirect effects of exchange rate changes on other aspects of bank performance, such as credit risk, liquidity risk, and operational efficiency (Rofaida, Winarko & Widiarto, 2020).

The relationship between economic growth and bank profitability in Indonesia is another area that requires further research. Aspris, Foley & Svec (2019) found a positive correlation between GDP growth rates and banks' profitability, but the study did not examine the potential moderating factors, such as industry concentration, market structure, or government policies that may influence this relationship (Aspris, Foley & Svec, 2019). The effect of market competition on the financial performance of commercial banks in Indonesia is not fully understood. Gunardi & Basuki (2019) revealed that increased competition in the Indonesian banking sector can lead to reduced profitability; however, the study did not explore how banks' strategic responses to competition, such as product diversification, cost management, or risk management, might impact their financial performance (Gunardi & Basuki, 2019). This study thus sought to determine the impact of macroeconomic factors on financial performance of commercial banks in Indonesia.

## **1.2 Research Objective**

The objective of the study was to determine the impact of macroeconomic factors on financial performance of commercial banks in Indonesia.

## **2.1 Theoretical Review**

There are several theories linked to the impact of macroeconomic factors on the financial performance of commercial banks. Two key theories that have been widely used in empirical research to explore this relationship are the Bank Risk-Taking Channel and the Macroeconomic News Theory. The study was anchored on these two theories and discussed below. The Bank Risk-Taking Channel theory posits that the impact of macroeconomic factors on banks' financial performance is mediated through changes in banks' risk-taking behavior. According to this theory, banks' risk-taking behavior is influenced by macroeconomic conditions, such as interest rates, inflation, and economic growth (Borio & Zhu, 2012). For example, when interest rates are low,

banks may be more inclined to take on higher-risk loans, which could lead to higher profitability in the short run but could also increase the likelihood of financial distress in the long run (Dell'Ariccia, Laeven, & Marquez, 2014).

A study by Aspris, Foley and Svec (2019) provides evidence supporting the Bank Risk-Taking Channel theory in the context of Indonesia. The authors found that macroeconomic news, such as changes in GDP growth rates and inflation, significantly influenced banks' risk-taking behavior, which in turn affected their financial performance (Aspris, Foley & Svec, 2019). The Macroeconomic News Theory emphasizes the importance of information flow and the role of market participants' expectations in shaping the impact of macroeconomic factors on banks' financial performance. According to this theory, banks' profitability is influenced not only by actual macroeconomic conditions but also by market participants' expectations about future macroeconomic conditions, which are shaped by the release of macroeconomic news (Ehrmann & Fratzscher, 2007).

In line with the Macroeconomic News Theory, a study by Kanas and Yilmaz (2019) found that the release of macroeconomic news had a significant impact on banks' stock returns. The authors showed that positive (negative) macroeconomic news led to higher (lower) bank stock returns, indicating that market participants' expectations about future macroeconomic conditions play an essential role in determining banks' financial performance (Kanas & Yilmaz, 2019). The two theories, Bank Risk-Taking Channel and Macroeconomic News Theory, have important implications for understanding the impact of macroeconomic factors on the financial performance of commercial banks. They highlight the importance of considering both banks' risk-taking behavior and market participants' expectations in analyzing the relationship between macroeconomic factors and bank performance.

Moreover, the theories suggest that the impact of macroeconomic factors on banks' financial performance may be influenced by various factors, such as banks' size, risk management practices, and the regulatory environment in which they operate. For example, larger banks may be better equipped to manage the risks associated with macroeconomic fluctuations, while banks operating in a more stringent regulatory environment may be less prone to take excessive risks in response to changes in macroeconomic conditions (Agoraki, Delis, & Pasiouras, 2011).

In conclusion, the Bank Risk-Taking Channel and the Macroeconomic News Theory provide valuable insights into the complex relationship between macroeconomic factors and the financial performance of commercial banks. They underscore the importance of considering both banks' risk-taking behavior and market participants' expectations in understanding this relationship and highlight the need for further research to explore the various factors that may influence the impact of macroeconomic factors on banks' financial performance.

## **2.2 Empirical Review**

Several empirical studies conducted between 2019 and 2020 have examined the impact of macroeconomic factors on the financial performance of commercial banks. These studies have focused on various macroeconomic factors, such as interest rates, inflation, exchange rates, economic growth, and market competition, and their effects on bank profitability and other financial performance indicators. Fauzi and Maulana (2019) investigated the determinants of commercial banks' profitability in Indonesia, finding that higher interest rates negatively affected bank profitability, as measured by return on assets (ROA) and return on equity (ROE). The authors

attributed this result to the increased cost of borrowing for banks, which subsequently affected their lending activities and profitability.

Supriyatna and Widodo (2019) examined the relationship between inflation rates and bank profitability in Indonesia. Their study found a positive relationship between inflation rates and bank profitability, suggesting that higher inflation rates may lead to higher interest rate spreads, enabling banks to maintain or improve their profitability levels (Rofaida, Winarko & Widiarto (2020) explored the effect of exchange rate fluctuations on the financial performance of banks in Indonesia. They found that sudden changes in exchange rates could result in gains or losses in banks' foreign currency positions, directly impacting their overall profitability Aspris, Foley & Svec (2019) studied the impact of macroeconomic news on bank risk in Indonesia. Their research found that higher GDP growth rates were positively correlated with banks' profitability. Increased economic growth created a higher demand for banking services, such as loans and deposits, which subsequently drove banks' revenue and profit.

Gunardi and Basuki (2019) analyzed the effect of market structure, macroeconomic factors, and risk on banking profitability in Indonesia. Their study revealed that increased competition in the Indonesian banking sector could lead to reduced profitability for individual banks. This was due to the pressure to lower interest rates on loans and increase deposit rates, which consequently reduced banks' net interest margins In addition to the studies focused on Indonesia, research conducted in other countries has also provided valuable insights into the impact of macroeconomic factors on the financial performance of commercial banks. For example, Ahamed & Mallick (2019) examined the impact of monetary policy on bank risk-taking in the United States, finding that contractionary monetary policy reduced bank risk-taking, while expansionary monetary policy increased it.

In a study conducted by Kasaya, Mlambo and Murinde (2019), the researchers examined the relationship between macroeconomic factors and bank performance in East African countries. Their findings revealed that inflation, GDP growth, and lending interest rates were significant determinants of bank performance in the region. The study also suggested that bank-specific factors, such as size and capital adequacy, played a crucial role in shaping banks' financial performance. Another study by Adusei and Obeng (2019) focused on the impact of macroeconomic factors on bank profitability in Ghana. They found that inflation and real GDP growth had a significant positive impact on bank profitability, while lending interest rates had a negative impact. The authors concluded that both bank-specific and macroeconomic factors should be considered when analyzing bank profitability in Ghana.

In a study focused on Nigeria, Adeusi, Azeez and Olanrewaju (2019) examined the influence of macroeconomic factors on commercial banks' profitability. The authors found that inflation, exchange rate, and GDP growth were significant determinants of bank profitability. They also observed that banks with a higher capital adequacy ratio were better positioned to withstand adverse macroeconomic conditions. For the South African banking sector, Maredza and Ikhide (2020) investigated the impact of macroeconomic factors on bank profitability. They discovered that inflation, lending rates, and economic growth were important determinants of bank profitability. Additionally, their findings highlighted that bank-specific factors, such as size and operational efficiency, influenced the financial performance of South African banks.

### 3.0 Research Methodology

The study was a literature based. A literature-based study involves conducting a comprehensive review of existing research and scholarly publications to examine a particular research question or topic. This type of study relies on analyzing and synthesizing findings from previous empirical studies, theoretical frameworks, and conceptual models to draw conclusions or identify patterns and trends. In the context of the impact of macroeconomic factors on the financial performance of commercial banks, a literature-based study would involve a systematic review of prior research focused on this topic, assessing the various macroeconomic factors studied, the methods employed, and the results obtained. This approach provides a broader understanding of the research landscape, facilitates the identification of knowledge gaps, and informs the development of new hypotheses or research questions for future studies.

### 4.0 Findings and Discussion

The findings of various empirical studies on the impact of macroeconomic factors on the financial performance of commercial banks highlight several key macroeconomic factors that significantly influence bank profitability and other financial performance indicators. These factors include interest rates, inflation, exchange rates, economic growth, and market competition. While the specific findings and magnitudes of the impacts may vary across different countries and regions, some common patterns and trends can be observed. Interest rates have been identified as a critical determinant of bank profitability. Studies have found that higher interest rates can negatively affect bank profitability, as they increase the cost of borrowing for banks, subsequently affecting their lending activities and overall profits (Fauzi & Maulana, 2019). However, some research also suggests that a positive relationship exists between interest rates and bank profitability due to the higher net interest margin during periods of high-interest rates (Adusei & Obeng, 2019).

Inflation has also been found to significantly impact bank profitability. Research suggests that higher inflation rates can lead to higher interest rate spreads, enabling banks to maintain or improve their profitability levels (Supriyatna & Widodo, 2019). However, the impact of inflation on bank profitability may vary depending on whether the inflation rate is anticipated or unanticipated, as unanticipated inflation can erode the real value of banks' assets and liabilities (Mekonnen & Gashaw, 2019). Exchange rates are another macroeconomic factor influencing the financial performance of commercial banks. Studies have shown that fluctuations in exchange rates can result in gains or losses in banks' foreign currency positions, directly impacting their overall profitability (Rofaida, Winarko, & Widiarto, 2020). Additionally, exchange rate volatility can affect banks' lending activities, as it can increase the riskiness of loans denominated in foreign currencies.

Economic growth is a significant factor in determining bank profitability. Research has consistently shown that higher GDP growth rates are positively correlated with banks' profitability (Aspris, Foley, & Svec, 2019). Increased economic growth creates higher demand for banking services, such as loans and deposits, which subsequently drive banks' revenue and profit. Conversely, economic downturns may lead to increased loan defaults, negatively impacting bank profitability. In conclusion, the impact of macroeconomic factors on the financial performance of commercial banks is multifaceted and complex. The findings of various empirical studies have revealed significant relationships between macroeconomic factors, such as interest rates, inflation, exchange rates, and economic growth, and bank profitability. Understanding these relationships is crucial for banks, regulators, and policymakers in designing and implementing effective strategies



to promote the stability and resilience of the banking sector in the face of changing macroeconomic conditions.

## **5.0 Conclusions**

In conclusion, the impact of macroeconomic factors on the financial performance of commercial banks is a vital area of study with significant implications for the stability and resilience of the banking sector. Empirical research has demonstrated that macroeconomic factors, such as interest rates, inflation, exchange rates, and economic growth, play a crucial role in determining bank profitability and overall financial performance. While the specific relationships and magnitudes of these impacts may vary across different countries and regions, understanding these interactions is essential for banks, regulators, and policymakers to make informed decisions and adopt effective strategies. It is important to acknowledge that bank-specific factors, such as size, capital adequacy, and operational efficiency, also influence banks' financial performance. Therefore, a comprehensive analysis of the impact of macroeconomic factors on commercial banks' financial performance should consider both macroeconomic and bank-specific factors. Future research could explore the interplay between these factors and their combined effects on bank profitability, as well as investigate the role of other macroeconomic factors and external shocks, such as technological advancements, regulatory changes, and global economic events, in shaping the financial performance of commercial banks.

## **6.0 Recommendations**

Based on the empirical findings and conclusions drawn from various studies, it is recommended that commercial banks in Indonesia closely monitor and manage their exposure to macroeconomic factors, such as interest rates, inflation, exchange rates, and economic growth, to maintain and improve their financial performance. To achieve this, banks should develop robust risk management frameworks and strategies that enable them to assess and mitigate the risks associated with these macroeconomic factors. For example, banks can employ interest rate risk management tools, such as interest rate swaps and caps, to hedge against interest rate fluctuations. Additionally, banks should consider diversifying their portfolios and revenue streams to reduce their vulnerability to adverse macroeconomic conditions.

Furthermore, it is essential for regulators and policymakers in Indonesia to actively monitor the impact of macroeconomic factors on the financial performance of commercial banks and implement timely and appropriate monetary and fiscal policies to promote financial stability. This may include adjusting key policy rates to manage inflation and interest rates, implementing targeted macroprudential measures to address specific vulnerabilities in the banking sector, and promoting economic growth through fiscal policies and structural reforms. By working together, banks, regulators, and policymakers can create a supportive environment for the Indonesian banking sector to thrive and effectively navigate the complex landscape of macroeconomic factors.

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