Research Article

# Analysis of the Financial Banking Intermediary Function on Economic Growth and Poverty in East Kalimantan from 2011 to 2022

**Nadine Annisa Gumilar*, Abdilah Amin, Priyagus, Aji Sofyan Effendi**

Economics, Faculty of Economics and Business, Universitas Mulawarman

**ORCID**
Nadine Annisa Gumilar: https://orcid.org/0009-0002-6955-7440

**Abstract.**
Banking intermediation in Indonesia is crucial because it directly affects economic growth to accommodate and channel capital from depositors to debtors to be used for production activities, encouraging economic growth in a region, in a certain period. The increase in economic growth caused by banking intermediation will directly or indirectly affect various aspects, one of which is the poverty rate. This paper aims to look at the effect of banking intermediation on economic growth directly and its effect on poverty levels both directly and indirectly through economic growth in East Kalimantan Province. The dataset used in this study comprises secondary time series data spanning from 2011 to 2022, sourced from the East Kalimantan Province's BPS (Central Bureau of Statistics) and the Indonesian Financial Services Authority. To analyze these relationships, this study employed path analysis with SPSS 25. The findings of this research revealed that banking intermediation in East Kalimantan Province had a direct impact on economic growth in the same region. However, the relationship between banking intermediation and economic growth in East Kalimantan Province did not have a direct effect on poverty levels in the region. Instead, the influence of banking intermediation in East Kalimantan Province on poverty levels operates indirectly through its impact on economic growth.

**Keywords:** financial intermediary, economic growth, poverty

Corresponding Author: Nadine Annisa Gumilar; email: nadineannisa.na@gmail.com

**Published** 31 July 2024

**Publishing services provided by Knowledge E**



Selection and Peer-review under the responsibility of the BESS 2023 Conference Committee.



## 1. Introduction

Development is a dynamic endeavor with the goal of enhancing the well-being of individuals. The benchmarks for gauging successful development encompass economic growth, the composition of the economy, and the reduction of income disparities among various populations, regions, and sectors. In addition to striving for maximum economic growth, the primary aim of economic development initiatives is to alleviate or diminish poverty rates, income inequalities, and levels of unemployment (Todaro & Smith, 2003). Economic growth and poverty alleviation are two crucial aspects of the development of a region or country, including in East Kalimantan.

In the context of East Kalimantan, a province in Indonesia known for its rich natural resources and potential for economic development, the interplay between these factors takes on a particular significance. East Kalimantan's economic growth is closely tied to its ability to harness and manage its abundant resources effectively. Referring to the data from the Central Bureau of Statistics of East Kalimantan Province during the span of 2011-2021, it has been quite fluctuating. Throughout the years 2011 to 2014, economic growth experienced a slowdown, followed by contractions or negative growth in the years 2015 (-1.2%) and 2016 (-0.38%). Subsequently, there was an economic improvement, and by 2019, economic growth reached 4.70%, although it contracted again by -2.87% in 2020 due to the impact of the Covid-19 pandemic. In 2021, the economy of East Kalimantan began to recover, and by 2022, it had grown by 4.48%. The province's economic landscape is marked by industries such as mining, oil, and gas, which play pivotal roles in contributing to the national economy. However, this economic growth can be accompanied by challenges, such as income disparities and uneven development across different areas within the province.

The role of banking intermediation in East Kalimantan becomes instrumental in this scenario Acting as intermediaries, banks in the region possess the potential to stimulate economic growth by directing financial resources towards productive sectors and providing support to local businesses. Concurrently, their actions can shape the extent to which economic growth translates into the alleviation of poverty. In any economy, the availability of financial resources is vital for fostering growth through efficient financial intermediation (Sulaiman and Aluko, 2015). Effective financial intermediation, as proposed by Agbada and Osuji (2013), fosters a dynamic financial system, enhances employment opportunities and production, and boosts income levels. Financial intermediaries, particularly banks, play a central role within a nation's comprehensive financial system, engaging in a variety of activities that are essential for promoting economic growth (Aziakmono, 2005).

By fulfilling its role as an intermediary institution, banks can assist real sectors in the economy in boosting production levels, thereby contributing to economic growth. Consequently, a bank's performance within a country can serve as an indicator of the country's advancement. The more developed a nation is, the more significant the role of banking becomes in managing the nation's economy (Kasmir, 2011).

Understanding the dynamics of banking intermediation in East Kalimantan, its impact on economic growth, and its effectiveness in reducing poverty rates is critical for policymakers, local authorities, and stakeholders. The outcome of such research can guide the formulation of strategies that maximize the positive contributions of banking institutions in driving economic growth while mitigating the adverse effects of income disparities and poverty.

## 2. Literature Review

### 2.1. Economic Growth

Todaro (2006) provides a definition of economic growth as a process whereby an economy's production capacity increases progressively over time, leading to a higher level of income generation. According to Sukirno (2016), economic growth can be defined as the advancement of economic activities within a society that results in an increase in the production of goods and services and an overall improvement in people's prosperity. Therefore, economic growth serves as a measure of a society's development progress over different time periods. This growth in production capacity is a consequence of an increase in both the quantity and quality of production factors.

In contrast to Adam Smith's viewpoint, David Ricardo argues that population growth actually leads to an excess of labor, causing a decrease in wages. Wages are essential for financing the minimum standard of living for workers, which can result in stagnant economic conditions. David Ricardo formulated this classic economic growth theory in his book "Principles of Political and Taxation."

According to Smith (2010), economic growth can be divided into five successive stages: hunting, animal husbandry, agriculture, trade, and finally, industrialization. This theory posits that societies transition from traditional to modern, capitalist societies. Throughout this process, economic growth accelerates due to the implementation of a division of labor system among economic actors. The division of labor is a central theme in theories aimed at increasing labor productivity. The specialization of economic actors is driven by factors such as improving worker skills and the invention of energy-saving machines.

Increased economic growth has a positive impact on enhancing well-being and reducing poverty. As demonstrated in a study by Rudy and Indah (2020), economic growth significantly influences the poverty rate, with the growth attributed to the creation of numerous employment opportunities that alleviate unemployment and subsequently reduce poverty levels.

### 2.2. Poverty

According to the Big Indonesian Dictionary (KBBI), poverty is defined as a condition in which a portion of the population or the entire population can only fulfill basic necessities like food, clothing, and shelter to maintain a minimal standard of living. Poverty is a challenge encountered by nations worldwide, particularly in developing and underdeveloped countries. It represents a complex issue influenced by various factors that extend beyond economics, encompassing political, social, cultural, and other societal systems (Suharto, 2005).

The alleviation of poverty can be accomplished through the promotion of economic growth. Economic growth serves as an indicator of prosperity, underscoring the importance of closely monitoring it. A study conducted by Rudy and Indah (2020) revealed that economic growth significantly impacts the poverty rate. The growth in economic activity is linked to the creation of numerous employment opportunities, which in turn attract workers and ultimately lead to a reduction in poverty rates.

### 2.3. Financial Intermediary

According to the Financial Services Authority (OJK), banking primarily functions as an intermediary institution with the responsibility of collecting and channeling funds from the public. Its primary objective is to support national development initiatives, striving to achieve equitable development outcomes, promote economic growth, bolster national stability, and ultimately enhance the overall standard of living for the population. In accordance with Law No. 10 of 1998 on Banking, a bank is formally defined as a business entity that gathers funds from the public through deposits and subsequently redistributes these funds to the public in the form of credit and/or other financial instruments, all with the overarching aim of enhancing the well-being of the general populace.

Banking's core function lies in financial intermediation, a process where surplus funds from the business sector, government, or households are acquired and then directed toward economic units facing deficits (Saunders & Garnet, 2008). Thiel (2001) argues that the financial sector plays a pivotal role in advancing technological progress, particularly when technical advancements need to be integrated into capital structures to influence production. In periods marked by rapid technological advancements, an efficiently organized financial sector seems indispensable, as it aids in refining technological progress within capital formation. This, in turn, enables countries to reap the benefits of this development in the form of higher rates of economic growth.

Financial intermediaries, including banks, have a profoundly positive impact on economic growth. These intermediaries help in reducing transaction costs and addressing information disparities, thereby mitigating liquidity constraints and enhancing the efficient allocation of capital (Fase and Abma, 2003).

## 2.4. Third Party Funds

Funds represent the most critical element in the functioning of financial institutions. Financial institutions can only operate effectively when they have access to adequate funds. Put differently, without sufficient funds, financial institutions would be non-functional. Funds refer to cash or assets readily convertible into cash that are owned or controlled by financial institutions. Third-party funds, as described by Kasmir (2014), are the funds that banks gather from the general public. These funds encompass demand deposits, savings deposits, and time deposits.

Conversely, as per Veitzal Rivai (2007), third-party funds are resources acquired from the public, which includes individuals, companies, government entities, households, cooperatives, foundations, and various others. These funds can be in either Indonesian Rupiah or foreign currencies.

In the words of Muljono (2006), third-party funds are resources amassed from the public and are utilized to finance the real sector through the provision of loans. Banks gather these third-party funds by offering various financial products to the general public, who trust the bank to safeguard their deposits and provide returns in the form of interest or capital gains upon maturity.

## 2.5. Credit

As per Thomas in Ismail (2010), credit, in a broad sense, represents a belief in the debtor's (credit recipient's) capacity to repay a specified sum of money in the future. Various credit definitions share common elements that enable credit transactions. In accordance with banking law number 10 of 1998, credit is defined as the provision of money or negotiable instruments that can be obtained, typically under a loan agreement or a contractual arrangement between a bank and another party, obliging the borrower to repay the debt at a later date.

Summarizing the insights of experts, it can be deduced that credit involves the disbursement of funds or negotiable instruments based on an agreement with the credit recipient, with a specified duration, and accompanied by a guarantee, often involving the payment of a certain amount of interest or profit sharing.

Within the context of financial development, domestic credit assumes a pivotal role. When banks extend domestic credit to acquire productive assets, it not only contributes to economic growth but also enhances income. This is because banks serve as intermediaries in financial transactions (Camba & Camba, 2020).

## 3. Methodology

This research employs a quantitative methodology, utilizing secondary data sourced from the East Kalimantan Central Bureau of Statistics and the Indonesian Financial Services Authority. The dataset comprises a time series spanning from 2011 to 2022. The use of historical data over a sufficiently long time frame often provides better insights into the factors influencing economic growth. In this study, the independent variables consist of credit value (X2) and third-party funds X1, while the dependent variables are Gross Regional Domestic Product (GRDP) (Y1) and poverty levels (Y2). To analyze the relationships between credit, third-party funds, GRDP, and poverty, Path Analysis is the chosen methodology.

Path analysis is employed in this study because this method can analyze complex conceptual models with interconnected relationships among several independent and dependent variables. Path Analysis enables researchers to test multiple hypotheses about how these variables interact and mutually influence each other.

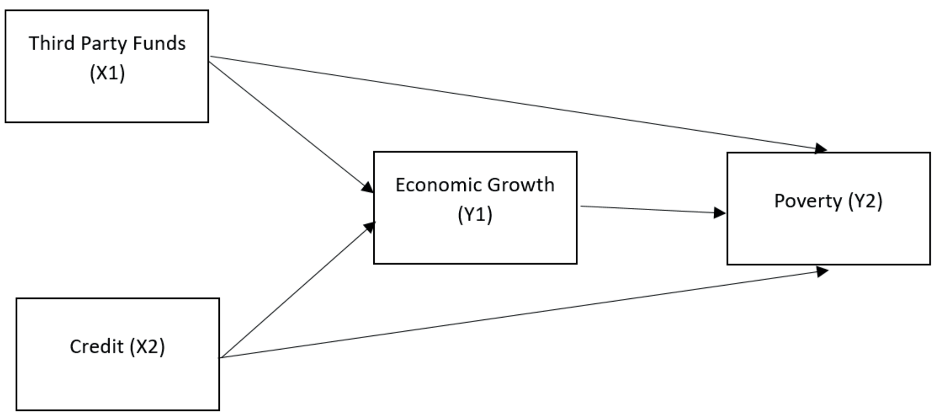


**Figure** 1: Conceptual Framework.

Path Analysis elucidates and assesses the cause-and-effect relationships among variables. The Conceptual Framework depicted in Figure 1 can be articulated in the following manner:

$$Y1 = \rho y_1 \; X_1 + \; \rho y_1 \; X_2 + \; \epsilon_1$$

$$(1)Y2 = \; \rho y_2 \; X_1 + \; \rho y_2 \; X_2 + \; \rho_y$$

**Equation 1 -- Structure Model**

Defined:

X1 = Third Party Funds

X2 = Credit

Y1 = Economic Growth

Y2 = Poverty

## 4. Result and Discussion

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .876ᵃ | .767 | .708 | 36448.169 |

a. Predictors: (Constant), Credit, Third Party Funds

**Figure** 2: Model Summary 1.

The model summary table provides insight into the relationship between third-party funds (X1) and credit (X2) concerning economic growth (Y1). It shows a correlation coefficient (R) of 0.876, indicating a robust and substantial connection between third-party funds (X1) and credit (X2) with economic growth (Y1).

In the computation, the coefficient of determination (R2) is determined to be 0.767 or 76.7%. This implies that a substantial portion, specifically 76.7%, of the variability observed in the dependent variable (Y1) can be explained by the two independent variables. The remaining 23.3% of the variability is influenced by unexamined variables in this study.

In the model summary table, it's evident that the correlation (R) among third-party funds (X1), credit (X2), economic growth (Y1), and poverty (Y2) has been computed at 0.739. This signifies a robust and significant relationship between the variables of third-party funds (X1), credit (X2), economic growth (Y1), and poverty (Y2).

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .739a | .546 | .352 | 9244.456 |

a. Predictors: (Constant), Economic Growth, Credit, Third Party Funds

**Figure** 3: Model Summary 2.

The coefficient of determination (R2) calculated in this analysis stands at 0.546 or 54.6%. This signifies that 54.6% of the fluctuations observed in the dependent variable (Y2) can be ascribed to the third-party funds, credit, and economic growth. The remaining 45.4% of the variations are impacted by additional variables that were not examined in this study..

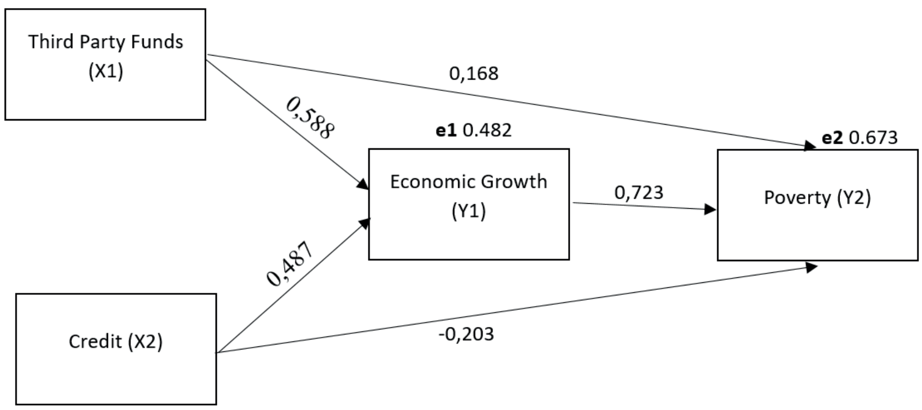


**Figure** 4: Path Analysis Calculation.

Upon analyzing the data using path analysis, we are able to see the relationship among variables in this study. Based on Figure 2, it shows the influence of each independent variable on the dependent variable as follows:

### 4.1. Direct relation between third party funds and economic growth

Third-party funds (X1) exhibit a significant effect with a sig value (0.011) < $\alpha$ (0.05) and a t value (3.264) > t table (2.306). Thus, it can be established that there is a significant and meaningful influence of third-party funds on economic growth when considered separately. This outcome emphasizes the noteworthy role played by third-party funds in contributing to and shaping the dynamics of economic growth, highlighting its potential implications for policy and decision-making in the pertinent field of study.

### 4.2. Direct relation between credit and economic growth

Credit (X2) demonstrates statistical significance with a sig value (0.027) < $\alpha$ (0.05) and a t value (2.703) > t table (2.306). Consequently, it can be deduced that there is a significant and meaningful relationship between credit and economic growth when analyzed separately. This significant finding highlights the importance of recognizing that alterations in credit levels can exert a substantial impact on economic growth. It underscores the notion that access to credit and the proficient utilization of credit resources may play a pivotal role in stimulating economic growth. These findings should be of particular interest to policymakers and stakeholders within the financial sector, as they underscore the significance of credit availability and prudent credit management in fostering economic development.

### 4.3. Direct relation between third party funds and poverty

Third party funds (X1) has sig value (0.703) < $\alpha$ (0.05) and t value (0.398) < t table (2.306), So partially there is no influence and no significant effect between third party funds and poverty.

### 4.4. Direct relation between credit and poverty

Credit (X2) has sig value (0.602) > $\alpha$ (0.05) and t value (-0.546) < t table (2.306), so partially it does not have a negative an insignificant effect. So there is no negative effect and there is no significant effect between credit and poverty.

### 4.5. Direct relation between economic growth and poverty

According to the outcome of the Path Analysis for the period between 2011 and 2022, it is evident that the significance value (sig value) of 0.213 is greater than the pre-established alpha level ($\alpha$) of 0.05. Additionally, the t value of 1.371 falls below the critical t-table value of 2.306. As a result, it can be concluded that, partially, there is no observed effect, and this effect is not statistically significant when examining the relationship between economic growth and poverty during the specified period.

## 4.6. Indirect relation between third party funds and poverty through economic growth

According to the findings of the Path Analysis conducted for the period spanning from 2011 to 2022, it becomes apparent that the magnitude of the indirect effect (0.425) surpasses that of the direct effect (0.168). Consequently, there exists a notable and statistically significant indirect effect between third-party funds and poverty, with economic growth acting as the intermediary factor. This finding carries substantial implications, indicating the presence of a significant and statistically meaningful indirect effect between third-party funds and poverty, with economic growth acting as a mediator.

This result highlights the intricate interplay between these variables. While the direct influence of third-party funds on poverty might seem modest when considered in isolation, the indirect effect through economic growth becomes more pronounced and substantial.

The indirect effect suggests that third-party funds play a pivotal role in stimulating economic growth. As these funds facilitate investment, business expansion, and economic activities, they contribute to overall economic prosperity. In turn, this economic growth generates opportunities for increased employment, higher income levels, and improved living standards, all of which can lead to a reduction in poverty rates.

## 4.7. Indirect relation between credit and poverty through economic growth

According to the outcomes of the Path Analysis spanning from 2011 to 2022, it becomes evident that the magnitude of the indirect effect (0.352) surpasses that of the direct effect (-0.203). As a result, there is a significant and noteworthy indirect effect between credit and poverty, mediated by economic growth. This observation carries significant implications, indicating the presence of a substantial and statistically significant indirect effect between credit and poverty, and this effect operates through the intermediary factor of economic growth.

This result underscores the intricate nature of the relationship between credit, economic growth, and poverty. It suggests that while the direct impact of credit on poverty might appear limited or even negative when considered in isolation, its influence becomes more evident and positive when assessed within the broader context of economic growth.

## 5. Conclusions

The results show that financial intermediation has a direct influence on economic growth. It affects the real sector, which includes various production activities that directly affect economic growth. However, intermediation does not directly affect the poverty rate in society because intermediation does not directly include factors that influence poverty, such as per capita income, unemployment, a decent standard of living and narrow employment opportunities and, most importantly, according to the neo-liberal theory poverty can only be changed through oneself.

Idirectly, financial intermediation influences poverty by way of its impact on economic growth. This influence arises from the critical role that banks play as conduits and sources of capital for both those with surplus funds seeking investment and individuals requiring capital for productive endeavors. Consequently, this dynamic provides opportunities for raising living standards, expanding employment prospects, increasing income levels, and ultimately diminishing poverty levels in society. These findings hold significant implications, signifying the existence of a noteworthy and statistically significant indirect effect between third-party funds and poverty, with economic growth serving as an intermediary factor.

## References

[1] Agbada AO, Osuji CC. An empirical analysis of trends in financial intermediation and output in Nigeria. Glob J Manag Bus Res. 2013;13(9):19–30.

[2] Aziakpono M. Financial development and economic growth in Southern Africa. Reducing Capital Cost in Southern Africa. 2005;1(1):137–67.

[3] BPS – Statistics of Kalimantan Timur Province. (2011). Kalimantan TimurProvince in Figures.

[4] BPS – Statistics of Kalimantan Timur Province. (2012). Kalimantan TimurProvince in Figures.

[5] BPS – Statistics of Kalimantan Timur Province. (2013). Kalimantan TimurProvince in Figures.

[6] BPS – Statistics of Kalimantan Timur Province. (2014). Kalimantan TimurProvince in Figures.

[7] BPS – Statistics of Kalimantan Timur Province. (2015). Kalimantan TimurProvince in Figures.

[8] BPS – Statistics of Kalimantan Timur Province. (2016). Kalimantan TimurProvince in Figures.

[9] BPS – Statistics of Kalimantan Timur Province. (2017). Kalimantan TimurProvince in Figures.

[10] BPS – Statistics of Kalimantan Timur Province. (2018). Kalimantan TimurProvince in Figures.

[11] BPS – Statistics of Kalimantan Timur Province. (2019). Kalimantan TimurProvince in Figures.

[12] BPS – Statistics of Kalimantan Timur Province. (2020). Kalimantan TimurProvince in Figures.

[13] BPS – Statistics of Kalimantan Timur Province. (2021). Kalimantan TimurProvince in Figures.

[14] BPS – Statistics of Kalimantan Timur Province. (2022). Kalimantan TimurProvince in Figures.

[15] Camba AC, Camba AL. The dynamic relationship of domestic credit and stock market liquidity on the economic growth of the Philippines. Journal of Asian Finance. Economics and Business. 2020;7(1):37–46.

[16] Cheyne C, O'Brien M, Belgrave M. Social policy in Aotearoa New Zealand: A critical introduction, Auckland: Oxford University Press, 1998.

[17] Dendawijaya L. Manajemen Perbankan. Cetakan Ketiga. Ghalia Indonesia; 2014.

[18] Ismail. Manajemen Perbankan. Prendamedia Group. 2010.

[19] Hasibuan H, Malayu SP. Dasar-dasar Perbankan. Bumi Aksara; 2007.

[20] Kasmir. Bank dan Lembaga Keuangan Lainnya. Edisi Revisi. PT. Raja Grafindo Persada. 2014.

[21] Kasmir. Dasar-dasar Perbankan. Raja Grafindo Persada: Jakarta, 2014.

[22] Kasmir. Analisis Laporan Keuangan, Raja Grafindo Persada. 2011.

[23] Mark K Smith, dkk. Teori Pembelajaran dan Pengajaran: Mengukur Kesuksesan Anda dalam Proses Belajar Mengajar Bersama Psikolog Pendidikan Dunia. Mirza Media Pustaka. 2010.

[24] Muljono TP. Analisa Laporan Keuangan untuk Perbankan. Bumi Aksara; 2006.

[25] Rudy S, Indah P. Pengaruh Inflasi dan Pertumbuhan Ekonomi terhadap Kemiskinan di Indonesia [JABE]. Journal of Applied Business and Economics. 2020;7(9):271–8.

[26] Saunders A, Garnet MM. Financial institutions management: A risk management approach (Sixth). International Edition. New York: McGraw-Hill; 2008.

[27] Sulaiman LA, Aluko OA. Financial intermediation and economic growth: A test for causality in Nigeria. Banks and Bank System. 2015;10(4):69–74.

[28] Thiel M. Finance and economic growth - a review of theory and the available evidence. Economic Paper. 2001;158.

[29] Todaro, Michael P, Smith SC. Pembangunan ekonomi. Jakarta: Erlangga, 2006.

[30] Rivai V. Credit Manajemen hand book. Jakarta: PT Raja Grafindo Persada; 2006.