



# The Impact of Fintech on Poverty Reduction in Southeast Asian Countries

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## Abstract

The primary objective of the United Nations Sustainable Development Goals (SDGs) is to end poverty in all forms by 2030. Motivated by this agenda, this study examines the direct impacts of financial technology (fintech) and its sub-measures on poverty. The study uses two analysis tools: linear regression and Pearson correlation coefficient analysis on annual data for seven Southeast Asian countries from 2018 to 2021. The seven countries are divided into two groups based on their income levels: middle-income and lower-income countries, per the list provided by the International Monetary Fund (IMF). The study uses five different measures to characterize fintech index adoption. The results reveal that fintech and most sub-measures significantly impact poverty in seven Southeast Asian countries, encompassing both middle-income and lower-income nations. This paper concluded that technological advancements in the financial sector have the potential to contribute meaningfully to the archiving goal of alleviating poverty as outlined by the Sustainable Development Goals.

## Subject Areas

Financial Technology, Fintech, Poverty, Quantitative Research

## Keywords

Financial Technology, Fintech, Poverty, Poverty Reduction, Southeast Asia, Quantitative Research, Regression, Pearson Correlation

## 1. Introduction

Poverty has remained a significant challenge for humanity in the 21st century [1]. A considerable portion of the global population still struggles to access the necessary resources to sustain their livelihoods. The nature of poverty involves

not only financial deprivation but also encompasses issues such as hunger, malnutrition, limited access to education and essential services, social discrimination, exclusion, and a lack of involvement in decision-making [2]. In 2015, over 736 million individuals lived below the international poverty line, with approximately 10% of the global population (pre-pandemic) experiencing extreme poverty and struggling to meet basic needs such as health, education, and access to water and sanitation [2]. Economists have pointed out different solutions to mitigate poverty, highlighting economic growth and financial development as key strategies for overcoming poverty [1].

The United Nations Sustainable Development Goals (SDGs) consider financial development as a key factor in the drive to end poverty by 2030 [3]. Along with many priorities, advancing financial development and financial technology are two of the most crucial policies for meeting these commitments. According to the World Bank, financial development plays a vital role in reducing poverty and inequality by expanding financial access to low-income and vulnerable groups. This enhancement in financial inclusion increases overall investment and productivity, ultimately resulting in higher income generation [4].

This study aims to analyze the impact of fintech development on reducing poverty rates. Current research primarily focuses on financial development and its role in reducing poverty [5]. While financial development is a key factor in addressing extreme poverty, financial technology (fintech) should receive equal attention. Fintech, which involves innovative technological advancements in the design and delivery of financial services and products, has recently gained considerable popularity [6]. Fintech fosters economic expansion, reduces growth fluctuations, and alleviates poverty through enhanced financial development, inclusion, and efficiency [7]. Consequently, the widespread adoption of fintech can significantly advance the achievement of Sustainable Development Goals.

In response to the issues of poverty and fintech development, this study aims to analyze the impact of fintech development on reducing poverty rates. It examines the links between fintech and poverty in seven Southeast Asian countries: Thailand, Indonesia, Malaysia, Myanmar, the Philippines, Cambodia, and Vietnam, from 2018 to 2021. Brunei Darussalam and Singapore are excluded from the analysis, given their status as the wealthiest nations in the region, with GDP (purchase power parity per capita) figures of USD 69,275 and USD 127,565, respectively, in 2022 [8]. Laos and East Timor are also excluded from the study due to insufficient information on fintech. The seven countries are categorized into two groups based on their income levels—middle-income and lower-income—as defined by the International Monetary Fund (IMF).

The dependent variable in the model is the poverty headcount ratio at \$2.15 a day (% population). The set of independent variables contains common determinants of poverty, including GDP per capita, inflation rate, trade openness as a percentage of GDP, household consumption, and fintech index indicators. The study uses five different measures to characterize fintech index adoption: the

number of access points per 100,000 adults at a national level, the percentage of people in the population who use the internet, the percentage of people in the population who report having an account at a commercial bank, the percentage of adults who report having an account with a formal financial institution or a mobile provider, and the volume of electronic money transactions [9]. The findings of such a study have the potential to inform policymakers, financial institutions, and other stakeholders, guiding them in leveraging fintech strategies to address and mitigate poverty challenges in Southeast Asia.

## 2. Literature Review

### 2.1. Concepts and Theories

To effectively reduce poverty, it is important to understand its determinants. The factors affecting poverty vary significantly across different regions, predominantly shaped by distinct cultural, political, and socio-economic contexts [5] [10]. Despite these regional variations, numerous studies highlight several key factors believed to significantly contribute to poverty alleviation [5]. Economic growth, for instance, is recognized as a major catalyst for reducing poverty and enhancing the quality of life in developing countries [11]. Extensive research finds compelling evidence that rapid and sustained economic growth is the most effective way to alleviate poverty [11]. Furthermore, extensive studies reveal a strong correlation, showing that a 10% increase in a country's average income is associated with a considerable decrease in the poverty rate [11].

Furthermore, economic growth is linked to another key determinant of poverty—inflation. The relationship between economic growth and inflation represents one of the most important macroeconomic concerns [12] [13]. The research by Erbaykal and Okuyan (2008) [13] showed a significant and negative short-term correlation between inflation and economic growth in Turkey. Akinsola and Odhiambo (2017) [14] further studied and concluded there is strong evidence, particularly in developed economies, that inflation and growth are negatively correlated. The paper mentioned a great deal of discrepancy in the precise inflation threshold that promotes economic growth. Their findings indicated no causal relationship between economic growth and inflation, but they identified the causality from inflation to economic growth. These results are consistent with earlier studies by Karaca (2003) [15] and Berber and Artan (2004) [16] in Turkey, suggesting that higher economic growth could help reduce inflation.

Another consideration is the frequent association between household consumption and income levels. Income is predominantly utilized to measure economic deprivation due to its ease of reporting and availability across much larger samples [17]. The income effect states that when consumers experience an increase in income, their consumption tends to rise [18]. This effect highlights a direct correlation between income and spending behaviors, where higher household consumption levels are associated with an improved stan-

dard of living. This relationship has broader economic implications, particularly regarding reducing poverty [18]. Furthermore, numerous statistical studies have identified a strong correlation between a national per capita income and its poverty indicators, using both income and non-income dimensions of poverty [19].

The final factor to be examined is trade openness, which plays a crucial role in determining the level of extreme poverty. There has been a notable increase in the involvement of developing countries in global trade, which has corresponded with a reduction in extreme poverty worldwide [4]. Specifically, the share of developing countries in world trade has risen from 33 percent in 2000 to 48 percent [4]. This growth in trade participation has decreased the number of people living in extreme poverty and has also been crucial in creating jobs, spurring economic growth, and boosting productivity in developing nations. The study by Agusalim (2017) [20] examines the long-term effects of international trade openness on poverty in Indonesia. Past studies indicate varying impacts across different countries. The dataset includes export-import values, gross domestic product, income per capita, open unemployment rate (OUR), and poverty rate (POVR) from 1978 to 2015. The results reveal that while trade openness shows no significant effect on poverty in the short term, it does significantly reduce poverty over the long term. While trade openness shows no significant effect on poverty in the short term, it does have a significant impact on reducing poverty over the long term.

Numerous studies have been conducted across various regions to investigate the impact of fintech on poverty reduction, showing a general decrease in poverty rates. Emara and Mohieldin (2021) [5] reveal that fintech has a statistically significant effect on reducing extreme poverty within the entire sample, including both the MENA and SSA regions. The results confirm that a ten percent increase in the fintech index resulted in a fall in the poverty headcount ratio by about 0.06% for the full sample and with larger impacts of 0.37% and 0.39% in the MENA and SSA regions [5]. Similar research in China has found that fintech and third-party payment and credit services significantly boost household per capita consumption. More precisely, a 1% increase in fintech, third-party payment, and credit leads to increases in household per capita consumption of 1.337%, 0.720%, and 0.368%, respectively, according to the IV-GMM model. These results also suggest that economic growth, facilitated by advancements in fintech, effectively reduces poverty by increasing household consumption [21].

## 2.2. Hypothesis Development

Fintech has proven to be a powerful instrument in combating poverty by expanding access to financial services, supporting microfinance, facilitating digital payments, delivering financial education, and generating employment opportunities. In a nutshell, as fintech promotes financial development and inclusion, it also has the capacity to reduce poverty. Therefore, the hypothesis suggests that

since fintech influences these key factors, it can play a significant role in poverty alleviation.

The assumptions of this study are as follows.

H0: Fintech has no significant impact on poverty rates in Southeast Asian countries.

Ha: Fintech has a significant impact on poverty rates in Southeast Asian countries.

### 3. Research Methodology

This study is conducted as quantitative research. The data set uses statistical tools to measure and explain the relationship among the indicators under the research hypothesis.

#### 3.1. Data Collection

The dataset comprises a panel of observations from seven Southeast Asian countries: Thailand, Indonesia, Malaysia, Myanmar, the Philippines, Cambodia, and Vietnam, covering the period from 2018 to 2021. These countries are categorized into two groups based on their income levels: middle-income and lower-income, as classified by the International Monetary Fund (IMF). Thailand, Indonesia, and Malaysia are middle-income groups, while Myanmar, the Philippines, Cambodia, and Vietnam are lower-income groups. Given that each variable has a unique scale, it is crucial to standardize all variables to a consistent, quantitative scale prior to analysis. **Table 1** provides a detailed list of the macroeconomic and fintech variables used, including their definitions, units of measurement, abbreviations, and data sources.

The information input for this study included various types of data such as units, percentages, currencies, and numerical quantities. A standardization process is applied to maintain consistency across diverse data types. In this system, each data point is adjusted relative to the highest value observed in the dataset, transforming all data into a scoring-based system. This conversion involves dividing each value by the highest value and multiplying the result by 10 to create a 10-point scoring system. A score of 10 represents the highest performance in a category, while lower scores reflect relative performance within the established scoring framework.

For some variables, such as the poverty rate, direct scoring would mean that a higher rate (negative in reality) would misleadingly result in a higher score (intended to be positive). To correct this, such variables are calculated inversely. That means, instead of scoring the poverty rate directly, it is scored in such a way that lower poverty rates (which are positive) receive higher scores. This inversion ensures that all variables maintain the intended meaning, where higher scores consistently reflect better outcomes. Therefore, using relative ratios ensures a uniform ratio system across all data types and their respective definitions. This standardization technique allows a deeper analysis of the data.

**Table 1.** Definitions of economic variables.

Variable	Details		
	Table column subhead	Unit	Source
Poverty Rate ( <i>pov</i> )	The poverty headcount ratio at \$2.15 per day represents the proportion of the population living below the threshold of \$2.15 a day.	Percent	Statista
Fintech Index ( <i>fin</i> )	The study uses five different measures to characterize fintech index adoption: the number of access points per 100,000 adults at a national level, the percentage of people in the population who use the internet, the percentage of people in the population who report having an account at a commercial bank, the percentage of adults who report having an account with a formal financial institution or a mobile provider, and the volume of electronic money transactions.	Percent, Volume, Number	UN Capital Development Fund
Trade Openness ( <i>to</i> )	The sum of net exports of goods and services, net primary income, and net secondary income.	Percent of GDP	World Development Indicators
Household Consumption ( <i>hc</i> )	The amount of final consumption expenditure made by resident households to meet their everyday needs	Percent	World Development Indicators
GDP ( <i>gdp</i> )	GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for the depreciation of fabricated assets or for the depletion and degradation of natural resources.	Percent	International Monetary Fund (IMF)
Inflation ( <i>inf</i> )	Consumer price index reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as annually.	Percent	International Monetary Fund (IMF)

### 3.2. Empirical Models

This research utilizes two analytical tools: linear regression and Pearson correlation coefficient analysis. Linear regression analysis explains how independent variables affect dependent variables. The poverty headcount ratio of \$2.15 a day as a percentage of the population is used as a proxy for poverty. The poverty headcount ratio at \$2.15 per day represents the proportion of the population living below the threshold of \$2.15 a day, considering purchasing power adjustments at 2017 prices (World Bank, 2021) [9]. The set of dependent variables contains common deter-

minants of poverty, including GDP per capita, inflation rate, trade openness as a percentage of GDP, household consumption, and fintech index indicators. The measures of the fintech index include the number of access points per 100,000 adults at a national level, the percentage of people in the population who use the internet, the percentage of people in the population who report having an account at a commercial bank, the percentage of adults who report having an account with formal financial institutions or mobile providers, and the volume of electronic money transactions constructed to create the fintech index.

Pearson correlation coefficient analysis explains how each indicator correlates with another indicator as a pair, providing in-depth details on the impact and direction of the coefficient. Following the initial hypothesis, the collected data are calculated to explore the relationship between fintech and its effect on poverty in seven Southeast Asian countries.

The regression equation represents the direct effect of fintech on poverty reduction.

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \varepsilon$$

where:

$Y$ : The dependent variable Denotes *pov*, the poverty headcount ratio, defined as the number of individuals living on less than \$2.15 per day.

$b_0$ : The intercept term.

$b_1$ : The slope coefficient, each associated with a paired independent variable  $i$ .

$X_1$ : Denotes the independent variables, where *fin* represents fintech indicators,

$X_2$ : Denotes *to* represents trade openness.

$X_3$ : Denotes *hc* represents household consumption.

$X_4$ : Denotes *gdp* represents GDP.

$X_5$ : Denotes *inf* represents inflation.

$\varepsilon$ : The random error component in the model.

## 4. Analysis Results

Research analysis has shown the relationship between dependent and independent variables. The results for linear regression and Pearson correlation can be seen below.

### 4.1. Linear Regression

Regression analysis concludes the analysis of poverty using fintech and economic factors. The equation below indicates that the weight coefficients of independent variables affect the poverty of two groups: middle-income and lower-income countries.

#### 4.1.1. Linear Regression of Middle-Income Countries

Regression Equation:

$$pov = -7.16 + 0.920 \textit{fin} + 0.758 \textit{to} - 0.150 \textit{hc} + 0.044 \textit{gdp} + 0.487 \textit{inf}$$

The equation represents the relationship between poverty levels and various

factors, including fintech and economic factors in middle-income countries. The analysis provides critical insights into the complex dynamics prevalent in middle-income economies. Notably, where a higher *pov* signifies lower poverty levels, the positive coefficients for financial technology (*fin*), trade openness (*to*), GDP (*gdp*), and the inflation rate (*inf*) all suggest a positive association with poverty reduction. In contrast, the negative coefficient associated with household consumption (*hc*) indicates that an increase in household consumption is correlated with a higher poverty rate (*pov*). These findings highlight the potential impact of technological advancements, international trade, economic output, inflation, and household consumption on poverty levels.

These regression results offer valuable insights for developing effective policies. Advancements in financial technology, especially in financial inclusion, can drive economic growth and reduce poverty in middle-income countries in the Southeast Asia region. Additionally, the positive impacts of trade openness and GDP growth underline the importance of adopting international trade and economic stability to reduce poverty. Managing inflation carefully is also vital to prevent negative effects on poverty levels. The negative relationship between household consumption and poverty rates suggests that enhancing living standards and encouraging consumption are effective strategies for poverty reduction. Overall, the findings advocate for a comprehensive policy strategy that addresses the interconnectedness of these economic factors to combat poverty effectively.

#### 4.1.2. Linear Regression of Lower-Income Countries

Regression Equation

$$pov = 1.24 + 0.792 \textit{fin} + 0.473 \textit{to} + 0.451 \textit{hc} - 0.003 \textit{gdp} - 0.856 \textit{inf}$$

The equation represents the relationship between poverty levels and several factors, including fintech and economic factors in lower-income countries. The insights gained from this analysis provide valuable considerations for understanding poverty dynamics within lower-income economies. The positive coefficient for financial technology (*fin*) suggests that improving this area can significantly enhance poverty reduction. Similarly, positive coefficients for trade openness (*to*) and household consumption (*hc*) indicate that higher levels of these factors contribute to poverty reduction. On the other hand, the negative coefficient for the inflation rate (*inf*) suggests that higher inflation rates may slow down the progress of poverty reduction efforts. Additionally, while the GDP (*gdp*) coefficient is negative, its small magnitude suggests a non-significant impact on poverty in this setting.

The regression results offer actionable insights for policymakers and stakeholders aiming to formulate effective strategies for poverty reduction. The positive impact of financial technology underscores the importance of investing in technological advancements, and digital financial services can significantly improve poverty reductions in lower-income countries in Southeast Asia. Policies could be shaped to promote inclusive access to these technologies, ensuring

broad-based benefits. The positive associations with trade openness and household consumption underscore the importance of promoting economic growth and encouraging global economic integration. However, the negative impact of inflation on poverty reduction highlights the need for implementing inflation control measures to mitigate negative impacts on the population. In summary, an integrated approach that combines technological innovation, economic expansion, and targeted policy interventions is crucial for effectively combating poverty.

## 4.2. Coefficient in Linear Regression

In linear regression, a coefficient represents the numerical value multiplied by an independent variable in the regression equation. This coefficient quantifies the relationship between the independent variable and the dependent variable.

In **Table 2**, a variance test was performed on the result of the regression analysis in middle-income countries. In this context, the variable *fin* is the only one that shows a statistically significant positive with the poverty rates at 95% confidence levels, suggesting a positive relationship with poverty reduction. Other variables such as *to*, *gdp*, and *inf* also exhibit positive relationships with poverty rates, but these factors are not statistically significant. On the other hand, the variable *hc* demonstrates a negative relationship with poverty rates, but this correlation is also statistically insignificant.

**Table 2.** Coefficient in linear regression in middle-income countries.

Variables	Details			
	Coef	t-value	P-value	VIF
Constant	-7.16	-1.08	0.323	
<i>fin</i>	0.920	2.98	0.025	3.24
<i>to</i>	0.758	1.35	0.226	84.94
<i>hc</i>	-0.150	-0.26	0.802	88.44
<i>gdp</i>	0.044	0.18	0.865	4.03
<i>inf</i>	0.487	1.88	0.110	3.34

**Table 3.** Coefficient in linear regression in lower-income countries.

Variables	Details			
	Coef	t-value	P-value	VIF
Constant	1.24	0.38	0.711	
<i>fin</i>	0.792	2.17	0.055	1.87
<i>to</i>	0.473	1.71	0.117	2.80
<i>hc</i>	0.451	1.28	0.229	10.97
<i>gdp</i>	-0.003	-0.01	0.996	10.01
<i>inf</i>	-0.856	-2.51	0.031	2.22

In **Table 3**, a variance test has been conducted on the result of regression analysis in lower-income countries. In this context, the variable *fin* shows a statistically significant positive with the poverty rates at 95% confidence levels, suggesting a positive relationship with poverty reduction. The P-value is slightly above the typical significance threshold, indicating marginal statistical significance. Furthermore, the variable *inf* also shows a statistically significant negative with the poverty rates at 95% confidence levels, implying that higher inflation is associated with worsening poverty conditions. Other variables, such as *to* and *hc*, also exhibit positive relationships with poverty rates, but these factors are not statistically significant. On the other hand, the variable *gdp* demonstrates a negative relationship with poverty rates, but this correlation is also statistically insignificant.

### 4.3. Pearson Correlation Coefficient

The Pearson correlation coefficient (**Table 4**) based on an analysis of real-world data, shows relationships between key variables and poverty improvement metrics in middle- and lower-income countries. Financial technology (*fin*) demonstrates a strong positive correlation with poverty rates in middle-income countries (0.734) and lower-income countries (0.619). This indicates that advancements in financial technology correspond with improvements in poverty conditions, highlighting the importance of technological innovations in promoting economic development.

The Pearson correlation coefficient (**Table 4**) shows that trade openness (*to*) has a very strong positive correlation of 0.945 with poverty rates in middle-income countries, indicating a significant link between increased international trade and improvements in poverty conditions. However, the correlation of trade openness in lower-income countries is considerably weaker at 0.246; while there is still a positive impact of trade on poverty reduction, it is significantly less pronounced in lower-income countries, possibly due to varying trade capacities or economic structures. Household consumption (*hc*) demonstrates a strong negative correlation with both middle-income countries (-0.954), implying that higher household consumption levels are closely linked to a reduction in poverty. On the other hand, household consumption in lower-income countries reflected the opposite result.

**Table 4.** Pearson correlation coefficient of middle and lower-income countries.

Variables	Poverty Rates	
	Middle-Income Group	Lower-Income Group
<i>fin</i>	0.734	0.619
<i>to</i>	0.945	0.246
<i>hc</i>	-0.954	0.605
<i>gdp</i>	-0.374	0.552
<i>inf</i>	0.704	-0.128

Furthermore, GDP growth (*gdp*) reveals a negative correlation with both middle-income ( $-0.374$ ), higher GDP may help reduce poverty, though the relationship is not as strong as other factors. The analysis in lower-income countries reflected different results. As lower-income countries' GDP increases, the poverty rate increases ( $0.552$ ). The inflation rate (*inf*) positively correlates with poverty rates in middle-income countries ( $0.704$ ), suggesting that higher inflation tends to correlate with increased poverty, possibly due to higher living costs not being matched by income growth. The inflation rates in lower-income countries show a weak negative correlation ( $-0.128$ ), implying that inflation has a slightly different and less pronounced impact on poverty.

**Table 4** reveals significant differences in how economic variables interact with poverty in middle- and lower-income countries. Financial technology and trade openness correlate positively with poverty reduction in both groups, though the effects are stronger in middle-income countries. Household consumption and GDP data suggest positive impacts on reducing poverty. Inflation shows varying effects associated with increasing poverty in middle-income countries but less in lower-income countries. Policymakers can use these correlations to develop targeted strategies such as promoting the adoption of financial technology, increasing international trade openness, and regulating household consumption patterns. It is important to note that the effectiveness of these measures may differ across various dimensions of poverty reduction.

## 5. Conclusions

The regression equation outlines the relationship between middle-income economies' poverty rates, financial technology, and economic factors. A higher Y (dependent variable) represents lower poverty levels in this model. The positive coefficients for financial technology (*fin*), trade openness (*to*), GDP (*gdp*), and the inflation rate (*inf*), suggest that these factors contribute to poverty reduction. On the other hand, the negative coefficient for household consumption (*hc*) implies that an increase in household consumption is linked to a rise in the poverty rate. These findings underscore the potential impact of technological advancements, international trade, economic output, inflation, and household consumption in influencing poverty levels. The analysis provides policy insights, emphasizing the importance of utilizing financial technology, enhancing access to financial services, promoting international trade, ensuring stable economic growth, and managing inflation effectively to address the complex challenges of reducing poverty.

In the lower-income segment, improvements in financial technology (*fin*) could significantly reduce poverty. Additionally, higher levels of trade openness (*to*) and household consumption (*hc*) are associated with reduced poverty. Conversely, a negative coefficient for the inflation rate (*inf*) indicates that higher inflation may worsen poverty reduction efforts. Although the GDP (*gdp*) coefficient is negative, its low magnitude implies that its impact on poverty is negligible in this context. These insights are crucial for understanding the dynamics of

poverty within lower-income economies and guiding effective policymaking.

The Pearson correlation analysis shows the relationship between economic variables and poverty rates across middle- and lower-income countries. Financial technology and trade openness positively correlate with poverty reduction in both groups, with more pronounced effects observed in middle-income countries. Additionally, household consumption and GDP are linked to decreasing poverty levels in middle-income countries. Household consumption in lower-income countries leads to an increase in poverty rate as household spending reduces family's wealth. This causes families to struggle to make ends meet and end up depleting their resources even further by consuming items that do not contribute to their long-term well-being. The analysis in lower-income countries reflected different results. As lower-income countries' GDP increases, the poverty rate increases. This relationship can happen when people's wealth is highly unbalanced and focused only on some area or some group of people rather than the whole community. It underscores the importance of implementing policies promoting economic growth while ensuring that the benefits are shared equitably among all segments of society.

The impact of inflation varies, tending to have a greater impact on poverty rates in middle-income countries while having a lesser effect in lower-income countries. These variations provide policymakers with valuable insights, allowing them to tailor strategies such as enhancing financial technology adoption, promoting greater trade openness, and managing household consumption to reduce poverty rates in Southeast Asian regions. It is crucial to recognize that the success of these policies differs significantly across regions.

As with most studies, this research also has certain limitations. One key limitation is that the data collected from 2018 to 2021 may not adequately capture the long-term effects of fintech on poverty reduction. Although it is presumed that the general context has not significantly shifted in recent years, future studies should consider exploring fintech with more current data and potentially larger samples. This would allow for a better understanding of how various factors, such as financial technology, trade openness, household consumption, GDP growth, and inflation rates, impact poverty levels. In addition, the data used to develop fintech indicators is based on self-reported data, such as the percentage of adults with a formal financial institution account or mobile money providers. This method could introduce errors from misreporting, or misunderstandings related to the survey questions. Future research should aim to develop more comprehensive indicators for measuring fintech. Despite certain limitations, this study contributes to the existing body of literature on the impact of fintech on poverty reduction and should prove valuable for policymakers and stakeholders. It also lays the groundwork for further research in this important area.

### **Conflicts of Interest**

The author declares no conflicts of interest.

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