#### Research Article

# **Economic Growth and Financial Inclusion in Developing Countries**

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#### Abstract.

The banking sector has an important role in the country's economy because banking can influence the economic conditions of a country. This research aims to analyze the influence of banking stability on economic growth in developing countries. This research uses secondary data from cross-section data from 35 developing countries with a research period from 2011-2022. The data analysis technique used is based on panel corrected standard error (PCSE). Results of stability research on the influence of economic growth in developing countries. Banking stability can increase economic growth because stable banks are able to support economic activities through providing credit, managing risk, and increasing public trust.

Keywords: economic growth, financial inclusion, panel corrected standard error

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# 1. Introduction

The ability of a country to provide various types of economic goods to its population in the long term with technological progress and institutional adjustments (1). Economic growth is a process that is supported by various economic sectors, one of which is the financial sector. The financial sector is a locomotive for real sector growth through capital accumulation and technological innovation to improve the economy. The financial sector is able to mobilize savings in households to facilitate consumption capacity, increase the amount of savings, and accumulate human capital (2). The financial sector is also able to provide services to banking service users with various high quality financial instruments with lower risk, lower transaction and information costs, and encourage specialization. (3). Financial development has played a leading role in many developing economies (4).

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The World Bank suggests the importance of policies that can encourage improvements in the financial sector in various countries in order to achieve financial inclusion. A high level of public financial inclusion influences the way in which finance and financial services are managed and made decisions, thereby improving the economy in a country. This is in line with the global objectives of the Sustainable Development Goals (SDG's), including increasing sustainable and inclusive economic development, employment and decent work, eradicating poverty, and reducing social inequality (3). Financial inclusion encompasses a range of services, including savings accounts, credit facilities, insurance, and payment mechanisms. The framework suggests that by increasing access to these services, financial inclusion can have a profound impact on economic growth in developing nations (5). In its development, efforts to increase financial inclusion are not only limited to developing financial products and services, but also include four other components of financial inclusion, such as expanding access to finance, availability of financial products and services, use of financial products and services, as well as improving the quality of use of financial products and services. Financial inclusion is a key pillar to country development since financial inclusion ensures that everyone benefits from banking services and help to eradicate poverty and reduce inequality (6).

Measurement of financial inclusion is based on three indicators, namely banking penetration, availability of banking services, and use of banking services (7) (8). Financial inclusion can increase people's access to services and services from formal financial institutions. The public's lack of access to formal financial services is caused by various obstacles, including a lack of public knowledge of the functions of financial institutions and the incompatibility of the products offered with the needs of the community, especially for people with low incomes. Low-income people improve their lives by using formal financial services at low costs. Access to available financial products and services can help start and expand businesses, invest in education or health, manage risk, and weather financial shocks, which can improve overall quality of life.

Bangladesh government policy encourages financial inclusion to alleviate poverty so that economic growth increases (5). Financial inclusion contributes to economic growth in developing countries, so the governments of these countries must develop plans to improve finance (9). The influence of financial inclusion on economic growth is more pronounced in developing countries compared to developed countries. The policy insights to enable the policy-makers in designing policies that ensure efficient and inclusive financial system on an equitable basis to achieve sustainable economic

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growth (9). Financial inclusion has a beneficial impact on economic growth through human resources, so human resource development must be increased (10).

Financial inclusion, measured as account ownership at a financial institution or with a mobile-money-service provider, is pivotal to integrating the unbanked population into the economic mainstream, fostering inclusive economic growth (11).

The relationship between financial inclusion and economic growth has become a significant concern for developing countries, and most studies on this topic have shown that the former exerts a positive effect on the latter (12) (13) (14) (15)

## 2. Methods

The unit root test is a test used to find out whether the time series data used in research is stationary or not. In practice, this test is often used to determine whether data is stationary or not. When time series data is not stationary, it can be said that the data experiences a unit root problem. If the data is not stationary, a false regression will be obtained, an autocorrelation phenomenon will occur and the regression results cannot be generalized to different times. If the data used is stationary, then OLS regression analysis can be used, but if the data does not show stationary, then the data needs to be seen to be stationary through the degree of integration test.

The ADF test formula is as follows:

$$\Delta Y_t = \alpha_1 + \alpha_2 T + \Delta Y_{t-i} + a_i \sum_{i=1}^m \Delta Y_{t-1} + e_t$$

The Cointegration Test functions to determine whether the dependent and independent variables have a long-term relationship or not. The purpose of this cointegration is to find out whether the cointegrated residuals are stationary or not. If the variables are cointegrated then there is a stable relationship in the long term. On the other hand, if there is no cointegration between variables, the implication is that there is no long-term relationship. The term cointegration is also known as error, because deviations from long-term equilibrium are corrected gradually through a series of partial short-term adjustments.

The analytical method used in this research is a quantitative descriptive analysis method, where the data used is secondary data from world bank starting from 2011

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– 2022. Data panel corrected standart error model for economic growth and financial inclusion is as follows:

$$PE_{it} = \alpha + \beta_1 NPL_{it} + \beta_2 IFI_{it} + +u_{it}$$

## 3. Result and Discussions

After carrying out the unit root test and cointegration test, the next stage is analysis Panel Corrected Standart Error to test pooled data, namely a combination of cross section (country) data with time series (annual) data. The results of the PCSE panel are better than ordinary panels, because they can be cointegrated long term and have a lag distribution that is most in line with theory.

TABLE 1: Hasil Estimasi PCSE.

Variable	Koefisien	Std.Error	z	prob
NPL	0270482	.0626807	-0.43	0.666
IFI	2435809	1289641	1.89	0.059
Cons	3522499	373042.4	9.44	0.000

Based on PCSE estimates, the variables used in Banking Stability are NPL (Non Performing Loan) & IFI (Financial Inclusion Index). The probability value of the NPL variable is 0.066 with a significant alpha level of 0.05%. The probability value of IFI is 0.059 with an alpha significance level of 0.05%. From the estimation results of this data processing, it is clear that the NPL % IFI variable has no significant effect on economic growth. According to the test results of this research analysis model, it is stated that the banking stability variable which is proxied by the use of the NPL (Non Performing Loan) & IFI (Financial Inclusion Index) variables has a negative effect on economic growth, so that it can reduce the ability of the banking sector to support economic growth. Financial inclusion and openness can also contribute to banking stability in developing countries (Trevie et al.,2021). The interaction between financial inclusion and openness has a significant positive effect on banking stability, which indicates that the more funds a bank obtains from implementing financial inclusion and openness policies, the greater the bank's potential to maintain its stability (Shalihina & Safuana, 2021).

Several authors Rajan and Zingales, (1986) provides further evidence that the level of development in the financial sector acts as an important contributor to economic growth. Terhi Joki dan Pierre Monin (2013) explores the relationship between banking sector stability and the subsequent evolution of real output growth and inflation, where

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the research results show that banking sector stability has a positive impact on growth. The relationship between banking stability and economic growth is a topic that is widely researched in the economic literature. Good banking stability is considered an important prerequisite for achieving sustainable economic growth, because stable banks are able to support economic activities through providing credit, managing risks and increasing trust. A stable bank has the ability to consistently provide credit to businesses and individuals. These credits are important for investment in infrastructure, technology, and increasing production capacity, all of which are key drivers of economic growth.

# 4. Conclutions

The influence of financial inclusion on economic growth in developing countries illustrates that the higher the financial inclusion, the higher the economic growth. Banking stability can increase economic growth, because stable banks are able to support economic activities through providing credit, managing risk, and increasing public trust.

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