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The Effect of Financialization on Economic Growth in Developing Countries with Large Financial Sectors

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ABSTRACT

In recent decades, financialization has emerged as a significant phenomenon shaping global economies. It refers to the increasing role of financial markets, institutions, and practices in the overall functioning of economies, often at the expense of the real economy. The **purpose** of the study is to identify the impact of financing on economic growth in developing countries with a large financial sector. While developing countries are typically characterized by lower levels of economic development and industrialization, some of them may have relatively large financial sectors. In this study, we profile seven developing countries with significant financial sectors. The countries include Brazil, India, Indonesia, Malaysia, Mexico, Singapore, and South Africa. The paper begins by examining the theoretical perspectives on financialization, which argue that financialization should promote economic growth through the Gross Value Added. We study the effect of financialization on economic growth using panel data econometric models, which include the Feasible Generalized Least Squares, Pooled Ordinary Least Squares, Fixed Effects, and Random Effects. The study deploys annual data from 1996 to 2022. This study finds that financialization has a positive and highly significant effect on the economic growth of developing countries with large financial sectors.

Keywords: financialization; economic growth; panel data econometrics; developing countries

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INTRODUCTION

Studying the effect of financialization on economic growth in developing countries with large financial sectors is important. Financialization is a relatively recent phenomenon in many developing countries, and its impact on economic growth is not well understood. Therefore, studying this relationship can provide valuable insights into the potential benefits and risks of financialization for economic development. Understanding the effect of financialization on economic growth in developing countries can inform policy decisions aimed at promoting sustainable economic development and reducing the risk of financial instability. While developing countries are typically characterized by lower levels of economic development and industrialization, some of them may have relatively large financial sectors. In this study we profile 7 developing countries with significant financial sectors. The countries include Brazil, India, Indonesia, Malaysia, Mexico, Singapore, and South Africa.

Background

The effect of financialization on economic growth has been the subject of numerous studies in recent years. However, most of these studies have focused on developed economies, and there is a relative paucity of research on the relationship between financialization and economic growth in developing countries with large financial sectors. Developing countries have experienced a significant expansion of their financial sectors over the past few decades, with many countries undergoing financial liberalization and deregulation. According to Gimet et al. [1] this has led to concerns about the impact of financialization on economic growth, particularly given the greater vulnerability of developing countries to financial instability. Several studies have found a positive relationship between financial development and economic growth in developing countries, suggesting that a well-functioning financial sector can contribute to economic development. However, studies by Beck et al. [2] have highlighted the potential negative effects of financialization, including increased income inequality, financial instability, and the misallocation of resources towards unproductive activities. Further research is needed to better understand the impact of financialization on economic growth in developing countries with large financial sectors, and to identify

policies that can promote sustainable economic development while minimizing the potential risks associated with financialization.

Motivation

Studying the effect of financialization on economic growth in developing countries with large financial sectors is particularly important due to the following motivations:

- Developing countries are increasingly becoming more integrated into the global financial system, and large financial sectors have emerged as a result [3]. Understanding the relationship between financialization and economic growth in these countries is crucial for policy decisions aimed at promoting sustainable economic development.
- In many developing countries, the financial sector has grown at a faster rate than other sectors of the economy, leading to concerns about the potential negative impact of financialization on economic growth [4].
- Developing countries are often more vulnerable to financial crises, and large financial sectors can increase the risk of financial instability, which can have negative impacts on economic growth [5].
- Large financial sectors can also exacerbate income inequality and may not contribute to broad-based economic growth, particularly if the financial sector is focused on short-term profit-maximization rather than long-term investments in productive activities [6].
- The impact of financialization on economic growth in developing countries with large financial sectors is critical for sustainable economic development and social welfare.

Aims and Objectives

The aims and objectives of this study on the effect of financialization on economic growth are:

- to examine the relationship between financialization and economic growth, and to identify the main factors that drive this relationship;
- to determine the extent to which financialization contributes to or detracts from economic growth over the long run;
- to provide empirical insight for promoting sustainable economic growth in the context of financialization, considering the potential risks and benefits associated with financialization.

Research Questions and Hypothesis

The study has four questions in which the hypotheses are formulated, research methods are constructed, and answers are provisioned in the subsequent sections.

i. How does financialization affect economic growth in developing economies with large financial sectors?

ii. What is the effect of financialization on economic growth in developing economies with large financial sectors?

iii. What is the key channel through which financialization affects economic growth in developing economies with large financial sectors?

The hypotheses of this study are formulated following the research questions above and are described as:

H_1: Financialization has a statistically significant effect on economic growth.

H_2: The effect of financialization on economic growth is positive.

H_3: There is a causal relationship between financialization and growth in the long-term.

LITERATURE REVIEW

Hartwell [7] defines financialization as the increase in the market share of the financial sector relative to other sectors in the overall economy. Foster [8] defines financialization as "the long-run shift in the centre of gravity of the capitalist economy from production to finance." Lapavitsas [9] postulates that financialization is "the real capital's profit from financial channels rather than commodity production and trade." Palley [10] defines financialization as "the process whereby financial markets, financial institutions, and the financially elites gain greater influence over economic policy and economic outcomes." These processes are wildly acceptable features of financialization by various scholars. According to Sawyer [11] the term "Financialization" as coined in the 1980s, is in alignment with the rise of neoliberalism and globalization. This timing is viewed as the start of an era of the continuity of financialization processes that has already began in earlier decades.

The empirical results of the effect of financialization on economic growth can be varied. The variegated results are obtained from different financial development indicators, empirical methods, sample size, and econometrics specifications. According to Akyüz [12] economic growth stagnation should be expected from an exceptionally large financial sector. Different countries have different economic growth, policies, financial systems, institutions, cultures, and legal systems. Developed countries have better institutions and public policies for an enabling environment. It is, however, expected that developed countries will tend to have developed financial markets. What is important to economists is how these financial markets affect the national economy.

Fufa and Kim [13] find that bank credit is significant in explaining financialization on economic growth. Using panel data models, they found that an increase in bank credit has a positive effect on GDP growth in 64 countries. Rioja and Valev [514] found that private credit as representing financialization increases economic growth in 74 countries. They also postulate that finance may have an uncertain effect in countries with low levels of financial system development. Afsar et al. [14] estimated the effects of financialization on economic growth in the G8 countries and found a positive relationship. Their financialization proxies included bank profitability stated as income before tax, stock market capitalization rate, and securities, which are bank assets. Through our analysis, bank credit to the private sector has empirical evidence of being an important driver of financialization and has a strong link with economic growth. The study by Ehigiamusoe and Samsurijan [6] shows that, from 1980 to 2017, there has been a positive correlation between credit to private sector and real GDP per capita, growth rate of real GDP per capita, and GDP growth rate. This has recently offered a qualitative view that an increase in the financial sector might have increased the growth of the world economy.

According to Pagano [15], developed financial systems can accelerate economic growth, while underdeveloped financial systems can retard economic growth. Some studies from the high-income countries on the African continent tend to hold related results using financial sector indicators. Akpan et al. [16] assessed the effects of financial sector development on economic growth in Nigeria and found that total bank deposits and market capitalization has a positive effect on GDP growth in the long-term. They found that these variables and GDP growth tend to aggravate each other. Sunde [17] applied a similar model of cointegration for South Africa and found that total credit to the private sector had a positive effect on growth in the long-term and that granger causality exists. Rousseau and D'Onofrio [18] applied the vector autoregressive model and found that domestic credit by banks and private sector increased economic growth in 22 Sub-Saharan African countries. Financialization increases the dominance of financial markets and financial institutions in Africa's leading economies. This trend has been driven by several factors, including the growth of foreign investment in African countries, the expansion of financial services, and the liberalization of financial markets. One of the main impacts of financialization in Africa has been the growth of the financial sector. This has led to an increase in the number and size of financial institutions, including banks, insurance companies, and investment firms. However, the benefits of this growth have not been evenly distributed, with many African countries continuing to face significant levels of poverty and inequality. Another impact of financialization in Africa has been the rise of debt.

According to Agyeman [19], many African countries have become increasingly dependent on debt financing from foreign investors and international financial institutions. This has led to concerns about debt sustainability and the potential for debt crises in the future. Furthermore, financialization has also led to a shift in the focus of economic development in Africa. Rather than focusing on the development of productive sectors of the economy, such as agriculture and manufacturing, many African countries have prioritized the growth of the financial sector. This has raised questions about the long-term sustainability of this approach, as well as its potential to exacerbate inequality. The impact of financialization in Africa is complex and multifaceted, with both potential benefits and risks. It is important for African policymakers to carefully consider the potential consequences of financialization, and to ensure that financial sector growth is balanced with the needs of the broader economy and society.

It is not all scholars that found a positive link between finance and growth. Gimet et al. [1] tested the link between financialization and the macroeconomy for 26 high-income countries. They tested the effects of financialization on gross capital formation, wage share, and GDP growth. It has been found that excessive leverage decreases wages, real-sector investment, and economic-growth, and increases financial fragility. The study found that financializations had a significantly negative effect on the real sector of the economy.

THE DATA

From a sample of 26 years, we collect data from Fitch Solutions, which is a data vendor that has access to macroeconomic data from official statistics of many countries.* *Table 1* depicts a list of variables, which includes the dependent, GDP growth rate (GDP), and independent variables, Finance nominal Gross Value Added (FGVA). The control variables included are the fixed capital formation, savings rate, and private final consumption.

The Measure of Financialization and Economic Growth

Finance Gross Value Added (FGVA) is a useful aggregate measure of the size and contribution of the financial sector to the economy and can be used to track changes in the size of the sector over time [20]. FGVA is a measure of the value added by the financial sector to the economy in terms of goods and services produced and includes activities in banking, insurance, and asset management. FGVA is calculated as the sum of the operating profits earned by financial institutions, compensation of employees of the financial sector, taxes paid by the financial sector to the government on their production and import activities, and less subsidies received by the financial sector from the government. FGVA is a leading indicator because it directly reflects the shift of capital from other sectors of the economy to the finance sector. Therefore, we assume that the variable, FGVA, will increase when there is growth in aggregate finance. The shift of capital to the financial sector is the hallmark of financialization [8].

We make use of the nominal FGVA percentage change year-on-year as the key indicator of financialization. The year-on-year percentage change in nominal GVA is calculated by taking the difference between the nominal GVA in the current year and the previous year and dividing it by the nominal GVA of the previous year. 100 to express the change as a percentage then multiply the resulting figure. The year-on-year percentage change in nominal GVA can provide insights into the growth and performance of the financial sector over time and can be used to compare the performance of the financial sector across different periods and countries.

The year-on-year percentage change nominal GDP is the total value of all final goods and services produced in an economy at current market prices. The percentage change in nominal GDP is calculated by taking the difference between the nominal GDP in the current year and the previous year and dividing it by the nominal GDP of the previous year. The resulting figure is then multiplied by 100 to express the change as a percentage. The year-on-year percentage change in nominal GDP can provide insights into the growth and performance of an economy over time and can be used to compare the performance of different economies across different periods. It is an important indicator of economic activity and can influence various policy decisions, such as monetary policy, fiscal policy, and investment decisions [21].

Correlations

FGVA measures the value added by the financial sector to the economy, while GDP measures the total value of goods and services produced in an economy. The financial sector plays an important role in the overall economy and its performance can have an impact on GDP growth. Panel A of *Fig. 1* depicts the scatterplot of the connection between FGVA and GDP. It shows that changes in FGVA are correlated with changes in GDP over time. This tells us that when aggregate financial activity increases, both nominal FGVA and nominal GDP are likely to increase. Conversely, during economic downturns, both nominal FGVA and nominal GDP may decrease as the financial sector contracts and the overall economy slows down.

Panels B and D show that finance and capital formation are positively correlated. Finance can also

* Fitch Solutions. Data Tools. FitchConnect. 2023. URL: https://app.fitchconnect.com/crir/data-tools (accessed on 01.08.2024).

Table 1

Description of Variables

Code	Variable	Definition
gdp	Nominal GDP, USD, % chg y-o-y	Gross domestic product (GDP) is the value of final goods and services produced annually minus intermediate consumption
fgva	Finance nominal GVA, USD, % chg y-o-y	Gross value added (GVA) refers to the value of production less the value of any intermediate inputs. GVA given for the finance sector includes insurance activities
fcap	Fixed capital formation, USD, % chg y-o-y	Represents the value of capital assets accumulated by producers. Capital assets refer only to tangible assets. The cost of depreciation and the value of non-producing assets are also taken into consideration
savx	Savings, USD, % chg y-o-y	Gross national savings represents the domestic level of savings by individuals, businesses and government combined
pcon	Private final consumption, % of GDP	Sum of all household spending on goods and services within the economy. Also include spending by non-profit institutions serving households

Source: Compiled by the author.

boost the formation of capital and the demand for capital can increase provision of finance. Panel C shows that the increase in capital is associated with an increase in economic growth. These trends are consistent with the theory of financialization (Mader et al., 2020).

There is typically a positive correlation between FGVA and GDP, as the finance sector is an important component of the overall economy, and its performance is intricately linked to economic growth. This is further supported by the correlation matrix in *Fig. 2*, which depicts that the correlation between finance and economic growth is an estimated 72.2%. This explains that there is a strong correlation between financialization and economic growth. When the economy is growing, businesses and individuals tend to increase their demand for financial services, such as loans, investment advice, and insurance, which can boost the revenue and profitability of financial institutions.

However, the strength of the correlation between FGVA and GDP can vary depending on several factors, such as the overall health of the financial sector, the structure of the economy, and the level of government regulation. In some cases, the finance sector may experience growth that outpaces the broader economy, while in other cases it may lag. It is worth noting that correlation does not necessarily imply causation. While FGVA and GDP may be correlated, other factors such as capital formation, interest rates, inflation, and government policy can also have an impact on both variables independently.

METHODOLOGY

We utilize the panel data econometrics to study the relationship between financialization and economic growth. All the variables in the model have data availability, making our panel balanced. To conduct a panel data analysis of the effect of financialization on economic growth, we applied the necessary panel data steps [22]. Firstly, we identified 7 developing countries with large financial sectors. Secondly, we collect data on financialization, economic growth, and control variables. Thirdly, we deploy the appropriate econometric models, which includes Feasible Generalized Least Squares (FGLS), Pooled Ordinary Least Squares (POLS), Fixed Effects (FE), and Random Effects (RE). According to the theoretical and empirical literature, we estimate **Equation 1**, which reflects the general linear representation of our panel data econometric models.

$$GDP_{i,t} = \beta_1 FGVA_{i,t} + \beta_2 FCAP_{i,t} + \\ + \beta_3 SAVX_{i,t} + \beta_4 PCON_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where $GDP_{i,t}$ is the nominal *GDP* growth, is the Finance nominal Gross Value Added, $FCAP_{i,t}$ is the

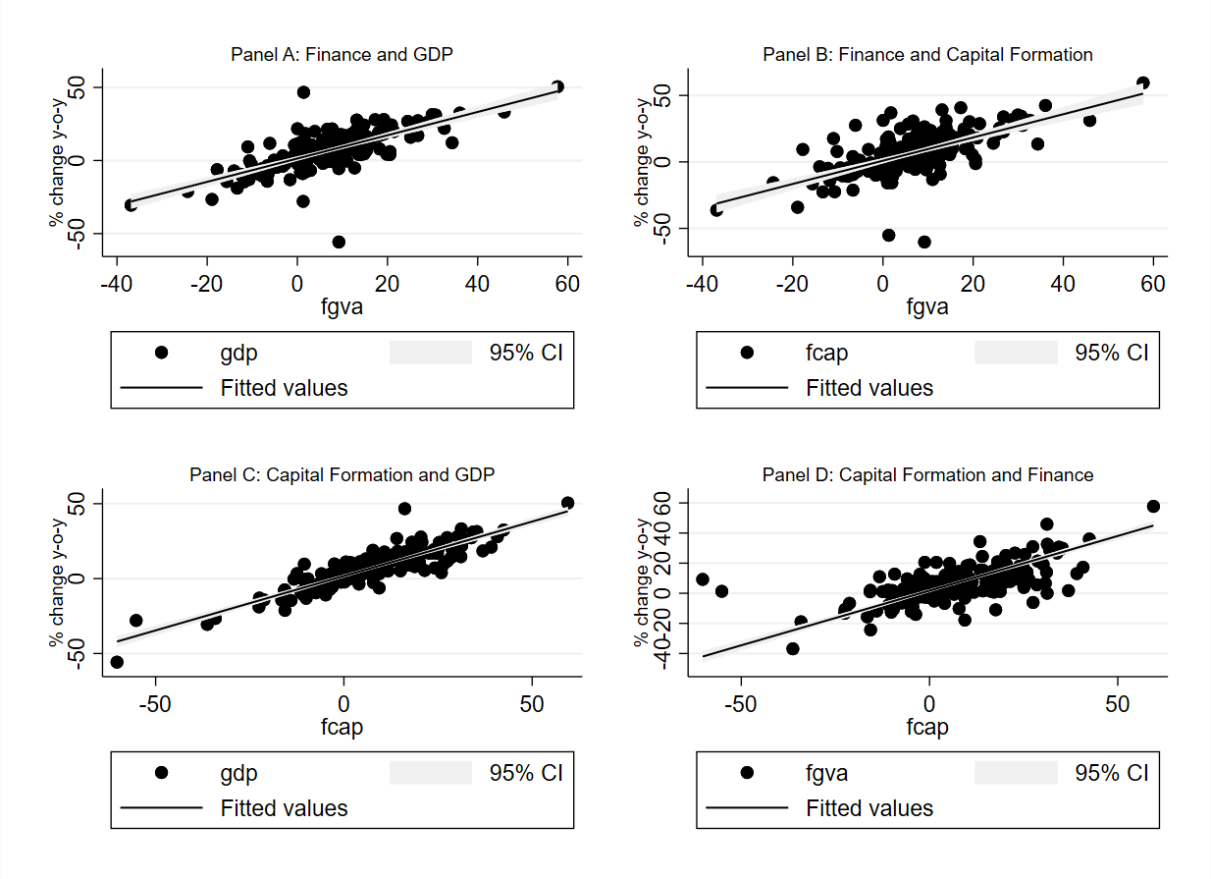

Fig. 1. **Scatterplot**

Source: Compiled by the author.

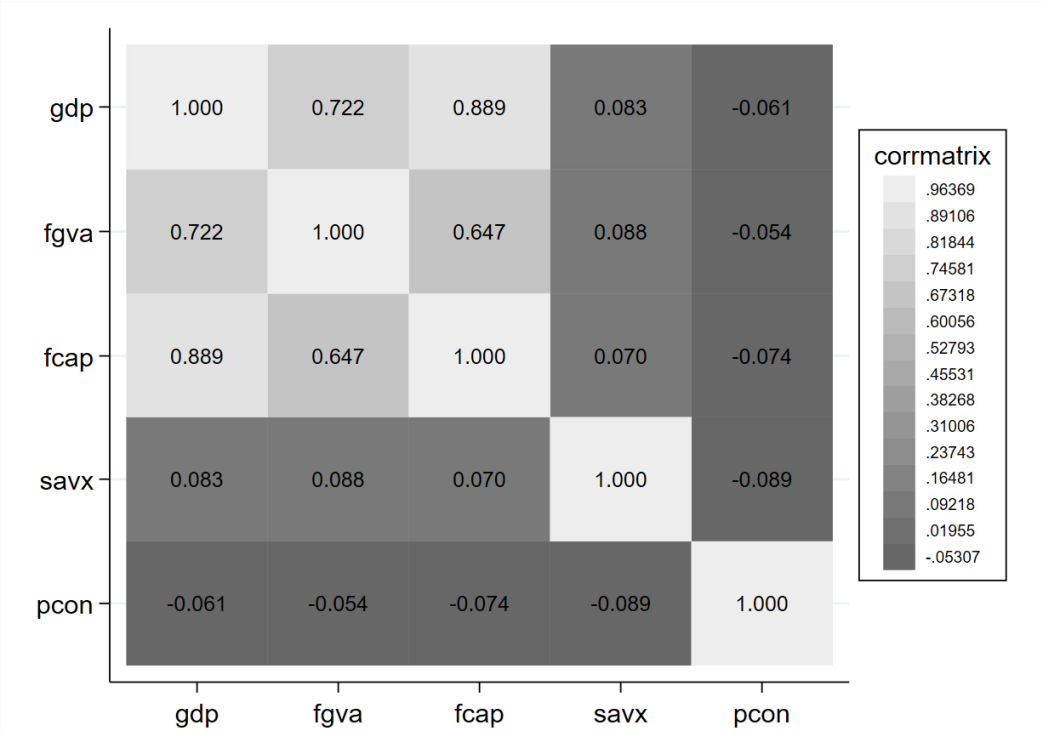

Fig. 2. **Correlation matrix**

Source: Compiled by the author.

Fixed Capital Formation, $SAVX_{i,t}$ is the Savings growth, and $PCON_{i,t}$ is the Private Final Consumption.

Nominal GDP growth is often used in empirical research because it provides a measure of the actual growth rate of an economy's output, including inflation [23]. In contrast, real GDP growth is adjusted for inflation, which may not reflect the actual growth in the economy's output. When conducting empirical research, nominal GDP growth can be a useful indicator of the overall health and performance of an economy. It can provide insights into the current level of economic activity, the pace of expansion, and the overall trend in economic growth over time. Our main independent variable of interest is the *Finance nominal Gross Value Added* and we use it as a single measure of financialization because it reflects the growth in the overall size of the financial sector [20].

We follow a parsimonious strategy in the inclusion of control variables to account for the effects of other factors in the finance-growth estimation. We include *Fixed Capital Formation* because it is a key determinant of long-term economic growth and is strongly associated with nominal GDP growth [24]. Fixed capital includes the physical assets used in production, such as machinery, buildings, and infrastructure. When an economy invests in fixed capital, it is essentially increasing its capacity to produce goods and services, which can lead to higher output and economic growth in the future. We include *Savings growth* because it is one of the key determinants of economic growth and is strongly associated with nominal GDP growth [25]. When individuals and firms save, they are essentially setting aside a portion of their income that can be used to finance investment in fixed capital, which can drive economic growth. Savings growth can help to fund investment in fixed capital, which can increase an economy's productive capacity and lead to higher output and economic growth in the long run. This is because investment in fixed capital can lead to the creation of new products and processes that increase productivity and output. We include the *Private Final Consumption* because it is an important determinant of economic growth, as it represents a significant portion of aggregate demand [26]. When households and non-profit institutions increase their consumption expenditure, this can stimulate demand for goods and services, which can in turn increase output and economic growth.

FINDINGS

There is considerable debate among economists regarding the relationship between financialization and economic growth. Some researchers argue that financialization can have a positive effect on economic growth, while others suggest that it can have negative consequences. Our empirical study partially examines the impact of financialization on economic growth in developing countries with large financial sectors.

Table 2 provides a summary of the empirical results from our panel data econometrics study. We find that financialization has a positive and highly significant effect on economic growth in developing countries with large financial sectors. Specifically, our study finds that a percentage increase in the Finance Gross Value Added, FGVA, is associated with a 28%-point increase in GDP growth, GDPGR.

The FGVA and GDP coefficients from all the panel data models deployed are not statistically different and therefore are consistent. These coefficients are consistent with the correlation matrix we found in *Fig. 2* above, which exhibits a strong and positive correlation of the finance-growth nexus. We are confident in the choice of our covariates, as we found a coefficient of determination, R-squared, of 83%. This shows that even a parsimonious model can produce desired empirical results. This means our choice of covariates helps explain economic growth adequately. The result of this study agrees with all three hypotheses in this study. Therefore, we can postulate that the financialization and economic growth nexus is positive and significant. In addition to the positive correlation between these variables, we also find and agree that financialization has a causal effect on economic growth.

Based on our findings, we postulate that partial studies should be conducted to separate developing countries with a large financial sector from those with a small financial sector. There is no doubt that financial activities are complex and difficult to measure. We believe that the best measure of aggregate financialization is the FGVA because it captures the value

Table 2

The Effect of Financialization on Economic Growth, 1996–2022

gdp	*FGLS*	*POLS*	*FE*	*RE*
fgva	0.276*** (6.21)	0.278*** (3.10)	0.281*** (6.24)	0.279*** (6.28)
fcap	0.596*** (18.13)	0.594*** (8.57)	0.604*** (18.14)	0.595*** (18.15)
savx	0.0102 (0.34)	0.0104 (0.33)	−0.0556 (−1.21)	0.00204 (0.06)
pcon	0.00482 (0.24)	0.00470 (0.28)	−0.00384 (−0.07)	0.00395 (0.18)
_cons	0.334 (0.25)	0.344 (0.31)	2.213 (0.76)	0.560 (0.38)
N	189	189	189	189
R–sq	0.827	0.828	0.831	0.827

Source: Compiled by the author.

Note: t statistics in parentheses *** p < 0.001.

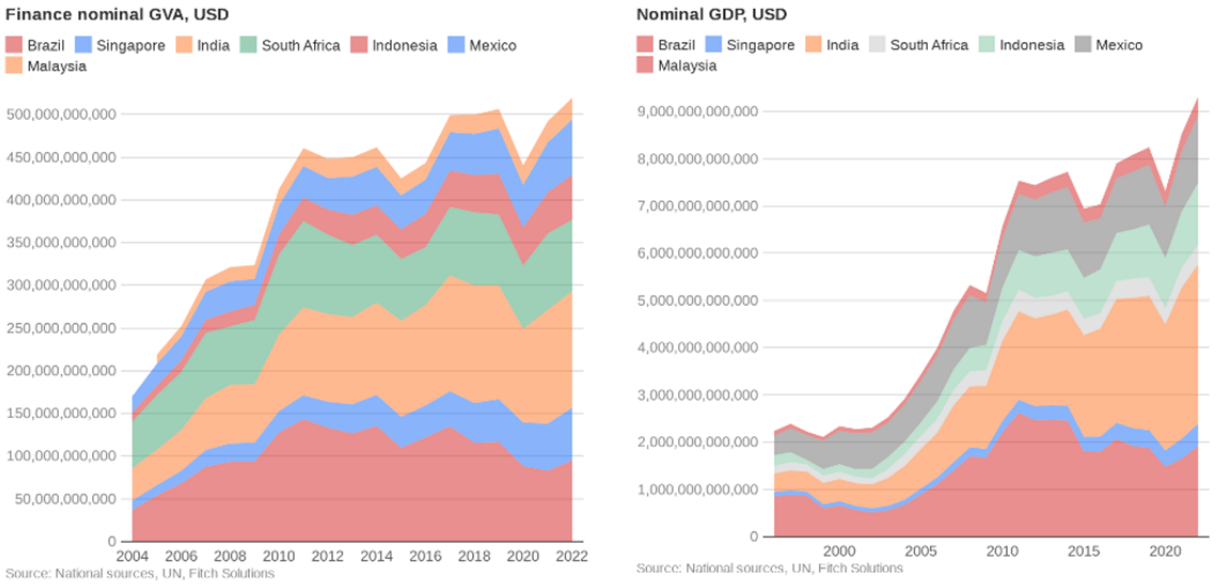

Fig. 3. **Financialization and Economic Growth in Monetary Terms**

Source: Fitch Solutions [21].

added by the financial sector, measures its contribution to GDP, reflects the size of the financial sector, and provides a reliable estimate of financial activity.

Making use of the FGVA as a measure of financialization and partially estimating developing countries with large financial sectors is the novelty of this study. The FGVA provides a reliable estimate of financial activity because it is based on official statistics. It is calculated using a standard methodology that allows for consistent comparisons over time and across countries.

Fig. 3 depicts that, on average, the FGVA has been rising in recent years. This reflects that the size of the financial sector in these countries have been increasing. In the same periods, on average, the GDP of these countries has also been increasing in monetary terms.

CONCLUSION

In conclusion, the effect of financialization on economic growth in developing countries with large financial sectors can be a complex issue. While some studies have shown that financialization can have a positive effect on economic growth by increasing the availability of credit and stimulating investment, others have suggested that it can have negative consequences such as increased financial instability and inequality. Our study concludes that, on aggregate levels, financialization had a positive effect on economic growth in developing countries with large financial sectors in the sample period 1996 to 2022.

We postulate that in addition to a positive correlation there is also a causal effect of financialization on economic growth. In these countries, the impact of financialization on economic growth may be even more nuanced due to the unique economic and political context of these countries. On the one hand, a large financial sector can provide critical infrastructure and access to finance for businesses and households, which can lead to increased investment and economic growth. On the other hand, a large financial sector can also be associated with financial instability and a concentration of economic power in the hands of a few large financial institutions.

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