

# The Relationship between Financial Markets and Economic Growth: The Case Study of Georgia\*

Naib Alakbarov<sup>1</sup>Rakhshada Murshudova<sup>2</sup>

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## Abstract

The aim of the study is to investigate the relationship between financial markets and economic growth in Georgia. In this study, causality relationship between financial development indices representing financial markets and gross domestic product representing economic growth was investigated by using annual data for the period of 1995-2017. According to the results of the Breitung and Candelon (2006) Frequency Domain Causality Test, it was observed that there was no causal relationship between the development in the financial markets and economic growth, but the economic growth positively affected the productivity in the financial markets.

**Keywords:** Financial Markets, Financial Development, Economic Growth, Georgia

**JEL Classification:** E44, C32, G17, E47

## 1. Introduction

The purpose of this study is to analyze whether there is a relationship between the development in financial markets and economic growth in Georgia. Researching the relationship between economic growth and financial development is important for countries. Therefore, many studies have been conducted on the relationship between economic growth and economic growth in the economic literature.

The first study examining the relationship between economic growth and financial development was done by Schumpeter (1911). According to Schumpeter (1911), it is necessary conditions for technological innovation and economic growth by activating savings by financial intermediaries, managing risk, evaluating projects, monitoring managers' performance and facilitating transactions. However, this view of Schumpeter has not been accepted by many economists. Economists who oppose this view believe that financial development is a relatively insignificant factor for economic growth. The relationship between financial development and economic growth differs from country to country. While financial development affects

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<sup>1</sup> Uşak University Faculty of Economics and Administrative Sciences, Department of Economics, naib.alakbarov@usak.edu.tr;

<sup>2</sup> Uşak University, Graduate Education Institute, Department of Economics, MA, rahsadem@gmail.com;

economic growth in some countries, the opposite situation is observed in some countries or there is no relation in some countries (Levine, 2005, p. 1-3).

While Robinson (1952) examines the relationship between economic growth and financial development, he argues that there is a one-way relationship between variables. According to Robinson (1952), if the demand for services offered by financial intermediaries in a country increases, financial development will occur in that country. These financial services are related to the real sector. The financial sector will develop as the real sector grows and develops. In addition, Robinson (1952) argued that the development in the financial sector could affect costs.

Patrick (1966) suggested that the relationship between economic growth and financial development can be bilateral. Patrick (1966) called this bilateral relationship the demand-traced and supply-led hypotheses. According to the demand-tracking hypothesis, there is a relationship from economic growth to financial development. This situation can be seen mostly in the economies of countries with little or no financial market development. In the supply-led hypothesis, it is argued that financial development will encourage economic growth. This situation is more common in countries with well-developed financial sector. It is possible to come across bilateral relations in countries with medium financial sector.

Another important issue in the relationship between financial development and economic growth is the McKinnon-Shaw model. According to McKinnon, Shaw and King and Levine, various constraints of governments on the banking system can slow the development of the financial system and thus economic growth. For example, interest ceilings, high compulsory reserves and compulsory sectoral loan programs are factors that slow the development of a dynamic and competitive financial sector that can finance economic growth. Similarly, inefficient banking has a negative impact on economic growth. For example, a crisis in the banking sector negatively affects economic activities and thus economic growth (Atindéhou et al., 2005; Aslan & Korap, 2006).

In particular, the McKinnon-Shaw model focuses on the negative effects of ceilings on deposit and loan rates. The main argument expressed in the model is that financial pressure in the form of a ceiling over nominal interest rates will stop financial deepening and thus economic growth. The interest rate ceiling, which leads to low or negative real interest rates, basically has a two-way effect. The first is the reduction of savings and thus the amount of loanable funds mediated through the official financial system. Second, low real interest rates affect the marginal productivity of capital. This will make the distribution of mutual funds inefficient. High reserve rates and direct loan practices will further increase these negative effects (Andersen & Tarp, 2003).

Lucas (1988) and Stern (1989) argued that there was no relationship between financial development and economic growth. Lucas (1988) and Stern (1989) stated that there is no causal relationship between financial development and economic growth in the long run. The authors express that policies aimed at deepening financial markets will lead to waste by drawing limited resources from productive areas. In such a case, the transfer of limited resources used in the real sector to the financial sector will be prevented and as a result, economic growth will not be possible (Çeştepe & Yıldırım, 2016).

In the study conducted by Gündüz (2020), the relationship between financial development and economic growth, which is one of the important topics of economic research, is examined through causality analysis. The data of 1996-2016 period were used in the study and the relationship was analyzed for European Union countries by using Emirmahmutoglu and Köse's (2011) panel causality test for European Union countries. According to the results of the analysis, there is a causal relationship towards economic growth from the general financial globalization index. In addition, the research results reveal a causal relationship from de facto financial globalization to economic growth and also from economic growth to the jure financial globalization index.

Analysis by Öztürk, Barışık and Darıcı (2012) covers the period of 1992-2007. In the analysis made using panel data techniques, the relationship between financial deepening and growth is investigated for 10 developing countries. As a result of the analysis, a positive and significant relationship was found between the increase in cash liabilities in the financial system, that is, the M3 / GDP variable that indicates that the financial system is being used more and the per capita GDP. According to the results of the analysis, the M3 / GDP ratio affects the growth positively, which is an indicator that the financial system finances real sector investments with bank loans.

In the study conducted by Васиљева ve Ковшун (2015), answers to two basic questions are sought. The first is whether an advanced financial system, removing the technological and institutional barriers in the capital flow and greater integration of financial markets is a prerequisite for economic growth at the national level. The second is whether economic agents have sufficient access to financial services provided by residents of other regions and countries. In this study, analysis was made by using manufacturing industry data in Russian regions between 2004-2012. According to the results of the analysis, it was concluded that the level of development of local financial intermediaries did not have a statistically significant effect on the growth rates of the manufacturing industry in the Russian regions.

In Güneş's (2013) research, the effect of financial development on economic growth is investigated for Turkey. In the study, cointegration analysis was carried out by using semi-annual data for the period of 1988-2009. According to the results of the analysis, it was concluded that financial development did not affect economic growth in the period of 1988-2009.

In the study of Khetsi (2015) covering the period 1971-2013, the effect of the development of financial markets in South Africa on economic growth is examined. According to the results of the research examining the long-term relationship, there is a positive relationship between economic growth and financial markets in South Africa. According to the results of the analysis, it was observed that the development of capital markets in South Africa has a long-term positive effect on economic growth.

## 2. Method and Data Analysis

In the study, Breitung & Candelon (2006) Frequency Domain Causality Analysis was performed by using the financial development indices and economic growth data of Georgia between 1995-2017. The data to be used in the current study were obtained from the International Monetary Fund (IMF), the Central Bank of Georgia, the National Statistics Office of Georgia (GeoStat) and the World Bank.

The variables used in the analysis are as follows:

FGI- Financial Development Index;

EG- Economic growth;

FIAI- Access to Financial Institutions Index;

FIDI- Financial Institutions Depth Index;

FIEI- Financial Institutions Productivity Index;

FII- Financial Institutions Index;

FMAI- Financial Markets Access Index;

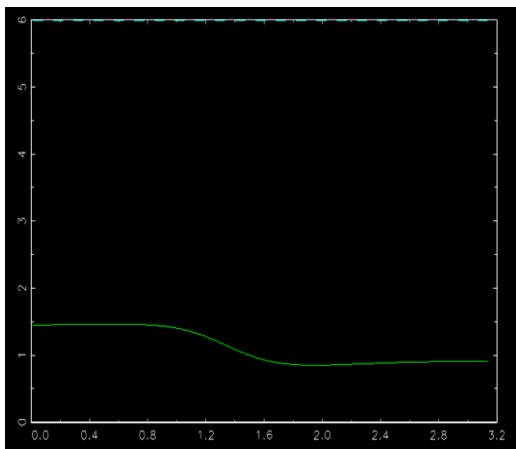
FMDI- Financial Markets Depth Index;

FMEI- Financial Markets Productivity Index;

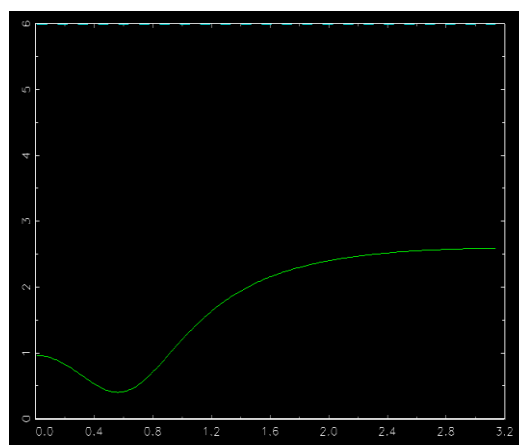
FMI- Financial Markets Index;

The analysis results are shown below.

**Figure 1.1** FGI → EG

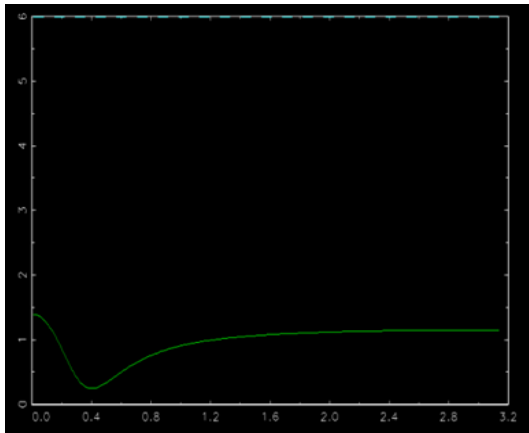


**Figure 1.2** EG → FGI

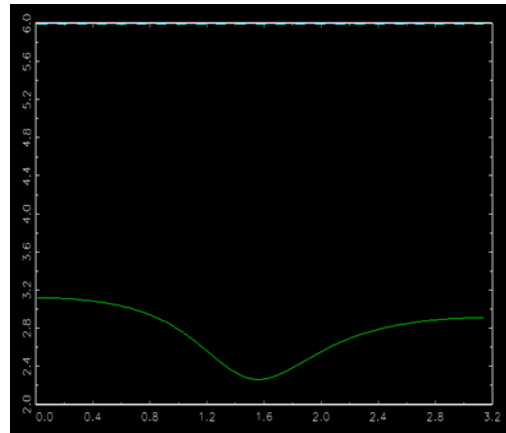


According to Figure 1.1 and Figure 1.2, it is seen that there is no causal relationship between Financial Development Index and economic growth.

**Figure 2.1** EG→ FIAI

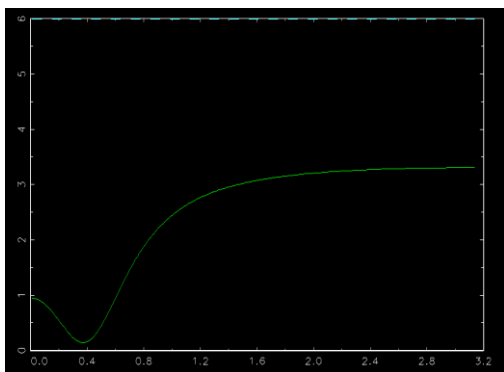


**Figure 2.2** FIAI→EG

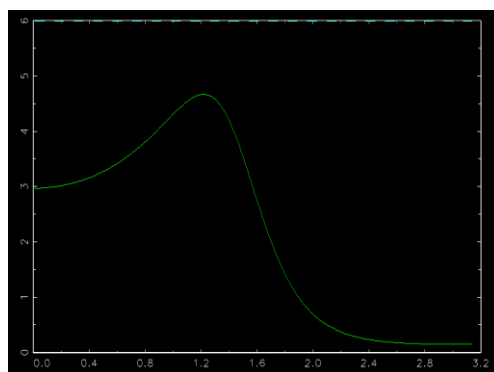


It is seen that there is no causal relationship between economic growth and the Financial Institutions Access Index in Figure 2.1 and Figure 2.2.

**Figure 3.1** EG→ FIDI

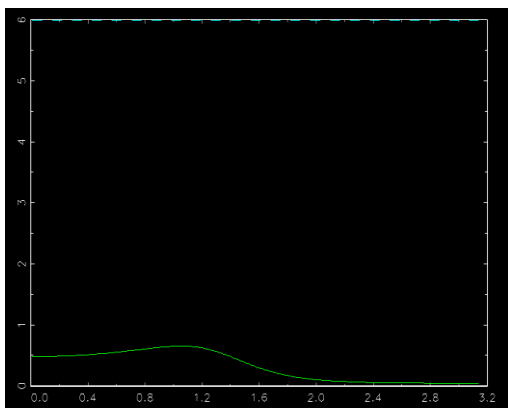


**Figure 3.2** FIDI→EG

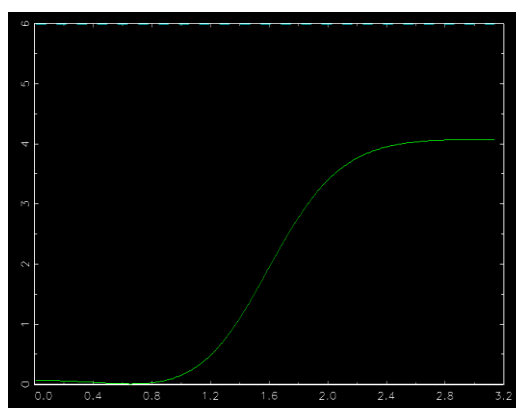


As seen in Figure 3.1 and Figure 3.2, it is concluded that there is no causal relationship between economic growth and Depth Index of Financial Institutions.

**Figure 4.1** FIEI→ EG

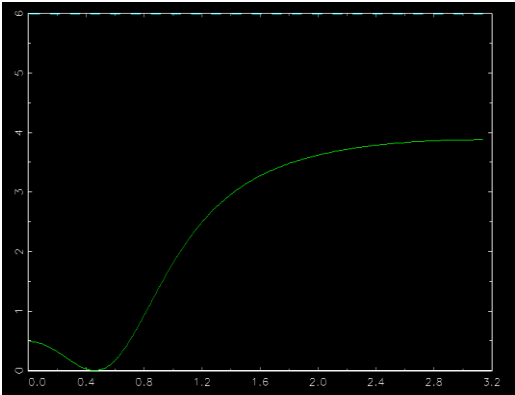


**Figure 4.2** EG→FIEI

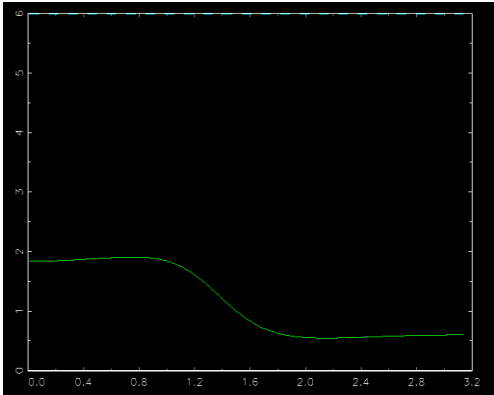


As seen in Figure 4.1 and Figure 4.2, no causal relationship was found between the Financial Institutions Efficiency Index and economic growth.

**Figure 5.1** EG→ FII

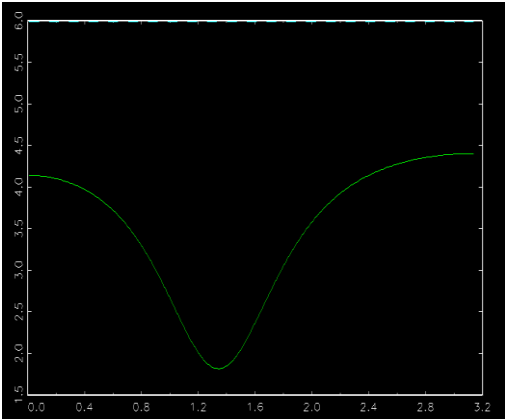


**Figure 5.2** FII→EG

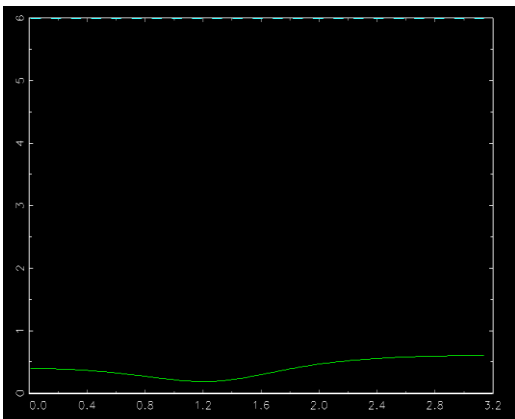


According to Figure 5.1 and Figure 5.2, no causality relationship was observed between economic growth and the Financial Institutions Index.

**Figure 6.1** FMAI→EG

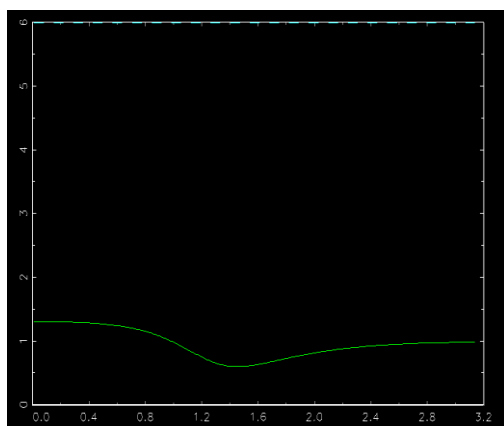


**Figure 6.2** EG→FMAI

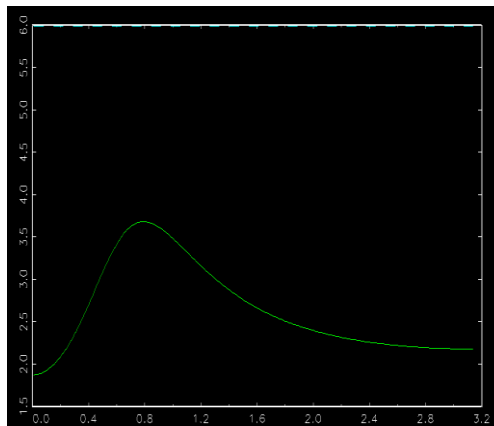


According to Figure 6.1 and Figure 6.2, no causal relationship was found between the Financial Markets Access Index and economic growth.

**Figure 7.1** FMDI→EG

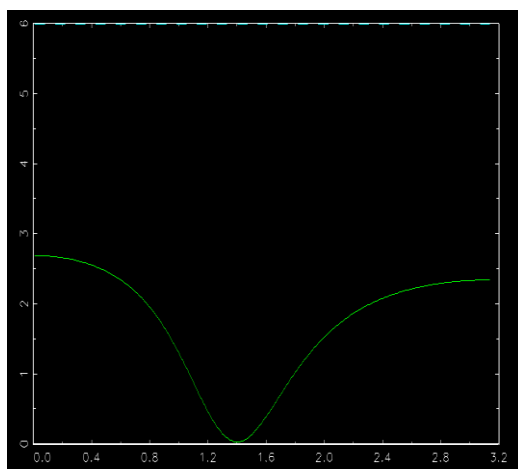


**Figure 7.2** EG→FMDI

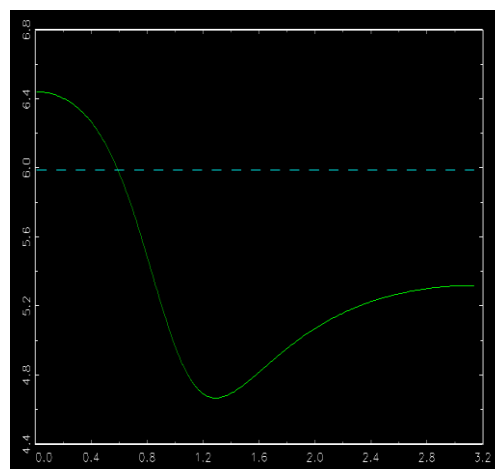


According to Figure 7.1 and Figure 7.2, no causal relationship was found between the Financial Markets Depth Index and economic growth.

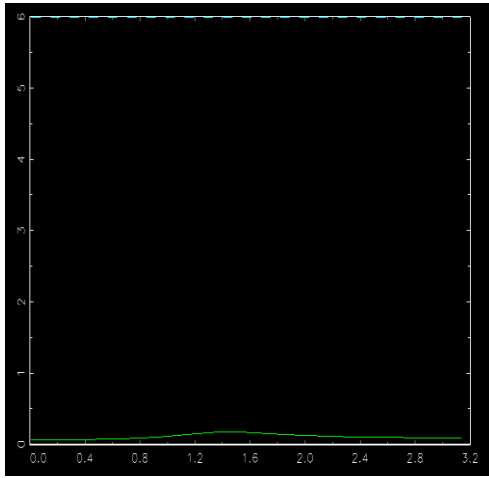
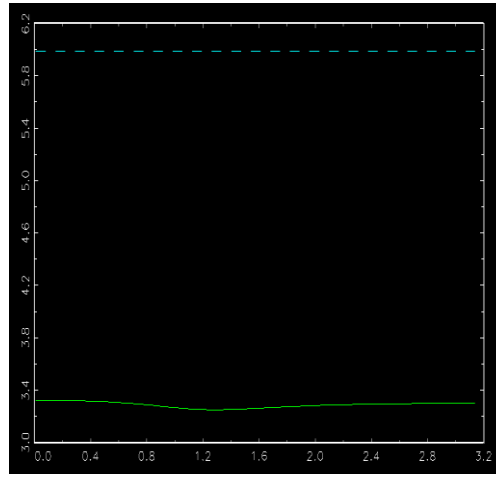
**Figure 8.1** FMEI→EG



**Figure 8.2** EG →FMEI



According to Figure 8.1 and Figure 8.2, while there is no causality relationship from the Financial Markets Efficiency Index to economic growth, there is a causality relationship from economic growth to the Financial Markets Efficiency Index.

**Figure 9.1** FMI→EG**Figure 9.2** EG→FMI

According to Figure 9.1 and Figure 9.2, it is seen that there is no causal relationship between Financial Markets Index and Economic Growth.

### 3. Conclusion

In this study, it has been investigated whether there is a causality relationship between Georgia's financial markets and economic growth. Annual data for the period 1995-2017 were used in the research.

The study includes index values representing financial markets and GDP growth rates representing economic growth. In the study, Breitung & Candelon (2006) Frequency Domain causality analysis method is used. According to the results of the analysis, it is concluded that there is a causal relationship only between economic growth and the Financial Markets Productivity Index. According to this result, the growth of the Georgian economy is important for the development of financial markets. In this case, positive developments in economic growth will positively affect financial markets in Georgia. Due to the independence of Georgia, the necessity to obtain the data used in the study from 1995 is the most important limitation of the study.

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