

SCTCMG 2021
International Scientific Conference «Social and Cultural Transformations in the Context of
Modern Globalism»

RELATIONSHIP BETWEEN FINANCE AND ECONOMIC
GROWTH IN THE CONTEXT OF STRUCTURAL
TRANSFORMATIONS

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Abstract

The paper deals with the problem of the relationship between finance and economic growth in the context of structural transformations. Changing technologies require significant financial resources, and the financial factor provides its owners with a dominant position compared to other actors. The development of the financial sector, which ensures the reallocation of financial resources, can facilitate the process of technological changes through the reallocation of investment flows and their concentration in leading areas. The financial sector significantly affects the social and economic system being incorporated into the social and economic relationships. The development of the financial sector in this context is triggered by economic development, which implies a more complex logic of their relationship, when the level of economic development determines the internal and external boundaries for the development of the financial sector, and the latter can become both a driver and a brake for economic growth. Modern society, which is characterized by dynamic structural shifts, is facing the increasing role of specific assets as new factors of economic activity that depend on investment in knowledge and development of knowledge infrastructure. Structural transformations ensure the growth of labor productivity and raise living standards thus becoming the core of economic development. Changes in the structure of the domestic economy, which are necessary to overcome the crisis and enter the trajectory of sustainable economic growth, require a shift of the financing vector to innovative activities, which is not characteristic of purely market relations and involves an active financial policy.

2357-1330 © 2021 Published by European Publisher.

Keywords: Economic growth, finance, structural transformations



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1. Introduction

The problem of the relationship between financial and economic development has always been in focus in research programs in various economic areas (Table 01). A new focus of interest is due to global technological transformations in the modern world.

Table 1. The relationship between financial and economic development in the leading economic areas

Scientific field	Description
Pioneering orthodox theories	The financial sector provides only monetary services; therefore, the activities of its institutions do not affect real economic processes
Neoclassical theories	Financial markets and institutions mediate investment movements, take on investment risks, promote rational distribution of social capital and, in this regard, stimulate economic dynamics
Evolutionary theory	The financial sector provides monetary services in conditions of simple reproduction. The development associated with extended reproduction involves the expansion of market financing for investments
Keynesian theories	The dynamics of investments depends on functioning of the financial system; therefore, the development of the financial sector contributes to economic dynamics. The key role of the financial sector in the implementation of investment demand and the formation of a social product is substantiated using three basic psychological factors
Marxist theory	The study of the interaction of financial and industrial capital leads to the substantiation of their relative isolation, the interaction of the real and financial sectors is a key condition for evolutionary sustainable social reproduction
New institutional theory	Financial markets and institutions facilitate the allocation of financial resources while minimizing transaction costs, which stimulates economic dynamics
Modern monetary theory	The financial sector is considered as the key factor in economic development, its functioning contributes to economic dynamics

In Russia, the relevance of the problem of the relationship between finance and economic growth is associated with the tasks of transition to long-term sustainable development in a complex geopolitical and external economic situation.

2. Problem Statement

Despite focused attention to the problem of the relationship between finance and economic growth, the fundamental works on this problem show significant discrepancies in assessing the impact of finance on economic growth, and the nature and orientation of their relationship. Empirical studies of the impact of the financial sector on economic growth (at the microeconomic, sectoral, macroeconomic, cross-country and time-series levels) have become widely known over the last three decades. However, their analysis reveals no consensus on this problem (Igonina, 2016; Panizza, 2014).

A number of works completely ignore the impact of financial development on economic dynamics. Thus, according to Lucas, the importance of financial issues is exaggerated and overestimated (Lucas, 1988). Chandavarkar (1992) notes that finance is not a pioneer factor in economic development. Lintel and Khan believe that finance does not facilitate economic growth, but only responds to the modified requirements of the real economy (Luintel & Khan, 1999). Other works report the opposite point of view, according to which finance (financial markets) is considered as a factor contributing to economic growth (Beck & Levine, 2004; Loayza et al., 2017; Neusser & Kugler, 1998). A number of researchers note that the level of financial development contributes to economic growth only to a certain extent, when further development of finance negatively affects economic growth (Arcand et al., 2015;

Law & Singh, 2014). A number of researchers urge to carefully treat the thesis that financial development always leads to economic growth, since the relationship between them is complicated and depends on a number of factors (Nyasha & Odhiambo, 2018).

Opinions on the orientation of the relationship between finance and economic dynamics are different. A number of researchers note that financial development follows production (Robinson, 1952), while others, on the contrary, believe that causal relationship is directed from financial development to economic growth (Christopoulou & Tsionas, 2004). Several works substantiate the evidence that the causal relationship between financial markets and economic dynamics is bi-directional (Aghion et al., 1999; Levine, 1997).

Despite the fact that the results of assessments obtained in modern cross-country and panel studies were ambiguous, they demonstrated a strong correlation between functioning of the financial sector and long-term economic growth. In addition, the results made it possible to identify the factors and channels of their interaction and led to understanding of the co-evolution of financial and economic development with regard to nonlinearity of the relationship.

In the context of structural transformations, the problem of the relationship between finance and economic dynamics becomes especially relevant, since successful overcoming the crisis and entering the trajectory of sustainable economic growth largely depends on the approaches to solution of this problem.

3. Research Questions

The object of the study is the relationship between finance and economic growth, and the conditions for sustainable financial and economic development in the context of structural transformations. In the study, an attempt was made to find the answers to the following questions.

1. What are the nature and orientation of the relationship between finance and economic growth; when does the financial sector act as a driver and when as a brake on economic growth?
2. How is the role of the financial sector in the economy changing in the context of structural transformations; is it possible to ensure sustainable financial and economic development on the market basis?

4. Purpose of the Study

The purpose of the study is to identify the logic of the relationship between finance and economic growth in the context of structural transformations.

5. Research Methods

The study of the relationship between finance and economic growth is based on the systemic, reproductive and co-evolutionary approaches, and the methods of logical and comparative analysis.

6. Findings

Understanding the mechanism of co-evolution of financial and economic systems implies conjugate interaction in the development and corresponding transformations of each of the systems with regard to the nonlinearity of relationship (Levine, 1997). Such interaction means not only the progressive development of financial and economic systems, in a broad sense, it also includes the possibility of co-involution (downward development) – interrelated destruction. The peculiarities of co-evolution and involution are that finance, on the one hand, affects the economic system, and, on the other hand, they are incorporated into the social and economic relationships. Development of the financial sector in this context is a derivative of economic development, which implies a more complex logic of their interaction, when the level of economic development determines the internal and external boundaries for the financial sector development, and the latter, depending on a number of factors, can become both a driver and a brake on economic growth. The fundamental condition for long-term sustainable growth is long-term stability of the financial and economic systems.

With regard to co-evolution, the efficiency and stability of the financial system cannot be considered autonomously, they must be analyzed in conjunction with the efficiency and stability of the economic system. The stability of the financial system reflects the economy stability. In case of sufficient financial stability, the financial system is capable of withstanding internal or external shocks. Local financial crises may not cause the destruction of the entire financial sector and not be transmitted to the real economy (Igonina, 2008). The financial sector becomes a brake on economic growth if it lags behind other sectors of the economy. In this case, for example, the low efficiency of the financial system in less developed countries is not the main reason for weak rates of the economic growth. Since these financial systems are underdeveloped, it is important to note that this is an objective reflection of the existing level of development of the national economy and its translation to the financial system.

Modern society, which is characterized by dynamic structural shifts, is facing the increasing role of specific assets as new factors of economic activity that depend on investment in knowledge and development of knowledge infrastructure. Funding for the creation of these factors is more targeted and often more risky. Corresponding changes in the principles of organizing the social and economic process are taking place. Companies assess the risk of investments in a particular asset, financial institutions assess the risk of financing, and the state chooses one or another regulator, incentives and tools to achieve the specified tasks of economic development. In the context of technological transformations, finance is becoming a particularly significant resource that provides the opportunity to create specific assets and a technological breakthrough. Underdevelopment of the financial sector relative to other sectors of the economy indicates insufficient funding for innovation and limited access to financial resources and existing production facilities. In this regard, financial development is crucial to economic growth.

Available quantitative characteristics of financial development include indicators of the depth of financial markets and institutions, the inclusiveness of financial services, and the efficiency of financial markets and institutions. The qualitative characteristics of financial development are associated with the analysis of the functions of financial markets and capability of the latter to effectively implement the functions, which implies the prioritization of areas for the accumulation and use of financial resources,

capital investment, synchronization of financial flows, and diversification of economic risks in spatial and temporal terms.

The main parameters of financial development in Russia are presented in Table 02.

Table 2. Main parameters of financial development in Russia

Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Money supply M2, % GDP	39.4	36.4	36.3	39.5	38.1	39.4	42.4	43.6	43.2	47.3
Equity market capitalization, % GDP	63.2	42.6	37.0	35.7	29.2	34.6	44.0	39.0	39.9	44.7
Market value of corporate debt security, % GDP	5.8	5.9	6.7	7.8	8.5	10.0	11.0	10.5	10.3	11.2
Bank assets, % GDP	75.8	73.0	69.7	78.5	98.0	99.9	93.1	92.5	90.8	88.3
Loans to non-financial institutions and individuals, % GDP	25.3	39.0	41.4	44.4	51.6	52.9	47.6	46.0	46.6	50.4
Share of state-owned banks in banking system assets, %	43.4	44.8	48.1	54.6	54.8	55.5	57.6	58.8	61.3	70.0
Banking system assets / assets of non-bank financial institutions	15.6	16.7	16.8	14.6	12.6	10.4	9.0	8.8	7.3	5.1

The considered indicators cannot directly measure the degree of implementation of the functions of the financial system. At the same time, their interpretation shows that a number of such characteristics are inherent in the financial development of Russia. These are as follows:

- growing but insufficiently high coefficient of GDP monetization;
- prevalence of banks over non-bank financial institutions in terms of total assets and operations, and the bank-centered nature of the financial market;
- significant involvement of the state in the financial markets.

In addition, a gap between interest rates in the financial market and the profitability of enterprises in the real sector can be observed. This leads to the fact that economic agents mainly use their own funds for investment, and their share in financial investment resources is steadily growing (Abramova, 2018). The budgetary and inter-firm channels, rather than the channel of financial intermediation, play the dominant role in the reallocation of financial resources.

In the conventional approach, the financial system is represented as an aggregated intermediary that directs accumulated savings through the most efficient channels available. Such channels are chosen in terms of the stability of financial institutions and the efficiency of the financial intermediation itself: financial resources are directed so that their reimbursement will be economically ensured. Since financing of the creation of specific assets is mainly associated with increased risks, it becomes less efficient in terms of the stability of financial institutions. In practice, commercially ineffective areas will receive less funding or not receive it at all, which will entail their reduction or disappearance. The reallocation of financial resources is unlikely to lead to sustainable and efficient financial development in the future. However, it stems from the assessment of the effectiveness of the financial system, which does not take into account the relationship of the latter with the economic system. At the same time, the role of the financial system as a mediator of investment capital is neglected and its focus on achievement of the result that embodies its functional purpose – financial and investment support of social reproduction on the innovative basis – is not considered (Igonina, 2016). In addition, unlike other resources, financial

resources are partly independent and partly dependent on the production of goods, which excludes the autonomous efficiency of the financial sector (Sukharev, 2017).

A contradiction arises between the need to ensure the sustainability of financial institutions in the current regime and the future effects of inclusive sustainable growth (technological development, innovative activities, new markets, and social, environmental and other effects). Structural problems in the economy and their social consequences will reduce the opportunities for economic development, and therefore will not ensure effective and sustainable financial development. The resolution of this contradiction is beyond the scope of the purely market logic of the reallocation of financial resources and the analytical optics of an autonomous assessment of the stability and efficiency of the financial system. It requires the integrated approach with the financial policy developed on the basis of the tasks of restructuring the economy, which is associated with basic financial indicators related to the solution of structural problems of social and economic development.

7. Conclusion

With regard to the co-evolutionary approach, the relationship between finance and economic growth is determined by the fact that the development of the financial sector is a derivative of the economic development, but at the same time, it significantly affects economic dynamics – accelerates or hinders it. The basic condition for long-term sustainable growth is long-term stability of the financial and economic systems.

In the period of structural transformations, the financial sector acquires critical importance for economic growth associated with the possibility of its participation in the creation of specific assets as new factors of economic activity. If the development of the financial sector lags behind other sectors of the economy, it becomes a brake on economic growth and reduces the financing of innovation. The financial sector can become a driver of economic growth in case it ensures the prioritization of areas for the accumulation and use of financial resources, their concentration at the leading points of technological breakthrough.

The mechanism for the reallocation of financial resources indicates the requirements for the efficiency and stability of financial institutions in terms of the financial intermediation. Thus, it cannot ensure the implementation of the functional purpose of the financial system that implies financial and investment support of social reproduction on the innovative basis, and the stability and efficiency of financial development in the future. Removal of financial constraints of structural transformations involves the development of financial policies embedded in the overall decision-making loop for managing the structural component of economic growth.

The relevance of this thesis is due to the fact that the co-evolution and co-involution of finance and economic growth can affect the development and further practical implementation of programs for the economy restructuring, as well as the directions of further research into identifying the institutional determinants of financial development.

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