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Influence of Non-Economic Factors on the Formation and Development of the Design of Financial Systems

Alim Fiapshev [1], Elena Travkina [1], Marianna Belova [1*]

[1] *Department of Banking and Monetary Regulation, Financial University under the Government of the Russian Federation, Moscow, 125167, Russian Federation.*

Abstract

The purpose of this scientific work is to investigate the impact of non-economic factors on the design of financial systems, focusing on the concept of institutional quality, which is measured using six indices according to the World Bank's methodology. To assess this impact, we utilized data from 1996 to 2022 for a wide range of countries, grouped into five clusters based on per capita income. The comparative analysis of these country clusters revealed a direct and consistent relationship between per capita income dynamics and financial development with changes in institutional quality. It also highlighted the significant influence of this relationship on the structural features of national financial systems. The study demonstrates that institutional quality is the starting point of this entire process, determining the effectiveness of the link between financial development and economic growth through changes in the financial structure. The findings confirm the convergence of financial development levels among countries with different financial system structures and legal traditions, provided they maintain high-quality institutions. The study underscores the importance of institutional quality in minimizing the consequences of structural distortions in the financial system and addressing gaps in financial and economic development. These results are crucial for economic policymakers in developing countries and those with low per capita incomes.

Keywords:

Financial System;

Structure of the Financial System;

Financial Development;

Non-Economic Factors of Financial Development;

Quality of Institutions.

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1- Introduction

Over a long period of time, researchers have expressed different, often opposing, opinions about the strengths and weaknesses of various financial system designs, describing them in binary terms—market or banking, universal or specialized. Disagreements among representatives of economics in this regard remain partly contemporary, reflecting their different understanding of the role of the banking and stock segment in redistributive processes in the economy. However, in general, the consensus on the advantages of having a diversified financial system structure with a developed stock market, a balanced banking system that maintains a high level of competition between banks that differ in size and market orientation, has been achieved for more than a decade. Recognizing that these advantages are realized in stimulating economic growth by increasing the level of financial development, we note that there are gaps in the study of factors contributing to the optimization of the financial structure and, as a result, strengthening this connection. This gap is particularly noticeable in terms of identifying noneconomic factors that influence changes in the design of the financial system. Confirmation of the positive impact of financial development on macroeconomic dynamics at the

* **CONTACT**: mtbelova@fa.ru

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model level gave, at one time, quite definite recommendations for regulatory practices in terms of policy priorities for the modernization of the financial structure.

The results obtained to date have stimulated the development of relevant proposals, the importance of which for the theory and practice of financial development is obvious. However, these studies were limited either to country samples compiled according to a narrow set of criteria or to include in the analysis only certain noneconomic factors that do not provide a complete picture of the state of the quality of institutions. At the same time, there is a need for a broad cross-country analysis of the impact of noneconomic factors, concentrated on the concept of the quality of institutions, on the structural parameters of financial systems, which would contribute to a positive link between financial development and economic growth. The fundamental motive of scientific research in this direction is also the presence of persistent economic development gaps in a significant number of countries. The answers to these questions require comparing the levels of economic development and the quality of institutions in an extensive sample of countries and then applying the results obtained to trends in financial development and structural features of national financial systems. Such an analysis is undertaken to identify patterns in the dynamics and structure of the financial development of countries that differ in the quality of the institutional environment and, accordingly, the level of socioeconomic well-being of their citizens.

2- Literature Review

Early sources reveal convincing conclusions about the important and significant impact of financial development on growth [1-3]. This view of the relationship between financial development and growth was reinforced later in the 1970s [4, 5] and through in-depth research at the end and beginning of the 20th century, which used extensive empirical material [6-9]. Notably, in studies of the role of the financial factor, even earlier, in the combination of "financial development - growth", on the side of causality, general economic development was exposed, which formed a set of conditions for complicating and improving the financial system [10, 11]. Moreover, a number of arguments indicate that the role of financial development in growth is greatly overestimated by economists [12]. In the 21st century, a paradigm shift is taking place. First, the linear relationship between financial development and economic growth is actually refuted [13]; then, it disappears at various thresholds of indicators of financial depth. The nature of this dependence is predetermined by the parameters of the financial structure, the absence and varying measures of macroeconomic stability, and the intensity and speed of globalization [14]. In line with these studies, there were justifications for optimal ratios between different segments of emerging financial markets [15-17].

Among the conditions ensuring the positive impact of the strengthening of the financial depth of the economy on economic growth, a special place was given to a set of circumstances of a noneconomic nature and among the latter, such as the quality of institutions. With respect to the role of institutions, financial development has a greater impact on economic growth when the financial system is embedded in a reliable institutional structure [18-20]. The issue of the quality of institutions, assessed in various ways and by different organizations, has become, if not decisive, extremely relevant for correcting regulatory practices. These actions, among others, focused on controlled factors, were justified as necessary and important for achieving the targets of macroeconomic dynamics.

The high level of quality of institutions is considered an important factor in increasing the level of financial inclusion [21], ensuring economic stability [22], effective debt management [23], and sustainable economic growth [24, 25]. These connections are more pronounced in emerging market countries. Improving the quality of institutions is reasonably associated with human development, which, being dependent on the level of development of social infrastructure, is actually predetermined by other parameters. These are the legal order, the practice of law enforcement, the measure of centralization of management, the political situation, the level of corruption, and cultural characteristics interpreted as ingrained decision-making procedures in all spheres of public life. It seems that underestimating this predestination provokes the inadequacy of assessments that form the basis of management decisions. The discourse formed by active discussions of the predestination of institutions by cultural characteristics, legal traditions, etc., as well as the conditions for improving their quality is now an area of intensive research on the possibilities of developing economies [26]. In this regard, the problem of assessing the impact of the main noneconomic factors on the design of financial systems, substantiating their optimal condition, and ensuring progressive financial development is of particular importance. This statement seems relevant and therefore important since, to a certain extent, financial development issues are issues of financial structure [27].

From approximately the end of the 19th century to the present, economic factors have provided a strong explanatory force for the development of financial systems with a market or banking orientation. However, the design of the financial system is highly dependent on noneconomic factors, particularly the legal tradition. This factor is often considered the dominant variable that determines the state of other noneconomic characteristics of political and legal systems [28, 29]. Although it must be admitted that regarding the role of the legal factor in terms of its impact on the financial structure, there are polar judgments supported by quantitative estimates [30]. This at least supports the thesis that the reliability of such estimates is limited, especially with regard to phenomena accompanying the evolution of national economies and influencing the consolidation of certain features of the design of the financial system within this movement [31].

The position of the dominance of legal traditions and regulatory practices as determinants of the design of financial systems is opposed by one another. In this position, the course of development was determined by political conditions and the associated level of centralization of the political system and the economy [32]. In our opinion, it complements the picture but underestimates the relationships among variables. The characterization of the centralization factor depends on the legal tradition: common law promotes the transfer of power to the periphery, whereas civil law often prevents this. In addition, civil law countries are more susceptible to centralized command and control than are common law countries. Nevertheless, civil law is capable, if motivated, of repeating the result of common law when it succeeds in modernizing institutions. In terms of choosing the design of the financial system and financial development, neither the political nor the legal structure are independent variables. They are linked and interdependent, determining other characteristics of institutions, such as public perceptions of the fight against corruption and the rule of law, voice and accountability, political stability, government effectiveness and the quality of regulation. At the same time, modern analysis of financial development problems provides estimates of the indifference of this development from a number of variables [33]. This highlights the vulnerability of estimates based on excessive use of quantitative methods [31]. The whole course of historical development has shown that all these variables are interrelated rather than mutually exclusive in their impact on the financial structure and, accordingly, the process of financial development.

3- Research Methodology

A comparative approach was used to assess the impact of the main noneconomic factors on the design of financial systems. The approach involved did not involve the identification of a measure of the relationship between indicators of financial development and the quality of institutions. The existence of a positive and significant connection seemed obvious, and this idea was based on the numerous assessments available in modern analysis. On this basis, the aim was to identify patterns in changes in the design of the financial system as a result of the evolution of institutions, as well as which of their components dominate their impact.

The comparison was carried out between different countries grouped according to the criterion of gross domestic income per capita. The analysis covered the time horizon from 1996--2022. At the first stage of the study, five country clusters were formed, differing in terms of GDP per capita: 1) above–average income member countries of the Organization for Economic Cooperation and Development; 2) non-OECD countries that also have high incomes; 3) above-average income countries; 4) below-average income countries; and 5) low-income countries. The division of high-income countries according to the criteria of membership in the Organization for Economic Cooperation and Development seemed important, considering the requirements for the participants of this association, which consists not only of demonstrating economic success but also of observing the principles of representative democracy and a free market economy. The fulfillment of the latter requirement correlates directly and closely with the quality of institutions. The values of indicators of this quality were evaluated for each group of countries. The analysis was based on the assessment of the quality of institutions calculated by the World Bank - Global Governance Indicators [34].

In the second stage, the indicators of the levels of development of various sectors of the financial system of a similar set of groups of countries classified by the level of per capita income were compared. The purpose of this analysis was to identify areas of intersection of the patterns identified at the first stage with trends in changes in the indicators of the financial structure.

In the third stage, the analysis of financial structure indicators was supplemented by an assessment of the country values of financial development indicators—indices of the development of financial institutions and markets calculated and provided by the International Monetary Fund [35]. The purpose of this stage was to compare the levels of financial development of various groups of countries formed according to the criterion of average per capita income, which, as determined at the first stage, corresponds significantly with the quality of institutions. Thus, here, as well as at the previous stage, the connections between the previously identified patterns and those that were noted during the current analysis were identified. In particular, trends in economic development, changes in the quality of institutions, and structural features of national financial systems were compared with changes in financial development over the past quarter century.

At the fourth stage of the study, an attempt was made to compare the groupings of countries classified according to legal tradition with the results of the hierarchy of countries identified at previous stages according to the criteria of the level of economic development, the quality of institutions and the financial depth of the economy. The choice of the criterion of legal tradition was because, at the first stages of the formation of the design of national financial systems, it predetermined their key characteristics. The aim was to identify the significance of the factor of legal tradition in influencing today's structural financial systems, its place in the set of institutional conditions accompanying the functioning of these systems, and its influence on financial and economic development.

The results confirmed the conclusions about the interdependence of financial and economic development, as well as the decisive role in this combination of a set of variables characterizing the quality of institutions, the high level of which promotes the financial system along the trajectory of a more balanced development of all its sectors.

4- Results

Most of the differences in the structure of financial systems are due to legal conditions resulting from entrenched legal traditions. These traditions, in turn, predetermined the measure of centralization, both in the political and economic structure. Thus, a high degree of centralization favored the development of the banking model (e.g., Kaiser's Germany and the Russian Empire), although countries with less centralization of political institutions and those based on federal principles (the USA) also achieved success in the development of banking systems. Banks, as institutions, have played crucial roles in the industrialization of many countries. The emergence of the lender of last resort in the 20th century stimulated the expansion of credit operations, allowing the system to take more risks. Thus, in Germany, the legal order and government regulation contributed to the development of large universal banks and at the same time hindered the prosperity of securities markets. Moreover, legal restrictions on banking in the United States have stimulated the development of liquid markets. The regulation of nonbanking institutions such as securities markets, corporate charters, limited liability and bankruptcy may influence the model of the financial system in a particular country.

The laws that define these features protect investors, contracts and property rights in one way or another and contribute to and often hinder the development of all types of financial institutions. Moreover, the adoption of laws is not exogenous, and the process depends on both legal and political conditions. Thus, countries that adhered to the civil law system had relatively weak investor protection, both through legal norms and through law enforcement. This led to the worst development of capital markets. Common law countries are at the other end of the spectrum, acting as bulwarks of market-oriented financial systems. Thus, financial systems initially came to their current state from different positions, having experienced different perturbations in this movement, the nature and scale of which predetermined the current quality of the institutions they use. Moreover, the importance of maintaining a high level of this quality, expressed by a set of indicators, is emphasized by a significant measure of the influence of institutions on economic development. Ensuring such characteristics of these dynamics as sustainability, balance, and social orientation is now the strategic setting of any country. For the purposes of analysis, how the design of the financial system manifests itself in all this, we proceed from this important conditionality.

This is demonstrated by the data in Figure 1, in which the level of economic development is correlated with the state of institutions, expressed in a set of indicators mainly of subjective origin but to a noticeable extent on the basis of objective data (for example, statistics of court decisions, antisocial phenomena, etc.). We consider indices calculated by the World Bank—Global Governance Indicators [34]. The relevant database provides information on the most important aspects of the quality of public administration, law, electoral practice, the state of society, etc.\ Six indices characterize various aspects of the state of the institutional environment; they are largely predetermined by the conditions of law and law enforcement and form a summary indicator. The division of high-income countries according to the criteria of membership in the Organization for Economic Co-operation and Development seemed important, considering the requirements for the participants of this association, which consists not only of demonstrating economic success but also of observing the "principles of representative democracy and a free market economy". The fulfillment of the latter requirement correlates closely with the quality of institutions.

The first index, the right to vote and accountability (voice and accountability), is the most important index in characterizing institutions, reflecting the reliability of the implementation of electoral procedures at all levels of the political system, the measure of centralization in terms of delegating appropriate powers to the level of municipalities and their responsibility to voters. The pattern of decreasing index values is clearly visible depending on the level of economic well-being, which is directly dependent on the values of the financial development index; the right to vote and accountability (voice and accountability) is the most important in characterizing institutions, reflecting the reliability of the implementation of electoral procedures at all levels of other indices.

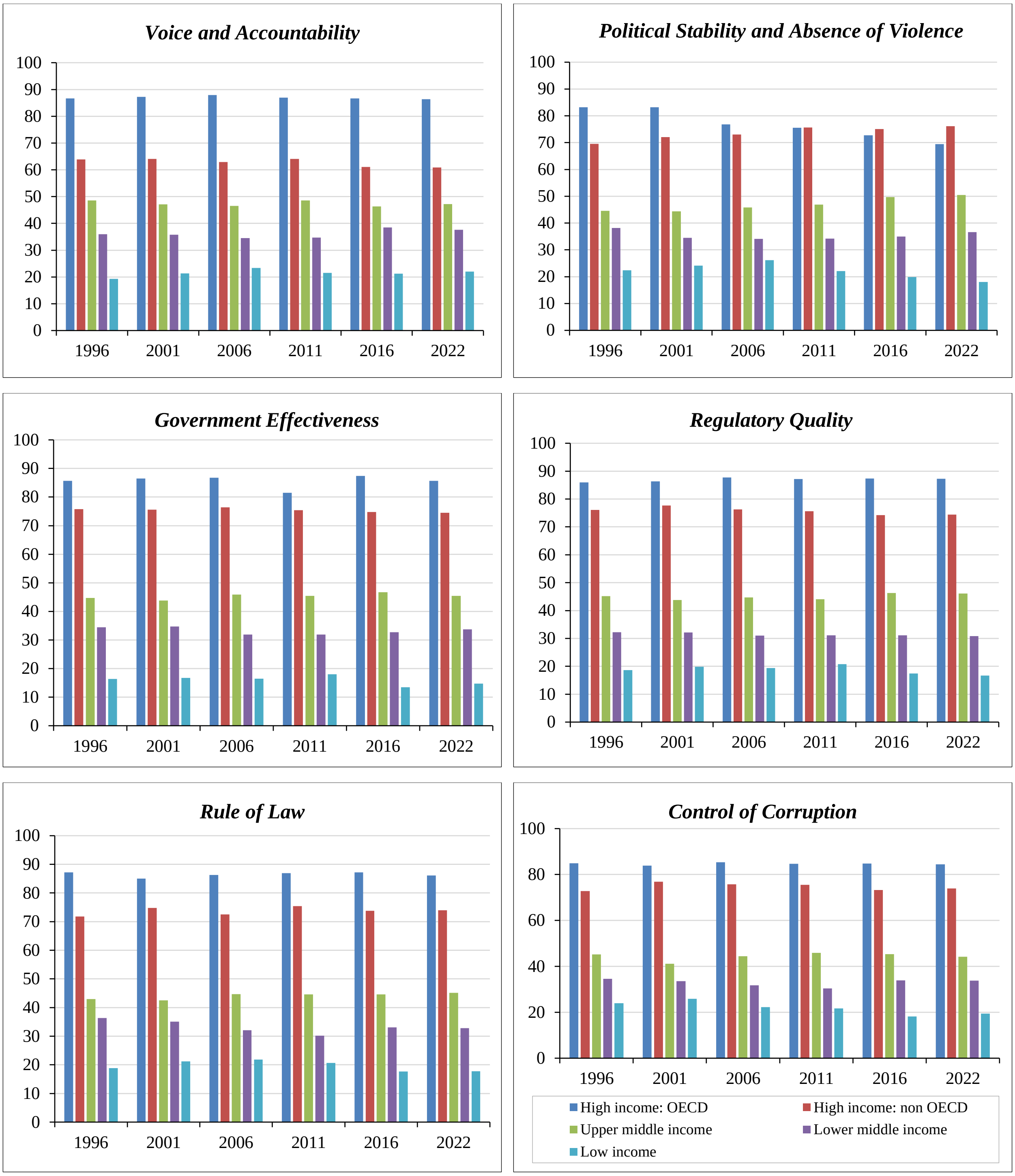

Figure 1. Dynamics of GGI indices by country samples (%)

The second indicator, Political Stability and Absence of Violence, is the most controversial of the whole set, since its values can be high against the background of rather weak institutions protecting the rights of individuals, including in the field of entrepreneurial activity. This is evidenced, in particular, by the high position of its values for high-income countries that are not members of the OECD. The third index, government effectiveness, reflects the effectiveness of government efforts to ensure macroeconomic stability and provides information on the effectiveness of other security measures implemented by the state in other areas. Here, we observe a more significant gap between low-income countries, as well as a significant gap between high-income countries that practice attitudes consistent with the principles of the OECD in their activities. The index reflecting the quality of the regulatory practices practiced is related to the previous indicator. At first glance, the ambiguity of this indicator may also seem to be determined by specific institutional conditions. However, in this case, the emphasis is on the effectiveness of the efforts being made to ensure competition, reduce discrimination in business activities, etc. In general, all the ratios recorded above remain. For the index characterizing the state of law, it should be remembered that the countries forming the analyzed samples initially practiced various regulations in this regard.

However, in recent decades, despite the national peculiarities of the legal tradition, there has been a noticeable and significant convergence of the family of developed countries in terms of the protection of individual and collective rights in the business sphere. There are also detachments recorded earlier. Finally, the latest index reflects a phenomenon that is the object of intense influence by the authorities of almost all countries. The significant gaps between the families of different countries indicate that in the weakest economies, the phenomenon of corruption can be provoked by the authorities themselves. At least the estimates underlying the numerical values of this index strengthen the evidence for this assumption. Thus, a comparison of economic development indicators with indicators characterizing the quality of institutions revealed a direct and significant correspondence between them. Let us turn to the country-specific features of financial development, which generally provide evidence of perturbations in the financial system in the direction of strengthening the role of the stock segment, acting as both a result and one of the conditions for progressive economic dynamics. The indicators characterizing this role are given in relative terms in relation to national GDP values. The countries are grouped in the same way as before—according to the level of economic development—but now without a breakdown of membership in the OECD. The presented indicators reflect the measure of development of the stock segment or the market orientation of the financial structure (Figure 2). As you can see, there are no statistics for the group of underdeveloped countries due to its insignificance in comparison with other families of countries.

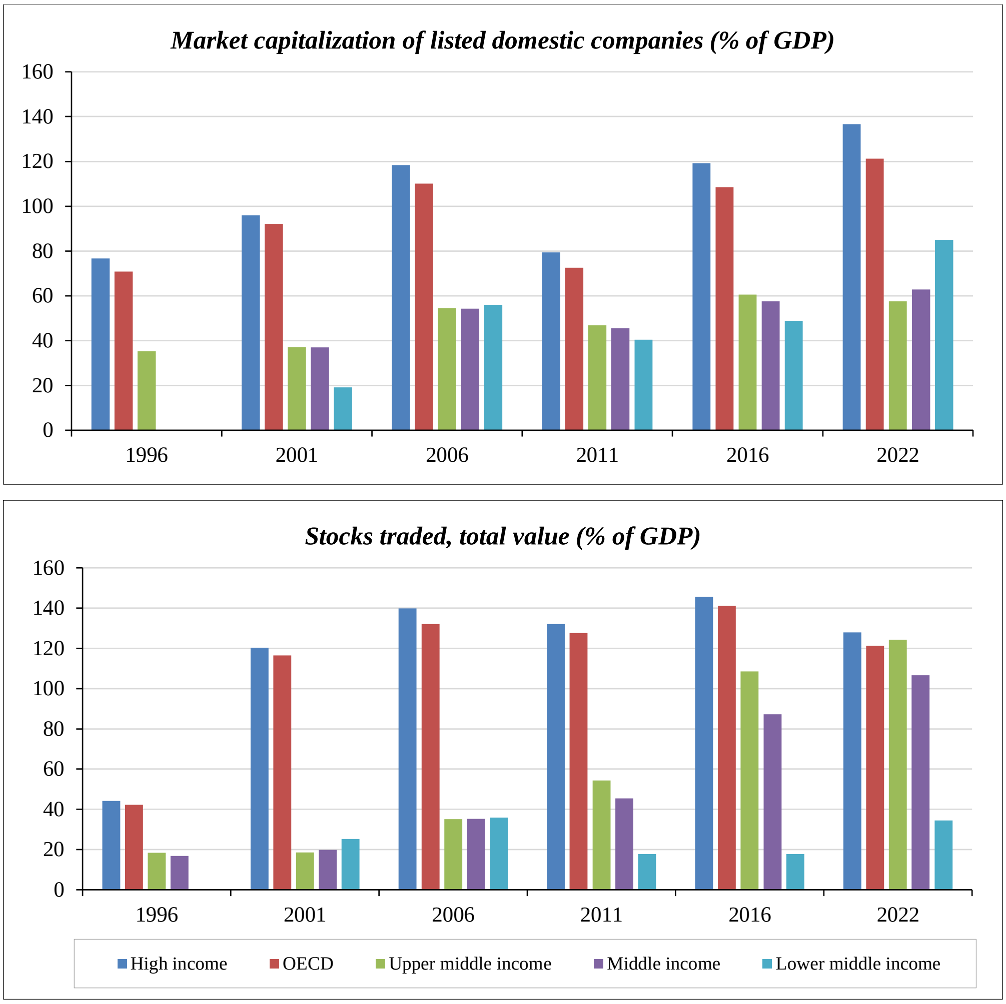

Figure 2. **Comparative characteristics of stock market development by country samples**

Groups of high-income and above-average income countries are leading in all indicators, reflecting the drift of national financial structures toward their greater market orientation. Despite the conjunctural component underlying the formation of the values of these indicators, such a combination is quite demonstrative and emphasizes the interdependence of the levels of financial and economic development, as well as the high quality of the institutional environment. A decrease in this quality does not so much undermine the analyzed bundle, as it provokes the movement of these levels after itself. At the same time, the samples are formed by countries with different degrees of law enforcement effectiveness from the perspective of well-known international authorities, differing in the ratio of different sectors of the financial market. In relation to the countries of the leading group, this means that there is a "blurring of boundaries" between the sectors that make up credit institutions, usually of a universal type, and sectors that provide alternative sources of funding. This trend is confirmed by data on domestic credit provided to the private sector and domestic credit to the private sector provided by the banking sector (see Figure 3).

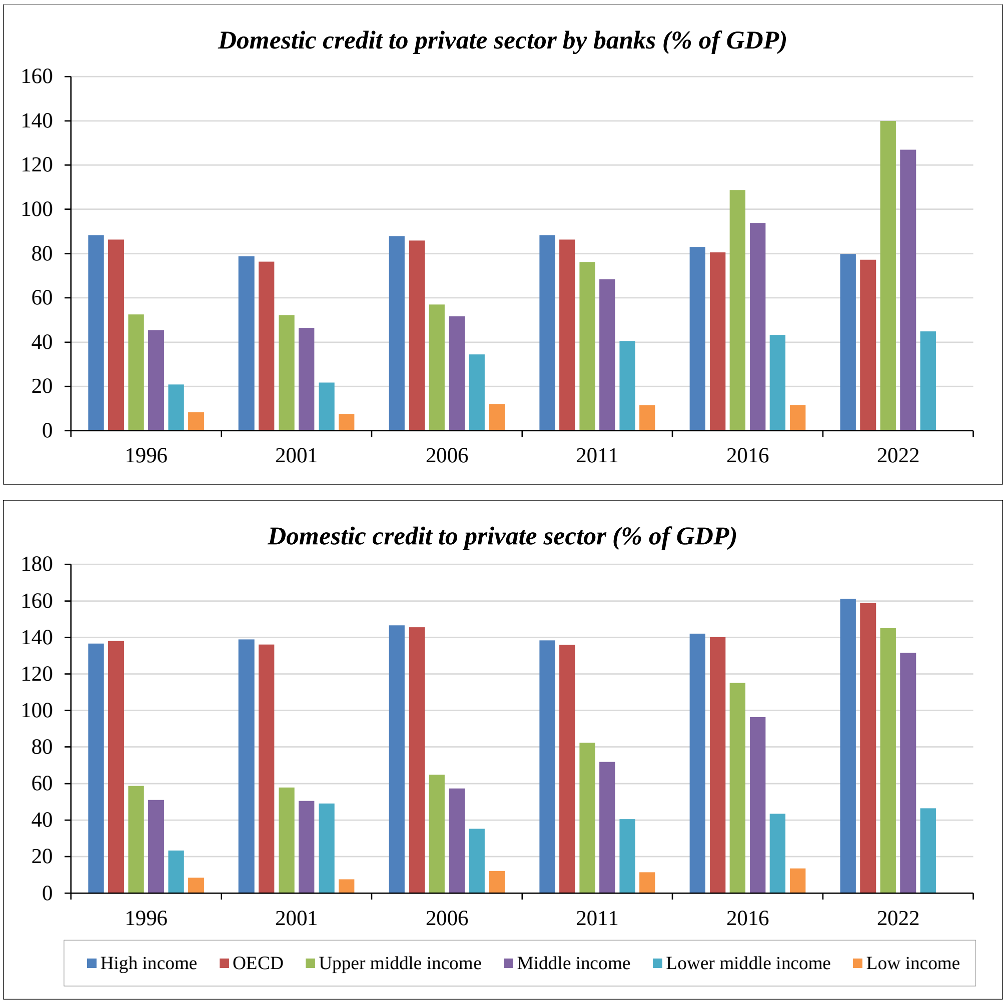

Figure 3. Domestic credit to the private sector as a percentage of GDP (%)

The growth in the lending rate in the leading group is due to the lifting of restrictions that were once imposed on banking operations in a number of countries with a market-oriented financial structure. The countries in the catching-up group maintain a pronounced trend toward significant amounts of bank lending. Finally, this is due to the action of giants such as China's state-owned banks. Modern large banks in emerging markets have actively diversified their business, everywhere complicating the organizational structure and mastering its divisional type in the product version, and in recent years, they have created their own ecosystems. However, against this background, the growth of alternative banking sectors is relatively slow here. This is clearly seen from the comparison of the values of the two indicators presented in Figure 3; in countries with an average level of per capita income, not to mention countries with lower incomes, almost all volumes of domestic credit are provided by banks. Here, the stock segment of the financial market is poorly developed and sometimes not at all. They also constitute a set of countries characterized by weak and insufficiently advanced institutions that consolidate a high degree of centralization of the financial structure, with the role of banks and regulatory practices characteristic of this measure.

Thus, if the leading countries in terms of economic development and, accordingly, the quality of institutions are characterized by a progressive decrease in emphasis in one orientation or another of their financial structures, then the countries completing this rating are characterized by a pronounced tilt of their structures in the direction of the banking system. This conclusion is confirmed by comparing the indicators of domestic credit to those of the private sector and the capitalization of national companies, as recommended by studies whose methodological approaches have already acquired canonical status [36]. If the values of country indicators characterizing the quality of institutions are superimposed on this background, the deterministic nature of this factor, in terms of its conditionality of the bundle of financial and economic development, becomes obvious. Moreover, financial development, as this quality grows, is steadily moving toward increasing the role of the stock segment. In conclusion, as this movement progresses, the legal tradition, which once played a leading role in shaping the basic classification of the design of financial markets, is no longer so important in itself. As seen, and as confirmed by the results of other studies, the importance of the ability of this tradition to self-development in the direction of increasing the quality of the entire set of institutions is growing.

To support the argument regarding the complementarity of high-quality institutions to the appropriate level of financial development and the role of various segments of the financial market, we use the IMF data. The consolidated financial development index reflects the design features of the financial system. Let us group the countries according to economic criteria. The group of countries showing a high level of per capita income is narrowed down to OECD members. The importance of such a breakdown and sampling is predetermined by the lack of any significant alternative for identifying the state of noneconomic factors in countries with different levels of development and differing characteristics of the financial structure.

The IMF offers six financial development indices, three of which reflect the level of development of financial institutions, forming the consolidated index Financial Institutions Index (FI), and three reflect the state of the markets, forming the Financial Markets Index (FM) [35]. As a result, all six indices constitute a composite indicator of financial development — the financial development index (FD) — a composite ranking of countries in terms of the depth, accessibility and effectiveness of their financial institutions and financial markets. Table 1 contains information on indices characterizing the level of financial development in developing and low-income countries, as well as OECD countries.

Table 1. Changes in the values of the indices of the development of financial institutions and markets of countries grouped by average per capita income

		Financial Institutions Access	Financial Institutions Depth	Financial Institutions Efficiency	Financial Markets Access	Financial Markets Depth	Financial Markets Efficiency
1996	High income: OECD	0.64	0.67	0.63	0.43	0.45	0.47
	Low-Income and Developing Countries	0.08	0.05	0.48	0.02	0.03	0.01
2001	High income: OECD	0.68	0.76	0.64	0.57	0.69	0.74
	Low-Income and Developing Countries	0.09	0.06	0.46	0.03	0.03	0.01
2006	High income: OECD	0.74	0.77	0.64	0.61	0.76	0.67
	Low-Income and Developing Countries	0.09	0.08	0.50	0.02	0.03	0.01
2011	High income: OECD	0.72	0.79	0.60	0.58	0.75	0.74
	Low-Income and Developing Countries	0.09	0.08	0.50	0.02	0.04	0.00
2016	High income: OECD	0.66	0.79	0.64	0.61	0.78	0.62
	Low-Income and Developing Countries	0.14	0.09	0.50	0.02	0.05	0.01
2021	High income: OECD	0.55	0.81	0.61	0.67	0.75	0.61
	Low-Income and Developing Countries	0.16	0.10	0.53	0.03	0.05	0.00

Comparing the values of indices by country groups and superimposing data on the quality of institutions strengthens the view that high values of this quality, inherent in countries with the same high indicators of economic development, determine the advancement of financial markets toward the diversification of financial instruments, sources of funding for current and strategic activities of organizations in the nonfinancial sector of the economy. In terms of the effectiveness of financial institutions, developing and lagging countries are close in position to leading countries. Since the indicator reflects the effectiveness of banks, it can be concluded that the structures of the financial systems of these countries are strongly oriented toward these institutions. Given the low values of the entire range of indicators of the quality of institutions here, the current orientation of financial markets in these countries may be burdened by excessive centralization in public management practices and the nationalization of banks.

On the other hand, an analysis of the country values of indices characterizing financial development showed that, by now, the financial markets of developed countries in continental Europe have significantly approached the countries that traditionally practiced a pronounced market orientation of their markets. Thus, the indices of market depth and efficiency have grown in Germany and France over a quarter of a century from 0.2 and 0.3 to 0.76 and 0.91, respectively. Austria, Switzerland, Sweden, and the Netherlands have the same trend, with minor dips within the analyzed time interval. The costs of grouping, as often happens, were expressed in the fact that a number of countries refute the thesis about the connection between the advancement of the stock market and economic development. This partly applies to individual Scandinavian countries. Another result is that the developed countries of continental Europe, which traditionally practice universal banking, did not significantly increase the values of the index of financial institutions. In general, in the group of developed countries, it is possible to see an increase in the value of indices characterizing the state of financial institutions in some years. This increase is due mainly to the growth of private institutional indices in the USA, Australia, and Switzerland. The UK has made significant progress in terms of the depth of financial institutions. Finally, this was facilitated by regulatory practices that relaxed restrictions on banking transactions. Owing to these trends, there is some blurring of the divide between the financial systems of developed countries, which differed significantly in terms of their structural characteristics several decades ago.

The dynamics of the composite indices characterizing the state of financial institutions and markets (Figure 4) clearly show the differences in the country-specific design features of financial systems.

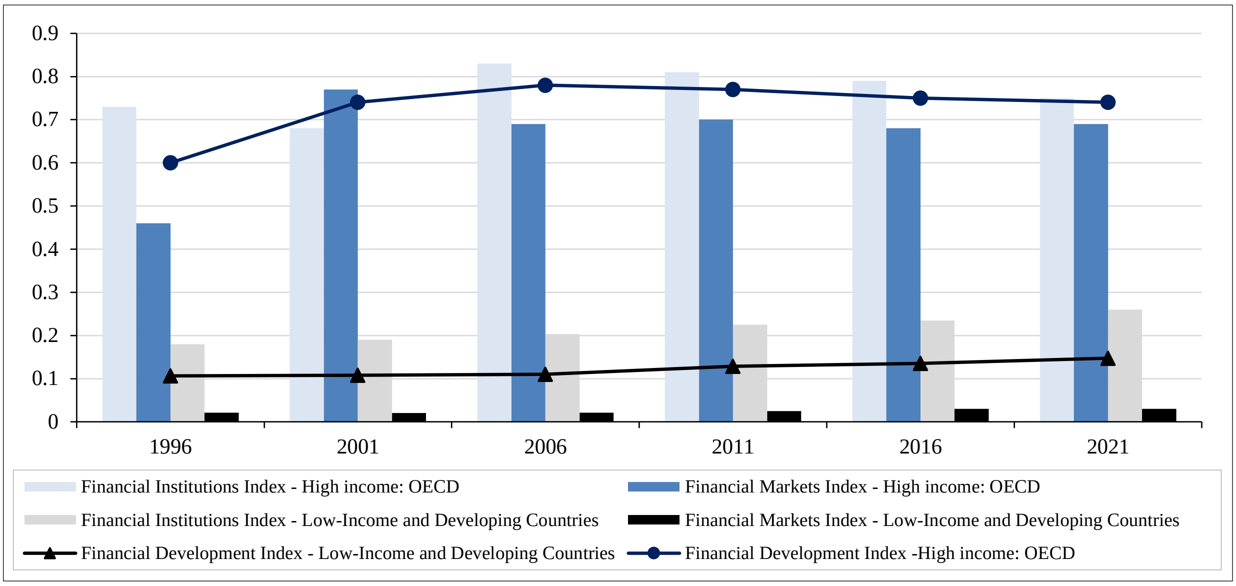

Figure 4. Changes in the consolidated financial development indices

The analysis of the values of the indices of countries differing in the level of economic development confirms the conclusion that finance is an effective factor of economic dynamics up to a certain level of financial depth of the national economy [37]. This level is expressed by a set of indicators characterizing the structural and quantitative parameters of the financial system. Moreover, the quality of institutions has an additional effect on the "financial development–economic growth" link. This is especially true for the countries of the lagging groups in their typology according to the level of economic development and the corresponding level of quality of institutions.

Thus, the analysis showed that, first, the high level of economic development corresponds to the equally high values of all six indices characterizing the quality of institutions. Second, the higher country values of average per capita income and the quality of institutions correspond to a more developed stock segment, strengthening its competitive position in comparison with the banking system in redistributive processes in the economy. Moreover, the movement toward the development and expansion of the stock segment is typical for countries where it initially occupied a peripheral role in the financial market. This movement is supported by an increase in the quality of institutions, fuelling economic and financial development. Third, all indices reflecting the state of financial institutions and markets and forming a generalized indicator of financial development are higher in countries with more advanced-quality institutions. These same countries are examples of more stable and balanced economic dynamics for countries from lagging groups that support conservative financial structures with high participation of banks, often affiliated with the state, and an undeveloped and sometimes absent stock market. Fourth, the legal tradition that laid the foundation for the structural construction of national financial systems no longer plays such a significant role in the development of their design. It has been replaced by legal practices, the effectiveness of which is ensured by the high quality of institutions. This is confirmed by the fact that by the end of the 20th century, the cohort of financially advanced countries was joined by countries whose legal traditions, against the background of insufficiently developed institutions, did not initially contribute to the growth of their competitive positions. This growth was restrained by excessive centralization of the financial system with a focus on banks, a limited number of sources of financing for long-term economic activities, dominant practices of corporate and public administration, and judicial decision-making, including in the field of property rights protection. Confirmation of this phenomenon will be undertaken in a subsequent discussion, where the results of the analysis will be "superimposed" on the classification of legal systems built on the basis of relevant traditions.

5- Discussion

In recent years, the discourse on the design of the financial system has significantly shifted. Various circumstances contributed to this. As noted above, the generic differences in financial structures were, to a certain extent, initially determined by legal traditions that influenced regulatory and management practices. Today's reality provides convincing evidence of the smoothing of these differences under the influence of the development of institutions that provide a whole set of well-known guarantees to participants in financial and economic interactions. In Table 2, national markets are classified according to their signs of reflection on the structural characteristics of their legal features and the influence of institutional conditions on them.

Table 2. Classification of national financial systems on the basis of the characteristics of the reflection of legal tradition in their design and the impact of the quality of institutions on their development

Criteria	Design of the financial system	Countries	Countries whose institutional quality meets OECD standards	OECD countries Upper-middle-income	Countries with FDI* > 0,6	Countries with WGI** > 60%
Common law	Markets based on the Anglo-Saxon legal system	Australia, Bahrain, Bangladesh, Bhutan, Botswana, Canada, Ghana, Hong Kong, India, Ireland, Israel, Kenya, Malaysia, Namibia, Nepal, New Zealand, Nigeria, Pakistan, Qatar, Saudi Arabia, South Africa, Thailand, United Kingdom, United States, Zimbabwe.	Australia, Canada, Ireland, Israel, New Zealand, United Kingdom, United States	Australia, Canada, Ireland, Israel, New Zealand, United Kingdom, United States	Australia - 0.91; Canada - 0.87; Ireland - 0.62; Israel – 0,60; New Zealand - 0.62; United Kingdom – 0.84; United States - 0.92	Australia - 92.30; Canada - 91.11; Israel - 68.50; Ireland – 91.50; New Zealand - 96.62; United Kingdom – 85.49, United States - 77.88
Civil Law (French)	Markets based on the continental legal system	Algeria, Argentina, Armenia, Azerbaijan, Belgium, Belize, Chile, Colombia, Chile, Colombia, Ecuador, Egypt, France, Greece, Indonesia, Italy, Mexico, Netherlands, Portugal, Peru, Philippines, Russia, Spain, Turkey, Uruguay, etc.	Belgium, Chile, Colombia, Chile, France, Greece, Indonesia, Italy, Mexico, Netherlands, Portugal, Spain, Turkey	Belgium, France, Italy, Netherlands, Spain	Belgium - 0.63; France - 0.81; Spain - 0.80; Italy - 0.77; Netherlands - 0.71	Belgium - 84.61; France - 80.21; Italy - 67.39; Netherlands - 91.82; Spain - 73.19
Civil law (Germanic and Nordic branches)	—//—	Austria, Belarus, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Iceland, Japan, Korea, Latvia, Lithuania, Norway, Luxembourg, Poland, Slovenia, Sweden, Switzerland, Taiwan, etc.	Austria, Denmark, Germany, Iceland, Japan, Korea, Latvia, Lithuania, Luxembourg, Czech Republic, Estonia, Finland, Poland, Slovenia, Sweden, Switzerland.	Austria, Czech Republic, Denmark, Estonia, Finland, Czech Republic, Germany, Iceland, Japan, Korea, Lithuania, Luxembourg, Norway, Slovenia, Sweden, Switzerland	Austria - 0.61; Denmark - 0.66; Finland - 0.65; Germany - 0.75; Japan - 0.89; Korea - 0.82; Luxembourg - 0.71; Norway - 0.64; Sweden - 0.78; Switzerland - 0.94	Austria – 87.08; Czech Republic – 80.59; Denmark - 95.35; Estonia – 87.14; Finland – 95.29; Germany – 88.42; Iceland - 93.22; Japan – 89.62; Korea - 79.23 Latvia – 75.22; Lithuania – 79.57; Luxembourg - 95.66; Norway – 93.79; Slovenia - 77.27; Sweden - 94.75; Switzerland -96.69

* Aggregate financial development index - 2021

** Averaged on the basis of six indicators of institutional quality - 2022

Table 2 confirms that the level of economic and financial development is predetermined by the corresponding quality of institutions. This conclusion is also confirmed by the existing results concerning the problems of financial development presented in their modern analysis. However, one of our main conclusions is that the legal tradition has noticeably lost its independent importance for the development of the financial structure, giving way to the quality of application of both general and civil law. The improvement of institutional conditions compensated for the costs of certain national legal traditions, which, according to a significant number of modern researchers, are interpreted as a factor constraining the improvement of the design of the financial system and economic development. The institutional modernization undertaken by a number of countries has made it possible to overcome backlogs, realize spurts in economic and financial development, or escape the so-called "middle income trap". Examples of South Korea, such as postsocialist and post-Soviet countries such as Poland, the Czech Republic, and Estonia, are convincing in this regard.

In addition, our findings are only partially consistent with the results of other studies that have noted a weak response of financial development to institutional factors such as the quality of regulation, government efficiency, and political stability. All the factors expressed in indicators characterizing the quality of institutions are interdependent. However, these three factors can be highly appreciated against the background of weak economic opportunities and an insufficiently effective financial structure. However, the adequacy of these estimates for long-term prospects is questionable, which is confirmed by the results of our analysis on the horizon for more than twenty years.

Institutions, their quality, and the cultural context of social dynamics and the current state of society that affects them constitute one of the decisive factors for the productive effect of linking economic growth with financial development through progressive and balanced changes in the design of the financial system. These changes should be expressed mainly in the increasing role of the stock segment in the national financial system and the growth of competition in the financial market, including its banking segment. The importance of this institutional factor in financial development and modernization of the financial structure of the factor is clearly greater for countries lagging behind in economic development. The analysis revealed the significance and stability of the gaps between different groups of countries over the past quarter century.

Culture and the institutions defined by it, such as the state of law, the political system, centralization, public administration, etc., constitute, as our previous studies have shown, the most powerful determinants of economic dynamics and financial development [26]. This can be attributed to changes in the design of financial systems, since, as noted above, financial development issues are primarily issues of financial structure. Historical examples show that institutions can promote or hinder economic and financial development. In the first case, this movement is catalyzed by the endogenous influence of the institutional superstructure on the economic basis; in the second case, external influence is needed. The possibility of the influence of the subjective factor has often been underestimated, particularly by the Russian political economic tradition. During the crucial stages of their history, socioeconomic systems often balance a limited number of prospects, which are often reduced to modernization and conservation. Here, external shocks can be dependent on what is commonly called the role of personality in history. This influence is by no means a simplification or a primitivization of the vision of the role of objective forces of the social movement. There has been, in the past and today, much empirical evidence of the insufficient influence of these forces for the realization of modernization goals in dramatic time periods of history.

The development of the financial system and its design is influenced by a more general process of economic dynamics. This thesis is consistent with the conclusions drawn in the middle of the 20th century by the classics of economics. However, financial development also begins to significantly fuel economic growth in an endogenous way if institutions contribute to this growth. This conclusion is already a modern analysis. On the other hand, the institutional and cultural factor, which is coordinated in its qualitative parameters with subjective influence, can constitute the greatest obstacle to economic and financial development, provoking the conservation of an inefficient financial structure and its subsequent degradation. This is confirmed by the long-term dynamics of a fairly stable set of countries forming the closing groups in our classification. Modern reality, with increasing frequency, gives rise to many phenomena that complicate cause–and–effect relationships, making it difficult to use formalized methods of assessment. These difficulties also affect the possibility of building a strict classification of financial structures. The latter, experiencing radical metamorphoses under the influence of technological factors, are complemented today by a decentralized alternative (DeFi) that challenges the traditional system. Noneconomic circumstances are also noticeable here in their action, giving rise to temptations interpreted both as behavioral deviations and as considerations of regulatory arbitration. Moreover, the number and scale of these manifestations are directly dependent on the entire spectrum of institutional conditions.

The design of the financial system is subject to long-term development factors, often resulting in a high degree of resistance to shocks such as economic crises, political upheavals, external trade and financial sanctions in the short term. However, over time, the process of financial development and the accompanying perturbations in the structure of the financial system eventually run into a fork, beyond which, in one direction, is the preservation of the quality of institutions provoked by excessive regulation and inefficiency of legal practices; in the other direction, the development of institutions buffers the costs of a high measure of centralization and subsequently contributes to the optimization of this measure. Institutional features expressed in indicators characterizing the legal environment, the quality of management and regulatory practices, and political trends should be considered both in the analysis and in the process of reformation of the institutional superstructure of the economic basis. Collectively, they determine the paths of economic and related financial development. At the same time, such influence is often ignored; at best, it is assigned a peripheral role, which often provokes an increase in economic and financial development lags and the consolidation of inefficient structures. The question of the priority of the components of this superstructure is important, making up one of the modern discourses of financial development problems. However, his decisions, built on the basis of excessive exploitation of the advantages of positive analysis, often obscure the evidence of the interdependence of factors of a noneconomic nature. This bias is fraught with contradictory judgments, which ultimately affects the assessment of the importance of the problems of institutional modernization and the growing number of secondary academic recommendations.

6- Conclusion

For more than half a century, the design of national financial systems has changed markedly. Therefore, these systems were in the same capacity at the stage of industrialization at the turn of the XIX-XX centuries; however, some of them returned to the starting point. However, the last two decades have been marked by significant shifts, which were largely facilitated by legislative innovations at the turn of the century, liberalized the modes of functioning of financial markets, and eliminated restrictions imposed after the Great Depression. Later, the reverse dynamics took place, provoked by the Great Recession, when regulatory practices were tightened and productive attempts were made to unify regulatory and supervisory requirements. All this has contributed to reducing national differences in financial structures, especially in developed countries. Moreover, many developing countries have not been able to overcome the so-called "middle income trap". This was largely due to their slowness, indecision or unwillingness to institutionalize. Decisions, mainly of a political nature, expressed a similar attitude to the role of basic institutions in financial development and economic dynamics, consolidated the conservation of ineffective institutions, and provoked their degradation.

The analysis revealed the stability of the marginal values of financial development indicators for a group of developing countries characterized by the presence of weak or underdeveloped institutions. This provision actualizes the task of institutional modernization, which can impetus structural perturbations in the financial system and significantly increase the sources of sustainable and balanced economic dynamics. The relevance of this task is also confirmed by empirical observations regarding certain postsocialist countries that have successfully passed the path of such modernization.

Moreover, finance is an effective factor in economic development up to a certain level of financialization of the national economy. At least, the values of their financial development indicators convince us of this. However, this does not exclude the need for them to maintain the high quality of institutions, corresponding to the level of financial development they have achieved, and contributing to economic growth on a sustainable and balanced basis.

The quality of institutions is one of the decisive factors for the productive action of financial development—economic growth. Countries that have gone further along the path of modernization of institutions, as a rule, have more balanced and advanced markets, which are among the most important conditions for positive and stable macroeconomic dynamics. The patterns identified during the analysis are important for decision-making within the framework of economic policy, orienting the subjects of these decisions to the best management and political practices. It seems that their implementation is associated not only with the expansion of sources of growth in economic well-being but also with the progressive development of human capital.

7- Declarations

7-1- Author Contributions

Conceptualization, A.F., E.T., and M.B.; methodology, A.F., E.T., and M.B.; software, A.F.; validation, A.F., E.T., and M.B.; formal analysis, A.F., E.T., and M.B.; resources, A.F., E.T., and M.B.; writing—original draft preparation, A.F., E.T., and M.B.; writing—review and editing, A.F., E.T., and M.B.; visualization, A.F.; supervision, A.F., E.T., and M.B. project administration, A.F., E.T., and M.B.; funding acquisition, A.F., E.T., and M.B. All authors have read and agreed to the published version of the manuscript.

7-2- Data Availability Statement

Publicly available datasets were analyzed in this study. These data can be found here:

- http://info.worldbank.org/governance/wgi/
- https://data.imf.org/?sk=f8032e80-b36c-43b1-ac26-493c5b1cd33b&sid=1480712464593

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7-4- Institutional Review Board Statement

Not applicable.

7-5- Informed Consent Statement

Not applicable.

7-6- Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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