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FINANCIAL SYSTEMS: CHALLENGES OF COMPARATIVE ANALYSIS

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Abstract: the paper addresses the methodology of comparative analysis applied for national financial systems. The study of existing approaches evidences that corresponding estimates vary considerably depending on the measures used.
Keywords: financial system, financial development, factors of financial development.

Our research is devoted to the controversial issues concerning the methodology of comparative analysis applied for national financial systems. As well known, financial deepening is one of the key drivers for economic growth. However, the methods, which traditionally used to evaluate a country's financial system, are not sufficient to get the true picture of financial development since they are based solely on financial factors and measures.

The message of our research concerns the need for the complex or *comprehensive* methodology of comparative analysis for national financial systems. Consequently, we are going to discuss three main questions:

1) What do we mean by a country's financial system?
2) What basic principles and methodological approaches are usually applied in comparative analysis of national financial systems?
3) Are there any special features that should be taken into account in case of emerging financial systems, such as the Russian financial system?

We started from a key question: what do we mean by the "financial system" in the cross –countries comparative analysis? There is a controversy about the design and essence of the financial system. From the most common perspective, the financial system constitutes a set of markets and institutions used for financial contracting and the exchange of risks and assets [2, p. 2].

The institutional structure of the financial system consists of key five elements:

1) financial markets for different financial instruments;
2) financial instruments;
3) financial institutions (such as banks, investment funds, pension funds, and insurance companies);
4) organization of financial operations (different formal and informal rules, business customs);
5) supporting infrastructure (human resources, facilities, technical support).

Полесгу

Here we should make some notes. We absolutely agree that financial markets, instruments and institutions define the essence of a country's financial system. However, we believe that other elements matter. The quality of organization and infrastructure relates to the quality of general social and economic institutions. The challenge is that it is quite difficult to draw a clear line between relevant and irrelevant factors. Not surprisingly, in many cases national financial systems are evaluated and compared by only financial indicators.

What also should be mentioned is the principle possibility of cross –country comparative analysis with regards to financial systems. National financial systems are generally considered comparable by their determining characteristics. This approach is based on the neoclassical conception of rational behavior. An alternative approach presumes that each financial system is unique since economic behavior has significant socio –cultural specifics. Hence, national financial systems can hardly be compared by means of common methodologies.

In our research, we logically turn to the first abovementioned approach and examine the most common methodologies applied in comparative analysis of national financial systems. The first methodology has been developed by the World Bank (WB). The second one has been represented by the World Economic Forum (WEF). These methodologies are to some extent opposite with respect to determining the key factors of financial development. The WB's Global Financial Development reports address primarily financials, while the WEF's reports are based on comprehensive methodology which allows estimating the quality of relevant social and economic institutions. Therefore, we shall consider the corresponding methodologies in more detail.

The WB's methodology focuses on *financial markets and institutions* and presumes that there are four main dimensions of the financial system: *depth, access, efficiency, and stability*. Depth is characterized by the relative volume of a country's financial sector. Access means affordability of financial resources to firms and population. Efficiency in this specific case relates to profitability of financial institutions and liquidity of financial markets. Stability is measured by distress probability for financial institutions and volatility for financial markets. The World Bank's 4*2 methodology and key indicators of national financial systems are shown it the table 1 [3, p. 9].

Table – The World Bank's 4*2 methodology with key indicators of a country's financial system

	Financial institutions	Financial markets
Depth	Private sector credit to GDP	Stock market capitalization to GDP
Access	Accounts per thousand adults (commercial banks)	Percent of market capitalization outside of top 10 largest companies
Efficiency	Net interest margin	Turnover / capitalization ratio for stock market
Stability	Z –score for commercial banks	Volatility of stock price index

The next methodology has been developed and applied by the World Economic Forum. According the WEF's wider approach, national financial systems are evaluated and ranked by means of the financial development index (FDI). The FDI is a weighted average value of three aggregated estimates: policy and institutions, financial intermediation, and financial access. The first two pillars in turn consist of several sub pillars (fig. 1).

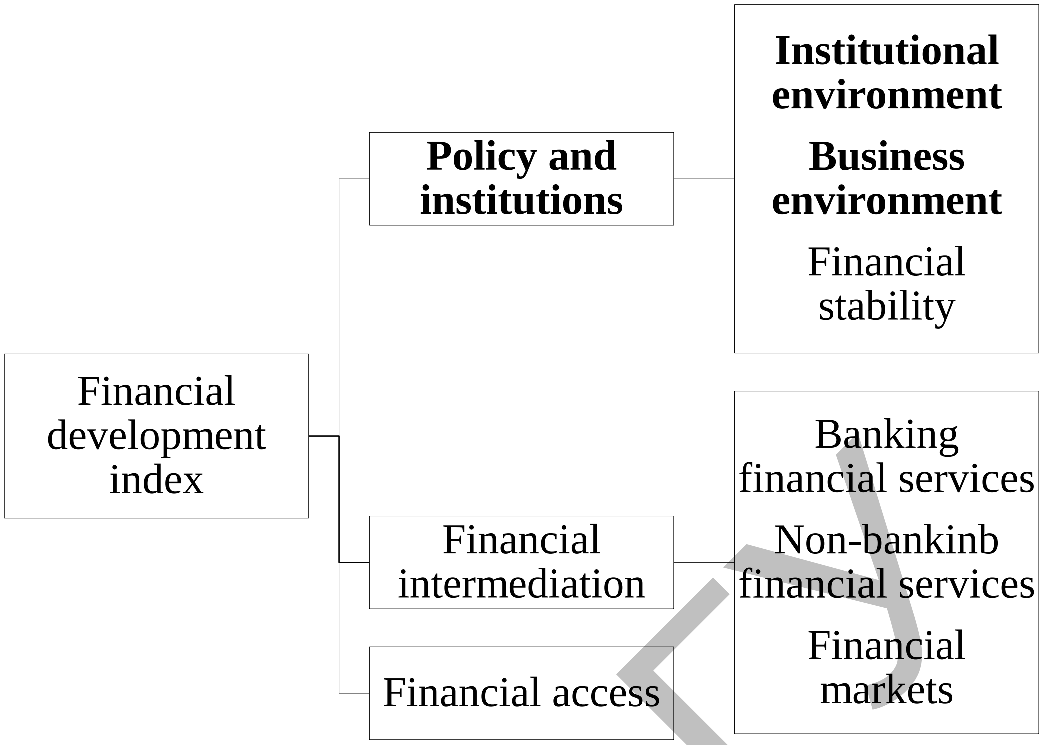

Fig. 1 – The conceptual model of the financial development index by the World Economic Forum [4, p. 5]

We should note that financial intermediation and access are evaluated by almost the same set of financial indicators as in the WB's methodology. Significant differences are hiding in the first pillar. It comprises of three sub pillars: institutional environment, business environment, and financial stability. Here we should pay special attention to the *institutional factors*: 1) "institutional environment" including laws, regulations, and supervision of the financial sector, as well as the general quality of contract enforcement and corporate governance in a country; 2) "business environment" considering the availability of human capital, the state of physical capital (that is, the physical and technological infrastructure), and some other aspects (taxation policy, the costs of doing business for financial intermediaries, etc.).

The wider methodology of the World Economic Forum is a good example of a comprehensive approach, which is not limited by financial indicators. This approach presumes that general institutions really matter. And this is the case of emerging financial systems, such as the Russian financial system.

Emerging financial systems are characterized by two main sings. Firstly, they have not been yet developed in terms of depth, access, efficiency, stability, and general institutional preconditions. Secondly, they are rapidly developing. Emerging financial markets demonstrate significant growth almost in all directions. However, they have been still far away from developed or "advanced" ones. Therefore, we suggest, that emerging financial systems should be analyzed primarily within the same group.

How strong are differences between emerging financial systems? At first sight, some of them are very similar. However, the situation with the Russian financial system is very illustrative. According to the WEF's wider comprehensive methodology, that we have earlier commented, Russian Federation has stronger positions in business environment, but its institutional environment and especially banking services are considerably weaker (fig. 2).

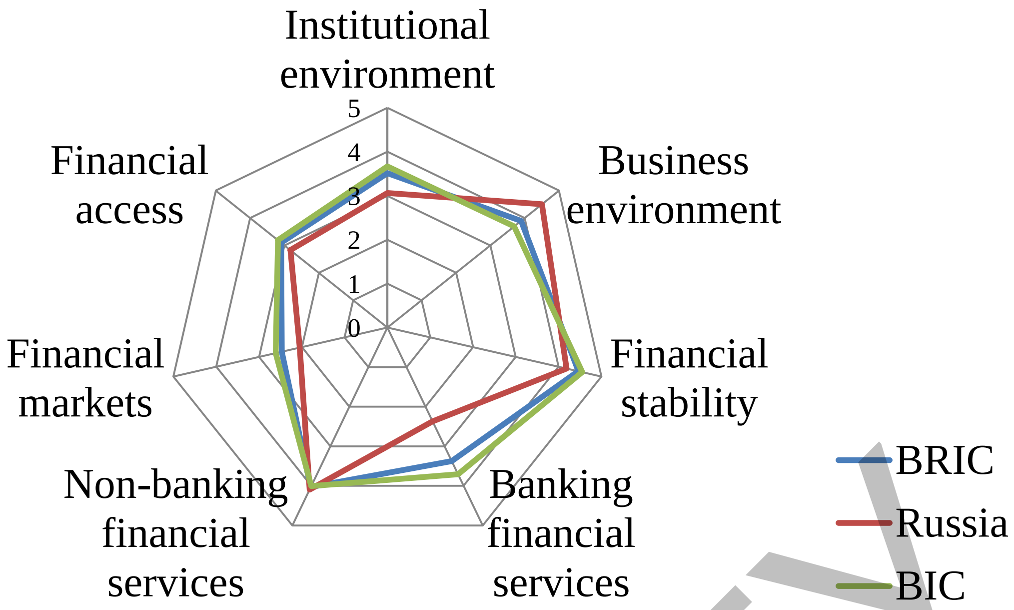

Fig. 2 – The comparative estimates of the BRIC's financial systems by the WEF, 2012 [complied from: 4, p. 13 – 14]

It is worth saying that there is one more version of financial ranking provided by the WEF's Global Competitiveness Report. Surprisingly, the situation with the Russian financial system looks significantly worse here (fig. 3).

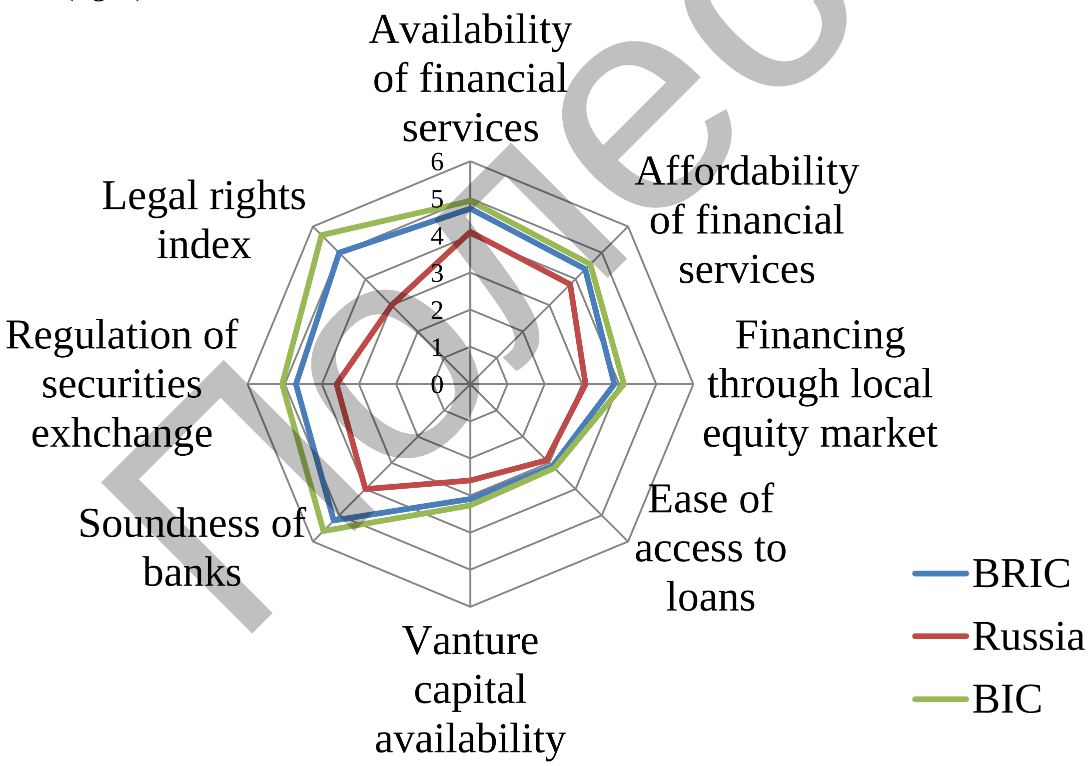

Fig. 3 – The comparative estimates of the BRIC's financial systems by the WEF, 2013 [complied from: 5, p. 500 – 507]

Due to the changed methodology, the rank of Russia is very low. Notably, there are no strong business environment factors here. The same time, the weight of unwanted factors, including legal rights index, is higher. So, not only institutional preconditions matter, but also the choice of favorable, neutral or unfavorable factors.

And the last question of our research concerns the special features of emerging financial systems. As for the Russian financial system, there is clear evidence that these features relate to over concentration:

– The Russian financial market is concentrated in the central region of the country.
– The main part of institutional investors and market professionals function in the Moscow region.
– The Moscow Exchange provides almost all transactions with securities and derivatives in Russia.

The main stock exchange in Russia is the Moscow Exchange (MOEX) which was formed in December 2011 as a result of a merger between Russia's two main exchange groups: MICEX group (Moscow Interbank Currency Exchange) and RTS group (Russian Trading System). MOEX provides almost all transactions with securities and derivatives in Russia. A limited number of regional exchanges were acquired by MOEX or serve a small part of local transactions. The situation with the Russian public companies is very characteristic. Three largest companies provide more than 60% of trade volumes on the secondary stock market. Ten largest companies accumulate 87% of trade volumes. And less than 5% of listed companies are liquid [see for details: 1].

What does it mean from the methodological perspective? On the one hand, evaluation can be done on a relatively small sample of companies. On the other hand, estimates are often relevant for this small sample of companies. We can give an example. As we know, the Moscow Exchange represents the Russian securities market, including the stock market. Besides, only 20 stocks accumulate the bulk of the market capitalization. If we analyze returns of these stocks, we easily come to conclusion that the corresponding market is operationally and informationally efficient. Does it mean that the Russian market efficient? The answer is ambiguous.

Summing up the above, let us formulate the conclusions:

– Financial systems need comprehensive comparative analysis. Institutional factors, being the important preconditions of financial system functioning, make a significant contribution to the final assessment of financial markets and institutions.

– Therefore, it would be more effective to combine financial and non –financial factors in the complex methodology of financial systems' evaluation. The corresponding approach appears especially valuable for emerging markets with their poor institutional conditions. However, obtained estimates of financial development strongly depend on the choice of institutional factors.

– Emerging financial systems should be compared within the corresponding group, but they still have special features that should be taken into account. For instance, the Russian financial system suffers from poor regulation, but business environmental factors are relatively strong. The Russian financial market is over –concentrated. This predetermines the specific of evaluation.

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