

## Transformation of Public Financial Policy in the Context of Economic Turbulence: Methodology and Practice

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### Abstract

*The article examines the problems and possible ways of transforming the state financial policy in the context of the new economic reality, which was formed under the influence of economic turbulence and is aggravated by the geopolitical factor. The authors propose to look for new sources of domestic economic growth in response to modern challenges and explore the possibilities of state financial policy from this point of view.*

**Key-words:** Public Financial Policy, Evaluation, Efficiency, Financial Indicators.

### 1. Introduction

The financial policy of the state plays a key role in solving the most diverse problems that the world and national economies face throughout their existence. Adequate strategies for the implementation of the state financial policy (SFP), formed considering the dynamics of the internal and external political and business environment, create the basis for the stability of the national market as a whole of its structural elements, and provide conditions for the successful functioning of participants in financial relations at all levels. SFP is particularly relevant in the context of global turbulence when it is almost impossible to make unambiguous management decisions, and deep research and analysis of the principles, approaches, financial mechanisms, tools, and measures

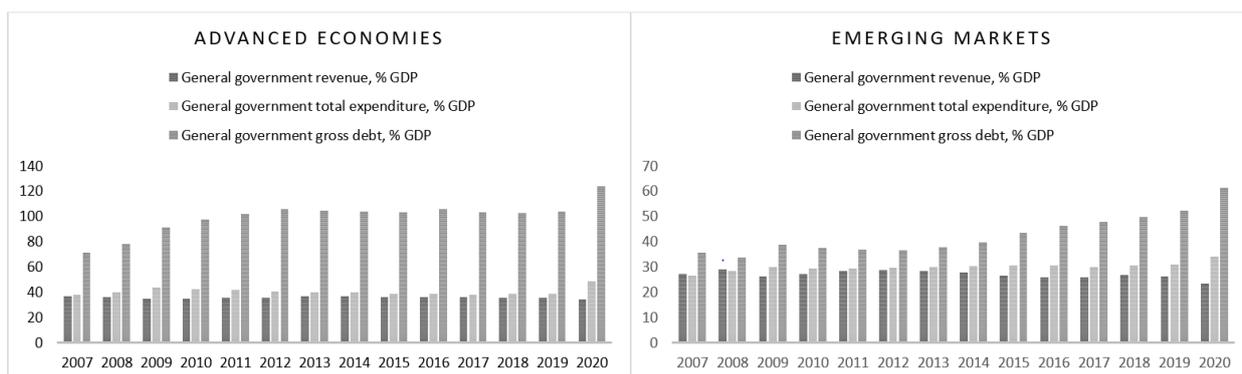
covering the entire financial system of the state are necessary for modeling and selecting the right scenarios.

International financial organizations consider the financial policy of the state as a critical factor of stability and growth. Monitoring the economic and financial policies of member states is one of the most important responsibilities of the International Monetary Fund (IMF). The IMF's oversight is carried out not only at the global and regional levels but also at the level of individual countries. Based on supervisory activities, potential risks are identified and recommendations are developed by the IMF on the need to adjust the economic and financial policies of the state to adapt them to changes in the global economy, reduce financial imbalances, and the vulnerability of national markets.[1; 4; 6; 7].

According to the IMF, it was a harmonious public financial policy that helped many states to cope with the economic difficulties of the pandemic period. In 2020, the countries of the world quite actively implemented management mechanisms aimed at solving the problems caused by instability in the movement of financial flows, implementing investment promotion strategies, easing restrictions on cross-border capital inflows, but tightening the conditions for the withdrawal of capital abroad, international payments and transactions, transfers abroad, temporarily eliminating taxes on foreign currency obligations of financial institutions. Financial risks were often assumed by the public sector in the group of countries with a developed economy [32; 33]. The central banks of many developed countries purchased large amounts of private-sector bonds and provided bank loans to private companies [2; 3; 5].

However, global measures of budgetary support for consumption and production in 2020 amounting to almost 14 US Dollars Trillion, caused the growth of the world's public debt, which reached 97.6% of GDP, which is 14% higher than in 2019 (Figure 1). In 2021, the debt is expected to grow further by about 2%. The most significant public debt increased in developed countries, the debt of which concerning GDP increased by 18% over the year – from 105% in 2019 to 123% in 2020, and the US public debt last year increased by 21% [27].

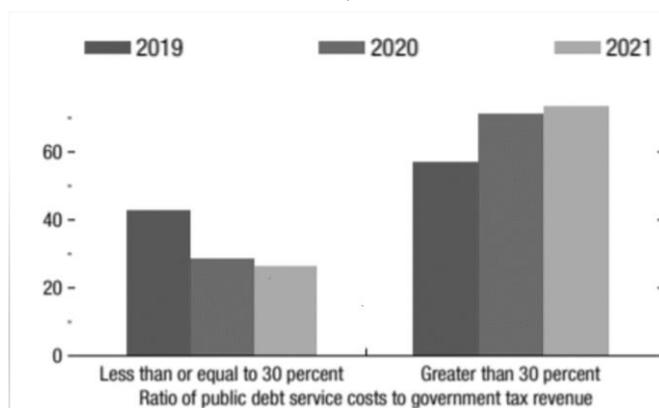
Figure 1 - Dynamics of government revenues, government expenditures, and public debt of different groups of countries.



Source: Compiled by the authors according to the IMF

States with an imbalance between financial capabilities and needs are at high risk. In the group of emerging market and developing economies, there was an increase in the number of countries in 2020, sovereign debt sustainability indicators of which deteriorated due to the increase in public spending due to the need to support economies in the pandemic, while budget revenues fell (Figure 2).

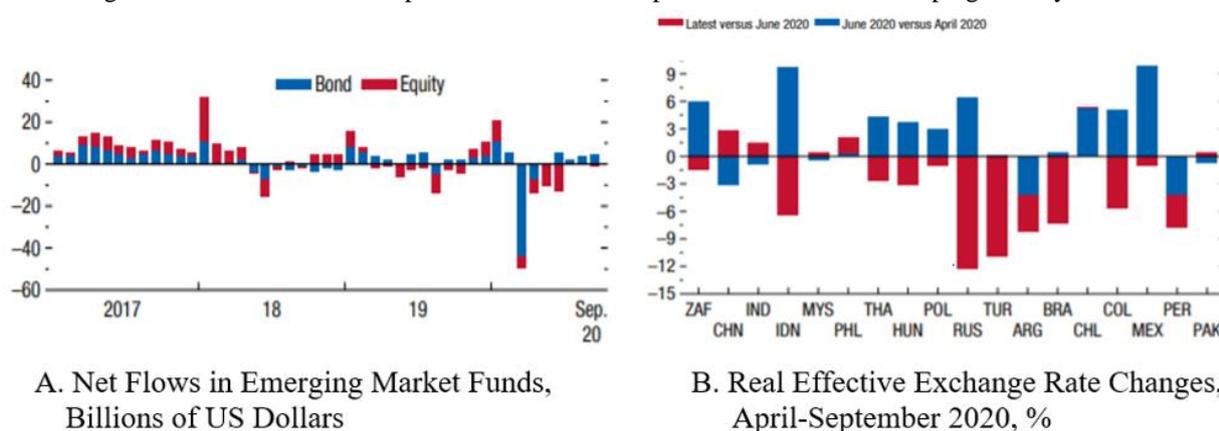
Figure 2 - Ratio of Public Debt Service Costs to Government Tax Revenue in emerging markets (share of countries group, %)



Source: according to the IMF [28].

The risks associated with sovereign debt were further compounded by the fact that the COVID-19 crisis led to a record outflow of capital from developing countries [9]. In the first quarter of 2020 alone, portfolio investments in these markets fell by almost 100 billion US dollars [29]. Also, there had been high volatility and a significant decline in the exchange rates of emerging economies during the past year (Figure 3).

Figure 3 - Indicators of the impact of the COVID-19 pandemic crisis on developing country markets



Source: IMF data [30].

Despite the gradual recovery of the economy by the end of the year, the IMF experts believe that "public policy actions should provide effective support until the recovery is firmly established, with special attention to solving the most important tasks — increasing potential output, ensuring inclusive growth that benefits everyone" [31]. Public financial policy should be considered as the foundation of these processes. There is a need to transform the SFP model to increase the return on public financial resources [14; 17].

## 2. Materials and Methods

The methodological basis of the study was a comprehensive approach, including dialectics, analysis, and synthesis, induction and deduction, system analysis, comparison, abstraction, the method of groupings, logical and historical methods, which suggested the possibility of considering phenomena and processes in dynamics and relationships, and allowed a comprehensive study of the financial flows of the state and to form approaches to assessing the effectiveness of management in the field of public finance [10; 21].

This study was based on the scientific works of leading foreign and Russian scholars, reflecting to varying degrees the issues of the formation and implementation of SFP measures, the theory of monetary policy, budget, taxes, public goods, the concept of managerism, financial management, the fundamental principles of the functioning of the market economy [18; 23].

The information base of the study was statistical data, analytical, review and reference materials of international financial organizations, such as the International Monetary Fund, the World Bank, the Bank for International Settlements, the European Central Bank, the Organization for

Economic Cooperation and Development, some national state financial institutions, as well as original calculations [12; 16].

### **3. Results**

The key direction in the processes of transforming public financial policy against the background of high risks of uncertainty is to resolve the increasingly acute contradiction between the limited sources and amounts of funding and the many options for their distribution and redistribution. This involves the development of reliable budget parameters, monitoring of financial risks, institutional consolidation, and tax reforms within the framework of the SFP.

Supporting the economy through public financial policy measures in a highly indebted environment requires a delicate balancing act to achieve a balance between short-term demand, as a prerequisite for post-pandemic economic recovery, and economic sustainability in the medium term. The IMF has developed the concept of a comprehensive policy framework, which, among other things, includes alternative options for an optimal set of money-and-credit, monetary, macroprudential, and capital flow management policies and can be used to form the basis for financing national economies in the special conditions of our time.

An actual way to solve the problem of the effectiveness of the SFP is to change the principles of assessing its effectiveness, which would help to increase objectivity in identifying "bottlenecks" and reserves, directions of possible correction of the SFP. In current practice, most often the results of public financial policy are determined indirectly or partially – either by the results in certain segments or only through the consequences in other areas of economic policy. The lack of transparency in the interpretation of the effectiveness of the SFP does not motivate the participants involved in its implementation. Therefore, it is very important to develop quality markers for the SFP. Therewith, it is necessary to move away from static assessment and provide for the assessment of indicators in dynamics, which will allow more clearly characterizing how efficiently the state uses the financial resources available to it, and taking more fully into account the configuration and possible consequences of the SFP.

To this end, when modeling the assessment of the effectiveness of the public financial policy, in our opinion, it is appropriate to use the idea of clusters, the totality of which will form a hierarchical structure of priorities of public financial management with a focus on the overall result [8; 13; 15; 22; 24]. The cluster concept in the context of the SFP assumes some transformation of the

very essence of clusters. Instead of the most common "geographical" interpretation, a cluster for the implementation of SFP is defined as a set of mono-or multi-profile institutions linked by state strategic goals. Clusters, as the core of the SFP, will become the objects of financing. Cluster structures can relate to individual industries (healthcare, education, housing, and utilities, etc.) or be combined in a complex direction (economic growth, investment attractiveness, etc.).

It is possible to assess the effectiveness of SFP from a variety of perspectives through the cluster mechanism – economic, social, public, budgetary, environmental, etc. The procedure for ranking clusters involves determining their contribution to the effectiveness of the public financial policy. The weight of the cluster in achieving the maximum return of the management level in the state finance system is based on a characteristic set of evaluation indicators of the effectiveness of a particular cluster, which, in turn, are also ranked by their significance in the cluster context.

#### 4. Discussion

The effectiveness of the SFP is important as a whole for national wealth, and not only in certain areas. A comprehensive assessment of the SFP, based on the cluster approach, just helps to increase the total return, as it forces us to search and find the most profitable option of the SFP, optimizing the sequence, scale, structure, and timing of financial investments in the implementation of state strategies. It will also lead to a shift of interests and increase private and general motivation in the final complex result.

The formalized model for evaluating the effectiveness of public financial policy can be presented through the integrated indicator for evaluating the effectiveness of public financial policy (Efpfp) as follows:

$$Efpfp = \sum Kit \frac{PRia/PRif}{PEia/PEif} (1)$$

where

PRia – the actual income received as a result of the implementation of the SFP within the i-th cluster,

PRif – forecast revenues from the implementation of SFP within the i-th cluster,

PEia – the actual cost of implementing the SFP within the i-th cluster,

PEif – estimated costs for the implementation of the SFP within the i-th cluster,

Kit – the coefficient of the relative importance of the i-th cluster, which characterizes the weight of each cluster in the efficiency of the SFP in the model structure,

it – the sequence number of the cluster, it = from 1 to n,

n – the number of clusters involved in assessing the effectiveness of the public financial policy,

t – the period for which the assessment of the effectiveness of the state service is carried out.

Table 1 shows the correspondence between the value of the integral indicator for assessing the effectiveness of the SFP and the level of effectiveness of the SFP.

Table 1 – Differentiated assessment of the levels of effectiveness of the SFP

Efficiency level SFP	Value of the integral indicator for evaluating the effectiveness of the SFP ( $Ef_{pfp}$ )
High	$Ef_{pfp} \geq 0.95$
Acceptable	$0.95 > Ef_{pfp} \geq 0.90$
Invalid (low)	$Ef_{pfp} < 0.90$

Source: Compiled by the authors.

The algorithm for modeling the assessment of the effectiveness of SFP following the cluster hierarchy logically includes six stages.

Stage 1. Formation of a system of clusters that characterize the directions, activities, and periods of evaluating the effectiveness of the SFP.

Stage 2. Selection of indicators for each cluster and their ranking.

Stage 3. Ranking of clusters by priority, considering the contribution to the effect of the implemented measures of the SFP.

Stage 4. Calculation of the effectiveness of the SFP, as a ratio of forecast indicators, based on the target indicators set at the stage of development of state strategies (PRia/PRif).

Stage 5. Calculation of the integral indicator of the effectiveness of the SFP (formula (1)).

Stage 6. Development of management decisions to improve the level of efficiency of the SFP at low and acceptable values of the integral performance indicator of the SFP (Figure 4).

Figure 4 - Modeling the assessment of the effectiveness of public financial policy

**EVALUATION OF THE SFP EFFECTIVENESS**

<b>Formation of the composition. Ranking of SFP valuation clusters</b>	<b>Formation of a system of assessment indicators of SFP clusters</b>	<b>Determination of SFP effectiveness</b>	<b>Calculation of the integral indicator for assessing the SFP</b>	<b>Development of management solutions to improve the SFP effectiveness</b>
<i>Industry cluster</i>	<i>Determination of a set of SFP cluster indicators</i>	<i>SFP actual results/SFP forecasted results</i>	<i>High level</i>	
<i>Social cluster</i>	<i>Calculation of SFP cluster indicators</i>		<i>Acceptable level</i>	
<i>Ecological cluster Public cluster, etc.</i>	<i>Ranking of SFP cluster indicators</i>		<i>Low level</i>	

Source: Compiled by the authors

Thus, the model for assessing the effectiveness of public financial policy through the integral indicator of the effectiveness of public financial policy reflects and quantifies the level of public administration in the financial sphere in different areas, activities, or (and) certain periods, considering their significance and completeness of achieving the goal. This model can be considered as a kind of KPI system of the SFP, which helps to determine the critical points of management in this area.

The proposed model for assessing the SFP is highly sensitive to changes in the socio-economic situation in time and space and can be adapted to various strategic guidelines of the state by changing the ranking scheme of cluster priorities and/or the composition of the evaluated positions. The flexibility of the model also allows obtaining results on the effectiveness of public financial policy in a broad and narrow sense, depending on the range of income and expenditure indicators that will be considered when calculating it – whether they cover only the sphere of public finance or also related areas that have been affected by it. The development of the model is also possible through the

formation of a regulatory framework for evaluating the effectiveness of the SFP, a comparison with which will increase the objectivity of the evaluation procedure data [11; 19; 20].

## 5. Conclusion

The main goal of the financial policy is to increase the efficiency of the use of financial resources necessary for the further development of society and improving the standard of living of the population. Progress in the field of sustainable development, national and international financial security depends on the success of strengthening public policy and regulatory regulation in the financial sector, reforming the public financial management system, and improving cross-border payments in modern conditions. In the context of changing the configuration of the global financial systems, the aggravation of geopolitical and geo-economic conflicts, the threat of financial crises, one of the most important requirements for financial policy is to adhere to an integrated approach in its development and implementation, that is, to coordinate the actions of all parts of the financial system with an emphasis on the implementation of the main task of a certain stage of development.

The model developed in the study for assessing the effectiveness of public financial policy can give a new impetus to the SFP, putting a comprehensive result at the forefront, strengthening responsibility in the field of public finance management, forcing it to work for a high overall result, which is urgently needed by modern economies. With this modeling of public financial policy, the dynamism and structural content are considered, the opportunities for the mobility of SFP, depending on the specific market and political situation, increase. Given the limitations of the internal and external financial potential of the state, it is quite fair to stipulate some tightening of the assessment approaches envisaged by this model for assessing the effectiveness of SFP.

## References

- Ahmad, N. H., & Ariff, M. (2007). Multi-country study of bank credit risk determinants. *International Journal of Banking and Finance*, 5(1): 62-76.
- Akber, M.Z., M.J. Thaheem, Arshad, H. (2017). *Life cycle sustainability assessment of electricity generation in Pakistan: policy regime for a sustainable energy mix*. *Energy Policy*, 11(1): 111–126.
- Arestis, P. (2004). Washington consensus and financial liberalization. *Journal of Post Keynesian Economics*, 27(2): 251–271.
- Bjorvatn, K., Farzanegan, M. R. (2015). Resource rents, the balance of power, and political stability. *Journal of Peace Research*, 52(6): 758–773.

- Bressanelli, E., Chelotti, N. (2016). The shadow of the European council. Understanding legislation on economic governance. *Journal of European Integration*, 38 (5): 511–525.
- Bykanova, O.A., Akhmadeev, R.G., Kosov, M.E., Ponkratov, V.V., Osipov, V.S., Ragulina, Y.V. (2017) Assessment of the economic potential of sovereign wealth funds. *Journal of Applied Economic Sciences*, 12 (1): 70-84
- Collier, P., Hoeffler, A. (2004). *Aid, policy, and growth in post-conflict societies*. European Economic Review, 48(5): 1125–1145.
- Ferrera, M. (2017). The Stein Rokkan Lecture 2016 mission impossible? Reconciling economic and social Europe after the euro crisis and Brexit. *European Journal of Political Research*. 56 (1): 3–22.
- Gao, X., Yu, J. (2020). Public governance mechanism in the prevention and control of the COVID-19: information, decision-making, and execution. *Journal of Chinese Governance*. 5 (2): 178–197.
- Hou, E. (2014). *Government WeChat, expired" old ticket"—disregard the changing circumstances, how far could the new deal?* China Media Report Overseas, 10 (1): 1–8.
- Kaufmann, R. K., Davidsdottir, B., Garnham, S., Pauly, P. (1998). *The determinants of atmospheric SO<sub>2</sub> concentrations: reconsidering the environmental Kuznets curve*. Ecological Economics, 25(2): 209–220.
- Kosamien, M. I., Tauman, Y. (2002). *Patent licensing: The inside story*. The Manchester School, 70(1):7–15.
- Kosov, M.E., Akhmadeev, R.G., Smirnov, D.A., Solyannikova, S.P., Rycova, I.N. (2018) Energy industry: Effectiveness from innovations. *International Journal of Energy Economics and Policy*, 8 (4): 83-89
- Kosomanoli-Filippaki, A., Margaritis, D., Staikouras, C. (2012). Profit efficiency in the European Union banking industry: A directional technology distance function approach. *Journal of Productivity Analysis*, 37: 277–293.
- Kosov, M.E., Akhmadeev, R.G., Smirnov, V.M., Popkov, S.Y., Rycova, I.N. (2017) Hydrocarbon market in countries with developing economy: Development scenario. *International Journal of Energy Economics and Policy*, 7 (6): 128-135.
- Kosorueger, A. O., Hagan, S. (2005). Sovereign workouts: An IMF perspective. *Chicago Journal of International Law*, 6(1): 203–218.
- Kosov, M.E., Sigarev, A.V., Sharov, V.F., Makashina, O.V., Smirnov, V.M. (2020) *Sovereign wealth funds: Russian and international experience*. Space and Culture, India, 7 (4): 246-254.
- Kosov, M.E., Solyannikova, S.P., Sigarev, A.V., Karpenko, V.P., Popkov, S.Y. (2019) Public investment in Russia: Peculiarities of implementation and ways to improve efficiency. *Journal of Advanced Research in Law and Economics*, 10 (4): 1288-1295.
- Lehoux, L., Duck, H., Akhmadeev, R., Morozova, T., Bykanova, O. (2019) Sustainable development facets: Taxation solutions for the energy industry. *Journal of Security and Sustainability Issues*, 9 (2): 457-472
- Otioma, C., A.M. Madureira, Martinez, J. (2019). Spatial analysis of urban digital divide in Kigali Rwanda. *Geo Journal*. 84 (3): 719–741.

Panayotou, T. (2016). Economic growth and the environment. *The environment in anthropology*, 24: 140–148.

Shafiei, S., Salim, R. A. (2014). *Non-renewable and renewable energy consumption and CO2 emissions in OECD countries: A comparative analysis*. *Energy Policy*, 66:547–556.

Sigarev, A.V., Kosov, M.E., Buzdalina, O.B., Alandarov, R.A., Rykova, I.N. (2018) The role of chains in the Russian retail sector. *European Research Studies Journal*, 21 (1): 542-554.

Slepov, V.A., Burlachkov, V.K., Danko, T.P., Kosov, M.E., Volkov, I.I., Ivolgina, N.V. & Sekerin, V.D. (2017) Model for integrating monetary and fiscal policies to stimulate economic growth and sustainable debt dynamics. *European Research Studies Journal*, 20 (4): 457-470

International Monetary Fund. (n.d.). [www.imf.org](http://www.imf.org)

<https://www.imf.org/ru/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update>

Denis Ushakov, Mikhail Vinichenko, and Elena Frolova. (2018). Environmental Capital in National Economy Stimulation: Limitations of Rationality. *Journal of Computational and Theoretical Nanoscience*. Sep 2018. *Adv. Sci. Lett.* 24(9): 6290–6292

Vinichenko, M.V., Klementyev, D.S., Rybakova, M.V., Malyshev, M.A., Bondaletova, N.F., Chizhankova I.V. (2019). *Improving the efficiency of the negotiation process in the social partnership system*. 28. <https://www.imf.org/ru/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update>