FINANCIAL MECHANISM FOR PUBLIC ADMINISTRATION OF ANTI-CORRUPTION PROCESSES IN THE CONTEXT OF DIGITALIZATION OF THE NATIONAL ECONOMY

Abstract. The article presents general tendencies of the development of the domestic shadow economy during 2013—2020. The problems rising in anti-corruption administration in the conditions of digitalization of the national economy have been systematized. The stages of formation of the financial mechanism for the public administration of anti-corruption processes of the national economy have been presented. It has been proposed to single out four components of the domestic economic system, which have vulnerable areas of operation that do not have adequate protection against illegal use of proceeds of crime. The tasks of the monitoring system functioning as a requirement for the development of digitalization of the national economy have been identified. The model of information support of the public mechanism for regulation of anti-corruption processes as a set of interacting subsystems, which have their purpose in the context of digitalization of the national economy has been offered. Construction of a model of information support of the state mechanism for regulating anti-corruption processes requires consideration of such factors as the characteristics of the structure and features of the functioning of state mechanisms in this area, which determines the feasibility of using such a model in both scientific and practical spheres. In order to achieve the established strategic goals of the financial mechanism against corruption in Ukraine in the conditions of digitalization of the national economy, it is necessary to follow an appropriate algorithm of actions, which we have proposed in the form of interconnected complex stages. It has been proved that following the stages of the implementation of tasks of the financial mechanism against corruption in Ukraine in the context of digitalization, stimulate economic entities to operate in the legal sector. To effectively reduce the level of shadow sector of the economy, it is desirable to make fundamental changes in macroeconomic policy, which are focused on the transition not to gross growth in the indicators, but to qualitatively increase the efficiency of the economy, which contributes to the formation of necessary conditions for legal sector development and transition to an innovative investment path of development.

Keywords: public administration, corruption, financial mechanism, national economy, digitalization.
ФІНАНСОВИЙ МЕХАНІЗМ ДЕРЖАВНОГО УПРАВЛІННЯ ПРОЦЕСАМИ ПРОТИДІЇ КОРУПЦІЇ В УМОВАХ ЦИФРОВІЗАЦІЇ НАЦІОНАЛЬНОЇ ЕКОНОМІКИ

Анотація. Представлено загальні тенденції розвитку вітчизняної тіньової економіки у період 2013—2020 рр. Систематизовано проблеми управління протидією корупції в умовах цифровізації національної економіки. Представлено етапи формування фінансового механізму державного управління процесом протидії корупції національної економіки. Пропонується використати чотири складові вітчизняної економічної системи, які мають вразливі напрями функціонування, що належно не захищені від незаконного використання доходів, отриманих злочинним шляхом. Ідентифіковано завдання функціонування системи моніторингу як вимога розвитку цифровізації національної економіки. Запропоновано модель інформаційного забезпечення державного механізму регулювання процесів протидії корупції як сукупності взаємодіючих підсистем, що мають своє призначення в умовах цифровізації національної економіки. Побудова моделі інформаційного забезпечення державного механізму регулювання процесів протидії корупції вимагає врахування таких чинників, як характеристика структури та особливості функціонування державних механізмів у зазначеній сфері, що зумовлює доцільність використання такої моделі як у науковій, так і практичній площі. Для реалізації встановлених стратегічних цілей фінансового механізму протидії корупції в Україні в умовах цифровізації національної економіки необхідно дотримуватися відповідного алгоритму дій, які нами запропоновано у вигляді взаємопов’язаних комплексних етапів. Доведено, що дотримання етапів реалізації завдань фінансового механізму протидії корупції в Україні в умовах цифровізації сприяє забезпеченню активізації функціонування суб’єктів господарювання у легальному секторі. Для ефективного зниження рівня тіньового сектору економіки бажано провести грунтовні зміни в макроекономічній політиці, які орієнтовані на перехід до валового зростання показників, а до якісного зростання ефективності функціонування економіки, що сприяє формуванню необхідних умов для розвитку виробництва в легальному секторі та переходу на інноваційно-інвестиційний шлях розвитку.

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Introduction. In the contexts of globalization, the development of the shadow sector of the economy of any state, regardless of the level of the development of its socio-economic and legislative systems, leads to the spread of corruption, means, and methods of criminal competition, reorientation of economic entities in the interests of criminal organizations. As a result, it leads to significant deformation of the state economic system as a whole and the problems with public administration in the field of counteracting the development of the shadow economy. The most favorable for the development of the shadow economy are new financial markets in countries with economies in transition. The world community recognizes that the development of the shadow economy has become a global threat to economic security, requiring states to take concerted actions to counteract this socially dangerous phenomenon at both the national and international levels.

One of the components of the social development of Ukraine is economic system stability, however, shadow economy causes destabilization and reduces the credibility of the authorities, which creates obstacles to European integration processes. Important areas of domestic public policy in modern conditions should be: organizing effective work of public authorities to counteract the development of the shadow economy; ensuring the relevant regulatory framework in accordance with international standards; controlling shadow flows. The task of the study is to implement the areas identified by us, which require improvement of the financial mechanism for public administration of anti-corruption processes in the national economy.

Analysis of research and statement of the problem. The importance of scientific research on the problems of state-administrative relations in the field of counteracting the development of the shadow economy is evidenced by the increasing attention to these issues by both domestic and foreign experts. The most significant contribution to the development of national and international systems for counteracting the development of the shadow economy has been made by such scientists as N. Akhtyrska [1], Kh. Kyliauskhanov [2], M. Klimchak [3], A. Kuntsova [5], D. Riutov [5], O. Novikov [7], B. Romaniuk [8], S. Simakova [9], O. Melnyk [9], O. Sosnin [10], I. Kovalechuk [13] and others.

The scientific works of these authors are widely known and recognized among public administration scholars. At the same time, the generalization of the achievements of modern managerial thought shows that there are still a number of problems that have not been properly covered and solved. This slows down the balanced reproduction and efficiency of public administration mechanisms, including counteracting corruption.

Elaborating the strategy for the development of the domestic economy, the existing relationships between the components of ensuring its stability and settlement of the shadow sector have not become basic. At the same time, these processes (each of which consists of a set of specific forms and methods, processes, and actions) are not always considered in their unity as a holistic mechanism, coordinated by interaction and management. As a result, the potential of mutual relations remains fully unimplemented, which has a negative impact on the effectiveness of the mechanisms for public administration of anti-corruption processes in modern conditions. The need to change this situation increases the urgency of developing, first of all, its scientific grounds. Theoretical and applied principles of effective functioning of the mechanisms for public administration of counteracting shadow economy require complex research. Such research allows conceptualizing the essence and ensuring economic security, identifying quantitative and qualitative characteristics, potential for formation, as well as increasing adaptive properties to improve anti-corruption tools in the national economy. Until now, there is virtually no relevant concept and effective mechanisms for its implementation, so the production and implementation of managerial influences are mostly arbitrary and fragmented. The scientific and practical significance of its problems has led to the choice of the topic of the research, its purpose, and tasks.

Results of research. Shadow economy of Ukraine can be most comprehensively characterized by an integrated indicator. Its method of calculation is based on separate differentiated
methods (each of which covers a certain area of the national economy with, respectively, a different share of the illegal sector), which showed different trends during the period under the study.

According to Table, only the Unprofitable Enterprise Method showed a reduction in the share of the shadow economy by 4.0 percentage points for the entire period under the study. In addition, the value of the shadowing calculated by this method was the lowest compared to other components of the integral index.

### Table

**Evaluation of the share of the shadow sector of the Ukrainian economy according to differentiated methods by years, % of official GDP**

<table>
<thead>
<tr>
<th>Estimation Method</th>
<th>Years</th>
<th>Average value for 2013—2020</th>
<th>Deviation of indicators (+/- pp) 2020 from</th>
<th>Average Value Index by a method to the Integrated (average) Indicator for 2017—2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Expenditures — Retail Trade Method</td>
<td>2013: 46.5 2014: 38.0 2015: 45.0 2016: 48.0 2017: 51.0 2018: 58.0 2019: 57.1 2020: 50.0</td>
<td>49.2</td>
<td>+3.5</td>
<td>-8.0</td>
</tr>
<tr>
<td>Electrical Method</td>
<td>2013: 28.0 2014: 27.0 2015: 35.0 2016: 29.0 2017: 30.0 2018: 38.0 2019: 35.0 2020: 31.0</td>
<td>31.6</td>
<td>+3.0</td>
<td>-7.0</td>
</tr>
<tr>
<td>Monetary Method</td>
<td>2013: 25.0 2014: 26.0 2015: 40.5 2016: 26.3 2017: 23.2 2018: 33.0 2019: 30.3 2020: 27.2</td>
<td>28.9</td>
<td>+2.2</td>
<td>-5.8</td>
</tr>
<tr>
<td>Estimation of prof. Friedrich Schneider</td>
<td>2013: 46.8 2014: 47.1 2015: 41.5 2016: 40.4 2017: 39.5 2018: 46.5 2019: 47.1 2020: 41.4</td>
<td>43.8</td>
<td>-5.4</td>
<td>-5.1</td>
</tr>
<tr>
<td>Estimation according to the Methodology of the State Statistics Service</td>
<td>2013: 18.1 2014: 15.5 2015: 16.1 2016: 16.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>An integrated indicator of the shadow economy</td>
<td>2013: 28.0 2014: 34.0 2015: 39.0 2016: 34.0 2017: 35.0 2018: 43.0 2019: 40.0 2020: 34.0</td>
<td>35.9</td>
<td>-4.0</td>
<td>-9.0</td>
</tr>
</tbody>
</table>

*Source: calculated by the author according to [5—9].*

As of the end of 2020, the absolute size of the shadow segment in Ukraine by the Unprofitable Enterprise Method was 20.0% — almost 2 times lower than the alternative data obtained using the modeling «DYMIMIC», and the index of its average to the integrated value for 2017—2020 was 0.68. Taking into account the above, it should be concluded that the level of unprofitable enterprises is a rather artificial indicator in modern economic conditions, based on obviously unfounded assumptions. Therefore, the further application of this method is considered too dubious, and therefore impractical.

Given the general trends in the development of the domestic shadow economy during 2013—2020, it should be noted:
- an increase in the level of shadow economy by 4.0 percentage points as of 2020 to the level of 34.0% of official GDP with an average value of 35.9%. The positive trends in the volume of
shadowing include the reduction of its integral index by 4.0 and 9.0 percentage points in comparison with the crisis of 2013 and 2018;

- the change in the real GDP of the country has a direct inverse dependence on the change in the level of the shadow economy. Thus, during the development of the economic crisis and the growth of the level of shadow economic relations in 2013 and 2018—2019, there was a decrease in GDP by 14.8, 5.5, and 9.9% compared to the same period last year with its further stabilization to the level of 2.3% in 2020.

At the same time, reducing the shadow economy is constrained by still unresolved issues, which negatively influence on the indicators of the development of the economy as a whole, in our opinion, they include the following: 1) continued bankruptcy of the banks and their liquidation, as well as existence of other significant challenges do not allow stabilising the financial system of the country; 2) significant tax burden on the corporate sector against the background of still low economic activity of enterprises and high cost of borrowing credit resources; 3) unfavorable foreign economic situation in key commodity markets of domestic exports and rising costs for imported raw materials due to the devaluation of the national currency; 4) the maintenance of tensions in international relations, as a consequence, the loss of Ukraine’s markets due to the collapse of economic ties; 5) reduction of domestic demand for domestic products; 6) presence of territories not under the control of the authorities, formed during the military aggression on the territory of the country; 7) low trust in government institutions, etc.

Formation of the financial mechanism for public administration of the anti-corruption process of the national economy consists of a step-by-step process:

- delineation of the object and subject of the mechanism for anti-corruption of the national economy;
- development and implementation of state policy and anti-corruption strategy of the national economy;
- definition and observance of the basic principles of ensuring the effectiveness of the anti-corruption mechanism of the national economy;
- the purpose and set of tasks for its implementation in the context of ensuring the economic security of the state;
- criteria and parameters of counteracting shadow domestic economy;
- formation of an effective organizational structure for regulating the anti-corruption process in the national economy.

Taking into account the current legislation, we propose to single out four components of the domestic economic system, which have vulnerable, in our opinion, directions of functioning that do not have adequate protection against illegal use of proceeds of crime.

For each of the selected groups, a list of relevant indicators is proposed, which together will form a monitoring system that will prevent the penetration of illegally obtained resources into the country’s economic system at a qualitatively new level and ensure control of these cash flows to legalize the shadow sector of the economy. We propose the following: to the first group include banks, financial institutions, payment systems, pawnshops, and credit unions; to the second group — stock exchanges, asset management companies, commodity, and other exchanges; to the third group — the results of audit firms, private accountants, the State Treasury of Ukraine and the State Financial Inspection of Ukraine, as reliability and stability of the economic system depends on the correctness of the transaction according to their content; the fourth group includes a notarial, lawyer, and other independent legal practice. This conditional division allows us to propose for each of the identified groups relevant indicators that may indicate the riskiness of the operations performed by the economic entities.

To achieve this goal, within the framework of the functioning of the monitoring system, as a requirement for the development of digitalization of the national economy, the following tasks have to be solved:

1) creation of single information space of efficiency indicators on the basis of a centralized information database that ensures the accumulation and storage of information;
2) integration of information into a single information space;
3) provision of a comprehensive analysis of the current financial and economic situation (monthly, quarterly, annual dynamics);
4) improvement of the efficiency and quality of management decisions based on the use of analytical and forecasting tools;
5) automation of preparation processes of the analytical reporting of divisions;
6) visualization of data with the establishment of geographic information systems;
7) instrumental and informational support of expert-analytical activity of the management and specialists [1—4].

The results of this work can be used not only to compile operational reports for the current informing of the management but also for the formation of the developed information base with the further possibility of its repeated use. The materials of the analysis of sources classified by such indicators, along with other databases, are the basis for the preparation of analytical reports, notes, references, reviews, and other documents of the system of problem-oriented informing.

Based on the above, it is possible to propose a model of information support of the state mechanism for regulation of anti-corruption processes as a set of interacting subdivisions that have their own purpose (Fig.).

![Model of information support of the state mechanism for regulation of anti-corruption processes in the national economy](image_url)

*Fig. Model of information support of the state mechanism for regulation of anti-corruption processes in the national economy*

*Source*: suggested by the authors.
1. Provision of external and internal communications (interactions) (organization of access to external and internal information resources).

2. Support of preparation processes and managerial decision-making (ensuring the required level of quality of decisions made by providing information on analogs and precedents of issues, analytical processing of information, support of substantive expertise, procedural aspects, collegial discussion, and making decisions).

3. Financial monitoring (formation of complex analytical information, methodical and instrumental support of processes to prepare and make administrative decisions by public authorities on counteracting the development of shadow economy, as well as to solve current obvious and hidden problems, and forecast of future problems on the basis of the received information).

4. Ensuring the necessary level of the final indicators of the activity of economic entities (due to information service of internal management functions and automated support of the main procedures of internal management: planning, resource allocation, control, analysis, etc.).

5. Documentary confirmation (ensuring the required level of quality of decisions made by collecting and analyzing information about the current, desired, and projected situation; collection and provision in various formats (text, tabular, graphic) of the documents of analytical, normative-legal, and scientific-methodical character, as well as providing access to specially organized funds of documents).

Construction of a model of information support of the state mechanism for regulation of anti-corruption processes requires consideration of such factors as a characteristic of the structure and features of the functioning of state mechanisms in this area, which determines the feasibility of using such a model in both scientific and practical spheres. The model reflects the interaction between different factors, subjects, and objects connected with the issues under the study. Taking into account the above mentioned, we propose the model of information support of the state mechanism for regulation of counteracting the development of the shadow economy.

In order to achieve the established strategic goals of the financial mechanism of anti-corruption in Ukraine in the conditions of digitalization of the national economy, it is necessary to follow the appropriate algorithm of actions, which we propose in the form of interconnected complex stages:

**Stage 1.** Identification of the optimal level of the shadow economy and its reduction at first to 30% of GDP, which corresponds to the marginal level, above which there is a threat to economic security; and then reduction of the level of the shadow economy to 16.3% of GDP, which corresponds to the average level of the shadow economy in developed countries.

**Stage 2.** Determination of the subject of influence. In the shadow economy, different social groups interact pursuing relevant interests. Economic entities operating in the shadow sector are able to become a real factor for economic growth during the transition to the legal sector of the economy. Indirect measures are more effective in comparison with direct administrative ones. That is, it is desirable to shift the emphasis from repressive measures to improve the regulatory framework, simplify the tax system, and so on. In turn, it is necessary to conduct effective direct state control in compliance with the existing regulatory framework. Thus, the implementation of the concept of counteracting the development of the shadow economy in Ukraine requires modernization of the existing structure of public administration [10—12].

**Stage 3.** Development and implementation of approaches to counteracting tax evasion.

- a utilitarian approach (with a reduction in the level of taxation, it will be less profitable for economic entities to stay in the shadow sector and they will switch to the legal one);
- conventional approach (to maximize utility, economic entities will seek to minimize costs and maximize utility).

**Stage 4.** Reduction of the general level of taxation and simplification of the tax legislation. Optimization of the total number of taxes and their level, taking into account the experience of countries with the most favorable conditions for business development and those that have similar
Stage 5. Formation of a favorable investment climate. Attracting the capital of the shadow sector of the economy with the aim of economic growth on the basis of industries that managed to attract the capital from the shadow sector. This contributes to attracting foreign investment.

Stage 6. Formation and implementation of programs counteracting shadow economy. The program should be focused on shadow capitals that have been exported and operate within the country. This program should include measures of a political and economic nature, which are associated with the transformation of the capital of the shadow sector, into a real innovation and investment resource for the legal sector.

Stage 7. Adjustment of the system of foreign economic relations. Elimination of existing shortcomings in the tax and customs legislation to prevent the development of shadow operations (under and overestimation of customs value, smuggling, and other measures in foreign economic activity).

Stage 8. Activation of the state policy in the sphere of stimulation of demand for domestic products. The basis of economic growth, first of all, should be the expansion of domestic solvent demand by strengthening imported products and possible ways for the development of the domestic economy, taking into account own production facilities and expanding the scale of domestic solvent demand.

Stage 9. Improvement of mechanisms for protection of private property rights. As private ownership is the basis for production and, accordingly, the market economy, the absence of a well-established mechanism of its protection deprives economic entities of stimulation to conduct legal business. That is why a real rather than a declarative mechanism of protection of private property rights is necessary.

Stage 10. Ensuring an effective system of motivation and stimulation of business entities to work in the legal sector of the economy. Using direct and indirect methods of state regulation, it is necessary to create or improve the existing methods of stimulating economic entities to work in the legal sector.

Stage 11. A complementary approach to the formation of state policy on counteracting shadow economy. That is, the formation and implementation of tasks on counteracting shadow domestic economy should be carried out in conjunction with the tasks of state policy in relation to the structural adjustment of the economy.

Stage 12. Activation of the implementation of the mechanism of functioning of market competition. Modernization of the institutions of the market economy, which ensure the functioning of the competition mechanism. Reduction of the monopolization of certain sectors of the economy by financial and industrial groups. Ensuring equal conditions for all economic entities in terms of forms of ownership and size, as well as ensuring equal distance from the power of economic entities.

Stage 13. Carrying out complex measures to counteract corruption. Development and implementation of effective measures taking into account current requirements.

Stage 14. Protection of domestic producers carrying out activities in the legal sector of the economy. Protection against dumping by transnational corporations, which take advantage of the international division of labor, the effect of the scale of production, access to the sources of cheap capital, etc [13—15].

Conclusions. Thus, in order to counteract corruption in the national economy in the context of digitalization to be effective, it has to be complex and include a system of necessary uniform norms and standards of activity, and uniform goals. The presence of an interconnected legal framework will provide a clear outlining of the framework of activities, the division of powers of each part of the system, create the only and integral policy in this sphere. If the outlined conditions are not met, there may be duplication of functions, irrational use of resources and, consequently, the result will not be effective.
It is the observance of the abovementioned stages of the implementation of the tasks of the financial mechanism countering corruption in Ukraine in the context of digitalization that will contribute to the intensification of the functioning of economic entities in the legal sector. To effectively reduce the level of the shadow sector of the economy, it is desirable to make fundamental changes in macroeconomic policy, which are focused on the transition not to gross growth of the indicators, but to qualitative growth in economic efficiency, which will contribute to the formation all the necessary conditions for the development of production in the legal sector and transition to the innovation and investment path of development.

Thus, a systematic approach to regulation of countering corruption provides that it is necessary to take into account all the real conditions of functioning of economic relations in the country, and the financial mechanism itself must have clearly defined elements and a scheme of their interaction. The functioning of the mechanism of the regulation of anti-corruption processes in the country, and the financial mechanism itself must have clearly defined elements and a scheme of their interaction. The functioning of the mechanism of the regulation of anti-corruption processes in the national economy in the context of digitalization provides the interconnection between goals and tasks at each level choosing the optimal ways in achieving the goals in order to comply with the relevant conditions for ensuring the economic security of Ukraine.

Література


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