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AUTHOR(S)	Oleg Meleshko, Andrii Kucheriavyi
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METHODS FOR ESTIMATING THE SHADOW ECONOMY AND INSTRUMENTS FOR DE-SHADOWING THE FISCAL SECTOR

Oleg Meleshko, Department of Finance, Accounting and Taxing, PHEI "European University", Ukraine, ORCID ID: <http://orcid.org/0000-0003-0978-5564>

Andrii Kucheriavyi, Department of Finance, Accounting and Taxing, PHEI "European University", Ukraine, ORCID ID: <http://orcid.org/0000-0001-5344-3911>

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ABSTRACT

The subject of research is a set of theoretical and methodological provisions and applied aspects of assessing the level of the shadow economy and de-shadowing of this process. The study is based on the definition of existing methods for assessing the level of the shadow economy; clarifying the tools used in the process of assessing the shadow economy, identifying ways to de-shadow the fiscal sector and identifying tasks for the implementation of leveling this process. It is established that there are four most effective methods of estimating the size of the shadow economy: the method of "population expenditure - retail trade"; financial method; monetary method; electric method. The results of the study made it possible to propose tools for de-shadowing the fiscal market, which are to increase the level of financial literacy of the population; formation of electronic databases of violators (subjects of the shadow economy); improving the methodology for assessing the scale of the shadow economy; introduction of a tax on international speculative transactions; reforming the state's anti-corruption policy; ensuring the principle of tax justice (equality) for taxpayers; provide an effective fiscal management of residents who use offshore jurisdictions; raising the level of legal culture of the population; legalization of shadow activity (subject to its legality); improvement of the "ProZorro" system; counteraction to financial crimes, "laundering funds"; introduction of tax amnesty and capital amnesty, etc. The purpose of the article is to substantiate the existing methods of assessing the shadow economy and to develop practical recommendations on ways and tools to de-shadow the fiscal sector. Different methods of estimating the level of the shadow economy are used at the macro- and microeconomic levels. It was found that the assessment of the shadow economy by existing methods in Ukrainian practice is not accurate, as its reliability is influenced by factors: unreliability, concealing or providing false information, the complexity of tracking "traces" of economic crimes, the scale of shadow economic activities and more. Identifying ways and measures to de-shadow the fiscal sector will reduce shadow phenomena in the domestic economy and in the fiscal sector, in particular.

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1. **Introduction.** In conditions of constant economic fluctuations, global shadowing of the economy, the negative impact of the global financial crisis, the rapid spread of the COVID-19 pandemic and the introduction of appropriate restrictions that adversely affect the functioning of state processes, interstate relations in general, declining economic potential, growing public discontent, new

socio-economic threats [1, 2], it is necessary to introduce new effective methods of de-shadowing the domestic economy.

The research problem is formulated as follows: since ensuring the process of de-shadowing of the domestic economy today is a priority of the state, it is necessary to explore existing methods of assessing the shadow economy, ways and tools to de-shadow the fiscal sector to further develop mechanisms to combat its spread.

The logic of presenting the material is to clarify the existing methods of assessing the shadow economy at its various levels (macro and micro). This definition has got estimation methods of the given economy (direct, indirect). Establish official methods to determine the extent of the shadow economy. Identification of the most effective methods for diagnosing this phenomenon. Outlining tools, ways and measures to minimize the shadow economy. It is substantiated that there are no universal tools to counteract the shadowing of the economy in the world. The state or region must develop tools that are specific to the conditions in which they currently find themselves.

One of the effective and relevant tools, in our opinion, is the introduction of a system of tax amnesty and capital amnesty. It is argued that based on the problems and realities of today, it is necessary to introduce a mechanism of capital amnesty using block chain technology. Ways and measures to de-shadow the economy have been developed. The doctrine staging of de-shadowing of the country's economy is proposed and the basic principles of this doctrine are highlighted. This is a continuation of the study by E. Borshchuk and M. Zaverukha [3], whose give an idea of the formation of a normative act, which will set out approaches to the process of de-shadowing and the sequence of its introduction into practice.

2. Methods for assessing the shadow economy of the state

The shadowing of the economy is considered a negative phenomenon for the functioning of modern states and disrupts their effective development, so an important issue is a comprehensive assessment of the real scale of the shadow economy for the development and implementation of effective mechanisms for de-shadowing. According to the Methodical recommendations for calculating the level of the shadow economy, approved by the order of the Ministry of Economy №123 of 18.02.2009, "Shadow economy is an unregistered economic activity of an economic entity, which is characterized by minimization of costs for production of goods, performance of works and provision of services, tax evasion, fees (mandatory payments), statistical questionnaires and submission of statistical reports, the consequence of which is a violation of statutory norms (the level of the minimum wage, working hours, working conditions and safety, etc. "(On approval of Methodical recommendations for the level of the shadow economy, 2009) [4].

Assessing the scale of the shadow economy is a complex, multi-stage process that requires the use of a variety of methods. The complexity of the process is related to the concealment of information necessary for calculations.

To measure the scale of the shadow economy, various methods are used, which are divided into two groups: direct (micro-level methods) and indirect or mediate (macro-level methods).

Indirect (mediate) methods – these are macro-level methods based on the analysis of macroeconomic indicators, comparable information, data from different sources and the study of mass statistical patterns that allow a more accurate assessment of the extent of development and development of the shadow economy.

Direct methods (micro-level methods) are based on the collection of statistical data in accordance with the requirements of the legislation that allow to study the structure of the shadow economy.

The macro-level methods include:

1. Polls, sample surveys - allow you to assess the presence and scale of shadow activity in the studied sector, region.

2. Methods of open inspection - during the inspections control bodies detect and stop relevant violations of the law (tax, customs, banking, antitrust, currency, trade rules, fire safety, sanitary norms, etc.), which are entered into accounting and statistical data.

3. Special methods of economic and legal analysis - experienced specialists (economists, accountants, auditors, etc.) detect traces of economic crimes. These methods are divided into 3 subgroups:

– method of accounting analysis - research of accounting (balance sheet analysis, evaluation, calculation, inventory, etc.) in order to identify accounting violations, inconsistencies, deviations;

- method of documentary analysis - research of accounting documents to identify specific inconsistencies in their design;
- method of economic analysis - analysis of economic indicators to identify the causes of shadowing activities;
- method of comparison - comparison of certain economic indicators of the object of study to identify differences that may characterize the "money funds" and concealment of real income;
- method of stereotypes - the study of non-standard (unusual) relationships between economic indicators that signal the presence of shadow activity of the object of study;
- method of special calculation indicators - a special calculation indicator is determined, the change of which indicates the implementation of shadow operations on the object of study;
- the method of corrective indicators - the comparison of economic indicators of the object of study with environmental factors to identify discrepancies and confirm the existence of shadow transactions.

Macro-level methods include:

1. Method of discrepancies - discrepancies in official statistics are investigated to identify hidden income and confirm the facts of shadow activity.

2. Structural method - on the basis of the received information on the sizes of shadow economy in various spheres regularities for realization of an estimation of shadow economy for other spheres are investigated.

3. Special methods - according to employment indicators (based on the productivity of the sector) and the method of stable interconnections (the difference between the real one, taking into account the shadow economy and the official GDP) determine the volume of the shadow economy.

4. Monetary methods - analysis of processes related to the demand for money, their turnover and comparison with the base period to track shadow cash transactions. There are 4 main variants of this method:

- Guttman's method (study of the ratio of cash and deposits);
- Feige method (differs from the first assumption that in the shadow sector compared to the official velocity of money is higher by 10%);
- the first modification of the Guttman method (the ratio uses the total money supply, not the amount of cash);
- the second modification of Guttman's method (assumption - the dynamics of the ratio of time deposits, demand deposits and total money supply reflects the volume of the shadow economy) [5].

Econometric method - monitors the movement of cash to detect the presence of shadow activity in industrialized countries.

5. Method of estimating unaccounted value - by means of random checks and observations the authenticity of official accounts is checked, the change of cost indicators is monitored in the process of creating additional value to identify contradictions, relevant violations characterizing the presence of shadow activity on the object of research.

In general, the assessment of the scale of the shadow economy by these methods, in our opinion, is not accurate, as it is hindered by certain factors: inaccuracy, concealment or provision of false information, the complexity of tracking economic "traces" of economic crimes, the scale of shadowing.

In Ukraine, there are 2 official methods for estimating the level of the shadow economy: the methodology of the State Statistical Service and the methodology of the Ministry of Economic Development, Trade and Agriculture of Ukraine.

The methodology for assessing the scale of the shadow economy was developed by State Committee on Statistics (USCS) on the basis of the Program of Development of the System of National Accounts № 475 of April 7, 2003 [6].

The main methodology of the Ministry of Economy, Trade and Agriculture of Ukraine for calculating the level of the shadow economy was approved by the order "On approval of the Methodical recommendations for calculating the level of the shadow economy" № 123 of 18.02.2009.

There are 4 most effective methods for estimating the size of the shadow economy, which contains the methodology of the Ministry of Economic Development, Trade and Agriculture of Ukraine:

1) The method of "population expenditure - retail trade" - a direct method, which is to identify the excess of consumer monetary expenditures on goods over the total sales of these goods in the official (legal) market.

2) The financial method - an indirect method, which consists in determining the trends of changes in the proportions between the value of goods (works, services) used in the production process and the gross income of enterprises in the state as a whole or in a particular economic activity.

3) Monetary method - an indirect method that consists in determining trends in the ratio of cash to bank deposits in the study period relative to the baseline.

4) Electric method - an indirect method that consists in comparing the growth of domestic electricity consumption with the growth of real GDP, as it is assumed that the volume of such growth should coincide. Thus, if the growth of domestic electricity consumption exceeds the growth of real GDP, it indicates the use of electricity in the shadow economy [4]. The Ministry of Economic Development, Trade and Agriculture of Ukraine also uses the method of enterprise loss - to determine the marginal (minimum and maximum) coefficients of the shadow economy as a share of GDP, within which is the level of the shadow economy.

The state policy of de-shadowing the domestic economy is an integral part of the general state policy. Since the main reasons for the shadowing of the economy include: high level of corruption, inconsistency of the quality of public functions with the level of tax burden and deviant behavior of taxpayers, the state policy of de-shadowing the economy should focus on counteracting (eliminating) these reasons.

It should be noted that most of the measures proposed earlier by scientists and politicians to de-shadow the domestic economy were not implemented in full or only partially [7]. The reason for such inaction on the part of the state, in our opinion, is the interest of some officials and oligarchs in the further functioning of shadow activities and ineffective public policy.

Thus, the de-shadowing of the economy is a set of actions by the state aimed at maximizing the elimination (minimization) of the shadow sector of the economy and preventing the probability of further shadowing.

3. Results and Discussion

3.1 Tools for de-shadowing the fiscal sector

Tools for de-shadowing the economy, including the fiscal sector, in modern conditions can be:

- increasing the level of financial literacy of the population;
- formation of electronic databases of violators (subjects of the shadow economy);
- improving the methodology for assessing the scale of the shadow economy;
- introduction of a tax on international speculative transactions;
- reforming the anti-corruption policy of the state;
- ensuring the principle of tax justice (equality) for taxpayers;
- introduction of effective mechanisms of tax regulation of residents using offshore jurisdictions;
- raising the level of legal culture of the population;
- legalization of shadow activity (subject to its legality);
- improvement of the "ProZorro" system;
- counteraction to financial crimes, "funds money";
- tax amnesty and capital amnesty, etc.

It should be noted that there are no universal tools to counter the shadow economy in the world. Each country or region must find or develop its own tools according to current conditions.

One of the effective and relevant tools, in our opinion, is the introduction of a system of tax amnesty and capital amnesty.

As the tax amnesty system is currently under consideration and implementation, we will present a mechanism for implementing a capital amnesty system using block chain technology.

Therefore, to reduce the level of the shadow economy, combat tax evasion and corruption, promote economic development of the state, we consider it appropriate to introduce a mechanism for the functioning of the capital amnesty system in Ukraine using block chain technology. This mechanism provides for *the purpose of*: formation of preconditions for the return of funds and property values exported from the territory of Ukraine, legalization of income of legal entities and individuals (including from shadow activities; *objects*: currency values of residents (including income) and objects of property of residents located outside the customs border of Ukraine and on its territory, regardless of the method of acquisition; *subjects* – residents of the state; *functions*: reducing the level of Ukraine's shadow economy, returning capital to the legal field, reducing the level of social injustice, balancing the financial

interests of the state and taxpayers; implementation of the latter is based on the *principles*: universality, binding, transparency, equality, digital priority; *directions of implementation of the specified mechanism*: improvement and entry into force of the Law of Ukraine "On Capital Amnesty", development and approval of the form of "zero declaration", maintaining registers using block chain technology and *expected results from the introduction of capital amnesty*: return of capital to the country, transparency of capital movements in the country; reducing the scale of shadowing of the domestic economy; income legalization of the subjects of the capital amnesty system; increase of revenues to the state budget; reducing the level of corruption, illicit enrichment, increasing macroeconomic indicators.

Summarizing the work of scientists economists [8-15], we propose ways to de-shadow the fiscal sector: combating the illegal use of offshore zones; improvement of currency control instruments in the state; reforming state systems; introduction of the open e-government model; ensuring transparency of work of state institutions, banks; Improving the system of electronic registers; development of an effective mechanism for refunding funds from abroad; creation of a system to increase the level of financial literacy of the population and public confidence in the state; support for small and medium business; implementation of measures to increase the investment attractiveness of the country.

The existence and spread of the shadow economy has a negative impact not only on the economic system of the state, but also on social processes, which in turn leads to imbalances in public areas.

The state policy of de-shadowing the fiscal sector is aimed at improving socio-economic indicators, the country's financial security, and level of live standards, regulating commodity-market relations, improving the investment climate, combating corruption (bureaucracy), combating tax evasion and more.

We share the opinion of M. Kuznetsova and O. Dubrovina that "ensuring the de-shadowing of the economy should be one of the components of state policy to strengthen and develop the country's economic system, aimed at harmonizing the interests of the state and the citizen, creating the most favorable conditions for business entities in legal field" [16].

3.2 Measures to de-shadow the fiscal sector.

The main measures to de-shadow the economy, in our opinion, should be:

- development of new effective mechanisms to combat corruption ("cleansing of power") and tax evasion;
- improvement of the system of fiscal administration;
- introduction of a system of "amnesty" of capital to legalize the income of shadow activities;
- introduction of additional incentives for legalization of informal activities by shadow economy entities;
- creating favorable conditions for business operation;
- implementation of measures to increase public confidence in the state, the level of financial and legal literacy;
- expansion of the system of non-cash payments and ensuring control over the target direction of such;
- improving control over foreign economic activity;
- optimization of procurement mechanisms;
- improving legislation to combat economic crimes (strengthening the responsibility of offenders);
- monitoring of offshore zones;
- ensuring the transparency of the real sector of the economy;
- use of modern financial technologies;
- maintaining all state registers using block chain technology.

We support the idea of creating a National Doctrine of de-shadowing of the economy, proposed [3]. They marked the staging of the formation of the doctrine of de-shadowing in five stages: the first - the definition of scientific approaches to substantiate the doctrine, its principles; development of a state document that defines the most important parameters of the doctrine; the document is approved by the parliament of Ukraine; the second is the development of a strategy (for the long term) and tactics of the doctrine of de-shadowing. Policy and tactics should include a set of adaptive measures of state influence to reduce the size of the shadow economy; the third - the formation of specific programs and mechanisms for implementing the policy of de-shadowing (sequence and methods of action of relevant bodies to regulate relations in society to improve living standards; fourth - the definition of basic criteria

for the effectiveness of de-shadowing policy; fifth - the organization of the system of implementation and control of programs to de-shadow the economy - implementation in practice.

The main purpose of the National Doctrine of De-Shading of the Economy is the formation of a single fundamental document, which will define all the basics of de-shadowing processes as a multilevel system.

The doctrine must have all the components of a state act: general provisions; main goals, principles of de-shadowing policy of the economy; priorities of the state policy of de-shadowing, the concept of carrying out social and economic reforms taking into account the problems of de-shadowing; priorities of the state policy of de-shadowing, the concept of carrying out social and economic reforms taking into account the problems of de-shadowing; state standards for each stage of doctrine implementation; the procedure for public monitoring and assessment of the achievement of the level of established indicators of de-shadowing; responsibility for the implementation of the provisions of the doctrine, the order of preparation and decision-making on amendments to the doctrine; interconnection with the problems of national security of Ukraine [3]. There must be a close relationship between all components of the doctrine for a de-shadowing policy to be effective.

It should be noted that the main principles of the National Doctrine of De-Shading of the Economy are:

- the principle of social justice - ensuring a fair and impartial distribution of national wealth, GDP;
- the principle of objectivity - taking into account all the factors that affect the quantitative and qualitative indicators of economic activity;
- the principle of determinism - characterizes the causal links between phenomena;
- the principle of coherence - taking into account the interests of other types of public policy;
- the principle of transparency - regulatory regulation of procedures for public authorities [3].

The doctrine of de-shadowing will become one of the main conditions for improving the country's economy, the level of financial and national security of the state, the level and quality of life, the level of observance of human rights and freedoms, promote further economic development, investment climate and more.

Thus, we believe that in order to promote the socio-economic development of the country, improve the investment climate, increase national security, develop interstate relations and business, it is necessary to develop and implement mechanisms (measures, programs, reforms) to de-shadow the domestic economy and, accordingly, elimination of the main factors of its appearance and spread.

Conclusions. The study of methods for assessing the shadow economy, tools and ways to de-shadow the fiscal sector made the following conclusions:

1. Methods of estimating the scale of the shadow economy at the micro and macro levels are studied. The main advantages and disadvantages of methods for estimating the scale of the shadow economy are schematically presented. It was found that in Ukraine there are 2 official methods for assessing the level of the shadow economy: methodology of the State Statistical Service on the basis of the Program of development of the system of national accounts № 475 from 07.04. 2003 and the methodology of the Ministry of Economic Development, Trade and Agriculture in accordance with the approved Order "On approval of Methodical recommendations for calculating the level of the shadow economy" № 123 from 18.02.2009.

2. The tools of de-shadowing of the economy in modern conditions are indicated. It was found that there are no universal tools to counteract the shadowing of the economy in the world. A mechanism for the introduction of a capital amnesty system using block chain technology as a tool for de-shadowing the domestic economy, which structurally consists of the following elements: objects; subjects; goal; system of principles and functions; directions and expected results from implementation. The introduction of the capital amnesty mechanism in Ukraine is expected to increase macroeconomic indicators, return capital to the country, ensure transparency of capital movements, increase state budget revenues, legalize revenues of capital amnesty entities, reduce corruption and shadow the domestic economy, and so on.

3. The ways and main measures of de-shadowing of the fiscal sector in modern conditions are presented. The importance of developing the National Doctrine of De-Shading of the Economy, proposed by Borshchuk and Zaverukha, is proved and the main stages of its formation are schematically presented. The main principles of the doctrine of de-shadowing are indicated: the principle of social justice; the principle of objectivity; the principle of determinism; the principle of

consistency; the principle of transparency. We believe that the introduction of all these methods (ways, directions) of de-shadowing of the domestic economy will have a positive effect on the functioning and efficiency of state processes in the future.

The prospect of further research is to improve approaches to assessing the shadow economy, mechanisms to minimize the impact on the fiscal sector and the development of techniques and technologies for de-shadowing economic processes in the country.

REFERENCES

1. Abuselidze, G., & Mamaladze, L. (2020) The Impact of the COVID-19 Outbreak on the Socio-Economic Issues of the Black Sea Region Countries. *Lecture Notes in Computer Science*, 12253, 453-467. Springer, Cham. https://doi.org/10.1007/978-3-030-58814-4_32
2. Abuselidze, G., & Slobodianyk, A. (2021). Pandeconomic Crisis and Its Impact on Small Open Economies: A Case Study of COVID-19. *Advances in Intelligent Systems and Computing*, 1258, 718-728. Springer, Cham. https://doi.org/10.1007/978-3-030-57450-5_61
3. Borshchuk, Ye., Zaverukha, M. (2018). Kontseptualni osnovy formuvannia Natsionalnoi doktryny detinizatsii ekonomiky. *Efektivnist derzhavnoho upravlinnia*, 1(54) Ch.2, 203-209.
4. Pro zatverdzhennia Metodychnykh rekomendatsii rozrakhunku rivnia tinovoi ekonomiky (2009). *Nakaz Minekonomiky vid 18.02.2009, №123*: <https://zakon.rada.gov.ua/rada/show/v0123665-09#Text>.
5. Bazylevych, V. D., & Mazur I. I. (2004). *Metodychni aspekty otsinky masshtabiv tinovoi ekonomiky*. *Ekonomika Ukrainy*, 8, 36-44.
6. Pro zatverdzhennia Prohramy rozvytku systemy natsionalnykh rakhunkiv na period do 2010 roku (2003). *Postanova Kabinetu Ministriv Ukrainy vid 07.04.2003, № 475*: <https://zakon.rada.gov.ua/laws/show/475-2003-%D0%BF#Text>.
7. Baranov, S. O. (2015). Shliakhy detinizatsii ekonomichnykh protsesiv. *Aspekty publichnoho upravlinnia*, 7-8(21-22), 56-62.
8. AuGustyn, R. R., & Demkiv, I. O. (2019). Stymuly ta instrumenty detinizatsii pidpriemnytstva: sektoralnyi aspekt. *Vcheni zapysky Universytetu «KROK»*, 1(53), 36-45.
9. Gudzovata, O. O. (2018). Instrumenty detinizatsii hroshovo-kredytnoho sektoru v systemi zabezpechennia finansovoi bezpeky Ukrainy. *Sotsialno-ekonomichni problemy suchasnoho periodu Ukrainy*, 4(132), 95-101.
10. Abuselidze, G. (2012). The Influence of Optimal Tax Burden on Economic Activity and Production Capacity. *Intellectual Economics*, 6(4), 493-503.
11. Abuselidze, G. (2012). Optimal Tax Burden and Budget System – the Factor of Macroeconomical Stabilization. *Journal of Applied Finance & Banking*, 2(6), 121-130.
12. Abuselidze, G. (2013). Areas of Improvement of Finance Policy in the Process of Advancing of Upgrading the Territorial Economic Activity and Financial Capacity. *International Business Research*, 6(5), 194-200.
13. Abuselidze, G. (2015). Formation of Tax Policy in the Aspect of the Optimal Tax Burden. *International Review of Management and Business Research*, 4, 601-610.
14. Abuselidze, G., & Katamadze, G. (2018). The importance of legal forms of business subject for formation of business environment in Georgia. *Kwartalnik Nauk o Przedsiębiorstwie*, 49(4), 83-88.
15. Abuselidze, G. (2018). Optimal Fiscal Policy–Factors for the Formation of the Optimal Economic and Social Models. *J. Bus. Econ. Review*, 3(1), 18-27.
16. Kuznetsova, M. I., & Dubrovina, O. O. (2017). U poshuku shliakhiv detinizatsii ekonomiky Ukrainy. *Nauka, tekhnolohii, innovatsii*, 1, 46-54.