

Modern Practices of Implementing Methods of de-shadowing national economies

ANNA ISHCENKO¹,
KATERYNA VOLOSHENKO²

ABSTRACT. The paper comprehensively examines the essence and factors of the shadow economy with the identification of such key reasons as political, socio-economic, legal and moral and ethical. The specifics of regional and local incentives for the development of the shadow economy in industrialized countries, as well as in the countries of Eastern and Central Europe, are analysed. The main methods of identifying the impact and analysing the size of the shadow economy (direct, indirect methods and models) are characterized and it is noted that for a complete and comprehensive assessment of the scale of shadowing of the national economy, the entire set of these methods should be used. The main approaches with possible methods and measures for transforming the shadow sector into the official one, namely, strengthening various types of punishment and, in turn, stimulating voluntary exit from the shadow, which are implemented as a kind of combination of incentive and punitive measures, are investigated. The leaders with the highest level of shadow economy among the EU countries and the best practices of implementing de-shadowing methods are identified. The key mechanisms, methods, principles and tools of state regulation for de-shadowing the economy of world leaders, namely in such countries as Denmark, Italy, the Netherlands, the United States, Austria, Latvia, Germany, France and others, are identified and outlined. The transformation processes that are intensifying in the world economy in the context of global financial, social, and security instability are transforming the international business environment, but at the same time they are also triggering the strengthening of the role of global communications, as they promote transparency and openness of data, accessibility of information, and also increase the importance of educational communication tools that form the tax morality of citizens and are key in the world practice of economic de-shadowing. The key vectors of combating the shadowing of the national economy are outlined, since de-shadowing is urgently needed for Ukraine. By applying the best international practices, it will not only help improve the economic situation of our country, but also help ensure compliance with European standards and requirements, which are crucial for successful integration into the European Union.

KEYWORDS: shadow economy, de-shadowing of the economy, methods of de-shadowing, global communications, digitalization.

¹ **Ishchenko Anna Volodymyrivna** – PhD in Economics, Associate Professor of the Department of International Trade and Marketing, Kyiv National Economic University named after Vadym Hetman. Scientific interests: global economic integration, international marketing, international trade, global marketing communications, international logistics. E-mail: ishchenko.anna@kneu.edu.ua. ORCID: <https://orcid.org/0000-0001-6419-3161>.

² **Voloshenko Kateryna Viktorivna** – the Bachelor's degree student of the educational and professional program "International Economics", specialisation 051 "Economics", Kyiv National Economic University named after Vadym Hetman. Scientific interests: international economics, global business environment, global marketing communications. E-mail: katevoloshenko2019@gmail.com.

Introduction

The shadow economy is one of the main obstacles to prosperity and economic growth. Implementation of the unshadowing process plays an important role in any country's economy, as it allows to strengthen its competitiveness, stimulate innovative development and economic growth, attract significant foreign investment, and improve the welfare of the population. The invaluable experience gained during the de-shadowing process is an example on the way to economic development in many countries, including Ukraine, where the shadow sector occupies the lion's share and is negatively impacted.

For a long time, the essence of the shadow economy and its problems have not been disclosed, despite the fact that a significant number of foreign economists have been dealing with this issue. The problems of the shadow economy, its significant impact on socio-economic development and ways of de-shadowing are the subject of scientific works of such scholars as: E. Feig, P. Gutman, S. Nikitin, O. Turchynov, V. Nahrebelnyi, A. Yarmolenko, V. Holovach, V. Tanzi, D. Thomas, and others. The relevance and importance of the shadow economy problem is confirmed by fruitful research by other domestic scholars, namely T. Tyshchuk, O. Bandurko, S. Ogreba, A. Bunych, T. Zaslavska, V. Antipov, Z. Varnalii, O. Podmazko, V. Honcharov, O. Samoilenko, T. Koryagina, M. Tarasov, D. Frolov, and T. Firsova. Today, due to the constant changes and deformations of existing methods of combating shadowing, a significant part of research is still devoted to this topic.

The purpose of this paper is to identify the peculiarities of implementing the methods of unshadowing the economy and to substantiate the priority areas of unshadowing the Ukrainian economy in the context of the most successful international practices.

Essence, factors, causes and socio-economic indicators of the shadow economy

The problem of the shadow economy was first highlighted in scientific research in the 1930s. One of the first to interpret the concept of the shadow economy in the most thorough manner was the American sociologist E. Feig. His statement is, in fact, the most widely recognized. In the author's interpretation, the shadow economy is all economic activity that, for some reason, is not included in the country's official statistics and is not taken into account in national calculations. The author distinguishes two subtypes of the shadow economy. The first one includes the entire economy of the country, which is legal and legitimate, but is not subject to taxation and is not subject to official statistics. In turn, the second component includes illegal economic activity, which is absolutely illegal and deliberately hidden³

³ Feige E.: How Big is the Irregular Economy? Challenge, 1979.

. There are other well-known scholars who have studied the phenomenon of the shadow economy. For example, in the 1970s, a significant contribution was made by the work of the famous American economist and scholar P. Gutman entitled "The Underground Economy", which highlighted the nature and essence of the shadow economy, emphasized the importance of establishing the causes of shadowing in the economy of countries, identified economic and social consequences and made it known that, in the end, it is unacceptable to neglect economic activities that are located in the "shadow"⁴.

V. Tanzi also conducted a thorough study of the shadow economy. In his scientific work, the author argues that the shadow economy includes income or production that is not included in the national statistics of a country. In turn, the result of economic activity does not refer to the income that is identified and declared to the tax authorities. After analysing this process, the author proves that as a result of tax evasion, the state treasury receives less revenue than it really should have. This is a logical conclusion that the state is much richer than official statistics show. The well-known scholar D. Thomas agrees with such considerations, in particular, he refers to the phenomenon of the shadow economy as the economic activity of society that is not included in the calculation of gross national income⁵.

In turn, according to O. Turchynov, the shadow economy is interpreted as an economic activity that is not controlled by the state authorities and is not included in official statistics, aimed at obtaining income illegally, in violation of current legislation⁶. It is worth noting that V. Nahrebelnyi also presented his interpretation of the shadow economy, according to the researcher, the shadow economy is an economic activity that is caused by the misappropriation by a group of persons or a person of a part of the value of the created good, which in one way or another falls under the distortion of reliable information about the circulation of funds in production and material assets, distortion of data in primary accounting in order to cover up the real origin of the source of income⁷.

In different textbooks and academic articles, the shadow economy is known by different names, such as the hidden economy, the black economy, the "grey" economy, or the informal economy. All of these identical words and phrases refer to a particular type of shadow economic activity. The IMF Working Paper uses the following definition: "the shadow economy encompasses all economic activities that are hidden from official government authorities for monetary, institutional, and regulatory reasons. Monetary reasons include avoidance of

⁴ Gutmann, P.M. The Subterranean Economy, *Financial Analysts Journal*, 33:6, 26-27, 1977. DOI: 10.2469/faj.v33.n6.26 URL: <https://www.tandfonline.com/doi/abs/10.2469/faj.v33.n6.26>

⁵ Tanzi V., Uses and Abuses of Estimates of the Underground Economy, *The Economic Journal*, Volume 109, Issue 456, June 1, 1999, Pages 338-347, <https://doi.org/10.1111/1468-0297.00437>. URL: <https://academic.oup.com/ej/article-abstract/109/456/338/5128722?redirectedFrom=fulltext>.

⁶ Turchynov O.V. Shadow economy: theoretical foundations of research / O.V. Turchynov. K.: ArtEK. 1995. C. 32.

⁷ Nahrebelnyi V.P. Shadow economy / V.P. Nahrebelnyi, V.M. Popovych // *Jurid. encyclopedia: in 6 vols.* K., 1998. T. 6. C. 74-76.

taxation and all social security contributions, regulatory reasons include avoidance of government bureaucracy or the burden of the regulatory framework, while institutional reasons include corrupt legislation, weak rule of law and the quality of political institutions".⁸

Researchers and experts in different fields use different approaches (Table 1) and terminology to study the shadow economy. One of the reasons for this is not just a very wide range of their theoretical and applied research, but also significant discrepancies between the concepts of the shadow economy used by global experts in the field of economic knowledge.

Table 1

SCIENTIFIC APPROACHES TO DEFINING THE CONCEPT OF "SHADOW ECONOMY"⁹

Approach.	Scientific interpretation of the concept of "Shadow Economy"
Economic and statistical	any economic activity that is not recorded in official statistics. Proponents of this approach emphasize the concealment of economic activity from state accounting and control, i.e. the lack of recording in official statistics.
Legal	economic activity is prohibited by law. Proponents of this approach focus on the study of socially dangerous forms of economic activity, prevention of offenses and combating them by legal means.
Fiscal	part of the economy that is hidden from taxation.
Institutional	economic relations that develop in society as opposed to laws, legal norms, and formal rules of economic life, including all types of economic activity that are not reflected in statistics. Proponents of this approach put socio-economic institutions at the centre, i.e., a system of formal and informal rules of behaviour, sanction mechanisms, and patterns of their development.
Cybernetic	economic relations that develop in society as opposed to laws, legal norms, and formal rules of economic life, including all types of economic activity that are not reflected in statistics. Proponents of this approach put socio-economic institutions at the centre, i.e., a system of formal and informal rules of behaviour, sanction mechanisms, and patterns of their development.
Criminological	the part of the economy that is objectively destructive and beyond the control of economic regulators. Supporters of this approach focus on the degree of harmfulness of economic activity.
Sociological	Interaction of social groups that differ in their position in the system of shadow institutions and the motives of economic behaviour in different situations.
Moral.	economic activity that violates generally accepted moral norms.
Motivational	all activities aimed at forming and satisfying needs that cultivate various vices in a person.

⁸ Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?, WP/18/17, January 2018, p. 4

⁹ Pirnykoza P. V. Theoretical essence of the economic category "de-shadowing of the economy", Economic Analysis. 2017. vol. 27, NO. 4. – PP. 65-74. URL: http://nbuv.gov.ua/UJRN/ecan_2017_27%284%29__10

It should be emphasized that all of the above approaches only in combination are the most perfect solution and tool for studying the shadow economy. A significant advantage of using all the approaches in combination is that the shadow economy is a multifaceted, multidimensional phenomenon with relatively similar features, which is largely studied in a more thorough and detailed manner using these approaches. Based on our considerations, the shadow economy is interpreted as fully as possible through the use of a number of interdisciplinary approaches¹⁰.

Defining the structure of the economy in the "shadow", there are three main types or often called components of the shadow economy¹¹:

- The informal (unofficial) component – as the name implies – is the production of goods and services that is not hidden, but informal, i.e., not included in official statistics in calculations. This component of the shadow economy usually has a positive social aspect. We can include household activities and small part-time jobs, since such activities are not recorded in the GNI calculation. The role of informal shadow economy actors is played by hired workers, small business owners, and civil servants;

- The hidden (underground) component of the shadow economy is formed by the illegal production of permitted goods, but in this case, it is usually the sale of services and products that are not accounted for. Examples include: salaries in envelopes, underreporting of revenues, or overstatement of expenses, etc. The subjects are the middle caste of the population: entrepreneurs, business owners, financiers, industrialists and bankers;

- The last component – fictitious or criminal – is unlawful, i.e. criminal activity prohibited by law. For example, we can cite the following types: trade in illegal narcotic, psychotropic substances, precursors, corruption – the use of official powers by a person, arms trafficking. The subjects of the underground component include: smugglers, drug dealers, pimps, i.e. all criminal persons, including corrupt officials, appear in their guise.

When studying the essence of the shadow economy, leading experts devote a significant part of their scientific analysis to the causes and factors of this phenomenon. Most of them point out that each region of the world has its own specific reasons, but all factors can be divided into four groups of factors that explain the emergence of the shadow economy. Among them are the following: political (political instability, flourishing corruption systems, overregulation of the economy, illiteracy of political actions, corrupt judicial systems, ineffective political activity of the state, high unemployment and a significant gap between the incomes of citizens of different groups of the population, interference of government agencies at all levels in the activities of business entities), socio-economic (including everything related to the

¹⁰ Lomsadze D.G. Methodology of Shadow Economy Studies 2020 P. 7-10

¹¹ Shadow economy in Ukraine: state, trends, ways to overcome: analytical review [compiled by S. Cherniavsky, V. Nekrasov, A. Tytko, et al. p. 11

economic level of development and its impact on society, such as relatively low living standards

The development of the shadow economy in industrialized countries was caused by many of the factors mentioned above, but the most important, empirically and scientifically proven, and most often cited, are the following:

- Significant tax deductions from wages and social security contributions. Indeed, a large number of empirical studies emphasize that the growing burden of mandatory taxes and social security contributions is one of the key drivers for the development of the shadow economy in industrialized countries¹².

- The density, clarity, and intensity of regulation in the "formal" economy, especially as it relates to the labour market, including mandatory shorter working weeks for all workers, generally early retirement, and rising unemployment, thereby providing more time and opportunities for irregular work. Increased intensity of regulation, often measured by the number of different laws and regulations, such as license requirements, trade barriers, strict labour market regulations, and work restrictions for immigrants. The direct, immediate impact of labour laws on the development of the shadow economy in these countries has been widely analysed. Such regulation significantly increases the cost of labour and limits the freedom of choice for participants in the "official" economy, especially for immigrants. Since most of these costs are passed on from employers to employees, such strict regulation is a factor in creating another motivation for workers to work "in the shadows."

- Weak tax morale, in other words, the unwillingness of the population to pay taxes, partly due to corruption and the decline of quality regulation by public institutions¹³.

In Eastern and Central Europe, other factors contribute to the shadow economy. In particular, they include¹⁴:

- Lack of competence of official institutions, legislative bodies, bureaucracy, and judicial systems, as well as corruption that undermines trust in these institutions.

- Weak enforcement of laws and regulations, unwillingness or inability of society to protect its property rights.

- Excessive negotiated costs and a hateful administrative burden for entrepreneurs.

¹² Enste D. H. The shadow economy in industrial countries. IZA World of Labor 2015: 127. 2015. DOI: 10.15185/izawol.127 <https://wol.iza.org/uploads/articles/127/pdfs/shadow-economy-in-industrial-countries.pdf>.

¹³ Tanzi V., Uses and Abuses of Estimates of the Underground Economy, The Economic Journal, Volume 109, Issue 456, June 1, 1999, Pages 338-347, <https://doi.org/10.1111/1468-0297.00437>. URL: <https://academic.oup.com/ej/article-abstract/109/456/338/5128722?redirectedFrom=fulltext>.

¹⁴ Schneider, F. Shadow economies and corruption all over the world: New estimates for 145 countries. Economics: The Open-Access, Open-Assessment E-Journal 1 (2007): 1-66.

– The unlikelihood of being caught as an illegal worker or a person who does not pay taxes is what makes illegal labour more attractive than similar work in the "official" economy.

– There is too much red tape and inefficient bureaucracy, which can force people to hide in the shadows.

– The widespread recognition of illegal labour and the public's perception of it as a common and acceptable phenomenon makes it difficult to combat.

Analysts and economists point out that the measurement of the shadow economy can vary considerably depending on the method of estimation used. There is no "perfect" method of estimation; each approach has its own strengths and weaknesses, but ultimately produces similar conclusions and results, which may differ in some small way.

Friedrich Schneider and Dominik Enste in their work "The Shadow Economy: Size, Causes and Consequences" divide the ways of measuring the shadow economy into three different methods: direct approaches, indirect approaches and models (Table 2). It is worth noting that the most widely used among economists are the "demand for currency" approach and the "latent variable" method.

Table 2

WAYS TO MEASURE THE SHADOW ECONOMY¹⁵

Method.	Methods.
Direct approach	Sample survey
	Tax audit
Indirect approaches	National accounting statistics
	Labour statistics
	Through transactions
	Demand for currency
	Physical costs (electricity consumption)
Models	The latent variable approach

The direct approach includes sample surveys and tax audits. A sample survey is an estimate of the entire size of the shadow economy based on specific survey data. In turn, a tax audit (tax inspection) estimates the size of the shadow economy based on the inspection of undeclared taxable income.

The professors divide indirect approaches into the following: national accounting statistics (accounting statistics), labor force statistics, transaction approach, demand for currency, physical costs (electricity consumption). In

¹⁵ Schneider F., Enste D. Hiding in the Shadows. The Growth of the Underground Economy. International Monetary Fund, 2002. URL: <https://www.imf.org/external/pubs/ft/issues/issues30/#:~:text=the%20official%20economy.,What%20Is%20the%20Shadow%20Economy%3F,from%20monetary%20or%20barter%20transactions>

the indirect approach of "national accounting statistics" (accounting statistics), the boundaries of the shadow economy are delineated by discrepancies between income and expenditure statistics in national accounting data or in individual data. The "labour statistics" approach estimates the growth of the shadow economy based on the decline in labour participation in the formal economy, assuming that the labour force in a country has a constant level of participation in the economy as a whole. A less commonly used approach to measuring the shadow economy is the "transactions" approach. This approach uses systematized data on the total volume of all monetary transactions in the economy to calculate total nominal (unofficial + official) GDP, and then estimates the size of the shadow economy by subtracting official GDP from total nominal GDP. In the currency demand approach, the size of the shadow economy is estimated based on the demand for cash, assuming that shadow transactions are conducted in cash, so that the growth of the shadow economy will increase the demand for cash. The last indirect approach is referred to as "physical costs (electricity consumption)." This means that in this indirect approach, the size of the shadow economy is measured by electricity consumption, assuming that electricity consumption is the only and best physical indicator of overall economic activity. This approach subtracts the growth rate of official GDP from the growth rate of total electricity consumption, thus explaining the difference by the growth of the shadow economy.

The last method used by Schneider and Enste to measure the size of the shadow economy is a latent variable model. Such models define the size of the shadow economy as a function of observable variables that are assumed to have a significant impact on the shadow economy, such as burdensome taxation or the burden of government regulation, as well as variables where the shadow economy shows its footprint: cash payments, official working hours, unemployment. This method is considered to be quite advantageous, as it considers several causes and shows several effects simultaneously^{16, 17}.

Global practice of implementing methods of economic de-shadowing

The ways of unshadowing are determined by the reasons for the existence of the shadow economy. In order to achieve an effective de-shadowing process in the economy of any state, it is necessary to find a way to influence indirectly all existing branches of government, including the executive,

¹⁶ *Schneider F., Enste D.* Hiding in the Shadows. The Growth of the Underground Economy. International Monetary Fund, 2002. URL: <https://www.imf.org/external/pubs/ft/issues/issues30/#:~:text=the%20official%20economy.,What%20Is%20the%20Shadow%20Economy%3F,from%20monetary%20or%20barter%20transactions>

¹⁷ *Schneider F., Enste D.* Shadow Economies: Size, Causes, and Consequences. The Journal of Economic Literature, 2000, 38/1, pp 77-114.

legislative and judicial branches. Such influence should create specific, defined conditions for the de-shadowing process:

- Launch of an active process of legalizing the existing shadow sector.
- Preventing the shadowing of existing legal businesses.
- Stimulating entrepreneurial activity of small and medium-sized businesses
- Overcoming corruption schemes.
- Application of effective administrative measures for the purpose of punishment.

First and foremost, unshadowing should be aimed at improving the legal framework, which is aimed at eliminating bureaucracy and corruption. However, the state authorities should be directly interested in this, as cases of lobbying by a large number of business groups when adopting various bills are not uncommon today. The next step is to reform the fiscal policy, which will include differentiation of taxes depending on the object of taxation, similar to the practice used in most developed countries. The experience of countries that have largely overcome the shadow economy proves that economic efficiency directly depends on the optimal development of different business sizes, including small, medium and large businesses. Small and medium-sized businesses are the backbone of socioeconomic development, so improving conditions for these sectors will help solve socioeconomic problems associated with shadowing. First and foremost, such conditions will be the primary source of change in the population's attitude to working in the shadow sector, which may eventually lead to a reduction in moral and ethical problems.

The following measures also include the following de-shadowing measures:

- Improving the tax system and creating new effective reforms aimed at reducing the tax burden and simplifying the taxation system as much as possible.
- Significant reduction of the excessive number of regulatory acts, as well as ensuring consistency between them and the stability of their operation.
- Overcoming the phenomenon of corruption.
- Improving the efficiency of state property and asset management.
- Reducing the overall level of monopolization of production in the market and the comprehensive development of the competitive environment.
- Ensuring simple and efficient operation of financial markets.
- Use effective mechanisms to return funds that are not of criminal origin to official circulation.

For a comprehensive understanding, the experience of implementing the de-shadowing process in other countries is very important for our country, Ukraine, which is also actively reforming its economy. Therefore, one of the main objectives of our study is to investigate the positive and negative aspects, ways, and methods of de-shadowing that have been recorded in

different countries of the world, as well as to find out what specific measures have been taken in these countries to achieve success in implementing reforms. It is worth emphasizing that the most valuable elements of this analysis are the identification and outlining of mechanisms, methods, principles and instruments of state regulation for de-shadowing the economy of world leaders. These four main components can be a starting point for the development of a new, more effective concept of economic de-shadowing, which can be further incorporated into national, regional or local strategies and programs.

Table 3

POSSIBLE OPTIONS FOR REDUCING THE SHADOW SECTOR¹⁸

<i>Approach</i>	<i>Method</i>	<i>Possible activities</i>
<i>Tougher penalties</i>	Improving the mechanism for detecting violations.	Improving data management, combining the efforts of inspection bodies, and participating in international interviews.
	Tougher penalties	Increasing the penalty for tax offenses, introducing criminal liability, and extending the statute of limitations.
	Awareness of the possibility of being exposed and facing consequences	Social advertising, showing all the consequences of doing shadow business – from social insecurity to the effectiveness of procedures for detecting offenses.
<i>Stimulation</i>	The usual measures	Facilitation of tax accounting. Tax incentives. Introduction of new categories of employment in the legislation. Development of tax regimes for small businesses.
	An incentive to voluntarily come out of the shadows	Tax amnesties, rewards for voluntary withdrawal from the shadows.
	Creating certain relationships and coalitions by moving into the shadows.	Providing advantages when working with honest partners. Increasing the level of education. Exchange of information. Tax transparency. Transparency of administrative procedures.

Source: developed by the authors.

European countries can be divided into several groups according to the level of the shadow economy. Thus, the class of countries with a high level of shadow economy includes post-Soviet countries: Ukraine, Moldova, Belarus and Russia. In turn, the broader, medium shadow economy class

¹⁸ Finances of the shadow sector. The impact of the shadow sector on the socio-economic development of Ukraine. URL: <https://t1p.de/s54vr>

includes: Albania, Bulgaria, Greece, Romania, Cyprus, Spain, Malta, Estonia, Turkey, Belgium, Portugal, Hungary, Croatia, Slovenia, Italy, Latvia, Lithuania, and Poland. Countries with a low level of shadow economy include: Austria, the United Kingdom, Germany, Slovakia, Switzerland, Luxembourg, the Netherlands, Norway, Denmark, France, Iceland, Finland, and Ireland.

It is worth considering the top 10 countries that are members of the European Union and have the highest shadow economy indicators (Figure 1). The top leaders in terms of shadow economy as a percentage of gross domestic product as of 2022 are the following countries: Bulgaria – with 33.10%, Croatia – 29.7%, Romania – 29%, Hungary – 25.4%, Southern Cyprus – 23.9%, Malta – 23.4%, Estonia – 22.7%, Lithuania – 22.4%, Slovenia – 22.1%, and Poland with the lowest rate among the "leaders" – 21.9%.

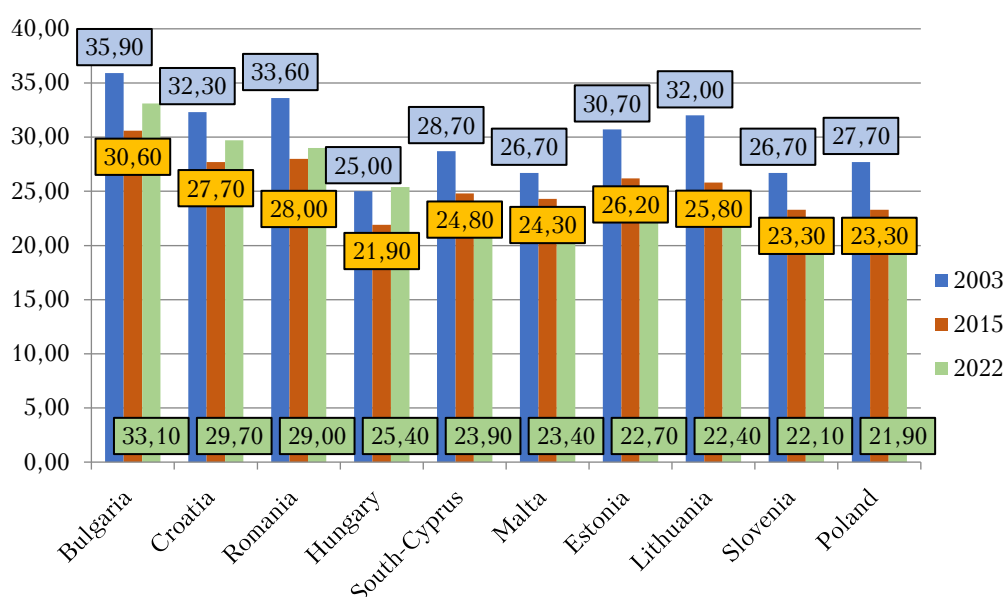


Figure 1. Top 10 EU countries with the highest shadow economy, % of GDP

Source: developed by the authors on the basis of ¹⁹.

In order to achieve positive results, Lithuania, as a member of the EU since 2004, has been actively pursuing reforms to ensure effective and efficient revenue administration and public financial management. In

¹⁹ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

particular, the country received significant support for structural reforms from its participation in the EU, which was the main driver of the country's active work. The Lithuanian authorities, through an educational campaign, took key actions to raise awareness and determine the possible impact on taxpayers' compliance with the country's tax laws, which resulted in a reduction in the size of the shadow economy²⁰. Romania has invested heavily in creating a legal framework and institutions responsible for reducing the shadow economy. The main task of the Labour Inspectorate is to prevent and combat undeclared labour. To combat it, Romania has amended the Labour Code to make undeclared labour above a certain level a criminal offense, and thus subject to prosecution of all companies that employ more than five workers at a time without an employment contract. The Romanian government is taking measures to encourage the use of electronic payments while discouraging the use of cash²¹. It is also worth noting that such countries as Lithuania, Poland, Portugal and France have implemented a system of mandatory real-time reporting of taxpayers to the tax authorities.

In turn, when reflecting on how leading European countries have fought the shadow economy, it is worth examining the top 10 European countries with the lowest and lowest levels of shadow economy, where the best practices of economic de-shadowing have been applied. The list includes 8 European Union member states – Austria, the Netherlands, Luxembourg, Germany, Denmark, France, Latvia and Italy – as well as two highly developed countries, Switzerland and the United Kingdom.

Thus, we can see that the lowest level of the shadow economy and the best indicator among European countries in 2022 belongs to Switzerland and amounts to 5.6% of GDP. Austria is in second place with 6.6%, followed by the Netherlands with 8.2%, Luxembourg with 8.3%, Germany with 8.8%, Denmark with 9.7%, and others. We can see the following dynamics in terms of years (2003 – 2022) – all the selected countries have been very successful in "fighting" the shadow economy, with the best results in unshadowing the economy shown by such countries as: Latvia – 10.5% (from 30.4% in 2003 to 19.9% in 2022), Germany has also improved its results significantly, reaching 7.9%, Denmark – 7.7%, the Netherlands 4.5%, Austria 4.2%.

Throughout their development, EU countries and developed European countries have been paying great attention to de-shadowing, i.e. combating tax evasion on a legislative basis. For example, Latvia, in its fight against tax evasion, implemented a nationwide action plan in its country, the key

²⁰ Reform Support. Awareness campaign strategy to reduce the shadow economy in Lithuania. *European Commission*. URL: https://reform-support.ec.europa.eu/what-we-do/revenue-administration-and-public-financial-management/awareness-campaign-strategy-reduce-shadow-economy-lithuania_en.

²¹ *Schneider F., Enste D.* Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

goal of which was to combat the shadow economy in various sectors by increasing efficiency in all policy areas. The "Action Plan of Public Authorities to Combat the Shadow Economy for 2016-2020" was applied²². In Latvia, limiting the shadow economy is one of the main priorities of the government, which is being implemented by taking measures to improve the business environment and promote voluntary fulfilment of tax obligations, forming a stable and predictable tax policy, conducting reforms, improving the legal framework, reducing corruption and administrative burden²³.

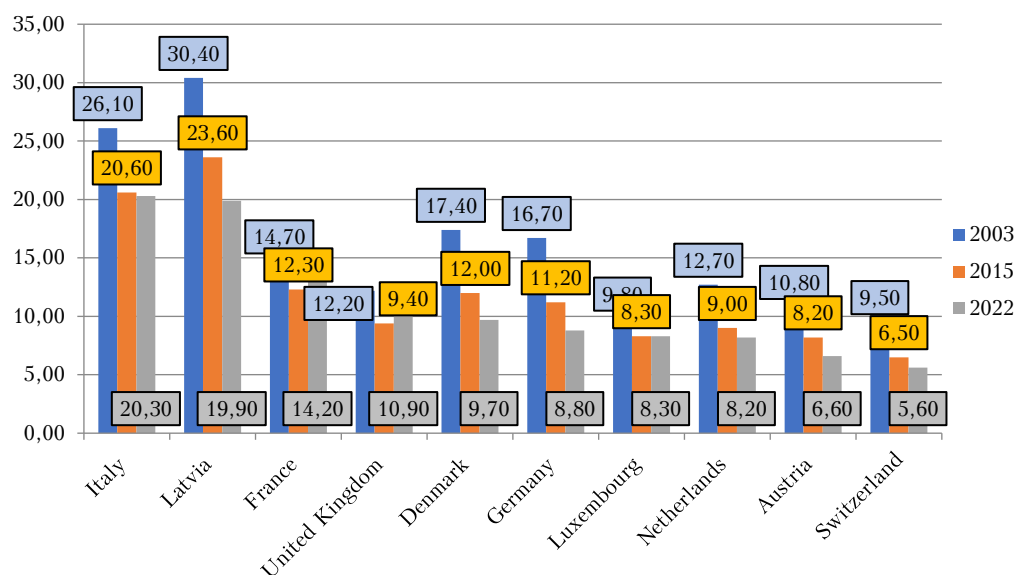


Fig. 2. Top 10 European countries with low shadow economy, % of GDP

Source: developed by the authors on the basis of²⁴.

Let's look at the state policy of combating informal employment in Austria, as this country has the lowest shadow economy rate among EU member states – 6.6%. The Austrian government has focused mainly on monitoring, detection, and prevention policies. The first policy measure in

²² Tackling the shadow economy of Latvia. *Ministry of Finance*. URL: <https://ec.europa.eu/social/ajax/BlobServlet?docId=17975&langId=en>

²³ Shadow Economy. Ministry of Finance of the Republic of Latvia. 2020. URL: https://www.fm.gov.lv/en/shadow-economy?utm_source=https%3A%2F%2Fwww.google.com%2F

²⁴ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

Austria was the Law on Social Fraud²⁵. Since March 2005, violators of tax laws face up to five years in prison for violations of tax laws. Subsequently, several EU countries, including Germany, Switzerland, and Austria, increased penalties for employers who do not register their employees. These policy measures reflect the dual function of registration as an access to services and to state audit and control. Austrian employers are obliged to register their employees with the relevant social security authorities before they start work. Such policy measures are aimed at encouraging workers to move to the formal sector or leave the informal sector²⁶.

Several European countries, such as Switzerland, the Netherlands, and Austria, have introduced data sharing and access to registers maintained by tax or social security authorities, or have established new coordinating institutions. These are mainly measures aimed at detecting and monitoring shadow economic activities, with a focus on undeclared labour²⁷.

The Austrian government's incentive-based policy of supporting businesses and households through various social packages has the potential to reduce the shadow economy. In order for people and businesses to benefit from these measures, such as subsidies, tax breaks, and other business support, they must "leave" the shadow economy and enter the formal economy.

Most of the policy measures taken by the Danish government to combat the shadow economy are preventive, as the country has one of the best tax policies in Europe. Like Austria, the Danish government has introduced penalties for employers who do not register their employees. Between 2003 and 2016, the government reduced labour taxes depending on income. Having somewhat reduced the tax burden, in 2015, the Danish tax authorities began to implement monitoring and detection measures aimed at individuals who declare very low taxable income but at the same time have a high standard of living, such as an expensive house, luxury cars, etc. Thus, by combining different administrative registers, the tax authorities hope to better identify individuals who receive income from undeclared work or criminal activities²⁸.

In addition, in September 2021, the government launched the "Denmark Can Do More" program²⁹, a proposal for a new reform agenda. The country ranks

²⁵ Bundesgesetzblatt Für Die Republik Österreich. Bundesgesetz: Sozialbetrugsgesetz-SozBeG, (NR: GP XXII RV 698 AB 743 S. 90. BR: 7163 AB 7169 S. 717.), 2004 Social Fraud Bill URL: https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2004_I_152/BGBLA_2004_I_152.html

²⁶ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

²⁷ International Labor Organization. Labor inspection in Europe: undeclared work, migration, trafficking. 2010. URL: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/publication/wcms_120319.pdf

²⁸ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

²⁹ Denmark – National Reform Program 2023. European Commission. 2022. URL: https://ec.europa.eu/info/sites/default/files/denmarks_national_reform_programme_2022_en.pdf

first in the tax policy ranking because it has a flexible, highly developed social security system. As a result, the tax morale of Danish citizens is considered one of the best in the world. The Danish government has been conducting regulatory reform for more than 20 years to reduce red tape for businesses. Thanks to all the above measures, the government is in a strong position to effectively reduce the shadow economy in the coming years.

Policy measures against the shadow economy in Germany, as in Austria, are mainly focused on detection and prevention. An agreement was reached between France and Germany to exchange information on illegal labour. In addition, the governments of Belgium, France, Germany, Italy, and Romania have created a European network of undeclared work to encourage knowledge sharing in this area³⁰. Germany applies punitive measures. Examples of such measures include changes to the criminal tax code and voluntary disclosure to avoid fines.

Over the past few years, Italy has taken a number of measures aimed at reducing tax evasion and the shadow economy in general. The main policies in the Italian government's fight against shadowing are the timeliness and compulsory completion of tax returns and early reporting of income. The government also insists on measures that encourage digital payments instead of cash. The Italian government has introduced sanctions for retailers and service providers that do not accept credit cards. These measures were announced at the end of 2020 as part of the "Cashless Plan" to encourage the transition from cash to digital payments. Many countries, such as Bulgaria, Greece and Italy, have set a certain threshold above which cash payments are not allowed or must be reported to the authorities³¹.

In 2019, Italy introduced the digitalization of other services, such as expanded mandatory digital invoicing and improved taxpayer profiling to improve tax compliance. Significant investments in the country are aimed at supporting the digital transition, in particular the digitalization of public administration, which will help control the payment system³².

A number of countries are focusing on fighting corruption. These include Hong Kong, Singapore, and Latvia, where multi-purpose authorities with law enforcement powers have been established. Specialized prosecution services have also been established: Romania, Spain, Croatia. Specialized police services: Norway, the United Kingdom and Belgium. To combat

³⁰ International Labor Organization. Labor inspection in Europe: undeclared work, migration, trafficking. 2010. URL: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/publication/wcms_120319.pdf.

³¹ *Schneider F., Enste D.* Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

³² Italy's recovery and resilience plan. 2023. *European Commission*. URL: https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/italys-recovery-and-resilience-plan_en#digital-transition

corruption, Albania, France, Slovenia, and Macedonia have established Institutions for the Prevention of Corruption and Policy Coordination³³.

The level of the shadow economy in the Netherlands is 8.2% in 2022. The main principles of the fight against corruption in the Netherlands include:

- continuous reporting and transparency. The Minister of Internal Affairs reports to the Parliament on detected cases of corruption and measures taken;
- developing a high-quality system for monitoring possible sources of corruption and suspicious persons;
- creating anti-corruption legislation for public officials;
- a harsh system of penalties, including a ban on holding public office, administrative fines, and even temporary suspension from duty³⁴.

Let's also consider three non-European but highly developed OECD (Organization for Economic Cooperation and Development) countries (Canada, Japan, and the United States), which have a lower shadow economy than Europe as a whole, with an average size of about 8.23% of GDP in 2022.

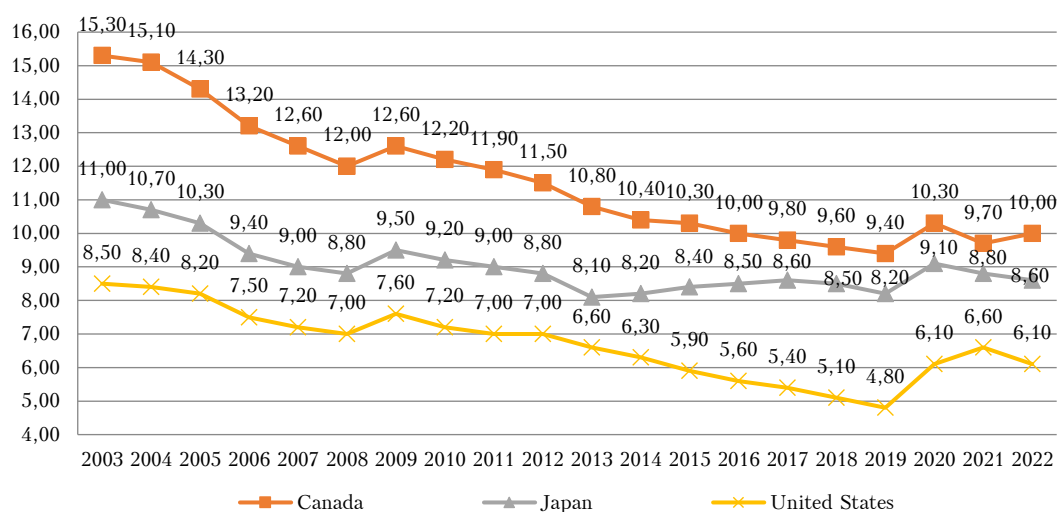


Fig. 3 Top 3 highly developed non-European economies with low shadow economy, % of GDP (2003-2022)

Source: developed by the authors on the basis of ³⁵.

³³ Specialized Anti-Corruption Institutions: A Review of Models // *Organization for Economic Cooperation and Development*. 2007. URL: <https://www.oecd.org/corruption/acn/39972270.pdf>.

³⁴ Dyachenko O.P. Foreign experience on state mechanisms of de-shadowing the economy of the European Union / O.P. Dyachenko // *Public Administration*, 2017, No. 3 (59) URL: http://pa.stateandregions.zp.ua/archive/3_2017/12.pdf

³⁵ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

Among these non-European countries, the United States has the lowest shadow economy and will account for 6.1% of GDP in 2022, Japan – 8.6%, and Canada – 10%. The United States is implementing one of the best policies that allows the country to be a leader among non-European countries with a minimum level of shadow economy, namely:

- Improving the effectiveness of tax compliance control: The Internal Revenue Service (IRS) is responsible for collecting taxes and monitoring compliance with tax laws in the United States;
- development of electronic payment systems. Electronic payment systems, such as credit and debit cards, virtual wallets, mobile payments, etc., can reduce the turnover of cash, which is often used in the shadow economy;
- Improving access to financial services. Ensuring access to bank accounts and other financial services reduces the level of the shadow economy, as people will then be more inclined to use legal financial instruments;
- The U.S. government is taking steps to regulate certain sectors that are particularly susceptible to the shadow economy, such as construction, the labour market, drug trafficking, and others;
- Increased transparency and openness. The government is ensuring greater transparency and openness in the economy, in particular by publishing more detailed information on business activities and providing open access to statistical data and information on public procurement³⁶.

Table 4

**GLOBAL EXPERIENCE IN IMPLEMENTING METHODS
 OF ECONOMIC DE-SHADOWING**

<i>Country</i>	<i>Measures for the de-shadowing process</i>
USA	The use of a polygraph. Transparency and openness of doing business. Ease of access to financial services. Development of electronic payment systems. Control over compliance with tax legislation: Internal Revenue Service (IRS).
Austria	Stiff penalties for violations of tax laws (prison, fines). Mandatory offline registration of employees. Data exchange and access to registers. Tax incentives and other business support to encourage businesses to come out of the shadows.
Germany	Optimization of the tax system, simplification of the tax calculation mechanism, reduction of payroll deduction rates, etc. Establishment of a number of organizations: Federal Financial Police, Department for Combating Organized Crime and Corruption, DIA (Department of Internal Investigation).

³⁶ *Simon C.P., A.D. Witte, K. Eakin, A. Ziebart. Underground Economy – Estimate of Size, Trends and Structure Executive Summary. URL: <https://www.ojp.gov/ncjrs/virtual-library/abstracts/underground-economy-estimate-size-trends-and-structure-executive>.*

Continuation of Table 4

Country	Measures for the de-shadowing process
Poland	Prohibition of business activities of individuals who have previously committed a serious tax crime. Introduction of property liability of legal entities for committing an economic crime.
France	Preventing export-import operations with businesses in offshore zones. Real-time reporting of taxpayers to the tax authorities. Fighting corruption.
United Kingdom	Increase public trust in the government, strengthen the independence of the courts by placing them under public control, and increase penalties for bribery.
Netherlands	Development of a monitoring system for possible sources of corruption and suspicious persons. Functioning of a state security system to combat corruption, such as social police. Harsh system of punishment, including prohibition to hold public office, large fines
Belgium, Hong Kong, Spain, Singapore,	Fighting corruption: multi-purpose bodies have been created; services within law enforcement agencies, including: specialized prosecutor's services; specialized police services; corruption prevention, policy development and coordination bodies.
Lithuania, Poland, Portugal and France	Mandatory real-time reporting by taxpayers to tax authorities.
Romania	Establishing and improving the regulatory framework and institutions. Encourage the use of electronic payments.
Italy	Introduce sanctions for retailers and service providers who do not accept credit cards.
Bulgaria, Greece and Italy	A certain threshold has been set above which cash payments are not allowed or must be reported to the authorities. The Greek Parliamentary Committee has access to information on the status and movement of funds in any accounts of individuals and legal entities.
Denmark	Regulatory reform has been implemented to reduce red tape for businesses. Good tax policy that improves tax morale in the country.

Source: developed by the authors based on ³⁷, ³⁸, ³⁹, ⁴⁰.

³⁷ Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

³⁸ Dyachenko O.P. Foreign experience on state mechanisms of unshadowing the economy of the European Union / O.P. Dyachenko // Public Administration, 2017, No. 3 (59) URL: http://pa.stateandregions.zp.ua/archive/3_2017/12.pdf

³⁹ A. Dreher, F. Schneider (2006) Corruption and the shadow economy: an empirical analysis. URL: <https://docs.iza.org/dp1936.pdf>.

⁴⁰ Specialized Anti-Corruption Institutions: A Review of Models // Organization for Economic Cooperation and Development. 2007. URL: <https://www.oecd.org/corruption/acn/39972270.pdf>.

Priority vectors of de-shadowing of the Ukrainian economy

The Ministry of Economy of Ukraine and the State Statistics Service are the key institutions at the national level that conduct direct detailed analysis of the level and scope of the shadow economy in Ukraine. For a more detailed analysis, we will highlight the dynamics of the shadow economy by separate methods (Figure 4). Using two classical methods, which are the most popular among many experts in Ukraine and the Ministry of Economy, an increase in the level of the shadow economy was recorded compared to 2020:

- "electric method" – an increase of 3 percentage points (to 27% of offshore GDP);
- "monetary method" – increase by 2 percentage points (up to 33% of offshore GDP)⁴¹.

In contrast, taking into account the last two methods, which arose as a result of the work of domestic experts and scholars, taking into account the historical features of the processes of entering the shadow economy in Ukraine, showed a decrease in the level of shadowing. We are talking about the method of "household expenditures – retail turnover and services" – as we can see from the graph above, the decrease was by 1 percentage point (to 22% of the total official GDP); and the last method – "the method of enterprise losses" – the decrease was by 3 percentage points (to 23% of the total official GDP). This was achieved through the adaptation of enterprises and households to the relevant "coronavirus" operating conditions, which responded to new challenges and stimulating actions by the Government, which resulted in a gradual improvement in certain financial results during the reporting year. In our opinion, this situation is explained by the replacement of traditional shadow activities with potentially new ones, which, unfortunately, may not be fully covered by the existing established assessment methods.

Analysing the statistical data and factors that lead to the existence of shadow economic activity in Ukraine, we understand that it is extremely important to actively engage in the process of de-shadowing the entire economic system in our country. We note that unshadowing should be seen not only as the withdrawal of money from the "shadow" or the legalization of illegally acquired funds, but also as the creation of an institutional controlled environment that will not contribute to the expansion of the shadow economy and the emergence of new shadow economic relationships, but rather will encourage all involved businesses to leave the shadow sector as soon as possible. One of the conditions for Ukraine's accession to the EU is the de-shadowing of the economy, so our country should make every effort to overcome the shadow economy.

⁴¹ General trends of the shadow economy in Ukraine in 2021 // *Department of Strategic Planning and Macroeconomic Forecasting*. URL: <https://me.gov.ua/Documents/List?lang=uk-UA&id=e384c5a7-6533-4ab6-b56f-50e5243eb15a&tag=TendentsiiTinovoiEkonomiki>

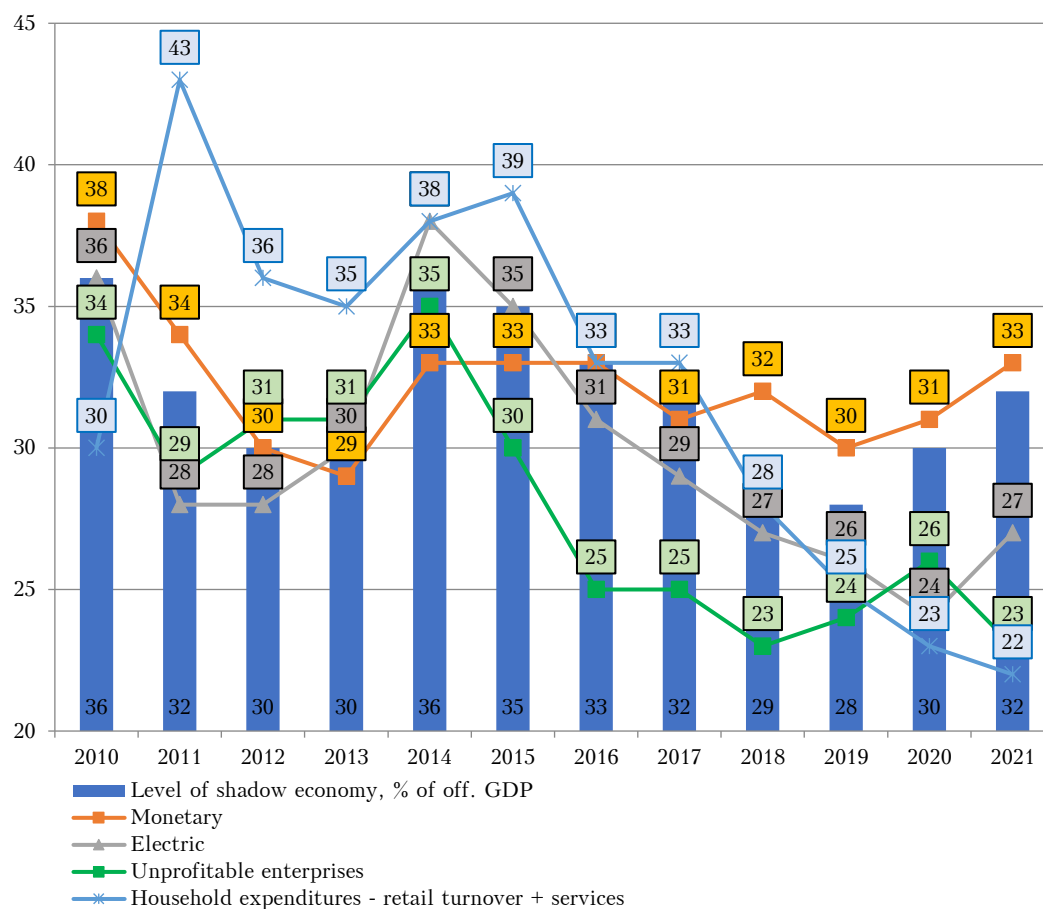


Fig. 4 Dynamics of the level of Ukraine's shadow economy by individual methods, % of official GDP

Source: compiled by the author based on⁴².

Let's take a closer look at a set of key measures for Ukraine's state policy that will help fight the shadow sector in the country:

1. The key solution to the fight against shadowing, which has developed in the difficult conditions for our country, is to *improve tax policy*. It means reducing the burden on businesses and supporting them in every possible way, including streamlining and simplifying the procedures required to

⁴² General trends of the shadow economy in Ukraine in 2021 // Department of Strategic Planning and Macroeconomic Forecasting. URL: <https://me.gov.ua/Documents/List?lang=uk-UA&id=e384c5a7-6533-4ab6-b56f-50e5243eb15a&tag=TendentsiiTinovoiEkonomiki>

regulate business activities, reducing the number of mandatory payments, paying taxes in simple, clear steps, raising the minimum level of income that is not subject to taxation, and other measures aimed at simplifying the taxation system. First of all, such a tax policy will lead to a level playing field for taxpayers and cases where companies deliberately minimize their tax liabilities should be reduced.

2. Establishing a procedure for value added tax (VAT) refunds. This will be done to support exports of goods and to increase business confidence in the state.

3. The next step is to identify employees and their employers who have been hired without properly concluding labour contracts, taking into account the experience of countries such as: Germany (Federal Financial Police), Switzerland, and Austria, which severely punish employers who unofficially employ active working-age people without concluding contracts. For example, Austrian employers are obliged to register their employees with the relevant social security authorities before they start work, which is a good example for our employers that needs to be implemented. Also, this step will significantly increase the amount of revenues to the relevant state funds.

4. Implementing a new anti-corruption reform that will improve the fight against corruption schemes in Ukraine.

5. Implementation of e-governance by improving the Diia application on the example of a country such as Canada, which was one of the first in the world to introduce open access to information of the necessary government agencies. Canada is a leader in e-government innovations. It has comprehensively developed portals and websites that provide access to information on all aspects of life. Along with Canada, best practices have been applied in such countries as: Australia, India, Singapore, Germany, Norway, South Korea, and the United States⁴³. This will lead to greater transparency in government decision-making and reduce corruption.

6. Gradual involvement of the population in expanding the use of cashless payments, providing all conditions for this. Popularization of the cashless lifestyle among the population of Ukraine⁴⁴. This practice was used in Romania, where measures were taken to encourage the use of electronic payments. For example, Italy has introduced sanctions for retailers and service providers that do not accept credit cards. Such measures will help to achieve better control over individuals and legal entities and their sources of income, and will help to identify situations where expenses exceed income.

⁴³ Best practices of e-government implementation: foreign experience. Methodical materials for the discipline: "Theoretical and methodological, organizational and institutional foundations of e-government" / authors: K. Synitskyi, Y. Oliynyk, M. Mikhalova and others; edited by Doctor of Public Administration, Professor S. Chukut, PhD in Public Administration O. Zagvoyska – Kyiv, 2010. 166 p. URL: https://ktpu.kpi.ua/wp-content/uploads/2016/02/Krashhi-praktiki-vprovadzhennya-elektronnogo-uryaduvannya_zarubizhnij-dosvid.pdf.

⁴⁴ Study of the shadow economy in Ukraine // National Bank of Ukraine. 2020. URL: <https://bank.gov.ua/ua/news/all/doslidjennya-tinovoyi-ekonomiki-v-ukrayini--mayje-chvert-vvp--abo-846-mlrd-griven--perebuvaye-v-tini>

7. To pursue a tax policy that will help improve tax morale. This is one of the most important elements for the return of funds to state budgets. In order to improve tax morale, we can follow the example of the Danish government, as the Danish government is constantly implementing updated programs to support the population and improve welfare – a good tax policy fundamentally develops tax morale in the country.

8. Drawing on the experience of the highly developed United States, the role of special government services should be strengthened to regulate certain sectors that are particularly susceptible to the shadow economy. FBI officers in the United States often work in corporations and concerns to monitor their activities. It was a brilliant decision of the US government to introduce mandatory polygraph examinations for public officials to uncover corruption schemes and tax crimes.

9. To intensify and continue the process of Ukraine's European integration by harmonizing Ukrainian legislation with the legal norms of the European Union, focusing in particular on the harmonization of customs, labour law and financial services.

The state strategy for the de-shadowing of the Ukrainian economy is part of the state's overall policy of regulating the economy. Such a state policy requires a responsible attitude, proper preparation and the use of an appropriate set of tools. Political support and cohesion of political interests are important factors for success in the de-shadowing process, along with consistent reforms of society, avoidance of populism and punishment of irresponsible behaviour of officials, as well as a change in the Ukrainian mentality towards the importance of civic engagement and active participation in the overall process of development and prosperity of our economy.

Conclusions

The shadow economy typically arises for a variety of reasons, including economic inequality, high tax burdens, bureaucratic red tape, corruption schemes, and poorly developed regulatory policies. In some cases, workers enter the informal economy due to the lack of legal opportunities for high earnings, while in other cases it becomes a way to avoid paying taxes and legal control. Combating the shadow sector requires a comprehensive approach, including social, economic and political measures that should be based on successful global practices of de-shadowing. As of the beginning of 2022, the shadow economy in Ukraine was 32%, which is high and equals about a third of the country's official GDP.

De-shadowing of the economy is of great importance for Ukraine and is an important step in the process of European integration, as the EU sets rather high standards in terms of transparency, well-functioning tax

legislation, fight against corruption and economic stability. Measures based on the global experience of de-shadowing will help reduce corruption, ensure a level playing field for business, attract significant foreign investment, and develop a competitive market environment in the international arena. In addition, the de-shadowing of the economy will help increase fiscal revenues to the state budget. This is important to ensure the stability of the financial and banking systems, as well as infrastructure development, high quality services, proper social programs and other areas.

This article was translated from its original in Ukrainian.

References

1. *Diachenko O.P.* Zarubizhnyi dosvid shchodo derzhavnykh mekhanizmiv detinizatsii ekonomiky krain Yevropeiskoho Soiuzu / O.P. Diachenko // *Derzhavne upravlinnia*, 2017, № 3(59). URL: http://pa.stateandregions.zp.ua/archive/3_2017/12.pdf [In Ukrainian].
2. *Doslidzhennia tinovoi ekonomiky v Ukraini* // *Natsionalnyi Bank Ukrainy*. – 2020. URL: <https://bank.gov.ua/ua/news/all/doslidjennya-tinovoyi-ekonomiki-v-ukrayini--mayje-chvert-vvp--abo-846-mlrd-griven--perebuvaye-v-tini> [In Ukrainian].
3. *Zahalni tendentsii tinovoi ekonomiky v Ukraini u 2021 rotsi* // *Departament stratehichnoho planuvannia ta makroekonomichnoho prohnozuvannia*. URL: <https://me.gov.ua/Documents/List?lang=uk-UA&id=e384c5a7-6533-4ab6-b56f-50e5243eb15a&tag=TendentsiiTinovoiEkonomiki> [In Ukrainian].
4. *Krashchi praktyky vprovadzhennia elektronnoho uriaduvannia: zarubizhnyi dosvid. Metodychni materialy do navchalnoi dystsypliny: "Teoretyko-metodolohichni, orhanizatsiini ta instytutysiini osnovy elektronnoho uriaduvannia"* / avt. kol.: K. Synytskyi, Ya. Oliinyk, M. Mikhalova ta in.; za zah. red. d.n.derzh.upr., prof. S.A. Chukut, k.n.derzh.upr. O.V. Zahvoiskoi. – K., 2010. – 166 s. URL: https://ktpu.kpi.ua/wp-content/uploads/2016/02/Krashhi-praktiki-vprovadzhennia-elektronnogo-uryaduvannia_zarubizhnij-dosvid.pdf [In Ukrainian].
5. *Nahrebelnyi V. P.* Tinova ekonomika / V. P. Nahrebelnyi, V. M. Popovych // *Yuryd. entsykl.: u 6 t.* / redkol.: Yu. S. Shemshuchenko (holova redkol.) ta in. K., 1998. T. 6. S. 74–76. [In Ukrainian].
6. *Pirnykoza P. V.* Teoretychna sutnist ekonomichnoi katehorii "detinizatsiia ekonomiky" / P. V. Pirnykoza // *Ekonomichnyi analiz*. – 2017. – T. 27, № 4. – S. 65–74. URL: http://nbuv.gov.ua/UJRN/ecan_2017_27%284%29__10 [In Ukrainian].
7. *Spetsializovani instytutsii z borotby proty koruptsii: ohliad modelei* // *Orhanizatsiia ekonomichnoho spivrobitnytstva i rozvytku*. – 2007. URL: <https://www.oecd.org/corruption/acn/39972270.pdf> [In Ukrainian].
8. *Tinova ekonomika v Ukraini: stan, tendentsii, shliakhy podolannia : analitynyi ohliad* / [uporiad.: S. S. Cherniavskyi, V. A. Nekrasov, A. V. Tytko ta in.]. – Kyiv : Nats. akad. vnutr. sprav, 2017. S. 11 [In Ukrainian].

9. Turchynov O. V. Tinova ekonomika: teoretychni osnovy doslidzhennia / O. V. Turchynov. K.: ArtEK. 1995. S. 32. [In Ukrainian].
10. Finansy tinovoho sektoru. Vplyv tinovoho sektoru na sotsialno-ekonomichni rozvytok Ukrainy. URL: <http://kaf-fin.wunu.edu.ua/wp-content/uploads/2021/03/%D0%A4%D1%96%D0%BD%D0%B0%D0%BD%D1%81%D0%B8-%D1%82%D1%96%D0%BD%D1%8C%D0%BE%D0%B2%D0%BE%D0%B3%D0%BE-%D1%81%D0%B5%D0%BA%D1%82%D0%BE%D1%80%D1%83.pdf> [In Ukrainian].
11. *Bundesgesetzblatt Für Die Republik Österreich*. Bundesgesetz: Sozialbetrugsgesetz-SozBeG, (NR: GP XXII RV 698 AB 743 S. 90. BR: 7163 AB 7169 S. 717.), 2004 Social Fraud Bill. URL: https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2004_I_152/BGBLA_2004_I_152.html
12. Denmark – National Reform Programme 2023. *European Commission*. 2022. URL: https://ec.europa.eu/info/sites/default/files/denmarks_national_reform_programme_2022_en.pdf
13. Dreher A., F. Schneider. Corruption and the shadow economy: an empirical analysis. 2006. URL: <https://docs.iza.org/dp1936.pdf>
14. Enste D. H. The shadow economy in industrial countries. IZA World of Labor 2015: 127. 2015. DOI: 10.15185/izawol.127 <https://wol.iza.org/uploads/articles/127/pdfs/shadow-economy-in-industrial-countries.pdf>.
15. Feige E. How Big is the Irregular Economy? Challenge, 1979.
16. Gutmann, P.M. The Subterranean Economy, Financial Analysts Journal, 33:6, 26-27, 1977. DOI: 10.2469/faj.v33.n6.26 URL: <https://www.tandfonline.com/doi/abs/10.2469/faj.v33.n6.26>
17. *International Labour Organization*. Labour inspection in Europe: undeclared work, migration, trafficking. 2010. URL: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/publication/wcms_120319.pdf.
18. Italy's recovery and resilience plan. 2023. *European Commission*. URL: https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/italys-recovery-and-resilience-plan_en#digital-transition
19. Lomsadze D.G. METHODOLOGY OF SHADOW ECONOMY STUDIES 2020 C. 7-10
20. Reform Support. Awareness campaign strategy to reduce the shadow economy in Lithuania. *European Commission*. URL: https://reform-support.ec.europa.eu/what-we-do/revenue-administration-and-public-financial-management/awareness-campaign-strategy-reduce-shadow-economy-lithuania_en
21. Schneider, F. Shadow economies and corruption all over the world: New estimates for 145 countries. *Economics: The Open-Access, Open-Assessment E-Journal* 1 (2007): 1–66.
22. Schneider F., Enste D. Hiding in the Shadows. The Growth of the Underground Economy. International Monetary Fund, 2002. URL: <https://www.imf.org/external/pubs/ft/issues/issues30/#:~:text=the%20official%20economy.,What%20Is%20the%20Shadow%20Economy%3F,from%20monetary%20or%20barter%20transactions>
23. Schneider F., Enste D. Shadow Economies: Size, Causes, and Consequences. *The Journal of Economic Literature*, 2000, 38/1, pp 77–114.
24. Schneider F., Enste D. Taxation of the Informal Economy in the EU. European Union, 2022, IPOL | Policy Department for Economic, Scientific and

Quality of Life Policies, PE 734.007 URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU\(2022\)734007_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf)

25. Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?, WP/18/17, January 2018, C. 4

26. Shadow Economy. *Ministry of Finance Republic of Latvia*. 2020. URL: https://www.fm.gov.lv/en/shadow-economy?utm_source=https%3A%2F%2Fwww.google.com%2F

27. *Simon C.P., A.D. Witte, K. Eakin, A. Ziegart*. Underground Economy – Estimate of Size, Trends and Structure Executive Summary. URL: <https://www.ojp.gov/ncjrs/virtual-library/abstracts/underground-economy-estimate-size-trends-and-structure-executive>

28. Tackling the shadow economy Latvia. *Ministry of Finance*. URL: <https://ec.europa.eu/social/ajax/BlobServlet?docId=17975&langId=en>

29. *Tanzi V.*, Uses and Abuses of Estimates of the Underground Economy, The Economic Journal, Volume 109, Issue 456, 1 June 1999, Pages 338–347, <https://doi.org/10.1111/1468-0297.00437>. URL: <https://academic.oup.com/ej/article-abstract/109/456/338/5128722?redirectedFrom=fulltext>.

Received on: May 8, 2023.

Accepted on: May 24, 2023.

Released on: July 15, 2023