MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

KYIV NATIONAL ECONOMIC UNIVERSITY
NAMED AFTER VADYM HETMAN

Faculty of International Economics and Management
Department of International Economics

BACHELOR DEGREE	**«INTERNATIONAL ECONOMICS»**
PROGRAM	**International economics**
FIELD OF KNOWLEDGE	**05 Social and behavioral sciences**
SPECIALTY	**051 «Economy»**

Form of education - full-time

BACHELOR THESIS

Title: «World experience in implementing the process of de-shadowing of the economy»

By: Kosobutska_Julia

Academic Supervisor Doctor of Economic Sciences, Professor of the Department of International Economics

Nataliya Moskalyuk
(Signature)

Bachelor Thesis has been approved for defense at Attestation Examination Commission (EC)

Head of the Department of International Economics Dr. of Science, Professor

Y. Stoliarchuk
(Signature)

KYIV 2024

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AGREED	**APPROVED**
Head of the project group (guarantor) of the educational-professional program	Head of the Department
________________Y. Stoliarchuk	_____________Y. Stoliarchuk
(Signature)	*(Signature)*
_______________ 2024	____________________ 2024

INDIVIDUAL TASK
higher education applicant Kosobutska Julia
full-time forms of education

Bachelor Thesis

"World experience in implementing the process of de-shadowing of the economy"

The title of the Bachelor's thesis has been approved by the Rector's Order 07. 12. 2023 №2231

Bachelor Thesis is based on open Ukrainian and foreign sources of scientific knowledge and analytical information, monographs and articles, reports of international organizations and national institutions.

Plan of Bachelor Thesis and the terms of its submission to the Academic Supervisor

Chapter 1	Theoretical aspects of the topic "World experience in implementing the process of de-shadowing of the economy"
Chapter 2	Comparing experience of different countries to develop a strategy for de-shadowing Ukraine's economy
Object of research:	Global experience in implementing the process of economic de-shadowing.
Subject of research:	Mechanisms and effectiveness of measures for economic de-shadowing in various countries worldwide.
The purpose of the Thesis:	Propose recommendations for the implementation of economic de-shadowing measures in Ukraine

Specific tasks applicant has to accomplish to meet the objective:

In Chapter 1, the focus is on analyzing the theoretical foundations of de-shadowing the economy. This includes exploring key concepts, principles, and frameworks that underpin effective economic de-shadowing practices. Additionally, the chapter aims to gain a comprehensive understanding of the factors and challenges involved in the de-shadowing processes across different countries.

In Chapter 2, the objective is to compare the experiences of various countries in implementing economic de-shadowing measures. This involves extracting valuable insights and lessons from these experiences to develop a tailored strategy for de-shadowing Ukraine's economy. The comparison will provide a basis for proposing practical and effective recommendations specific to the Ukrainian context.

The task has been set
by the Academic Supervisor ________________ Nataliya Moskalyuk
(Signature)
01.01.2024

The task has been given to
Applicant ________________ Kosobutska Julia
(Signature)
01.01.2024

ABSTRACT

The qualifying bachelor thesis contains 82 pages, 5 tables, a list of used sources of 50 items, appendices.

«World experience in implementing the process of de-shadowing of the economy»

Object of research: Global experience in implementing the process of economic de-shadowing.

Subject of research: Mechanisms and effectiveness of measures for economic de-shadowing in various countries worldwide.

Objective of the bachelor's qualification work: Analysis of the global experience in implementing the process of economic de-shadowing to identify the most effective approaches and recommendations for its implementation in Ukraine.

Research tasks:

Analyze the theoretical foundations of economic de-shadowing.

Study the practical experience of economic de-shadowing in countries with different models of economic development.

Identify key success factors and obstacles in the implementation of the de-shadowing process.

Propose recommendations for the implementation of economic de-shadowing measures in Ukraine.

Practical significance of the obtained results: The research findings may be useful for government agencies, business communities, and academic groups interested in financial system reform and stimulating economic growth.

Year of completion of the bachelor's qualification work: 2024.

Year of defence of the work: 2024.

Keywords: economic de-shadowing, financial system, economic development, global experience, reforms.

Review
on the bachelor's thesis
of the student of the Faculty of International Economics and Management
of the bachelor's degree program "International Economics"
Kosobutska_Julia
on the topic of «**World experience in implementing the process of de-shadowing of the economy»**

1. Relevance of the topic: Over the past decades, the number of companies that have opened business in offshore zones has grown rapidly. There is a process of capital export from national economies, which leads to an increase in shadowing of the economy. Therefore, the study of the world experience in implementing the process of de-shadowing of the economy is relevant.
2. Positive aspects of the bachelor's thesis: the theoretical foundations of de-shadowing of the economy, in particular, the essence, types and scales of de-shadowing of the economy, methods of measuring and evaluating the shadow economy, the main directions and tools of de-shadowing of the economy are explored in the Thesis.
3. Presence of author's independent developments: the student systematized measures to de-shadowing of the economy in developed countries and in developing countries, in particular, Georgia, Poland, and Lithuania.
4. Value of theoretical conclusions and practical recommendations: the determined research experience of de-shadowing can be used for implementation in the economy of Ukraine.
5. Presence of drawbacks: mechanisms of implementation of the world experience of de-shadowing of the economy have a low level of information support. The shortcomings also include the following: the provisions of thesis are descriptive in nature and are not supported by analytical and statistical information, the areas of detinization of the global market are not defined, there is no assessment of the impact of offshore companies on the shadowing of the global economy, the sectors of the shadow economy in Ukraine are not identified, the effectiveness of measures for economic de-shadowing is not disclosed as defined the subject of this research.
6. Overall assessment of the bachelor's thesis and its admission to defence: the research topic is disclosed, the work is written according to the requirements, it is allowed to be defended before the Examination Committee with an assessment of **30 points.**

Supervisor:

PhD in Economics, Associate Professor
of the Department of International Economics of KNEU Moskalyuk N.

" 11 " June 2024 year

CONTENTS

INTRODUCTION

Relevance of the topic. In the modern conditions of globalization and rapid technological progress, the process of economic de-shadowing is gaining increasing importance. The rapid development of financial technologies, the emergence of cryptocurrencies and other alternative financial instruments, as well as the growing trust in their use, cast doubt on the role of traditional financial institutions and currencies. Thus, exploring the global experience of implementing the process of economic de-shadowing becomes a relevant task of our time.

Throughout the history of Ukraine's independence, the issue of the shadow economy has remained at the forefront of relevance. According to official statistics, in 2021, it accounted for 32% of the country's total GDP. However, estimates by international experts, such as the World Economic Survey, indicate that the level of the informal economy may reach 44.2% of Ukraine's total GDP. Unofficial calculations go even further, putting this indicator within the range of 45-60% of the total GDP.

When the level of the shadow sector exceeds 50%, it becomes a critical problem for the country. From half or even more of the economy operating outside official regulation, both economic development and the well-being of citizens suffer. For example, in developed countries with a high level of economic stability, the level of the shadow economy does not exceed 13.5% of GDP. The lowest figures are observed in countries known for their effective control systems: in the USA - 7.3%, in Switzerland - 7.5%, in Austria - 8.7%, in Japan - 9.6%, in the UK - 10.3%, in Canada and Germany - 11.2%, in China - 12.7%, and in France - 13.1%.

The beginning of 2022 marked a period of unjustified losses for Ukraine, as it fell under severe military aggression. This situation led to serious economic losses and immediately impacted the shadow sector. Naturally, in times of war, the problem of the shadow economy tends to grow, as the main task becomes ensuring the survival of the population. However, after the conflict ends, this problem will remain relevant, especially in the conditions of post-war recovery of Ukraine's economy. Therefore, studying scientific literature in this direction is extremely important.

Among the main factors contributing to the thriving shadow economy, it is worth noting the high level of corruption, lax legislation, and deficiencies in the judicial system, which result in low levels of trust both in society and among investors. Also, uneven taxation of different economic entities and a low level of protection of intellectual property rights and general property contribute to the problem.

The shadow economy operates outside the law, evading taxation and regulation, leading to the destabilization of social development and economic processes in the country. These dangerous socio-economic phenomena are studied by scholars such as Z. Varnaliy, O. Kuvshinova, I. Mazur, V. Mandibura, S. Mocherniy, and Yu. Kharazishvili. Various theoretical aspects of the shadow economy issue, including in the context of causality processes, have been explored by foreign scholars such as E. de Soto, P. Gutmann, V. Tanzi, F. Schneider, and others.

Recent research and publications in the field of economics reflect a growing interest in the issues of economic de-shadowing and its impact on global financial systems. There are various approaches to studying this phenomenon, which require further analysis and synthesis.

Purpose and objectives of the study. The purpose of this qualification work is to systematize and analyze the global experience of implementing the process of economic de-shadowing, determining its characteristics and impact on the economic development of countries. The main objectives are to disclose the object and subject of the study, determine research methods, and the theoretical, methodological, and practical significance of the results obtained.

Research object. The object of the study is the process of economic de-shadowing at the global level.

Research subject. The subject of the study is the practice of implementing and the results of the process of economic de-shadowing in different countries around the world.

Research methods. This work will use general scientific and special research methods, including the method of analysis of scientific literature, comparative analysis, statistical analysis, expert assessments, etc.

Theoretical, methodological, and practical significance of the results obtained. The results of this study have significant theoretical importance for understanding the process of economic de-shadowing and its impact on global economic dynamics. They can also be used to develop methodological recommendations for implementing similar projects in the future.

Information base of the research. During the preparation of this work, data from scientific articles, monographs, dissertations, as well as statistical information and analytical reports covering the period up to recent years were used

CHAPTER 1.
THEORETICAL FOUNDATIONS OF DE-SHADOWING OF THE ECONOMY

1.1. Concept, essence, types and scale of economic de-shadowing

The shadow economy is a phenomenon that has accompanied humanity throughout its history. The definition of this phenomenon varies from country to country.

Who was the first to notice this phenomenon?

The shadow economy has always existed alongside the official economy, but the systematic study of this phenomenon began in the second half of the 20th century. The first to notice this phenomenon and contribute to its understanding were researchers and economists who observed economic processes in developing and developed countries in the postwar period.

- **Philip P. Sheldrake:** In the 1970s, Sheldrake began researching informal sectors in developing countries. He was one of the first to draw attention to the significant amount of economic activity that took place outside the formal economy [23]. His research became the basis for subsequent scholarship in this area.
- **Keith Hart:** In 1973, British anthropologist Keith Hart coined the term "informal economy" during his research in Ghana. Hart noticed that a significant portion of the urban population was engaged in informal activities, such as petty trading and crafts, that were not covered by official economic statistics. His work, Informal Income Opportunities and Urban Employment in Ghana, was an important contribution to understanding the scale and importance of the informal economy.
- **Edwin M. Lemert:** A sociologist who in the 1950s and 1960s developed the concept of "primary" and "secondary" deviance, which also addressed aspects of economic activity that did not conform to official norms [11]. Although his work was more focused on social aspects, it laid the groundwork for further economic research on the shadow economy.

Historical background:

Historical sources also show the presence of the shadow economy in different periods:

Antiquity: In ancient Roman and Greek societies, there were illegal markets and trade, including slaves and smuggled goods.

The Middle Ages: During the Middle Ages, there were black markets where illegal or restricted goods such as smuggled alcohol, spices, and other goods were traded.

The industrial era: With the development of industrialization, new forms of shadow economy emerged, including illegal employment and tax evasion.[11]

Thus, although the shadow economy has existed throughout human history, systematic research and scientific study of this phenomenon began only in the 20th century with the work of scholars such as Sheldrake and Hart. Their research helped to realize the scale and importance of the shadow economy, which became the basis for further research and development of this scientific field.

Who developed the concept of the shadow economy?

The development of the theory and methodology of shadow economy research was carried out by several key researchers who made a significant contribution to the understanding of this phenomenon.

Principal investigators:

Friedrich Schneider:

Contribution: Austrian economist who became one of the leading experts in the study of the shadow economy. He developed various methods for estimating its size and impact on the official economy.

Works: Schneider has published numerous studies on the shadow economy in different countries, using econometric analysis methods to estimate its size. He also developed the concept of the Shadow Economy Index.

Hernando de Soto:

Contribution: Peruvian economist who has researched the informal economy in developing countries and the impact of shadow activities on economic development.

Works: His book The Other Way (1986) has become a classic in the field. In it, he argues that the main cause of poverty in developing countries is the lack of legal infrastructure that would allow people to legalize their property and business activities.

Peter Gutmann:

Contribution: An economist who has made significant contributions to the understanding of shadow economy measurement methods. He has studied how cash flows in the economy change to estimate the extent of shadow activities.

Works: His articles and research on the use of cash to measure the size of the shadow economy have had a significant impact on the development of this field.

Contribution to classification and understanding:

Alexander J. Field:

Contribution: He studied the historical aspects of the shadow economy and its impact on the official economy in different historical periods.

Research: His work focuses on the economic history of the United States and the impact of informal economic activity on the overall economy.

William Britton:

Contribution: Studied social and economic factors that contribute to the development of the shadow economy.

Works: Britton has analyzed the impact of regulations and policies on the shadow economy, as well as ways to integrate the informal sector into the formal economy.

Key ideas and concepts:

<u>Estimation methods</u>: Economists have developed various methods to estimate the size of the shadow economy, including cash demand, electricity consumption, econometric modeling, etc.

<u>Causes and consequences:</u> Researchers have studied the causes of the shadow economy, such as high taxes, excessive regulations, and corruption, as well as its effects on the economy and society, including loss of tax revenue, social inequality, and the undermining of formal institutions.[5]

These researchers and their work have become the basis for further research and policy development aimed at combating the shadow economy and integrating it into the formal economy.

Definition of the shadow economy

The shadow economy is the part of economic activity that takes place outside the scope of official registration, regulation, and taxation. These activities can include both legitimate activities that are not officially registered and illegal activities.

Table 1.1. Scientific approaches to defining the concept of "shadow economy"

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 socioeconomic 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.

Source: [23, p.118].

The shadow economy is a complex phenomenon that includes many different components. It can be defined as any economic activity that is not recorded in official statistics. It can also be defined as any economic activity that is hidden from taxation.

Table 1 presents different scientific approaches to the definition of the shadow economy. Each of these approaches has its strengths and weaknesses.

Economic and statistical approach: This approach emphasizes that the shadow economy is economic activity that is not recorded in official statistics. This is the most common approach to defining the shadow economy, but it has its limitations. For example, not all shadow economy is hidden from statisticians. Some types of shadow economy may be known to statisticians, but they are not included in official statistics for various reasons.

Legal approach: This approach focuses on the fact that the shadow economy is an economic activity that is prohibited by law. This approach has its limitations, as

not all shadow economy is illegal. Some types of shadow economy may be legal, but they are still not recorded in official statistics.

Fiscal approach: This approach defines the shadow economy as the part of the economy that is hidden from taxation. This approach has its limitations, as not all shadow economy is hidden from taxation. Some types of shadow economy may be taxed, but they are still not recorded in official statistics.

Institutional approach: This approach defines the shadow economy as economic relations that develop in a society in contravention of laws, legal norms and formal rules of economic life, including all types of economic activity that are not reflected in statistics. This approach has its limitations, as it does not always clearly distinguish between the shadow economy and other forms of informal economic activity.

Cybernetic approach: This approach defines the shadow economy as a part of the economy that is objectively disruptive and beyond the control of economic regulators. This approach has its limitations, as it does not always clearly define which economic activities are objectively destructive.

Criminological approach: This approach defines the shadow economy as a part of the economy that is socially dangerous and leads to crime. This approach has its limitations, as it does not always clearly distinguish between the shadow economy and other forms of criminal activity.

Sociological approach: This approach defines the shadow economy as the interaction of social groups that differ in their position in the system of shadow institutions and motives for economic behavior in different situations. This approach has its limitations, as it does not always clearly define what types of economic activity are shadow.

Moral approach: This approach defines the shadow economy as economic activity that violates generally accepted moral norms. This approach has its limitations, as it does not always clearly define which economic activities are shadow.

Motivational approach: This approach defines the shadow economy as any activity aimed at generating and satisfying needs that cultivate various vices in a person. This approach has its limitations, as it does not always clearly define which economic activities are shadow.

Thus, the shadow economy is a complex phenomenon that includes many different components.

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 of 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 approaches.

The main aspects of the definition

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

Informal economy:

These are types of economic activity that are legal in nature, but are carried out without official registration and without paying taxes.

Example: informal employment, small business without licenses, domestic services.

Illegal economy:

These are types of economic activity that are prohibited by law.

Example : drug trade, smuggling, illegal gambling.

The hidden economy:

This is an economic activity that is carried out for the purpose of evading taxes or avoiding government regulation.[8]

Example: understatement of income to avoid tax obligations, use of fictitious companies to hide real financial transactions.

The main characteristics of the shadow economy

Anonymity: Participants in the shadow economy try to remain invisible to government authorities to avoid legal liability.

Lack of official registration: Many activities in the shadow economy are not officially registered, making them invisible to government statistics.

Lack of regulation: Activities in the shadow economy are not subject to government regulations and standards, which can lead to low-quality goods and services, as well as violations of workers' rights.

Tax evasion: The main goal of many participants in the shadow economy is tax evasion, which leads to losses of the state budget.

Social isolation : Entrepreneurs and workers in the shadow economy are often excluded from social protection and legal aid.

Examples of the shadow economy:

Informal labor sector: People who work without formal registration and without paying taxes.

Illegal trade: Sellers who sell goods without the necessary licenses and certificates.

Tax Evasion: Businesses that understate their income or overstate their expenses in order to reduce their tax liability.

Illegal production: Production of goods that are prohibited by law or produced in violation of standards.

The impact of the shadow economy:

Economic impact: The shadow economy leads to a loss of tax revenue, which reduces the state's ability to finance social programs and infrastructure projects.

Social impact: Workers in the shadow economy are often deprived of social security, health insurance and pension contributions.

Legal impact: Lack of regulation and control can contribute to the violation of consumer and employee rights, as well as the spread of corruption.

Thus, the shadow economy is a complex phenomenon that has a significant impact on the economic, social and legal environment of the country.

The structure of the shadow economy

The main components of the shadow economy:

1. Informal employment:

Employees who work without official registration, contracts and payment of taxes.

2. Illegal business *:*

Enterprises that carry out their activities without the necessary registration and licenses.

3. Smuggling and illegal trade:

Trade in prohibited goods or goods that do not pass customs control.

4. Tax evasion:

Understatement of income or overstatement of expenses in order to reduce tax liabilities.

5. Illegal financial transactions:

Use of fictitious companies, offshore accounts to hide real financial flows.

The causes and factors of the development of the shadow economy

Reasons for the emergence of the shadow economy

- *High level of taxes and complexity of the tax system*

One of the main reasons for the emergence of the shadow economy is the high level of taxes and the complexity of the tax system. Entrepreneurs and employees can avoid high tax obligations by switching to informal activities. Complex tax regulations and requirements can also encourage tax evasion, as the significant costs of tax compliance make official activities less attractive.

- *Excessive regulation and bureaucracy*

Excessive regulations and complex business registration procedures often become an obstacle to running a legal business. The high costs of complying with regulatory norms encourage many entrepreneurs to operate in the shadow sector. This allows you to avoid costs associated with regulatory requirements and increase competitiveness in the market.

- *Corruption and inefficiency of state institutions*

Corruption and inefficiency in state bodies create favorable conditions for the development of the shadow economy. The lack of trust in state institutions and the possibility to avoid punishment due to corruption schemes encourage economic agents to conduct unofficial activities. This undermines the legal system and promotes the spread of illegal activity.[16]

- *Economic instability and unemployment*

Economic crises, high levels of unemployment and other forms of economic instability force people to look for alternative ways of earning. In cases where the formal labor market cannot provide enough jobs, informal employment becomes an important source of income for many families.

- *Low level of education and awareness*

An insufficient level of education and awareness of rights and responsibilities can contribute to the development of the shadow economy. People may not be aware of the benefits of formal registration and legal business opportunities, forcing them to work in the informal sector. Low levels of financial literacy also make people vulnerable to illegal schemes.

Development factors of the shadow economy

<u>Demand for cheap goods and services</u>

Consumers are often willing to buy goods and services cheaper, which stimulates the development of shadow markets. A low price is one of the main attractive factors for buyers, especially in cases of economic instability and low purchasing power of the population.

<u>Vulnerability of workers in the formal sector</u>

The lack of social guarantees and proper protection of the rights of workers in the formal sector can contribute to their transition to informal employment. Workers who do not feel supported by the state look for opportunities in the shadow economy, where they can often receive higher wages or more flexible working conditions.

<u>Technological changes and development of the Internet</u>

The development of digital technologies and the Internet make it easier to conduct informal business and evade official regulations. Online platforms allow entrepreneurs to reduce the cost of doing business and avoid taxes by using online transactions and digital currencies.

<u>Globalization and international trade</u>

The growth of international trade and globalization can contribute to the development of the shadow economy due to the difficulty of controlling international transactions. Cross-border transactions are often difficult to monitor and regulate, creating an enabling environment for illegal activity.

The structure of the shadow economy

The main components of the shadow economy:

Informal employment: Workers who work without formal registration, contracts and payment of taxes. These can be both low-skilled workers and highly qualified specialists who work on a freelance basis.

Illegal business: Businesses operating without the necessary registration and licenses. These can be both small traders in the markets and large enterprises that evade regulations.

Smuggling and Illegal Trade: Trade in prohibited goods or goods that do not pass customs control. Examples include trafficking in drugs, weapons, contraband alcohol and tobacco products.

Tax evasion **:** Understatement of income or overstatement of expenses in order to reduce tax liability. Both individuals and enterprises can do this using various tax optimization schemes.

Illegal financial operations: Use of fictitious companies, offshore accounts to hide real financial flows. This allows tax and regulatory evasion, creating opportunities for money laundering and other financial crimes.

Favorable conditions for the start and development of the shadow economy

Economic conditions

Economic instability, high unemployment, inflation and poverty are the main economic conditions contributing to the development of the shadow economy. In such conditions, people are often forced to look for alternative sources of income, which may be in the shadow sector.[32]

Social conditions

Low level of trust in public institutions, social inequality and low level of education are important social factors. The lack of social security and opportunities for legal employment encourages people to work in the shadow economy.

Political conditions

Corruption, ineffectiveness of state bodies and weak legal protection create political conditions for the development of the shadow economy. Under conditions of corruption, economic agents can avoid punishment for illegal activity, which stimulates its growth.

Regulatory conditions

High taxes, complex and excessive regulations and bureaucracy contribute to the development of the shadow economy. Entrepreneurs who cannot or do not want to comply with all regulatory requirements choose to operate in the shadow sector.

Cultural conditions

Social norms and traditions that support informal economic activity also contribute to the development of the shadow economy. In some cultures, informal activities are considered acceptable or even necessary for survival.

Technological conditions

The development of digital technologies and the Internet facilitates the conduct of informal activities. Online platforms, social networks and digital currencies allow entrepreneurs to avoid official regulations and reduce the costs of doing business.

The shadow economy is a complex and multifaceted phenomenon that arises and develops under the influence of various economic, social, political and cultural factors. Understanding the causes and factors contributing to its development is key to developing effective policies to combat the shadow economy and integrate it into the formal economy. This will ensure stable economic development, raise the standard of living of the population and strengthen the country's legal system.

1.2. Methods of measuring and assessing the scale of the shadow economy

Direct assessment methods

Direct methods are based on the collection and analysis of specific data on activities in the shadow economy. They include the following approaches:

a) Surveys and questionnaires

One of the most common methods is surveys and questionnaires of the population and enterprises. Respondents answer questions about their activities, income, expenses and participation in the shadow economy.

Advantages:

- Obtaining specific data on the volume and structure of the shadow economy.
- The possibility of determining the socio-demographic characteristics of participants in the shadow economy.

Disadvantages:

- Low reliability due to reluctance of respondents to disclose illegal activities.
- The high cost of surveys.

b) Inspections and audits

Inspections and audits of enterprises may reveal facts of tax evasion and other illegal activities. This method is often used by tax authorities.

Advantages:

- Obtaining accurate data on the volume of illegal activity of specific enterprises.
- The possibility of imposing fines and other sanctions on violators.

Disadvantages:

- High cost and duration of inspections.
- The possibility of corruption among inspectors.

Indirect assessment methods

Indirect methods are based on the analysis of macroeconomic indicators and statistical data. They include the following approaches:

a) Method of imbalances

The method of imbalances analyzes discrepancies between official statistical data. For example, you can compare data on national income with data on population spending and investment.

Advantages:

- Using official statistical data that is available in many countries.
- The possibility of estimating the total volume of the shadow economy.

Disadvantages:

- Low accuracy due to possible errors in official statistics.
- Lack of detailed information on the structure of the shadow economy.

b) Cash flow method (Kaufman-Kaliber method)

This method is based on the analysis of the demand for cash. It is assumed that the growth in demand for cash may indicate an increase in the volume of the shadow economy.

Advantages:

- Ease and availability of cash flow data.
- The possibility of obtaining dynamic estimates of the volume of the shadow economy.

Disadvantages:

- The influence of other factors on the demand for cash (for example, the inflation rate).
- It is impossible to determine exactly the reasons for the increase in the demand for cash.

Table. 1.2. Ways to measure the shadow economy

Method	**Methods**
Direct approach	Sample survey
	Tax audit
	National accounting statistics

Indirect approaches	Labor statistics.
	Through transactions
	Demand for currency
	Physical costs (electricity consumption)

Source: [28, p.67]

Method of physical indicators

This method is based on the analysis of physical indicators of economic activity, such as electricity consumption, production and transportation of goods. Deviations between official GDP data and physical indicators may indicate the extent of the shadow economy.

Advantages :

- Using objective data that is difficult to falsify.
- The possibility of assessing the dynamics of the shadow economy.

Disadvantages :

- The influence of other factors on physical indicators (for example, technological changes).
- It is impossible to determine the exact volume of the shadow economy.

Integrated evaluation methods

Integrated methods combine different approaches to obtain more accurate estimates. They include:

a) Complex econometric models

Complex econometric models simultaneously use several methods and indicators to estimate the volume of the shadow economy. These models may include analysis of cash flows, physical indicators, and other statistical data.[9]

Advantages :

- Obtaining more accurate and comprehensive estimates.
- The possibility of taking into account various factors and their impact on the shadow economy.

Disadvantages :

- High complexity of developing and using models.
- The need for large data sets.

b) Fuzzy logic method

The method of fuzzy logic is based on the use of fuzzy sets and algorithms to estimate the volume of the shadow economy. This method allows you to take into account incomplete and inaccurate information.

Advantages :

- Flexibility and ability to take into account different types of data.
- The possibility of assessment under conditions of uncertainty.

Disadvantages :

- High complexity of developing algorithms and models.
- The need for special knowledge and skills.

Conclusion

Estimating the scale of the shadow economy is a complex task that requires the use of various methods and approaches. Direct methods allow obtaining specific data, but often have low reliability and high cost. Indirect methods are based on the analysis of macroeconomic indicators and statistical data, but may have low accuracy. Integrated methods combine different approaches to obtain more accurate and comprehensive estimates. Understanding the causes and factors of the development of the shadow economy, as well as the use of modern assessment methods, are key to developing effective policies to combat this phenomenon and integrate it into the official economy.

1.3. The main directions and tools of de-shadowing of the economy

Before moving on to the classification of areas and tools of de-shadowing, it is important to understand that this concept covers many aspects of the country's economic life. The de-shadowing of the economy is not just about fighting illegal activities and tax evasion. It is also about creating conditions for the development of entrepreneurship, promoting the creation of new jobs and raising the social level of citizens. In this context, economic de-shadowing is the process of transforming the shadow economy into a legal one, which contributes to strengthening the economic system and increasing its efficiency.

Directions for De-shadowing:

1. **Tax Reform:**
    - Reducing tax burdens for businesses and individual taxpayers.
    - Implementing transparent and simple taxation systems.
    - Combating corruption within the tax system.

Tax Measures:

- Lowering tax rates.
- Introducing simplified tax systems.
- Encouraging voluntary income declaration.

The tax system plays a crucial role in regulating economic processes and forming the financial base of the state. In the context of de-shadowing the economy, tax reform is an important tool for reducing shadow activities and stimulating the development of legal businesses and individual taxpayers.

Reducing Tax Burdens: The first and most important step for de-shadowing is reducing the tax burden. High tax rates usually encourage businesses and individuals to avoid paying taxes, shifting their activities to the shadow sector. Reducing tax burdens for businesses and individual taxpayers is an effective measure to decrease incentives for shadow activities.[12]

Transparent and Simple Taxation Systems: Transparency and simplicity in the tax system are key aspects that contribute to de-shadowing. The complexity and ambiguity of tax rules can become an obstacle to compliance and also encourage tax avoidance. Implementing transparent and simple taxation systems will not only reduce the shadow economy but also ensure greater equality and fairness in taxation.

Combating Corruption in the Tax System: Corruption in the tax system is a serious impediment to de-shadowing. When corruption flourishes among tax officials, taxpayers lack confidence that their contributions will be used for the common good. Combating corruption in the tax system involves reforming institutions and processes, ensuring transparency and accountability, and strictly punishing law violations.

Tax Measures:

- Lowering tax rates is a key element of tax reform. Reducing tax rates increases incentives for legal economic activity and reduces incentives for tax evasion.
- Implementing simplified taxation systems also contributes to de-shadowing. Simplified taxation systems reduce bureaucratic barriers and risks of violations, thus decreasing pressure on taxpayers.
- Encouraging voluntary income declaration can be a viable measure to attract shadow entities into the legal sector. Offering certain benefits and preferences to those who voluntarily declare their income can stimulate the transition from the shadow to the legal economy.[17]

All these measures together create favorable conditions for de-shadowing the economy, promoting the development of a competitive and sustainable economic environment.

2. **Financial Sector Reform:**

- Reducing the shadow banking and financial sector.
- Increasing transparency and efficiency of the banking system.
- Creating favorable conditions for the development of alternative financial instruments.

Financial sector reform is a crucial component of the strategy for de-shadowing the economy, as financial institutions play a decisive role in promoting legal circulation and economic development. Enhancing the transparency and efficiency of the financial sector can significantly reduce shadow activities and create conditions for sustainable economic growth.

Reducing the Shadow Banking and Financial Sector: One of the key tasks of the reform is to reduce shadow activities in the banking and financial sector. This can be achieved by implementing strict reporting and control requirements for financial activities, as well as adhering to anti-corruption standards.

Increasing Transparency and Efficiency of the Banking System: A transparent and efficient banking system is a vital prerequisite for de-shadowing the economy. This entails creating clear rules and procedures that regulate the functioning of banks and ensure a high level of protection for clients and investors.[17]

Creating Favorable Conditions for the Development of Alternative Financial Instruments: The development of alternative financial instruments can reduce dependence on traditional banking institutions and contribute to the diversification of the financial market. This may include the development of stock and commodity markets, digital payment systems, as well as crowdfunding and venture capital.

Financial Measures:

1. Improving the banking system and reducing its shadow components requires the implementation of strict regulatory standards that control the activities of banks and other financial institutions. This may include conducting regular audits, monitoring and analyzing transactions, as well as prohibiting money laundering.

2. The development of alternative financial instruments also plays a significant role in de-shadowing the economy. The widespread use of these instruments can help reduce shadow activities, provide access to financial services for various population groups, and stimulate innovative economic development.

Financial sector reform is an essential element of the de-shadowing strategy, aimed at creating sustainable and efficient financial institutions, reducing shadow activities, and stimulating the development of the legal financial market.

3. **Regulation and Control Reform:**

- Strengthening control over compliance with economic activity rules.
- Expanding the powers and resources of tax and financial authorities to combat the shadow economy.
- Improving legal norms and mechanisms to counter financial crime.

Regulation and control reform is an important component of the strategy for de-shadowing the economy, as it aims to ensure compliance with economic activity legislation and reduce the shadow sector.

Strengthening Control Over Compliance with Economic Activity Rules: Enhancing control over compliance with economic activity rules is a key aspect of the reform. This means ensuring effective monitoring and supervision of the activities of enterprises and individual entrepreneurs to ensure their actions comply with legislation and ethical standards.

Expanding the Powers and Resources of Tax and Financial Authorities: Expanding the powers and resources of tax and financial authorities is necessary for effectively combating the shadow economy. This means providing tax and financial authorities with sufficient means to conduct audits, investigate financial crimes, and take effective measures to combat tax evasion and other shadow practices.

Improving Legal Norms and Mechanisms to Counter Financial Crime: Improving legal norms and mechanisms to counter financial crime is necessary to ensure effective legal regulation of economic processes and punishment of those who violate the law. This may include developing and implementing new legislative acts, strengthening control and supervision mechanisms, and increasing accountability for financial crimes.

Legal and Institutional Measures:

1. Strengthening the legal framework for combating corruption and economic crime involves improving legislation regulating financial and economic relations and creating effective mechanisms for its implementation.

2. Expanding the powers and resources of law enforcement agencies is necessary to ensure effective detection, investigation, and suppression of illegal practices in the economy. This may include providing additional financial, technical, and human resources to law enforcement agencies, as well as improving their methods of operation and cooperation with other agencies and international partners.

Regulation and control reform is an important element of the strategy for de-shadowing the economy, as it creates the necessary conditions for ensuring legality and transparency in economic activities. These measures contribute to increasing the trust of citizens and investors in the country's financial system and promote the development of a sustainable and competitive economic environment.

3. **Stimulating Legal Economic Activity:**

- Providing incentives for businesses and individual entrepreneurs to operate legally.
- Ensuring access to financial and other resources for business development.
- Supporting small and medium-sized enterprises that often end up in the shadow sector due to difficulties accessing credit and markets.

Stimulating legal economic activity is an important element of the de-shadowing strategy, as it encourages businesses and individual entrepreneurs to move from the shadow sector to legal circulation and development.

Providing Incentives for Businesses and Individual Entrepreneurs: Stimulating businesses and individual entrepreneurs to operate legally may include tax incentives, financial support, simplification of administrative procedures, and other measures that make legal activity more attractive compared to the shadow economy.

Ensuring Access to Resources for Business Development: Ensuring access to financial and other resources is key to developing a legal business. This may include providing low-interest loans, creating favorable conditions for attracting investment, and developing financial services for small and medium-sized enterprises.

*Supporting Small and Medium-Sized Enterprises***:** Small and medium-sized enterprises often end up in the shadow sector due to difficulties accessing credit and markets. Supporting these enterprises may include providing financial assistance, consulting on management and business development, and facilitating their integration into the market.

Socio-Economic Measures:

1. Creating new jobs and opportunities for entrepreneurship is an important aspect of stimulating legal economic activity. This may include developing infrastructure, supporting innovation and technological development, and encouraging entrepreneurial initiatives.

2. Raising the level of education and awareness among citizens about the negative consequences of the shadow economy is important for forming a culture of compliance with legality and ethical standards in society.

3. Implementing social programs and support for individuals transitioning from the shadow sector to the legal economy may include providing advisory assistance, training in new skills and professions, and ensuring social guarantees.

These measures are aimed at creating sustainable and competitive conditions for legal economic activity, which will help overcome the shadow economy and ensure sustainable economic growth.

Level and structure of the shadow economy in Ukraine

Despite the negative consequences of the shadow economy, it can also have a positive impact. It can serve as an economic stabilizer since it is more flexible and dynamic compared to the official economy, quickly responding to the needs for structural changes and expanding employment opportunities. This is especially relevant during economic crises when official incomes significantly decrease.

In Ukraine, the shadow sector has a significant volume, estimated at 30 to 60% of the entire economy. According to World Bank research, the shadow economy accounted for 58.7% of the country's GDP in 2010 [19, p.18].

According to research by the Association of Chartered Certified Accountants (ACCA) International, dedicated to analyzing and forecasting trends in the shadow economy, the size of this sector in Ukraine in 2016 amounted to UAH 1,095.3 billion or 45.96% of the country's GDP. The research also identified three main players in the shadow sector by the end of the third quarter of 2021. The highest level of "shadow" is observed in the financial and insurance sectors - 56%, as these companies actively use tax optimization. Next on the list is the extractive industry - 49%, where work, even in official mines, can be dangerous, but some people work there due to the lack of other options. The third largest in terms of volume is the real estate operations sector - 47%, which includes unofficial rental of housing and real estate.

Although the shadow economy has its negative aspects, it also has certain positive features. For example, it can help individuals and businesses avoid bankruptcy and provides employment for a certain portion of the population, reducing the burden on the state during times of crisis. The shadow sector can also generate additional financial resources to address social problems. Moreover, participants in the shadow economy contribute through taxes, sometimes even paying them from their incomes.

However, it's important to remember that the shadow economy is more of an exception than a rule and should be minimized for stable economic development of the country. Tax optimization and informal work can have serious consequences for the country's finances and society as a whole. While the shadow economy may provide some solution in crisis situations, it's important to work towards creating conditions for the development of legal and stable economic sectors [20].

Others choose to work in this sector due to the reduction in the number of jobs in registered enterprises and the increase in vacancies in the informal sector, although there are no guaranteed social benefits. Without the shadow sector, many people would be left without work or forced to turn to employment services. This would lead to losses for the state budget as social spending would increase, which is particularly unacceptable during an economic crisis. The shadow economy has contradictory consequences: although it leads to a loss of a portion of the gross domestic product, it helps to survive economic difficulties with minimal losses. The main thing is to control its size, not allowing it to exceed certain levels, such as those in Europe (18%). Thus, one of the positive aspects may be that during crises, the population has certain financial reserves for survival, which helps to alleviate pressure on the unemployed.

In the first section, the theoretical foundations of de-shadowing the economy, which is an important step within economic reforms, were discussed. Analysis of scientific sources and concepts has shown that de-shadowing aims to reduce the role of banks in the financial system and increase its transparency and stability. Studying the theoretical aspects of de-shadowing has allowed an understanding of how this process affects the structure and functioning of the country's economy.

Additionally, the section noted that de-shadowing the economy entails not only reducing dependence on banks but also contributes to the development of alternative financial instruments and markets. Studying the theoretical aspects of this process underscored the importance of careful analysis for the successful implementation of financial reforms and ensuring sustainable development.

Thus, based on the analysis, it can be concluded that de-shadowing the economy is a complex and multifaceted process that requires careful planning and implementation. Studying this aspect is crucial for further analysis of the practical aspects of de-shadowing in future sections of the work.

CHAPTER 2.

MECHANISMS OF IMPLEMENTATION OF THE WORLD EXPERIENCE OF DE-SHADOWING OF THE ECONOMY

2.1. Analysis of the experience of de-shadowing of the economy in developed countries

Comparative analysis of countries by level of development

Developed countries:

In developed countries, the level of shadow economy is usually lower compared to other types of countries. This is due to the high level of economic development, transparency and efficiency of the tax system, as well as a high level of social and economic guarantees for the population. However, even in developed countries, certain segments of the shadow economy may exist, in particular in cash-intensive industries such as construction, restaurants or services, where it is difficult to control financial flows.

Developing countries:

In developing countries, the level of the shadow economy is usually higher, due to the low level of development of financial and tax systems, high levels of bureaucracy and corruption, as well as insufficient social and economic guarantees for the population. In these countries, the shadow economy can cover significant segments of the economy, including services, trade, agriculture and construction.

Underdeveloped countries:

In underdeveloped countries, the level of shadow economy may be the highest due to the lack of effective government control and regulation of the economy, high levels of corruption and poverty, and limited access to financial and social services. In such countries, the shadow economy can be the main source of income for a large part of the population working in the informal sector.

General conclusions:

The general trend is that the size of the shadow economy tends to decline with the level of economic development and the effectiveness of public administration. However, there is great diversity among countries, and the extent of the shadow economy can vary considerably depending on specific socio-economic conditions and political contexts. Tackling the shadow economy requires a comprehensive strategy that includes reforms to the tax and financial systems, the fight against corruption, and the improvement of social and economic guarantees for the population.

General analysis of the experience of individual countries in de-shadowing the economy

Legalization of the national economy involves transitioning economic activities into a lawful domain by creating favorable conditions for conducting legitimate business, taking into account the interests of all economic entities. The aim of this process is to reduce the scale of the shadow economy by developing and implementing a unified system of measures and instruments aimed at eliminating and preventing the main causes of shadow activities, as well as transferring illegally obtained funds into the legal domain.

The complexity lies in the fact that the shadow sector is unstructured, which complicates the creation of a unified analytical system for developing effective government countermeasures. Additionally, in the current crisis situation of the Ukrainian economy, it is challenging to create attractive economic conditions for domestic and foreign participants in legal relations [24, p.76].

Ukraine's membership in various international economic and political organizations imposes certain obligations that constrain its actions. At this stage of development, the shadow economy is widespread in many spheres, so countering its further expansion must be comprehensive (Bryhinets, 2014). To reduce the level of economization in Ukraine, it is necessary to study and adapt the foreign experience of combating this phenomenon. Let's consider the experience of countries around the world in de-shadowing the economic system (Table 2.1).

Table 2.1 - Experience of countries worldwide regarding de-shadowing the economic system

Country	De-shadowing Measures
USA	Interaction of state special services with government structures to control the spread of the shadow sector in the country
Poland	Prohibition of economic activity for individuals who have violated tax legislation. Property liability for committing economic crimes
UK	Formation of punishment systems for bribery, increasing the independence of courts, building high levels of public trust in government
France	Prohibition of export-import operations by economic entities with firms located in offshore zones to prevent price manipulation. Combatting tax evasion and illegal profits from price differentials
Germany	Reforming the tax system by simplifying it, reducing deductions from wages. Formation of control bodies, including the Federal Financial Police, Department for Combating Organized Crime and Corruption, Department of Internal Investigation
Netherlands	Formation of a monitoring system for the sources of corruption, activities of social police
Belgium	Formation of central management for combating corruption
Austria	Formation of measures to combat corruption in the civil service sector

Source: [21, p.41].

So, among the most effective measures for de-shadowing the national economy, it is necessary to highlight the creation of a robust system of penalty sanctions to combat shadow activities, comprehensive monitoring to prevent tax evasion and illegal income generation, simplification of tax administration, and reduction of the tax burden on the working population. Additionally, it is essential to ensure the functioning of an efficient central authority to combat corruption, the establishment of an independent judiciary system, and internal investigation units to counteract shadow economic practices.

The policy of de-shadowing in many countries is based on the use of legal instruments and involves the development of comprehensive measures to restrain and combat the shadow economy. Let's consider the main principles and mechanisms of de-shadowing national economies of European Union countries. For example, Austria, although having a low level of shadow economy, faces significant corruption perception. The main direction of combating corruption there has been the development of measures to prevent corruption among civil servants and political parties.

Comprehensive measures to counteract the shadow economy in Austria are carried out by tax and customs authorities, the Control Agency for Illegal Employment of Foreign Workers, the Federal Ministry of Finance, and so on. In the Netherlands, the level of corruption is low, which is explained by the implementation of a series of anti-corruption measures, such as [25]:

Development of an advanced monitoring system for sources and facts of corruption;

- Continuous reporting and transparency regarding detected cases of corruption;
- Effective anti-corruption measures for officials;
- System of fines and administrative penalties, suspension or dismissal from duties;
- Presence of units in all government bodies tracking the activities of officials for transparency and corruption prevention;
- Systematic training of civil servants with an emphasis on the impermissibility of corruption;
- Registration and disclosure by authorized bodies of all known cases of corrupt actions [26, p.495].

Dutch criminal proceedings regarding corruption fully comply with the Criminal Convention on Corruption adopted by the Council of Europe in 1999. At the same time, Ukraine ratified this Convention in 2006 and is an active member of the Group of States against Corruption. In Ukraine, this Convention started to operate from the beginning of 2010. As of the beginning of 2018, the Group of States against Corruption (GRECO) comprised 49 member countries, including 48 European states and the USA.

The Ukrainian Chamber of Commerce is a member of the International Chamber of Commerce and has ratified relevant anti-corruption documents. It is noteworthy that the International Chamber of Commerce unites about seven million members (enterprises, associations, and trade chambers from different countries) who regularly receive information on preventing corruption and conducting business honestly.

The International Chamber of Commerce (ICC) has developed the "Anti-Corruption Code of Conduct," which includes a series of measures to combat corruption in enterprises. The main provisions of this document are as follows [27, p.18].

Organization ethics and personal leadership example: Every employee, including management, should behave in a manner that is not beholden to anyone or dependent on anyone. Implementing such competencies ensures the quality execution of contracts without corrupt elements.

Employee priority: Distinguishing between business and personal gifts, proper conduct with authorities and partners, avoiding conflicts of interest, etc.

Organizational measures: Proper documentation management, staff rotation in potentially corrupt departments, presence of an effective information system.

Control and sanctions: Continuous verification of credibility, standards control, and a system of sanctions.

An important mechanism for combating the shadow economy is the imposition of high fines for violations of the law. In our country, the fine system is one of the softest in Europe, which may contribute to the spread of shadow activities. However, as emphasized in the study, the key lies not in developing new principles but in implementing existing and internationally proven tools. First and foremost, measures need to be taken to limit the monopolistic position of economic entities.

The fight against the shadow economy is ensured by Resolution 1847 of the Parliamentary Assembly of the Council of Europe and recommendations of the International Labour Organization on transitioning from the shadow to the formal economy. Among the prospective directions of state policy for de-shadowing the national economy, the following can be highlighted:

Effective management of public finances involves developing measures for each stage of budget planning and expenditure utilization. For example, standardization and codification of goods for government procurement, risk management during budget expenditure planning, and enhancing the accountability of budget-forming individuals.

Improvement of foreign economic activity.

Creating favorable conditions for entrepreneurial activity, including analysis of the competitive environment and risk management.

Combatting corruption through monitoring the activities of heads of state bodies, cooperation with international anti-corruption organizations, and adopting foreign experience.

One of the main instruments of state regulation remains tax payments and control by fiscal services. However, according to research (Borshchuk, Priymak, 2017), the tax administration system in Ukraine remains complex due to the presence of many tax exemptions and preferences, which leads to insufficient budget revenues. In their work (Hubareva, 2017), the application of vector autoregressive models for analyzing the financial stability of the national economy is proposed. The assessment of financial stability includes the use of the crime rate indicator in the credit and financial services sector as an indirect indicator of shadow economic activity. Another important indicator related to the shadow sector is the rate of change in material losses from crimes in the credit-financial and budgetary sectors. In addition, import dependence of the fuel and energy sector, imperfect tax policy, and high levels of shadow economy also affect financial stability [28, p.681].

Regarding the fight against the growth of the shadow sector, Khalimonik, K. V., Fartushnyi, I. D. recommend improving the work of the State Financial Monitoring Service through cooperation with banking institutions and legal authorities. Also, to combat money laundering, it is important to implement a system for assessing the effectiveness of financial monitoring at different levels of economic activity and to use best practices in this area. In addition, the development of coordinated structural stages of state policy for economic de-shadowing, which take into account both management measures and preparatory stages, is expedient [29, p.28].

Thus, among the preparatory stages of state policy for de-shadowing the national economy, it is important to collect statistical information and analyze existing methods of determining the level of the shadow economy. After that, it is possible to proceed to calculate the level of the shadow economy by different sectors. These measures should be carried out regularly to study the dynamics and determine the factors influencing the change in the shadow sector.

At the stage where we have already identified the structural and absolute indicators of the shadow sector of the national economy, we can conduct research on the economic, social, and environmental consequences of this phenomenon. This will allow us to determine the revenue losses to the state budget due to the shadow economy and to formulate effective strategies to counter it. It is important for the process of de-shadowing the national economy to be cyclical in order to constantly evaluate the effectiveness of measures [30, p.19].

Assessing the effectiveness of government policy instruments in regulating the shadow sector is a key element of a systematic approach to de-shadowing. This approach involves increasing the salaries of public servants, transparency of the tax system, effective legal regulation, as well as dynamic development of market mechanisms and competition. These measures are an important basis for combating the shadow economy.

Analysis of de-shadowing in specific countries. Experience of developed countries with low shadow economy

Singapore

Process: Singapore is considered one of the countries that has successfully tackled the shadow economy. The de-shadowing process involved a wide range of measures, from tax reforms to combating corruption and effectively regulating financial flows.

Outcome: Singapore has become an example of effective economic management and combating the shadow economy. Through developed tax systems, strict anti-corruption policies, and effective legal mechanisms, the country has achieved a low level of shadow economy and ensured stable economic development.

Singapore is known for its effective fight against the shadow economy, but like any other country, it had its periods when the shadow economy was a significant issue. The most problematic periods for Singapore were the 1960s and 1970s, when the country was still shaping its economic model and grappling with numerous social and economic challenges.

1960s: In the 1960s, Singapore faced high levels of unemployment, poverty, and social problems, which contributed to the development of the shadow economy. Estimates suggest that during this period, the shadow economy could account for up to 20% of the country's GDP. The main areas of shadow activity included illegal trade, smuggling of goods, illegal labor, and other forms of unofficial economic activity.

1970s: In the 1970s, due to rapid economic development and urbanization, Singapore continued to grapple with shadow economy issues. During this period, the main problems were tax evasion, illegal labor, and corruption. The size of the shadow economy at that time was estimated to be 15-20% of GDP.

Key Indicators of the Shadow Economy

Tax Evasion: Tax evasion was a significant problem in the 1960s and 1970s. Many entrepreneurs and individuals sought to avoid paying taxes due to low levels of trust in the government and ineffective tax authorities.

Illegal Labor: Illegal labor was a crucial aspect of the shadow economy. During periods of high unemployment, people often worked without official contracts, allowing employers to evade taxes and social payments.

Smuggling: The smuggling of goods, especially alcohol, cigarettes, and electronics, was widespread due to Singapore's advantageous geographical location as a major port. This led to significant losses in tax revenue.

Money Laundering: In the 1970s, money laundering became a serious problem as Singapore transformed into an international financial center. The lack of sufficient control and regulation allowed criminal organizations to use the financial system to launder illegal incomes.

Factors Contributing to the Growth of the Shadow Economy

1. **Economic Instability:** High unemployment rates and economic difficulties contributed to the growth of the shadow economy.
2. **Lack of Effective Control:** Ineffective government agencies in combating illegal economic activities.
3. **Social Problems:** High levels of poverty and inequality forced people to seek illegal sources of income.
4. **Corruption:** High levels of corruption in government institutions facilitated the development of shadow practices.

Measures for De-shadowing the Economy

Since the mid-1970s, Singapore has actively fought against the shadow economy by implementing comprehensive reforms and measures:

1. **Anti-Corruption Campaign:** Establishment of the Corrupt Practices Investigation Bureau (CPIB), which was given extensive powers to combat corruption at all levels.
2. **Tax Reform:** Implementation of a transparent and effective tax system that facilitated tax payment and increased their collection rate.
3. **Financial Sector Regulation:** Strengthening control and regulation of financial institutions to prevent money laundering.

4. **Economic Development:** Creating favorable conditions for business development and investment attraction, which contributed to the growth of the official economy and reduction of shadow activities.

Results

Thanks to these measures, Singapore has significantly reduced the level of the shadow economy. Today, the share of the shadow economy in the country is approximately 9% of GDP, which is one of the lowest indicators in the world. Singapore continues to be one of the most effective examples of combating the shadow economy, ensuring high transparency, low corruption, and stable economic growth.

Germany:

Germany serves as an example of a country that has successfully tackled the shadow economy through a comprehensive reform program, including simplifying tax procedures, strengthening financial transaction controls, and ensuring transparency in public procurement. The country actively collaborates with other nations and international organizations in combating corruption and illegal financial practices.

Sizes and indicators of Germany's shadow economy during its worst times of development

Post-war period (1945-1950s)

After World War II, Germany was in a state of economic and social chaos. During this time, the shadow economy significantly expanded due to shortages of goods, high unemployment, and overall instability. Black markets for goods, especially food, alcohol, tobacco, and fuel, flourished. Estimates suggest that up to 20% of economic activity during this period occurred in the shadow sector.

1970s

In the 1970s, Germany, like many other countries, faced a global economic crisis caused by the OPEC oil embargo. Economic instability, high inflation, and rising unemployment led to an increase in the share of the shadow economy. Estimates suggest that the size of the shadow economy during this period was approximately 10-15% of GDP.

1980s

In the 1980s, Germany's shadow economy continued to grow due to economic reforms and global economic changes. In particular, high unemployment rates and economic instability contributed to the growth of illegal activities. Estimates show that the share of the shadow economy could reach 15% of GDP during this time.

Indicators of the shadow economy

Tax evasion rate

During the worst periods, tax evasion was one of the main indicators of the shadow economy. Estimates suggest that tax evasion losses in the 1990s amounted to billions of marks annually.

Level of illegal labor

Illegal labor was an important indicator of the shadow economy. In particular, in the eastern states after reunification, a significant part of the population worked illegally due to the lack of official job opportunities.

Smuggling level

Smuggling of goods, especially from neighboring countries with weaker economies such as Poland and Czechoslovakia, was also a significant indicator of the shadow economy.

Money laundering

Money laundering became a significant problem at the end of the 20th century, particularly due to the globalization of financial markets and the development of digital technologies. Germany became an attractive location for money laundering due to its stable economy and developed banking system.

Key factors contributing to the growth of the shadow economy:

1. Economic crises: High levels of unemployment and inflation at different times encouraged people to seek illegal sources of income.

2. High taxes: High tax rates stimulated tax evasion.
3. Social inequality: High income inequality forced people to participate in the shadow economy.
4. Weak control: Inadequate control over economic activities and weak government institutions contributed to the development of shadow schemes.

At its worst, the size of Germany's shadow economy reached up to 16% of GDP, posing a serious challenge to the country's economic development and financial stability.

Measures of Decriminalization of the Economy in Germany

Germany has implemented a series of comprehensive measures to combat the shadow economy, including:

1. Tax Reform
   - Introduction of electronic administration: Implementation of the ELSTER system for electronic submission of tax declarations, which simplifies the process of filing declarations and reduces opportunities for tax evasion.
   - Tax inspections: Strengthening tax control and increasing the number of inspections, especially in sectors with a high risk of tax evasion.
2. Legislative Changes
   - Anti-corruption legislation: Adoption of laws to combat corruption, establishing strict penalties for corrupt actions in both the public and private sectors.
   - Anti-money laundering law: Implementation of a law requiring financial institutions to thoroughly verify the sources of funds and report suspicious transactions.
3. Labor Law Reform
   - Worker protection: Introduction of new rules and standards to protect workers' rights, increase the minimum wage, and provide social guarantees.
   - Combating illegal labor: Active inspections and sanctions against employers using illegal labor, as well as campaigns to inform workers about their rights.
4. Enhancing Business Transparency

- Information disclosure: Requirement for companies to disclose information about their ultimate owners and financial transactions.
- International cooperation: Participation in international initiatives to combat tax evasion, such as the OECD's Base Erosion and Profit Shifting (BEPS) and automatic exchange of tax information.

5. Utilization of Modern Technologies
   - Big data analysis: Using big data analytics technologies to detect tax violations and tax evasion schemes.
   - Electronic payments: Encouraging the use of electronic payments to reduce the volume of cash transactions, which are the basis of the shadow economy.
6. Challenges on the Path to Decriminalization High cost of control measures
   - Financial expenses: Implementation of new technologies and intensified control require significant financial resources.
   - Infrastructure costs: Development of infrastructure for tax and customs control.
7. Resistance from the business sector
   - Resistance to reforms: Some entrepreneurs resist changes that increase the cost of doing business, such as through increased transparency or introduction of new taxes.
   - Tax culture: Entrenched practices of tax evasion and illegal activities are difficult to change.
8. Complexity of detection and accountability
   - Complexity of schemes: Modern tax evasion schemes are becoming increasingly complex and difficult to detect.
   - International nature of the shadow economy: Many tax evasion schemes have an international character, complicating their investigation and prosecution.
9. Social and economic factors
   - Unemployment and poverty: Economic problems such as unemployment and poverty compel people to participate in the shadow economy.

- Social inequality: High social inequality contributes to the spread of the shadow economy, as vulnerable segments of the population seek additional sources of income.

Current Results

Germany has achieved significant success in reducing the level of the shadow economy through comprehensive reforms and strengthened control. Some key results include: Reduction in the share of the shadow economy

- Level of the shadow economy: Estimates suggest that the share of the shadow economy in Germany has decreased to approximately 10-12% of GDP, which is a significant improvement compared to the worst times. Improvement in tax revenues
- Increase in tax revenues: Due to the decriminalization of the economy, tax revenues to the budget have increased, allowing for increased funding for social programs and infrastructure projects. Enhancement of business transparency
- Improvement in the business climate: Increased business transparency has contributed to improvements in the investment climate and increased trust from investors.
- Reduction in corruption: Anti-corruption measures have helped reduce the level of corruption in the public and private sectors.

Social Consequences

- Improvement in working conditions: Labor law reforms have contributed to improved working conditions and increased social protection for workers.
- Reduction in social inequality: Increased tax revenues have allowed the government to invest more in social programs, helping to reduce poverty and social inequality.

Germany's successes in reducing the level of the shadow economy are the result of a comprehensive approach, including tax reform, legislative changes, strengthened control, international cooperation, and the use of modern technologies. However, the work on decriminalizing the economy continues, and the government continues to implement new measures for further reducing the level of the shadow economy.

United Kingdom

The United Kingdom is known for its effective mechanisms for controlling the shadow economy. The country has strict tax laws, anti-corruption mechanisms, and a transparent financial system. Combating financial sector abuses and illegal financial transactions is a priority for the British government. Additionally, the United Kingdom actively cooperates with international organizations and other countries to exchange information and jointly combat the shadow economy.

The shadow economy of the United Kingdom has experienced significant growth during several key periods in the country's history when economic and social conditions favored the spread of illegal economic activity.

Post-war period (1940s-1950s):

After the Second World War, the United Kingdom faced serious economic difficulties, such as goods shortages, high unemployment, and inflation. During this period, various forms of the shadow economy flourished, including the black market for goods. According to some estimates, up to 20% of economic activity could have occurred in the shadow sector during this period.

1970s:

In the 1970s, the global economic crisis caused by the OPEC oil embargo seriously affected the economy of the United Kingdom. Economic instability, high inflation, and unemployment led to an increase in the shadow economy. Estimates suggest that the shadow economy accounted for approximately 10-15% of GDP during this period.

1980s:

In the 1980s, during the economic reforms under the government of Margaret Thatcher, the unemployment rate in the country significantly increased, contributing to the growth of the shadow economy. Many people lost their jobs due to the closure of unprofitable enterprises and cuts in government spending. During this period, the share of the shadow economy could reach 13-15% of GDP.

Late 1990s - early 2000s:

During this period, the shadow economy remained a significant problem, although active measures to reduce it began. Technological development and globalization created new opportunities for illegal economic activity. In particular, the internet and digital technologies facilitated tax evasion and money laundering. According to some estimates, during this period, the share of the shadow economy could range from 12% to 14% of GDP.

Indicators of the shadow economy

Tax evasion rate: During the worst periods, tax evasion was a major indicator of the shadow economy. In the 1980s and 1990s, the budget losses from tax evasion amounted to billions of pounds annually.

Illegal labor rate: Illegal labor was also a significant indicator. In the 1980s, tens of thousands of people worked illegally to avoid paying taxes or preserving social benefits.

Smuggling rate: Smuggling of goods such as alcohol, tobacco, and drugs was another important indicator of the shadow economy. In the 1990s, alcohol and tobacco smuggling led to significant losses in tax revenues.

Money laundering: At the end of the 20th and the beginning of the 21st century, money laundering became a significant aspect of the shadow economy. The globalization of financial markets and the development of digital technologies made it easier to conceal illegal income.

Key factors contributing to the growth of the shadow economy

Economic crises: High unemployment and inflation levels led people to seek illegal sources of income.

High taxes: High tax rates encouraged tax evasion.

Weak control: Inadequate government control contributed to the spread of the shadow economy.

Social problems: Lack of social guarantees and high inequality motivated people to participate in the shadow economy.

During the worst periods, the size of the shadow economy in the United Kingdom reached 15% of GDP, indicating significant challenges for the official economy and the need for comprehensive reforms for its de-shadowing.

De-shadowing measures

The United Kingdom has taken several comprehensive measures to combat the shadow economy, including:

Tax reform

• Introduction of new technologies: Automation of tax administration through Making Tax Digital-type systems, simplifying the tax filing process, and reducing opportunities for tax evasion.

• Enhanced control: Increasing the number of tax audits, particularly in sectors where shadow operations frequently occur.

Anti-corruption measures

• Legislation: Enactment of anti-corruption laws such as the Bribery Act 2010, which establishes harsh penalties for corruption in both the private and public sectors.

• Fraud-fighting agencies: Establishment of specialized agencies such as the Serious Fraud Office (SFO) to investigate and prosecute economic crimes.

Increased business transparency

• Information disclosure: Requirement for companies to disclose information about their ultimate owners and financial transactions, including through the Companies House registry.

• International cooperation: Participation in international initiatives such as the OECD's Base Erosion and Profit Shifting (BEPS) to combat tax evasion by multinational corporations.

Labor law reform

• Worker protection: Introduction of new rules and standards to protect workers' rights, including raising the minimum wage and providing social guarantees.

• Combatting illegal labor: Active inspections and sanctions against employers using illegal labor.

Results

The United Kingdom has achieved significant success in reducing the level of the shadow economy. Thanks to comprehensive reforms and increased control, the share of the shadow economy has been reduced to approximately 9-10% of GDP, which is a significant improvement compared to previous years.

Improvement in tax revenues

• Increased tax revenues: Due to the de-shadowing of the economy, tax revenues to the budget have increased, allowing for increased funding of social programs and infrastructure projects.

Increased business transparency

• Business climate improvement: Increased business transparency has contributed to improving the investment climate and increasing investor confidence.

• Corruption reduction: Anti-corruption measures have helped reduce the level of corruption in both the public and private sectors.

Social consequences

• Improved working conditions: Labor law reforms have improved working conditions and increased social protection for workers.

• Reduction in social inequality: Increased tax revenues have allowed the government to invest more in social programs, helping to reduce poverty and social inequality.

However, the work on de-shadowing the economy continues, and the government continues to implement new measures to further reduce the level of the shadow economy, taking into account the challenges posed by the modern globalized world.

Conclusion:

Developed countries that have successfully overcome the shadow economy rely on effective management systems, strict adherence to legislation, transparent financial systems, and active cooperation with other countries and international organizations. They use a comprehensive approach to combat the shadow economy, which allows them to achieve stability and development.

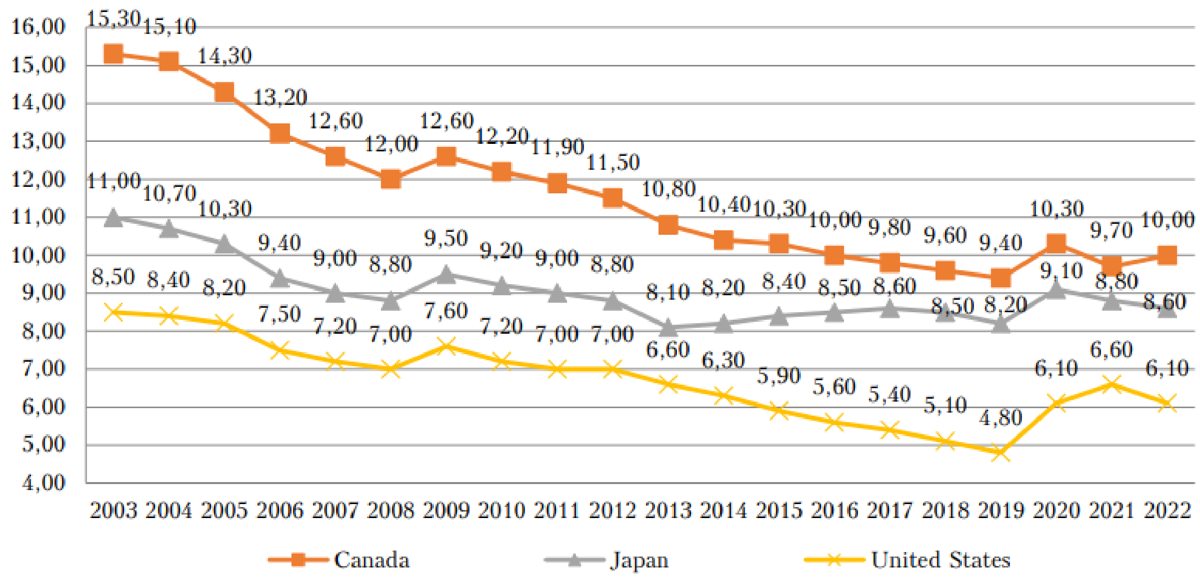

Figure 2.1. Top 3 highly developed non-European economies

Source: [39, p.57].

Non-European Developed countries

Let's also look at three non-European but highly developed OECD (Organisation for Economic Co-operation and Development) countries (Canada, Japan and the United States), which have a smaller shadow economy than Europe as a whole, with an average size of around 8.23% of GDP in 2022.

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 procurement

2.2. Peculiarities of de-shadowing of the economy in developing countries

Peculiarities of De-Shadowing the Economy in Developing Countries: The Cases of Poland, Georgia, and Lithuania

De-shadowing the economy is a significant challenge for developing countries, which often grapple with high levels of informality, corruption, and economic instability. Examining the experiences of Poland, Georgia, and Lithuania provides insights into the unique strategies, challenges, and successes these nations have encountered in reducing their shadow economies.

Historical Context and Challenges

Poland: Poland's transition from a centrally planned economy to a market economy in the 1990s was marked by significant informal economic activities. High unemployment, economic restructuring, and initial weak regulatory frameworks contributed to the growth of the shadow economy. At its peak, the shadow economy was estimated to be around 25-30% of GDP.

Georgia: Georgia faced a particularly challenging situation in the post-Soviet era, with widespread corruption, weak governance, and a large informal sector. The shadow economy in Georgia was estimated to be as high as 60% of GDP in the early 2000s, driven by factors such as inefficient public administration, a lack of trust in government institutions, and widespread tax evasion.

Lithuania: Lithuania, like Poland, underwent significant economic changes following the collapse of the Soviet Union. High levels of corruption, bureaucratic inefficiencies, and substantial informal labor markets characterized the early years of transition. The shadow economy in Lithuania was estimated to be around 20-25% of GDP during its peak.

Measures Implemented

Poland:

Tax Reforms: Simplification of the tax system and reduction of tax rates to encourage compliance. Introduction of electronic tax filing systems to improve efficiency.

Labor Market Policies: Regularization of informal labor through incentives for formal employment, such as tax breaks for companies hiring legally.

Anti-Corruption Efforts: Establishment of the Central Anti-Corruption Bureau (CBA) to tackle corruption at various levels of government.

Georgia:

Deregulation and Simplification: Comprehensive reforms to simplify business regulations and reduce bureaucratic barriers. This included the introduction of a flat tax system.

Anti-Corruption Campaigns: Radical anti-corruption measures, including the dismissal of corrupt officials and the establishment of transparent public service practices.

E-Government Initiatives: Implementation of e-government services to reduce opportunities for corruption and increase transparency in public administration.

Lithuania:

Tax and Business Reforms: Introduction of a more business-friendly tax regime and reduction of regulatory burdens on businesses.

Strengthening Law Enforcement: Enhanced capabilities of tax authorities and law enforcement agencies to detect and combat illegal economic activities.

Public Awareness Campaigns: Efforts to raise awareness about the negative impacts of the shadow economy and promote a culture of tax compliance.

Challenges Faced

Poland:

Economic Transition: The transition to a market economy involved significant economic and social upheaval, which made it difficult to enforce new regulations.

Cultural Resistance: Long-standing habits and distrust of government institutions posed barriers to formalizing the economy.

Bureaucratic Inefficiencies: Initial inefficiencies in public administration hindered effective implementation of reforms.

Georgia:

High Initial Levels of Corruption: The entrenched nature of corruption required drastic measures and faced significant resistance from vested interests.

Economic Instability: Persistent economic challenges, including poverty and unemployment, drove many to participate in the shadow economy.

Institutional Weaknesses: Weak institutional frameworks initially made it difficult to implement and enforce reforms.

Lithuania:

Corruption and Bureaucracy: Similar to Poland and Georgia, corruption and bureaucratic inefficiencies were significant obstacles.

Informal Labor Market: High levels of informal employment were difficult to regulate and formalize.

Economic Disparities: Economic disparities and social inequalities contributed to the persistence of the shadow economy.

Results and Current Status

Poland:

The shadow economy has been reduced to approximately 14-16% of GDP, reflecting significant progress from its peak levels. Improved tax compliance and labor market conditions have been key achievements.

Georgia:

Georgia has made remarkable progress, with the shadow economy estimated to be reduced to around 30-35% of GDP. The country's radical anti-corruption measures and regulatory reforms have been widely praised and have led to substantial improvements in economic transparency.

Lithuania:

Lithuania has also seen a reduction in the shadow economy, now estimated to be around 15-18% of GDP. Enhanced law enforcement, tax reforms, and public awareness campaigns have contributed to this progress.

Conclusion

The experiences of Poland, Georgia, and Lithuania highlight several key peculiarities of de-shadowing the economy in developing countries:

Economic and Institutional Transition: Developing countries often face the dual challenge of transitioning to market economies while simultaneously building effective institutions and regulatory frameworks.

Comprehensive Reforms: Successful de-shadowing requires a multifaceted approach, including tax reforms, labor market policies, anti-corruption measures, and improvements in public administration.

Public Trust and Awareness: Building trust in government institutions and raising public awareness about the benefits of formal economic participation are crucial for sustainable success.

Challenges of Implementation: High levels of initial corruption, economic instability, and cultural resistance are significant challenges that require persistent and adaptive strategies.

Overall, while developing countries face unique challenges in de-shadowing their economies, the experiences of Poland, Georgia, and Lithuania demonstrate that significant progress is achievable through comprehensive, targeted, and sustained efforts.

2.3. Assessment of the process of de-shadowing of the economy of Ukraine and directions of public administration

Shadow economy in Ukraine presents a complex phenomenon, challenging to precisely gauge due to its clandestine nature. It's a serious issue, casting a negative impact on economic processes and sparking numerous debates. Its roots trace back to pre-independence times, when many enterprises operated outside the law and without state oversight. Post-independence, it persisted thriving through bureaucratic hurdles, low wages, corruption, and imperfect legislation.

Today, illicit economic activities permeate all sectors of the economy, from private to state-owned enterprises, from small businesses to large corporations. Shadowization of the economy remains a significant challenge to Ukraine's economic development. Responsibility for fulfilling financial obligations to the state is a constitutional duty of every Ukrainian citizen, including regular payment of taxes and fees.

The Ministry of Economy of Ukraine and the State Statistics Service are key national institutions conducting detailed analysis of the level and scale of the shadow economy. According to the Ministry of Economy's data, the level of Ukraine's shadow economy by the end of 2022 amounted to 30% of the official GDP. This is 2 percentage points less than in 2021, but 3% more than in 2020.

Table 2.3 - Integral indicator of the shadow economy level in ukraine (% of gdp) and the growth rate of real gdp (in % compared to the previous year)

Year	Level of Shadow Economy (% of Official GDP)	GDP Growth (% Change)
2010	36	4,1
2011	32	5,5
2012	30	0,2
2013	30	0,0
2014	36	-6,6
2015	35	-9,8
2016	33	2,4
2017	32	2,4
2018	29	3,5
2019	28	3,2
2020	30	-3,8
2021	32	3,4
2022	30	2,9

Source: [33, p.297].

In 2022, the composite index of the shadow economy decreased from 32% to 30%. The lowest level of the shadow economy was recorded in 2019, while the highest indicators were in 2010 and 2014 due to the crisis and political situation. The decline in 2022 is attributed to enterprises adapting to the new conditions brought about by the

COVID-19 pandemic and the government's stimulating measures, leading to improved financial indicators.

Table 2.4. - Dynamics of the Shadow Economy Level by Specific Methods, % of Official GDP Volume

Sector	Industrial Production Index in 2020 (%)	Industrial Production Index in 2021 (%)	Change (%)
Engineering	-17.6	+8.5	+26.1
Production of finished metal products	-8.7	+5.8	+14.5
Metallurgy	-8.7	+5.8	+14.5
World prices for basic metals	+0.5	+46.8	+46.3

Source: [35, p.21].

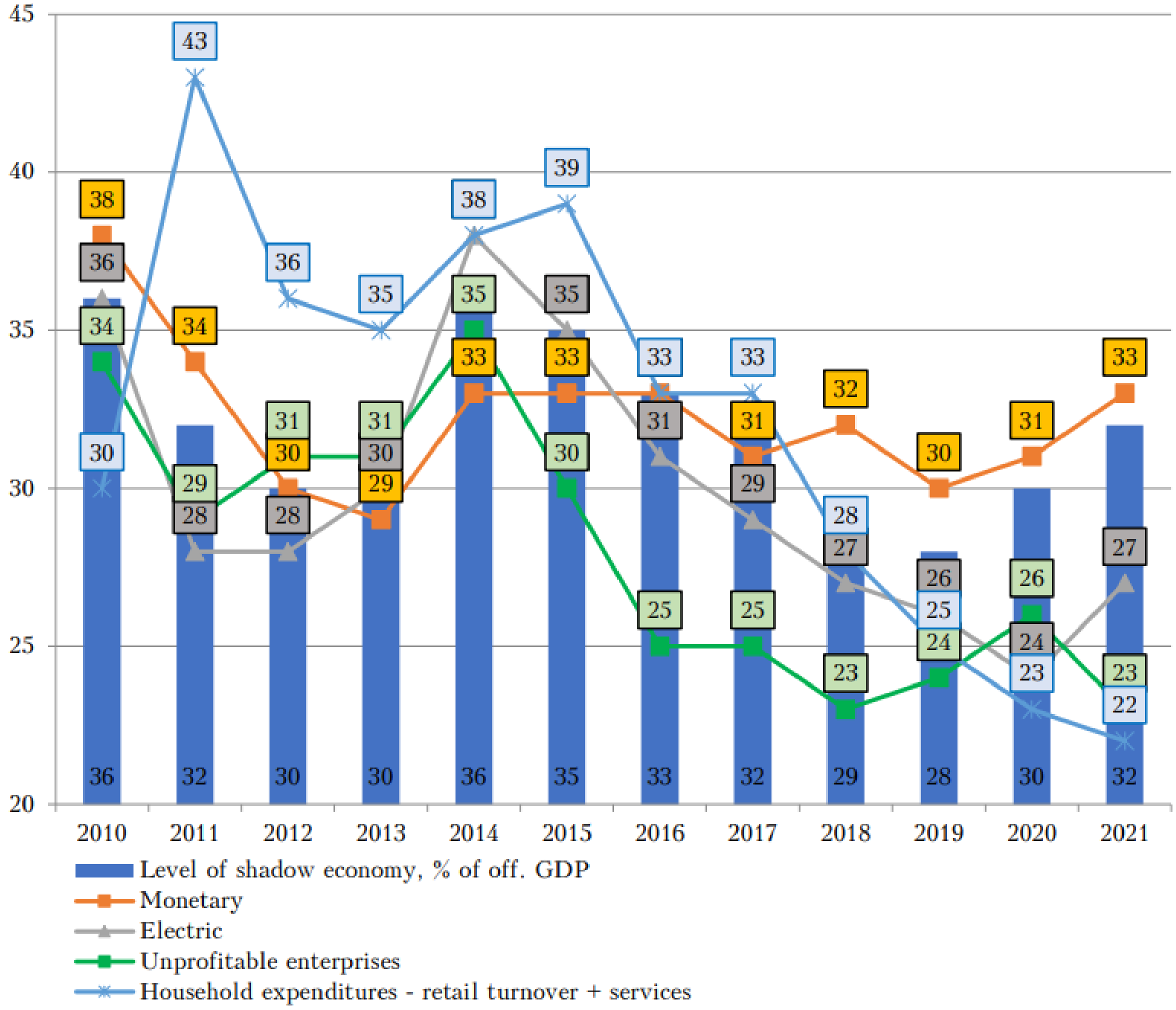

Figure 2.2. Dynamics of the level of Ukraine's shadow economy

Source: [23, p.54].

The replacement of traditional channels of shadow activity with new ones, which are not fully covered by existing assessment methods, has also affected these indicators. For example, the electric method showed a level of shadow economy of 27% in 2021, the monetary method - 33%, the "household expenditure" method - 22%, and the corporate loss method - 23%. These data show that different methods yield different results, but all indicate a significant share of the shadow economy.

Analysis of the level of the shadow economy shows that it continues to occupy a significant portion of the national economy. Fluctuations in the level of the shadow economy in different years depend on the economic and political situation in the country.

The highest indicators are recorded in crisis periods, indicating insufficient resilience of the economic system. However, there are positive trends towards reducing the shadow sector thanks to optimal tax policies and anti-corruption measures.

How much Ukraine's GDP loses from the shadow economy and in which sectors the shadow economy is most prevalent

Losses of Ukraine's GDP from the shadow economy: According to estimates from various experts and studies, Ukraine's shadow economy constitutes a significant portion of its gross domestic product (GDP). According to reports from the International Monetary Fund (IMF) and other research organizations, the share of the shadow economy in Ukraine may range from 30% to 45% of GDP. This means that the country loses substantial sums of money that could be used for economic development, social programs, infrastructure, and other public needs.

Sectors where the shadow economy is most prevalent: The shadow economy permeates many sectors of the Ukrainian economy. Here are some of the main sectors where shadow activities are particularly significant:

1. Trade and Services:

○ A significant portion of the shadow economy is concentrated in retail trade and the service sector. This includes illegal trading, unofficial service provision, tax evasion, and smuggling.

2. Construction:

○ The construction sector often faces issues of illegal employment and tax evasion. A significant portion of workers operate without official labor contracts, leading to tax revenue losses.

3. Agriculture:

○ In agriculture, widespread informal employment and unofficial product markets are common. The lack of proper accounting for production and sales leads to significant losses for the state budget.

4. Transportation and Logistics:

- The transportation sector also frequently operates in the shadow through illegal transportation, tax evasion, and corruption schemes at customs and other regulatory agencies.

5. Information Technology (IT):

- While the IT sector in Ukraine is one of the most dynamic and developed, it also has a significant level of shadow operations. This includes service provision without official contracts, income tax evasion, and social security contribution evasion.

6. Light Industry:

- Production of clothing, footwear, and other goods often occurs within the shadow economy, where workers are unofficially employed, and production and sales are not properly accounted for.

Estimation of losses

Losses of Ukraine's GDP from the shadow economy could reach tens of billions of dollars annually. For example, assuming that the shadow economy constitutes 40% of GDP (with Ukraine's GDP being approximately 200 billion dollars), the size of the shadow economy could be approximately 80 billion dollars. Considering that a significant portion of these funds are not subject to taxation, the state loses significant revenue to the budget.

Legislative Acts Regulating Ukraine's Shadow Economy

In Ukraine, there exists a range of legislative acts aimed at combating the shadow economy and regulating economic activities. Below are key legislative acts and regulatory documents that play an important role in this context:

1. Tax Code of Ukraine:

The Tax Code is the primary legislative act regulating taxation in Ukraine. It contains provisions regarding tax administration, tax reporting, and liability for tax violations.

2. Law of Ukraine "On Prevention of Corruption":

This law defines legal and organizational principles for preventing corruption in Ukraine, including measures to prevent corrupt offenses and conflicts of interest in public administration.[43]

3. Law of Ukraine "On Prevention and Counteraction to Legalization (Laundering) of Proceeds from Crime":

This law aims to prevent money laundering and terrorism financing. It defines measures for financial monitoring and requirements for financial institutions to identify clients and report suspicious transactions.[29]

4. Law of Ukraine "On Basic Principles of State Supervision (Control) in the Sphere of Economic Activity":

This law establishes legal and organizational principles of state supervision (control) in the sphere of economic activity, including measures to detect and prevent shadow economic activities.

5. Law of Ukraine "On Electronic Trust Services":

This law regulates the use of electronic trust services, contributing to increased transparency and reliability of electronic transactions and reducing opportunities for shadow operations.

6. Law of Ukraine "On State Regulation of the Securities Market in Ukraine":

This law establishes legal foundations for regulating the securities market in Ukraine, including measures to prevent manipulation and fraud on financial markets.

7. Law of Ukraine "On Licensing of Types of Economic Activity":

This law defines the procedure for licensing certain types of economic activity, contributing to the legalization of businesses and reducing the shadow economy.

8. Law of Ukraine "On Labor":

This law regulates labor relations, including issues of employment, wage payment, labor contracts, and protection of workers' rights, which contributes to reducing informal employment.[35]

9. Law of Ukraine "On Public Procurement":

This law regulates procedures for conducting public procurement, increasing transparency in the use of public funds, and reducing corruption risks.

10. Resolutions of the Cabinet of Ministers of Ukraine and orders of ministries:

The Cabinet of Ministers of Ukraine and various ministries issue regulatory acts that detail and implement the provisions of laws. They relate to tax administration, regulation of financial markets, state control, and supervision.

For effective combating of the shadow economy in Ukraine, it is necessary not only to have appropriate legislative framework but also to ensure effective enforcement of laws and regulatory acts. This includes increasing transparency of government processes, improving tax administration, preventing corruption, and strengthening institutional capacity of government agencies.

What specific experiences from other countries, which have been studied, can be suggested to Ukraine in its fight against the shadow economy?

Therefore, if in 1990 Ukraine's GDP per capita in terms of purchasing power parity exceeded the world average by 11%, by 2022 it was 56% lower than the world average and amounted to 16.4% of the EU countries' level. In 2015, Ukraine, with a GDP of $2,110 per capita, ranked 133rd out of 186 countries. In 2018, this figure was $2,600.

It is worth noting that the level of the shadow economy can vary significantly depending on the calculation methods. Despite the widespread prevalence of shadow economic activity, it has a heterogeneous structure.

The economies of individual countries largely rely on illegal businesses - piracy, drug and arms trafficking (Somalia, Nigeria, Colombia, Afghanistan), illegal production of counterfeit goods (Azerbaijan, Russia, Ukraine). In developed countries, shadow economic activity is characteristic of individual and small businesses.

For example, in the USA, it permeates the fashion industry, where the labor of illegal migrants is used. In EU countries, illegal economic activity is characteristic of such labor market segments as self-employment and usually increases in response to increased tax burdens and/or decreased demand for labor.[51]

It should be understood that the development of Ukraine's economy is accompanied not only by an economic crisis but also by political and social crises, a crisis of trust in the authorities, redistribution of financial flows to ensure the livelihoods of society among corrupt oligarchic-clan structures, leading to the destruction of the country's economic potential.

The exacerbation of the economic situation, social tension, requires identifying the main sources of the destructive trajectory of the economies of countries, their shadowing, in particular the economy of Ukraine, forming a system of necessary measures for de-shadowing, which will allow accumulating the country's economic potential in a short time and directing it towards the development of the real sector of the economy oriented towards a creative development vector.

Based on the existence of shadowing problems in Ukraine, the following main factors can be identified:

- Political uncertainty, mistrust in government actions, and high bureaucracy;
- Lack of institutional support for economic policy in Ukraine;
- Inefficiency of state property management and protection of property rights;
- Deficiencies in tax policy and imperfections in budget policy;
- Imbalance of state regulatory policy;
- Deformation of the population's employment structure;
- Raiding, which is associated with such factors as the weakness and imperfection of the judiciary, the exposure of the shadowy quasi-state, the unproductive outflow of capital, and other shadowing factors.

The conducted research allows us to affirm that a significant level of shadowing of the economy is observed in Western European countries, average levels in South Africa, Malaysia, Latvia, and Turkey, and minimal levels in such countries as Switzerland, Denmark, Norway, USA, Japan, and China. These differences are explained by the high level of nationalization of the mixed economy in developed European countries, negative costs of American individualism, and the atmosphere of "social consensus" in Japan, where even "gangsters honestly pay taxes on income from drug trafficking, extortion, and prostitution."

The scale of the shadow economy in developed countries is relatively small and accounts for about 5-15% of GDP. In developing countries, the shadow sector plays a more significant role. Shadow economy in some of them exceeds the official one (Nigeria, Bolivia, and Thailand). The average scale of the shadow economy in the "third world" is about 35-45%.

The reasons for the shadow economy vary in different regions of the world, but the complex of reasons for the existence of shadow business in the market will be more diverse, especially when considering the experience of the most vulnerable sectors of the market economy.

To form an effective mechanism for de-shadowing Ukraine's economy, it is necessary to take into account the experience of leading countries in the world with a low level of the shadow economy since the measures they have taken have already had a certain effect and have positive trends; it is also necessary to use the experience of countries that are in the same situation as Ukraine regarding the shadowing of the economy, as these countries are also looking for effective tools to counter the transition of the economy into the shadows. For this purpose, a complex of directions and measures aimed at countering the shadow economy in different countries of the world has been generalized and defined.

Table 2.5. - Integral Indicator of the Shadow Economy Level in Ukraine (% of GDP) and the Growth Rate of Real GDP (in % compared to the previous year)

Direction Of Unshadowing	**Measure**	**The Country Where The Unshadowing Measure Was Implemented**
TAXATION		
Lowering tax burden	Tax benefits for creating new working places	The Netherlands, Great Britain
	Tax benefits for new employees	Montenegro
	Tax remission of the vulnerable strata of population	Hungary
	Increasing the limit of non-taxable income	Bulgaria, Belgium
	Decreasing the total gross of tax burden (% of the GDP)	Many countries of the EU
	Decreasing the individual income tax	Estonia, Slovakia
	Tax remission on re-invested incomes	Estonia
	Lowering VAT for labor-intensive services	The Netherlands, Bolivia
	Lowering corporate income tax	Hungary, Poland, Slovakia
	Tax benefits for the branches, in which a high percentage of unregistered employees is noticed	Sweden, Belgium, France
	Establishing the uniform tax rate for non-residents	Montenegro
	Harmonizing tax system	Austria, Greece, the Netherlands, France, Portugal, Denmark

Stimulating the tax system simplification	The simplification of tax system for small and medium-sized business. Brazil introduced the integrated system of taxes and payments for small and medium-sized business (SIMPLES).As a result, the registration of firms grew by 10-30%. Also the level of employing workers without labor contract decreased. Argentina introduced the simplified tax system for small business, which led to raising tax payments. However, the measures of simplification in Bolivia and Chile, in their turn, created a lot of different taxation schemes, which decreased the positive impact of these reforms, particularly where the access to information and the level of entrepreneurs' education were limited	Kenya, Tanzania, Uruguay, Brazil, Argentina
	Introducing on-line registration and payment system	Estonia
	Establishing the uniform tax rate for non-residents	Montenegro
	Changing of VAT /income tax / with the uniform tax. Latin American countries are the example of successful introducing these measures, because many firms in these countries have legalized their activities	Argentina, Bolivia, Brazil, Chile, Costa-Rika, Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru
SOCIAL SECURITY		

Measures of motivating the registration of new employees	Payment of social assistance proportionally to personal payments and income taxes	Estonia and many of the EU countries
	Reducing payments for vulnerable strata of the population	Hungary
	Reducing payments for new employees	Poland
	Contractor is also responsible for social security of the client company	Germany, the Netherlands, Great Britain
	Lowering payments of social security	Bulgaria
Labor activity regulation		
Flexibility in employing workers	Registered unemployed can work part-time and receive incomes	Czech Republic
	Introducing labor contracts together with mentioning part-time employment	Slovakia
	Introducing part-time contracts with renewing / raising the flexibility of temporary contracts. The introduction of such measures results in raising tax payments and considerable dismissing of unregistered employees	Spain, Slovakia, Argentina, Bolivia, Brazil, Chile, Columbia, Peru
Flexibility of labor payment	Maximal increasing of minimal wages per consumer price index, introducing differential minimal wages (according to age, region, etc.)	Poland
Motivating of employees' registration	The legalization of unregistered employees	The USA, Spain, Italy
	Introducing of "transfer working places" for the unemployed	Germany

	Decreasing the dependence of the unemployed / disabled people on social assistance and providing them with the help in looking for work	Bulgaria, Hungary, Lithuania, Slovakia, Great Britain
Following labor legislation	The motivation to denounce the competition lacking in on scientiousness (unregistered employees) by trade-unions and employers	More than 15 countries of the EU
	The compulsion to perform duties in registering new employees in departments engaged in social protection	Bulgaria, France
	Strengthening the relations between institutions	More than 15 countries of the EU
	Raising the level of material-technical provision for monitoring unregistered employees, creating monitoring agencies	More than 15 countries of the EU
	Implementing target measures in concrete fields (household work, agriculture, etc.), in which unregistered labor is excessive	The Netherlands, Austria, Spain, Sweden, Denmark
	Monitoring the employers of unregistered workers, which will enable employees to demand social assistance payments	Japan

REGULATING BUSINESS ACTIVITY		
The creation of favorable conditions for registering new business	The creation of stimuli for registering private property. Measures as to expanding property rights on land for rural workers in Bolivia did not lead to considerable demand on credits, because there had existed a cumbersome procedure of business registration, and also there had been no support of micro-enterprises and small business. In Peru 512 000 families received property right on land during the period between 1996 and 2000	Bolivia, Croatia, Peru
	Improving the laws as to property rights and their following	Croatia
	Shortening the terms of procedures and cost of business registration. As a result of adopting the program of “quick business registration” in Mexico in 2002 the term of registering small and medium-sized business was shortened to 2 days, and the procedure – from 8 to 2 days. Thus, the number of registered companies increased from 4 to 8%.	Mexico, Portugal, Poland, Great Britain
	The creation of “a single window” of registration. As a result of these measures, the share of registered firms in Columbia grew by 5,2%	Australia, Belgium, Ukraine, Estonia, Lithuania, Columbia, Uganda
	Introducing the single general ID (passport) of business	Finland

	Temporary amnesties for entrepreneurs, who decided to register their business (without fines)	Italy
	Establishing temporary limitation for courts aimed at giving out official confirmations of business registration	Bosnia
Simplifying the system of licensing	Simplifying licensing regulations, introducing automatic licensing	Georgia
	Simplifying trade procedures of licensing / automatic continuation. In the framework of this project in Uganda, the time of giving out licenses was shortened to 30 minutes instead of 2 days, administrative expenses decreased by 10%, and the efficiency of working hours increased by 2%	Uganda, Tanzania
Cutting down expenses	Simplifying the procedures of business closing	Macedonia
Strengthening of requirements	Adopting the laws to fight corruption and internal policy to fight corruption in governmental bodies; adopting the code of behavior / standards of ethics for the state and private sectors	More than 15 countries of the EU
	Exchanging information between agencies and inspections (bodies of social protection of the population, state employment service, tax bureaus). Forming the automatic communication of data bases, their renewing. As a result of strict measures, the incomes of	More than 15 countries of the EU

	Spain from tax payments increased considerably, and informal employment decreased	
	Unique identification numbers / the number of employee's social security, which can be checked by the inspector any time	More than 15 countries of the EU
	Increasing the frequency of checks-up. In Brazil at increasing the number of checks-up by 1% the informal employment fell by 1,5%, thus the incomes from taxes on wages in the state budget grew. In Argentina increasing the number of labor inspectors per 100 thousand of persons led to increasing the share of formal employees in the private sector by 1,4%	More than 15 countries of the EU, Brazil
	Raising the authority of state inspection bodies	Lithuania, Germany
	Strengthening the punishment in legislation for informal employment. As a result of these measures in Spain, the share of coming in the GDP from tax payments doubled	Austria, Belgium, Denmark, Germany, Ireland, Slovenia, Spain
	Expanding the authorities of control bodies' employees	Austria, Germany
	Creating the firm registering employees at the national level	Poland
	Starting the company in the informing of the public / improving communication strategy. The simplified taxation	Denmark, Sweden, France, Great Britain, Lithuania, Estonia, Romania

	scheme introduced in Tanzania in 2001 was not successful, because the information about it was not properly given to entrepreneurs	
	Employing private detectives for watching over unregistered employees	Germany
	Publishing, making known the names of infringers	Ireland
	Compensations to companies for delays in conducting separate procedures	India
MEASURES TO COUNTERACT CORRUPTION		
The system of political and legal mechanisms to fight corruption	Destroying material, first of all financial basis of criminal groupings. Confiscating property and creating independent legal base for the impossibility of “laundering” “dirty” money	Germany
	Making the register of corruptive firms	Germany
	Making payments for the labor of government officials according to the formula, which is linked with the	Singapore, Japan, the USA
	average wages of persons, who work successfully in private sector; controlled annual reporting of government officials concerning their property, assets and debts; prosecutor has the right to check up any bank, stock, and payment accounts of persons, who are suspected in violating the Statement	

	about preventing corruption	
	Strict attitude to considering corruption cases, concerning government officials of high rank aimed at supporting moral prestige of incorruptible political leaders	Singapore
	The liquidation of unnecessary administrative barriers with the aim of economic development	Singapore
	Limiting business activeness of former government officials after retiring from government bodies	The USA
	The possibility of public control over making the most important economic and political decisions, independence of judicial power; sustainability of power branches	The USA, Georgia, the EU countries

Summary and General Recommendations for Ukraine based on the table provided above:

Drawing upon global trends and taking into account existing and potential factors contributing to economic shadowing in Ukraine, a strategic system of measures to combat the informal economy is proposed. Here are the key recommendations:

- Engage Competent Managers: Bring in skilled professionals to swiftly devise an economic revival plan, purge the regulatory system of corruption and bureaucracy, and transition it to a unified management system that combines planning and market mechanisms.
- Criminalize Illicit Enrichment: Treat unlawful enrichment as a criminal offense.

- Ratify Anti-Corruption Convention: Approve the corruption convention within the framework of criminal law.
- Reform Law Enforcement Reporting Systems: Align law enforcement reporting systems with standards observed in developed countries.
- Develop Comprehensive Methodological Framework: Create a comprehensive theoretical and methodological basis for identifying and combating criminal and shadow activities.
- Enhance Participation in International Anti-Money Laundering Systems: Activate involvement in international systems combating the laundering of economic activities at various levels of international cooperation.
- Create Favorable Business Environment: Simplify coordination and permit procedures for entrepreneurial activities radically and realistically.
- Monitor Offshore Zones: Keep a close eye on offshore zones.
- Capital Amnesty: Grant amnesty to non-criminal assets, especially those directed towards innovation and other socially significant and priority sectors.
- Tax Amnesty Declaration: Declare a tax amnesty.
- Tax System Improvement: Narrow the shadow economic base by reducing the taxation level on verified funds invested in human capital development (education, skill enhancement, etc.).
- Transparent Tax Exemption System: Develop and implement a transparent system of tax incentives, optimize tax administration.
- Mechanisms to Hold Tax Evaders Accountable: Devise mechanisms to hold tax evaders accountable.
- Balance Fiscal and Regulatory Tax Functions: Maintain balance between fiscal and regulatory tax functions.
- Combat Illegal Labor Market: Overcome the illegal labor market.
- Improve Social Insurance: Enhance social insurance and reduce fiscal burden on payroll funds (including pension reform).
- Fair Wage: Ensure fair wage.

- Legalize Wages: Legalize wages.
- Effective Protection and State Guarantees: Ensure effective protection and state guarantees for owners' and investors' rights.
- Address Shadow Phenomena in Foreign Economic Activity: Overcome shadow phenomena in foreign economic activity, particularly in the regulatory system.
- Accelerate Financial Market Development: Speed up financial market and corporate sector development in line with European standards.
- Significantly Enhance Anti-Corruption Efforts: Substantially increase anti-corruption and organized crime-fighting effectiveness, especially in the financial sector.
- Raise Public Awareness: Increase public awareness and ensure its influence on government decisions.
- Government Support for Innovation and Investment Projects in the Real Sector: Support innovation and investment projects in the real economy sector.
- Strengthen State Institutions: Strengthen state institutions.
- Implement Strict Measures against Corruption and Raids: Apply stringent measures against corruption and raiding.
- Minimize State Regulation in Various Spheres of Life: Minimize state regulation in various spheres of life.
- Ensure Transparency of the Real Economy Sector: Ensure transparency of the real economy sector.
- Establish Working Groups in Regional State Administrations: Create working groups in regional state administrations to coordinate law enforcement activities and non-state security structures for economic and physical protection of entrepreneurship.

This is a substantial yet incomplete list of key measures to combat illegal economy, which are advisable to implement and adapt to the conditions of national socio-economic relations, promoting economic recovery, growth, and strengthening the state in the context of its economic and national security.

Based on conducted research, it is advisable to conclude that in the conditions of utilizing global experience in de-shadowing economic relations, it is necessary to limit and displace Ukraine's shadow market through two main approaches.

The first relies on implementing economic measures aimed at making entrepreneurs' participation in legal, official market relations economically and materially advantageous and safe, rather than continuing operations in the illegal shadow sector.

The second direction involves state coercion measures, specifically, improving legislation aimed at intensifying the fight against shadow businessmen and ensuring its strict enforcement in practice.

However, in recent years, the possibility of utilizing a third direction has been discussed. This approach has been successfully tested in some countries that currently have developed economies but had faced decline in the past. This direction is associated with amnesty for shadow businessmen.

The main methods of legalizing shadow capital are well-known but difficult to implement. The key is democratization of all aspects of socio-economic relations, creating favorable legal conditions for producers, tax system reform, real accountability of executive bodies to Parliament, change in monetary policy, anti-corruption measures, stabilization of the domestic labor market, and more. It's worth noting that these measures require serious political will and, simultaneously, freedom from authorities at various levels.

CONCLUSIONS

Our research has shown that the shadow economy, also known as underground or informal, encompasses economic activities occurring outside the framework of legislation and official reports, evading taxation. We have found that this realm includes drug trafficking, illegal employment, undocumented migration, smuggling, and tax evasion, among other activities.

The emergence of the shadow economy stems from various reasons such as economic inequality, high tax burdens, bureaucratic barriers, corruption, and ineffective regulatory policies. Some individuals opt for informal economy due to a lack of opportunities for sufficient legal income, while others choose it to evade taxes and legal oversight.

The shadow economy has a significant negative impact on society and the official economy, depriving workers of social protection and infringing upon their rights. It can undermine the country's investment attractiveness, worsen economic conditions, and reduce the welfare of the population. The shadow economy leads to revenue losses for the state, depriving it of tax revenues that could be used for infrastructure development and social services. This, in turn, results in financial difficulties for the government and diminishes its ability to provide essential services to its citizens. Additionally, it exacerbates inequality, social injustice, and economic instability.

Underground activities and tax evasion contribute to wealth inequality, where only a limited group profits while the majority remains in conditions of scarcity. This leads to social tension, dissatisfaction, and impedes stable societal development.

We have examined these issues and determined that effective measures are necessary to combat the shadow economy. This requires a comprehensive approach involving social, economic, and political measures, based on global de-shadowing experiences.

As of 2022, the shadow economy in Ukraine accounted for 32% of the country's GDP, which is a significant figure. This is particularly crucial for Euro-integration, as the

European Union maintains high standards regarding transparency, tax systems, and anti-corruption efforts.

Economic de-shadowing will be instrumental in addressing issues that could hinder Ukraine's accession to the EU. Measures based on global experiences will help reduce corruption, create a favorable business environment, and attract foreign investments.

Additionally, it will increase financial inflows into the state budget, which is vital for financial system stability and infrastructure development. De-shadowing is essential to ensure compliance with European standards and successful integration into the European Union.

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APPENDICES

Appendix A

Table 1.1. - World experience in implementing the process of de-shadowing of the economy

Aspect	Description
Objectives	- Reduce informal economic activities - Increase tax revenues - Improve transparency
Strategies	- Strengthening tax enforcement - Simplifying tax systems - Enhancing regulatory framework
Tools	- Tax amnesties - Penalties for tax evasion - Monitoring and reporting mechanisms
International Cooperation	- Sharing best practices among countries - Collaboration on anti-money laundering measures
Challenges	- Resistance from informal sector - Administrative complexities - Political opposition
Success Factors	- Strong political will - Public awareness and education - Effective enforcement measures