DE-SHADOWING OF THE ECONOMY IN THE FIELD OF NON-BANK FINANCIAL INSTITUTIONS

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Abstract. The purpose of the article is to define the de-shadowing of the economy in the sphere of non-bank financial institutions. The author presents the peculiarities of the domestic shadow economy and defines the concept of the shadow economy in the non-banking financial sector, identifies the components of the shadow economy, and proposes measures to overcome shadow economic processes. Subject of the research – de-shadowing economy in the sphere of activities of non-banking financial institutions. The shadow economy in the NFI is a complex socio-economic phenomenon, which is presented as a set of uncontrolled and unregulated, both illegal and legal, but immoral financial and economic relations in the sphere of activity of the NFI, which are in conflict with the legislation in force and are characterised by deliberate illegal acts of individuals, committed with the aim of concealing their income from the state and its bodies, making profits, evading taxes, etc. The shadow economy has three components: the informal, the hidden and the underground (criminal) economy. The informal economy is characterised by unregulated production of goods and provision of services; the hidden economy is the legal production and sale of unregistered goods and services; the underground (criminal) economy – prohibited activities (corruption, drug trafficking, etc.). Methodology – the article uses general scientific methods of formal logic (analysis, synthesis, deduction, induction, analogy, abstraction and modeling). It should be noted that the content analysis method made it possible to determine the influence of the shadow economy on the commission of violations in the field of activity of NFIs, to show in a qualitative and quantitative ratio, in general, the trends in the level of spread of violations in their activities. Results. The definition of the concept of the shadow economy in the non-banking financial sphere is given – it is a complex socio-economic phenomenon, which is a set of uncontrolled and unregulated, both illegal and legal, but immoral financial and economic relations in the sphere of activity of NFIs, which are in conflict with the legislation in force and are characterised by deliberate illegal actions of persons with the purpose of concealing their income from the state and its bodies, making profits, evading taxes, etc.; the components of the shadow economy are defined; it has been proved that Ukraine has a fairly extensive shadow economy in its economy, which actually serves as the basis of the country’s entire financial policy. The NBU acts as a state regulator of social relations arising during the conduct of economic activities related to finance (public or private).

Key words: de-shadowing economy, shadow economy in the non-banking financial sphere, components of shadow economy.

JEL Classification: F38, G20

1. Introduction

The shadow economy remains one of the most significant threats to the economic security of the state, exacerbating the socio-economic crisis in Ukraine and negatively affecting its international image. Therefore, the development of effective mechanisms for bringing the economic and financial spheres out of the shadows, the search for and return to legal circulation of assets illegally removed from it, and the protection of property rights are priority directions for the implementation of state policy in the field of law enforcement. (Buha, 2022)
The growth of the shadow economy and the criminalisation of almost all spheres of economic activity hinders the development of market relations in Ukraine, threatens the national interests and national security of the state, undermines the confidence of citizens in democratic institutions and values, causes concern in society and critical assessments by international experts. (Buha, 2022)

It should be noted that the peculiarities of the domestic shadow economy are a consequence of its formation and development during the Soviet period. Under the conditions of the administrative-command planned economy system in the former USSR, shadowy relations became the basis for organised crime and corruption, which are inextricably linked, causing at the same time the interdependence of corruption offences with the receipt of significant material benefits. The globalisation of financial systems, the development of international banking networks, electronic telecommunication systems and transaction networks have created conditions for the use of financial instruments for the purpose of laundering funds obtained by criminal means. (Buha, 2022)

In the field of domestic scientific research, the works of such scientists as A. Bazyliuk, Yu. Dmytrenko, O. Nadon, O. Sidelnyk, I. Khytra, etc. are devoted to the issue of bringing the economy out of the shadows in the sphere of activity of non-banking financial institutions. However, the disclosure of a number of problematic issues requires special attention, which emphasises the relevance of the subject of the article.

The purpose of the article is to determine the process of de-shadowing economy in the sphere of activities of non-banking financial institutions.

2. Characteristics of the domestic shadow economy

The task of economists, lawyers or other specialists who deal with the shadow economy is to stop the shadow processes by creating economic, organisational and legal conditions for de-shadowing the economy. However, this can only be done through the joint efforts of economists and lawyers under the conditions of an integrated approach. Economists will not be able to develop an effective economic model of the conditions for de-shadowing the economy if they do not take into account the peculiarities of the country’s organisational and legal environment.

Lawyers will not be able to create effective legal forms and appropriate organisational and legal infrastructure of preventive influence on economic and organisational and legal causes of shadow economy without knowledge of economic patterns, financial, legal, organisational and management technologies of financial and economic circulation of things, rights and actions. In this regard, it can be denied that such an approach is extensive, since it is impossible to know the whole block of economic, organisational, management and legal sciences. However, the information necessary to determine the object-technological, subject and causal structure of the shadow economy can be found precisely in these fields.

At the same time, the practical experts of law enforcement bodies, who combat shadow criminality, must have such information, otherwise they will simply not be able to detect and expose a specific shadow criminality. Accordingly, the training of such specialists at the administrative level, who are called upon to create economic conditions and organisational and legal infrastructure for the de-shadowing of the economy, requires a complex approach. On the other hand, such training is necessary both for researchers who study the phenomenon of the shadow economy and for government officials who don't always make balanced economic decisions that lead to the globalisation of shadow processes.

This is evidenced by the above analysis of shadow processes and problems of defining the concept and structure of the shadow economy. In addition, it is important for researchers of the shadow economy to know these disciplines precisely in the part that reflects the economic, organisational, financial and legal aspects of the essence of the "shadow economy".

That is, it is about the development of praxeological principles of internalisation of the knowledge developed in these sciences and their integration in a special interdisciplinary theory, which in the elements of its subject and scientific and practical tasks would reflect the economic, organisational, legal and criminogenic aspects of this phenomenon and would become a synthesized methodological basis of complex cognition of the object-technological essence of shadow processes, their structure, subject and causal structure. It should be noted that praxeology is the science of the principles and methods of effective human activity. Research in the field of praxeology is concerned with the fundamentals of organising people’s joint activities in terms of decision-making, motivation and implementation of both collective and individual actions. The fundamentals of the use of computers and other modern technical means in management are also studied.

Some Ukrainian academics also advocate a comprehensive approach to understanding and combating the shadow economy. In particular, scientists from the Research Institute of the Ministry of Economy of Ukraine A.V. Bazyliuk and S.O. Kovalenko note that "narrowly focused measures... only aggravate crisis phenomena, which contributes to the expansion of the shadow economy. In the current situation it is necessary to apply
a comprehensive approach... aimed at changing the motives of behaviour of all subjects of society...". (Bazyliuk, Kovalenko, 1998)

Thus, the shadow economy remains one of the most significant threats to the economic security of the state, which exacerbates the socio-economic crisis in Ukraine and negatively affects its international image. That is why the development of effective mechanisms for the de-shadowing of economic and financial spheres, the search for and return to legal circulation of assets illegally removed from these spheres, and the protection of property rights are priority directions for the implementation of state policy in the field of law enforcement. The peculiarities of the domestic shadow economy are a consequence of its formation and development during the Soviet period. Under the conditions of the administrative-command planned economy system in the former USSR, the shadow economy became the basis for organised crime and corruption.

3. The concept of the shadow economy in the non-banking financial sector

The shadow economy in the NFS is a complex socio-economic phenomenon, which is presented as a set of uncontrolled and unregulated, both illegal and legal, but immoral financial and economic relations in the sphere of activity of the NFI, which are in conflict with the legislation in force and are characterised by deliberate illegal actions of individuals, committed with the aim of concealing their income from the state and its bodies, making profits, evading taxes, etc.

4. Components of the shadow economy

The shadow economy has three components: the informal, the hidden and the underground (criminal) economy. The informal economy is characterised by unregulated production of goods and provision of services; the hidden economy is the legal production and sale of unregistered goods and services; the underground (criminal) economy – prohibited activities (corruption, drug trafficking, etc.).

As noted by S.S. Cherniavskyi and V.A. Nekrasov, any legal economic activity can belong to the sphere of shadow economy. At the same time, the highest level of shadow economic activity is appropriate to: production and distribution activities, in particular productive capital; investment activity; banking, exchange, insurance activities; resource extraction and distribution activities; spheres of service provision (in education, medicine, etc.); any intermediary activity. (Shadow economy in Ukraine: state, trends, ways of overcoming: analytical review, 2017)

5. Measures to overcome shadow economy processes

The state is trying to take all possible measures to overcome the shadow economy processes. Thus, in accordance with the requirements of the international community, the Regulation on the Application of Measures of Influence by the National Bank of Ukraine on institutions for violation of the legislation on financial monitoring (2020) (On Prevention and Counteracting the Legalisation (Laundering) of Proceeds from Crime, Financing of Terrorism and Financing of the Proliferation of Weapons of Mass Destruction: Law of Ukraine of 06 December 2019. № 361-IX), was adopted with the aim of determining the procedure of influence measures to be applied by the NBU provided by the Law of Ukraine "On Prevention and Counteraction of Legalisation (Laundering) of Proceeds from Crime, Financing of Terrorism and Financing of the Proliferation of Weapons of Mass Destruction" (On Prevention and Counteraction of Legalisation (Laundering) of Proceeds from Crime, Financing of Terrorism and Financing of the Proliferation of Weapons of Mass Destruction: Law of Ukraine of 06 December 2019. № 361-IX), measures of influence, presenting requirements for violations of the legislation on financial monitoring by institutions, as well as monitoring their implementation. The requirements of this Regulation can be applied to insurers (reinsurers), insurance (reinsurance) brokers, credit unions, pawnshops, and other financial institutions (with the exception of financial institutions and other legal entities in respect of which state regulation and supervision in the field of prevention and countermeasures is carried out by other subjects of state financial supervision); payment organisations, participants or members of payment systems providing financial services on the basis of relevant licences or registration documents; postal operators; other institutions providing services for money transfer and currency transactions; branches or representative offices of foreign economic entities providing financial services on the territory of Ukraine; other legal entities that are not financial institutions by their legal status, but provide certain financial services.

This Regulation establishes the procedure for the application of the NBU to the institutions of influence measures provided for by Art. 32 of the Law, namely written warning. In accordance with Chapter III, Paragraphs 21-22 of the Regulations, the NBU issues a written warning to the NFI, expressing its concern about the NFI’s situation, specifying the violations of law committed, the shortcomings in the NFI’s work and, if necessary, the specific measures to be taken within a certain period of time in order
to remedy and/or prevent them in the future. The NFI is obliged to submit a response to the NBU within five working days from the date of receipt of the written warning, indicating the period within which it undertakes to resolve the identified problems, eliminate the violations and/or take measures to prevent such violations in the future.

Within 20 calendar days from the date of receipt of the institution’s obligations to eliminate violations, the NBU has the right to make comments on them, which the institution is obliged to take into account (Regulations on the Application of Influence Measures by the National Bank of Ukraine against Institutions for Violation of Legislation on Financial Supervision): Resolution of the Board of the National Bank of Ukraine of 28 July 2020. № 106); cancellation of the licence and/or other documents granting the right to carry out activities, with the performance of which the entity acquires the status of NFI; imposing on the NFI the obligation to suspend an official from work.

According to Chapter III, Sections 33-35 of the Regulation, the NBU has the right to take a decision on the suspension of the following officials of the institution: the head(s) of the NFI; the responsible employee. The decision on suspension shall be notified to the institution no later than the next working day following the date of its adoption. No later than three working days from the date of receipt of the decision on suspension, the NFI notifies the NBU by e-mail about the official who will perform the duties of the suspended official, specifying the details of the decision(s) taken by the competent body (official) of the institution (Regulations on the Application by the National Bank of Ukraine of Influence Measures against Institutions for Violation of Legislation on Financial Supervision): Resolution of the Board of the National Bank of Ukraine of 28 July 2020. № 106).

Pursuant to Chapter III, Paragraph 27 of the Regulation, the NFI is obliged to notify the NBU of the payment of the fine no later than on the next working day after the payment of the fine via the NBU’s e-mail and, on the same day, to send to the NBU an electronic copy of the settlement document on the payment of the fine, certified by a qualified electronic signature of the authorised person of the NFI. If it is not possible to send a copy of the settlement document on payment of the fine in the form of an electronic document, its certified copy shall be sent to the NBU by registered mail with advice of delivery (Regulation on the Application by the National Bank of Ukraine of Influence Measures against Institutions for Violation of Legislation on Financial Supervision): Resolution of the Board of the National Bank of Ukraine of 28 July 2020. № 106):

1) Conclusion of a written agreement with the NFI, in which the NFI undertakes to pay a specified financial obligation and to take measures to eliminate and/or prevent further infringements of legal requirements in the field of prevention and countermeasures, to ensure an increase in the effectiveness of the operation and/or adequacy of the risk management system, etc.;
2) Submission of the NBU pursuant to Art. 18 of the Law on Requirements for the Implementation by the NBU of Legislation in the Field of Prevention and Countermeasures against Legalisation (Laundering) of Proceeds from Crime, Financing of Terrorism and Financing of Proliferation of Weapons of Mass Destruction;
3) Implementation by the NBU of control over the implementation by institutions of decisions on the application of influence measures, written requirements.

6. Effectiveness of the de-shadowing process

The effectiveness of the de-shadowing process of the involved financial investments depends on the state's ability to create safe, stable and favourable conditions, which will allow the NFI to increase economic and investment activity in the legal economy, functioning in accordance with the principle of maintaining fair economic competition on the market.

It is worth paying attention to the statement of Yu. M. Dmytrenko, who notes that the work of the NBU is primarily public, its essence is financial activity regulated by financial and legal norms concerning the formation and implementation of monetary and currency policy in the state; the structure, functioning and control of the non-banking system with the aim of stable and effective organisation of the use of public funds and creation of favourable conditions for the development of the market economy.

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The NBU has special functions in comparison with the NFI, in particular in ensuring the functioning of the national economic security system. In particular, it is appropriate to allow a person authorised by the state to influence the activities of the NFI on the basis and in the manner established by law. In this way, the NBU shall simultaneously influence the work of the banking and non-banking systems in order to increase their efficiency and ensure their necessary stability.

At the same time, academic circles are expressing assumptions about the need to strengthen the monitoring function of the NBU. For example, I.Ya. Khytra argues that the NBU should be given more freedom in implementing monetary policy and supervising the financial sector in order to ensure high-quality administrative and legal support for the NFI’s activities. (Khytra, 2011)
Taking into account the current changes in the world market of financial services, the need to adapt the requirements of the EU Directives and to reflect them in the national legislation, the organisational principles of ensuring safety in the market of non-banking financial services are aimed at the following: obligatory maintenance of information on market participants; establishment of a uniform approach to the regulation of legal relations related to the licensing of certain types of activities; determination of the order of legal succession according to concluded contracts; analysis of the activities of market participants (capital, liabilities, reserves, profitability, liquidity and other key indicators of market activity); Determination of the order of legal succession according to concluded contracts; analysis of the activity of market participants (capital, liabilities, reserves, profitability, liquidity and other key indicators of market activity); creation of transparency in the activities of the components of non-banking financial services; creation of a mechanism for protecting clients in this market and strengthening their confidence, provision of quality services; permanent financial monitoring; development of standard training programmes for the personnel of financial institutions and constant control over the completion of this line of work and acceptance of the final NBU examination.

Implementation of the task regarding improving the quality of financial services provided by NFI must be carried out in view of the needs of potential clients. The NFI and NBU should be the entities that will ensure the fulfillment of this task.

NFIs can achieve a high level of financial services provision due to the following factors: increasing the speed of NFI customer service; ensuring the quality (completeness, nature) and comprehensiveness of information and consulting on the features, benefits and economic characteristics of the financial service; urgency and timeliness of financial transactions; professionalism and qualification of personnel, absence of errors in customer service and financial transaction processing; NFI operation mode, oriented to the needs of potential clients; individual approach to client needs; completeness, reliability and timeliness of fulfilment of obligations, and so on. (Sidelnyk, 2011)

7. Quality of non-banking financial services

The quality of non-bank financial services is ensured by the efficiency of internal work processes, the level of motivation of employees, labour productivity, the level of costs of correcting errors and other criteria arising in the provision of financial services. These requirements should be taken into account when designing the development strategy of the NFI.

The provision of quality services depends to a large extent on the qualifications and professionalism of NFI employees. In this case, it is possible to adopt the experience of domestic banks and foreign financial institutions in the use of the "secret client" method, which will contribute to the formation of professional skills of NFI employees. This method makes it possible to formulate the main problems and shortcomings in the service provided to clients in the work of the NFU, to reveal the priority directions of further work to improve the quality of the services provided, to assess the strengths and weaknesses of the employees, as well as to outline the main approaches and directions for improving the qualification of the employees.

The training of professional and qualified staff of the NFI falls to some extent within the competence of the NBU. In particular, the first steps have been taken in this area to formulate standard programmes for improving the qualifications of managers and chief accountants of financial institutions and their practical implementation, but it is also necessary to expand this area of work (Financial Stability Report 2021):

- to introduce the obligation for employees to certify their compliance with their positions and with the areas of activity of the NFI: insurance, non-governmental pension funds, credit and deposit transactions, securities transactions, and so forth;
- to initiate the creation of training courses for specialists in higher education institutions in accordance with the needs that have emerged in the financial services market and that meet the requirements for NFI employees (specialists in non-governmental pension provision, insurance, work with securities, specialists in leasing and factoring);
- to initiate and conduct round tables, conferences, seminars, press conferences on the development of the non-banking financial sector and specific types of NFIs, involving leading industry experts, academics, potential investors and clients in these events.

8. The trust of the population is the most important factor that characterises the work of the NFI

Among the many factors that characterise the activity of NFIs (economic, legal, organisational, human, etc.), the psychological factor of public confidence is particularly important. At present, there is a tendency for citizens to lose confidence in the State and in financial institutions, which in many cases they do not dare to transfer to financial intermediaries. They need guarantees, respect for them as customers and confidence that the State will protect their personal savings if a financial institution makes a mistake.
The issue under consideration is quite complex, as the confidence of the population is expressed in two aspects, namely confidence in the national currency and confidence in the NFI. Insufficient attention to this issue may significantly slow down the development of the financial services market in the near future.

Confidence in the national currency must be built first and foremost on the basis of the macroeconomic policy conducted by the government and the NBU. After all, with a high level of confidence, the processes of dollarisation of savings slow down, the capitalisation of the population's income is revived, the demand for money and the supply of money and capital on the financial market increase, and the resource base of financial intermediaries grows. The key problem of the financial market in Ukraine today is the low level of participation of the population's funds in the formation of the resource base of financial intermediaries, despite the significant growth of the population's income.

Looking at the experience of other countries, it can be concluded that households are often the only sellers of money on the financial market. All other sectors of the economy, including businesses, central and local government, financial institutions, etc., are additionally financed at their expense.

The main factors that negatively affect the formation of the population's income and increase the population's savings and its participation in the development of the financial market are: the low level of wages and the gap between the average monthly wage and the subsistence minimum of the population; the excessive differentiation of the population in terms of monetary income.

The solution of the problem of creating confidence in the NFI requires the development and implementation of special state programmes, which should reflect the mechanisms for solving such problematic issues: the introduction of specific forms of responsibility of state structures for making management decisions, the implementation of which violates the property rights of individuals; increasing the responsibility of officials, employees of financial institutions, other subjects of the financial market, whose actions reduce the financial stability and economic reliability of the institutions managed by them; increasing the requirements for entities regarding the level of capitalisation of the financial services market, including NFIs; ensuring transparency in the formation and use of cash flows formed at the expense of investors' and clients' funds; maintaining new forms of state guarantees regarding the protection of the rights of consumers of financial services, their timely and complete receipt of these services. The first step in this direction was the adoption of the Financial Sector Development Strategy of Ukraine until 2025.

9. Low level of information transparency in Ukraine's financial services markets

In connection with the shadowing of the NFS, it is necessary to pay attention to the fact that there is a low level of information transparency in the markets of financial services in Ukraine. Financial institutions providing financial services do not provide complete, reliable, accessible and comparative information about the costs and conditions of providing such services, the risks and benefits associated with them, while consumers of financial services try to manipulate information about their own financial and property status and obligations of a financial nature in order to obtain such services or to avoid property liability related to them.

The results of sociological research conducted in Ukraine indicate a low level of financial literacy and awareness among citizens, who have to acquire knowledge about financial institutions and their services on their own. In some cases, financial institutions take advantage of the generally low level of public awareness of financial services to transfer most of the risks of providing such services to their consumers, resulting in negative public attitudes towards financial markets and their professional participants, mistrust of financial institutions, and reluctance to use them as a means of securing savings and increasing wealth. Moreover, the least informed are the most vulnerable groups of the population, especially pensioners. At the same time, age, level of education or income are not the main factors influencing the level of financial literacy of consumers of financial services.

10. Principles with which the NFI information system must comply

The NFI's information system must comply with the following principles: accessibility (investors and shareholders of the NFI or members of credit unions, potential consumers must receive all disclosed information without delay or complication); openness (dissemination of information through the Internet and mass media); clarity (statutory and other internal documents of the company must contain clear wording); completeness (based on the declaration of openness of the information sphere and ethical actions of all financial market participants); unity (rely on state support and a legal framework that would indicate responsibility not only for refusal to provide information, but also in case of late submission).

11. Effectiveness of shadow process prevention

The effectiveness of the prevention of shadow processes depends not only on objective factors
(improvement of legislation, optimisation of the interaction between the various supervisory bodies, implementation of a transparent information policy, etc.), but also on the correct level of organisation of this activity at the state level. This, in turn, requires the development of new approaches to the reform of the relevant services involved in NFI oversight. The structure and functioning of the bodies and services responsible for monitoring compliance with legislation on financial and economic activities and combating financial crime no longer meet the modern requirements of society. For example, one of the regulatory and legal shortcomings affecting the level of financial crime is the lack of clear specialisation of control bodies at the legislative level, which in fact leads to a duplication of functions due to their various structural subdivisions. An equally difficult task in the prevention and termination of the offences detected by the NBU is the search for legal grounds for the involvement of specialists in control bodies or other specialised institutions.

12. Conclusions

Thus, Ukraine has a fairly extensive financial sector of the economy, which actually serves as the basis for the entire financial policy of the country. The NBU acts as a state regulator of social relations arising during the conduct of economic activities related to finance (public or private). Accordingly, the National Bank of Ukraine, as an entity of the State's economic security system, has a special status, special powers and a corresponding range of responsibilities with respect to the financial sector of the economy and performs regulatory, supervisory and other functions defined by national legislation.

The work of the NBU itself, as a regulator and independent body of state administration, covers the entire cycle of management actions and decisions in the NFS, in particular, with regard to taking measures to counteract existing and potential threats in the field of financial security. Such a special place of the state financial institution in the system of economic security of the country gives it a legal opportunity to determine the conditions for the implementation of non-banking activities in Ukraine, to analyse and evaluate the results of work, to supervise and control their implementation, to correct its own actions and the actions of the NFI, to apply measures of influence on violators of legislation. (Ndon, 2017)

Taking into account the role of the National Bank of Ukraine in the economic security system of Ukraine, centralisation of management activities is a necessary condition for effective state influence on the entities of the non-banking system. This is also logically determined by the principles of the structure and functioning of the NFS.

References:


Polozhennia pro zastosuvannia Natsionalnym bankom Ukrainy zakhodiv vplyv do ustanov za porushennia zakonodavstva z pytany finansovoho monitorynu [Regulations on the application by the National Bank of Ukraine of influence measures against institutions for violation of legislation on financial monitoring]: Resolution of the Board of the National Bank of Ukraine dated July 28, 2020. № 106. Available at: https://zakon.rada.gov.ua/laws/show/v0106500-20*Text

Pro zapobihannya ta protydiu lehalizatsii (vidmyvanntiu) dokhodiv, oderzhanych zlochynnem shliakhom, finansuvanniu teroryzmu ta finansuvanniu rozpovsiudzhennia zbroi masovoho znyshchennia [On preventing and countering the legalization (laundering) of proceeds from crime, the financing of terrorism and the financing of the proliferation of weapons of mass destruction]: Law of Ukraine dated December 06, 2019. № 361-IX. Available at: https://zakon.rada.gov.ua/laws/show/361-20*Text


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