

5. Policies and practices for eco-innovation uptake and circular economy transition. EIO bi-annual report 2016. Eco-innovation observatory. URL: <https://www.eco-innovation.eu/>

6. Thematic Strategy on the Sustainable Use of Natural Resources, 2005. URL://<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0670:FIN:EN:PDF>.

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CAUSES AND SIGNIFICANCE OF THE SHADOW ECONOMY

Evaluation of the shadow economy has received much attention in recent times. The main incentives for any economic activity, including the shadow economy, are to generate maximum income, as well as the mentality inherent in society. In general, the population is predisposed to work more if more money can be earned.

The shadow economy has been observed as a phenomenon for more than four decades also named as unofficial, hidden, underground, or black market. Economists globally try to define it, estimate the extent of it and recommend either control or eliminate it of the shadow economy is all economic activities (whether legal or illegal) dealt on market transactions.

To estimate the extent of the shadow economy, Schneider and Enste [5] infers three common following approaches: the direct method (through the surveys); the indirect method (via national accounting, monetary approaches and physical input method); and the model approach. Eilat and Zinnes [3] emphasize the density of regulatory perception as the key determinant of the shadow economy in transitional countries. As Krstic and Schneider [4] also concur that the social welfare system can demoralize individuals and firms from working in the official sector.

Foreign scientific literature identifies three main reasons that affect the dynamics of the shadow economy: taxes and payments to the social security fund, the intensity of regulation, public sector services. Excessive tax burden (taxes and social security payments) is noted as one of the main reasons stimulating the growth of shadow economic activity, as the difference between the total value of the official labour force and the income remaining after taxes has a significant impact on the growth of shadowing. The intensity of regulation, often measured in the number of laws and regulations, is another important factor that reduces the freedom (choice) of employees in the formal economy. These include labour market regulations, trade barriers, and labour restrictions for foreigners. Excessive regulation leads to a significant increase in labour costs in the formal economy. Most of these costs can be shifted to employees, so they are also an incentive to work in the shadow economy, where this can be avoided. The increase in the shadow economy may lead to a decrease in public revenues, which in turn reduces the quality and quantity of socially required goods and services. Ultimately, it may lead to higher tax rates for firms and individual entrepreneurs in the formal economy. This is quite often accompanied by deterioration in the quality of public goods and management and, as a result, encourages participation in the shadow economy.

The shadow economy has both negative and positive socio-economic significance. Traditionally, shadow economic activity has been perceived as negative. However, as long as it does not exceed admissible sizes, it plays its stimulating role in the development of the country's economy. The positive impact of the shadow economy, given its limited size, may affect the stimulation of small business. Most small businesses start their operations in the shadow sector of the economy, and then, as they develop, move from the shadow sector into formal business, i.e. into economic activities carried out in accordance with the adopted legal procedure and accounted for in the accounts.

The shadow economy provides employment, goods and services for low-income groups with no other sources of supply. The loss of formal employment has pushed the masses of the population

to seek other forms of employment. Tolerance of non-payment of taxes in the shadow economy has contributed to the preservation of a large number of jobs that would not otherwise exist.

During the transition period of economic development, the presence of shadow activities contributes to the improvement of the legislative framework, as it is a kind of indicator of imperfection of legislation and shows the "bottlenecks" in it.

On the other hand, when the shadow economy becomes widespread and criminalized, active government intervention in such processes is necessary.

This is due to the fact that shadow informal relations corrupt economic actors. Under the conditions of poor quality tax legislation, entrepreneurs get used to not paying taxes, and this becomes part of the entrepreneurial culture.

The negative side of the shadows of economics also applies:

- supporting the development of corruption. Officials, "turning a blind eye" to evading payments of shadow economic entities, expect compensation for this service (money, services). Such relations corrupt officials, and they can transfer these rules of communication to honest taxpayers [1];

- there is a high risk of criminalizing activities, as the line between criminal and non-criminal activities is very thin and easy to break;

- a significant shadow sector may reduce investments, as the laws of management in the shadow economy are not prescribed, which increases the risk of investments. Mutual support and investment of business is based more on trust and kinship than on formal contractual relations [2].

Thus, in the post-Soviet period there was a significant increase in the level of shadow economic activity with its qualitative transformation. As a result, a shadow economy was formed in Ukraine, the main features of which are: corruption, economic activity without registration, concealment of part of economic transactions, hiring of labour without registration of labour relations and, as a result, tax evasion. Size of shadow economy in Ukraine in 2018 was 47.2% of the total GDP and 46.8% in 2017 [6]. This has both negative and positive aspects, allowing reducing social tensions in society. The task is to use the positive aspects of shadow activity to minimize its negative impact on the country's economy and society as a whole, primarily the criminalization of economic activity. This requires strengthening the State and improving legislation.

On the whole, while the underground economy has positive aspects besides negative ones, countries around the world should still focus their efforts on reducing it. It is necessary to minimize the volume of the hidden sector because it contributes to the growth of corruption and illegal, sometimes even criminal, businesses, including drug trafficking and trade in human organs. It is also important that the methods of states should not be aimed at struggle, but at natural reduction through the voluntary refusal of citizens to conceal information about their operations. Increasing income levels through relatively low tax rates, stronger legislative regulation, and anti-corruption policies will contribute to a significant reduction in the shadow economy.

1. Choi J.P., Thum M. Corruption and shadow economy. *International Economic Review*. 2005. 46 (3). P. 817-836.

2. Davidescu A.A., Strat V.A. Shadow economy and foreign direct investments: an empirical analysis for the case of Romania. *Ecoforum*. 2015. 4 (2/7). P. 110-118.

3. Eilat Y., Zinnes C. The shadow economy in transition countries: Friend or foe? A policy perspective. *World Development*. 2002. 30 (7). P. 1233-1254.

4. Krstic G., Schneider F. *Formalizing the shadow economy in Serbia*. 2015. New York, NY: Springer International Publishing.

5. Schneider F., Enste D.H. Shadow Economies: Size, Causes, and Consequences. *Journal of Economic Literature*. 2000. 38(1). P. 77-114.

6. Shadow economy in Ukraine. Results of the 2019 survey. URL: <https://www.kiis.com.ua/?lang=eng&cat=reports&id=897&page=1>.