

# “Level of shadow economy in Ukraine: reasons and ways to overcome”

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 <http://www.researcherid.com/rid/H-4762-2018>

## ARTICLE INFO

Alina Bukhtiarova, Arsen Hayriyan and Nataliia Vynokurova (2018). Level of shadow economy in Ukraine: reasons and ways to overcome. *Public and Municipal Finance*, 7(1), 6-11. doi:[10.21511/pmf.07\(1\).2018.01](https://doi.org/10.21511/pmf.07(1).2018.01)

## DOI

[http://dx.doi.org/10.21511/pmf.07\(1\).2018.01](http://dx.doi.org/10.21511/pmf.07(1).2018.01)

## RELEASED ON

Wednesday, 30 May 2018

## RECEIVED ON

Friday, 02 March 2018

## ACCEPTED ON

Wednesday, 25 April 2018

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## JOURNAL

"Public and Municipal Finance"

## ISSN PRINT

2222-1867

## ISSN ONLINE

2222-1875

## PUBLISHER

LLC “Consulting Publishing Company “Business Perspectives”

## FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

**18**



NUMBER OF FIGURES

**2**



NUMBER OF TABLES

**3**

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## Level of shadow economy in Ukraine: reasons and ways to overcome

### Abstract

The article offers an investigation of the level of the shadow economy in Ukraine in the period 2007–2016, the structure of the shadow (“grey”) economy in the sectoral section, Ukraine’s place in world rankings in terms of economic freedom, corruption, favorable business conditions, and competitiveness. The main reasons of high level of shadow sector of the national economy are considered, and several measures regarding the reduction of the shadow economy in Ukraine and improvement of its economic situation are presented.

**Keywords:** shadow economy, level of the shadow economy, gross domestic product, corruption.

**JEL Classification:** E26, O5, O17.

**Received on:** 2<sup>nd</sup> of March, 2018.

**Accepted on:** 25<sup>th</sup> of April, 2018.

### Introduction

Current development of the world financial system faces an important problem such as the shadow economy, which is the basis for bribery in various spheres: political, economic, social and contributes to the criminalization of society. Too large scale of the shadow economy is reflected in the volumes and structure of the gross domestic product, distorting the indicators of economic development of the country. The material losses suffered by the economy from the functioning of the shadow economy in the world are measured in billions of dollars.

Today, the volume of the shadow sector in Ukraine is quite high. The impact of shadow relations on all branches of social sphere is negative for our society. First, it is about the significant influence on population incomes, their diversification, unemployment, pension payments, social stratification, and, consequently, the low standard of living of the population. The shadow sector leads to irreparable losses not only for the state budget, but also for the economy.

Therefore, investigation of the theoretical and practical foundations of the level of Ukraine’s shadow economy, the reasons for its emergence and the development of ways to overcome it, is very relevant today.

### 1. Literature review

Works on the shadow sector influence on social and economic processes are: Varnalii, Burkaltseva, and Saienko (2011), Bochi and Povoroznyk (2014), and others. Even though the problem of researching the

shadow economy is global, it remains open for further research.

The purpose of this article is to study the level of the shadow economy in Ukraine, to identify the causes that lead to its emergence and to identify the main ways to address the shadow economy problem to ensure a stable social and economic development of the state.

In the current market conditions, the economy of any country faces an important issue such as the existence of the shadow economy. In Ukraine, the shadow economy is represented by the so-called “stumbling block” for the growth of social standards of living and development of the country’s competitiveness. It reflects high corruption among public authorities, active criminalization of economic processes, low tax and legal culture of individuals and legal entities (Bochi and Povoroznyk, 2014).

The main reasons for sufficiently high level of shadow economy in Ukraine are as follows:

- ◆ a significant tax burden, which in turn leads to a reduction of interest in legal economic activity by legal entities and individuals;
- ◆ personal interest of some representatives of the state apparatus in obtaining shadow income;
- ◆ commission by the officials of the state fiscal service of crime in official activities and intensifying the activities of criminal structures;
- ◆ social and economic crisis, inefficient work of many enterprises, wage arrears, lack of social protection of the population, unemployment growth, imperfect monetary regulation, which consists in opaque refinancing of commercial banks and the establishment of a flexible exchange rate, imperfect budget system, low control over budget spending, etc. (Bochi and Povoroznyk, 2014).

The shadow economy has the greatest influence on the gross domestic product, since it serves as an indicator of the volume of national production and economic welfare of the population. Moreover, based on GDP, it serves as the basis for calculating

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a whole range of socio-economic indicators of the country's development. The level of the shadow economy in Ukraine as a percentage of the official GDP is presented in Table 1.

Table 1. The level of the shadow economy in Ukraine in 2007–2016, % of GDP

Year	Gross domestic product, UAH million	The level of the shadow economy, % of GDP
2007	720,731	28
2008	948,056	34
2009	913,345	39
2010	1,082,569	38
2011	1,316,600	32
2012	1,408,889	32
2013	1,454,931	35
2014	1,566,728	43
2015	1,979,458	40
2016	2,383,182	35

Source: Compiled by the authors based on Ministry of Finance of Ukraine and Ministry of Economic Development and Trade of Ukraine data.

Analysis of statistical data showed that the highest level of shadow economy was observed in 2014 – 43% of GDP and in 2015 – 40% of GDP. This is due to an unstable situation in the country, namely:

- ◆ a military conflict on the territory of Ukraine;
- ◆ financial destabilization (significant balance of payments deficits, price and exchange rate shocks, loss of production);
- ◆ growing panic mood among economic agents and increasing administrative pressure.

The decrease in the indicator in 2016 by 5 percentage points is usually a positive phenomenon for the Ukrainian economy.

Overcoming the shadow economy has become possible as a result of:

- ◆ consolidation of macroeconomic stability and economic growth restoration (by the end of 2016, real GDP grew by 2.3%; the consumer price index in December was 112.4% (43.3% in 2015), which was the result of an increase in supply in the domestic market at a moderate exchange rate volatility);
- ◆ improving the business climate in the context of the entrepreneurial activity deregulation, which, in turn, contributed to the growth of investors' confidence and the growth of the direct investments inflow;
- ◆ gradual legalization of relations in the labor market because of the reduction of the single social contribution, and consequently, the easing of the burden on the wage fund.

Instead, fighting the shadow economy is hampered by challenges such as: maintaining significant

challenges to the stability of the country's financial system; relatively low confidence in the institutions of power; the presence of territories that are not under the control of the authorities, in particular the territory of the country, formed in the course of military aggression (Ministry of Economic Development and Trade of Ukraine, n.d.).

The largest level of the shadow economy is present in the following areas: financial and insurance activities, extractive industry, real estate operations, transport, postal and courier activities, warehousing, manufacturing, construction, wholesale and retail trade, agriculture, forestry and fishery economy (Figure 1).

According to the Ministry of Economic Development and Trade of Ukraine, the volume of the shadow economy by type of economic activity in 2016 compared with 2015 has decreased relatively.

The highest level of the shadow economy in 2015 was extractive industry – 51% and real estate transactions – 48%. For all types of activities in 2016, there is a decrease of this indicator, so in extractive industry – by 8 percentage points; real estate transactions and financial and insurance activities were reduced by 5 pp., processing industry – 9 pp., transport, warehousing, postal and courier activity – by 6 pp.; construction – by 7 pp., agriculture, forestry and fisheries – by 3 pp. The largest decrease in the level of the shadow economy occurred in the wholesale and retail trade – by 11 pp. This same order of types of economic activities by the largest share of the shadow sector has not changed. It is believed that the main reason for this decrease is primarily the impossibility of doing business outside the legal sector.



Source: Ministry of Economic Development and Trade of Ukraine (n.d.)

**Figure 1. The level of shadow economy by fields of activity, %**

It is understandable that the offshore zones are the basis for the shadow economy development, since businessmen who engage in offshore operations only for “money laundering” are moving into the so-called shadow sector of activity, constraining the process of transformation, first, aimed at improving the welfare of the country. It is not a big secret that Cyprus is the largest offshore zone (its investments amount to \$ 10,201.5 million). The “Cypriots” are not investing in their country, in fact it is a direct “money laundering”, which is hidden under the guise of foreign investment.

The negative trend regarding the level of the shadow economy in Ukraine in 2017 is characterized by many world ratings, where the country is in a low position compared to other countries of the world (Table 2). So, in developed countries, the level of shadow economy ranges from 7 to 12%; in developing countries, this figure ranges from 16 to 25 percent, while in countries with economies in transition from 30 to 50 percent. That is, in the leading countries of the world, the size of the shadow sector in the economy is much lower than in other groups of countries (Ponomarenko & Olvinska, 2016).

**Table 2. Ukraine’s place in world rankings relative to countries with market and transition economies**

Country/ 4 Rating	Economic Freedom Index, 2017 (from 180 countries)	Corruption Perception Index, 2016 (from 176 countries)	Doing Business, 2017 (from 190 countries)	World Competitiveness Report, 2017–2018 (from 137 countries)
Ukraine	166	131	76	81
Russia	114	131	35	38
Armenia	33	113	47	73
USA	17	18	6	2
Austria	30	17	22	18
Germany	26	10	20	5
France	72	23	31	22
Spain	69	41	28	34
Italy	79	60	46	43
Netherlands	15	8	32	4
Poland	45	29	27	39
Sri Lanka	112	95	111	85
Denmark	18	1	3	12

Source: Heritage Foundation (n.d.), Transparency International (n.d.), World Bank (2018), World Economic Forum (2018).

By the level of the shadow economy, Ukraine has entered the so-called “three leaders”. In 2016, the indicator reached 35% of GDP, which is 5 percentage points less than in the previous year. Inferior to Nigeria – 48% of GDP, which took the second stage and Azerbaijan – 58% of GDP, which

holds the first position. The best is the situation, oddly enough, in the economies of the Russian Federation, Sri Lanka, Brazil and Pakistan. The United States (7.8% of GDP), Japan (10% of GDP), China (10.2% of GDP) can be proud of the smallest indicators.

Thus, the Economic Freedom Index indicates the unsatisfactory state of our economy and indicates that Ukraine's economy has shrunk considerably and remains rather fragile. The prolonged interruptions of export and production potential and significant outflow of capital are putting increasing pressure on reserves and currency while seriously undermining monetary stability. As far as the reliability of fiscal policy is concerned, its performance has deteriorated significantly, and, accordingly, the government deficit and public debt have increased (World Bank, 2018).

Ukraine's rating of corruption is 29 points out of 100 (27 points out of 100 in 2015 and 130 in 167 countries). The results obtained show a high level of corruption in the country, although in 2016 there was an increase in the overall rating by two marks. The main causes of this phenomenon are the monopolization of business, the occupation of state corruption, the impossibility of long-term financial planning among the population due to the unstable economic situation in the country.

In terms of ease of doing business in the World Bank's "Doing Business" rating in 2017, Ukraine ranks 76th (2016 – 80th place). That is, the indicators have improved significantly in different areas, such as: registration of enterprises, obtaining a building permit, lending and taxation.

The deterioration occurred in the global competitiveness index. In 2017–2018, there was a

shift of Ukraine from 79 to 81 steps. In the sectoral indices, the following positions were fixed: institutions – 118th place, infrastructure – 78, macroeconomic environment – 121, health and primary education – 53, the size of the market – 47. The most problematic factors for conducting business in Ukraine, according to the authors, are: inflation, corruption, instability of the political course, tax rates, tax rules, instability of power (revolution), insufficient level of the work force education, closeness to innovations, crimes and fraud.

## 2. Methodology

To understand what the situation in Ukraine in the coming years in the shadow economy will be, it is necessary to make projected calculations. It is believed that the most effective and precise way to identify the trend of the shadow economy level is the method of analytical equalization in a straight line. In this case, the actual levels of several dynamics are replaced by theoretical levels, calculated based on a certain curve, which is described by the analytical expression. It is assumed that the theoretical curve is free from oscillations and, therefore, accurately reflects the general tendency of change in the time of the index (World Economic Forum, 2018).

The definition of extrapolation of the shadow economy size for the period 2017–2021 is presented in Table 3.

Table 3. Forecast calculations of the shadow economy level in Ukraine for the period 2017–2021, % of GDP

Year	Exports of goods, USD million, Y (t)	t	t <sup>2</sup>	Y(t)×t	Y(t) theoretical
2009	39	-7,0	49,0	-273,0	36,0
2010	38	-5,0	25,0	-190,0	36,2
2011	32	-3,0	9,0	-96,0	36,4
2012	32	-1,0	1,0	-32,0	36,6
2013	35	1,0	1,0	35,0	36,9
2014	43	3,0	9,0	129,0	37,1
2015	40	5,0	25,0	200,0	37,3
2016	35	7,0	49,0	245,0	37,5
Total	294,0	0	168	18,0	294,0
2017		9			37,7
2018		11			37,9
2019		13			38,1
2020		15			38,4
2021		17			38,6

For predictive calculations linear dependence was used. This equation will be as follows:

$$Y(t) = 36,8 + 0,1 \times t.$$

The calculation shows that in the next 5 years the level of the shadow sector will tend to increase (Figure. 2).

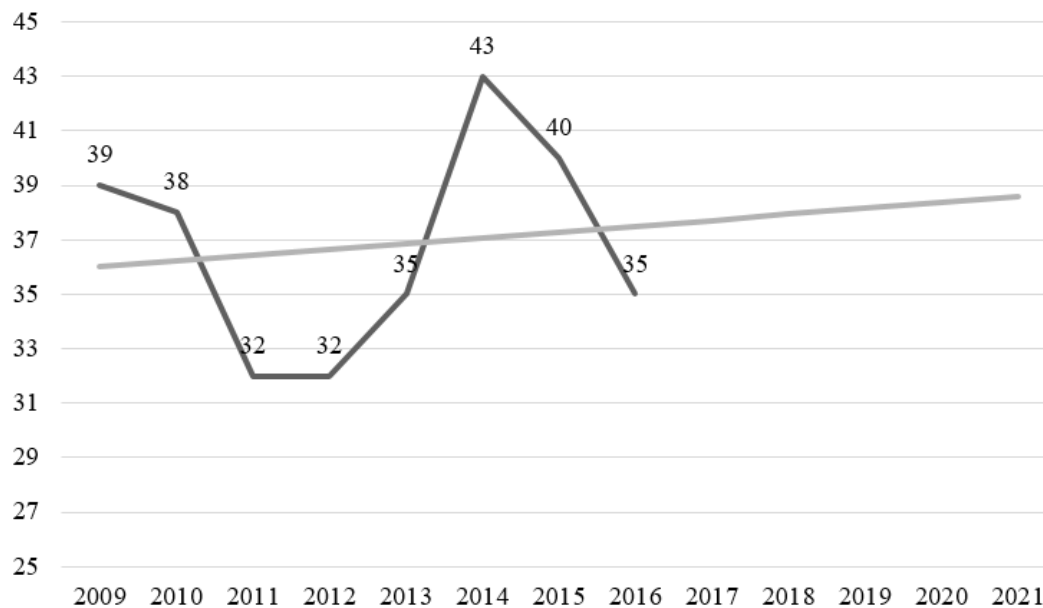


Figure 2. Forecast of the shadow economy in Ukraine, %

According to the results of the investigation in 2017, the shadow economy will amount to 37.7% of GDP, and by 2021, it is expected to slightly increase by 0.9 percentage points. So, the next five years, the level of the shadow economy will not be “European”.

### 3. Results

The main ways of overcoming the high volume of the shadow economy are the following:

- ◆ strengthening electronic monitoring and supervision of cash flows of financial institutions;
- ◆ strengthening control over transactions with the participation of offshore jurisdictions;
- ◆ improving the rules and regulations governing the activities of financial markets, ensuring transparency of financial instruments;
- ◆ provision of a system of special measures to prevent corruption;
- ◆ introduction of new information systems in the state apparatus;
- ◆ raising the level of trust in the state of business;
- ◆ reducing the tax burden; ensuring effective tax administration and public finances stability;
- ◆ improving the control of incomes, extending the system of cashless settlements;
- ◆ increasing the use of administrative measures for violations associated with the evasion of the employer from the establishment of labor relations with the employee, tax evasion, insurance premiums;
- ◆ ensuring the guarantees of a fair trial and enforcement of property rights, the fight against raiding, protection of property rights.

Overcoming the major problems that led to such a high level of shadow economy in Ukraine will accelerate economic growth and improve living standards.

### Conclusion and recommendations

The results of the investigation showed that the large scale of the shadow economy is the main obstacle to the sustainable economic development. Of course, the shadow economy exists in all countries without exception, but its scale is only a few percent of GDP (US, Japan, China). In Ukraine, the level of the shadow economy is high – 35% of GDP while influencing social, political and economic spheres. Military actions in the east of the country are only suppressing a situation that before this was not sufficiently stable. In world rankings, we see Ukraine is relatively low positions.

Forecast calculations of the shadow economy level have shown that the next five years, austerity in reducing the size of the shadow sector will not happen. Therefore, to improve the economic situation in Ukraine and reduce the level of the shadow economy, at least 20% of GDP must take a series of strict measures that will “push” the economy of Ukraine from a month and help to take a worthy position in international ratings and prompt our country to move forward only.

### Acknowledgement

The investigation is performed under the State budget research 0118U003585 “Formation of the system of transparency of public finances as a prerequisite for combating corruption in Ukraine.”

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