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LOOKING FOR WAYS OF UNSHADOWING THE ECONOMY OF UKRAINE

***Abstract.** It was considered the meaning of “shadow economy”. It was observed the historical aspect of the shadow economy research. It was set out the results of typology of approaches and methods of estimation the shadow economy levels that are used in international and national practice. It was given the shadow economy levels of different countries and Ukraine. It was discovered the importance of non-cash payments as an effective way of fighting against corruption and shadow economy. It was analyzed the state of non-cash payments in Ukraine and factors that cause it.*

***Keywords:** shadow economy, shadow economy, methods of calculating the level of the shadow economy, unshadowing the economy, non-cash payments.*

PROBLEM FORMULATION

Nowadays, the unshadowing of national economy is one of the most pressing problems. The distortion of macroeconomic indicators leads to discrepancy of analysis, forecasting and modeling of social and economic development results to the real conditions, which was provoked by the shadow economy.

RELEVANCE OF RESEARCH

The economy of Ukraine is characterized by significant and powerful shadow sector, which makes state mechanisms of stimulation economic ineffective, holding back economic growth, complicate the conditions of doing business. However, the shadow economy provides population with incomes, mitigating the problem of rising unemployment in the country and deterring destabilizing processes in society.

The nature of shadow economy as an economic phenomenon is complex, and the effect of shadow sector on the economy is ambiguous. Thus the ukrainian problems of determination the amount of shadow economy and the invention of effective tools of unshadowing the economy are still unresolved.

ANALYSIS OF RECENT RESEARCHES AND PUBLICATIONS

The most significant contribution to the research of the theoretical and practical aspects of the shadow economy was made by: V. Bazylevych [1], Z. Varnaliy [2], V. Mandybura [4], V. Popovych [6] O. Turchynov [8]. Among the foreign scientists there are G. Grossman [11] P. Gutmann [12] A. Kalyberd [13] D. Kaufmann [13] V. Tanzi [14] F. Schneider [9, 10, 15, 16].

Exploring the problem of the shadow economy, its causes, role and place in the modern market economy, scientists provide their analytical conclusions, suggest some ways of calculating the amount of shadow economy.

Purpose of the article is an assessing the level of shadow economy in Ukraine and finding the way to reduce the extent of this phenomenon.

MAIN PART

Shadowing processes exist as an integral part of the economic system, and they are common to all countries. Their main differences are volume, factors, forms, state of social and legal control over the shadow economy and level of its realization. Countries with developed market economy have a little scale of informal sector, which doesn't effect largely on legal sector. The sizes of shadow

economy in developed countries are from 9% to 19% of GDP, in developing countries – from 25% to 35% and more (pic.1). The smallest level of shadow economy is in Switzerland, Austria, Netherlands, France and Canada. These countries have common principles of building national tax systems and follow the international standards in the fight against the shadow economy.

According to the experts of the World Bank, at the initial stage of Ukraine as an independent state, its shadow economy was 10-11% of GDP. But mistakes in political and economic reforms in Ukraine created optimal conditions for the development of the informal sector. As a result, according to F. Schneider [13], the part of shadow economy in Ukraine in 2000 reached 52% of GDP, and during the global financial crisis (2008-2009) this indicator was 46% of GDP. Note that the method MIMIC (Multiple Indicators Multiple Causes), using by World Bank, is convenient to comparing the levels of the shadow economy between countries, but ineffective to determining its nominal value.

In own study Professor of Economics at Johannes Kepler University Linz F. Schneider predicts in 2015 reduction of shadow economy in the EU on average to 18.3% of GDP (compared to 18.6% in 2014 and 18.8% in 2013, respectively) [7]. The only country in the EU whose informal sector is more than 30% (whereby in developing countries further growth of the shadow economy can cause serious macroeconomic imbalances and undermine the foundations of economic security mechanism) is Bulgaria – 30.6% (31% in 2014). Making calculations, professor pay attention to the fact that shadow economy includes not only illegal activities but also undeclared income from legal production of goods and services, obtained through monetary or barter transactions.

In Ukraine shadow economy is studied and researched by the Ministry of economic development, which determine it as unregistered economic activities of business entities, that is characterized by minimization of expenses to production of goods, works and services, evasion of taxes and duties (mandatory payments), deviation from statistical surveys and submission of statistical reports, which lead

to violation of statutory regulations (minimum wages, working hours, conditions and safety at work, etc.) [5].

Evaluation of level and analysis of shadowing the national economy in general and for certain types of economic activities is making by indirect methods, such as extrapolation based on excess demand for cash and unreasonable power consumption. The Ministry makes calculations by four methods (electric, monetary, “expenditures of population – retail goods turnover”, losses of enterprises), which cover a certain area of national economy (with different part of illegal sector, that led to different results), and then determine the integral indicator of shadow economy level.

Table 1 shows the typology of existing international and national approaches and methods of shadow economy evaluation.

Table 1

The typology of approaches and methods of shadow economy evaluation

[3]

Classification of criteria	of Types of methods
Depending on the form of assessment	direct (absolute evaluation); indirect (relative assessment, describing the change of process in time)
Depending on the level of the assessment	micromethods; macromethods; methods of international comparisons;
Depending on the database	collecting primary information (sociological, expert interviews); using secondary information
Depending on the assessment tool	subjective methods; econometric methods; modeling
Depending on the object of study	individual level; entity level; sectorial level; regional level; state level; megaregion level; global level
Depending on the time	method of retrospective analysis;

parameters	operating forecasting approach	methods;
Depending on the scope of the research	financial; monetary; analysis of labor activity;	structured methods
Depending on the subject to research	State Statistics Service of Ukraine; Ministry of Economic; Development and Trade of Ukraine; Security Service of Ukraine; State Financial Monitoring Service of Ukraine; State Customs Service of Ukraine; State Fiscal Service of Ukraine; International institutions	

The main method of determining the level of the shadow economy is the monetary method. In turn, the result of this method confirms the effectiveness of policies to increase the non-cash transaction. The method is based on the relationship between the amount of money turnover and real GDP at a constant rate of money turnover. The method also assumes that:

- the use of cash as a payment method remains widespread in the shadow economy, whereas in the formal economy transactions are usually done through bank accounts;
- the velocity of money in the formal and shadow economy is the same;
- the proportion of cash varies according to changes in income, taxes, interest rate or under the conditions of the shadow economy.

So the level of shadow economy is estimated by comparing ratios of volume of money in circulation and total short-term deposits of economic entities to bank accounts.

Demand reduction for cash is evidence of a gradual decline in transactions, the legality of which is impossible to control. To sum it up, the more non-cash transactions will expand (the tool of more total control over revenue sources and early detection of expenditure in amounts that exceed income), the more adverse will be the conditions for shadow economy functioning.

Schneider`s conclusion also indicate the existence of negative correlation between frequency of electronic payments and shadow economy.

In his study professor says, that increasing of electronic payments by a mean of 10% per year (at least during 4 years) can lead to 5% reduction of black economy [15].

One more effective tool for fighting corruption and black economy is application non-cash payments in the calculation. Common and correct action of banks and regulation authorities will be significant for increase in effectiveness of banking sector and development of funds transfer network too. Moreover, such action can be directed towards:

- introduction of modern payment technologies, for example, mobile payment systems and decisions, that allow to crunch numbers between banks in real time;

- promotion of mobile payments, expansion of bank card, increasing the number of POS-machine (terminal for non-cash calculations using plastic cards);

- providing clarity in cost of cash transaction etc.

Unfortunately, Ukraine has the highest level of shadow economy among European countries (in spite of its reduction in 2009 to 39% and in 2013 to 35%) with minimum using of electronic payments. It is worth nothing that in 2011-2013 general number of payments for 1 person have been increasing in Ukraine an average of 27% per year. But compared with other countries the structure of such changes is quite different. For example, the number of non-cash payments with using plastic cards for 1 person in Ukraine in 2013 was almost 13 pcs, and credit transfers – only 7,6 pcs. At the same time in Bulgaria those indexes were 6,25 and 28,3, in Poland –37,6 and 47,9, in Sweden – 249,8 and 93,12.

In particular, the tendency toward reduction of shadow economy took place before 2013 (subject to stable growth of non-cash transaction. In particular, the tendency toward reduction of shadow economy took place before 2013 (subject to stable growth of non-cash transaction), first of all, by monetary costing method. But shock events in 2014 (aggravation of panic and financial destabilization almost

by Russian aggression) broke this connection. Only in January-September 2015 Ukraine could stabilize macroeconomic situation and move towards decline in shadow economy (40% of GDP in 2015 according to the Ministry of economic development). Reduction of cash in money stock can also indicate that trend to declining in future will be fixed.

The development of non-cash transaction has achieved the greatest success in Ukraine. In particular, this is confirmed by the development of non-cash payments through POS terminals – payment cards. The growth share of non-cash payments in the total amount of transactions is from 5.2% in 2009 to 31.2% in 2015 (this corresponds to some European countries, including Poland). The introduction of ceiling amount of cash settlements on 9.01.2013 had a direct impact on the development of non-cash payments. In this case, transactions between the individual and enterprise should not exceed 150 thousands UAH (or 6 thousands EUR).

According to Ukrainian experts, such cash transaction limits should help to attract additional financial resources to the economy of Ukraine and lead to reduction of shadow operations.

Payment cards are not only a convenient payment tool, but also stimulate economic growth as an evidenced by research of agency Moody's Analytics [19]. Agency experts have concluded that consumption in the economy will grow at 0,056% annual average with the increasing using of payment cards. According to this agency, the widespread using of payment cards in Ukraine helped to increase its GDP by nearly 460 million US dollars (or 0.07% of GDP) for 2011-2015.

Note that the speed of Ukraine's transition to non-cash payments directly depend on the willingness to change the market, including the state of its infrastructure. Currently, the average number of POS-terminals per 1 million population of Ukraine is far behind European countries (4.5 thousand to 10 thousands in Eastern Europe, or 22 thousands in Western Europe). An example of successful infrastructure is in Poland, which for four years has expanded its

network of POS-terminals by 58% to 10 thousands, a positive impact on reducing the shadow economy (by 2 percentage points to 23.3%).

Despite the steady growth of transactions with using payment cards (on average 23% per year), Ukraine remains a country with low number of credit cards by 1 person. While the undisputed leaders in terms of non-cash payments are countries with the highest level of socioeconomic development. The economy of these countries is less vulnerable to economic and social upheaval, and people try to properly perform their consumer behavior.

However, most people in the world are not ready to refuse cash due to its convenience, anonymity and liberty. So the use of cash for consumer services payments remains popular. MasterCard consultants, exploring progress for 33 countries, which move towards non-cash economy, reached conclusion that about 85% of all consumer payments are still made by using cash [14]. While all countries, that took part in research, showed the progress on the road of non-cash society during the last 5 years.

Realization of this concept is planned in the following areas of work: decrease in demand of cash, development of non-cash payments and infrastructure and formation of consumer culture as the element of financial capability of people. Moreover, National bank adopted the requirements (Decision of the National Bank of Ukraine from 06.09.2016 number 382 “On amendments to some regulatory legal acts of the National Bank of Ukraine”) for banks not to impose full responsibility for users about contested transactions with using plastic cards. This will improve the level of customer service of payment cards and confidence to its using.

CONCLUSIONS

In conclusion, we would like to note, that the main purpose of unshadowing the economy is creating the favorable conditions for legalization businesses, economic investment of legalized capital and so on. These problem solving is the main goal of branches of government. However, the methods of fighting against the shadow economy in Ukraine are still unsystematic and summarized by the

using of punitive penalties. This is not laying the foundation for the reduction of the shadow economy without providing feedback protection of natural and legal persons by public authorities. Meanwhile, overcoming the shadow economy is a prerequisite to the Ukraine–European Union Association, and therefore, the main problem of Ukraine toward the European community.

Ensuring the unshadowing is a component of public policy for the developing the country's economic system, harmonization the state and citizens' interests, creating the favorable conditions for performance of economic operators in the legal terrain.

According to current trends in the world for non-cash payments and dynamic development of credit card market in Ukraine, we can also conclude that the most effective and modern mechanism of unshadowing the economy is a continuation the policy of noncash payments.

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