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#### Mode

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The monograph deals with modern determinants of fiscal policy formation taking into account national and international guidelines. The strategic guidelines of a competitive tax environment formation in the context of solving the social and economic problems of society are outlined. The analysis of the financial system functioning under conditions of geopolitical imbalances is carried out. The innovative trends in modern fiscal theory are presented. The prospects of development of national and international business under conditions of tax harmonization are investigated.

For researchers, lecturers, postgraduates and students, government officials, including employees of fiscal services, economics practitioners, and everyone interested in issues of fiscal policy.

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## PREFACE

Fiscal policy plays an important role in the modern economy, as it has effective instruments and performs important functions for the state and the population. The question on the role of fiscal policy as a tool for regulation of the national economic system is of great interest at this time, when there is a real necessity of searching for the sources to solve the crisis, combat inflation, ensure proper living standards and stimulate national production development, because all this can be achieved in the case of its effective implementation.

Classic examples of application of fiscal policy instruments is the economic cyclicity adjustment mechanism. In particular, under economic recession conditions, fiscal theory advises to apply stimulus packages such as reduction in tax rates, granting tax incentives, increasing unemployment benefits, etc., for economic recovery. Instead, in the conditions of achieving high rates of economic growth, in order to avoid "overheated economy", fiscal policy instruments are used in the opposite direction. However, the outlined mechanisms rarely function under present conditions. Current realities of society's functioning show inefficiency of a great deal of classical economic laws. First of all, the different types of economic cycles stratify one onto another both in terms of one country and on a global scale. Therefore, it is difficult to determine the stage at which it is necessary to put into action the appropriate tools of fiscal policy. In addition, there are its time lags, which may level all the efforts. The reaction of the person as a man of thought to certain social and economic challenges is different, as far as the principles of behavioral economics begin to dominate in the modern society. Therefore, conducting fiscal policy at the present stage is changing. It requires a lot of knowledge in the related fields of study, awareness of social and economic situation both domestically and globally and the most important thing is the ability to predict it for perspective.

The current fiscal policy of Ukraine, as of any other state, is determined by both internal and external factors. Unfortunately, nowadays in Ukraine external non-economic factors greatly influence when applying the instruments of fiscal policy. Hostilities in the east of the country force to accumulate considerable resources for the army support that is an additional fiscal burden for population, whose welfare remains low. Military conflict and economic instability in the country discourage foreign investors creating dependence conditions on "donations" of international financial institutions. The current collaboration with the International Monetary Fund forces the government to conduct the unpopular reforms in housing and communal services in the sphere of tariffs increase, which again reduces the welfare and purchasing power of the population.

On this background, the situation in the field of monetary policy, which is directly related to the fiscal policy, does not increase the optimism. Under conditions of deep economic crisis, the exchange rate of national currency is constantly decreasing. The National Bank in this situation does not have sufficient tools to control the exchange rate that under conditions of import dependency reduces the financial well-being of the people.

Thus, nowadays fiscal policy is one of the main means of stabilizing the economy and solving the crisis. We are convinced that under the current circumstances any reforms in the fiscal realm should be aimed at improving the well-being of the population. Taking into consideration the fact that in Ukraine the minimum wage is about USD 60, according to UN standards more than 80.0% of the state's population is below the poverty line. We believe that population's income growth is the flywheel that must start the economic growth of Ukraine.

This monograph is an attempt to show the possible ways of solving the economic crisis in Ukraine using the instruments of fiscal policy. Moreover, it highlights the issues relating to the problems of the functioning of other areas of social and economic life of the state, which could influence the decision-making in terms of fiscal policy implementation and determine the efficiency of its tools usage.

The first chapter of the monograph focuses its attention on the strategic guidelines for forming competitive tax environment. In particular, it deals with the divergence of interdependence of formation of competitive tax environment, functional and institutional aspects of reform of the state customs affairs and fiscal capacity of the Ukraine's customs system, vectors of activation of subnational taxation system in Ukraine, prospects of implementation of ecological and labor tax reform in Ukraine, the strengths and weaknesses of the VAT reverse charge mechanism, methodological problems of evaluation of efficiency of tax administration in Ukraine, international tax risk management practices and the possibility of their application in Ukraine, analysis of current changes in the simplified taxation system in Ukraine.

The second chapter examines the special features of the financial system functioning under conditions of geopolitical imbalances. The causes and the ways of solving regional fiscal imbalances are examined, consumer behavior of households in Ukraine under modern conditions is analyzed, the health insurance market is monitored, the prospects and the results of fiscal consolidation are outlined, the problem of harmonization of fiscal policy of Ukraine under conditions of European integration is considered, the peculiarities of the customs system functioning in Ukraine are ascertained.

The third chapter of the monograph is devoted to innovative trends in modern fiscal theory. In particular, attention is given to the conceptual principles of the fiscal regulation mechanism in Ukraine, dialectics of use of tax and debt instruments of fiscal policy, the conceptual essence of institutions of taxation, budget and tax regulation as well as priority areas of Ukraine's customs policy.

The fourth chapter covers the issues of the international business functioning under conditions of tax harmonization. The section deals with the interaction of investment activity entities in the context of tax priorities, taxation of infrastructure bonds, customs tools of Ukraine's trade liberalization with the EU, financial and tax regulation of agriculture development under conditions of dependency on international collaboration, peculiarities of the application of VAT towards the e-commerce in the European Union.

The main idea of this monograph is intentions of the authors to form modern approaches to conducting fiscal policy under current conditions, taking into account existing challenges and threats as well as acquired world and domestic experience aimed at improving welfare of the population.

# 1. Strategic guidelines in forming competitive taxation surroundings

# 1.1. Divergence of interdependence of formation of competitive tax environment in Ukraine

Transformations of geopolitical and geoeconomic priorities form the modern architectonics of world economy and predetermine appearance of updated approaches and requirements to provision of effective functioning of national systems of public management. Their effectiveness should support the appearance of efficient and effective instruments in solving complex intercultural contradictions especially those arising within global space. That's why, the interdependence between countries increases and the necessity of organizing effective forms of coexistence arises supporting transparent international economic cooperation. The progress of modern world exists owing to global integration, the main features of which are corresponding principles and institutional mechanisms of its development.

Global integration, as a means for association of countries, promotes effective interaction between them on each stage of transformation of society and is based on realization of common interests. Global integration causes changes in the world structure making new integral systems influencing the intensive development of mankind in general. So, global integration supports structural changes in modern system of international relations and mainly supports equal division of social and political, economic and cultural potential between countries under the conditions of common global vector of social evolution. The range of each country is considerably expanded owing to the rapid development and spreading information and communicative systems under such conditions. At the same time, corresponding processes ever limit national possibilities of the countries as subjects of international economic and political relations. according to this the role and meaning of political elites decreases which should explain the essence of some phenomena caused by these processes.

However, it is necessary to define that the mechanisms of supporting competitiveness in functioning of the state as social institution in such global processes depend on the next factors: historical conditions; types, forms and structure of state apparatus, and also the type of interrelations between the state and society. One of the means of global integration in modern conditions of world development is a global expansion that is space broadening in interaction between states [1].

The concept of transition economy which was started to form since the end of the 20th century is one of the most important and controversial paradigm of modern world economic system being realized under the influence of behavioral factors which have direct influence on the choice of instruments concerning supporting balanced development. The evolution determination of modern society is of great interest which does not ruin its natural base, spiritual and cultural ground and created conditions of vital activity, do not cause the appearance of vast destructive processes threatening its existence. The problem of forming doctrine of balanced social development is in question for a lot of countries in the world including Ukraine. The absence of corresponding strategy causes many imbalances in forming state socio-economic relations. During last decades a lot of different programs and concepts concerning directions of transition to market economy have been formed, but the issue about mechanisms and methods of supporting balanced social development was out of perfect investigation though being enough controversial and discussed by scientists and communities.

Valid normative and legal acts, developed national programs and laws do not cover comprehensively this diverse and complicated problem of transition of Ukraine to market economy. Such situation has got number of negative effects reflected in macroeconomic tendencies of social development of our country (Figure 1).



Figure 1. The main macroeconomic indicators of Ukraine during 2014 Source: compiled by authors according to data of State Statistics Service of Ukraine Ukraine's economy has not been increasing since the second half of 2012. In the third quarter of 2014 the gross domestic product (GDP) showed 5.3% decrease compared to the same period last year. At the same time the dynamics of the main components of GDP became worse: industrial production decreased by 10.7%, capital investments decreased by 23.0%, export and import of goods decreased by 14.4% and 27.4% respectively, retail turnover decreased by 8.6% and real incomes of population decreased by 9.0%.

The current social and economic situation in Ukraine should be estimated according to correlation of influences of world financial and economic situation and internal contradictions accumulated in national economy. The results of comparative analysis show that recent years tendencies in Ukrainian economy are similar to those macroeconomic indicators of EU countries-"newcomers" and countries-participants of intergovernmental association of the Community of Independent States (CIS) (Table 1).

Table 1

#### Dynamics of GDP growth rate in CIS and EU countries-"newcomers" (% in comparison with previous year) for 2007-2014\*

Countries	2007	2008	2009	2010	2011	2012	2013	2014
Azerbaijan	151,3	141,5	88,7	119,3	122,6	105,1	106,3	101,4
Belarus	122,6	133,6	105,9	119,7	180,7	178,5	122,4	119,9
Bulgaria	106,9	105,8	95,0	100,7	102,0	100,5	101,1	101,7
Armenia	118,6	113,3	88,0	110,1	109,2	105,9	106,9	105,9
Kazakhstan	125,8	124,9	105,9	128,3	126,4	110,1	116,2	109,7
Kirghizia	124,7	132,5	107,0	109,5	129,8	108,6	114,4	111,8
Moldova	119,4	117,8	96,0	119,0	114,6	107,1	113,9	110,9
Poland	107,2	103,9	102,6	103,7	104,8	101,8	101,7	103,4
Russia	123,5	124,1	94,0	119,3	120,9	111,1	106,5	107,9
Romania	106,9	108,5	92,9	99,2	101,1	100,6	103,4	102,8
Tadzhikistan	137,2	138,3	116,5	119,7	121,7	120,3	112,1	112,5
Ukraine	132,4	131,6	96,3	118,5	120,3	108,4	106,7	104,1
Croatia	105,2	102,1	92,6	98,3	99,7	97,8	99,1	99,6
Czech Republic	105,5	102,7	95,2	102,3	102,0	99,2	99,3	102,0

Source:compiled by authors according to data [2]

But during 2012-2014 in Ukraine and in CIS countries GDP growth rate decreased while EU "newcomers" showed the growth of the given indicator. The signs of macroeconomic imbalances are available during the analyzed period in Ukrainian economy, because GDP volume increase was not caused by constant long-term factors. Economic growth was not a result of system internal reforms but the consequences of favorable short-term external and internal factors including inflation processes (Figure 2).



Figure 2. Dynamics of inflation rate in Ukraine during 2005-2015 2015 – estimated figures

Source: compiled by author according to data of State Statistics Service of Ukraine

Taking into account the real situation of Ukrainian social and economic environment formed on the base of crises regular phenomena, foreign experts increasingly make conclusions about prognostic technical default in Ukraine in the end of 2015 [4]. But national specialists emphasize theoretical probability of such situation already in July of 2015 [5].

Hence, in comparison with the stated above countries, the dynamics of GDP growth in Ukraine should be defined as unstable. Obviously the reason for such statement is too high volatility of trajectory of macroeconomic dynamics (Figure 3), which does not show clearly outlined dominant of the development and GDP annual growth rate fluctuates from 4.1% in 2014 to 32.4% in 2007 reflecting complex cyclic nature of the GDP volumes curve caused mostly by endogenous factors of continuous economic crises during the research period of 2007-2014.

# Figure 3. Dynamics of changes in GDP volume during 2007-2014 (% in comparison with previous year)



Source: [2]

Taking into account key aspects connected with functioning of the state and the necessity of financial support from the International Monetary Fund (IMF), unrealistic revenue plan was included in the budget of 2015 (Figure 4).



\*pessimistic prediction of the governemnt Source: [6] \*\* optimistic prediction of the government

The government set the State budget revenues plan for 2015 by 30.0% more than it was expected during 2014. To some extent such increase can be explained by transfer of personal income tax from local budgets to the State budget. But even if not taking into account the factor of personal income tax, we can see that 26.0% increase in planned tax revenues is explained by the IMF experts as a considerable excess of financial capacity of the country because nominal GDP growth was planned at 11.0% up to UAH 1721 billion [7]. Paying attention to such moderate growth of tax base it is almost impossible to have such ambitious revenue increase under current conditions. There is a necessity of broadening tax base. But as the practice showed in 2014 imposition of new taxes does not have sufficient revenue potential that's why such proposed budget will be under-executed (at the level of UAH 30-40 billions on the year results).

Value added under market conditions is one of the main indicators for the assessment of activity of separate enterprise or branch as well as the degree of economic development in general. Stated above value dimension shows how much new value is added to raw materials in the process of production of ready product which can be bought by the final consumer. Exactly bought, in other words, value added should be realized in order the manufacture could be able to regenerate and increase. That is to say, in market economy similar value should be added to labour in order the final product should be competitive. Under current conditions of economic development of our country the stated above questions are of great interest because of modern approaches to forming new mechanisms of business activity.

The main part of gross value added in Ukraine was in industry -20.8% and in agriculture -20.7% (Figure 5). It should be defined that in comparison with 2012 for industry the stated indicator almost has not changed (only +0.2%). But the share of agriculture increased more than twice (+ 11.7%). The share of construction (2.2% (3.2% - in 2012)) was the least in common structure of gross value added in Ukraine in 2014.

Increase in budget arrears was added to high deficit in 2014. Nevertheless, by the results of 2014, in general, budget revenues increased by 2.9% in comparison with the previous year, VAT revenues showed increase only by 8.3%, reflecting a difficult economic situation. Expenditure increase considerably exceeded revenue dynamics for a long time. But according to the results of the year, this indicator was only 3.4%. Such effect was owing to considerable reduction in capital expenditures in the end of the year (by 32.0% in annual dimension). As a result budget deficit





was 5.1% of GDP, in comparison to 4.5% in 2013. Because of the limit of sources of financing budget deficit, fund balance of the government on the single treasury account decreased to crucial low level. As a result, considerable budget arrears including VAT refund were formed.

Regardless the fiscal consolidation of budget resources, public debt was extremely increasing. During 2014 revenues decreased because of economic fall and also availability of evident problems appeared during tax collection in the east of the country during anti-terrorist operation (ATO) at the same time, when expenditures on national security considerably increased. During March and July for budget deficit decrease the government of the country set up fiscal measures to increase budget revenues along with reduction in expenditures supporting the deficit of the general fund of the State budget of Ukraine at 4.6% of GDP (in comparison with the similar indicator in 2013 which was at 4.8%). Instead of this the great necessity in financing budget off-balance sheet items for covering increasing deficit of the company "Naftogaz of Ukraine" (5.5% of GDP) and supporting the trust to banking system by means of recapitalization of Deposit Guarantee Fund (1.9% of GDP). All this was under the influence of national currency devaluation and it caused the extreme increase in state debt-to-GDP ratio up to 70.6% (in comparison with 40.6% in 2013).

International reserves of National Bank of Ukraine (NBU) decreased to crucial level in comparison to 2013 by 63.1%. Balance of payments of Ukraine during January-December, 2014 was done with deficit at \$13.307 bln. against to surplus at \$ 2.023 bln. according to summing up of the previous year. According to operative data of NBU in the end of 2014 the deficit of current account reached \$ 5.228 bln. and the deficit of capital and financial account – \$ 8.079 bln.

In December, 2014 the deficit of consolidated Balance of payments was \$ 2.261 bln. in particular, the deficit of current account was \$ 711 mln. and the deficit of capital and financial account was \$1.550 bln.

The deficit of current account was caused by reduction in exports of goods during a year by 14.4% up to \$55.6 bln. because of production facilities suspense and transport infrastructure destruction in the east of the country and also price reduction of key goods in the world markets and worsening of trade relations with Russia. Simultaneously the imports of goods reduced by 27.4% – up to \$61.7 bln. caused by weakening real effective exchange rate and reduction in national demand for the non-essential goods in particular electronics, building materials, automobiles, etc. The same situation is regarding capital and financial account deficit because of anti-terrorist operation in the east of the country and a number of macroeconomic imbalances that caused reduction in attraction of investment and credit resources by private sector for refinancing the current payments according to previous loans and worsening investment climate in Ukraine in general.

The volume of industrial production in Ukraine in 2014 amounted to UAH 1195.592 bln. (Figure 6). including 67.7% of the total volume of realization what was processing industry. The volume of realization in electricity, gas, steam and conditioned air (18.7% of the total volume) amounted to UAH 217.099 bln. what is 4.5% or UAH 7.083 bln. less than the volume of previous year. In mining and quarrying industry (12.3% of the total volume) the volume of realization was UAH 153.658 bln. that is UAH 7.2% or 7.839 bln. more than during 2013.

The biggest volume of realized production was in Dnipropetrovsk region – UAH 171.077 bln., Donetsk region – UAH 138.339 bln., Zaporizhzhya region – UAH 66.752 bln. and in Kyiv – UAH 60.041 bln.

The Index of Industrial Production in Ukraine is a weighted average dimension, the base of its structure is data about division of gross value added between industrial types of activity according to individual indexes of each good.

In 2014 the Index of Industrial Production was 89.3% and showed the reduction in the volume of industrial production by 10.7% in comparison with 2013 (Table 2).



realization



Source: compiled by authors according to data of State Statistics Service of Ukraine

Table 2

#### Indexes of Industrial Production in Ukraine for January-December 2014, %

Indicators	December 2014 / November 2014	December 2014 / December 2013	January-December 2014 / January- December 2013
Industry	97,9	82,1	89,3
Mining and quarrying industry	98,5	70,9	86,3
Processing industry	94,9	85,9	89,9
Electricity, gas, steam and conditioned air supply	109,3	88,9	93,4
Investment goods	-	-	79,7
Short-term consumer goods	-	-	101,7
Energy	-	-	85,5

#### Source: [8]

It is the result of the reduction in volume of mining and quarrying industry by 13.7%, processing industry – by 10.1% and electricity, gas,

steam and conditioned air supply – by 6.6%. According to data shown in Table 1.2 it is evident that the biggest reduction in volume of industrial production was in December 2014.

So, in comparison to the same month in 2013 the given index decreased by 17.9% and by 2.1% in comparison to November 2014. For the next year 2015 (January-April 2015), the Indexes of Industrial Production according to the main industrial groups in Ukraine were the following, as it is shown in Table 3.

Table 3

Indexes of Industrial Production according to the main industrial groups	
in Ukraine for January-April, 2015, %	

Indicators	April 2015 / March 2015	April 2015 / April 2014	January-April 2015 / January- April 2014
Industry	98,0	78,3	78,5
Intermediate goods	101,5	82,7	83,4
Investment goods	104,6	73,8	72,0
Short-term use consumer goods	95,8	83,6	87,3
Long-term use consumer goods	88,9	67,8	77,2
Energy	92,3	71,4	70,9

Excluding Crimea, Sevastopol and part of ATO zone Source: [9]

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So, according to the information of the State Statistics Service of Ukraine the Index of Industrial Production for January-April 2015 was 10.8 points lower than in 2014. The fall of this index is also observed according to other industrial groups. The explanation of this phenomenon is the following – difficult political situation in the country influencing national economy development.

At the same time, there is a great potential in the sphere of agrarian production in Ukraine and the country is able to play a very important role in strengthening global food security. In 2012 the share of agrarian economy in total volume of GDP of the country increased to 9.3% and amounted to 17.2% of the level of employment and 26.0% of national exports. But agrarian possibilities are used not fully because of restraining farms' incomes and inadequate policy causing reduction in private investments to the levels lower than necessary for this sector modernization.

In spite of negative factors during 2014 the agricultural production supported positive growth rate of 2.8% (Table 4).

But in comparison with 1990 the volume of production reduced by 6.8% showing not fully usage of the potential of the investigated sector.

#### Table 4

Dynamics of the agricultural output growth rates for 2010-2014, %

Year	Compared to the previous year	Compared to 1990
2010	98,6	69,1
2011	120,2	83,0
2012	96,1	79,8
2013	113,6	90,7
2014	102,8	93,2
Courses [2]		

Source: [2]

In general, the agricultural output growth rate in 2014 was lower than in 2013 (Figure 7).

# Figure 7. The agricultural output growth rates compared to the corresponding period of the previous year, %



Source: compiled by authors according to State Statistics Service of Ukraine

Along with that, only in June 2014 the indicator of the previous year was not the same. The biggest increase in the agricultural output in comparison with 2013 was in September 2014 – 116.0%.

Therefore, in general, macroeconomic situation in Ukraine became worse during last years. At the beginning it was inactivity of authority and executive bodies and corruption, then – military invasion, annexation of Crimea and anti-terrorist operation continuing more than a year in the east of the country – all these not only influence destructively the current

social and economic development but will cause negative consequences in future.

Evaluating interdependences of competitive tax environment formation in Ukraine it is necessary to define that in spite of political and economic crisis, imperfection of valid norms of elective, judicial and fiscal legislation, and also military opposition, the strong necessity of realization of the reforms is of great current interest. To support their realization is possible only by forming long-term strategy of social and economic development of the country which could combine all spheres of social life and base on scientific investigations and logically grounded proofs. That's why, it is important to solve problems concerning providing gualitative educational services, stimulating scientific activity, national financing fundamental sciences and supporting business in making investment in applied sciences. The state should be on the leading positions concerning forming of national paradigm and strategy of well-balanced social development. Simultaneously, the Ukrainian nation steeled in the Revolution of Dignity and defending the interests of our country on the world political arena, has shown its ability to control the authority and move the vector of reforms to the most correct and pragmatic direction. At the same time, the legal field should become an important basic element of the process of state recreation within which will be corresponding transformations. Aggression and unreasonable actions which can be observed today in the process of "cleaning the authority" are not typical to our society and do not solve any problems being of great interest today. Afterwards, combining theoretical knowledge and practical experience, using the style of compromise and mutual help, all these will support the possibility of adequate and effective solution of all problems, in particular will support qualitative formation of competitive tax environment of national fiscal space.

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# 1.2. Fiscal capacity of customs system of Ukraine

Globalization and internationalization effect on the state of economy of each country and cause its dependence on external factors, growth of economic indicators or crisis phenomena in all sectors of economy. Under such conditions, special attention is devoted to the problems of providing economic security from external and internal threats that can be caused by various phenomena such as: trade wars, protection of domestic producers, compulsive restriction of trade in certain commodities conditioned by position of the international community and so on.

Using a variety of economic measures to stimulate foreign economic activity, countries should take care of financial background, such as providing subsidies and export credits. This requires significant financial resources in the form of taxes that can be obtained by the state thanks to foreign trade. Therefore, each state tries to build a customs system that

will ensure not only the development of foreign trade relations, but also budget revenues.

Historically the customs system of Ukraine was integrated into the economic system of Tsarist Russia and the Soviet Union, and as an independent element of economic policy began to develop with the independence of the country. The essence and functions of the customs system, its importance and place in the mechanism of state regulation of the economy, constantly transformed under the influence of the state development strategy and its financial policy.

The concept of "customs system" is multidimensional because we should understand not only the state and other structures that ensure the implementation of customs policy, but also practical forms of their activities, and also customs legislation, including bylaws [1, p. 35]. I. Be-rezhnyuk defines customs system as a functional, control and regulatory, well-organized and well-structured socio-economic system of state customs affairs management in general and all its subsystems, in particular, aimed at to the most effective implementation of customs policy. The author defines customs system as a system of organization of customs service, which operates in the state. In turn, the system of customs service includes all elements of the state customs affairs with its infrastructure.

In his research K. Sandrovskyy considers customs system as a combination of various measures implementing the customs policy that provide economic protection of state borders [2, p. 9]. In the most structured form the concept of customs system is presented in scientific papers by V. Pokrovska, who considers this category as "a major public sector and institution of protection of national interests, within which customs exists". However, "the main purpose of the customs system in the market economy is to ensure the interests of participants of foreign economic activity in maintaining the necessary level of economic security of the state" [3, p. 20]. To do this within the customs system on the one hand, the conditions for foreign trade are being created that can promote the development of the domestic market and integration into the world economy. On the other hand - the state establishes the procedure of movement of goods and vehicles across the customs border, customs declaration, customs duty rates, namely regulates processes in the field of customs, based on the principles of customs policy.

So, in general, the customs system will be considered as an important part of state regulation of foreign economic activity, combining forms, measures and methods of regulation of export and import of goods.

Schematically, functioning of the national customs system of Ukraine is shown in Figure 1. A standardized form of the functioning customs





system at different levels of interaction is manifested in the regulation by international institutions customs formalities and procedures based on innovative approaches in state customs affairs, which helps to minimize transaction costs of customs clearance for participants of foreign economic activity, and strengthening international ratings of countries in the world economy system.

Customs system of the country is an important and effective tool to influence economic processes. In addition, by using existing tools, customs system is a guarantee of protection of economic interests not only of the state in general, but business entities. Directly influencing international trade and performing fiscal function, the customs system solves the important economic problems. As it was noted by V. Martynyuk, functioning of customs system is a unique and specific, which analog is hard to find. The uniqueness is manifested through regulation in the Customs Code socio-economic functions realized by fiscal authorities, and specificity is manifested in special features of operations that are regulated through the customs system [5, p. 84]. Unlike the tax system, customs system more deeply effects on the activities of economic entities that are registered in different countries.

Customs system includes a number of subsystems that are grouped along functional lines and shown in Figure 2. Financial and economic subsystem is called priority subsystem [6, p. 18], which promotes the unity of the internal business processes and relationships. It performs one of the main functions ensuring receipts of customs payments to the state budget. Also, within the financial and economic subsystem measures of protection and promotion domestic producers through the use of instruments of tariff regulation are implemented.

Organizational subsystem includes two components – the technological and informational. The first involves equipping the customs border to optimize the time of implementation of customs formalities, and the second – the creation of a single automated storage system for collecting and processing information through the use of advanced information technology tools. Law enforcement subsystem is focused on ensuring the economic, social and technological security of the state by eliminating and preventing violations of customs legislation of the state.

Both important and controversial part of the customs system is its financing mechanism. On the one hand, such funding is provided through budgetary allocations. On the other hand, the financial and economic mechanism of the customs system can operate on the principles of selfsufficiency, accumulating funds received by fiscal authorities thanks to services for agents of foreign economic activity. Such financial resources are earmarked and can be used to pay officials of the customs system.

#### Figure 2. Subsystems of customs system of the country \*



Source: Based on [7, p. 150; 8, p. 10].

Among the set of functions that custom system performs today, central position is devoted to the fiscal. This thesis confirms the dynamics of receipts of customs payments to the State Budget of Ukraine (Table 1).

Providing receipts of customs payments is the prerogative of the customs offices of the State Fiscal Service of Ukraine that execute customs control and customs clearance of goods crossed the customs border. These agencies provide government revenues at about 50.0% of all tax revenues. As we can see from Table 1, the absolute figures on the receipts of customs payments to the State budget for 2010-2014 are characterized by positive dynamics (except 2013) and in 2014 amounted to 137,657,340,000 UAH. The share of customs payments in the gross domestic product also increased – from 7.95% in 2010 to 8.80% in 2014.

Table 1

Revenues of the State Budget of Ukraine during 2010-2014 that ensured by fiscal authorities, mln. UAH

	Indicator	2010	2011	2012	2013	2014
1	2	3	4	5	6	7
1.	Taxes on income, profits	39969,21	60898,90	62376,12	61883,45	52587,71
2.	Value added tax	12973,92	34079,56	37251,22	31725,61	81239,48
3.	Excise tax	23019,89	25189,12	27417,87	26362,65	28085,46
4.	Ecological tax		1073,40	1211,35	2118,19	2708,49
5.	Others	5097,77	25535,55	22758,46	21386,91	27869,40
6.	The total amount of tax payments that are provided by tax authorities	81060,79	146776,53	151015,02	143476,81	192490,54
7.	% of tax revenues	48,58	56,11	54,97	54,60	51,19
8.	% of GDP	7,51	11,29	10,75	9,89	12,29
9.	Value added tax	73342,00	96014,19	101575,26	96543,70	107287,27
10.	Excise tax	3470,30	6743,49	8478,87	8946,80	16855,38
11.	Customs duty	8847,90	11771,89	13184,88	13342,50	12388,62
12.	Ecological tax		11,98	52,22	246,74	220,08
13.	Others	251,20	286,91	408,94	220,50	905,99
14.	The total amount of tax payments secured by customs offices the of State Fiscal Service	85811,40	114828,46	123700,17	119300,24	137657,34
15.	% of tax revenues	51,42	43,89	45,03	45,40	48,81
16.	% of GDP	7,95	8,83	8,81	8,23	8,80

Source: Compiled and calculated according to the State Treasury Service of Ukraine

Therefore, in Ukraine, despite its membership in the WTO fiscal bias of customs policy dominates. Such things help to set standards regarding the level of customs value of goods that have been used in the customs determining the amount of customs payments at the customs clearance of goods. Realizing the fiscal interests of the state, fiscal authorities provide a high level of receipts of customs payments to the State budget.

An important indicator of functioning of customs system, which shows its importance in economic growth and ensuring financial and economic security of the state, is the State budget expenditures. Their share that is covered by customs payments identifies the fiscal importance of tools and measures undertaken to achieve a common goal – to ensure receipts of customs payments to the budget in full (Table. 2).

During 2010-2014 the State budget expenditures are increasing (Table. 2). Their indicator increased from 303,589.0 mln. UAH in 2010 to 447,300.0 mln. uah in 2014, 1.5 times. However, the coverage ratio of government spending for 2010-2014 is uneven, and its biggest value amounted to 34.4% in 2011. Also it is necessary to emphasize that contrary to the predicted fall in the main macroeconomic indicators in 2014, the coverage ratio of budget expenditures by customs payments amounted to 30.0%. The above figures show that customs offices of the State Fiscal Service of Ukraine provide third of government spending to fulfill its basic functions.

Table 2

# Share of ensuring expenditures of the State Budget of Ukraine due to customs payments

Indicator	2010	2011	2012	2013	2014
Customs payments receipts to the State budget, mln. UAH	85911,4	114816,8	123648,9	119053,5	137657,3
The State budget expenditures, mln. UAH	303589,0	333460,0	395682,0	403403,0	447300,0
%	28.3	34.4	31.3	29.5	30.0

Source: Calculated on the basis of the State Treasury Service of Ukraine

In the process of analysis of the fiscal component of the customs system one should pay attention not only to the absolute amounts of customs payments, but also on the level of administrative costs. Overall, the activities of fiscal authorities must ensure minimizing government spending and foreign economic activity agents' spending during transportation of goods across the customs border of Ukraine. Thus, it is mandatory to ensure compliance with customs legislation. There are cases where there is a curb of trade flows by means of customs control that entails additional costs of economic agents and at the same time it holds back budget revenues.

To sum up, one should note that an efficient customs system should be balanced to perform all of its functions. On the one hand, it should facilitate the customs procedures and further trade liberalization. On the other hand – to protect domestic producers and to ensure an adequate level of receipts of customs payments to the State budget. Also it is necessary to consider the participation of Ukraine in global economic integration associations that requires adaptation of the national customs system to the requirements of globalization.

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# 1.3. Vectors to activate system of subnational taxation in Ukraine

The availability of financial resources at administrative areas as well as authorization to use them is a basis of development for market relations and democratic transformations in any state. According to analysis of the situation in regions, local authorities have to solve problems of social & economic development of the territories: improvement of local community well-being, ensuring steady rates of economic growth at the expense of mobilization of investment activity within a region, and increasing of resources usage efficiency as well as creation of conditions for development of basic economic branches and infrastructural essentials of social & economic development of the territories for reinforcement of their competitiveness.

It is the transformation of the process to form national competitive advantages and its shifting from national to subnational level that gives task to scientists and politicians to revise theoretically the rules of regional influence upon reinforcement of national competitiveness on the world market as well as to create the efficient mechanism for harmonization of regional and national interests [1, p. 1].

The main question that local communities face during such shifting of emphasis on subnational level, is financial supply of programs that local authorities are responsible for. In this respect it requires scientifically substantiated revision of government tax policy aiming at reinforcement of subnational taxation role.

Meanwhile, it is important to keep in mind the dynamics of modern development of taxation, caused by amendments to budget & tax regulations, reorganization of fiscal bodies, decentralization of tax policy, emergence of new risks in the mechanism of tax administration, etc. The comprehensive research of theory and practice of subnational taxation will highlight the expected effects from reforms in tax policy under the context of balancing and modernization of regional development.

The mechanism of tax policy and distribution of tax powers in particular are dictated by the character of state system i.e. what the state is: federal or unitary one. While the tax system of federal state has three levels – federal (federal taxes), regional and local (sub-federal taxes), the tax system of unitary states has two levels – national and local taxes. To say more, group of local taxes can be heterogeneous and include taxes of different sub-levels. Particularly, on the example of Ukraine we can spot the difference between local taxes and duties (whose list is limited in accordance with tax regulations) and taxes coming to local budgets (including national ones). Thus, those taxes coming to local budgets in Ukraine should be defined as subnational or identical to sub-federal ones in the countries with the federal state system.

Hence, the subnational taxation system is the system of local and similar to them taxes and duties that, according to valid regulations, belong or subscribed to local budgets. The formation of efficient tax system on the subnational level, that would include local, subscribed and adjustable taxes and duties, is extremely relevant task on the current stage of tax reform in Ukraine.

The tax policy on subnational level is a constituent part of economic policy, which is implemented on the level of regional management due to the strategy of local social & economic development. The mechanism of tax policy implementation here is defined as an aggregate of organizational measures and practical instruments to influence the development on regional level.

The dominating goal to form and implement the tax policy on subnational level is considered to be the increasing of regional fiscal potential at the expense of its revenues and social & economic rate growth as well as elaboration of taxation mechanism that aims at the promotion of investment activity in the region. Hence, the selection of main instruments to implement the tax policy on subnational level is carried out in such correlating directions:

fiscal – to provide sufficient rate of revenues in the region;

 regulatory – for efficient redistribution of economic agents' incomes, elimination of disproportions in distribution of these incomes;

 stimulant – to sustain the priority branches of economy and improve the rates of regional social & economic development.

It is obvious that growth of regional financial, investment and industrial resources is relevant to economic and social development of the region.

Modern conditions in Ukraine indicate the availability of considerable drawbacks in the system of regional tax relations that negatively impact the volume of gross regional product, deteriorate the investment attractiveness of the area. The valid rules for diversification of tax revenues between state and local budgets, existence of economically disadvantaged regions, increasing of inequality and disproportions in social & economic development either do not allow to stimulate the modernization of regional economy or result in emerging of depressive territories that lose contacts with united economic area and become an obstacle for entire successful national development. In this case, the tax policy should be aimed at conducting economic reforms in regions in particular implementation of economic recovery programs [2, p. 64].

First of all in Ukraine, one has to increase the rate of fiscal decen-

tralization for improvement of efficiency of tax policy on subnational level and growth revenues to local budgets i.e. the financial development of local communities and enterprises. So far, those local communities in developed countries that are self-sufficient in financial terms are likely to be stabilizers of social, political, financial and economic situation on the national level.

Decentralization is closely linked to organization of public management system. It promotes the modeling of efficient relations between the government and local authorities. Decentralization is a diversification of rights and powers of local and regional authorities in independent decision-making and accomplishment of delegated by state duties. Decentralization is also a method of regional organization for organs of power when a state delegates rights for decision-making in a number of issues to local or regional authorities that are not constituents of executive power and relatively independent from central authorities [3, pp. 35-47].

One should also mention that tax decentralization is a diversification of rights and powers of local and regional authorities in independent decision-making and accomplishment of delegated by state duties in formation of local budgets at the expense of taxes, duties and other compulsory payments [4, pp. 144-150].

Besides, it is necessary to differentiate the budget decentralization which is determined as a process of authority's (functions', competence and responsibilities) delegation by central government to local authorities [5]. Such delegation of authority should be accompanied by a transfer of corresponding financial resources to support the accomplishment of this authority via levying local taxes or handing-over some national taxes to local authorities.

Integration of mentioned-above definitions is transformed into fiscal decentralization. American economist Ch. Tiebout was the founder of such approach. His idea was that fiscal decentralization would give an opportunity to subnational authorities to be independent in financing of public services. He proved that only under fiscal autonomy of sub-national organs of power the public expenditures would be relevant to individual preferences of customers according to their requirements [6].

Considerable contribution into development of fiscal decentralization theory was also made by W. Oates who suggested the following definition: "decentralization is a right of decentralized units to make independent decisions" [7]. According to his theory the regional and local authorities can make their decisions concerning financial and managerial issues. It was Oates who suggested the main principles of classical theory for tax and budget decentralization. Due to the author, the main decentralization rule is: tax functions and functions of budget expenditures financing without any extreme conditions should be ultimately decentralized for taking advantage out of voters' will on the basis of their newest preferences. This rule is relevant to Ch. Tiebout's research projects. In this case the decentralization concept first of all belongs to powers associated with decisionmaking about financing of expenditures, and obtaining revenues.

Thus, during substantiation of the efficiency of tax policy on subnational level, we can conclude that subnational budgets should be financed at the expense of taxes levied on local inhabitants who are simultaneously their main consumers. It is also important that the taxes are of regional character and their incidental consequences for other regions were minimal.

The fiscal decentralization process itself can be carried out by means of de-concentration or devolution. De-concentration assumes that the government delegates a number of its tax functions like planning and financing to regional representatives but retains general control. Hence, de-concentration is an administrative instrument which application authorizes central executive bodies to make decisions. The devolution assumes that the government delegates some authorities and functions of taxation to local authorities. The main goal here is convergence of authorities with population and improvement of transparency alongside with accountability. Under such conditions the local authorities act within general political framework established by the government though they function independently during accomplishment of their duties.

The local authorities are supposed to be independent in terms of identification of revenues sources and identification of municipal tariffs and taxes. The budget independence is the right of local authorities to have their budget as well as approve and make amendments in it. The independence in terms of municipal tariffs is the right of local authorities to run individual tariff policy in communal payments. Tax independence assumes the right to levy the local taxes and their rates, incentives and determination of tax base [8, pp. 145-151].

In general, the fiscal autonomy depends upon the role of subnational managerial bodies in national economic system. If local authorities run the policy dictated and elaborated by higher ones, there is no necessity of fiscal independence. To the contrary, if the local management carries out its own expenditure programs and individually determines the volume and quality of its public services, the incapability of local authorities to influence the tax rates will result in absence of levers to impact upon the revenues to local budgets.

The important indicator of financial independence is ability-to-pay (taxes) ratio of an area. This indicator is used in a lot of foreign coun-

tries and is calculated as a correlation between area ability-to-pay and average domestic ability-to-pay. If the ability-to-pay ratio in the area is less than "1", such territory gets a financial aid under process of financial equalization. If such ratio is more than "1", than this area becomes financial donor. Respectfully, the low ability-to-pay areas or poor territories are reasonably of low financial independence rate. And vice versa, the high solvency areas or rich territories are of higher independence rate. This also concerns the areas with middle ability-to-pay rate.

In European countries every budget is independent and separated from others, and local budgets of lower levels are not included to regional budgets of higher levels. For example, the own-source revenues of local budgets in Sweden and Switzerland make up more than 70 per cent, 50 per cent in Spain, and 56 per cent in Norway of revenues to local budgets. It proves the fact that own-source revenues are a main source of revenues to local budgets of unitary European states.

Generally, in European countries there are formed the principles for efficient functioning of subnational taxation institutions that assume:

- fair distribution of tax burden taking into consideration taxpayers' ability-to-pay and benefits they get from public services rendered by local authorities;
- transparency of tax burden for individuals and companies that will promote the efficient distribution of resources;
- confirmation of authorization for local managerial bodies to amend on demand the rates of local taxes under imposed in advance restrictions;
- low rate of economic (minimal impact on municipal economic area), demographic (avoiding migration of population) and social (avoiding deterioration of social well-being) consequences;
- certain elasticity promoting the correction of tax revenues according to changes in expenditures [9, pp. 78-83].

Thus, the tax policy of local authorities in a number of states is likely to be an important instrument of influence upon distribution of labor resources and sustention of depressed areas. Having obtained the opportunity to create special or preferential tax regimes, the local authorities induce extra investments, promote capital construction and foreign economic relations. Besides, the foreign experience shows that the less the certain district is developed, the more benefits it gets from local authorities to overcome the economic lag.

In comparison to developed countries, the share of own-source revenues to local budgets in Ukraine is low that indicates the low rate of financial independence of local authorities. The long-term practice of local taxation in Ukraine even after the latest amendments to regulations shows that system of local taxes and duties plays subsidiary role to national taxation. Such conditions are caused by existing discrepancies in the system of collection and distribution of revenues on subnational level. One has to mention the following ones among them:

- considerable transfers from bodies of public administration;
- out-of-time receiving, short-coming of transfers and their receiving in non-monetary form;
- lack of stimuli among highly developed regions to broaden the tax base.

The valid system of distribution of budget powers is characterized with its exceeding centralization on the governmental level. The fiscal instruments of local authorities are limited. Even when the relevant authorization is available, the region with low financial resources cannot use them due to invalid intergovernmental relations. Hence, there appears the vivid necessity to delegate the most fiscal powers to local authorities (fiscal decentralization) in order to accumulate the budget resources for rendering public services.

Thus, the important condition of implementation of strategy of social & economic development both on national and subnational levels is an efficient tax policy within fiscal decentralization. The system of regional strategic development evokes the necessity to specify and make relevant the essentials of tax policy toward reaching strategic goals in regional social & economic development.

Here, the irregularities in territorial development result in the necessity of tax policy adaptation to peculiarities of regional economy. Nowadays the efficiency assessment of tax policy is carried out from the view-point of a taxpayer or the government and it is not being made on regional level. Hence, there emerged objective necessity in elaboration of methods to evaluate the efficiency of tax policy, which would take into consideration both governmental interests and fiscal and social impacts of subnational taxation.

Hence, the vectors for development and modernization of subnational taxation system due to positive international experience are:

- implementation of main principles of tax and budgetary policy aiming at construction of the reinforced financial & economic basis of local self-government;
- creation of taxation environment that is favorable for activation of business activities, provision of equality of taxpayers before the law and step-by-step formation of taxpayers' responsibility of accomplishment of their tax duties;
- decreasing of inequality in property status through modernization of administration system for the tax on real estate, other than land;

- gradual reducing tax burden upon local economy due to balancing of budget system [10];
- shifting the tax burden from mobile industrial factors (labor and capital) on consumption, environmental and resource payments;
- improvement of fiscal efficiency of compulsory payments at the expense of modernization of administration system, optimization of tax incentives and broadening the local tax base due to reducing the scale of tax evasion.

To activate fiscal and social effects of subnational taxation it is necessary to hand over wide enough powers concerning formation of own systems of taxes and duties to local governments. One has to legally attach to every managerial body the own steady source of revenues. It is caused by delineation of functions and competence at every level in a state and vital necessity to reinforce the budgets independence on different levels [11, p. 134]. The reasonability of this approach was proved in world practice as "decentralization of tax systems is a process which is very fast in highly developed countries" [12, p. 69] and intrinsic to both federal and unitary countries.

Concluding the mentioned-above one has to state that starting-point for the implementation of activation of subnational taxation in Ukraine is formation of new institutional tax environment which is supposed to ensure the implementation of the principle of equality of all taxpayers before the law, avoiding the cases of tax discrimination and formation of taxpayers' responsibility for accomplishment of their tax obligations as well as accommodation of fiscal decentralization into national tax system.

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# **1.4.** Background and prospects of ecological and labor tax reform implementation in Ukraine

Human civilization is not capable of functioning without the planet's resources. Back in time, the first human settlements have learned to develop land and natural resources successfully that has allowed people to survive, and to further create a comfortable environment for life. However, if at the initial stages of the human society development there was no question of the feasibility and scope of natural resources' use, nowadays there is an acute problem of its rational use and conservation in the best ecological condition possible. Natural resources of the planet are limited, and the population is constantly growing. The volumes of use of natural resources are increasing too as well as the human impact on the environment that is polluting ecosphere.

In such conditions, a range of measures concerning the limitation of the volumes of natural resources extraction and use is discussed and implemented on national and international level, different energy-saving technologies and high tech production processes are stipulated that help to rationalize the resources flow and reduce the negative impact on the environment. Usually in the legislation of the individual countries, natural resources are determined as the state property. Therefore, economic and administrative measures of the rational use of resources are implemented on the legislation level. They can include full or partial prohibitions, limitation for resources usage, licenses, rent payments to the state, etc. Moreover, together with these measures, there are tax payments for the environmental pollution in many countries of the world, this stimulates producers to develop and implement innovative technologies to decrease harmful effects to the biosphere. Therefore, tax regulation of using ecological resources of the planet is one of the most effective indirect ways of impact in this matter.

Tax policy of the state should also take into consideration the total impact of taxation on the activity of business and citizens. The fiscal role of particular taxes, which are going to be imposed, possible regulation influences as well as their correlation with other payments, should be taken into consideration. Regulation mechanisms of ecological taxation in the majority of the world's countries are at the moment focusing on the increase of tax burden on the resource flow. Increase of the overall tax burden is negatively considered by the society in general and by business in particular. Therefore, it should be looked for alternatives of the redistribution of tax burden between factors of the production in the state.

According to the classification of taxes based on the object of taxation, they are divided on taxes on income and profits taxes, consumption taxes, property taxes and resource payments. According to this classification, the tax burden can be different for incomes of individuals, profits of corporations, consumption, property and resources. However, tax burden structure is absent in the methodology of the statistical office of the EU (Eurostat). Instead, the budget revenue structure is distinguished (direct taxes, indirect taxes and social payments (contributions)) where environmental fees are included in the direct taxes. In addition, the structure by the economic function of taxation, according to which the tax burden is distributed between consumption, labor and capital as factors of production, is common. This structure also does not include the ecological or environmental taxation. Instead, the structure of environmental taxes in relation to GDP is represented separately. In turn, all components of the above-mentioned methodologies are considered in their relation to GDP. Therefore, the most adequate approach to estimate the correlation of tax burden on the resources and other components of the state budget formation is compering their GDP shares.

The average environmental taxes in the countries of the European Union are equal to 2.4% of GDP [1, p. 158]. Out of them: 1.8% are energy taxes, 0.5% – transport taxes and 0.1% – charges for pollution of the environment and use of natural resources. In Ukraine, the share of resource and environmental payments constitutes 1.4% of GDP [2], two thirds of which is the land tax, which does not carry any ecological function as

well as the function of natural resources rationalization. For comparison, average tax burden on labour in the EU countries is 20.1% of GDP, and this indicator in Ukraine is equal to 17.4%.

Such discrepancies in the distribution of the tax burden cause range of problems. First, high level of taxation of salary and other incomes of population stimulates citizens to hide their incomes, and high level of social contributions stimulates employers to pay salaries "in the envelopes". For Ukraine this problems is especially relevant, because the overall level of incomes is very low (in 2015 average salary in Ukraine was about 170 USD) [3]. On the other hand, we have the high level of environmental pollution, which is caused by not effective control over the activity of business entities in the field of harmful emissions and low ecological payments. Very typical situation for Ukraine is also the domination of resource industries in the export and GDP, which is also characterized by the low level of rent payments.

Therefore, modern tax system in the majority of countries of the world is formed based on the old views, where the natural capital was considered "for free". Very obvious that such structure of taxation is causing exhaustion of the natural resources and environmental pollution. At the same time, such structure stimulates employers to save to the maximum on creating new jobs and on the salaries; it also stimulates job shortages and therefore leads to unemployment.

A real paradoxical situation appears: tax policy promotes phenomena that society considers dangerous and harmful, and inhibits the processes that society considers useful. Such illogic manner of the traditional taxation structure has led to the development of the EU concept of "ecological and labor tax reform". The essence of this reform is simple and clear: shifting the tax burden from labor and capital to the resources flow.

One of the strongest sides of this ecological tax reform is doubling the dividends. First, resource consumption taxation is a strong incentive to reduce consumption; taxation of resources will promote new, less resource-intensive technologies, implementation of energy efficiency measures, pollution prevention and many more. This "environmental" benefit (which economists call "green dividend") is obvious. However, contrary to popular idea among businesspersons, in case of the eco-tax reform costs "on the environment", do not become an additional burden that is administratively "hang" on the manufacturing sector. Because increase of the "ecological" taxes is connected with the parallel decrease of taxes on labor and capital, employers in general are carrying the same expenses, as before, but receive a motivation to open a new job places and increase salaries. This second, social, dividend of the eco-tax reform can have more important society impact as the benefits for environment. In order to reduce the political opposition to the reform, while planning ecological and labor reform, so called "fiscal neutrality" should be maintained, meaning introduction of new "green" taxes should be fully compensated by reduction in labor taxation, and the total tax revenues of the State Budget should remain unchanged.

Nowadays, in the world fiscal practice, the objective of tax reforms can be shown in two areas:

- 1. Creating favourable conditions for economic development;
- 2. "Greening the tax system" the growing role and share of the environmental taxes.

Ecological and labor tax reform contributes to solve two problems, mentioned above, because of that it was spread around the world. Thus, from the 1980s, revenues from environmental taxes in OECD countries increased in about 4 times.

Ecological tax offset, which was theoretically discussed since the late 1970s, became a reality in 1990s within a growing number of European countries with the biggest momentum in the period 1990-1994. Denmark, Italy, Netherlands, Germany, Norway, United Kingdom, Finland and Sweden introduced reforms that link the various "green" taxes with a reduction of contributions to the fund of social protection. "Transit" of tax yielded from 0.2 to 2.5% of tax revenues in these countries. Austria and Belgium announced the implementation of ecological and labor tax reform, and have done the first steps in this direction. Due to the "greening" of the tax systems, revenues in the countries of the European Union in the period 1980-2001 from environmental taxes have increased almost four times - up to 238 billion euros, without inflation adjustment. Major part of this revenue is gained from taxes on gasoline, diesel and automotive engines. In Germany, for example, eco-tax, which is deducted from various forms of energy consumption, was introduced in 1999, after which it increased by 4 times every year. Until 2002, it had already helped to avoid more than 7 million tons of carbon dioxide (CO2). Annual revenues increased from about 4 billion USD in 1999 to 19 billion USD in 2003. Thanks to that, more than 60,000 new jobs were created until 2002 [4, p. 55].

Table 1 shows short characteristics and the results of the ecological and labor tax reform in particular countries of the European Union as of 2001.

Table 1

Characteristics and the results of the ecological and labor tax reform in particular countries of the European Union

Country	Tax reduction	Tax increase	Financial amount of the tax offset
Sweden (1990)	<ul> <li>Personal income tax;</li> <li>Tax on energy for agriculture;</li> <li>Continuous training.</li> </ul>	• $CO_2;$ • $SO_2;$ • Other.	2.4% of all tax revenues.
Denmark (1994)	<ul> <li>Personal income tax;</li> <li>Social contributions.</li> </ul>	<ul> <li>Different (gasoline, electricity, water, waste, cars)</li> <li>CO<sub>2</sub>;</li> <li>SO<sub>2</sub>;</li> <li>Capital profit.</li> </ul>	Around 3.0% of GDP till 2002 and more than 6.0% of all tax revenues.
Netherlands (1996)	<ul> <li>Corporate income tax;</li> <li>Personal income tax;</li> <li>Social contributions.</li> </ul>	• CO <sub>2</sub> .	0.3% of GDP in1996, or around 0.5% of all tax revenues.
Great Britain (1996)	Social contributions.	Waste utilization.	Around 0.1% of tax revenues in 1999.
Finland (1997)	<ul> <li>Personal income tax;</li> <li>Social contributions.</li> </ul>	<ul> <li>CO<sub>2</sub>;</li> <li>Waste utilization;</li> <li>Corporate profit.</li> </ul>	0.3% of GDP as of March 1999 or around 0.5% of all tax revenues.
Norway (1999)	Personal income tax.	• $CO_2$ ; • $SO_2$ ; • Diesel fuel.	0.2% of all tax revenues in 1999.
Germany (1999)	<ul> <li>Social contributions;</li> <li>Renewable energy sources.</li> </ul>	Oil products.	Around 1.0% of all tax revenues in 1999.
Italy (1999)	Social contributions.	Oil products.	Less than 0.1% of all tax revenues in 1999.

Source: [5]

Therefore, data in Table 1 demonstrate that as a result of administering the reform, majority of the countries lowered social contributions from salaries, some countries lowered personal income tax. At the same time, it has observed the increase of environmental and resource payments such as tax on carbon dioxide, taxes on oil products, etc.

For Ukrainian context, both of these aspects of such reform are very relevant. High level of burden on payroll fund is stimulating employers to pay salaries unofficially, hiding from taxation. This, subsequently, reduces the taxation base, revenues from single social contribution and personal income tax. From the other side, incentives to create new job places are absent. From the employee's point of view, there are few disadvantages too. First, it is hard to get employed officially. Unofficial employment or minimum official salary are not providing employee with the necessary level of social security, nor in the working period, neither on his pension time.

Therefore, in the current circumstances, getting the payroll funds out of the shadow is one of the most important problem of the economy. In 2015, government and the fiscal authorities began to introduce series of reforms in the administration of the single social contribution in terms of its payment by employers. The essence of these reforms lies in reducing the rate of single social contribution by a condition of increasing the salary level for employees and fulfilling the range of other criteria. However, such reforms practically do not contribute to the legalization of wages, because such criteria are financially unacceptable for employers. In this situation, the absolute reduction of single social contribution rate as part of the ecological and labor tax reform is an effective alternative way out of the situation.

Equally important for the state is the second effect of the reform, which is to increase the tax burden on the resources. First, revenue compensation (due to single social contribution reduction) is provided. At the same time, the conditions for improving the environmental situation in the country and rationalization of the use of natural resources would be created.

Taking into consideration the level of environmental taxation, there are absolutely well-grounded conditions for its increase in Ukraine. Comparing the shares of eco-taxes in GDP of the EU countries and Ukraine, the indicator in our country is 1.0% less, than in general in the EU countries. Share of the eco-taxes in the tax revenues of the EU states is 7.2% [1, p. 240], and in Ukraine (without counting the land tax) – 2.2% [2].

Therefore, in this way, we see clear arguments for ecological and labor tax reform implementation in Ukraine, but such reform must be administered gradually. Steps of transition should be determined in advance for the minimization of normal production cycle interruption. Tax reform that broadens the tax base by resource flow in the conditions of lowering the level of taxation of personal incomes and payroll fund should become a key moment in the structural rebuilding of the Ukrainian tax system.

Positive prospects of ecological and labor tax reform in Ukraine are intensified by the fact that the current tax system, introduced as part of market reforms, is relatively new and still shallow rooted in the Ukrainian economy. Changing the taxation system of Ukraine allows to reach the simultaneous effective increase of salaries in the process of economic development, attracting investments in technological innovations, reducing costs of energy and other natural resources by reducing energy and material consumption of the production, reducing harmful emissions and environmental pollution, implementation of effective restructuring of the industry, reducing dependence on energy imports, improving the trade balance and strengthening national security. Moreover, advantages of the resources and environmental taxes are their relative simple administration. Transit from statistical accounting of the natural resources' use that our enterprises are doing nowadays to the tax reporting is simple. Environmental taxes are difficult to evade because they are based on the accounting of physical quantities. Indicators of resources are difficult to hide unlike shadow cash flows, which use unaccounted cash and which contribute to the shadow wages [6, p. 393].

Let's take a detailed look on the composition and structure of the ecological and resource taxation in Ukraine to outline the ways of activation of these payments' regulatory function. According to the Tax Code of Ukraine, ecological tax and rent can be included in so called "green taxes".

Ecological tax was introduced in Ukraine in 2011 with the entry into force of the Tax Code. Taxpayers are entities engaged in pollutant emissions into the atmosphere and water objects, remain hazardous and radioactive waste and so on. Tax rates are set in hryvnias per ton of pollutant. These substances include several chemical compounds such as nitrogen oxides, ammonia, hydrocarbons, carbon monoxide and others. At the same time, a part of the substances, which the environmental tax is paid for, is carbon dioxide at a rate of 0.26 UAH per 1 ton. This rate has practically no regulatory effect on air pollution. Instead, a tax on carbon dioxide is among the main environmental taxes in most EU countries. Of course, raising its rate to the level of developed countries (about 1 USD per ton) significantly increases the tax burden on businesses, so this must be done within the framework of the ecological and labor tax reform by reducing the burden on the payroll fund. In 2014, the share of ecological tax was approximately 1.3% of general tax revenues that is too low amount in the context of the regulation of harmful substances emissions.

Thus, in the context of ecological and labor tax reform in Ukraine, we offer to review the existing ecological tax rates in the direction of their increase, especially concerning the carbon dioxide. Some scientists propose to introduce a separate carbon tax. In our opinion it is more efficient to strengthen its regulatory role as a component of ecological tax, as for the economic content, purpose and the mechanism of administration, it corresponds to the ecological tax. By increasing the tax rate, it will be appropriate to apply a gradual approach in parallel with the gradual reduction of the single social contribution. In our opinion, it is inappropriate to indicate the final rate of the tax. Its size should be correlated with the rate of the single social contribution. Therefore, the final goal of the reform should be legalization of the salary with the respective level of the single contribution. Therewith, the reform of environmental taxation should be completed, i.e. the upper limit of ecological and rent payments must be established with the goal of tax revenues compensation.

Rent in Ukraine consists of:

- rent payment for the use of subsoil for mining;
- rent payment for the use of subsoil for the purposes not related to mining;
- rent payment for the use of radio frequency resource of Ukraine;
- rent payment for the special use of water resources;
- rent payment for the special use of forest resources;
- rent payment for transportation of oil and petroleum products by the main oil pipelines and oil-products pipelines; transit transportation of natural gas and ammonia by the pipelines through the territory of Ukraine.

Until 2015, these payments were called fees for special use of natural resources and amounted up to 5.8% of tax revenues. The largest share of these payments is payment for the use of subsoil (payment for the use of mineral resources) - 91.2%. This structure is logical since minerals are a finite resource and therefore businesses should be encouraged to use them rationally. More detailed analysis indicates that the biggest share of the payment for the use of subsoil belongs to extraction of oil and natural gas. The profitability of enterprises, engaged in these activities, is extremely high. For example, the rent rate for oil extraction is 45.0% of its value, and natural gas - 70.0%. That means that the state, which owns these natural resources, gains from oil 45.0% of its value, and the business, that produces it, receives in the form of profit over half the value of the resource. As a result, without producing anything, oil and gas extracting enterprises obtain unbelievable profits. In this situation, the rent payments in this field should be raised, and the financial flows into the state budget should be redistributed.

Let's take a look on the other natural resources, which require a long time to recover – forest resources. In this area, there are no unified approach in terms of property of the companies, involved in the harvesting and sale of forest resources. Some enterprises are state-owned, and some are private. Revenues from fee for the special use of forest resources account 0.1% of all tax revenues or 2.8% of the rent payments. Such poor indicators and rates of this particular payment do not encourage forest preservation of the state. This has led to the fact, that Ukraine is facing an unsystematic deforestation. Therefore, the rent in this area should also be increased.

Therefore, conducting the research, we have come to the following important conclusions:

- Ukraine's tax system is based on outdated principles, which practically does not take into account the regulatory impact of environmental and resource payments. Instead, the excessive tax burden on labor destroys incentives to create new work places and leads to the shadow salaries;
- 2. In developed countries of the world since the beginning of 1990s, ecological and labor tax reforms took place; the essence of which was shifting the tax burden from labor and capital to the resources, that provides:
  - efficient salary increase and increase of employment in the process of economic development;
  - attracting investments into the technological innovations;
  - decreasing the expenses of energy resources and other natural resources through lowering energy and material volumes of the production;
  - decreasing the harmful emissions and environmental pollution;
  - administering efficient structural reform of the industry;
  - decreasing the dependence on energy resources import, improving the trade balance and increasing the national security of the country.
- 3. Nowadays, there are all conditions for effective implementation of ecological and labor tax reform in Ukraine. Tax burden on resources is much lower than in the developed countries of the world, and the burden on labor is much higher. Besides, the tax system in Ukraine is in the process of formation that will give a possibility to go less painful through the transformation period after the reform.
- 4. The reforming process should be gradual. The rate of a single social contribution should be lowered gradually as well as increasing the rate of ecological tax and rent payments.
- 5. In terms of the ecological tax, special attention should be paid to increasing the carbon dioxide tax rate. Instead, reforming the rent payments should be focusing on increasing rent payments for oil and gas extraction and the special use of forest resources.

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# **1.5.** Analysis of modern transformations of simplified taxation system in Ukraine

The comprehensive analysis of foreign experience and national practice of small business development proves the fact, that while there is no efficient complex governmental support, this extremely important macro component of market economic system is doomed to recession and will never become a powerful sector of national economy. Having taken into consideration the deficit of budget financing for address aid, the main method of sustaining small business during implementation of institutional market transformations is likely to be its indirect subsidization via fiscal mechanism. Moreover, due to latest amendments to the Tax Code of Ukraine concerning simplified taxation system, one can summarize that its particularly wide application has been determined by national lawmakers as a main direction of implementation of such preferential tax policy in the sphere of sole proprietorships.

A lot of local (V. Andruschenko, V. Vyshnevskyy, Yu. Diakon, Yu. Ivanov, O. Kyrylenko, A. Krysovatyy, S. Yuriy), Russian (V. Kniazev, D. Chernik, Ye. Shkrebela, T. Yurkina), and foreign economists (C. Blankart, J.Yu. Stieglitz, U. Tissen, W.M. Hassi) devoted their scientific researches to substantiation of conceptual fundamentals of tax policy in the sphere of small business, investigation of theoretical and applied aspects for alternative tax technologies for small business, built up according to principle of most taxes and duties integration into unified payment, assessment of their fiscal efficiency and stimulating influence on the economic activities of small business, selection of optimal mode of taxation of small business. Nevertheless, the legal regulations for simplified taxation regime for small business in Ukraine have experienced rather tough transformations for a number of times that extremely deteriorates application of this alternative tax technology. One more time the substantial changes in the simplified system of taxation, accounting and reporting for small business were adopted by Law of Ukraine No. 71-VIII from 28/Dec/2014 "On Amendments to the Tax Code of Ukraine and Certain Legislative Acts of Ukraine Regarding Tax Reform" which became due from 01/Jan/2015 [8]. So the necessity in analysis of legal norms that substantially modified mentioned alternative fiscal technology both from the point of view of normative taxation theory and of available legal contradictions remains relevant.

Hence, the objective of this investigation is an identification of problems of valid simplified taxation system for small businesses in Ukraine that facilitate assuming the ways of its further optimization and solution of problems associated with its implementation. To the contrary of similar researches [2; 7; 13; 14], the attention will not be concentrated on minor technical innovations specifying the order of single tax payment and administration, but there will be made an attempt to analyze mentioned alternative tax regime on conceptual level from the viewpoint of its relevance to fundamental axioms and normative principles of efficient taxation.

One of the main latest legal innovations about simplified taxation system is diversification of small businesses as potential single tax payers into three groups depending on annual income ratio and number of employees (restriction of employees was imposed only to 1<sup>st</sup> and 2<sup>nd</sup> groups of single tax payers). The next crucial innovation is creation of 4<sup>th</sup> group including agricultural producers whose share of agricultural output for the previous tax year is equal or exceeds 75 per cent. Thus, the technology of single tax, to our mind, absorbed rather artificially and unreasonably fixed agricultural tax. The arguments to prove the stated authentic position are following.

Firstly, the main objective of imposition of simplified system of taxation, accounting and reporting in Ukraine was to promote small business under complicated conditions of market economy formation by means of substantial decrease in expenditures on adhering regulative tax procedures (complex tax accounting, submission of diversified tax reports and payment of a number of compulsory payments). As a considerable bulk of agricultural enterprises due to imposed quantitative criteria can not be regarded to be small businesses their classification as a single tax payer is rather incorrect.

Secondly, single tax for small businesses (fixed or as a percentage

of income) and single tax for agricultural producers, which used to be called more correctly as fixed agricultural tax, are of different economic nature. Thus, the former, due to its economic contents, belongs to taxes charged on economic agent's income; the latter belongs to the category of property taxes because it is paid according to available arable land (croplands, pastures, hayfields, forests and gardens) and/or water fund land (ponds, lakes, internal basins, storage reservoirs) being either a property or rented.

Hence, the methods of calculation of single tax for small businesses and agricultural producers will be different. If the tax liability for the first type of single tax is calculated as a product of legal minimum salary or income and unified percentage rates, then sums of tax liability of single tax for agricultural producers are calculated by multiplication of three ratios: total area of arable land (water fund land), normative monetary assessment of one hectare of agricultural land and tax rate being differentiated according to type of soils and their location [8].

Basing on the mentioned above, one has to admit that the Tax Code of Ukraine has to differentiate these types of single tax as it used to be. Besides, we would like to state that due to the objectives of this research project the future investigation will be dealing only with simplified taxation system for small businesses (without single tax for agricultural producers).

The summary reflecting peculiarities of currently valid in Ukraine modification of simplified taxation system for small businesses is presented in Table 1.

Despite of a number of disputable moments and unsolved problems, national simplified taxation system is generally assessed by some scientists and specialists supporting strict governmental tax support of domestic small business to be quite progressive [6; 9]. Although the tax burden has slightly risen due to an increased unified single social contribution, the single tax payers lately were allowed to work with corporate entities and to increase the ultimate value of annual turn-over.

So for the first group of taxpayers the annual sales and services turnover, which facilitates the application of simplified taxation system in the form of fixed single tax, increased almost in three times: since 01/Jan/2012 this ratio was augmented from  $\gtrless119,000$  to 150,000, and from 01/Jan/2015 – up to  $\gtrless300,000$ . The same way there was increased ultimate income rate for sole proprietors belonging to the 2<sup>nd</sup> group of single tax payers at first from  $\gtrless500,000$  to  $\gtrless1,000,000$  and later up to  $\gtrless1,500,000$ .

For the newly imposed 3<sup>rd</sup> category of single tax payers (there are former 3-6 groups) there was cancelled the restriction about number of

Table 1

Categories of Small Businesses paying Single Tax and Conditions of its Payment under Latest Amendments to the Tax Code of Ukraine\*

Group of tax- payers	Qualitative Characteristics of Single Tax Payers	Quantitative Requirements to Grouping of Small Businesses as Single Tax Payers	Single Tax Rate	Tax Period
1 <sup>st</sup>	Sole proprietors involved only in retail trade at outlets on marketplaces or render consumer services to individuals (the list of 40 services is given in point 291.7 article 291 of the Tax Code), under condition they are relevant to quantitative criteria during a calendar year	No employees. The amount of income does not exceed €300,000	Up to 10 per cent of the minimum salary (since Jan/2015 – €1218) <sup>1</sup>	Calendar year
2 <sup>nd</sup>	Sole proprietors rendering consumer services to individuals or single tax payers, production or sales, restaurant business <sup>2</sup>	No employees or their number does not exceed 10 individuals <sup>3</sup> . The amount of income does not exceed €1,500,000	Up to 20 per cent of the minimum salary (since Jan/2015 – €1218) <sup>1</sup>	Calendar year
3 <sup>rd</sup>	Sole proprietors <sup>4</sup> and legal entities – economic entities of any organizational and legal form, under their compliance to quantitative criteria during a calendar year	Number of employees is unlimited. The amount of income does not exceed €20,000,000	2 per cent of income if VAT is paid 4 per cent of income if VAT is included into the single tax	Calendar quarter

Source: Compiled by the authors on the basis of [8]

<sup>1</sup> If single tax payers refer to 1<sup>st</sup> and 2<sup>nd</sup> qualitative characteristics, maximal single tax rate for such type of economic activity is due. If single tax payers refer to 1<sup>st</sup> and 2<sup>nd</sup> qualitative characteristics on the areas belonging to 2 and more local communities, maximal single tax rate for corresponding group of single tax payers is due. In case single tax payers run 1<sup>st</sup> and 2<sup>nd</sup> group activities, maximal single tax rate for corresponding tax rate for such type of economic activity is due. If single tax payers run 1<sup>st</sup> and 2<sup>nd</sup> group activities, maximal single tax rate for such type of economic activity is due. If single tax payers refer to 1<sup>st</sup> and 2<sup>nd</sup> qualitative characteristics on the areas belonging to 2 and more local communities, maximal single tax rate for corresponding group of single tax payers is due.

<sup>2</sup> Excluding small businesses rendering dealer's services in purchasing, sales, rent and real estate appraisal (group 70.31 КВЕД ДК 009:2005) as well as produce, supply or sell jewelry and welfare commodities of precious metals, gems, organic gems or semi precious stones.

<sup>3</sup> Calculation of total number of employees does not count on employees who are currently on maternity leave during authorized period.

<sup>4</sup> Including small enterprises rendering dealer's services in purchasing, sales, rent and real estate appraisal (group 70.31 KBEД ДK 009:2005) as well as produce, supply or sell jewelry and welfare commodities of precious metals, gems, organic gems or semi precious stones if they refer to quantitative requirements for 3rd group of single tax payers.

employees and stated that amount of income both for sole proprietors and companies should not exceed  $\gtrless$ 20,000,000 (this ration rose in 20 times since the introduction of simplified taxation system in 1998). We agree with those scientists who consider such increasing to be reasonable since the permanent growth of inflation rate, minimum salary and consumer prices (for example, the minimum salary rose in 22 times from 01/July/1998 to 10/Jan/2015) [11, p. 782].

Concerning the disputable issues of coming reform of single tax payment order, it should be stated that suggested amendments do not comply with normative maxim of taxpayer's ability to pay during definition of tax liability. According to this principle the shares of tax payments in incomes of a small business during application of general or simplified tax technology should not be different. Particularly, the system of single tax payment within such approach from the viewpoint of tax burden upon sole proprietors should not give any quantitative advantages upon payment of tax and duties array according to general tax system (tax on incomes and other taxes and duties, which substitutes single tax) beside simplification of tax accounting and reports. In this context one has to admit that single tax rates can be hardly ever called scientifically substantiated and those to reflect totally the general fundamental principle of construction of efficient and reasonable taxation system.

Therefore, the main difference between alternative taxation schemes should be both in accounting difficulties degree and expenditures on adherence to tax procedures. Small enterprises meeting the requirements but unable to shift to simplified tax regime will face the equal challenges with single tax payers if they stick to this norm. Besides, it will deprive big and middle business of any wish to minimize the tax burden by elaboration of complicated schemes containing simplified taxation technologies.

To our mind, the application of unified rates of single tax in per cent to income for 3<sup>rd</sup> group payers does not facilitate the branch features of expenditures, added value and production (service) costs, i.e. to avoid considerable deviations in level of tax burden for similar in economic scale small businesses working in different sectors of economy. Hence, the single tax interest rates should be differentiated at least from the viewpoint of amalgamated branches of economy.

The requirement, when simplified taxation system does not refer to non-resident sole proprietors and companies (pp. 291.5.7), is not sequenced with the Tax Code principle of taxpayers legal equality and nondiscrimination, which ensures equal treatment of all tax payers regardless their social status, race, nationality and confession, corporate property category, country of residence, capital origin (pp. 4.1.2) [11, p. 784-785].

Let's do thorough insight of the problem of simplified taxation system

application for easing of fiscal liability at big and middle business, which after some attempts to reform the single tax both remains unsolved and is apt, to our mind, to deteriorate in future as result of introduction of new restrictions for number of employees and annual income of small businesses that are supposed to shift to single tax payment. Thus, in spite of detailing of economic agents who are not allowed to use simplified taxation system (they run mainly highly profitable business and were not founded by small economic agents) current reformed technology of simplified taxation remains attractive for middle and big businesses as it enables tax avoidance through manipulations with different competitive tax regimes.

The internal nature of the mostly widespread schemes that use legal "gaps" for half-legal or formally legal minimization of tax burden is following.

Firstly, big and middle-size businesses cooperate with sole proprietors as single tax payers and VAT non-payers. The mentioned above companies sell to the latter goods at cost or discount prices and form tax credit with VAT, meanwhile the sole proprietors sell these goods at market prices, pay back to companies in cash without reflecting such deals in accounting. As result the tax liability to budget decrease considerably that leads to big losses in revenues and so discrepant governmental financing of public goods. Even imposed mechanism of correction of tax liability due to deviations between contract and market prices can not solve this problem completely as pricing process being accomplished by economic agents is not likely to be under total control.

Secondly, some big and middle-size companies make their employees to register as sole proprietors – single tax payers and sell via them their output (goods and services). Such artificial small economic agents pay fewer taxes and give the possibility to big companies to minimize their tax liability with VAT and corporate income tax considerably. Besides, the popularity of the scheme to optimize taxation is caused be high level of tax burden upon salary & wages fund in Ukraine.

An employer prefers "camouflaging" his/her employees as sole proprietors, who use simplified tax technology in the form of single tax, to paying single social contribution, individual income tax, and military duty. Such situation is one more direct violation of normative ability to pay principle in taxation. Moreover, using wage labor by registration of employees as sole proprietors – single tax payers leads to limitation of the latter's rights because artificially registered sole proprietor doesn't have those rights that are included into labor legislation for employees [12].

Due to mentioned above one has to admit the problem which is indirectly associated with application of simplified taxation system for small economic agents that comes as follows. Considerable number of single taxpayers can be hardly ever embraced with the total tax control that leads to multiple abuses and violations in hiring of staff and rendering decent social protection after retirement. Some small businesses risk at hiring employees without any job contracts [10], the employees are getting their salaries and wages either on half or full illegal basis. It forces the employees to violate consumers' rights by around treatment and miscalculation in the form of cheating. In general, low salaries in future result in poor retirement plan. Nevertheless, after taking effect of new norm (article 265) of the Labor Code of Ukraine concerning the responsibility of employers for employment of employees on illegal basis as well as illegal payment of salaries and wages assuming high penalties for labor law violations [5], the situation improved considerably. However, to resolve the problem entirely, it is necessary to optimize the tax burden upon employers in the sphere of salaries and wages payment.

Our idea is to essentially neutralize the risk of abuse with simplified taxation schemes (single tax as percentage of the minimum salary or as percentage of income) through the artificial diversification of big and middle enterprises into small businesses, it is necessary to impose the rule of aggregation of economic turnover and number of employees. The essence is that businesses being founded (owned) or controlled by an individual or stockholders (or common center for decision making), should be recognized as unified payers of single tax. Violation of this rule has to result in substantial sanctions and disqualification of all members of such "alliance" in terms of application of simplified schemes on a long-term basis (e.g.: three years).

However, in order to avoid faults by fiscal authority's officials, the suspects in such abuses have to be confirmed in commercial court (in special tax court after its establishment) [4, p. 144]. For example, such grouping of taxpayers with available financial and economic or organizational integrity was stated in article 11 of EU Directive 2006/112 about VAT, it was also imposed in Austria and Germany (so-called "Organschaft Directive") [12].

Due to considerable decrease in bureaucratic expenses on adherence to tax regulation procedure the simplified system of taxation, accounting and reporting promotes the processes of self-employment, business incentive in small business sector and formation of middle class. To the contrary, the absence of thorough accounting of incomes and expenditures and no appropriate tax control retains the possibilities to use this simplified tax technologies in "dirty" or prohibited economic operations [12] and disseminates increase in the size of shadow sector of economy. The adopted by Law of Ukraine from 28/Dec/2014 No. 71-VIII "On Amendments to the Tax Code of Ukraine and Certain Legislative Acts of Ukraine Regarding Tax Reform" requirement about application of registrars of payment transactions with fiscal functions making cash payments by single tax payers will definitely improve to some extents the functionality of tax control after small economic agents – single tax payers. The fiscal functions mean the capability of mentioned registrars to provide download, long-term storage in fiscal memory, multiple usage and impossibility of changes in final data about the volume of transactions or volume of foreign currency exchange transactions [3].

The requirement of compulsory application of registrars by 3<sup>rd</sup> group single tax payers is valid from 01/July/2015 and by 2<sup>nd</sup> group single tax payers it is scheduled since 01/Jan/2016. Nevertheless, the legislators, as result of powerful political pressure from small business representatives and their public organizations, making amendments to the Tax Code (p.296.10) had to meet halfway. Thus, the registrars of payment transactions are no longer used by single tax payers of:

- 1<sup>st</sup> group;
- 2<sup>nd</sup> and 3<sup>rd</sup> groups (sole proprietors) regardless of selected type of activities whose income is less than €1,000,000 [8].

No one has managed so far to solve entirely another problematic moment about application of alternative general and simplified taxation systems should not impact the selection of organizational and legal forms of activities of small economic agent due to tax reasons (apart from those types of activities being not under simplified taxation) as the violation of mentioned requirement will result in distortion of competitiveness conditions and violation of economic freedom by small businesses that withholds the market self-regulators.

According to valid tax regulations single tax payers can not include sole proprietors running technical tests and research (74.3 KBEД ДК 009:2005 group), audit operations (pp. 291.5.2 of the Tax Code), meanwhile they include companies that seems to be irregular issue. Besides, it contradicts to the norms of Law of Ukraine "About Audit Activities" No.3125-XII authorizing both individuals and companies to run audit operations. One has also to emphasize here that, if there is no such exception, and then the auditors – sole proprietors should belong according to the Tax Code to 3<sup>rd</sup> group of single tax payers and, hence, pay it at the same rates as companies do. That is why the legislators' motives are obscure as they allowed audit firms the transition to single tax payment and simultaneously forbade it to individuals [1].

The list of discriminative norms of the valid Tax Code of Ukraine influencing the selection of organizational and legal form or type of activity of small business includes the ban to practice the single tax technology for sole proprietors who lend plots with total area up to 0.2 hectares, premises and/or their parts with total area up to 100 square meters, nonresidential premises and/or their parts with total area up to 300 square meters (pp.291.5.3). This restriction at the same time does not refer to companies [8].

The summary of all stated above is following.

1. The transparent and clear general order of taxation for economic agents including small businesses facilitates more thorough consideration of essential principles of optimal taxation and preventing considerable deformations in levels of tax burden. The preferences for small economic agents under multi-tax system should be focused on elimination of fiscal and bureaucratic expenditures on tax accounting and reporting. Moreover, that national tax regulations that propagates general taxation system is of complicated, obscured, containing a number of legal irregularities and ineloquent determination of legal norms by tax payers and tax bodies. That is why in current social and political situation the cancellation of simplified taxation system without efficient reform of general taxation order can result in even more negative consequences than discrepant single tax payment by small economic agents. Thus, the simplified taxation system should be retained in the nearest future but it has to be deprived of spotted discrepancies and legal irregularities by adoption of corresponding amendments to valid tax regulations. It will encourage national small business to experience intensive development and the state will improve the transparency of tax policy and decrease the level of tax torts in small business that will promote budget revenues on all levels.

2. Further modernization of single tax payment technology for small businesses in Ukraine requires the following fundamental research: prediction of possible stimulating and fiscal consequences of valid option of tax technology based on economic and mathematical (imitative) models and IT; critical study and selection of the most appropriate proposals made by national small business representatives, scientists, practitioners, and tax officers about optimization of taxation in small business; deep insight of fiscal regulations (norms) in foreign countries with transitive economy that reached remarkable success in accelerated development of small and middle-sized business, etc. The special attention should be paid to studies and implementation of positive experience in the sphere of preventing tax delicts as well as legal technical minimization of tax base by means of simplified taxation schemes, which results in considerable losses for governmental financial interests.

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# 1.6. Strengths and weaknesses of the vat reverse charge mechanism: a theoretical framework

The current situation of tax compliance in Ukraine is characterized by imbalances and absence of coordinated and sustainable development. It caused to a great extent of complexity of administering VAT, which is now one of the major budget revenue generating tax in Ukraine. The mentioned problem significantly depends on use of fraudulent schemes, considerable expenditure of human resources and financial support in order to control the VAT payment.

These challenges are common not only for Ukraine, but also for other countries worldwide, notably for EU countries. The nature of VAT itself gives the possibilities for dishonest taxpayers to take advantage of the gaps in the tax law in order to use fraudulent schemes. Thus, recently VAT became one of the problematic instruments in national fiscal systems, notably, due to abusive practice of VAT refund.

The failure to ensure an effective control for the VAT refund caused the discussions about possible change of VAT by another type of the universal excise (turnover tax or sales tax). But the EU integration course of Ukraine conditioned that VAT remained in the Tax Code of Ukraine as one of the main taxes, being changed, however, by some way regarding to the administration system and tax refund procedure.

At the end of 2014 the revolutionary changes in the VAT administration system were adopted in Ukraine, notably, the implementation of the electronic VAT administration (i.e. the introduction of special VAT accounts) is one of the effective tools in order to ensure the comprehensive fight with fraudulent schemes.

But the problem of improvement of current VAT collection procedure remains to be important. This is confirmed by the government's assignments related to the reforming of VAT administration system, stated both in the Coalition Agreement and in Strategy of Sustainable Development «Ukraine-2020», fulfillment of which the State Fiscal Service of Ukraine participates in. It should be noted that now the tax authorities operate aimed to stop tax evasion schemes in order to reduce the shadow sector, to reduce the number of dishonest taxpayers and to increase the budget revenue.

Accordingly, there is the interest to the VAT reverse charge mechanism, which used in the EU countries in order to fight with fraudulent schemes and to simplify the VAT refund procedure. Taking into account the above-mentioned facts, the detailed analysis of strengths and weakness of the VAT reverse charge scheme is required in order to conclude on the possibility of its practical application in Ukraine.

The impact of the application of the VAT reverse charge mechanism to the provider and the recipient of the taxable fulfillments, mainly for the construction works as well as the impact of the administrative burden related to the evidence of this scheme for the tax entity and also for the tax administrator were analyzed in Grasgruber et al. [8]. Beca & Şerban [3] highlighted the main reasons and effects of the adoption of the VAT reverse change scheme for the supply of cereals and industrial plants in Romania. Lamensch [10] examined the efficiency of the VAT reverse charge scheme in a digital context, and in particular their practicability for suppliers (acting as tax collectors) and discussed whether they are in compliance with the 1998 OECD recommendations on e-commerce.

Tumpel [18] identified criteria for successful implementation of the reverse charge VAT and explained how this mechanism would resolve the problems of existing VAT rules within a Common Market of European Union that would combat VAT fraud effectively. The cross-border reverse VAT issues were studied by Chossen [5].

The VAT reverse charge mechanism as a possible prevention of approach of the VAT frauds scenarios was discussed in Rajagopalan [13], Ainsworth [1], Bukhsh & Weigand [4].

At the same time, the EU experts assessed the practical application and impact of the VAT reverse charge mechanism within the EU VAT system [2; 15; 16].

VAT reverse charge mechanism was created to fight against VAT fraud across the Member States. Practically, the introduction of an optional reverse charge system means that those Member States that opted for it would require that, where invoices were issued above a threshold amount, the customer, when he is identified as a taxable person, would be liable to pay the VAT instead of the supplier. For any supply below the threshold or for a non-taxable person the supplier remains liable for the VAT as is the case today under the normal rules.

To control the movement of «untaxed» goods, which are subjected to the reverse charge businesses, would be required to fulfill extra reporting obligations. Notably, the supplier provides a periodic global list detailing his customers with VAT number and the value of supplies. The customer may also be required to provide the tax authorities by the purchase list containing the supplier's details and the value of transactions to match in general sense the supplies with the purchases [12, p. 3].

The «reverse charge mechanism» will potentially apply to the following sectors: mobile phones, integrated circuit devices, supplies of gas and electricity, telecoms services, game consoles, tablet PCs and laptops, cereals and industrial crops and raw and semi-finished metals [7, p. 2].

The performed analysis of the possible strengths and weaknesses of the VAT reverse charge mechanism allowed us to summarize them as it is represented on Fig. 1.

The main advantages of the VAT reverse charge scheme are as follows.

### Fight against fraudulent schemes.

Fight against VAT frauds is very important now for the EU countries. Commonly, the VAT frauds are divided into following categories.

*Black market fraud.* Economic agents operating in the black market do not file VAT returns, so they can understate the value of their sales and/or overstate the value of their purchases.

Second category includes *Missing Trader Intra Community* (MTIC) schemes, which in turn can be divided into three types.

Acquisition fraud. This is the simplest missing trader fraud where the one fraudster imports some goods. These are zero-rated in the country of origin, and VAT is due in the country where they have been imported. But fraudster charges basic price and VAT. Later fraudster become missing trader and does not pay VAT to the Government, resulting in VAT losses

*Carousel fraud.* Under this scheme, trader purchases goods from a supplier located in another EU state. Then the trader sells the goods to a business and charges VAT. Later on the missing trader disappears without paying the VAT. This starts a chain process where the buying economic agent sells the goods to a second agent and charges VAT paying the excess VAT received from the second agent to the government. The same type of fraud exists between the second economic agent and the third one etc. The latest economic agent in the chain sells the goods to a broker. After exporting goods, for example, in certain EU country, the broker reclaims the VAT on next purchase. At this time fraud is revealed, that VAT was not being paid by the missing trader.

*Contra-trading fraud*. A contra-trading fraud occurs when the «first» broker does not submit a claim to obtain a refund of the VAT charged to





him. Instead, he uses a «clean» deal chain to offset the VAT. This means that the broker imports goods from another EU state without paying VAT on that transaction. This VAT charge and import goods strategy continues until one broker down the supply chain submits a claim for a refund of input tax. This type of fraud could be regarded as a combination of two frauds: carousel and a scheme where the input and output VATs neutralize each other [4, pp.1-2].

In general, according to the estimations of European Commission experts, the VAT tax gap in 2012 due to non-compliance or non-collection was  $\in$ 177 billion which equates to 16.0% of total expected VAT revenue of 26 Member States. Thus, in 2012 the lowest VAT tax gap was in the Netherlands (5% of total expected VAT revenue), in Finland (5.0%) and in Luxembourg (6.0%). The highest values of this parameter were in Romania, Slovakia and Lithuania – 44.0%, 39.0% and 36.0% of total expected VAT revenue respectively [17].

Under a VAT reverse charge, the importer does not charge VAT on its domestic sales as long as its customer, who sells goods to the final consumer, is VAT-registered. The customer, if it decides to export the goods, cannot claim a refund of input VAT, as under the VAT reverse charge regime, since it would not have paid any. Therefore, such reverse charge system is able to remove the ability to commit carousel MTIC fraud [13, p. 2].

But it should be noted that it is true for all stages of the supply chain, except the retail level. At this level the possibility of VAT fraud still exists and the amount of tax that can be defrauded is greater. So the VAT fraud at the retail stage becomes more profitable.

The European Commission Directive recognized that the reverse charge mechanism has proved its effectiveness in specific sectors such as construction. But equally it is argued that despite its application could reduce certain types of fraud, also entails other problems, such as the risk of new types of fraud. In addition, EU countries, which promote broader use of the reverse charge mechanism, consider that such a system has to be accompanied by additional tax compliance obligations, compared to the current system, in order to avoid new risks of fraud [6, p. 9].

#### **Positive liquidity effects**

For the VAT-registered business. The VAT-registered economic agent who sells goods for the final consumer has the possibility to deduct the input VAT at the same time as the output VAT is paid. So the customer does not have to wait until the right to deduction arises.

For small and medium enterprises. As experience of VAT collection in the construction sector has shown, the big companies often do not pay their VAT liabilities in time. Under the standard VAT scheme, the SMEs face the liquidity problem, since they have to pay the output VAT before the payment from the customer is received. The reverse charge mechanism allows to avoid this problem since the output VAT is only charged nominally in the tax reporting.

Increase of the financial solvency of business, participating in the supply chain. The VAT reverse charge scheme is positive for the business further down the supplier chain. In case when their partners, being above across the supply chain, are bankrupt or/and insolvent, the suppliers do not have to pay output VAT without obtaining this amount from their customers.

The main disadvantages of the introduction of the VAT reverse charge are as follows.

**Disruption of the standard VAT chain.** Applying the VAT reverse charge mechanism leads to disruption in the VAT chain. I.e. it transforms into a retail sales tax as found in most US States and some Canadian provinces [5, p. 3].

In turn, such disruption of the chain contradicts one of the main principles of VAT charging – a fractioned, multi-staged principle, by making possible the single-staged turnover tax and by reducing the potential of the self-enforcement of VAT [10, pp. 3-4].

This leads to the increase of administrative costs and tax compliance costs.

The VAT reverse charge mechanism induces the increase of tax compliance costs for businesses at all stages of the supply chain, except the last one. Notably, economic agents aiming to evade the VAT payment, should ensure that their partners are VAT-registered, and also that sold goods will be used for business purposes. Moreover, they have to submit regular lists of reverse charged supplies they have made, including the VAT number of their partners [13, p. 2].

I.e. the tax compliance cost will increase and for honest taxpayers, operating in sectors with low volumes of fraud. It is not unexpected that such a system will be more costly for SMEs than for large companies. Consequently, the cost of auditing tax records by tax authorities will also increase.

Moreover, according to Karlsson and Lúðvíksson, under the reverse charge system, the financial risk of the VAT non-payment is transferred from the tax authorities to businesses as it is the taxable people that have to decide whether or not to charge VAT. Such shift of responsibility could lead to the potential costs for business and run counter to the objectives of the Lisbon strategy [9, pp. 29-30; 11, p. 14].

«Black market sales» and possibility of appearance of new fraudulent schemes.

As it was mentioned above, the VAT reverse charge mechanism is an effective tool in order to prevent the «carousel» fraud. But the European Commission Communication COM (2006) 254 states that the reverse charge can be applied to specific sector (construction, waste, wood, etc.). So fraudsters could operate illegally by operating in other sectors and/ or by selling other goods, i.e. there is a possibility of misclassification of business activity in order to be subject of VAT reverse charge.

So the reverse charge mechanism could not be regarded as a solution to prevent sales on the "black market". Under standard VAT scheme commonly used in EU countries, any economic agent in the supply chain is responsible for output VAT paid to the tax authorities. Even he does not file the tax invoice, and, consequently, does not pay this output VAT, the tax authorities withhold the input VAT. As a result, taking into account the abusive practices of economic agent, the budget losses are only fraction of the total VAT for certain good. While, as stated in COM(2006) 254, for a taxable person, who has to charge VAT at the end of the supply chain, the incentive to obtain «black» supplies will increase as he has to account for the total amount of the VAT and no longer just for the fractionated part in relation to his «value added» [6, p. 4].

And shifting by tax authorities the VAT liabilities to the economic agents, being upside of the supply chain ensures the possibilities for the last company in the chain to disappear. So the incentives to fraud at this level increases. According to Ainsworth, the VAT reverse charge mechanism, applied to a single supply, prevents the spread of MITC in this supply, but it is not a scalable solution. It cannot be applied broadly – unless it is acceptable for the VAT to devolve into a retail sales tax [1, p. 26].

### Negative liquidity effects

*For the government.* Under the reverse charge mechanism the output VAT is not paid to the tax authorities on a continual basis, i.e. payments are postponed. But the tax authorities have to reimburse input VAT, which corresponds to costs for the supply, which results in surplus input VAT being reimbursed before the output VAT is paid to the tax authorities. This could have a negative impact on the state budget because of the liquidity loss.

For suppliers. Under standard mechanism of VAT charge, the supplier can hold and use to pay input VAT for his acquisition of material used for the supplied service, before the output VAT is paid to the tax authorities. But the reverse charge scheme provides that, in fact, the supplier does not receive the VAT from the buyer. This is the wanted effect of such scheme since it prevents the dishonest economic agents from getting access to the VAT amounts. However, at the same time it leads to the lack of liquidity for the honest traders. It is obvious that the lower level of the chain is occupied by supplier, the more liquidity is affected negatively and vice versa.

### Obstacle to free movement of goods and services

Before introduction the reverse charge mechanism the Member States have occurred problems because of the differences in their VAT systems. After starting use of this system, the problems of coordination and harmonization have been deepen considerably. And this concerns especially SMEs, which do not usually have enough funds (as compared to large companies) in order to handle the VAT reverse charge mechanism in their activity.

According to the estimations of the European Commission, 14% of SMEs avoid the cross-border transactions because of the current VAT systems (and after introduction VAT reverse charge mechanism their number will increase) while for larger companies this share is only 10% [9, pp. 31-32].

The study showed that the VAT reverse charge mechanism allows to fight efficiently with fraudulent «missing trader» schemes (acquisition fraud, carousel fraud and contra-trading fraud), but at the same time the problems with black market sales remain untouched. Moreover, such mechanism does not prevent the possibilities of appearance of new fraudulent VAT schemes.

Increase of the budget revenue caused by additional VAT receipts (as a result of fight with fraudulent schemes) is accompanied by increase of both administrative costs and tax compliance costs for taxpayers and tax authorities.

The VAT reverse charge scheme considerably complicates the accounting of concerned operations as well as the administrative processes in the tax authority. Certain business activities subject to this scheme are defined arbitrary, allowing to the dishonest taxpayers to fraud. For example, the activity in the construction sector, needed the evaluation of proportion of commercial and non-commercial buildings. Taking into account the fact, that in Ukraine, notably, due to absence of state standards of construction, appropriate statistical data, etc., such proportion is hard to calculate and the VAT reverse charge scheme used in this sector can complicate the administration procedure and increase the number of legal controversies.

The clear classification of business activity, which is one of the most important requirements of effective functioning of the VAT reverse charge mechanism, is also hard to ensure since now the tax authorities do not control the correctness of such classification. In turn, it gives the possibilities to dishonest taxpayers to misclassify their activities in order to be subject of the VAT reverse charge.

Applying the VAT reverse charge mechanism leads to the disruption in the VAT chain. I.e. it transforms into a retail sales tax with its advantages (simplicity) and disadvantages of standard VAT (complicated accounting and administration). The VAT reverse charge mechanism leads to the increase of tax compliance costs in all stages of the supply chain, except the last one. The economic agent, being at this stage, becomes the tax agent and pays VAT. But it should be noted that "lower" business (especially, small enterprises) spends much resources to account operations subject to the VAT reverse charge scheme. Taking into account the eventual outcome, obtained by the government due to implementation of the VAT reverse charge, it could be reasonable to introduce the sales tax for such operations. But in current national tax system the most of small and micro-enterprises which are subject to the simplified tax treatment are, in contrast with most EU countries, on the top of the supply chain and sell the goods and services directly to the final consumer, which, in turn, can induce the appropriate tax risks.

The VAT reverse charge mechanism cannot be considered as exhaustive response to the VAT fraudulent schemes, primarily, because of the time lag between the payment of VAT from buyer to supplier. When the VAT is paid by the buyer, but not yet to the budget, it claims to refund and the supplier disappears, the VAT reverse charge is an effective tool to shift the VAT liabilities on the buyer. But this mechanism could be useful only for certain goods, which are more subject to fraud. And in case of the broaden use of the VAT reverse charge the new fraudulent schemes will appear.

The performed analysis allowed us to conclude that the feasibility of the introduction of the VAT reverse charge mechanism in Ukraine is controversial since it requires taking into account the set of factors, which are crucial in the current economic and institutional conditions. Thus, the further research directions consider the evaluation of increase of administrative burden for the business, being on the top of the supply chain.

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# 1.7. Methodological problems of evaluation of efficiency of tax administration in Ukraine

Tax administration is a legal activity that regulated by tax and customs authorities. The final goal is the allocation of financial resources through taxation mechanism between all participants of tax relations. Thus every management activity should have scientific and conceptual basis, which can be determined by evaluation of efficiency of the tax system. That is why, the question of efficiency of the fiscal authorities is of great interest for not only foreign, but also national scientists and practices.

The level of efficiency of tax administration is output indicators that characterizing the work of the tax service. Especially important to understand the essence of the concept of Ukrainian "*efektyvnist*", which in English has two analogs: "*effectiveness*" and "*efficiency*", which are often, translated the same way. If we delve into the etymology of these two concepts, we can find differences in their definitions. Thus, according to the Oxford and Cambridge dictionaries *effectiveness* – the degree to which something is successful in producing a desired result; *efficiency* – the good use of time and energy in a way that does not waste any [1; 2].

It should be noted, that in the national taxation theory there is no generally accepted method of evaluation of efficiency of tax administration. In practice, there is only obligatory condition – the assessment should be carried out according existing tax legislation in Ukraine. This uncertainty has generated a significant amount of views on this issue.

Coryphaeus of Ukrainian financial science, Doctor of Economics, Professor V. Andrushchenko offers indicators for evaluating the efficiency of tax administration, based on guidelines of the World Bank. He argues that *effectiveness* means the fact of correct actions of focus in the right direction, its functional efficiency aimed at achieving this goal, including any cost. *Efficiency* (economic efficiency) shows the performance – connection between the expenses and received benefits [3, p. 304].

The scientist noted that effectiveness can be estimated by 22 indicators [4, pp. 35–37]:

- 7 quantitative (number of: registered taxpayers, large taxpayers, declarations, state tax authorities, etc.);
- 14 qualitative (organizational structure, number of regional and local tax authorities, Tax revenues /GDP, Number of tax returns/Number of registered taxpayers, Actual tax revenues/Planned tax revenues, etc.);
- separately selected indicator: The total amount of tax payments (taxes plus fees, customs and social contribution)/GDP, which reflects

the tax burden on the economy.

Also V. Andrushchenko offers efficiency assessed as:

- The average number of days spent on the identification and registration;
- Number of taxpayers/Number of employees of Tax authority;
- Tax administration costs/Total tax revenues;
- Direct and associated costs of taxpayers, which related to tax liabilities (tax compliance costs).

Another opinion has Doctor of Economics, Professor V. Melnyk. He noted that tax administration is a complex administrative activity and to measure its impact on efficiency of the tax system is very difficult and in some areas, it is impossible, because efficiency of fiscal arrangements in many cases depends on the reaction of society, psychological perception of taxpayer's on innovation, etc. [5, p. 5].

In his opinion, there are two aspects of influence of the tax administration on the efficiency of the tax system, which can be defined in a digital dimension, namely [6, pp. 165–169]:

- coefficient of costs (not only performance: State expenditure on the financing of fiscal authorities/General tax revenues, but also individual coefficients for each competent state authority – tax and customs agencies, off-budget trust funds);
- coefficient of efficiency of controlling influence (Additionally assessed sums as a result of tax audit/ General tax revenues.

While other indicators can be characterized only by logical and intuitive (expert) level. Although in the future, when the economy will be stable, he does not exclude the possibility of evaluation of other factors, which have a direct impact on the efficiency of the tax system [6, p. 172].

However, many national scientists offer a list of possible key performance indicators of tax administration (table 1).

As we can see from the Table 1, most scientists think that evaluating efficiency of tax administration a wide range of indicators should be used, which will allow us to evaluate this performance more precisely. However, it should be noted that none of the above-mentioned approaches are not reflected in practice. This is confirmed by the fact that the country's leadership continues to search alternative system for evaluating the efficiency of fiscal authorities. This raises the question: why a significant number of researches in this area do not become the catalyst for the creation of a single and standard methodology?

We think that the main disadvantages of these methodologies can be:

using of a large number of comparable indicators to analyze the efficiency of tax authorities;

- using of quantitative indicators versus qualitative;
- subjectivity in conducting surveys to assess certain indicators;
- improper using of world experience;
- using of traditional approaches to determining performance versus alternative;
- emphasis on increasing tax revenues, but not on voluntary taxation, etc.

Last disadvantage, in our opinion, is the most significant. The modern international scientific studies in this area confirm this. So, Professor Emeritus of Business Economics Richard M. Bird in his own studies noted that «tax administration is a difficult task even at the best of times and in the best of places, and conditions in few developing countries match these specifications. The best tax administration is not simply that which collects the most revenues; facilitating tax compliance is not simply a matter of adequately penalizing noncompliance; tax administration depends as much or more on private as on public actions (and reactions); and there is a complex interaction between various environmental factors, the specifics of substantive and procedural tax law, and the outcome of a given administrative effort. All this makes tax administration a complex matter» [12, p. 135].

Table 1

# Scientific approaches of evaluation of efficiency of tax administration in Ukraine

Author	Key performance indicators
K. Proskura [7, p. 191]	<ul> <li>Total number - 21, for example:</li> <li>1. Coefficient of increase in the number of taxpayers.</li> <li>2. Ratio of accounted taxpayers to total number.</li> <li>3. Amounts of entities and individuals, which registered in the state.</li> <li>4. Growth rate of number of provided tax advices.</li> <li>5. Growth rate of number of considered appeals from taxpayers.</li> <li>6. Growth rate of number of processed tax returns.</li> <li>7. Growth rate of total tax debt and so on.</li> <li>The universal indicator is fiscal efficiency.</li> </ul>
Ya. Samusevych [8, p. 50]	<ul> <li>Total number - 21, for example:</li> <li>1. Ratio of taxpayers who are registered in tax authorities to total number of taxpayers in the economy.</li> <li>2. Ratio of unplanned tax audits to planned tax audits.</li> <li>3. Ratio of unplanned tax audits, during which irregularities were found, to total number of unplanned tax audits.</li> <li>4. Ratio of number of cases of a taxpayer (tax authorities) that was granted in favor of the taxpayer (tax authorities) to number of cases of a taxpayer (tax authorities) that was granted in favor of the taxpayer (tax authorities) to number of cases of a taxpayer (tax authorities) that was granted in favor of the tax authorities (the taxpayer).</li> <li>5. Ratio of amounts of fines to the amount of tax revenue.</li> <li>6. Ratio of tax compliance costs to tax payments.</li> </ul>

D. Serebriansky, Yu. Gusak [9, p. 77]	<ul> <li>Total number – 2, that have groups of indicators (coefficients):</li> <li>1. Absolute efficiency – estimated as a ratio of obtained effect (tax revenues, additional taxes, increase in the number of taxpayers) and the expenditure (maintenance of the fiscal authority, control, etc.);</li> <li>2. Allocating efficiency – determined through the using of all national tax system (combination of all processes of administration) and estimated using existing tax climate in the country and external independent assessments of current tax relations in society.</li> </ul>
O. Ivanyshyna [10]	Fiscal efficiency of direct taxes is basis of: Ratio of efficiency of levy of taxes (tax revenues) to expenses for their administration.
A. Vdovychenko, A. Zubrytsky, D. Serebriansky [11, p. 234]	Developed a system of KPI of the performance of the Ministry of Revenues and Duties, using experience of Great Britain, Slovenia, Czech Republic, Finland, Australia, Canada and Denmark. This system was developed in the context of strategic initiatives of the Ministry, described in Strategic Plan of the Ministry of Revenues and Duties for the years 2013–2018. Nevertheless, on March 18, 2015 this Plan was repealed. Total number of strategies: 27 Total number of indicators: 84. Also developed an alternative system that also contains binary indicator lights and indicators, which can be evaluating after the survey of respondents.

The need to improve the efficiency of tax administration was also supported by Lead Public Sector Management Specialist of the World Bank *Jit B. S. Gill.* He says, «tax policy and tax laws create the potential for raising tax revenues, the actual amount of taxes flowing into the government Treasury, to a large extent, depends on the efficiency and effectiveness of the revenue administration. Weaknesses in revenue administration lead to inadequate tax collections» [13, p. 1].

Therefore, there does not exist one widely accepted indicator for estimation of the efficiency of tax administration. Thus, in foreign scientific literature various methods of evaluating the efficiency of tax administration are suggested, such as:

- to evaluate the performance of fiscal authorities;
- grouping performance in key areas of management of fiscal authorities into a single system of indicators;
- to study the basic elements of tax administration and assess of the tax gap;
- to assess the effectiveness of certain taxes and fees, focusing on increasing tax revenue;
- analysis of the results of supervisory work, etc.

In international practice different methodologies to assess the efficiency of tax systems are used, the key element of which is the efficiency of tax administration. Today, the world uses such tools to evaluate this efficiency as [14]:

- European Union: EU Blueprint;
- Central America: Central America Tax Administrators;
- World Bank: Integrated Assessment Model for Tax Administration IAMTAX;
- International Monetary Fund: Baseline Assessment Framework; Tax Administration Diagnostic Assessment Tool – TADAT; Revenue Administration Fiscal Information Tool; Revenue Administration Tax Gap Tool.

For comparison we consider most known and used in the world methodologies such as: TADAT and IAMTAX.

*Tax Administration Diagnostic Assessment Tool* (TADAT) is a diagnostic tool to provide an objective and standardized performance assessment of strengths and weaknesses of a country's system of tax administration.

TADAT assessments are particularly helpful in [15, p. 8]:

- identifying the relative strengths and weaknesses in tax administration systems, processes, and institutions;
- facilitating a shared view on the condition of the system of tax administration among all stakeholders (e.g., country authorities, international organizations, donor countries, and technical assistance providers);
- setting the reform agenda, including reform objectives, priorities, initiatives, and implementation sequencing;
- facilitating management and coordination of external support for reforms, and achieving faster and more efficient implementation;
- monitoring and evaluating reform progress by way of subsequent repeat assessments.

A set of 26 high-level indicators critical to tax administration performance are linked to 9 performance outcome areas. A total of 51 measurement dimensions are taken into account in arriving at the indicator scores. Each of TADAT's 51 measurement dimensions is assessed separately. The overall score for an indicator is based on the assessment of the individual dimensions of the indicator. Combining the scores for dimensions into an overall score for an indicator is done using one of two methods: Method 1 (M1) or Method 2 (M2). For both M1 and M2, a four-point 'ABCD' scale is used to score each dimension and indicator. Table 2 describes key TADAT performance indicators in 9 performance outcome areas [16, pp. 6–9].
Table 2

TADAT Performance Indicators

Performance outcome areas	High-level indicators	Number of measurement dimensions
Integrity of	P1-1. Accurate and reliable taxpayer information	2
the registered taxpayer base	P1-2. Knowledge of the potential taxpayer base	1
	P2-3. Identification, assessment, ranking, and quantification of compliance risks	2
Management of	P2-4. Mitigation of risks through a compliance improvement program	1
risks to the tax system	P2-5. Monitoring and evaluation of compliance risk mitigation activities	1
	P2-6. Identification, assessment, and mitigation of institutional risks	1
Support given to	P3-7. Scope, currency, and accessibility of information	3
taxpayers to help them comply	P3-8. Time taken to respond to information requests	2
them comply	P3-9. Monitoring of taxpayer perceptions of service	2
On-time filing of tax returns	P4-10. On-time filing rate	4
On-time payment	P5-11. Timeliness of payments	2
of taxes	P5-12. Stock and flow of tax arrears	4
Accuracy of	P6-13. Use of tax audits and other initiatives to detect and deter inaccurate reporting	2
information reported in tax returns	P6-14. Coverage of automated information cross- checking	1
returns	P6-15. Monitoring the extent of inaccurate reporting	1
Adequacy	P7-16. Existence of an independent, workable, and graduated dispute resolution process	3
of dispute	P7-17. Stock and flow of dispute cases	2
resolution	P7-18. Time taken to resolve disputes	1
processes	P7-19. Degree to which dispute outcomes are acted upon	1
	P8-20. Achievement of tax revenue outcomes	1
Efficiency and effectiveness of operations	P8-21. Use of efficient collection and reporting systems	4
	P8-22. Efficiency of processing and accounting systems	2
	P9-23. External oversight of the tax administration	2
Accountability and	P9-24. Level of internal controls	3
transparency	P9-25. Public perception of integrity	1
	P9-26. Publication of activities, results, and plans	2

Source: [15, pp. 21-136]

Each measurement dimensions evaluate with four-point 'ABCD' scale [16, p. 8]:

- 'A' denotes strong performance (i.e. performance that meets or exceeds international good practice);
- 'B' represents sound performance (i.e. a healthy level of performance but a rung below international good practice);
- 'C' means weak performance relative to international good practice;
- 'D' denotes inadequate performance, and is applied when the requirements for a 'C' rating or higher are not met.

Also let's describe basic methods of evaluation of efficiency of tax administration according TADAT.

Method M1 is used for all single dimensional indicators and for multidimensional indicators where poor performance on one dimension of the indicator is likely to undermine the impact of good performance on other dimensions of the same indicator (in other words, by the weakest link in the connected dimensions of the indicator). For indicators with 2 or more dimensions, the steps in determining the overall or aggregate indicator score are as follows:

- 1. Assess each dimension separately and give it a score (i.e. A, B, C, or D).
- 2. Combine the scores for the individual dimension by choosing the lowest score given for any dimension.
- 3. Add a '+' where any of the other dimensions are scored higher (Note: It is not possible to choose the score for one of the higher scoring dimensions and add a '-' for any lower scoring dimensions. And it is not possible to add a '+' to the score of an indicator with only one listed dimension).

Method M2 is based on averaging the scores for individual dimensions of an indicator. It is used for selected multi-dimensional indicators where a low score on one dimension of the indicator does not necessarily undermine the impact of higher scores on other dimensions for the same indicator. Though the dimensions all fall within the same area of the tax administration system, progress on individual dimensions can be made independent of the others and without logically having to follow any particular sequence. The steps in determining the overall or aggregate indicator score are as follows:

- 1. For each dimension, assess what standard has been reached on the 4-point 'ABCD' calibration scale (as for M1).
- 2. Go to the conversion table for scoring M2 and find the appropriate section of the table (2-4 dimension indicators).
- 3. Identify the line in the table that matches the combination of scores that has been given to the dimensions of the indicator (the order of

the dimension scores is immaterial). For example: D – B  $\rightarrow$  C; C – C – B  $\rightarrow$  C+; D – C – A – A  $\rightarrow$  B.

4. Pick the corresponding overall score for the indicator.

The executive summary according TADAT consists of a one-page description of the main strengths and weaknesses of the system of tax administration, together with a table of assessed performance scores across the 26 indicators and a diagram showing the distribution of scores [15, p. 12].

As a result, we can conclude that this methodology is based on the 4-point 'ABCD' calibration scale. Each point calculated as a ratio of specific indicators (number of timely paid taxes, tax arrears with limitation period more than 12 months, etc.) to the general (total amount of paid taxes, the amount of total arrears, etc.).

A somewhat different approach to evaluation of efficiency of tax administration is proposed by Integrated Assessment Model for Tax Administration. IAMTAX is a web-based tool, which allows for a comprehensive assessment of tax administration performance. The measurement framework of IAMTAX can be used both as a benchmarking and as a diagnostic and monitoring tool. As a benchmarking tool, the measurement framework identifies and assesses the performance gaps of tax administration by comparing the actual performance against a set of desirable benchmarks and good practices. As a monitoring and diagnostic tool, the measurement framework assesses and monitors performance over time, once a baseline set of data for all indicators has been established [17].

Thus the diagnostic tool of the IAMTAX would inform future engagement in tax policy and revenue administration reform projects by providing useful inputs to project teams across regions to [18, p. 3]:

- assess the current situation of a given tax administration in the preparation stages of a project;
- establish the baseline for the entire set of indicators against which the progress of tax administration would be assessed throughout the project cycle and beyond.

It evaluates the efficiency of the tax authorities, using 230 indicators, 53 of which performance indicators, 145 – good practices – preferred features of the tax authorities and 32 – output indicators – used to research and have not valuation component, in 12 business areas and 14 strategic dimensions, which are summarized in two aggregate indexes [17].

Table 3 describes main IAMTAX measurement framework.

#### IAMTAX Measurement Framework

Business Areas	Strategic Dimensions						
<ol> <li>Revenue management</li> <li>Taxpayer information and assistance</li> <li>Tax audit and investigation</li> <li>Revenue arrears management</li> <li>Legal affairs</li> <li>International taxation</li> <li>Internal audit / Internal control</li> <li>Strategic planning and control management</li> <li>Information and communication technology</li> <li>Human resource management</li> <li>Administration and Finances</li> <li>Cooperation with stakeholders/ government relations</li> </ol>	<ul> <li>A. Simplification of tax legislation</li> <li>B. Client/Taxpayer orientation</li> <li>C. Enhancing voluntary compliance</li> <li>D. Use of information and communications technology</li> <li>E. Segmentation of taxpayers</li> <li>F. Comprehensive compliance risk management model</li> <li>G. Information as a fundamental asset of tax administration</li> <li>H. Emphasis on human resource management</li> <li>I. Increasing relevance of international taxation</li> <li>J. Equity and transparency of the tax system</li> <li>K. Process orientation</li> <li>L. Strategic planning as a core element of tax administration</li> <li>M. Increasing analytical capacities of the tax administration</li> <li>N. An external communications policy, which fosters relations with the private sector and other stakeholders</li> </ul>						
Overall Index (two-dimensional)							
<ol> <li>Strategic vision, legal and regulatory framework</li> <li>Operational performance</li> </ol>							

Source: [17]

As we see from Table 3, IAMTAX's approach provides a new paradigm for compliance, focusing on attention to dialogue, prevention, taxpayers' needs, voluntary compliance, and broadening the tax base.

According to this Methodology every indicator characterize with:

- formula (depending on the index);
- weighting indicators;
- range from 0 to 100;
- standardization of values (normalization rules).

So, each indicator is assigned a weight (range of 1 to 3), which increases as the importance of the indicator increases (Table 4). We can see that only output indicators have not weights. Other components of IAMTAX have 2 of 3 weighting indicators. Table 4

Distribution of weights of the indicator according to IAMTAX

The level of impact on the tax authorities	Total	Performance indicators	Good practices	Output indicators
Not scored (0)	32	-	_	32
Normal weight(1)	79	-	79	-
High weight(2)	103	37	66	_
Critical weight(3)	16	16	_	_
Total	230	53	145	32

Source: [17]

Each of the indicators range from 0 to 100 that determines its efficiency in the tax administration. They were selected by a general method from a wide range of indicators, which used in international guidelines, standards, conventions or references, regardless of social and economic characteristics of each country and grouped based on objectivity and measurability.

But not all of the indicators fit naturally into the range of 0 to 100. For example, some indicators are "True" or "False," some are percentages, some are multiple choices, and others have standard values. Therefore, the following normalization rules are applied, to help turn these indicators into values that can subsequently be added to the respective strategic dimensions [17; 19, p. 14]:

- 1. The True indicator is estimated at 100, and False at 0;
- 2. The percentage indicator is used as it is (for example, 80% 80);
- 3. Each number in the list is normalized from 0 to 100, which divided evenly by the number of parameters in the list (for example, the list consists of 1, 2, 3, 4, is considered 1 0; 2 33; 3 66; 4 100);
- 4. Each normalized value requires the use of standard values, provided in the evaluation methodology specific indicator (for example, less than 2% 0%; 2-5% 50% and more than 5% 100%).

The total value assessment of business areas, strategic dimensions or overall index is calculated using the weighted average formula:

where 
$$VEI = \frac{\sum (PI \times W)}{\sum W} + \frac{\sum (GP \times W)}{\sum W}$$

VEI – Value of estimated index; PI – performance indicator (from 0 to 100); GP – good practice (from 0 to 100); W – weight. Hence, IAMTAX using the range of 0 to 100, formulas and in some cases normalization rules. The World Bank Methodology covers a significant part of areas of tax administration. This gives reason to assert, that the assessment according to IAMTAX is reliability. But it is quite cumbersome and without special preparation and a large number of experts it will be difficult to implement.

So, as a result, after describing two internationally recognized assessment methodologies, Table 5 gives a comparative analysis of their main characteristics.

Table 5

Characteristics	TADAT	ΙΑΜΤΑΧ		
developer	International Monetary Fund	World Bank		
countries	Pilot assessments (2013-2015) in: - Low/middle/high income (Zambia/ South Africa/ Norway); - small island nation (Fiji); - resource rich (Mozambique); - post conflict (Kosovo); - francophone Africa (Cote D'Ivoire); - Latin American (Paraguay). More pilots assessments possibly in the Middle East, Europe, Asia and Caribbean. It will be launched for full rolled out in November 2015			
assessment tools	26 high-level indicators; 9 performance outcome areas; 51 measured and scored dimensions	230 indicators; 12 business areas; 14 strategic dimensions; 2 aggregate indexes		
general areas	operational (functions, processes)	operational (functions, processes); regulatory (procedural features); institutional (structure, potential)		
indicators	26 performance indicators	53 performance indicators; 145 good practices; 32 output indicators		
scale	four-point 'ABCD' scale	scale from 0 to 100		
evaluation tools	Method M1	Formulas: depending on the index and the weighted average formula		
	Method M2	Weighting indicators – range of 1 to 3		
additional conditions	Conversion of 2-4 dimension indicators	Normalization rules		

Comparative analysis of TADAT and IAMTAX

Source: [15; 17]

Consequently, IAMTAX in assessing the efficiency of tax authorities used point calibration scale, although something different from TADAT. However, the World Bank Methodology exposure points require greater expenditure of time and resources, since it covers more areas than the Methodology of the International Monetary Fund. This gives reason to assert that the reliability evaluation by IAMTAX has advantages over TADAT. But scale of IAMTAX leads to significant time and administrative costs. Also, lead points in one form much easier by TADAT (table uses a simple transfer points) than IAMTAX, where used the rules of normalization and different formulas.

Thus, we think, that today, especially for the Ukrainian realities, there is a need for search new alternative Methodology of evaluation of the efficiency of tax administration, which will be easy to use, reliable, objective and measurable. In addition, we consider that this Methodology should not depend on changes in economic, social and political situation in the country.

In this context, to provide a basis on IAMTAX, because:

- Ukraine is in the list of countries that can use this Methodology. However, for unknown reasons, it's using has not found actual evidence;
- it assesses the overall efficiency of the tax authorities in three interrelated areas: operational (functions, processes), regulatory (procedural features) and institutional (structure, potential);
- it is focusing on attention to dialogue, prevention, taxpayers' needs, voluntary compliance;
- it has examples of good international practices;
- it evaluates level of impact of each indicator on tax administration (weights of the indicator).

Also, in further studies we offer to focus on such strategies as: enhancing voluntary compliance (1), equity and transparency of the tax system (2) and taxpayer orientation (3), because first of all alternative approaches emphasis on these areas.

In general, the international community expected that regular monitoring of the performance indicators will make it possible to obtain information about whether improving the efficiency of tax administration in each country, and if yes then in what level. While attention should be focused on the level of public authorities, including the relevant agencies that supervision of taxation process.

Thus, knowledge of the way in which goes development of theoretical and methodological foundations of efficiency of tax administration in international practice, helps to create the most efficient tax administration in Ukraine. However, during the borrowing of foreign experience, we should not forget to take into account national traditions and trends in the rule making and governance of the country.

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# 1.8. The international practices in tax risk administration and the scope of their application in Ukraine

The traditional priorities of the activities carried out by the tax audit units and units fighting against money laundering are undergoing transformations. Currently, these units are becoming a part of the overall process of the tax risk management executed by the government. The need for a systematic approach towards treating risky taxpayers is determined by the intensification of the globalization processes in conducting business, the increasing level of the transparency of information, the increasing complexity of regulations which, in its turn, transfers the supervisory and review activities of the State Fiscal Service bodies of Ukraine onto a new level. Therefore, nowadays the effective tax risk management is one of the priorities of the State Fiscal Service bodies of Ukraine.

In particular, the Strategic Development Plan for the State Fiscal Service for the period between 2013 and 2018 [1] defines strengthening the function of risk evaluation and risk management, as the foundation of control over the complete payment of taxes, fees and customs duties, as one of the priorities among the focus areas and objectives of the strategic plan which can be achieved through:

 developing the methods of working with the taxpayers of different risk categories;

- carrying out the analysis and processing the current information on the tax risks which are peculiar to certain regions;
- improving the system of preventing the risk of non-payment of taxes and fees;
- complete integrated automation of risk management processes related to taxpayers, fees and customs duties;
- improving the efficiency of methods for fighting against tax avoidance;
- transforming the budget revenue forecasting into coordinating the budget process based on revenues taking into account the best international practices;
- providing active cooperation between the international organizations and tax authorities and learning from the most efficient practices of administering the tax risks and risky taxpayers, etc.

Taking into account the European aspirations of Ukraine and its efforts to become a full subject of the globalization of economic processes, the study of foreign practices of tax risk administration and fighting against tax evasion leading to creating the shadow economy has been carried out taking into consideration the cases of the European Union countries (hereinafter – the EU) and the Organization for Economic Cooperation and Development (hereinafter – the OECD). The practicality of studying and implementing the practices of these countries is also reasoned by a significantly higher level of the development of the tax system in the member states of the EU and OECD [2], compared to that of Ukraine, etc.

The international practices in working with tax risks in most developed countries consist in applying the system of tax risk administration which is a multi-functional management process and which provides a system of measures taken to detect deviations in the tax administration process, to identify the causes of the emergence of tax revenue loss and to prevent it. Generally speaking, it is a method of managing tax risks of anti-fiscal range which includes the following elements: identification, evaluation, analysis and ways of minimization.

First and foremost, having analyzed the international practices, we consider the main issue to be the fact that, in their annual reports, tax authorities do not reveal officially to the public the main risks of tax legislation compliance and measures taken to treat them. This concerns not only Ukraine but foreign countries as well.

In particular, the aim of the sixth international edition published by the Organization for Economic Cooperation and Development (the OECD) named "Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies" included in the comparative

information series of tax administrations of the Centre for Tax Policy of the OECD (hereinafter – the Edition) [3] is to promote dialogue between tax authorities (tax officials) of developed countries on important issues in tax administration. The Part titled "Adapting the risk management approach" in Chapter 3 of the Edition contains the comparative analysis of implementation of the strategies of risk management and taxpayers' compliance towards tax legislation conducted by the OECD. To conduct this series of comparison, tax authorities of the developed countries were offered to answer a small number of questions in which five key areas of the risk of tax legislation compliance identified in 2014 were used. The answers to these questions were supplemented with the reports and documents that were released by the bodies of the tax services in order to provide additional information.

Thus, the study in 2014 was conducted to identify the openness of the information on the emergence of tax risks and their administration. 56 tax authorities of different countries took part in the study (for reference: in 2010, the study involved 49 tax authorities from different countries). The vast majority, 53 out of 56 tax authorities (for reference: in 2010 this number was 45 out of 49 tax authorities) claimed that they had a formal process of their identification and evaluation. Only 24 out of 56 tax authorities specified making the tax risks and treatment methods public (for reference: in 2010, 27 out of 49 tax authorities from different countries made the tax risks public). Furthermore, only two countries (for reference: Australia and New Zealand) were marked as those whose tax authorities released permanent reports with the detailed summary of the main risks evaluation and how they intended to work with it [3; 4].

The results of the analysis of the international practices in administering tax risks and risky taxpayers conducted in this study show that the activities of the Austrian tax service are of great interest to us. The description of risks is based on the key market segments (for instance, large enterprises and micro-enterprises), each of which is described in short in the statement. The main risks are defined and basic counteraction strategies are used for each market segment. For instance, the statement of the Austrian tax service defines the following risk areas for large taxpayers:

- 1. Changes in the amount of profits;
- 2. International cross-border agreements;
- 3. Consolidation;
- 4. Corporate restructuring, mergers and acquisition;
- 5. Capital profit and capital loss;
- 6. Capital gain and foreign residents;
- 7. VAT on financial supplies;

8. Taxation of financial arrangements;

- 9. Researching and developing the requirements;
- 10. The integrity of business systems;
- 11. Transactions and property value;
- 12. Pension funds.

The statement includes a quick overview of the activities that corresponds to the programme requirements for the current fiscal year [3; 4].

Such an example would be useful for Ukraine since the risks are not divided depending on the segment in which they occur. Moreover, it is also necessary to extend the above mentioned list of risk areas, and the item containing corporate restructuring, mergers and acquisition in particular, with such a phenomenon as raiding. It is surprising that Austrian tax authorities do not mention this phenomenon since it is rather common nowadays and it was introduced to our country from abroad. In addition, it would be sensible to allocate such a segment as agriculture since Ukraine is an agrarian country, etc.

Another appropriate example is New Zealand where risks are determined for each of ten key customer segments (i.e. for wealthy individuals and those having a high income, families, non-profit groups, small and medium enterprises, shadow economy, large enterprises, central and local authorities, employers as well as tax agents and intermediaries). They are grouped according to their profile followed by the description of particular risks, approaches to their elimination that will be applied (for instance, through education, campaigns, service, auditing, publicity, initiating a criminal prosecution, etc.). The tax service announces the positive outcomes gained from its initiatives and, in addition to creating considerable publicity, seeks the feedback from the external audience [3; 4].

Unfortunately, there is no such vast categorization of risks according to the customer segments in Ukraine which would be very appropriate. Those who are subject to the risk area are the following: business entities – potential beneficiaries; business entities which use "tax dumps" ("shell companies" or "artificial companies on demand"); "transiters" (artificial intermediary companies); "sleeping business entities"; those who do not provide reports; the ones that were re-created and individuals. Thus, risk classification is carried out after their occurrence.

Figure 1 presents the Swedish model of tax risk administration.





Source: Compiled by the author based on [3; 4; 5]

There exist corresponding working groups which operate on central and regional levels in Sweden. These groups are responsible for risk identification and risk analysis (provided there is knowledge). The groups consist of experts who collect information and carry out analysis. However, they do not evaluate risks or select their priorities. Their task is to provide the basis for decision-making. There also exists a permanent working group (administering the risks of the reference group) having delegates from all regions and the central level as well. This group carries out risk evaluation and makes suggestions about which of them are of higher priority. Their work is based on facts and knowledge obtained from the groups of analysis and selection together with the other information (for instance, research on the environment, etc.). Apart from risk administration, another model is of great interest - the Swedish model of audit strategies. It consists of four components. Strategies are based on the assumption (depending on practices and theory), that, as a rule, new non-payers, begin to evade paying taxes on a small scale, and then the situation escalates if evasion is successful. Those non-payers who evade on a large scale tend to evade for some time.

The first strategy is to identify large non-payers who aim to receive large amounts of money. The second strategy is to prevent the transformation of new non-payers into the "old" non-payers. This means that audit should be carried out for the newcomers (new enterprises, young people), even if the potential amount of evasion is minor. The third strategy is to create a better individual preventive effect of conducting the following inspections. This means that taxpayers who were audited in the past (and cases of evasion were identified) are audited again. The bottom line is that this audit will enable taxpayers to be more likely to change their behaviour if they know that a single case of tax evasion identification will result in the risk of undergoing audits in the future.

The fourth strategy is to create a better general preventive effect through audit in risk-free areas by conducting the inspections of taxpayers as well as large-scale consumer education activities among them. The results of these activities are announced further through mass media pointing out valuable cases of diligent taxpayers. The number of inspections should not be large, but they should focus on those areas where people evade taxes due to imperfect legislation, lack of confidence in the tax system and the factor of high level of resentment over taxation.

The tax risk administration model in Italy is quite interesting (Figure 2).

#### Figure 2. The arrangement of tax risk administration in Italy



Source: Compiled by the author based on [3; 4; 5]

Central directorate is divided into the correspondent number of units each of which performs certain functions. This allows to identify risks more accurately, evaluate risks and make decisions concerning their elimination. In addition, studying the risks of large taxpayers is carried out in four regions of the country separately: in the north, in the east, in the south and in the west. Ukraine would benefit a lot from these practices since risks vary in different regions. Moreover, such studies should be carried out not only on business entities but on the individuals as well.

The structure of tax risks administration in Germany is presented in the following way (Figure 3).





Source: Compiled by the author based on [3; 4; 5]

In order to be prepared in case the number of risk occurrence increases the finance department of German state authorities constantly solves organizational, personnel and legal issues. Measures and suggestions are compiled based on various regular working groups, which include experts from all federal states, the Federal Central Office and the Federal Ministry. The entire practical knowledge that is based on new approaches is suggested by the local and regional levels of authorities which will be permanently discussed by the working groups.

Lack of staff and the complexity of tax laws directly affect the emergence of tax risks for the tax administration. Therefore, in Germany the intensive use of electronic processing of risk data based on the filter system is applied to distinguish the cases of shortage of tax revenues with low risk level. Declarations with low risk level are checked automatically; those having a higher risk level are checked personally by the staff of the tax administration while other declarations are selected on a random basis to be checked personally. The issue of considerable relevance in the modern field of conducting the so-called "e-business" is that the Federal Central Office analyzes unregistered business activities within the web space (for instance, eBay) using the web crawler systems of Xpider; reverse taxation for different fields (for instance: construction); the legislative basis for inspections with no prior announcement; risk management systems (RMS), etc. One of these measures is that the federal tax authorities intend to create a universal risk administration system (RMS) as soon as possible in each federal state.

Ukraine could learn from the immense amount of German practices in the spheres of informatization, computerization and creating new products for tax authorities. It is necessary to allocate appropriate resources as well as to engage promising young professionals into software development. However, unfortunately, there is a tendency towards scientists emigrating abroad where they encounter more opportunities to develop their skills.

Tax risks administration in the Netherlands is an integral part of control over and implementation of the strategy of the Dutch Tax and Customs Administration. The Risk Administration Organization consists of four parts:

1. Income tax and corporate income tax;

- 2. VAT and the payroll tax;
- 3. Tangible risks;
- 4. Knowledge.

Tangible risks alarm the regional tax offices. The basis of tangible risks may be the correlation between the available data of internal and external sources and the regional tax auditors' professional judgment. Both "what" should be done and "how" it is done are of great importance in the Risk Administration Organization. Therefore, the training cycle is included into carrying out their administration.

The training cycle is used for enhancing the capability of the staff of the Risk Administration Organization and regional tax offices to make a choice and take actions based on observation, reflection, conceptualization and experiments. The staff of the Risk Administration Organization and regional tax offices use risk databases for recording and consulting on the risks. A risk database is a computer programme which records the whole "life cycle" of the risk. It is important to know and respond to the events within the organization and the society in the process of risk identification, risk selection and development [3; 4].

Thus, a lot of useful aspects from all the above discussed models of the foreign countries may be used in case of Ukraine. We pay particular attention to the practices in Sweden, Germany, Italy and the Netherlands.





Firstly, research institutes should pay more attention to studies in the field of risk identification in tax administration and the development of measures taken to minimize them. Relevant work should be carried out based on the information provided by the authorities responsible for the completeness of budget revenues. Both the tax revenue plan should be approved and the Law "On the State Budget for the current year" should be adopted taking into account the received information. It is also advisable to divide the risk emergence in the northern, southern, eastern and westerns regions respectively based on the case of Italy. Since each region has its peculiarities (for instance, demographic ones, etc.), the types and the range of risks will be different. In addition, in our view, a prerequisite of the quality tax risk administration and monitoring is the training cycle introduced in the Netherlands.

We would also like to emphasize that the increasing level of software will result in making the financial monitoring of tax risks in the supervisory and review activities a more dynamic and powerful tool of the supervision and application by the fiscal authorities.

Since tax risks for the state is a new phenomenon in economics, there exists a wide range of issues that have not been studied sufficiently. In particular, these are methods of identification, analysis, evaluation and ways of minimization of tax risks which constitute the prospect of further scientific research in this field.

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# **1.9.** Some functional and institutional reform aspects of state customs affairs of Ukraine

The State Fiscal Service of Ukraine was established by the Resolution of the Cabinet of Ministers of Ukraine of May 21, 2014 No. 160 [5] through the reorganization of the Ministry of Revenue and Duties of Ukraine. This was the third wave of reforms relating to customs and tax spheres during the last three years.

The list of tasks of the new agency consists of 82 points [5]. Among them, besides administering taxes and duties and monitoring the fullness and timeliness of payments, there are the licensing of customs brokerage, activities of alcohol manufacturers, alcohol and tobacco products, etc., control over the correct determination of customs value of goods and their countries of origin, preventing and combating smuggling, providing consultations concerning the Tax and Customs Codes, control over the manufacture and turnover of excisable goods and organizing work related to the excise stamps production. The State Fiscal Service of Ukraine also carries out operational-search activity, the pretrial investigation of offenses and tracing fugitives who hide themselves from the investigation for criminal offenses in the tax, customs and budgetary spheres.

The main surprise of an updated version of the reform of the Ministry of Revenue and Duties of Ukraine was rejection of its division into autonomous agencies: Tax Service and Customs Service. Firstly, in February, Arseniy Yatseniuk spoke about returning to "pre-ministerial" status quo [7]. The final version was considered by experts and politicians as a successful one [8]. However, the effectiveness of the third transformation should ultimately be judged by its results. But what, then, should be done and which first steps should be taken to bring visible and tangible results. Division and reviewing of functional and institutional reform aspects of State customs affairs of Ukraine is the purpose of the article.

The issue of institutional development of the customs service has been considered in a number of studies of such domestic scientists and experts of the customs service as Berezhnyuk I., Dodin Y., Kivalov S., Mazur A., Novikova K., Pryimachenko D., Tereschenko S. and others. Concerning the functional development Desyatnyuk O., Krysovatyy A., Martynyuk V., Pashko P., Polischuk H., Pakhomov S., Filatov V. have made a major contribution towards this research field.

However, despite the significant developments in the practice of customs affairs, the issue of priority reformatory measures of the customs sphere is not well-studied.

What has to be done immediately in order to bring effectiveness and

results for newly established service in the direction of state customs affairs?

Priority actions to reform the customs sphere are:

- Bringing the provisions of domestic legislation that regulates customs matters (primarily the Customs Code of Ukraine) [2] in line with the provisions of the Regulation (EU) No. 952/2013 of 9 October 2013 (Union Customs Code) [1] (Figure 1).
- 2. Reorganizing the management structure of the central apparatus of the State Fiscal Service of Ukraine as well as the territorial authorities (customs houses) to provide the customs authorities by functions which are inherent for them but have been already lost (IT services, combating smuggling, administration of taxes).
- 3. Fighting against corruption, including through the changing the methods of formation of personnel potential (implementing the contract forms of employment and remuneration, social maintenance) (Figure 2-3).
- 4. Carrying out the anti-corruption expertise of whole legislative basis which regulates customs sphere to identify and cancel all legislative acts that directly or indirectly create conditions for corruption.
- 5. Granting the right to provide operational-search activity for customs officials (nowadays officials of the fiscal bodies can perform such activities only according to an assignment of an investigator, a judge or a prosecutor).
- 6. Creating conditions to prevent the phenomenon of "patent trolling". It is necessary to change national legislation on the protection of intellectual property rights, particularly industrial patterns. Nowadays, the Customs Register [4] is filled in with information about industrial patterns which have such features of these patterns that have been accessible to public for a long time in the world. Accordingly, the novelty of such patterns is questionable. On the other hand, there are no grounds for refusal to include these industrial patterns to the Customs Register because the competent authorities issued patents on such patterns. The abovementioned situation creates conditions for administrative pressure from the part of the customs houses on business entities. Taking this into account, it is sensible to foresee at the legislation level the order of carrying out of examining applications for any common things.

- It is advisable to initiate changes to the Order of reimbursement for storage of goods and vehicles at the customs warehouses approved by the Decree of the Ministry of Finance of Ukraine of June, 15, 2012, No. 731 [6], by adding to the item 9 "Costs that are not counted and will not be reimbursed if" of the Order with the following: "goods, vehicles that are stored at the customs warehouses, which have been recognized in a proper way as a humanitarian aid". These changes will allow for the recipients of such goods (charitable and non-profit organizations that are not engaged in business and have no means to pay to customs house for storing the goods) to place humanitarian aid goods under customs control at a customs warehouse without paying for storage over all time of the procedure of recognition them as humanitarian goods.
- Simplifying the procedure of electronic declaration in part of expanding the list of formats of electronic documents submitted with electronic customs declaration (not only PDF format but provide for the use of other formats, which create files smaller size).

The above mentioned will allow reducing the load of communications links, speeding up the procedure of customs clearance and increasing the number of customs declarations in electronic form.

- 8. Simplifying selling procedures of the goods (including vehicles) which were confiscated to the state's revenue under decisions of courts and stored at the customs warehouses. Provide the selling procedures of such goods solely through the open auctions held under auspices of the Ministry of Finance of Ukraine, upon condition of informing through the media and the involvement to the participation in the auctions the general public and business entities. In this case all amount of money received from the selling procedures will income to the state budget.
- 9. Eradicating the phenomenon of so-called "strengthening" of customs control for individual goods or groups of goods, first of all which are exported from the customs territory of Ukraine. In the past these goods were cereals and today it is walnut and timber. The analysis shows that such "strengthening" refers to the goods, which have demand, supply and prices at the foreign markets that enables for national businesses entities to obtain substantial profits. As a result some officials who have powers of authority make efforts to force such entities to pay illegal benefits for customs clearance of these goods to avoid "strengthening".

In terms of reform of the state customs affairs of Ukraine, the State Fiscal Service, activities offered above can be the basis for shaping the program of priority actions.

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# 2. Financial system in the conditions of geopolitical imbalances

# 2.1. Regional fiscal imbalances: their causes and ways of narrowing

The unbalancing of the budget system in Ukraine which has been taking place over the last two years was preconditioned by the external factors of regional development, in particular decreasing volumes of industrial production, outflow of investment capital, unstable export dynamics, falling construction levels, narrowing domestic market, worsening situation on the labor market, as well as an overall decline in the income level [1]. The mentioned challenges act negatively upon the budget system and state finance in general, considerably complicate the implementation of reforms declared by the government in the spheres of public administration and local self-government, taxation, social protection, housing and communal services, etc.

According to expert opinion [2], the unbalancing of the national budget system is characterized by the following major tendencies:

- high level of redistribution through the budget and tax system (the share of consolidated budget revenues in GDP made 29.1% in 2014);
- an increasing deficit of the State budget, reaching 4.95% of GDP in 2014;
- failure to meet the revenue collection targets of the consolidated budget (by 6.6% in 2014);
- growth of unproductive expenditures in the consolidated budget, such as expenditures on debt service, defense, law enforcement, security, and judicial power;
- a decreasing share of capital expenditures and expenditures on economic activities in the consolidated budget;
- the state's worsening ability to finance social protection and social security assignments from the budget;
- rather high the State budget expenditures on balancing the Pension Fund of Ukraine;
- a continuously growing dependency of local budgets on transfers from the state budget, reaching the level of 56.4% in 2014.
- The mentioned negative tendencies add up to existing imbalances at the regional and local levels, which manifest themselves as a gap between the revenue base of local budgets and the expenditure as-

signments delegated to local self-governments. We believe that the existing imbalances at the local budget level are caused by:

- significant centralization of the country's budget system inherited from the previous command-administrative economic system, as well as underdevelopment of local self-government institutions;
- purely fiscal orientation of the national tax system, which has been traditionally considered solely as an instrument of filling the state treasury;
- hypertrophied development of the sub-system of national taxes in the state tax system compared with the sub-system of local taxes;
- prevalence of paternalistic attitudes among local self-governments, lacking skills of autonomous management, and low interest in searching for alternative income sources.

The processes of forming our country's own model of the budget system and establishing financially autonomous local self-governments cooccur with the processes of distributing expenditures among budgets of different levels in line with division of authority between the state and local governments, as well as expanding the basket of local budget expenditures in connection with delegation of state authority for a number of expenditure assignments to local governments. Unfortunately, these changes are not accompanied by sufficient budget resources being directed to local self-governments. Practice has proven that this contradiction cannot be solved by applying partial measures, only by implementing a systemic approach, which entails significant strengthening of the revenue base of local budgets; proper arrangement and review of the expenditures assigned to local budgets of different levels; and further reform of the intergovernmental relations and intergovernmental transfer system.

Table 1 shows the revenue structure of Ukraine's local budgets over the period from 2010 to 2015, revealing a number of tendencies, which strongly contrast with the goals declared by the state government: not only they interfere with the elimination of fiscal imbalances, they contribute to their deepening. These tendencies are as follows: the significant growth of local budgets' dependency on transfers from the State budget; the weakening fiscal role of tax revenues as a basis for budget revenues; and decreasing shares of non-tax revenues and revenues from capital transactions, which characterize the effectiveness of local governments' activity in the economic sphere.

More than 70.0% of tax revenues are currently generated by personal income tax, which makes the overall revenue structure extremely vulnerable, as it becomes considerably dependent on how effectively only one tax is administered. At the same time, the receipts from resource usage fees, local taxes and duties remain to be small, regardless of changes in their structure. Thus, although the share of local taxes and duties in total tax revenues increased from 6.4% in 2012 to 9.3% in 2014, their weight in aggregate local budgets remains to be insignificant, which doesn't comply with best practices of foreign countries.

#### The revenue structure of local budgets in Ukraine in 2010-2015, %

		0		,	
Revenue groups	2008	2010	2012	2014	2015 (target)
Tax revenues	43.1	42.4	38.1	37.7	26.8
Non-tax revenues	5.6	5.5	5.6	5.3	4.8
Revenues from capital transactions	3.3	1.6	0.8	0.5	0.5
Targeted funds	1.7	1.0	0.3	0.1	0.1
Official transfers	46.3	49.5	55.2	56.4	67.8
Total	100	100	100	100	100

Source: Based on data of the State Treasury Service of Ukraine

The majority of non-tax revenues (up to 80.0%) comprise ownsource revenues of budget institutions, which are recorded in special funds of respective budgets, as required by current practice. Thus, it is only approximately one-fifth of total non-tax revenues that are generated by local governments' activities: these are incomes from property, entrepreneurial activity, non-commercial economic activity, and administrative fees and charges.

Another negative tendency in revenue formation for Ukraine's local budgets is a continuously growing share of transfers, which doesn't contribute to strengthening of the financial autonomy of local self-governments, but rather testifies to increasing centralization of the country's budget system. Thus, prior to budget reform, in 2001, the share of official transfers in Ukraine's aggregate local budget revenues approached 30.0%, whereas in 2014 it rose to 56.4%, and is estimated to reach 67.8% in 2015. According to annual results of 2014, official transfers accounted for 87.4% of overall rayon budgets ('rayon' is a type of administrative unit in Ukraine, a constituent part of an oblast).

The expenditure structure of Ukraine's local budgets is also extremely inefficient, which contributes to deepening of regional budget imbalances and creates risks for further development of local self-governments in conditions of decentralization and administrative-territorial reform. The expenditure side of local budgets is characterized by the following features:

 prevalence of social expenditures, which exceed 80.0% of total expenditures and represent government commitments within the del-

Table 1

egated authority (education, healthcare, social protection and social welfare, culture and arts, physical training and sports);

- modest expenditures on economic activities (4.0-5.0%), environmental protection (0.4-0.5%), and housing and communal services (2.0-8.0%), which impairs local economies, labor markets, and overall welfare and living conditions of local residents;
- a considerably high share of protected expenditure items (75.0-86.0%), the financing of which is obligatory, and the size of which cannot be changed even when authorized budget assignments are curtailed, which also limits the autonomy of local self-governments in their use of financial resources;
- absolute predominance of current expenditures (up to 97.0%), insignificant share of capital expenditures and modest volumes of development budgets, which complicates the process of financing the socio-economic development of territorial communities (Table 2).

The expenditure structure of local budgets in Ukraine in 2010-2014, $\%$							
Expenditure groups	Year						
	2010	2012	2014				
By functional classification							
Nation-wide functions	6.4	4.8	4.9				
Law-enforcement, security and judiciary	0.2	0.1	0.1				
Economic activity	4.9	5.8	4.1				
Environmental protection	0.4	0.5	0.4				
Housing and communal services	2.8	8.8	7.8				
Healthcare	22.5	21.2	20.6				
Spiritual and physical development	4.0	3.7	4.0				
Education	31.9	32.0	31.7				
Social protection and social welfare	22.1	22.5	25.5				
Intergovernmental transfers	4.8	0.6	0.9				
By economic classification							
Current expenditures	96.9	93.5	93.8				
Capital expenditures	3.1	6.5	6.2				
By allocation priority							
Protected expenditure items	86.6	76.0	75.7				

The expenditure structure of local budgets in Ukraine in 2010-2014, %

Table 2

Source: Based on data of the State Treasury Service of Ukraine and [3; 4; 5]

One of the reasons for regional financial imbalances is inefficient state regional policy and fiscal equalization as its most important component. Local budget expenditures and intergovernmental transfers serve as main instruments used when implementing regional policy and equalizing the socio-economic development of regions. One of the indicators of financial equalization effectiveness is aggregate expenditures of local budgets per inhabitant of the respective administrative-territorial unit. Table 3 shows the dynamics of such expenditures by region (oblast) over the period from 2012 to 2014.

Table 3 Dynamics of aggregate local budget expenditures per inhabitant in 2012-2014, UAH

Regions         Year           2012         2013         2014           Ukraine, national average         5152.62         5128.53         5548.80           Cherkasy oblast         4917.67         5045.69         5616.29           Chernihiv oblast         4726.35         4752.95         5515.71           Chernivtsi oblast         4735.19         5140.47         5454.02           Crimea, Autonom. Rep. of         5182.61         5364.28         -           Dnipropetrovsk oblast         5152.30         5155.84         5581.24           Donetsk oblast         5024.06         5282.82         5765.60           Kharkiv oblast         4789.66         4815.70         5766.25           Kherson oblast         4617.85         4854.97         5441.48           Khmelnytskyi oblast         4828.85         5154.08         5639.35           Kirovohrad oblast         4402.22         5140.97         5652.08           Kyiv oblast         5160.17         5179.11         5639.21           Luhansk oblast         4484.27         4305.47         3004.33           Lviv oblast         4433.36         4790.82         5334.51           Mykolayiv oblast         45160.17         5179.11	UAR								
2012         2013         2014           Ukraine, national average         5152.62         5128.53         5548.80           Cherkasy oblast         4917.67         5045.69         5616.29           Chernihvi oblast         4726.35         4752.95         5515.71           Chernivisi oblast         4735.19         5140.47         5454.02           Crimea, Autonom. Rep. of         5182.61         5364.28         -           Dnipropetrovsk oblast         5736.27         5454.54         4402.42           Ivano-Frankivsk oblast         5024.06         5282.82         5765.60           Kharkiv oblast         4789.66         4815.70         5766.25           Kherson oblast         4617.85         4854.97         5441.48           Khmelnytskyi oblast         4828.85         5154.08         5639.35           Kirovohrad oblast         4902.22         5140.97         5652.08           Kyiv oblast         4484.27         4305.47         3004.33           Luhansk oblast         4484.27         4305.47         3004.33           Lviv oblast         4758.62         4961.42         5342.10           Odessa oblast         4604.56         4730.55         5328.84           Poltava obl	Regions		Year						
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Range of variation         3858.36         1851.53         5156.45		4433.36	4305.47	3004.33					
	Maximal value	8291.72	6157.00	8160.78					
Max/min coefficient 1.87 1.43 2.72	Range of variation	3858.36	1851.53	5156.45					
	Max/min coefficient	1.87	1.43	2.72					

Source: Based on data of the State Treasury Service of Ukraine and the State Statistics Service of Ukraine

The above-presented indicators lead us to conclude that the policy of financial equalization is not effective enough. Thus, irrespective of all the measures implemented within the inter-governmental relations reform and improvements in the mechanism to calculate transfers from the state to local budgets aimed at providing equal living conditions for citizens regardless of their place of residence, we can still observe deepening regional differentiation of local budget expenditures per inhabitant, which increases regional disparities in public service provision. For example, in 2012, when Ukraine's national average for aggregate local budget expenditures per inhabitant was 5152.62 UAH, the minimum value of this indicator was 4 433.36 UAH in Lviv oblast, whereas its maximum value was 8 291.72 UAH in Kyiv, with considerably high values observed in Donetsk oblast (5 736.27 UAH) and the city of Sevastopol (6 022.51 UAH). In 2014, the differentiation of expenditures deepened as the range of expenditure variation increased from the minimum value of 3004.33 UAH in Luhansk oblast to a maximum of 8160.78 UAH in the city of Kyiv. Thence, the ratio of maximum to minimum expenditure was 1.87 in 2012, increasing to as much as 2.72 already in 2014.

Ukraine lacks a long-term strategy of reforming the budget system as a whole, and inter-governmental relations in particular, although the latter are instrumental in stabilizing public finance and eliminating the existing budget imbalances. In addition to vagueness of the conceptual principles laying the basis for budget system reform, there is a set of problems related to their positioning within the existing mechanism, which negatively affects the formation and execution of local budgets. These problems include the following:

- insufficient state financing of the delegated authority, when local self-governments are forced to direct their own revenues to cover the expenditures related to implementation of the delegated state authority;
- the absence of compensation for losses in budget revenues, which result from exemptions granted by central government on taxes and obligatory payments that are normally recorded as revenues to local budgets (for example, land fees);
- irregularities and delays in official transfers, as well as transfer of funds during the last days of the budget year, which makes it impossible to fully use the allocated funds;
- the absence of formalized approaches to and intransparency of the procedures for allocating certain types of special-purpose subventions from the state budget, as well as financing local development projects from the State Regional Development Fund, etc.

Along with that, we can admit that Ukraine managed to take real steps in 2015 towards budget autonomy and financial independence of local budgets [6]. We can observe a transition to the next stage of intergovernmental relations reform, which introduces a new model of local budget financing and new approaches to organizing interrelations between the state and local budgets, and entails the following:

- expanding the sources of local budget financing to enable local selfgovernments carry out authorized expenditure assignments;
- using a new system of horizontal equalization of tax capacity of territories depending on the level of revenues per inhabitant;
- introducing new types of intergovernmental transfers (education and healthcare subventions, subvention for training of workers, direct and reverse subsidies);
- giving local self-governments the right to independently determine the rates of local taxes and duties within the limits set by the law, as well as grant privileges on their payment.

The innovations of 2015 that have taken place in the context of budget decentralization resulted in significant growth of local budget resources [7], which has become a test for separate local authorities on their ability to build effective, independent and responsible economies [8]. However, the introduced changes should be further developed in order to reach stable positive effects from their implementation. We believe that it will be possible to eliminate fiscal imbalances at the level of local budgets after completion of the following set of systemic measures and reforms that have been launched over the recent years:

- implementing the decentralization of public administration and budget decentralization in particular;
- making clear division of authority between central government and local self-governments, and respective division of revenues and expenditures between budgets of different levels;
- further strengthening of the revenue base of local budgets and reducing their dependency on transfers from the State budget, as well as improving the mechanism used to calculate transfers to local budgets from the state budget;
- reforming the tax system so as to reduce the tax burden on payroll funds and bona fide taxpayers, simplifying tax administration, enhancing investment attractiveness of the country;
- improving local taxation as one of the most important institutions of local finance and an effective instrument in the hands of local governments;
- applying the program budgeting method in the local budgeting proc-

ess, transition to middle-term budget planning and development of three-year local budgets, which is necessary to finance the development of combined territorial communities;

 providing sufficient financing of local budget expenditures, which is necessary to carry out authorized budget commitments, by applying social standards and financial standards of budget sufficiency in calculations of intergovernmental transfers.

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# 2.2. Consumer behavior of households in Ukraine in the present conditions

Households play an important role in the functioning of the state economic system and by performing their traditional functions such as consumption, saving, investment, act as some kind of internal stabilizing mechanism and influence socio-economic development of the country.

In current circumstances extremely important is researching the pragmatic aspects of consumer behavior and the factors that influence its formation. Because modern society is primarily characterized by the strong focus on consumption sphere, which, in the course of its evolving, thorough and comprehensive analysis of such phenomena as "consumer society", "consumption culture", "Organized consumers' movement, expansion and protection of their rights", "consumerism" (in its negative context), "demonstrative consumption" and many other processes, that are typical for the modern Ukrainian society which is actively involved into the current globalization processes.

This work aims to study the pragmatics of the households' consumer behavior and to outline the direction of its rationalization in the modern world.

Undoubtedly, consumption can be positioned as the most important sector of the market economy, because it determines the trends and volumes of the flow of goods and capital in society, and it also generates the market demand for them.

The level and structure of consumption in Ukraine affected by several factors, among them the most important: income level of the consumers, specifics of the mentality, consumption culture. However, Ukrainian consumers are under the influence of such specific factors as the impact of life experience and lifestyle, which were formed under command economy; complexity and instability of the current economic situation and so on. In addition, a social life and being makes a significant impact on consumer behavior. Analysis of the household consumer strategies in light of its members status allows us to define three basic models:

- 1. Conformist consumption caused by the bandwagon effect and the desire to keep up with life and fashion. The desire to be "not worse than others", follow the idols is often a manifestation of the modern consumer's essence (especially the younger person).
- 2. Ostentatious consumption, which is primarily expressed in purchase of the most expensive goods or services, the amount of which exceeds real needs to the big extent. The choice is made for a more expensive product, because it confirms the solvency and elitism of an individual.

 Quite typical and obvious example of this consumption is constant "upgrading" and buying newer cars or mobile phones by Ukrainians. Moreover, for young people this serves as the best expression of their status position [1, p. 375].

Among the important determinants that describe the behavior of consumers are also psychological factors – motivation, emotions and feelings. For example, a positive perception of reality shortens decision-making when choosing goods and triggers a state of motivation. In this context, it is interesting to note that the data from the survey [2] has shown for example Ukrainian consumers to be paying attention to the quality, freshness and price of a product first when buying products; factors such as the country of origin, safety and the brand only play a minor role. It should however be mentioned that in Ukraine 34.0% of citizens only pay attention to the price after having ascertained the quality and freshness of the product in question (Figure 1).

# Figure 1. Factors that influence the choice when buying food by the Ukrainian population, %



Source: [2]

In contrast to the Ukrainians, two out of five Europeans among the main criteria for choosing any product name quality (42.0%) and price (40.0%), and only 23.0% of European citizens pay importance to the freshness (the production date) [2]. We can make a suggestion here that Europeans are more thorough in "counting money" than Ukrainians, they

are more saving and pay close attention to whether the manufacturer complies with the quality/price balance. But perhaps there is another factor that plays a role here – the confidence of the Europeans, that there are by definition there is no food with expired date of consumption on the supermarket shelves.

The abovementioned sociological research also showed that the relation between price, quality and freshness in the process of choosing food is changing with the age. So, individuals over 30 years age, but not yet 40, will pay the least attention to the price. For such consumers quality is the main criteria (that also corresponds with the choice of Europeans that 20 and older and with a finished education). People in the retirement age pay less and less attention to the quality and product's freshness – the price is at most importance (Figure 2).

# Figure 2. Impact of the price, quality and freshness on the choice of food depending on the age of the respondents in Ukraine, %



#### Source: [2]

But of the major factors that affect consumer behavior, is undoubtedly the income of the respective individual and family. The amount and the quality of the purchased goods and services are depending on this factor, as well as the existing taste and preferences of the consumers. According to the results of the random observation of the households living conditions, conducted by the State Statistics Service of Ukraine [3], the monthly average income of one household in Ukraine in 2013 accounted 4337 UAH (~ 167 \$). The urban household received around 4486 UAH (~173 \$) per month, rural – 4000 UAH (~154 \$). The employment income in 2013 was accordingly 54.8% of total household resources, from which 50.8% was income from employment and work activities, 4.0% was the income from entrepreneurial activity and self-employment. Pensions, subsidies and social benefits accounted for 28.2% of total resources (income) of the average household, income from personal farming and storages was 6.6%. Amount of the financial assistance from relatives and other individuals was 6.6% (Figure 3).

The relation between the total income of 10% most and least wealthy population in Ukraine was 4.7 times, including among urban population - 4.9 times and rural - 4.0 times.



#### Figure 3. Structure of total household income of Ukraine in 2013

Source: [4, p. 195]

According to the self-evaluation of their income level in 2013, 61.0% of Ukrainian households estimated their income level as satisfactory; 36.0% of the households estimated its income as satisfactory for normal consumption, but had limited possibilities for purchasing goods and serv-

ices, other than food. Moreover, 3.0% were not able to sustain even the proper nutrition for themselves [5, p. 5].

Generally consumption expenditure of the Ukrainian households (3814 UAH or ~ 147 \$) were fluctuating between 96.6 % of the total expenditure in 1999 and 86.2% in 2008, increasing to 90.3% in 2013 [4, p. 136]. Furthermore, households in the cities have more consumption expenditure than rural ones, which is the result of bigger amount of utilities costs and expenditures on transport, telecommunications, education, leisure and culture as well as on restaurants and hotels (Table 1). Important to notice is also that the expenditures on leisure, culture, restaurants and hotels is almost 2-3 times less for households in the rural areas than for urban ones, which also indicates the limited choice for people in the villages to attend cultural events.

The biggest part of the Ukrainian household expenditure is connected with food and nutrition: over 50.0% of the households' total expenditure (according to the classification of the United Nations, 60.0% of the family budget expenses manifest the poorness of the household). For example, in the United States this indicator is around 20.0%, in the Western European countries – 25.0%, in the developing countries – around 60.0%. Expenditures on food in 2013 in average for one individual per day accounted for 31 UAH (~1.2\$). The price for a daily food package for the households in the 1<sup>st</sup> socio-economic decile was 20 UAH (~ 0.8 \$) per person per day in contrast to 48 UAH (~1.8 \$) among households in the 2<sup>nd</sup> decile.

For the purchase of non-consumer goods and services households were spending around 1/3 of their total income. Average Ukrainian household spent 1/10 of its money for accommodation (including renovation works etc.), water, electricity, gas and other utilities, 6.0% – for buying clothes, 16.0% – for other expenditures (education, leisure and culture, house equipment, electronics, telecommunications, health, transport etc.).

Interesting to consider is also information about the distribution of the consumption expenditure of the Ukrainian households according to the decile groups, depending on the amount of average total income per person (Table 2).

Information from the Table 2 shows that the households of the  $10^{\text{th}}$  decile group (the richest ones) are spending for the transportation 8 times more than the households of the  $1^{\text{st}}$  group (households with the lowest income level); for restaurants and hotels – 7.3 times more, for leisure and culture – 5.0 times; for house equipment, electronics and costs for real estate maintenance – 5.5 times more; for health – 4.2 times more, confirming there is big inequality among domestic households not only according to the income levels, but also according to the expenditures.

Table 2

The structure of consumption expenditure of the Ukrainian households in 2013\* (monthly average, calculated for one household, % of total expenditure)

	All households	Living in			
		Urban areas	Rural areas		
Consumption expenditure	90.3	91.1	88.1		
Food and non-alcoholic beverages	50.1	48.8	53.7		
Alcoholic beverages	1.5	1.6	1.1		
Tobacco	2.0	2.0	1.9		
Clothes and shoes	6.0	5.7	6.3		
Housing, water, electricity, gas and other types of heating	9.5	10.1	7.7		
Furnishings, household equipment and housing maintenance	2.3	2.3	2.5		
Health	3.4	3.4	3.5		
Transport	4.3	4.5	4.0		
Telecommunications	2.8	3.1	2.2		
Leisure and culture	2.1	2.4	1.1		
Education	1.2	1.4	0.8		
Restaurants and hotels	2.5	3.0	1.1		
Different goods and services	2.6	2.8	2.2		
Non-consumption expenditure	9.7	8.9	11.9		
Total expenditure	100	100	100		

Source: Composed according to the data [4, p. 137, 139]

What should be mentioned is that financial crisis, that started in autumn 2008 in Ukraine, has brought up a bunch of important problems, to which Ukrainians didn't pay attention before, and had in some ways made people to re-think their preferences and habits in order to become more rational in spending financial resources. In the developed, industrialized countries the culture of controlling and taking care for the personal expenses in the conditions of the overproduction of goods and services was formed in decades. In Ukraine we see the opposite situation: starting to live in the "society of consumption", Ukrainians didn't learn much the art of saving. It's a paradox, but fact: even despite the former generations of our citizens were living in the conditions of extreme economy and saving during the Soviet times, today on the subconscious level people tend to perceive negatively careful money spending and saving. The efforts to take care of the earned money have, unfortunately, not become a norm of good behavior. Saving is usually perceived as "humiliating necessity" and the sign of poorness by Ukrainian citizens.

#### Consumption household expenditure in Ukraine according to the decile groups, depending on the amount of average total income per person in 2013 (in average per month per one household, UAH)

	olds	Acco	ording t				(10%) ( come p			the lev	vel of
	All households	1st (lowest)	2	3	4	Q	9	7	ω	6	10
Products	11913	11481	11579	11608	11789	11817	11938	12065	12131	12228	12498
Clothes and shoes	1226	1146	1155	1169	1188	1206	2226	1226	2285	2292	2365
Accom- modation, water, electricity	2362	2258	2291	2290	2323	2326	2354	2371	3484	3428	4570
House equip- ment, electronics and costs for real es- tate main- tenance	789	340	450	457	568	674	785	790	1115	9110	2221
Health	9130	557	882	695	7103	8127	9126	9153	1155	1160	2240
Transport	1165	455	766	777	9101	9127	1137	9204	1196	1244	3441
Telecom- munica- tions	8109	574	780	683	794	7100	7108	8118	8129	1136	1164
Leisure and cul- ture	578	232	334	343	451	456	572	584	5102	8110	1159
Education	446	226	330	332	339	338	449	348	461	553	679
Restau- rants and hotels	795	335	443	444	458	472	775	789	1123	1151	1257
Different goods and services	7100	256	459	464	478	491	797	7103	7122	1135	1196
Total con- sumption expendi- ture	23445	22351	22564	22651	22996	23154	23396	23695	23989	34225	45434

Source: [4, p. 164]

But sooner or later the problem of financial flows optimization will appear in front of many households. In highly developed societies citizens are constantly considering the ways of income and expenses optimizations, discussing different possibilities for making savings and investments, exchanging the experiences of the rationalization of the consumption expenditure. In industrialized societies it's not a good fashion and also not a good manner to be someone, who spends earned money without thinking about it.

So taking into consideration the necessity and importance of the careful distribution of the income, we can define few basic principles for the total household expenditure rationalization in the modern conditions, which are based on the experience of the economically developed countries as well as on the peculiarities of the Ukrainian economic realities:

- planning of the expenditures which is the guarantee of making only the most necessary purchases and avoiding the money to be spent without need;
- rational and right consumption, because the more irrational wishes a person has to follow the last fashion trends or desired lifestyle, the less financial freedom will be achieved;
- detailed analysis of expenses, because taking time for the critical analysis of own expenses will give an opportunity for the household members to save much financial resources in the future;
- composing a rational model of the household budget which foresees effective and necessary common management of the incoming and, especially, outgoing money flows of the household;
- purchasing things in the right time and as cheap as possible (for example, in the sales time, when one can save much money);
- conducting a marketing research to compare prices and finding the optimal choice, when buying expensive things;
- maintaining a healthy lifestyle, because having no bad habits can save much money;
- debts minimization, for which one should pay by lowering liabilities (the passive part) and making actives that bring profit at first place;
- putting a particular part of the income (like 10.7 or 5.0%) into savings and investments, which will be a real guarantee for having a financial freedom in the future.

Naturally, every person can add many other personal recommendations to the mentioned list on how to spend the income rationally, but of the most importance, in my opinion, is to understand the necessity of such steps and start acting.

Summing up the abovementioned statements, it's important to mention that the art of consumption in the current conditions is as essential as the art of money-making. But the dilemma is not in saving all the time and limiting the choice, but in the right consumption. We are living in the times of stable pressure from manufacturers: information from magazines, TV, radio, advertisements in the public transport, Internet, etc. is coming with enormous speed to the consumers. Therefore very important today is to learn how to shape and filter it in the right way and how to make an active resistance to the repeating efforts to provoke consumer into the irrational purchase and ineffective expenses.

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# 2.3. Methodological problems of institutional environment of the health insurance market

In the late twentieth century, Ukrainian economic studies began emphasizing new scientific conceptions and research directions connected with transformation processes in the country. It became necessary for elite scientists to study and interpret market processes, which had completely changed the role of insurance in the social and economic life of humankind. One direction within economic science that relates to the methodological basis for health insurance market research is the institutional theory. The authors of this paper deem it necessary and appropriate to apply this institutionalism methodology to the health insurance market, since the significant institutional analysis prerogative is to cover all its fields of social development.

Along with emergence and development of evolutionary and institutional theories, the neoclassical methodology of scientific knowledge of market relations has undergone significant changes. During that period of economic development the representatives of evolutionary theory, including Joseph Schumpeter, and of institutionalism and neo-institutionalism – among them Thorstein Veblen, John Commons, Ronald Coase, Douglass North, Oliver Williamson, Eirik Furubotn, and Rudolf Richter – made considerable contribution into development of theory of markets, whose methodology is directed to break certain limits of neoclassical theory.

In his work "The Theory of Economic Development" Joseph Schumpeter discussed the fundamental principles of the innovative-evolutionary theory that denies key points of the neoclassical school, as they predicted the dynamic economic development and started the research on the economic dynamics versus static analysis [1, p. 53]. However, Schumpeter's doctrine was based on the experience of the classical school of economic theory, famous for the historical development of the economic process. Considering the classical methodological approach to the study of economic development, the scientist did not reject the main principles of neoclassicism, and stayed in concert with it. However, in our opinion, it is impossible to combine or consider in parallel the opposite methodology principles and approaches to these two theories, as it would conflict with the essence of both the evolutionary theoretical doctrine and basic laws of dialectics. Thus, a typical neoclassical theory is characterized by equilibrium, stability, and stable diversity, while the evolution of economy achieves constant movement, transformations, phenomena and processes changes, and uncertainty. Therefore, the spread and development of evolutionary economic theory denies methodological dominants of static market economy, the theory of a perfect competition market. The neoclassical postulates, then, remain the starting point, which begins with the theory of evolution and the development of modern economic theory.

Economic doctrines, which help research the problems of market theory development considering institutionalism, are based on the following principles of such economic theories: the classical liberalism of Adam Smith and David Ricardo; property rights as outlined by Ronald Coase and Eirik Furubotn; ideas of transaction costs put forth by Ronald Coase, Oliver Williamson, and George Stigler; contracts by Oliver Williamson, Armen Alchian, and Joseph Stiglitz; and the new institutional economic theory of Douglass North, Robert Fogel and Avner Greif. Unlike the neoclassical theory, institutional theory analyzes a broader range of market phenomena and concepts (transaction costs, contracts, and property rights), using modified preconditions for rational human behavior, as well as considering more systematic approach and the specifics of economic systems structure. Thus, the representatives of institutionalism have managed to enhance basic theoretical and methodological bases of market relations research, as well as to change and complete the postulates of the following theories: industrial markets, competition, firms, governmental regulation of markets.

Simultaneously the representatives of the new institutional theory believe that neglecting institutional analysis is the disadvantage of the neoclassical economic theory, and so the neo-institutional credo: institutions are extremely important for the results of functioning of economy, and they should be taken into account and analyzed in detail [2]. The development of categorical apparatus of the institutional approach to the formation of the theory of markets, and its main and secondary concepts appear to be also very important.

It is necessary to define key concepts in order to use preliminary studies on institutionalism effectively for elaboration of theoretical, legal, and organizational principles of health insurance as well as to outline practical recommendations for its effective development. It should be pointed out that economists use different approaches to such key definitions of the institutional theory as "institution," "organization," and "institutional environment". Therefore, some representatives of institutionalism identify the terms "institution" and "organization" while others differentiate between them. These aspects require further explanation.

As for the institutional theory, it would be better to distinguish two main approaches to the definition of "institution": in both its broad and narrow senses. We define institutions in the narrow sense as a set of formal and informal rules [2, p. 9]; a set of formal and informal constraints that affect the behavior of individuals and their decision-making in the selection of various alternative options of actions [3, p. 18]; a system of commonly accepted social rules which structure social interaction [4, p. 28].

Douglass North, in particular, defines institutions as "the rules of the game in a society or humanly devised constraints that shape human interaction". The author distinguishes between formal rules (rules, laws, constitutions) and informal constraints (norms of behavior, conventions, and self-imposed codes of conduct) and enforcement characteristics [5, p. 11]. Kovalenko defines institutions as systems that contains for-

mal constraints (rules and enforcement characteristics), informal ones (codes of conduct and thinking stereotypes) and intuition, which support the optimal organization, coordination, and stimulation of economic agents behavior [6, p. 45]. We'd like to emphasize that Douglass North clearly distinguishes between "institution" and "organization", stating that institutions are the rules of the game, and that organizations are the players structuring interpersonal relationships [5, p. 16]. In such context, the following point of view presented by Yuriy Lopatynskyi is inappropriate because he uses the notion "institution" to determine the general group of organizations [7, p. 231].

Thorstein Veblen defines the essence of institutions very restrictively as he considers them as prevalent habits of thought [8, p. 46]. Such definition does not reveal the essence of institutions, which cover both informal norms (habits) and formal constraints.

In summary, one should note that the scientists emphasize the legal and social nature of organization of relations in the context of the approach to the definition of the notion of "institution". Therewith, we consider the viewpoints of North and Kovalenko as more persuasive according to which codes of conduct, the rules of the game, formal and informal constraints form the notion of "institutions".

The second approach to the definition of "institution" states that institution covers both institutions and organization structures implementing them into practice.

The System of National Accounts defines organizations as institutional units, while the institution combines these units and their activity within defined formal and informal rules of interaction of the system elements [9].

O. Voronkova's approach merits our attention as she defines the essence of "institution" as the system combination of institutions (a functional system) and institutional subjects (an organizational system). O. Voronkova states that an institution is a system of appropriate institutions and institutional subjects in a certain area of social relations [10, p. 24]. However, the author considers the nature of institutions through a combination of formal, informal and traditional mental rules, where she considers the latter as behavioral regulators, based on traditions, customs and values. In our opinion, such separation is inappropriate because traditional mental rules are component of informal rules.

Similar to the above interpretation is the definition of "institution" presented by Kovalenko, who states the correlation between forms of functional structure (institutions) and elementary structures (organizations), which may lead to the emergence of institutions (institutional organizations) and regulatory agencies (organized institutions) [6, p. 41]. However, the author's division of institutions into institutional organizers and organized institutions is unclear.

I. Tarsasova investigates the wider conception of "public (social) institution", and defines it as a sustainable community of people united according to a set of codes and rules under certain features in order to fulfil certain functions [11, p. 12]. The author states that social institutions regulate the activity to maintain social guarantees as well as reproduce relationships among different groups (institution of social welfare, institution of health care, etc.). Such conception equates the notions of "institution" and "organization". When reviewing the above-mentioned approaches, we note that institutions of social insurance, health care, and commercial insurance interact during the process of formation of institutional environment of the health insurance market.

We consider institutional environment of the health insurance market as a set of organizational and economic as well as legal norms and informal rules, becoming a fundamental precondition for insurance protection of natural persons' property interests when receiving medical care in the event of an insurance case connected with the risk of loss of life or health. At the same time it is reasonable to define institutional support as institutional entities (units) ensuring the existence and implementation of formal and informal norms in the sphere of health insurance.

Institution of the state and market institutions are basic, historically stable institutions of the health insurance institutional environment. The institutions of social insurance, commercial insurance, mutual insurance, reinsurance, and insurance brokerage are specific institutions in the sphere of insurance relations forming the basis for its integrated institutional infrastructure. Institutional subjects and their main activity, combining them under the defined formal and informal norms and rules, form the basis for these institutions' functioning.

The defining features of institution of health insurance in the system of insurance relations are the correlations among its subjects that form institutional and organizational environment of this social and economic institution (Figure 1).

Much discussion in scientific works on economics and law relates to the problem of defining the structure of insurers in the social health insurance. Particularly in various bill drafts on compulsory (state) social health insurance, authors consider that it would be reasonable to involve insurers as one of the following structures: a state health insurance organization, a specialized insurer whose sole owner is the state; insurance companies operating in the insurance market in the area of risk insurance, having health insurance license; and Compulsory State Social Health Insurance Fund of Ukraine. V. Stetsenko emphasizes the following principles, which should become the basis for the draft of law on compulsory health insurance: 1) insurance medical establishments (business entities) should act as insurers; 2) the funds of the compulsory health insurance should be used to pay for medical service, for bonus awards for medical personnel, for the maintenance Compulsory Health Insurance Fund; 3) to found Compulsory Health Insurance Fund, which will deal with the organization of the compulsory health insurance in Ukraine as well as it will further control the implementation of the state guarantees program on gratis aid for the citizens [12, p. 71]. We do not agree with some statements of the author. To our mind, it is not reasonable to form a separate structure – the Fund. Firstly, establishment of a new structure will lead to additional costs for its maintenance, which will be included into the insurance rate, will increase insurance contributions and result in higher prices for medical service, the cost of which afterwards will be shifted to average citizens.

Secondly, there are currently sufficient regulatory authorities supervising insurance companies. One of them is the State Commission for Regulation of Financial Services Markets of Ukraine. Therefore, strengthening the effective control over insurance companies activities should not mean the excessive use of administrative and legal methods of state regulatory impact on health insurance sphere that often happens in modern conditions, particularly in other areas of insurance. Thirdly, the establishment of the Fund actually duplicates the administrative-command system of health care management, deprived of any market mechanisms and economic incentives.

It should be noted that the author's view on the involvement of commercial insurance companies to compulsory health insurance is quite reasonable. We think that the prerequisite for it must be as follows: they should have a license to insure and to be a member of the Ukrainian Medical Insurance Bureau. To improve the quality and reliability of voluntary health insurance of social insurance risks there was founded the Ukrainian Medical Insurance Bureau in March 1999. It was founded under conditions of low capitalization of the insurance market, which did not create a certain financial basis for such risk damages.

In commercial health insurance that is voluntary in Ukraine, insurers are insurance companies that insure only in case of having a license. Among insurants of the institution of commercial health insurance, we should distinguish natural persons (capable citizens) and legal entities (companies representing the interests of citizens, charities, and funds), which make insurance contracts, pay insurance contributions, and have the right to protect their property interests obtaining health care in the event of insurance cases, determined by insurance contract or current



legislation and related to the risk of loss of life, health, and disability because of diseases. The natural persons, having health insurance and the right to free health care in case of an insured event according to insurance contract or current legislation, are called insured persons.

The larger list of insurers and insured persons is involved in compulsory health insurance. To our mind, I. Okhrimenko more widely characterizes the parties of the financial relations in the above-mentioned system. Depending on an insurant, the author identifies the following four categories of insured persons [13, p. 29]:

- Employees, in particular the residents of Ukraine, stateless persons and foreigners, working under labor contracts or civil law contracts at enterprises and subsidiaries, no matter what the type of activity and types of ownership are. The insurant in this case is an employer.
- 2) Individuals, who have professional training courses, day release refresher courses or study at Master's Degree courses, Post-graduate courses, Doctoral programs, internship, full-time medical residency; individuals, who receive financial assistance in paying for care of a child under the age of three; children under 18 years old who don't work, disabled people since childhood, who don't work; able-bodied people, who don't work and take care of first-group disabled people or disabled children under 16 years old, as well as they look after retired people, who need to be under constant care. In this case the state becomes the insurant. Moreover, the insurance contributions are paid by the state from the state budget or local budgets.
- 3) Individuals whose insurants are compulsory social insurance funds. The Pension Fund of Ukraine is an insurant for non-working retirees. The Social Insurance Fund of Ukraine is an insurant for non-working disabled people, who have become invalid after accidents at work or as a result of professional disease. The Fund for Compulsory State Social Insurance in Case of Unemployment is an insurant for people who are registered as unemployed. The appropriate funds pay insurance contributions for insured persons of mentioned categories.
- 4) individuals who are self-employed lawyers, notaries, and people who are engaged in creative and other types of activities related to receiving income directly from these activities, as well as persons who carry out business activities, or members of their families, if the latter take part in their business running; other individuals, not included to 1-3 categories of the insured persons, and who legally live at the territory of the state and made contracts with the insurance companies to be voluntary insured according to the system

of the compulsory health insurance (CHI). Under these conditions, CHI insurants make CHI contracts in their favor and pay insurance contributions from their own incomes.

We consider that the principal institutional units, which are the direct parties of the insurance relationship in case of the health insurance (insurers, insurants and insured persons), form together the organizational structure in the sphere of health insurance. However, other institutional entities involved in maintenance and regulation of insurance (insurance agents and brokers, hospitals, state insurance supervision and monitoring, service organizations (assistant companies), voluntary insurers associations (Ukrainian Medical Insurance Bureau), staff training organizations, information and educational structures, specialized publishers) characterize the infrastructure of the health insurance sphere.

We would like to highlight medical establishments among institutional units, which belong to the health insurance infrastructure and take an important place in insurance services. Medical establishments as independent entities of different forms of ownership, based on contracts signed with licensed and accredited insurers also may participate in the system of compulsory or voluntary health insurance. Thus, the financial mechanism to provide medical care for the insured and the insurance services implementation in these areas of insurance relations are different.

Specific institutional entities of the health insurance infrastructure are assistant companies that maintain service for the citizens of Ukraine who stay abroad. Under the health insurance policy these mediators guarantee medical treatment abroad and help in getting a number of services: recovery of expenses on treatment and hospitalization, returning home of sick persons or the deceased and the individuals who accompany them; emergency dental care and other insurance services stipulated in the insurance contract on medical expenses insurance.

In summary, three institutional models of the health insurance development require emphasis: 1) the model that based on compulsory health insurance functioning if a state health insurance organization, Health Insurance Fund dominate; 2) the model of voluntary health insurance, of which principal entities are commercial insurance companies; 3) the mixed model that allows health insurance to function either in compulsory or voluntary forms as well as to combine both state and commercial structures. The most appropriate model is the third one, which will combine economic interests of all parties of health insurance, and it will provide a reliable insurance protection in case of risk of health or life loss.

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# 2.4. Prospects and consequences of fiscal consolidation in conditions of budget decentralization

The economic and political instability in Ukraine incited the search of effective stabilizing instruments. As it has been testified by the experience of highly developed countries, it is nothing but the budget decentralization that is capable of making a considerable contribution into raising efficiency of the management process of all authority levels. The realization of such measures may assist in stabilizing the economy if the decentralization policy is implemented clear, coherent, and thought-out.

However, one more challenge Ukraine has faced along with the government crisis within the recent years is the steep increase of the state debt and misbalance between the budget revenues and expenditures, which threaten the future economic growth. Therefore, fiscal consolidation – as a government policy aimed at balancing the budget and controlling the state debt level – is oftentimes implemented for the stabilization of public finances along with the decentralization policy.

Both decentralization and fiscal consolidation have ambivalent influence on the macroeconomic development of the state since they may either promote the economic development of the country or deteriorate it. Nevertheless, it is an indisputable fact that local self-government authorities should play a significant role in the process of the fiscal policy implementation. Thus, the determination of the role of both central and local authorities for the process of fiscal decentralization and implementation of the fiscal consolidation policy, as well as their connection in the abovementioned processes are pressing issues that should be studied.

A special role of the local authorities in the process of fiscal policy implementation was emphasized by the American economist W. Oates (1999) who proved the so-called "Decentralization theorem". The theorem states that the total expenses of all local authorities for financing social needs are equivalent, and sometimes even bigger and more effective that the expenses of the central government. W. Oates also claimed that local authorities have more information and are better aware of the needs of the population, thus being able to execute budget expenditures in a more efficient way.

On the other hand, the budget decentralization decreases the possibilities of the central government in implementing the stabilizing policy, which may cause macroeconomic instability and increase of the state debt. This hypothesis was proved by T. Goodspeed in his model of the pure consumption of public goods, which covers two periods of time

(2002). The first time period is characterized by accumulation of taxes or borrowings by the local government authorities to provide public goods at the local level. At the same time, the central government authority exercises all possible measures to maximize its chances for being elected once again. This probability is modelled by T. Goodspeed as a function of the levels of pure consumption in every individual region. The second time period is marked by the decrease of pure consumption on the local level, which is stipulated by the necessity to pay off the debts. Herewith, the central government authority may increase the net-consumption by providing certain grants and subsidies that will increase the probability of its repetitive election. Such actions of the central government authority are considered by the local government authorities during the first time period leading to the high level of borrowings on the local level. Thus, if the central government authority allocates grants for certain territories at its discretion, it forces the local authorities to shape their image as that of a needy region that is being underfunded. Since the major expenditures of the state funds are distributed over the entire country, whereas the problems exist on a separate territory, such a behavior is predictable from the point of view of some subnational governments (Weingast 1981).

Furthermore, the budget decentralization requires coordinated actions from various levels of authority. In case there exist numerous independent governments that regulate the budget revenues and expenditures at their sole discretion, a risk arises – there may be misbalance of fiscal policy realization on the state level that will lead to growing budget deficits on all the levels (De Mello 1999).

Thus, it is important to study the way of balancing the budget in conditions of decentralization and economic crisis (how the fiscal consolidation policy is going to be implemented).

It was stated in scholarly economic research on fiscal consolidation (e.g. those by A. Alesina, S. Ardagna, I. Drazen, R. Perotti, N. Roubini, D. Sachs, etc.) that only the central government is in charge of controlling the sum and structure of the country's financial balance. Yet, as it has been testified by the practice, subnational governments oftentimes play a significant role in the process of fiscal policy implementation, and may considerably complicate the government process on the macroeconomic level due to lack of coordination of actions between government authorities of various levels.

It should be stressed that various levels of state authority in different countries have different conditions of implementation of their powers owing to certain historical conditions of power function realization. Many countries with federated system, like the USA, Austria, Germany, and Canada, local government authorities have considerable political power and obligations regarding expenditures and finances of the central level. At the same time, the lower levels of state authority of the unitary system countries usually have less budget-related power. Yet, it does not imply that their role in the fiscal policy is inconsiderable.

Given the above-mentioned facts, it should be emphasized that the budget decentralization has a considerable impact on the implementation of the fiscal consolidation policy. Among others, such influence may be present in the following aspects:

- In particular, the decentralization is capable of decreasing the potential of the central government in terms of successful policy of balancing the public finance system;
- It can also increase the potential of the central government to balance the budget by improving the control over budget funds usage and mutual accountability of all the government authority levels.

The budget decentralization means the increase of the government apparatus that would hinder the process of strict decision-making in fiscal policy. Whereas clear fiscal consolidation requires a bigger number of bureaucratic levels, it makes the process of its implementation more complex. Herewith, the role of subnational governments becomes more significant. Thus, for instance, the correlation is very important between the central government revenues and local self-government revenues in general tax receipts. It is because the central government often funds specific expenditures on the local level. In this case, the general effort aimed at bringing the state finance system to balance is directly related to these financial relations between the center and regions, and requires the support of the latter.

Thus, even when the central government does not see necessity in agreeing the fiscal consolidation with territorial communities, the autonomous efforts of the center aimed at bringing the state finance system to balance may be negated by the latter. It is because after the successful fiscal consolidation the central government may provide some support for the local level via, for instance, a system of financial equalization. In such a case the local government authority receives an opportunity to spend more funds and accumulate additional debts with hope of receiving extra assistance from the country-wide level in the future. Such actions of the local government decrease the efficiency of the countrywide fiscal consolidation. Therefore, the incentives for excessive usage of funds depend on the amount of intergovernmental transfers within the country. Given the above-mentioned facts, the decentralization of budget-related obligations creates additional threats to the implementation of fiscal consolidation since it leads to decrease of the central government opportunities regarding the stabilization reforms, and makes the process of decision-making concerning specific measures within the fiscal consolidation policy more complex.

On the other side, the budget decentralization reinforces the fiscal discipline and fiscal efficiency thus increasing the trust to a long-term financial stabilization. Fiscal decentralization acts as a guarantee that the fiscal policy chosen will not be soon reconsidered and altered, even as a result of successive elections in the country. These are the conclusions made by the theoretical economists Feld and Schaltegger (1946) who studied the practice of fiscal regulation in Swiss cantons during years 1981-2001. They found out that coordinated actions of the centre and periphery in conditions of budget decentralization have a positive influence on fiscal consolidation. It happens because the autonomous efforts of the central government authorities aimed at improving the balance of the state finance system are rarely long-term. While doing their research, they concluded that intergovernmental transfers play a significant role in the fiscal consolidation by decreasing the expenses on its implementation. However, intergovernmental transfers considerably prolong the process of fiscal consolidation at the same time.

The issue of implementation of the fiscal consolidation policy in conditions of budget decentralization was also studied by the following scholars: J. Darby, A. Muscatelli, and G. Roy (2005). They focused on the coordination of common efforts on both the country-wide and local levels in their investigation. Analyzing the episodes of the fiscal consolidation in the countries of OECD during 1970-1999, the authors claim that most episodes of the fiscal consolidation were implemented on the country-wide level. Yet, they suggest that the sample being analyzed enabled them to distinguish the fiscal consolidation instruments that were of primary use for the local government authorities.

Given the experience of the countries implementing the fiscal consolidation in conditions of budget decentralization, a connection between the fiscal consolidation efficiency and decentralization level becomes apparent. Such a connection may be described as follows:

- Fiscal consolidation is the most successful in case of coordinated actions between the central and local authorities who aim at balancing public finance;
- Local government authorities play an important role in decreasing both capital and current expenditures. In particular, it relates to those of salary fund, the latter being one of the key spheres that can promote the process of balancing the budget;
- The measures of the local government authorizes aimed at fiscal consolidation play a crucial role in the overall success of the fiscal consolidation policy in the country;

- The decrease of transfers from the central to the local government authorities usually takes place along with the effective process of fiscal consolidation, thus leading to lack of financial opportunities of the local government authorities, since the latter do not have a right of attraction of alternative sources of revenues. Therefore, the decrease of intergovernmental transfers considerably affects expenditures;
- The behavior of the local government authorities depends on whether the fiscal consolidation is being implemented on the country-wide level within the coordination of efforts from both the center and regions, or implemented by the local self-government authorities independently. In the second case, the efforts will be more directed towards decreasing capital expenditures and increasing the revenues, thus failing to improve the country-wide financial balance (Darby et al. 2005).

Thus, provided the fiscal consolidation policy is being implemented successfully, there is a tendency of stable decrease of intergovernmental transfers from the central government authorities to the government authorities of the lower level. In turn, it forces the latter to reduce their expenditures including the inefficient ones.

Special attention should be paid to the research conducted by S. Adedejib and J. Thorntona (2010) who regard the mutual relations between the fiscal consolidation and budget decentralization in conditions of cooperation of the central and local government authorities during the implementation process of fiscal consolidation in developing countries. The research findings suggest that local government authorities play a significant supplementary role in the overall success of fiscal consolidation. Furthermore, the local government authorities of such countries make use of two major trends to promote overall fiscal consolidation:

- By means of reducing their capital expenditures;
- By means of increasing their own-source tax revenues.

The reduction of capital expenditures by local government authorities due to fiscal consolidation policy is also described in the research paper of J. Darby, A. Muscatelli, and G. Roy (2005). Such actions of local government authorities are regarded as the consequences of imprudence and short-term planning during the process of amending the financial balance of the local budget. Since they are usually elected for a short term, they tend to make efforts to reduce the part of expenditures that is least visible in this short-term period, namely – capital expenditures. Yet, such a policy leads to negative consequences in the long-term prospects as the lack of capital investment causes a restraining effect on the economic growth and domestic demand, which, as a result, leads to growing unemployment. Except for the above-mentioned macroeconomic factors and conditions usually used to shape the fiscal policy, political and institutional factors should also be considered when implementing the fiscal policy. Herewith, the primary criterion of the fiscal consolidation efficiency in conditions of budget decentralization is the level of coordination and agreement of actions between the central and local government authorities. As it has been testified in practice of the implementation of fiscal consolidation in developed and developing countries, local government authorities may considerably influence the improvement of fiscal balance factors in the country and support the country-wide consolidation ambitions.

Given the experience of developed countries, the intensification of fiscal discipline and decline in the state debt level are accompanied by considerable limitations that influence the budgetary savings level. In conditions of budget decentralization, the central government has less levers of influence on the financial policy of subnational government authorities, which leads to deterioration of coordination actions between various levels of government authority. Therefore, the classical economic theory considers that fiscal consolidation requires budget centralization and fiscal autonomy restriction of the local government authority. Yet, further theoretical and practical research demonstrated that the budget decentralization leads to balancing the budget and reducing the level of debt. It is particularly the case with highly developed countries.

The analysis of research conducted by prominent scholars working on this issue let us speak about the presence of contradictory attitudes towards the budget decentralization and its effect on macroeconomic and budget balance. On one hand, the classical theory of public finance and budget federalism proves that budget decentralization leads to increased accountability of local government authorities and efficiency of providing public goods, which, when combined with the interregional competitiveness for capital and human resources, improves the local financial discipline. On the other hand, though, further economic research dwells on a high level of macroeconomic risks of budget decentralization, especially when the central government is continuously providing financial support for the regions by means of intergovernmental transfers.

The implementation of fiscal consolidation on a local level may lead to the following major threats:

If the successful fiscal consolidation is being implemented by the central government autonomously, without engagement of local government authorities, the latter have less incentives to use their own financial resources effectively. Furthermore, they develop risks of increased expenditures and excessive debt accumulation. It happens because in case of well-balanced state finance system the central government tends to allocate additional funds for priority program implementation for the local government authorities;

– Unreasonable intergovernmental transfers lead to inefficient expenditures on the local level, which causes a vertical imbalances of the budgetary system and negates positive effects of fiscal consolidation;

 Local government authorities tend to decrease their own capital expenditures and increase their revenues in the process of fiscal consolidation, thus negating the long-term possibilities exchanging them for the electoral support of population in the short-term period.

Yet, budget decentralization aimed at improving the control over usage and allocation of budget funds on the local level (in case of purposeful and coordinated fiscal policy) amplifies the effect of fiscal consolidation on the level of the central government.

Thus, the implementation of fiscal consolidation in conditions of budget decentralization has many risks on one hand, but gives an impetus to economic growth and construction of a democratic society on the other hand.

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# 2.5. Problems in synchronization of fiscal policy of Ukraine with the tax systems of EU countries in the process of eurointegration

The effectiveness of the process of Ukrainian Euro integration demands rapid activity adaptation of all the state institutions, which affect the field of socio-economic development to EU standards. Such a necessity follows not only because of the needs of the economy, but also because of the Ukrainian society orientation to the welfare of European countries. One of the most important spheres of the state activity, which is designed to ensure the European integration interests of both: enterprise and society, is fiscal system.

The key difference of national tax policy with the European practice of building fiscal system is its instability. The norms of the Tax Code of Ukraine, the main legal act governing the appropriate sphere, experience constant changes, which, as it is demonstrated by the same European practice, negatively affect the economic system in the whole. The existing imperfection and variability of tax law of Ukraine needs reforming, which these processes are leant on, often does not provide the expected result. The root causes of difficulty to implement fiscal rules of the EU directives in Ukraine are significant gaps in indicators of social, economic and political development, and also a significant difference in the public mind as to the necessity of effective tax administration. As a result of the existence of such causes, any changes in the tax system are accompanied by the growing dissatisfaction among business entities, the growth of the shadow economy, increase in corruption, complexity of the process of tax administration, reduction in positions in international rankings, etc.

Despite the high degree of integration relations of the EU countries, their fiscal policy is not marked by the only rates or standard set of tax payments. Tax policy of the European Union is a system of measures, which are held by institutions and organizations of the EU and by its states – members, with the aim to harmonize tax legislation of the States-Members to eliminate tax barriers in the internal market of the European Union, ensuring the realization of the basic freedoms under the Treaty about the EU (freedom of movement of goods, persons, services and capital), inadmissibility of unfair and harmful tax competition of States-Members jurisdictions, inadmissibility of tax discrimination in the internal market, developing new principles and mechanisms in order to avoid double taxation and also providing fight against tax offenses [1].

Analysis of realization of the EU integration process allowed to make

a number of conclusions about the current tendencies of harmonization of tax policies, including:

- EU legislative documents expressly do not foresee harmonization, but declare the alignment of national legislation, adapting them to the needs of building a common market in Europe;
- 2) harmonization should be recognized and should take the form of specific measures within the tax reforms;
- 3) steps of harmonization are consistent and labor-intensive;
- 4) harmonized at EU level should be only those taxes, the administration of which is consistent with the problems of the common market functioning in Europe.

In general the EU countries - is the territory of high taxes. This is evidenced by indicators of the tax coefficient calculated as the ratio of taxes (including social payments) to GDP at market prices. In 2012 the average value of this ratio in the EU27 was 39.4%, significantly more than in countries like the United States (24.7%) and Japan (30.3%) [2, p. 6]. Under such conditions, even the strengthening of European integration of Ukraine does not relieve opportunities to build our own fiscal policy, but its position because of competition from the side of other countries participating in the integration process will be strictly structured and will meet common international standards, and efficiency of this process will depend on the degree of deregulation of economic processes in the country. The problem of excessive state influence on the functioning of the fiscal system in Ukraine clearly manifested itself in the adoption and enactment of the Tax Code. The adoption of this legal act is designed to fully optimize the fiscal system of Ukraine to the world standards, its rates of certain taxes correspond to the sizes that are declared in European countries, but the fact that certain provisions did not take real action (or were postponed for entry into force in the future), cardinal, expected changes it did not provide. It is evidenced by indicators of the level of the tax system, calculated by the World Bank (Figure 1).

Resulted indicators give grounds for optimistic moods, as a comparison of indicators of the tax system of Ukraine and the world average values constantly approached, but the overall result points to a different reality. Thus, according results of the latest 2014, the development of Ukraine's tax system corresponded to only 164 place among 185 countries included in the rating. The main role in the slight improvement of indicators of Ukraine's tax system played a certain quantitative indicators, as according to the norms of the Tax Code local taxes significantly reduced. The World Bank experts also noted that the reduction in time resulted in the simplification of VAT declarations and single social contribution and also improvement of electronic reporting system.



# Figure 1. Dynamics of indicators of the development level of Ukraine's tax system compared to the world indicators

Source: constructed by authors according to [3]

The essential problem of modern tax system in Ukraine compared with European practice can be its orientation not on the corporate sector but on the social sphere that in a low level of social welfare and reducing real income is disastrous. Because "not elevation" of taxes causes processes of evasion of them and does not contribute to the development of tax awareness. Moreover, these trends relate to both direct and indirect taxes. Proof of this stands the structure of dynamics of tax revenues to the budget of Ukraine (Figure 2). As shown in Figure 2 the main fillers of the budget are such taxes, like VAT, PIT, CIT and excise tax (ET). The largest share of tax revenue provides VAT – 40%, better known as the consumption tax and its tax base increases retail prices for products and thus, reduces purchasing power. The second volume of tax revenues to the consolidated budget of Ukraine is personal income tax (up to 20%). In other words tax the charges of which reduces incomes of the population. Excise tax accounts for less than 10% of tax revenues to the consolidated budget of Ukraine.

A significant discrepancy in the sphere of influence on income and purchasing power of population is confirmed by the fact that in Ukraine the tax burden on wages reached 56.0% (single social contribution rate from 36.76 to 49.7% plus 15% (17%) – personal income tax). In Germany, where incomes and purchasing power are much higher, deductions from

wages are only 30.0%, while in Sweden, a country with some of the highest taxes in the world -46.0% [5].



# Figure 2. Structure of tax revenues to the consolidated budget of Ukraine for the period of 2003-2014 years

Source: constructed by authors according to [4]

Equally significant problem of modern fiscal policy of Ukraine is primitive reform process, which lies in the manipulation of interest rates or of the fiscal payments, whereas reality requires changing concept of its construction itself. For high dependence of the budget on taxes from society does not allow them to cut them, low level of business entities can not increase the fiscal burden on the corporate sector, on the other hand – the low level of welfare and social initiatives as for the bringing it up to European standards make it impossible, or even require increasing of budget expenditures. In such circumstances, the concept of reforming the tax system it is advisable to build as a kind of balance between fiscal "compromise" for the development of entrepreneurship and the economy in general and the need to increase tax revenues. An algorithm of constructing such a system, we see in the mainstreaming of the principle of progressivity (accrual of taxes according to differentiated rates) as the basic principle of the tax system of Ukraine. Despite the fact that this system creates complexity in tax administration, its impact on the socioeconomic system is highly rational. Since the backward socio-economic indicators at the minimum taxation will have reserve to increase, and those that are characterized by a high degree of development, due to slightly higher rates cover the budgetary costs of the privileged first. Should be mentioned that similar initiatives registered in some norms of the Tax Code of Ukraine, but in fact they are not met, or have a low degree of applied use or achievement of expected results, and therefore their action today practically is not observed.

We offer a tentative draft of the tax system according to progressive principle in the context of the experience of European countries. Thus, indirect taxation, including the VAT, should be carried out with two key requirements. At first, support for exports and consequently equalization of the payment balance and stabilization of the exchange rate. Second – optimization of purchasing power by charging lower rates for particular goods. Examples of such rates can be the following: minimum rate (or 0%) VAT for exports and for the taxation of essential goods sale (agricultural products, bakery products and other food products); maximum high one for taxation of sale of luxury goods (jewellery, luxury vehicles, fur and leather products, new technology, etc.); and the main rate (at the level of 20%) for the taxation of all other transactions for buying and selling goods and services.

We believe that the use of such differentiated tax rates will help to balance the revenue from VAT enrolment and will meet the orientation of social tax law.

Regarding excise tax, it is advisable to implement its differentiation of rates according to class or value of a particular product. For example, set the highest rate for gasoline A-98, which is used by consumers to high-cost vehicles; the base rate should be assessed only on diesel fuel and gasoline A-95 (the most used fuels by owners of private and commercial means of transport); minimal one (or even zero) for gasoline A-92, A-76 (80) and alternative fuels.

High rationality and social significance would be the introduction of a progressive system of income tax as follows: minimum, or 0% from the citizens – whose income does not exceed the cost of living; 15% from citizens whose incomes are higher than the living wage, but not more than the average income in the country; higher rates for people whose income exceeds the average income, etc.

Differentiated approach can also be used for corporate income tax. The key element, relatively to which it is possible to carry out rates differentiation, must be pure act profitability of a functioning capital of companies. Here it should be used the minimum or 0% of rate for new businesses or created by foreign investment in priority sectors of the economy, during their payback time, high rate – for highly profitable enterprises and the base rate for other entities.

Activation of differentiated approach to calculating basic categories of fiscal payments can be a key integration tool and one of the factors attracting foreign investment in the domestic economy.

Equally important issue in the construction of effective process of European integration of Ukraine is a significant level of fiscal policy centralization and necessity to fill the budgets of territorial-administrative units. The complexity of the process is associated with the heterogeneity of the economic opportunities of the country. The optimal direction of formation of fiscal policy at the local level can be the system of parafiscal charges. The essence of such sanctions lies in imposing special taxes on certain products (services) with the aim of targeted use of these receipts to the development of certain specific objects.

- Examples of parafiscal funding sources may be the following taxes:
- tax on the use of tourist routes is directed to their equipment, computerization, etc.;
- tax from participants of fairs, exhibitions and concerts for venues of equipment, development of adjacent infrastructure, etc.

The introduction of such payments can provide the specific needs of particular regions and at the same time can act as criterion of municipality management system. Because excessive congestion will not provide adequate returns, but on the contrary it will reduce revenues. Optimization of such activity and rationalization of fiscal activity of the municipality will substantially increase revenues and will contribute to regional development and reproduction of their infrastructure.

Summing up it should be noted that the process of European integration of Ukraine's economy requires not only adjustments of the goals and objectives of tax policy, but also it requires cardinal changes in its construction taking into account the national fiscal peculiarities and current global trends of financial globalization. Reconciliation of strategic directions of tax policy transformation necessitates improving tax mechanism and administration system of tax payments, reducing the tax burden and eliminating tax barriers in economic relations aimed at improving welfare and increasing its purchasing power. Implementation of these directions of tax policies reforming have a positive impact not only on overall economic growth of Ukraine, but also on the development of its regions, that in future will bring the process of deepening integration relations.

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# 2.6. The significance of customs security as an important component of economic security of the state

The rapid development of market relations, revitalization of export and import operations, and intensification of international economic cooperation and integration processes are accompanied by growing economic competition on domestic market that raises the need to ensure economic security of the state and its components.

The impact of globalization on national economy results in new attractive opportunities and prospects for our country as an independent agent of international economic relations. Globalization has such positive effects for the country, as economic growth, flow of investments, employment growth and higher living standards, increasing national businesses' competitiveness. Meanwhile the negative effect of external factors on Ukraine's customs security arises, namely the growing number of agents that infringe customs rules, the increase in smuggled goods, and diminution in customs payments, etc.

The analysis of researches, which deal with the problem of customs security as a component of economic security of the state, exhibits that the issue is studied both by Ukrainian and foreign scientists, among which we can note: I. Berezhnyuk, O. Ivashyna, L. Lozovskyi, K. Noviko-

va, P. Pashko, P. Pisnoy, B. Raizberg, T. Ryda, Ie. Starodubtseva, S. Tereschnko, D. Viter and others.

The issue of customs security is one of the crucial ones, since a good protection of economic interests and economic security has a great importance for the state, implementation of which is assigned to customs authorities of Ukraine. The main aim of customs security is ensuring state economic interests protection, as well as security of vital needs, interests and values of a person, population, state and regions against internal and external threats, the sources of which are foreign economic relations.

Because of changes to tax and customs legislation, instability of financial situation in the state, and existence of shadow economy, customs security as a component of economic security of the country remains in danger. If customs security is not ensured properly, it can have a negative effect on social and economic development of the country.

Because of a deep international division of labor, strengthening integration in world economy, entry of Ukraine into WTO, the state of national economy depends more on foreign economic activity of the country. Thus, customs security as a component of economic security becomes crucial for Ukraine. Economic security of the state is considered as the economic provision of a state national security, certain measures aimed at sustainable development of the economic system of the state, ensuring self-sufficiency that includes the mechanism to resist external threats. Therefore, economic security of the state can be presented as a complex system that comprises certain elements and directions.

Based on well-known definitions of the components of economic security of the state we will focus on some of them and state that customs taxation affects directly the financial component of economic security of the state. The receipts of customs payments to the State Budget revenues are provided by the mechanism of customs taxation, influencing directly the state of budget and monetary system. Foreign economic security is directly connected with customs taxation. Through differentiation of customs tariff rates the system of customs taxation, on the one hand, serves as a safety device against smuggling, irrational structure of import and export, negative balance of foreign trade, on the other hand, facilitates free flow of goods, labour and capital that creates favourable conditions for development of national economy owing to its integration into international division of labour. It may be said that customs security influences directly or indirectly almost every component of economic security of the state [2, p. 26].

Thus, customs security as a component of economic security plays a leading role, since protects national economic interests in a foreign economic field. P. Pashko and P. Pisnoy consider that customs security is the state of protection of customs interests of Ukraine, ensuring and implementation of which is assigned to customs authorities, and provides opportunity regardless of external and internal threats to provide realization of customs affairs [6, p. 67]. Customs security should not be simply treated as a static value, primarily as a dynamic phenomenon that is exposed to the effects of external environment.

Customs security affects greatly budget revenues and protection of national interests. Thus, an effective system of budget revenues collection, service to combat smuggling and customs infringements, service to control the legality of customs tariff and non-tariff regulation application, electronic declaration of goods and gradual shift to post-customs control have been established in a short period of time. Along with formation of customs bodies, many problems arise. Nowadays the following problems may be defined as the main ones:

- failure to perform the operational-search activity that reduces effective detection and prevention of customs violations;
- absence of elaborated advanced system of cooperation with law enforcement authorities;
- necessity to lower the impact of human factor on the process of customs clearance that should reduce the share of "grey" and "black" imports, increase budget revenues, and also provide effective combat with corruption in state authorities;
- constant understatement of customs value of imported goods aimed at paying less customs payments as well as overstatement of invoice value of exports to refund more VAT from budget;
- inclusion of a great number of objects of intellectual property into the register causes delays in customs clearance due to activation of risk management system;
- need in improvement of interaction with border authorities of neighbouring countries;
- decline in social security and absence of proper financial incentives for customs officers;
- increase in complaints about delays in customs clearance without providing reasons, and also about ill-mannered behavior of customs officers;
- cuts in spending on facilities;
- depriving customs authorities of some important functions (postclearance audit, foreign economic and customs statistics; participation of customs bodies in consideration of claims, etc.) that immediately lowers effectiveness of the units' activities as well as responsiveness and deep analysis of detected violations;
- long sales of confiscated goods or inability to sell them.

If customs security is considered as the state of protection of customs interests of the state, then customs interests of the state are national interests ensuring and fulfillment of which are achieved by implementation of customs affairs [8, p. 20].

Customs interests are a certain spectrum of national interests of the state that are connected with provision and implementation of customs affairs, meeting customs interests facilitates effective operation, sustainable development of the economic system, lowering threats to national security of Ukraine as well as stability in society and fields, which are linked with customs sphere, and is determined by a current state of foreign economic relations, meeting citizens' wants, the extent of fulfillment of strategic benchmarks of social and economic development and protection of cultural and information environment of the state, as well as the state of foreign economic and customs security [8, p. 11].

The main aim of customs security can be considered as achievement of effectiveness and reliability of customs system owing to effective performance of customs authorities.

It is worth singling out such stages of customs security implementation:

- 1. Formation and approval of customs policy in the field of customs security;
- 2. Formation of the system of customs regulation in interrelation with economic interests and state objectives that affects customs regulation benchmarks;
- 3. Application of chosen measures concerning methods of regulation and control over the goods crossed the border;
- 4. Monitoring of the system of customs regulation.

Customs security includes ensuring security of trade chain and security that is provided due to combating smuggling and violations of customs rules and is closely connected with foreign trade security that describes the state of customs interests in the sphere of export and import. That division of security by types and subtypes is quite relative, because this classification is constantly added and itemized, and all types are closely connected.

The activity of the state in the field of customs security is aimed at ensuring certain customs interests, among which the most important are: creating conditions for liberalization of foreign trade; non-admission of smuggling and violations of customs rules; improvement of customs legislation of Ukraine according to world and European standards; accelerating flow of goods and passengers across the customs border; provision of quality foreign consumer products and non-admission of hazardous goods. In this context, customs security as an integral component of economic security needs its own ensuring at the state level, because over the centuries customs remains one of the most significant factor of statehood and independence, a guarantee of state and financial sovereignty.

Any component of economic security of the state is characterized by such a category as threat to state security. The threats are such destructive factors that create dangers to individuals and society in general as well. In turn, customs threats are such factors that create danger in the sphere of customs activity. The treats are divided into internal and external ones as well as real and potential ones [8, p. 18]. The threats to customs security includes: emergencies, disasters, global economic crises, which have a negative effect on national economy; protectionist measures of trade partners, high level of dependence on global markets of certain resources or on a domineering trade partner.

A customs threat is a concrete or immediate form of a threat to customs security on the stage of its transition from probability into reality as a result of contradictions that occur in the society, foreign economic field, political and economic relations, in the sphere of customs activity, industrial and natural phenomena that manifests itself by an appropriate form of display, way of impact and effects that can cause any customs damages [7, p. 13].

The sources of threats to customs security can be the following [4, p. 13]: spontaneity of natural processes, natural disasters which hinder appropriate course of foreign economic relations; accident (e.g. subjective inappropriate performance of customs procedures); opposing tendencies, collision of contradictory interests (from wars to competition between subjects of foreign economic activity); probable character of scientific and technical progress with its impact on modern techniques of customs control; inability to perceive an object clearly, absence of full information about it – the phenomenon that is crucial for customs bodies which haven't a right to carry out operational-search activities, and receive identification information from the subject of foreign economic activity; imbalances of main components of economic and administrative mechanisms of customs service that is confirmed by constant system restructuring.

The main objectives that the state faces while elaborating the system of prevention of threats to customs security are the following:

- prevention of counterfeited goods increase;
- combating smuggling, violations of customs rules and money laundering;
- control over movement of currency and cultural values while crossing the customs border;

- application of sanctions;
- control over determination of tax base and completeness of payment of customs charges and other mandatory payments;
- interaction with other law enforcement and supervisory bodies to prevent the violations of valid legislation;
- combating corruption that leads to decrease in "shadow" sector and "black" and "grey" imports, etc.

P. Pisnoy in this context states that the crucial objective, which customs authorities of Ukraine face, is ensuring customs security in the course of elaborated system of protection of national and customs interests of the state; and also possibility and ability to ensure by systemic principles counteraction to possible dangers and threats in customs field [9].

The main threat to customs security of the state is that part of payments which customs service has not collected to the State Budget. The important function of customs bodies in ensuring customs security is control over completeness of customs payments, but not their amount [8, p. 18]. The above conclusion confirms the fact that comparison of foreign trade statistics of Ukraine with statistical data of its leading trading partners, namely countries of EU and CIS, indicates about great discrepancies, which annually amount from 10.0% to 30.0%. It is implied that the goods, which are entered in EU foreign trade statistics as export to Ukraine, should be rendered in Ukraine's foreign trade statistics as import from corresponding country-partner. The discrepancies are explained not so much by methodological differences in statistical techniques (e.g. while determining the price of exported item transport costs and insurance are not considered, which are considered at customs clearance of these goods as import into Ukraine), as by a wide spread of shadow schemes with import and export operations that lie in reluctance to declare goods, manipulation with customs value and the country of origin, that lead to diminution in customs payments or exemption from taxation.

In this context it is very important to develop culture of information exchange with customs authorities of trading partners, and also with government authorities that carry out fiscal and regulatory functions. It is necessary to follow a holistic approach to optimization of security measures accompanied by improvement and facilitation of international trade.

P. Pashko emphasizes that one of the main indicators of customs security is the implementation of customs post-clearance audit as a component of risk assessment system. In 2013 after audit of goods classification additional budget revenues amounted to UAH 97.3 million, audit of countries of goods origin – UAH 53.1 million and audit of customs value – UAH 4.71 billion. Besides, because of execution of interagency Inter-

national Trade Commission resolutions, which authorize the application of special measures of customs and tariff regulation, special types of customs duty (UAH 58 million) were directed to the budget. We can make a conclusion that customs security is an integral component of economic security owing to a direction for protection of national economic interests and national producer. At this stage, it is necessary to improve customs legislation that will facilitate detection and combating customs violations, which inevitably weaken customs security of the state.

It is worth saying that customs security while protecting national interests of the state according to valid legislation of Ukraine, and to ratified treaties and agreements on international cooperation shall provide:

- movement of goods and vehicles across the customs border of Ukraine;
- realization of customs regulation connected with establishing rates of taxes and duties and completeness of their payment;
- application of customs procedures, measures of customs-tariff and non-tariff regulation;
- fulfillment of tasks aimed at fighting smuggling and violations of customs rules;
- execution of the other tasks by customs authorities by means of effective implementation of customs affairs [9].

In future customs will remain a guarantor of customs security as a component of economic security, so the objectives of customs authorities are application of recognized international trade regulation techniques on the base of WCO Framework of Standards to Secure and Facilitate Global Trade to detect and prevent external and internal threats.

Restructuring of customs bodies should be done taking into account global tendencies conducting foreign economic activity by business entities. In this case, territorial location of subdivisions is not the only important objective, but also the availability of sufficient number of trained officers to carry out customs formalities is crucial. A great work to restructure the institution of "customs bodies" has been done lately. It is primarily connected with reduction in the number of customs to one unit in each region, and staff reduction from 18,000 in 2010 to 11,500 in 2014. Besides, one of the consequences of this process is depriving customs authorities of some important functions.

As the primary objective of customs authorities is protection of national interests, it is expedient to consider an experience of leading countries:

- to set clearly the priority of national interests while regulating foreign trade;
- to approve the principles of reciprocity concerning foreign trade

concessions and of compliance with fair competition;

- to provide an opportunity to protect national economic security by means of administrative regulation of export;
- to provide a detailed legal support for foreign economic activity regulation techniques. Setting clear priorities gives customs authorities the opportunity to provide effective interaction with law enforcement bodies with minimum costs and to maximize the efficiency of budget revenues of the state.

As we can see the customs authorities have quite complicated objectives, which require a rapid response. However, nowadays in the conditions of unstable political and economic situation, fiscal function remains primary objective for customs authorities and there are not sufficient resources to introduce modern customs processes management mechanisms.

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# 2.7. Influence of the state debt on the financial stability: the current environment and risks

On the way of the Ukrainian state to the EU integration there are many problems and challenges especially perilous under the external aggression and war fighting. Economy of Ukraine as well as the state itself experiences an overly complicated period and demands urgent efficient transformations. In 2014 Ukraine survived unprecedented combination of political, financial and economical and banking crisis. The conflict in eastern Ukraine along with the accumulated for previous years macroeconomic imbalances have ruined macrofinancial stability of the state. The modern economic environment in Ukraine displays that one of the most influential factor to hamper the development of the country is the increase in the state debt burden up to the threatening level. Excessive financial borrowings under the quite unfavorable conditions accompanied by their inefficient use impede long-term economic growth and threaten the financial security.

Tendency to increase in the state debt of Ukraine (Figure 1) is traced within several last years. Thus, the period of 2005-2007 is characterized by a balanced approach to the state debt formation. Throughout these years debt-to-GDP ratios decreased due to the economic growth and effective approach to the debt policy. The following stage (2008-2009) is the peak period of the world financial crisis, economic decline of the country, increase in the state budget deficit and aggravation of the debt security caused by impetuous accumulation of the state debt (through the emission of the government bonds to increase the equity capital of the banks and inflow of the Stabilization Fund; the first tranche of International Monetary Fund loan; depreciation of the national currency).

In 2010-2013 the debt pressure on the economy of Ukraine increased which made the long-term and short-term credit ratings of Ukraine lower. The period of 2013-2014 is notable for maturity of significant part of the stabilization credit debts that were received from the IMF in 2008-2009 which made additional debt financing necessary to pay out the previous debts. Beginning with 2014 a stage of the debt aggravation has begun. It was caused by the overall economic environment in the country and the war conflict in the east of the country. This period is characterized with high exchange risks of external debts, unstable refinancing of the previous debts as well as debt payment pressure on the state finances.

Over 2014 the volume of the state and state guaranteed debt increased from 584.4 bln UAH (40.2% of GDP) in 2013 to 1100.8 bln UAH (70.3% of GDP) in 2014, having crossed the critical limit of the debt-to-





Source: Compiled by the author: according to the Ministry of Finance of Ukraine

GDP ratio of 60% and the state debt rose from 480.2 bln UAH (33.0% of GDP) to 947 bln UAH (60.3% of GDP) respectively.

The main determinants of the state debt increase in 2014 became:

- severe political crisis and the war conflict demanding additional financing of the defense facilities as well as national security law enforcement agencies;
- deep economic recession caused by necessity to reform economic relations because of the loss of the economic contribution of the Autonomous Republic of Crimea and those of Donetsk and Luhansk regions, breakdown of economic relations with the Russian Federation, the number of internal and external factors that influences the budget revenue and demands additional financing;
- social and the other binding duties of the state regardless the economic instability;
- additional financial resources necessary to reform structure of the economic environment and its stabilization;
- the state borrowings needed to finance the constant deficit of the state budget caused by substantial increase in defense taxes (84.4%) and debt service (51.5%); the deficit in 2014 was equal to 78.1 bln

UAH (Figure 2) or comprised almost 5% of GDP which was much bigger than the economically sound limit of the index 3% of GDP. Predominance of debt financing resources eventually forms the vicious circle of constant growth of the state deficit and the state debt. The phenomenon was called the debt helix [1, p. 10];

 further budget support to the national enterprises and banks through the increment of their equity capital.

Essential destabilizing factor is the substantial increase of the amount of state debt in Ukraine. Significant devaluation of the national currency during 2014 and the early 2015 (from 8 to 23-24 UAH to 1 USD) resulted in growth of the debt part nominated in the foreign currency and its payment correspondingly. Both the state and the state guaranteed debt enlarged from 300.3 bln UAH / 37.6 bln USD (51.4% of the state and government-backed debt) in 2013 up to 612.97 bln UAH (55.6% of the state and government-backed debt) or 38.8 bln USD in 2014. The processes intensify risks of Ukrainian dependence on foreign financing.



Figure 2. Dynamics of the budget deficit and state borrowings, bln UAH

Source: Compiled by the author: according to the State Treasury Service of Ukraine

The afore-mentioned condition is especially perilous against the background of extreme decrease in international currency reserves the amount of which comprised 7.5 bln USD at the turn of 2014. Further reduction in gold and foreign exchange reserves to 5.6 bln USD as of 01.03.2015 is an anti-record beginning with June 2003. At the same time the minimum standard of gold and foreign exchange reserves (reserves import ratio during three months) has to correspond to about 23 bln USD.

The following environment reduced opportunities to pay the external debt and aggravated assessment of the credit rating of Ukraine [2, p.6].

Moreover, in December 2014 Standard&Poor's Ratings Services decreased long-term sovereign credit rating of Ukraine in the foreign currency to the level of "CCC-". At the same time the short-term credit rating of Ukraine in the foreign currency was confirmed at the level of "C". The long-term and short-term ratings in the national currency were defined to the level of "CCC+" and "C" accordingly and the negative forecast is provided. In February 2015 Fitch Ratings determined the long-term default ratings of the emitter (DRE) in the foreign currency at the level of "CC", defined the short-term rating in the foreign currency at the level of "C" and decreased the long term DRE in the national currency to the level of "CCC". On March 24,2015 Moody's Investors Service (Moody's) lowered rating as for long term obligations both in the foreign and national currency from "Caa3" to "Ca" and kept negative forecast. In September 2015 Standard& Poor's lowered long-term and short-term sovereign credit rating of Ukraine in the foreign currency from "CC/C" to the level of "SD" due to restructuring of the state and government-backed debt and its partial remission and temporary stop in payments of acquittance and service of the state and government-backed debt. In October 2015 Fitch ratings lowered long-term and short-term default rating of the emitter in the foreign currency from "C" to the level of "RD" [3].

Substantial aggravation of credit ratings to the default level implies impetuous narrowing of foreign investments and capital outflow because of the reluctance of creditors and investors to risk transactions which will lead to the increase in borrowing capital costs and further devaluation processes.

It is important to note that amount of the state debt of Ukraine has reached the critical limit for the budget sphere of the state. The ratio of the state and government-backed debts to the revenue of the state budget testifies to the statement. Thus, before 2009 the revenues of the state budget surpassed the state debt amount but fast increase in the state and government-backed debts in 2014 had threatening scopes compared to the revenues of the state budget (the state and government-backed debts exceed the revenues of the state budget more than 3 times). Along with increasing amounts of liabilities the amounts necessary to pay and service the state debt enlarge. According to annual returns of 2014 payments of the state debt made almost half of the revenues to the State Budget of Ukraine (Figure 3).

Such environment makes the Government borrow again to provide the payments of previous debts that in the long run will provoke further negative trends or restructuring of the current liabilities.



## Figure 3. Dynamics of the State budget revenues of Ukraine and indicators of state debt, bln. UAH

Source: Compiled by the author: according to the Ministry of Finance of Ukraine

Essential destabilizing factor is high cost of debt service. Borrowings were made at high interest rates due to urgent necessity of the budget deficit financing under no access to inexpensive financial resources at financial market. Thus, along 2013-2014 debt service costs substantially increased (Figure 4). Meanwhile in 2013 the ratio of the state debt service to the revenues of the state budget comprised 9.3%, in 2014 the ratio grew up to 13.4% (the ratio of the state debt service to budget expenses was 11.2% in 2014). Necessary increase of taxes to service the state debt from 31.7 bln UAH in 2013 to 48.0 bln UAH in 2014 significantly diminished not only the opportunities to finance other expenditures but also the effectiveness of the tax part of the State budget on the whole.

Significant concentration of liabilities of Ukraine in portfolios of individual owners creates substantial risk for the financial security. The Ukrainian bonds are owned mostly by hedge funds. The biggest owner of the state and government-backed Eurobonds is the hedge fund of Franklin Templeton, which owns the blocking stake in 7 emissions of Eurobonds. When Franklin Templeton published its reports the above-mentioned amount was a bit smaller and comprised 4 bln USD which makes 21% of the total amount of individual creditor debt. Anyway, along with the number of other hedge funds (PIMCO, Blackrock, Fidelity Ta Stone Harbor) Franklin Templeton takes control over 50% of the Ukrainian market creditor debt [2, p. 15]. The issue assumes more prominence in case of necessary debt restructuring.



Source: Compiled by the author: according to the Ministry of Finance of Ukraine

Besides indices connected to the level of the state debt and volumes of debt payments to evaluate perspectives of debt stability and conditions of debt security the following group of indices is used in international practice. The group includes indices of the state debt structure and key factors influencing the debt dynamics. First of all they are the indices of structure according to currency types, interest and term of the liabilities. The correspondence of the state debt structure to optimal values and lack of significant structural deformations are essential determinants to decrease external vulnerability of the financial system. In contrast abrupt changes of exchange rate and/or interest rates of the risk structure of the state debt can cause substantial negative influence not only on the amounts of debt payments but also on the debt level on the whole.

Let's consider the structure of the state and government-backed debt of Ukraine in terms of currencies repayment (Table 1). The increase in the relative share of the state debt in hryvna should be considered as a positive tendency since the reduction of currency risks of the country is accomplished under such circumstances. However the national realities prove otherwise.

Table 2

Table 1

State debt and state guaranteed debt of Ukraine (by currency of repayment)

									-		
Indicat	or	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
State debt and state	bin UAH	78,1	80,5	88,7	189,4	316,9	432,2	473,1	515,5	584,4	1100,8
guaranteed debt	share, %	100	100	100	100	100	100	100	100	100	100,0
U.S. dollar	bln UAH	49,0	50,1	57,4	90,4	88,6	129,9	154,8	191,8	271,4	494,1
0.5. 001181	share, %	62,70	62,25	64,67	47,70	27,97	30,04	32,71	37,21	46,45	44,88
EURO	bln UAH	9,1	9,9	10,2	14,7	16,5	16,2	16,4	22,3	18,9	58,5
LUKO	share, %	11,67	12,35	11,48	7,76	5,19	3,75	3,47	4,32	3,23	5,32
SDR*	bln UAH	6,0	4,2	2,2	36,3	103,0	129,5	129,5	81,9	57,7	120,0
JUK	share, %	7,67	5,20	2,45	19,15	32,50	29,95	27,38	15,88	9,87	10,90
Ukrainian	bln UAH	13,5	11,1	13,6	39,0	105,0	155,5	170,4	217,1	235,0	421,8
hryvnia	share, %	17,23	13,82	15,31	20,57	33,12	35,97	36,01	42,11	40,21	38,31
Swiss	bln UAH	-	3,2	3,4	5,6	-	-	-	-	-	-
Franc	share, %	-	3,95	3,87	2,94	-	-	-	-	-	-
Japanese	bln UAH	0,6	2,0	2,0	3,6	3,9	1,2	2,1	2,5	1,5	3,8
Yen	share, %	0,73	2,43	2,22	1,88	1,22	0,28	0,25	0,48	0,44	0,35

\*SDR – (eng. special drawing rights, SDRs) – reserve and payment instrument that emitted by the International Monetary Fund (IMF), exists only in a cashless form as records on bank accounts.

The structure of the state debt in terms of currencies repayment is presented in Table 2. The main types of interest rates at which the state borrowings were made are: fixed interest rate, IMF interest rate, LIBOR, refinancing of the NBU rate (refinancing rate), US Treasury rate, bank rate of the FRG.

### State debt and state guaranteed debt of Ukraine (by interest rates)

Otate	uebiai		e gua	antee	u ueb		lane	by int	erestr	u(03)	
Indicato	r	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
State debt and state	bln UAH	78,1	80,5	88,7	189,4	316,9	432,2	473,1	515,5	584,4	1100,8
guaranteed debt	share, %	100	100	100	100	100	100	100	100	100	100,0
LIBOR	bln UAH	19,0	24,9	28,5	47,8	43,0	44,2	41,2	40,8	55,5	126,5
	share, %	24,30	30,86	32,12	25,23	13,57	10,23	8,70	7,91	9,50	11,49
PIBOR	bln UAH	0,4	0,3	0,2	0,2	-	-	-	-	-	-
	share, %	0,46	0,36	0,24	0,08	-	-	-	-	-	-
NBU	bln UAH	1,3	0,9	0,6	0,2	1,6	1,6	1,6	-	1,0	-
refinancing	share, %	1,69	1,16	0,62	0,09	0,51	0,37	0,34	-	0,17	-
US Treasury	bln UAH	0,8	0,7	0,6	0,7	0,6	0,4	0,3	0,2	-	-
rate	share, %	0,98	0,83	0,65	0,39	0,19	0,11	0,06	0,04	-	-
IMF rate	bln UAH	6,0	4,2	2,2	36,3	103,0	129,5	129,5	82,0	57,7	120,0
IVII Tate	share, %	7,67	5,21	2,45	19,14	32,50	29,95	27,38	15,91	9,87	10,90
Bank rate of	bln UAH	0,3	0,3	0,3	0,3	0,3	0,2	0,14	0,10	0,03	-
the FRG	share, %	0,42	0,38	0,32	0,17	0,09	0,05	0,03	0,02	0,01	-
Fixed	bln UAH	50,4	49,3	56,4	104,0	168,4	256,3	300,7	342,9	470,2	854,4
	share, %	64,48	61,20	63,60	54,90	53,14	59,29	63,49	76,12	80,46	77,61

During 2010-2014 the share of liabilities obtained at the fixed interest rate has increased. Thus, the change in interest structure of the state debt testifies to the efficient risk-management of the state debt.

It is important to note that interest rates of IMF credits and the ones of the other international financial institutions fluctuate at the level of 3-6% which is far less compared to the raising of the funds through the emissions of bonds the yield of which can range within 10-13%. However, as the world economy recovers, the rates of IMF and Libor will grow causing the increase not only in the amount of the external debt but also in the one of taxes to service it. At the same time, the pace of growth will be lower than that of international capital markets, which testifies to certain advantages in the structure of the external state debt of Ukraine.

The results of analysis display that the quality of the policy and strength of shocks play an important role in the forecast as to what countries will encounter debt problems. Using the quantity methods the experts of the World Bank proved that in many countries the debt level did not exceed the limits but nevertheless likelihood of the debt problems was rather high owing to low indices of the economic growth or miscounts of the economic policy. There are also countries that have a heavy debt burden but the likelihood of debt problems does not exceed the average index, which is determined by high quality of their economic policy and strength of the economic base [4, p. 11].

Impetuous growth of state liabilities, substantial interest and currency risks of the debt, refinancing of previously accumulated debts constitute a significant threat in the system of state debts of Ukraine. That's why the improvement of state debt management and its service is an urgent problem since only the effective debt policy can enhance the level of the debt security, allow to decrease the state budget deficit and encourage economic stability of the country. The state debt management is expedient to consider as a system the main elements of which are the overall strategy of debt borrowings, effective use of the obtained resources, sourcing and timely and full repayment of the liabilities [5, p. 313].

Thus the system of the state debt management of Ukraine has to look for long term strategic concerns of the national economy. The primary steps in effective management of the state borrowings have to be the following: introduction of the relevant legal frameworks, where the initial principles of the borrowing policy of the state were fixed; development of risk-management system of the state debt, optimization of the state debt structure; employment of debt planning and forecast combined with the budget and macroeconomic planning as well as prediction and activation of structural reforms in the sector of national government directed to improve efficiency of the budget resources use, transition from the passive fund raising in order to finance the budget deficit to systematic debt management, control procedures improvement as to repayment of the state debt; development of the internal market of government securities, state investments planning not only within one year range but also in the long term perspective within 5-10 years. Besides assessment of state investment efficiency as well as the one of their expedience should be given an important role. Such activities will prevent crisis debt environment and minimize the budget costs to service and repay the state debt.

Moreover, the enhancing relations of Ukraine with the other international financial institutions and governments of the other countries will encourage inflow of foreign investments, restarting the economy and increase of the budget revenues. It is also important to intensify the transparency of the state resources due to simultaneous record of transactions and liabilities of the institutions and the budget deficit through the cash receipts and disbursement basis and accrual basis methods for the sector of the national government, legal specification in essence of the types and record of quasifiscal transactions that are completed in the sector. In the sector of state guaranteed debt the mechanism of state guarantees requires improvement through setting both the upper limit of the Government accountability at the breach of warranty and quantity restrictions of their volume and strict control on target use of resources obtained against the state guarantees by economic agents. Remedial measures as to origin of state debt accumulation - constant deficit of the budget resources - assume more prominence. They include the sourcing to decrease it through development of energy strategy allowing to lessen the dependence on foreign energy carriers as well as to introduce the system of non-state retirement and medical insurance, which will lower the budget taxes.

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## 2.8. The essence of fiscal decentralization and its importance for Ukraine

Since 1991, since independence, Ukraine faces the issue of implementation of the policy of decentralization, including financial.

Reform of the relationship between levels of government, initiated by the adoption of the Constitution of Ukraine, the Law of Ukraine "On Local Government" and continued in 2002 after the enactment of the Budget Code, allowed to start the process of fiscal decentralization and made relations among levels of government more transparent and predictable.

Fiscal and financial decentralization is caused by several factors, among which we note the following:

- inadequate territorial-administrative structure;
- low revenue potential of local budgets and disadvantages of tax administration;
- over-centralized management;
- deficiencies in the system of intergovernmental transfers, and limited access to local government borrowing.

Consider in detail the nature of a form of decentralization – financial. It should be noted that research in the field of financial decentralization policies has fragmented character. This primarily concerns the definition of "fiscal decentralization". Thus, S. Osipenko believes that fiscal decentralization is the most efficient form of organization of public funds management that fully meets both the new system of economic relations based on market principles and the process of democratization of all spheres of society [1, p. 176].

In foreign countries instead of the term financial decentralization it is used the term of fiscal decentralization. The founder of this idea was the American economist Charles Thibault. In his opinion, fiscal decentralization allows subnational governments to obtain autonomy for funding and providing public social and public services. He proved that only the fiscal autonomy of subnational bodies allows to meet public expenditures and individual preferences and needs of the consumers.

Hypothesis of Charles Thibault (1956) can be formulated as follows: "... in the presence of a large number of territorial units and intensive migration fiscal decentralization contributes to Pareto-improvement because it creates a prerequisite for adequate detection preferences regarding public goods and the fullest realization of these preferences" [2, p. 252; 3, p. 293 – 294].

A significant contribution to the theory of fiscal decentralization was made by English scientist and economist W. Oates. He proposed a defi-

nition of the term: "decentralization is the right of independent decisionmaking of decentralized units" [4, p. 115]. Regional and local authorities have the opportunity to make their own decisions on financial issues and management of territory's development.

W. Oates performed the basic principles of the classical theory of fiscal decentralization [5]. In his work he represented the analysis of dependence of possible information advantages of fiscal policy decentralization on the presence of external effects (externalities) that could be more accurately reflected in the case of a centralized policy. He established a rule decentralization, which is that in the absence of significant externalities tax functions and functions of production or finance budgetary expenditures should be as decentralized as possible to take advantage of the local expression of voters based on their preferences taken into consideration. This rule is associated in particular with the research of Charles Thibault. In this case, the concept of decentralization should have concern, first of all, to the powers relating to making decisions on financing expenditures and revenues.

In substantiating the issue of effectiveness of fiscal policy it is concluded that subnational budgets should be funded as far as possible, through taxes, which tax only residents of the region and are going just for them. It is necessary that the expenditures were regional in nature, and their side effects for other regions were minimal.

By W. Oates decentralization does not affect the level of expenditures but decentralized decision in respect of the supply of local public good should be more effective than centralized one or not to give it in terms of efficiency. In the process of decentralization it is advisable to compare the social costs and benefits of providing benefits locally. This conclusion is based on the following assumptions: the benefits associated with the decentralization of public services, is limited in space; giving by consumers the benefits to private or public goods, as well as their attitudes toward various social benefits, is unequal; consumer response to the "budget localization factors" is mobile. If these conditions are not met, then, according to W. Oates, there are no reasons for decentralization in terms of economic efficiency.

The theory of fiscal decentralization, like any other, has its positive and negative sides, which is shown in the table 1.

Taking advantage of fiscal decentralization requires providing the following conditions [10]:

- sufficient autonomy of local governments in determining the size and structure of local budget expenditures;
- clear division of expenditure responsibilities between levels of government based on economic criteria;

- sufficient administrative and financial capacity of local authorities to properly performing of their functions;
- effective incentives and accountability mechanisms of local authorities to ensure the effective provision of public goods.

Separately, we consider it necessary to note that successful implementation of decentralization reform requires two resources – trained skilled people and adequate budget [11].

Advantages a	whealb ha	antance of	fiecal d	ecentralization
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Table 1

Advantages	Disadvantages
Better meeting the needs of the local population by local governments at the local level	Complicated process of expenditure redistribution through the budget and managing the budget process generally, as at the national level it is easier to decentralize responsibility to local budget expenditures than tax sources
Promoting competition among local governments, allowing citizens to choose their activities for administrative services	In terms of decentralization it is difficult to reconcile local needs of individual local communities of macroeconomic needs of the whole country
Creating a mechanism for balancing powers at different levels of governance in order to prevent interference in the market economy	Increased conflict of interests within the community
Forming of local elites, the development of human capital within a specific territory	High probability of fusion power and business in the regions
Improving the quality of local power and performance of its functions	Increased inequality of territories
Increasing of competition for resources (high need for human capital investment)	Complications of the national spatial development policies, the emergence of need to search mechanisms to coordinate the interests of local communities and central government
Strengthening of democratic procedures, enhance the protection of human rights and freedoms	Passivity of significant number of representatives of local communities and contradiction to changes

Source: formed by author using [6; 7; 8; 9]

In general, the value of decentralization is that it:

- improves the situation in the field of education, culture, local transportation and medicine;
- reduces the negative effects of the arbitrariness of politicians and external forces and threats of reforms cancellation;
- increases the competitiveness of the community in the fight for investors.

The value of financial decentralization is that it balances mechanisms of public services with the needs and preferences of local communities and residents, increases the responsibility of local authorities for the implementation of the relevant functions and degree of efficiency of the public sector as a whole by introducing elements of competition.

Accordingly, the decentralization of financial powers is the main condition for ensuring the independence of local government in finance, and vice versa, strengthening of financial independence of local government must be seen as a consequence of fiscal decentralization [12, p. 139]. That is, both processes are related as individual and whole, and their actual implementation in practice will strengthen the financial foundations of local government and as a result will provide high quality level of public services.

Also, it is possible to note that the market economy provide the optimum combination of centralization and decentralization in the management of finances and creating an environment in which local authorities will have broader powers in preserving the central government and political control functions [13, p. 13].

The main objectives of fiscal decentralization should, in our view, be the following:

- satisfaction of realization of interests, public needs of local communities;
- increase in community participation in the development of a specific territory;
- effective provision of public social services.

Since decentralization involves the distribution of functions, it is appropriate to decide which of them transfers control to the local level, and what should be left for central authorities. R. Musgzave [14] developed a classification of public tasks that determines the feasibility of the consolidation of certain functions at the appropriate levels of government. In his view, the main function of local government must be distributive function, and its main task is to provide the local population by public goods and benefits according to the preferences of the population with the maximum degree of coverage of the burden of funding which falls on the beneficiaries of these services.

In the classical theory of the public sector there are its three main management functions in the process of providing of public goods and services suggested by R. Musgzave [14; 15, p. 20-21]: stabilising, redistributive and allocative. Stabilization function assumes that macroeconomic stabilization has to be centralized, since the money supply is determined centrally and regional economies open to one another and are interdependent, that is lead to a decentralized externalities in these conditions.

Redistributive function provides that an independent regional cohesion policy of (redistribution) income provokes from a certain part of the population the incentives for migration from one region to another (there is evidence of "mobility" of poor). Therefore, the basic parameters of redistributive policies should be determined centrally, while redistribution of functions can be transferred to local authorities.

Allocative function assumes that decentralized production of public good will be more effective than centralized if:

- the benefit of the grant is localized mainly in a particular area;
- preference regarding benefits largely differ between the territories than in the middle of them;
- decentralization does not lead to an increase of its production cost;
- benefits are financed mostly decentralized, that is, by those who live in a particular region.

Thus, pursuing a policy of fiscal decentralization, it is very important for the countries to divide tasks between the different levels of government. Firstly, it is necessary to define clearly the tasks that must be distributed between local and central levels of government. Secondly, authorities on each level should follow the distributed tasks on a regular basis. Thirdly, with differentiation of tasks the problems of division of expenditure between levels of government can largely be solved.

In Ukraine the process of fiscal decentralization is rather slow, due to:

- 1) lack of tax autonomy in local government;
- 2) predominance of essential share of transfers and fixed revenues in the structure of budget revenue;
- 3) the tendency to reduce the share of local budgets in the consolidated budget of the country.

Fiscal decentralization in Ukraine, carried out by changes to the Budget and Tax Codes in December 2014, already allows in full volume to fund all expenditures of villages and small towns, to fulfil their responsibilities and shows the effective communities.

There are main instruments of fiscal decentralization [16]:

- distribution ratio of personal income tax (60.0%, 15.0%, 40.0%, 0%);
- 10.0% of corporate income tax (the private sector enterprises);
- ecological tax (80.0%);
- charge on retail excise goods;
- local taxes (real estate, including commercial property, land tax, vehicle tax);
- new types of transfers;

- local guarantees and borrowings (simplification of procedures);
- equalization of budget revenues and related opportunities for communities to participate and influence projected budget indicators.

Thus, the budgets of villages, towns and cities of regional importance in the result of the reform obtain 100.0% of excise tax, property tax, single tax, fees for parking, tourist duty, fees for administrative services, income tax, rent payments for subsoil use of local value, and license fees for state registration, administrative fines and penalties, dividends, loans and local fees for issuing local guarantees, own revenues of budgetary institutions. Also, these budgets will receive 25.0% of ecological tax, 1.5% of sales production, 90.0% of the funds from the sale of nonagricultural land and other income.

However, local budgets will be filled from retail charges for excisable goods (beer, alcoholic beverages, tobacco products, petroleum products) at a rate of 5.0% of the cost of goods sold. In addition, their revenues will be filled by property tax, tax on cars with large engine volume, 80.0% of ecological tax (instead of 35.0%) and from 2.0% to 5.0% of fees for mineral resources.

Significant benefits will get the budgets of united community which are equal to the budgets of regional centers and areas. In addition to these taxes, they will receive even 60.0% of personal income tax and other revenues, including from Regional Development Fund [17].

Part of the new local taxes allows to accumulate in the local budgets general fund of additional resources up to 25 bln. UAH. In general, taking into consideration the new system of intergovernmental transfers, additional resource of local budgets only in the current year will be about 45 bln. UAH [18].

Since the beginning of 2015, the sources of local budgets in Ukraine were expanded due to passing from the state budget to local ones a number of taxes and the introduction of new fees.

And most importantly – now the local authorities are able to decide how they will spend these funds.

In our opinion, the financial decentralization should be a manageable process, not natural. Controlled fiscal decentralization is formed when the authorities consciously choose the direction of motion, the goal, and as a result, receive a package of solutions aimed to achieve it. In this regard it is important to explore the range of possible strategic objectives important for each community. First of all, we believe that the main goal of fiscal decentralization should be to improve the standard of living in Ukraine.

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## 2.9. Fiscal potential of tax component of state budgetary resources

Investigation of fiscal potential of tax system is a substantial aspect of understanding of apologetics of tax gaps (as a consequence of tax losses accumulation) and fiscal reserves available if a state is provided with sufficient budgetary resources. Unused potential of taxes and levies constraints significantly the amount of social welfare funded by means of taxation.

The analysis of tax revenue structure of the consolidated budget of Ukraine shows quantitative prevalence of fiscally insignificant payments in the national tax system. Thus tax receipts from only three taxes (corporate income tax, individual income tax and value added tax) make up in average 75.48% of tax revenue of the consolidated budget from 2004 to 2014 (Table 1).

Table 1

### Tax revenue structure of the consolidated budget of Ukraine, %

							Jourg			,	
Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Tax revenue	100	100	100	100	100	100	100	100	100	100	100
including:											
Individual income tax	20,92	17,67	18,13	21,57	20,20	21,38	21,76	17,99	18,88	20,40	19,78
Corporate income tax	25,59	23,93	20,81	21,34	21,07	15,88	17,24	16,47	15,47	15,54	10,94
VAT	26,49	34,47	40,08	36,82	40,54	40,66	36,82	38,88	38,48	36,24	37,82
Other revenues	27,00	23,93	20,98	20,27	18,19	22,08	24,18	26,66	27,17	27,82	31,46

Source: calculated by the author based on the data provided in [1]

Revenues from excise taxes and duties make up another 14.22%. Therefore, the rest of taxes and duties formed only 10.30% in average of the consolidated budget tax revenue during the period under observation.

Thus, given the existence of the taxes in Ukraine, that do not produce significant fiscal effects in determining fiscal potential we are to focus on the main budget generating taxes – value added tax, corporate income tax and individual income tax.

The analysis will be based on the numerical formalization of the notion of "fiscal potential" and on the calculation of fiscal efficiency of the above-mentioned taxes and their effective tax rate as a consequence of the impact of tax expenses multifactor phenomenon on architectonics of state budget resources.

Table 2 presents the calculation of the effective tax rate of value added tax as a ratio of budget revenue from value added tax and final consumption of households and tax productivity as a ratio of effective and nominal tax rates, as well as a budget effectiveness index which shows how much fiscal revenue in % to GDP falls to 1% of nominal tax rate.

Table 2

### Indicators of effective tax rate, productivity and budget effectiveness index of VAT

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Nominal VAT rate, %						20,0					
Effective VAT rate, %	9,3	13,4	15,8	14,0	15,8	14,5	12,6	15,9	14,4	12,1	12,5
VAT productivity, %	46,5	67,0	79,0	70,0	79,0	72,5	63,0	79,5	72,0	60,5	62,5
VAT budget effectiveness index	0,24	0,38	0,46	0,41	0,49	0,46	0,40	0,49	0,49	0,44	0,44

Source: calculated by the author based on the data given in [1; 2; 3]

Fiscal potential of relatively high (20%) VAT nominal rate in Ukraine is not implemented due to the low effective (implicit) rate of this tax. As it can be seen from Table 2, following a rapid decline of all VAT effectiveness indicators in 2010, as late as in 2011 their highest values were observed: effective rate – 15.9%; productivity – 79.5%; budget effectiveness index – 0.49. This is due to both objective macroeconomic factors (growth of GDP, imports, retail trade turnover) and artificially controlled financial flows (overpayment of tax, delay of VAT refund, exemption from VAT on the supply of cereals of operations that led to loss of agricultural enterprises` rights to tax refunds). It should be emphasized that taking into account the amounts of unrefunded VAT that artificially increase the fiscal effects of this tax in this calculation would reduce the actual effective tax rate throughout the study period.

Powerful sector of shadow economy also adjusts the tax effectiveness indicators toward their deterioration. Widespread schemes of illegal tax evasion, especially in foreign economic operations, such as fictitious exports and smuggling, are generally related to VAT.

Recently, the scientific community is increasingly proposing replacing VAT by sales tax. However, we agree with A. Krysovatyy who believes that fiscal instruments forming the budgetary resources of the state in terms of globalization, on the one hand, should be adapted to national economic conditions, and on the other – should be based on taxes and tax payments providing formation of budget revenues in the EU, as geostrategic vectors of our state are associated with the European integration process.

Implementation of any unique national tax forms or archaic taxes (such as sales tax), although may temporarily solve some economic and fiscal problems, but will lead to a weakening of Ukraine in a globalized world and nullify all its hopes for European integration [4, p. 66]. Cancellation of VAT and the introduction of another tax would destroy the existing system preventing double taxation, as all international agreements signed by Ukraine in this area are related to current taxes. In addition, the levying of VAT is a prerequisite for Ukraine's membership in the EU.

Significant fiscal potential is typical for income taxes, due primarily to their broad tax base, a direct relationship between taxpayer's income and his payments to budgets of all levels and an ability to manipulate tax rates aimed at forming budget resources of the state. However, income taxation has a number of disadvantages that create a risk of reducing its fiscal value. First of all, it requires a sufficiently high level of economic development of the state, contributing to the emergence of income from which taxes are paid, and achieving the appropriate level of taxpayers' consciousness and culture, making it impossible to hide income and evade taxes. In addition, an important condition for the effectiveness of income taxes is the introduction of a reliable system of revenue accounting as object of taxation.

In the context of reforming the tax system of Ukraine, more attention is paid to regulatory potential of direct taxation as an important instrument of state regulation of income of individuals and legal entities and elastic levers of influence for their economic behavior. However, the fiscal function is essential for any tax, i.e. its ability to form state budget resources in order to finance socially necessary expenditures. Table 3 represents the calculations of fiscal reserves and effective income tax rate of enterprises in Ukraine.

Establishing from 01.01.2013 special procedure for levying income tax by means of advance payments with recalculating the amount of tax

according to the results of the year, increased disharmony in volumes of fiscal potential and tax amounts actually paid: in 2013 with the potential 44600000000. UAH the budget received much more -55.0 bln. UAH. (including advance payments -38.7 bln. UAH, or 70.36% of the total amount).

Table 3

Fiscal potential and effective rate of corporate income tax

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
The financial result of enterprises that obtained profit, bln. UAH.	73,7	89,2	110,7	147,3	193,7	143,7	212,0	272,7	277,9	234,5	334,5
Nominal tax rate, %	25	25	25	25	25	25	25	25 (from 01.04 – 23)	21	19	18
Fiscal potential, bln. UAH.	18,4	22,3	27,7	36,8	48,4	35,9	53,0	64,1	58,4	44,6	60,2
The actual amounts of tax, bln. UAH.	16,2	23,5	26,2	34,4	47,9	33,0	40,4	55,1	55,8	55,0	40,2
The difference between fiscal potential and actual fiscal revenue from corporate income tax, bln. UAH.	2,2	-1,2	1,5	2,4	0,5	2,9	12,6	9,0	2,6	-10,4	20,0
Effective tax rate, %	22,0	26,3	23,7	23,4	24,7	23,0	19,1	20,2	20,1	23,5	12,0
Growth rate of the financial result of enterprises that obtained profit, bln. UAH, %	-	121,0	124,1	133,1	131,5	74,2	147,5	128,6	101,9	84,4	142,6
Income tax growth rate, %	-	145,1	111,5	131,3	139,2	68,9	122,4	136,4	101,3	98,6	73,1

Source: calculated by the author based on the data given in [1; 2; 3]

This imbalance is due to the fact that under the new rules business entities that for the previous year received an income exceeding 10 mln. UAH, pay monthly advance payments of at least 1/12 of accrued income tax amount for the previous year. That is the amount of tax paid during the current year, is "tied" to the income of the previous year. Thus, the financial results of companies that profited in 2013 decreased compared to 2012 by 43.4 bln. UAH (from 277.9 to 234.5 billion. UAH) but advance payments of large businesses are calculated based on the profit received in 2012. In 2014 the opposite situation is observed: the actual financial results of companies that profited increased by 100 bln. UAH, but the amounts of tax paid decreased by 14.8 bln. UAH (out of 40.2 bln. UAH of tax paid 26.5 billion. UAH (65.92%) were advance payments, calculated according to the financial results of the previous year).

The new approach led to a decline in the share of income tax in the financial result of profit-making companies in 2014 to a critical value of 12.0% and to increasing unused opportunities of corporate income taxation – up to 20.0 bln. UAH. Reducing the effective tax rate causes significant fiscal losses and consequently – increases debt threats in the field of public finance.

One should also note the discrepancy between the growth rates of the financial result of enterprises that profit and the growth rates of revenue from corporate income tax to the budget. Thus, in 2005, 2008, 2011 and 2013 tax growth rates exceeded the growth rate of the tax base – by 24.1 percentage points (p.p.); 7.7 p.p.; 7.8 p.p.; 14.2 p.p. respectively. Instead, in 2006-2007, 2009-2010 and in 2014 we are witnessing the opposite phenomenon – the tax growth rate was lower than the growth rate of the tax base by 12.6 p.p.; 1.8 p.p.; 5.3 p.p.; 25.1 p.p.; 69.5 p.p. respectively. Only in 2012 the growth rate of the tax base and the tax paid were at adequate levels – 101.9% and 101.3% respectively.

These asymmetries are the result of imbalances existing in mechanism of corporate income taxation and collecting taxes to the budget, leading to losing relationship between the income tax received and paid. Powerful unused fiscal potential of income tax also lies in balancing financial results of privatized enterprises. Fiscal practice of recent years shows that profitable state-owned enterprises steadily begin to declare losses after the transition to private property system. That is, first the state budget receives considerable one-off payment from privatization, but then income tax revenues obtained from these businesses reach their minimum or disappear.

Considerable fiscal importance of corporate income tax in Ukraine is due, above all, to the proportions in the distribution of GDP, that have developed historically: in centrally-planned economy the bulk of budget revenues were receipts from the state and very little share were taxes collected from the population, because consumption fund was artificially constrained and accumulation fund was expanded. In market economy the relations between consumption and accumulation funds are gradually aligned, resulting in a progressive reduction in the fiscal effects of corporate income tax and an increase in individual income tax. If in 2004 the share of corporate income tax in the Consolidated Budget of Ukraine exceeded the relevant index of individual income tax (25.59% vs. 20.92%), in 2014 the situation was reversed: the share of corporate income tax was lower compared to individual income tax (10.94% vs. 19.78%).

This is consistent with European trends, as generalization of the world experience shows that in developed countries the main fiscal focus of the system of income taxes is put on personal income tax and corporate income tax is used mainly as an instrument in the competition for resources in the world market. This is explained by a broader tax base for individual income tax, consumer nature of using income of citizens and by reluctance to tax capital at higher rates.

By the definition of I. Shevchuk, the fiscal potential of individual income taxation is a set of legal, organizational and economic measures aimed at full use of existing and hidden opportunities of levying individual income taxes and increasing tax revenues for local budgets from all sources of income [5, p. 17].

Therefore, an urgent need to strengthen the financial base of local governments actualizes the question of determining fiscal capacity of individual income tax as the main component of tax revenues of local budgets and searching fiscal reserves for individual income tax in order to optimize the tax forms of financing local expenditures as economically viable alternatives for state budget transfers and borrowed finances.

It is advisable to study the trends in individual income taxation in the context of the dynamics of population's incomes in determining fiscal potential of individual income tax. According to the calculation methodology used by the State Statistics Service of Ukraine [3], population's incomes include: a) salaries; b) profit and mixed income; c) income from property; d) social assistance; e) other current transfers. The object of individual income taxation at the base rate is only salaries, profit and mixed income. Income from property is taxed at additional rates for specific taxation of certain types of income. Social assistance and other current transfers are mostly not subject to taxation.

Table 4 shows the results of calculation of the effective rate of individual income tax during 2004-2014.

The data presented in Table 4 show that the effective tax rate of individual income in Ukraine is much lower than the statutory basic rate – 7.9% in average during the analyzed period. These asymmetries of fiscal effects of population's incomes taxation are caused by the fact that according to the Law of Ukraine "On Personal Income Tax" of 22.05.2003 № 889-IV, and the Tax Code of Ukraine of 02.12.2010 № 2755-VI the tax rates applied to individual income are different, which gives the opportunity to provide tax optimization within current legislation by means of artificial manipulation of the revenue source status.

The effective rate of individual income tax

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Population's incomes being subject to taxation, including:	169,3	230,1	288,2	394,3	525,9	529,8	677,5	797,3	915,1	962,4	961,1
– salary	117,2	160,6	205,1	279,0	366,4	365,3	449,6	529,1	609,4	630,7	611,7
<ul> <li>profit and mixed income</li> </ul>	43,8	58,4	69,2	95,2	131,1	129,8	160,0	200,2	224,9	243,7	257,4
<ul> <li>income from property</li> </ul>	8,3	11,1	13,9	20,1	28,4	34,7	67,9	68,0	80,8	88,0	92,0
The actual amounts of tax, bln. UAH.	13,2	17,3	22,8	34,8	45,9	44,5	51,0	60,2	68,1	72,2	72,7
Effective tax rate, %	7,8	7,5	7,9	8,8	8,7	8,4	7,5	7,6	7,4	7,5	7,6

Source: calculated by the author based on the data given in [1; 2; 3]

The receipts from individual income tax to the budget of Ukraine are provided mainly through payroll tax, levied by a tax agent at the source of income. Thus, even at the hypertrophic amounts of "shadow" envelope wages, over 90% of all individual income tax revenue during the study period is provided by payroll tax. Thus, the fiscal potential of individual income tax can be calculated based on the value of individual income tax, which is to be paid out of salary (table 5). For the period 2011-2014 we shall use the rate of 15% for calculations, taking into account that the average salary in Ukraine these years was 2633 UAH, 3026 UAH, 3265 UAH, 3480 UAH respectively.

Apparently, the increased tax rate of 17% introduced by the Tax Code of Ukraine for revenues 10 times exceeding the minimum salary in the reporting month, set for 1 January of a fiscal year did not significantly change the effective tax rate, i.e. had no significant fiscal effect.

Thus, the value of the fiscal potential of the individual income tax paid from salary differs significantly from its actual budget revenue. Alarming trend is increasing annual losses of potential sums of revenue proceeding from 9.3 bln. UAH in 2007 to 27.4 bln. UAH in 2014. In addition, if in 2007 unrealized reserves accounted for 22.20% of individual income tax fiscal potential, in 2011 this indicator has increased to 29.85%. To a large extent this situation is a consequence of the mechanism of tax benefits when a certain part of the salary of the taxpayer is taken out from taxation. The modern system of tax benefits in the Ukraine, in our opinion, is not economically justified; it is not a significant regulatory value for those

Table 4

Table 5

Fiscal potential and effective rate of payroll tax

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Indicators	2007	2008	2009	2010	2011	2012	2013	2014
Population's incomes in the form of salary, bln. UAH.	279,0	366,4	365,3	449,6	529,1	609,4	630,7	611,7
Nominal tax rate, %	15	15	15	15	15 (17)	15 (17)	15 (17)	15 (17)
Fiscal potential, bln. UAH.	41,9	55,0	56,4	68,9	79,4	91,4	94,6	91,8
Actual amounts of individual income tax in the form of salary, bln. UAH, including:	32,6	43,6	42,8	49,1	56,8	63,0	66,1	64,4
<ul> <li>tax on employees' income (including miners)</li> </ul>	31,3	42,0	41,0	47,1	54,5	60,6	63,5	61,1
<ul> <li>individual income tax of armed forces personnel, rank and file and commanding officers</li> </ul>	1,3	1,6	1,8	2,0	2,3	2,4	2,6	3,3
The difference between fiscal potential and actual fiscal revenues from individual income tax, bln. UAH	9,3	11,4	13,6	19,8	22,6	28,4	28,5	27,4
Effective tax rate, %	11,7	11,9	11,4	10,7	10,7	10,3	10,5	10,5

Source: calculated by the author based on the data given in [1; 2; 3]

who pay individual income tax, while significantly reducing the fiscal importance of this tax. Also, the tax rate of 10% of tax base on the income in the form of salary of miners, workers of mine building enterprises and employees of state paramilitary rescue services (formations) canceled only from 01.01.2015 had a negative impact on the performance of fiscal functions of individual income tax.

Moreover, from 01.01.2015 the tax rate was increased to 20% for incomes obtained in connection with labor relations and for civil contracts that in the reporting month 10 times exceed the minimum salary, set for 1 January of a fiscal year and passive income (interest on current or deposit account, royalties, dividends, etc.). These innovations are to have positive fiscal impact. However, for income from dividends on shares and corporate rights paid by residents – payers of corporate income tax, the tax rate remained at the level of 5%.

Thus, the fiscal potential of the individual income tax in Ukraine is greatly influenced by the amount of population's incomes, the level of debt on payment of salaries, tax rates, and the level of tax evasion. The fiscal potential of the tax is fully realized in the taxation of salaries. A significant reserve for this potential lies in improving taxation of income in the form of dividends, inheritance, benefits from pension funds and contracts of long-term life insurance. In addition, it is necessary to reduce opportunities for tax evasion and increase effective use of budget resources in order to improve the general standard of living.

Our study of the correlation between actual and potential revenues from major budget-generating taxes supports the conclusion that each of the sources of budgetary resources of Ukraine has great potential fiscal opportunities that are not used in full at present. Fiscal reserves of taxation can be explained with the help of "objective factors" like tax exemptions and preferences, tax debt and a high level of tax evasion. Significant fiscal reserve of enlarging the national tax system potential lies in reducing the extent of tax evasion. This should be done by means of sound state policy, aimed at raising tax awareness, increasing responsibility for violation of tax legislation, reducing the tax burden, i.e. the creation of conditions for the legalization of shadow incomes, which is an important direction of broadening the tax base and reducing tax losses of budgets of all levels.

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# 2.10. Pragmatism of execution of local budgets in conditions of the lack of financial resources

Under current economic conditions providing social and economic development of the country and its administrative units requires the timeliness and completeness of financial resources mobilization and their efficient use in different links of the financial system. Effective formation of financial resources at the national and local levels is a guarantee for prosperity and the European future. However, the implementation of these processes depends on the tax capacity of the regions, their economic development, the social component, and efficient operation of financial services, which provide the territorial units with the financial resources for fulfilling all the powers of state and local authorities.

Research on the problems of formation and execution of local budget revenues is of great interest, primarily because the budget reflects the level of economic development of certain territory, and due to proper and effective implementation of the budgetary process, the economic and social stability as well as adequate standard of living and welfare of the local community are provided.

In our opinion, the study of trends of execution of local budgets revenues deserves special attention in particular after adoption of the Tax Code of Ukraine contributing to revenue increase.

Considering the above-mentioned, we analysed the trends of execution of municipal budgets by the example of the City of Ternopil budget (the city budget). So, consider the features of execution of the City of Ternopil budget revenues for 2012-2014 (Table. 1) [1].

The data illustrated in Table 1, show that in the years 2012-2014 there is a non-fulfilment of General Fund of the City of Ternopil budget for 3.1%, 2.8% and 1.8% respectively with an upward trend of indicators from 96.9% in 2012 to 98.2% in 2014.

During the analyzed period a special fund of the city budget was executed at 110.7%, 102% and 108.1% respectively, due to changes in the Tax Code of Ukraine regarding the single tax revenues to the Special Fund of the budget, but with a significant drop in 2013 (by 7.3%) compared to 2012. Such situation is a consequence of the macroeconomic and political instability.

At the same time, the structure of local budget three years in a row shows an increase in tax revenues both in the General and Special Funds of the City of Ternopil budget (Figure 1).

The data illustrated in Figure 1 show that in the years 2012-2014 the share of tax revenues in the City of Ternopil budget is dominant with a tendency to increase by 0.5% in 2013 compared to 2012, and amounted to 46.3%, 46.8% and 46% respectively. This growth occurs primarily thanks to local taxes and duties in particular single tax. Indeed, due to adoption of the Tax Code of Ukraine since 2011 the structure of local taxes and duties has undergone significant changes. The number of local taxes and duties reduced from 14 to 5.

Indicators         2012           Indicators         approved         received         exe           Thous. UAH         Thous. UAH         Thous. UAH         eceived         exe           Tax revenues         321347,9         303662,9         9         9           Non-tax revenues         321347,9         303662,9         9         9           Non-tax revenues         3846,6         9676,4         9         9           Revenues from         11,0         0,0         9         9           Official transactions         342083,3         338907,7         9         9           Total General Fund         673288,8         652247,0         9         9           Total General Fund         673288,3         26542,7         1         1           Tax revenues         38834,9         45905,2         1         1           Tax revenues         38834,9         45905,2         1         1           Non-tax revenues         3000,0         8737,7         9         9           Capital transactions         9000,0         8737,7         9         9           Official transactions         9000,0         8737,7         1         1		0	General Fund				
approved         received           Thous. UAH         Thous. UAH           Thous. UAH         303662,9           321347,9         303662,9           9846,6         9676,4           11,0         0,0           321343,3         338907,7           673288,8         652247,0           38834,9         45905,2           24536,3         26542,7           9000,0         8737,7           13166,6         13166,6           6722,0         7812,5			2013			2014	
Thous. UAH         Thous. UAH           321347,9         303662,9           321347,9         303662,9           9846,6         9676,4           11,0         0,0           11,0         0,0           342083,3         338907,7           673288,8         652247,0           87334,9         45905,2           24536,3         26542,7           9000,0         8737,7           13166,6         13166,6           6722,0         7812,5	ed execu-ted	approved	received	execu-ted	approved	received	executed
321347,9         303662,9         303662,9           9846,6         9676,4         11,0           11,0         0,0         338907,7           342083,3         338907,7         338307,7           342083,3         338907,7         338307,7           342083,3         338907,7         338334,9           673288,8         652247,0         338334,9           38834,9         45905,2         338334,9           24536,3         26542,7         3000,0           9000,0         8737,7         13166,6           13166,6         13166,6         13166,6           6722,0         7812,5         3812,5	JAH %	Thous. UAH	Thous. UAH	%	Thous. UAH	Thous. UAH	%
9846,6         9676,4         9676,4           11,0         0,0         1           342083,3         338907,7         338907,7           342083,3         338907,7         338907,7           342083,3         338907,7         338907,7           343238,8         652247,0         33834,9           38834,9         45905,2         338334,9           38834,9         45905,2         338334,9           313166,6         13166,6         13166,6           6722,0         7812,5         3812,5	2,9 94,5	338680,0	318932,3	94,2	336793,3	334353,1	99,3
11,0         0,0           342083,3         338907,7           342083,3         338907,7           342083,3         338907,7           53834,9         45905,2           38834,9         45905,2           24536,3         26542,7           9000,0         8737,7           13166,6         13166,6           6722,0         7812,5	4 98,3	8859,8	12632,6	142,6	11880,0	8868,5	74,7
342083,3     338907,7       342083,3     338907,7       673288,8     652247,0       38834,9     45905,2       38834,9     45905,2       24536,3     26542,7       9000,0     8737,7       13166,6     13166,6       6722,0     7812,5	0,0	0,0	0,3	ı		ı	,
673288,8     652247,0       38834,9     45905,2       38834,3     26542,7       24536,3     26542,7       9000,0     8737,7       13166,6     13166,6       6722,0     7812,5	7,7 99,1	365826,9	362013,7	0 <sup>,</sup> 06	411475,8	403408,9	86
38334,9 45905,2 24536,3 26542,7 9000,0 8737,7 13166,6 13166,6 6722,0 7812,5	7,0 96,9	713366,7	693578,9	97,2	760149,1	746630,5	98,2
38834,9         45905,2           24536,3         26542,7           9000,0         8737,7           13166,6         13166,6           6722,0         7812,5		Special Fund	pu				
24536,3 26542,7 9000,0 8737,7 13166,6 13166,6 6722,0 7812,5	;,2 118,2	55003,8	56187,2	102,2	57543,6	61374,3	106,7
9000,0 8737,7 13166,6 13166,6 6722,0 7812,5	108,2	25217,5	30811,7	122,2	25441,7	32145,1	126,3
13166,6         13166,6           6722,0         7812,5	7 97,1	7500,0	6872,6	91,6	6200,0	5809,1	93,7
6722,0 7812,5	;,6 100,0	14217,6	10504,4	73,9	15482,1	14281,1	92,2
	5 116,2	4229,0	3909,7	92,4	4000,0	3814,6	95,4
Total Special Fund 92259,8 102164,7 1- revenues	4,7 110,7	106167,9	108285,6	102,0	108667,4	117424,3	108,1
Total revenues 765548,6 754411,7 9	1,7 98,5	819534,6	801864,5	97,8	868816,5	864054,8	99,5



## Figure 1. The structure of revenues of the City of Ternopil budget in the years 2012-2014

Inclusion of single tax caused the increase of the share of local taxes and duties in the structure of local budget revenues. Accordingly, single tax receipts to the City of Ternopil budget increased in 2.9 times in 2013 compared to 2011, due to increase in the number of individuals and small businesses.

In addition, it should be noted that individual income tax keeps the largest share in the tax revenues of the local budget – 33.8% of total revenues of the City of Ternopil budget in 2013 and 2014. The share of this tax is 40% of General Fund revenues of the City of Ternopil budget. Proceeds of individual income tax in the years 2012-2014 grew in 1.2 times and amounted to 282,708.5 thous. UAH. in 2014, which is a positive aspect concerning increasing the revenue base.

Annual plan of collecting individual income tax was executed at 98.7% in 2014 while in the previous year – at 92.4% and in 2012 – at 93.8%. Consequently, despite the increase of individual income tax receipts, the City of Ternopil budget receives not fully from this revenue source, which generally leads to budget sequestration.

Land tax is traditionally significant source of the revenues of the City of Ternopil budget. Thanks to it the budget received 40,181.6 thous. UAH in 2013, which is 1.1 times more than the previous year and 44,989.6 thous. UAH in 2014, which is 1.1 times more compared to 2013. Execu-

tion of the annual plan of land tax collection is characterized as positive: in 2013 - at 107.2 and in 2014 - at 105.9%. However, paying attention to the tax base, and a small positive dynamics of growth of revenues from this source during the analyzed period, there is a need to review approaches to the determination, more precisely, the increase of land rents and the changes in land taxation.

In turn, the City of Ternopil budget received 64,224.2 thous. UAH of local taxes and duties in 2014, which is 1.1 times more compared to 2013, in 2013 – 58,250 thous. UAH, which 1.3 times more in comparison with 2012. There is a positive dynamics of execution of the main indicators for this source of revenues during analyzed period: concerning General Fund of the City of Tenopil budget – at 90.6%, 106.9%, 114.4% respectively and 110%, 101.7%, 125.9% for Special Fund. Such dynamics enables the fulfilment of commitments taken by local authorities.

One of the innovations of the Tax Code of Ukraine is imposing national ecological tax to replace the fee for environmental pollution. Proceeds from this source to the City of Ternopil budget decreased in the years 2012-2014 from 600.1 thous. UAH in 2012 to 403.3 thous. UAH in 2014 (in 1.5 times). It is observed non-fulfilment for this revenue source: in 2012 – at 10.4% and in 2014 –at 19.3%, which does not justify the expectations concerning introduction of new rates of this tax. One should note that from January 1, 2011 the ecological tax paid by all who use fuel for vehicles, including business entities, citizens of Ukraine, foreigners and stateless persons who use cars. By the end of 2012, the calculation of the rate of this tax is 50% of the rate set by the Tax Code, in 2013 – 75% of the rate, and as of January 1, 2014 – 100% of the rate.

The amount of non-tax revenues of the City of Ternopil budget increased from 36,219 thous. UAH in 2012 to 41,013.6 thous. UAH in 2014 (in 1.1 times). In the structure of non-tax revenues during the analyzed period, it is observed the increase of revenues from property and business activity in 4 times, and a significant reduction of administrative charges and fees – in 1.6 times. In 2013 it is observed the surplus of non-tax revenues in the context of the General and Special Funds of the City of Ternopil budget execution – 142.6% and 122.2% respectively, in 2012 Special fund – at 108.2%, while non-fulfilment of General Fund is at 1.7%, and in 2014 – is already at 25.3%. As traditionally happens the own-source revenues of budgetary institutions are the largest source of non-tax revenues. Their amount tends to increase (in 1.1 times during the analyzed period).

The city budget revenues from capital transactions illustrate the downward trend from 8,737.7 thous. UAH in 2012, to 6,873.3 thous. UAH in 2013 and to 5,809.1 thous. UAH in 2014 due to shortfall in funds from

Source: [1]

the sale of municipal property. The lowest levels of execution of revenues from capital transactions is in 2013 - at 91.6% and in 2014 - at 93.7%, which is a negative trend, because it means that the policy of planning the local budget revenues is imperfect.

As for official transfers for 2012-2014, there is a significant non-execution for this revenue source in 2014 by the Special Fund – 92.2% and General Fund – 98%. At the same time, the year 2012 is characterized by execution of planned indicators at 100%, and there is non-execution of the Special Fund in 2013 – 73.9%. Such imbalances in intergovernmental relations negatively affect the ability of execution of all obligations by local authorities of the City of Ternopil.

The analysis of execution of the City of Ternopil budget revenues reveals a slight deviation of planned indicators, because during 2012-2014 the City of Ternopil budget was executed at 98.5%, 97.8% and 99.5% respectively, that shows its dependence on the decisions of higher state authority, and makes it impossible to implement an active investment policy at local level as well as to take feasible part in improving the social protection and economic freedom of local community.

The data illustrated in the Tables 2-3 show the state of execution of the City of Ternopil budget expenditures in the years 2012-2014 [1].

According to the data presented in the Tables 2-3, expenses on education, health care, social protection and social welfare were the main directions of the city budget spending for 2012-2014. These programs cover over 60% of total expenditures.

However, one should note that despite the importance of this group of expenditures in the social and economic processes, quantitative characteristics of budget expenditures for these purposes are far from optimal, especially in education and health care. Moreover, the plans approved by the budget for these expenditures are not executed, and do not include the full need for spending on social and cultural sphere.

Execution of the City of Ternopil budget in 2012 was implemented in accordance with the priorities of the budget policy for 2012. Total expenditures of the City of Ternopil budget amounted to 750.6 mln. UAH, and according to the planned indicator should be 783.8 mln. UAH. In 2012 the City of Ternopil budget expenditures were executed at 95.8% (the lowest indicator during analyzed period).

Indicators Governance									
Governance		2012			2013			2014	
Governance	plan	actual	%	plan	actual	%	plan	actual	%
Governance		General Fund expenditures	ind expe	enditures					
I am onforcement activity and state	25024,1	24187,7	96,7	29541,5	28702,1	97,2	35531,5	34931,5	98,3
Law emolocement activity and state security	×	×	×	293,0	293,0	100,0	40,0	40,0	100
Education	250,0	250,0	100,0	267070,2	265374,8	99,4	299514,5	289514,5	96,7
Health care	246724,6	242833,5	98,4	119263,7	118911,2	99,7	129152,6	127152,6	98,5
Social protection and social welfare	132169,2	131493,3	99,5	221759,2	219437,3	99,0	290498,4	289498,4	99,7
Housing and utilities sector	198358,4	196579,6	99,1	13377,7	12916,0	96,5	18972,7	16972,7	89,5
Culture and art	7231,0	6897,5	95,4	25700,4	24663,0	96,0	28954,3	26954,3	93,1
Mass media	24226,9	23684	97,8	711,5	651,5	91,6	880,0	680,0	77,3
Physical culture and sport	710,0	621,5	87,5	11511,5	11294,8	98,1	9886,6	9586,6	96
Agriculture, forestry, fishing	11013,2	10899,9	<b>0</b> ,06				-		'
Transport, road facilities, communications, telecommunications and informatics	21135,8	18519,8	87,6	20086,8	18414,9	91,7	22458,2	21458,2	92,6
Other services related to economic activity			0,0			0'0			0'0
Prevention and liquidation of emergency situations, natural disaster consequences	69,0	50,0	72,5	212,7	161,8	76,1	370,0	200,0	54,1
Expenses not related to major groups	5624,8	5313,0	94,5	4891,0	4463,3	91,3	4845,6	4345,6	89,7
Reserve Fund	×	×	×	×	×	×	700,0	700,0	100
Total General Fund expenditures	672537,0	661329,8	98,3	714419,2	705283,7	98,7	841804,4	822134,4	97,7

Table 2

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				UAH					
		2012			2013			2014	
Indicators	plan	actual	%	plan	actual	%	plan	actual	%
		S	oecial Fu	Special Fund Expenditures	es				
Governance	573,3	132,3	23,1	590,0	439,0	74,4	520,3	516,3	99,3
Education	18209,4	16563,4	91,0	22029,2	20324,9	92,3	17192,7	16192,7	94,2
Health care	11031,1	9882,1	89,6	14349,4	12526,1	87,3	10414,7	10214,7	98,1
Social protection and social welfare	360,9	241,7	67,0	209,0	153,5	73,4	288,8	268,8	93,1
Housing and utilities sector	12131,3	9657,5	79,6	41097,2	36723,2	89,4	35103,6	33103,6	94,3
Culture and art	3321,4	2428,2	73,1	5884,3	4685,3	79,6	4043,0	3543,0	87,7
Physical culture and sport	2830,8	2150,7	76,0	3272,1	2623,1	80,2	2066,0	1866,0	90,3
Construction	12719,0	12467,3	98,0	5343,1	4607,9	86,2	12528,8	11628,8	92,8
Transport, road facilities, communications, telecommunications and informatics	25252,1	19398,3	76,8	27077,0	19011,0	70,2	19362,3	18362,3	94,8
Other services related to economic activity	14193,3	8199,7	57,8	13087,2	8420,7	64,3	7157,0	6257,0	87,4
Targeted Funds including:	9116,3	7367,1	80,8	7392,5	6533,4	88,4	4862,5	4362,5	89,7
Protection and rational use of natural resources	703,9	344,9	49,0	683,5	458,1	67,0	620,0	320,0	51,6
Expenditures not classified by major groups	1419,3	714,5	50,3	1718,1	1565,8	91,1	400,0	300,0	75
Total Special Fund expenditures	111267,8	89289,4	80,2	142340,8	117810,0	82,8	114559.7	106697,6	93,1
Total expenditures	783804,8	750619,2	95,8	856760,0	823093,7	96,1	956364,1	928832,0	97,1
Source: Compiled by the author using [1]	sing [1]								

Significant non-fulfillment occurs under item "Transport and road facilities" - 87.6%, and "Culture and art" - 95.4%, which is a negative aspect because this item of expenditures should be financed in full.

The expenditures of the Special Fund of the City of Ternopil budget were executed at 80.2% in 2012, the failure is observed under all spending items, mainly – governance – 23.1%, protection and rational use of natural resources – 49.0%, social protection and social welfare – 67.0%.

Compared to 2012 the City of Ternopil budget expenditures were executed at 96.1% in 2013, which is higher indicator compared to the previous period and demonstrates the possibility of increasing financing for all planned expenditure. This situation occurred due to the partial localization of financial crisis, which negatively affected all spheres of society. The expenditures of the General Fund of the City of Ternopil budget were executed at 98.7%; in terms of items: law enforcement activity (100%), education (99.4%), health care (99.7%), social protection (99.0%), however the Special Fund – only at 82.8% due to underfunding of items such as transport and road facilities (70.2%), governance (74.4%), social protection (73.4%). Considering this situation, expenditures of mentioned directions require urgent and timely funding.

In turn, the City of Ternopil budget expenditures were executed at 97.1% in 2014, which is higher indicator compared to the previous year and shows the gradual overcoming of crisis processes and recovery of financial capacity of the region. Thus, the expenditures of the General Fund of the city budget were executed at 97.7%. The expenditures of the Special Fund of the city budget were executed at 93.1% in 2014.

The analysis of execution of the city budget revenues and expenditures for 2012-2014 demonstrates social orientation of the budget, which is one of the important components of the budget policy. However, along with this lack of financial resources for execution of budget revenues and as a result, budget expenditures reveals the dependence of the city budget on decisions of higher state authorities, which makes it impossible to implement an active investment policy and improve the social and economic situation in the country [2].

In our view, improving the practice of execution of the City of Ternopil budget requires a number of measures concerning mobilization of the financial resources and their effective and targeted spending. In particular, to improve the revenue base of the city budget the following measures are required:

- increasing incentives for small businesses;

greater use of local loans;

- improving the system of regulation of intergovernmental relations;

Execution of expendit

 strengthening the control of the local communities over compliance with budget and tax legislation by the local government.

It is also necessary to provide measures in the context of formation and execution of expenditures of the City of Ternopil budget, as follows:

- strengthening the social orientation of budget expenditures;
- encouraging the development of early childhood and secondary education;
- reforming the health care system and preventing elimination of existing treatment facilities;
- improving conditions for the development and conservation of the network of art and culture institutions.

Summing up, it should be noted that budget funds management at the local level requires radical changes. In particular, we need an increased attention of local authorities to building own-source revenue base and improving the efficiency of spending of financial resources by optimizing the structure of revenues and expenditures of local budgets that are counted and not counted in determining the amount of intergovernmental transfers, strengthening a fiscal role of local taxes and duties, providing financing of the expenditures of local authorities based on a clear distinction for delegated by the state and their own powers, improving the program planning of local budgets, increasing the innovation and investment component of local budgets.

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# 2.11. The influence of geopolitical factors on the macroeconomic processes in the country

Today geopolitics is closely intertwined with globalization, complementing each other and changing each year. Every country needs a new political strategy for existence in a global world. Subjective (political preferences, education, culture, stereotypes and so on) and objective factors affect the formation of political and geopolitical priorities of the regional elites' representatives. Among the objective factors it is necessary to distinguish:

- general political, economic, social and cultural tendencies in the country altogether, and in regions in particular;
- global political and economic factors (for example, prices for energy sources);
- the state of the domestic policy and the adequacy of politicians' activity with the problems, which have arisen in front of the society;
- public policy of the country and its geographical neighbour countries.

The enumeration of subjective and objective geopolitical factors is not confined to the examples above. The promotion of the national interests of any country foresees the adequate reaction on the challenges and threats of modernity, in other words, conduction of the effective policy of the national security.

It is indispensable to admit that the main objects of national security are the citizens (their rights and freedoms), the society (its spiritual and material values) and the country (its constitutional system, sovereignty and territorial integrity). Therefore, the principal accent of geopolitical factors is directed on:

- national independence and sovereignty, territorial integrity of the country;
- developed civil society, democracy standard, standard of formation and efficiency of legislation base of lawful State, personal protection;
- the State's economic opportunities;
- the state of armed forces, their combat effectiveness and capacity;
- national determination and originality;
- the development of the national self-consciousness and culture;
- the availability of the general strategy of national development, "National idea", generally recognized aim;
- national agreement and unity;
- internal political stability;
- the readiness and capacity of political forces to implement commonly defined aims.

The investigation of geopolitical factors and their influence on macroeconomic indices in the country belongs to the priority courses of state policy in national security. Just external but not internal threats constitute the biggest menace for the country.

Geopolitical factors of Ukraine's national economy formation are: social, economic and natural potential, geographical and political position, external circumstances and conditions which define the development and place of Ukraine in the world and in the region. Ukraine occupies comfortable geopolitical position with the population of about 43 million people. On a scale of united Europe Ukraine is a demographic giant, which is inferior to Spain (46.4 million), Italy (61.3 million), Great Britain (64.5 million), France (66.2 million) and Germany (80.9 million people). However, taking into consideration the economic realities Ukraine is a giant beggar. Ukrainian average income per person in 2014 was almost 12 times less than average in the EU and 2.3 times less than in Bulgaria.

Domestic GDP per capita was 3,100 dollars, whereas in neighbor country Moldova it was 2,200 dollars. According to the World Bank data, even Kosovo (4,000 dollars) and Albania (4,600 dollars) are in front of us. In 2015 the level of GDP per capita in dollar equivalent lowered to the level of such countries as Swaziland (2,700 dollars) or Honduras (2,400 dollars), taking into consideration the devaluation of hryvnia to dollar almost by 40.0% and expected lowering of real GDP by 10.0-11.0%.

In 2013, when one dollar cost 8 hryvnias Ukrainian's contribution to country's GDP was about 7-9 thousand dollars. Given index in the Republic of Belarus was twice bigger, in Romania – 2.5, Russia – 3.4, Poland – 3.6, Hungary – 3.8 and Slovakia – 4.5 times bigger.

According to the World Bank data, during its independence, Ukraine became the world leader in absolute depopulation. From the year 1990 the population decreased in 18 countries by 21.9 million people. Ukraine's part in this amount is 6.5 million people or almost 30.0%. The second in this list is Russia – 4.5 million people (20.4%). The reason is not only in demographic waves because during this period in Europe population increased in Germany by 1.8%, Greece – 7.9%, Italy – 8.1%, Denmark – 9.7%, Austria – 11.2%, Belgium – 12.6%, Great Britain and Netherlands – 12.7%, France – 13.1%, Switzerland – 22% and other.

Even if it sounds paradoxical today's welfare in Ukraine is determined by external prices for raw materials: when they rise in price – there's a chance for GDP growth, when they lose their value – the chances for GDP growth are minimal. In 1990 Ukraine's part in world GDP was 0.36%, in 2008 – 0.29% but in 2013 and 2014 it was already 0.24% and 0.17%. For 2015 given index did not exceed 0.1%.

Ukrainian economy strongly reacts on the exchange rate movements

of dollar and euro: when world currencies depreciate, free financial flows are directed into other non-dollar assets. Among those we can distinguish oil, wheat and so on. This causes the changes in their futures prices which lead current prices. Thus, during 2001-2005 the devaluation of dollar to euro by 16-17.0% was usually conducted by higher wheat prices by 20.0%. However, after the beginning of a global financial crisis in 2008 each prolonged consolidation of dollar was conducted by reduction of prices for wheat. Similar dependences have place in price changes for metals, sunflower seed oil and so on.

During 2014-2015 Ukraine is suffering from recession, high devaluation and inflation. GDP in 2014 and three quarters of 2015 reduced by 16.6%, industry declined by 23.5% (compared to December 2013), Consumer Price Index increased by 1.8 times (compared to December 2013), hryvnia to dollar exchange rate devaluated by 2.7 times (compared to December 2013), state and state guaranteed debt increased from 39.9% of GDP to 75.5% of GDP, real salary decreased by 34.0% (compared to December 2013).

Gradual domestic market opening for the European enterprises, which started in 2016, first of all, will stimulate import accumulation into Ukraine. Under conditions of high import dependence of the domestic industry there is a possible enhancement of presence of Ukrainian manufacturers on European market, which will lead to an import increase. In its turn, it will result in negative trade balance.

A necessity to realize projects in restoration of devastated territories and infrastructure may promote an investment demand in Ukraine. However, it is possible if we are able to attract external financial resources despite the depressed state either of public finances or bank system altogether.

At present Ukrainians are in front of protracted system challenges. Strengthening global competition, which includes not only traditional target markets of goods but also funds, technologies and manpower, requires a structural reorganization of Ukraine's economy and the formation of new approaches to national administration.

The development of world economy in the nearest decade will be characterized by:

- Technological breakthroughs, intensification of "intelligence" and inventions "hunting";
- Broadening the usage of alternative sources of energy;
- Stream replacement in world trade and capital flows;
- Intensification of migration processes.

There are such world examples as Singapore, Hong Kong, Taiwan and South Korea, when foreign investors shifted medium technological and high-tech manufactures to these countries. Thus, world leaders accordingly change their own investment and structural conceptions providing a stimulus on the internal high-tech manufacture and encourage the transfer of harmful, raw and low technological manufactures into the other countries.

The signature of "economic breakthrough" could be an intensification of a domestic economy's role in world economy owing to the realization of a proper staff, territorial, natural and financial potential. For achieving a marked goal an internal consolidation is not enough. We also need foreign investment resources' infusion. Transformation of public management should become a significant factor of rapid development.

According to indices of institutional capacity, the World Governance Indicators presented by the World Bank, Ukraine tangibly remains behind developed countries, which have a comparative with our country level of GDP redistribution through government expenditures.

Table 1. Top 10 world countries by the level of share of government expenditures in GDP and indices of their institutional capacity

Country	Share of total expenditures of state sector in GDP, %	Government effectiveness	Regulatory quality	Control of corruption	
Libya	84,44	4,78	1,91	0,96	
Lesotho	64,11	42,58	39,71	63,64	
Finland	58,26	100,00	98,56	98,09	
France	57,50	89,47	85,17	88,04	
Denmark	54,60	99,04	97,61	100,00	
Belgium	54,54	93,30	87,56	91,87	
Austria	53,31	92,82	91,39	89,95	
Italy	51,69	67,46	74,64	57,42	
Ukraine	50,95	30,14	28,71	11,96	
Sweden	50,62	98,56	99,04	99,04	

Source: Based on [2].

Thus, according to the results of econometric analysis, carried out by the experts of Centre for Economic Strategy, the optimal level of expenditures for Ukraine is 37.0% of GDP. Objectively we have much higher index – 50.95%. According to the experts' estimation the deviation of government expenditures from the optimal one provokes negative influence on the growth of the real GDP. For providing economic growth, we need to reduce the share of government expenditures at least by 13.0%.

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### 2.12. Priority directions of development for risk management system as an element of customs control in Ukraine

Last decades experienced considerable transformation processes in political economic, scientific & technical spheres. Globalization and consequent processes test on steadiness and adaptability the traditional models of public administration causing certain activation of scientific research that aim at formation of new concept and behavior paradigm. Under such conditions the role and competence of public administration bodies is fundamentally changing, particularly customs ones, which functions should reflect the modern trends of global processes.

Process of EU integration of Ukraine evokes the necessity of reconstructions in national customs aiming at simplification and harmonization of customs procedures. A precondition for such transformation is optimization of customs control by means of application of risk management system that will promote the activation of foreign trade and improve business climate in Ukraine.

The necessity to research theoretical and applied aspects of risk management in customs is at first substantiated with: urgent necessity to unify national customs regulations with international customs standards; actualization of issues in the sphere of efficiency and mechanism of risk management within the customs control procedure; necessity to systemize the world experience of risk management in customs as well as legal support of increasing efficiency of risk management system.

Owing to theoretical projects of such researches of customs like I.Berezhnyuk, I.Bomdarenko, O.Grabelnyk, L.Derkach, Yu.Diomin, A.Dusyk, T.Kornieva, N.Lypovska, A.Mazur, V.Nastyuk, V.Naumenko, A.Pavlov, P.Padun, P.Pashko, I.Pysmennyy, D.Pryimachenko, T.Protsenko, S.Tereschenko, O.Tropina, O.Todoschak, S.Khrystenko, V.Chentsov there were created the preconditions to investigate the character, contents and functions of Customs Service in Ukraine, and implementation of international experience into national practice of customs. Despite the scholar's attention to customs problems, a number of issues require more thorough research like analysis of risk-oriented instruments of customs control, formation of efficient risk management system basing on peculiarities of crossing-points.

One of the most important directions of customs risks research is formation of their efficient system of management. It is worth to mention that development of risk management system in the sphere of international customs regulations started in the late 90-ties when Kyoto convention was adopted where they declared the prospects of implementation of analysis system and risk management. Due to requirements of Kyoto convention the risk management is the main principle of modern customs regulations that facilitate the evasion of extra customs formalities for the most foreign economic agents.

Since that time there was fast development of this direction that resulted in adoption of a number of legal regulations on international level aiming at global implementation of the following risk management system: Framework of Standards to Secure and Facilitate Global Trade by World Customs Organization (adopted in June, 2005) [6]; the International Convention on the Simplification and Harmonization of Customs Procedures (adopted on 18/May/1973) in Kyoto that became operative in Ukraine on 15/Sept/2011 [3], Customs Code of Partnership (adopted by decree No.450/2008 of European Parliament and Council on 23/Apr/2008) [7]; Customs Code of Customs Union (due to decision of Inter-state Council of Euro-Asian Economic Commonwealth No.17 from 27/11/2009 (City of Minsk) which became operative since 01/July/2010) [8].

The essence of notions 'risk' and 'customs risk' has been substantially studied in economic literature, though little store was set to investigation of theoretical aspects of the notion 'risk management system'. European Commission considers the risk management system to a technology for systematic spotting and implementation of measures being necessary to avoid possible risks [11]. In Ukraine the first legal definition of the notion of "risk management system" appeared in the Customs Code of Ukraine adopted on 13/March/2012 which claims that risk management is an area of responsibility of fiscal bodies to analyze the risks, identify and evaluate them, develop and accomplish the measures aiming at risk minimization, assessment and control after their efficiency [2].

The modern interpretation of the notion of "risk management system" in scientific literature does not contain any unified approach common view-point to it. Having made comprehensive analysis of corresponding scientific sources, we agreed with the idea [9, p. 56] that risk management system in customs is an aggregate of instruments and methods of customs control basing on the optional principle and allowing customs offices to use only legal methods of customs control. The objective of this system is creation of modern system of customs administration that provides efficient customs control operations due to optional principle with the purpose to minimize violations of Ukrainian customs regulations that: a) are contemporary; b) are associated with considerable customs duty and tax evasion; c) decrease the competitiveness of domestic producers.

Having determined the implementation of risk management to be useful both for customs offices and businessmen, the World Bank highlighted the main approaches to obtain balance between business intentions and commercial benefits with trans-border security [12] i.e. the risk management system has to be based on the preliminary notification and data processing, to foresee the separation of free commodity sales from completion of customs procedures, simplification of customs formalities for authorized economic operators, improvement of security measures, efficient administration and control after customs payments that should be audit-based.

All mentioned elements are extremely important for efficient risk management; however the ultimate task for modernization of risk management system on crossing points is obtaining in advance of information about commodities and vehicles before their arrival to borderline. Such data should be used by customs officers for analysis and risk assessment.

It also should be mentioned that customs and tax bodies in developed countries use risk as a main instrument, which enables controlling institutions to refuse of total inspections and to focus mainly on unconscientious taxpayers and foreign economic agents. In this sense, the Strategic Plan of Development, which was approved by World Customs Organization for years of 2009-2014, recommended to avoid imposing new commercial barriers that can result in extra delays on border. In this context the customs bodies were proposed to use risk management system, which is likely to be a basic element of modern system of customs control [10].

The reason for implementation of risk management system in Ukraine is proved with the information about a number of cargo customs inspections during accomplishment of customs procedures. Particularly, by 01/ Jan/2014 the customs inspections rate made up 3.38% that is in almost 3.3 times less than during corresponding period in 2012 (11.05%) [1]. The decrease in customs inspections number is caused with the Customs Code of Ukraine which became operative then and obliged the commodities inspection as result of application of risk management system.

The efficiency of implementation of risk management system as

a modern form of customs control has been proved with the information about successful application of customs procedures by means of automated analysis and risk management system that was provided by Department of Customs Audit, Analysis and Risk Management. In particular, by 01/Jan/2012 the total number of classified commodities with changed product code that resulted in increasing of customs payments, which made up a list of 417 items or UAH 8,544,890 that is UAH 20,540 per item. So far as 01/Jan/2013 there was insignificant increase of goods number with changed product code which made up a list of 531 items or 27.3%, though the sum of customs payments sky-rocketed nearly on 94.0% up to UAH 16,569,960. Again in January/March/2013 there was considerable growth of commodities with changed product code that resulted in total acceleration of profit on 85.2%. In comparison with January/March/2011 total sum of customs payments grew on 189.0%. To say more, the average growth rate of payments per item increased up to UAH 54,300 [9, p. 78].

The efficiency of risk management system during customs control and clearance directly depends upon its correlation with risk profiles. The analysis of valid risk profiles (on the basis of decisions adopted by Expert Commission on Analysis and Risk Management System) [4] shows that most valid RP deal with customs clearance of import that is explained with the fact that customs control has priority directions aiming to secure full-range customs payments and existing common approach when main attention is paid to commodities and vehicles coming to Ukraine. In 2012 the State Customs Service of Ukraine approved more than 120 RPs with nearly 60 ones that are currently valid [9, p.81]. During 2013 there were duly approved and imposed 34 risk profiles. The special attention should be paid to the contents of risk profiles i.e. usage of indicators that show the peculiarities and intensiveness of foreign economic activities [1].

Into the bargain, for whole-range application of risk management system on the border checkpoints it is necessary to investigate the ways to develop risk management system for both cargo and passengers. For this purpose, it is important to establish real interaction with border guards both on central and local levels. Under such conditions, one has to consider the possibility of elaboration of common instruments and/or measures to manage risks together with other supervising authorities at border checkpoints. Such interaction principles were assumed by Concept of Integrated Border Management [5].

Discussing further modernization of risk management system at border checkpoints it is necessary to keep in mind the non-automated analysis and risk assessment there. Such analysis and evaluation should be carried out by authorized personnel from fiscal bodies by application of non-automated instruments of risk management (lists of risk indicators and written risk profiles).

As the problem of operations with risk management system at border checkpoints is rather new for the staff, one has to set a great store to its re-training in order to develop new approaches to customs control that is likely to improve the latter's efficiency through the changes in philosophy of authorized personnel.

According to recommendations EU26 some customs administrations form special units called targeting centers to manage risks. It is very important for reaching the main goal of risk management system i.e. gaining balance between trade promotion and ensuring sufficient control over foreign economic operations. The aim of such centers is monitoring of subsequently selected with automated management systems movement and expertise assessment of its risk. Such targeting centers employ the most experienced staff working in the most specified spheres.

There exist some options to create targeting centers in Ukraine. The first one assumes creation of targeting centers at every customs office, another one insists on regional institutions (with a couple of customs within their area of responsibility). The 3<sup>rd</sup> option assumes creation of a number of targeting centers specializing on certain issues associated with the type of border checkpoint (automobile, railway, aviation, sea border checkpoints). The combination of the mentioned above is also possible.

Thus, the further development of risk management system in Ukraine assumes a number of measures like modernization of legal regulations in the sphere of risk management at border checkpoints, construction of automated systems of risk management at border checkpoints, training and re-training in risk management of personnel of border checkpoints, supply of manuals concerning risk analysis and management, formation of targeting centers for more precise risk assessment and control by means of risk management system in case the automated control is not available, modernization of customs technologies and corresponding legal regulations for processing of preliminary information about goods and vehicles before their arrival to border checkpoints, establishing active interaction with other law-enforcement units, foreign customs bodies, managerial bodies of traffic clusters (seaports, airports), and foreign economic agents.

Another pretty relevant issue nowadays is modernization of functional units at the State Fiscal Service of Ukraine towards improvement of its analytics and supply with automated system of analysis and risk management, risk profiles, elaboration of unified approaches to integrated management of tax and customs risks, ensuring further integration of available internal databases for automated system of analysis and risk management (database of violators of customs rules etc.) as well as databases of other state power authorities and as international organizations, modernization of computer data exchange among domestic and foreign customs administrations, implementation of preliminary notification as a means to improve the efficiency of risk management systems etc. The implementation of suggested measures will facilitate the balancing between minimization of customs rules violations and foreign economic agents' interests as well as activate foreign trade.

All in all, it is worth stating that risk management system is an inevitable element of state customs affairs although it requires essential modifying in terms of implementation of successful foreign experience into domestic customs practice. Thus, according to Framework Standards, the efficient solution of the shipment security problem has to be made by newly imposed system including both methods of state security control and identification instruments, monitoring of 'critical points', risk and efficiency assessment of resources being used along entire shipment chain of producer, supplier, and consumer of goods. The priority task of modernization of risk-oriented instruments of customs control is formation of 'optimal' methods of risk assessment to ensure the shipment security with the purpose to determine and analyze the priority threats and weak points. Its elaboration can be started as result of consultations with business circles and it might consequently become an international model.

Investigation of international aspects and recommendations concerning customs risk management gives the possibility to state that customs control and customs clearance on the basis of risk management system have to carried out with minimal loss of time, material and human resources. The improvement of efficiency of these procedures can be facilitated through qualitative modernization of communication between customs personnel and foreign economic agents as well as synergy between customs administrations of different countries of the world.

Further development of customs risk management system is possible after thorough studies of EU, Customs Union and US experience in this sphere under the context of its possible implementation into domestic practice. However, it is worth emphasizing that implementation process is rather complicated due to irrelevance between Ukrainian customs regulations and international customs recommendations, absence of complex application of risk management system, considerable gap between international practice and national business environment. This makes relevant the necessity of further modernization of national risk management system on the basis of specific features of foreign activities, maximal automation of managerial decision-making in the sphere of forms and volumes of customs control and minimization of human factor influence with the purpose to support the balance between simplification of customs procedures and providing of sufficient level of control.

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# 3. Innovative tendencies in modern fiscal theory

# 3.1. Conceptual principles of the mechanism of tax regulation improvement in Ukraine talking into account international experience

Social and political events in the end of 2014 – beginning of 2015 expose some hidden economic problems in fiscal sphere. Ukrainian tax system is one of the most complicated and the most cumbrous system in the world according to indexes of the number of payments and time spent on administration. Many bureaucratic procedures, fiscal pressure of tax bodies as well as civil servants corruption and low culture of tax payment in society are the key barriers to business and making preconditions for shadow economy. Therefore, today there is necessity of immediate reformation of fiscal sphere. It is caused by the fact that the country is in difficult financial and economic situation on the one hand, and these problems could be solved only by cardinal reforms. On the other hand, society gives today credit of trust to authorities for conducting unpopular decisions to receive long-term effect. Foreign experience of tax reforms, in particular Georgia experience, testifies that it is possible to overcome such negative phenomena inherent to Ukrainian tax system as bureaucracy, corruption, tax evasion in a very short time by means of political will, readiness of society to change and international support.

Theoretical basis and practical aspects of tax regulation and also the problems of tax reform were reflected in the works of Ukrainian scientists: V. Andruschenko, H. Balashov, Z. Varnalii, V. Vyshnevskyi, V. Heitz, A. Gryschuk, T. Yefimenko, V. Zagorskyi, T. Medynska, O. Moldovan, V. Plys, I. Pryimak, Yu. Tymoshenko, O. Sych, A. Sokolovska, O. Shevchenko, and others. Such classics of economics idea as J. M. Keynes, K. Rau, D. Ricardo, A. Smith, M. Tugan-Baranovskyi made a contribution into investigation of formation of effective tax system as one of the main elements of macroeconomic policy in market economy.

Low quality assessment of national tax system testifies serious problems and internal contradictions. Generalization allows us to recognize the key negative factors, which determine low competitive positions of Ukrainian tax system:

1) high tax burden on business. Especially it concerns taxation of wag-

es. If we consider East-European countries one can see that integral rate of social charge on payroll fund in Ukraine is approximately the same, however, while burden in our country is substantively shifted into the side of employers;

- 2) irrational distribution of tax burden among the factors of production. The tax burden in Ukraine is mainly realized on capital and human resources, which are the driving forces of the model of investment and innovation economy formation in modern economic conditions. High burden on payroll fund and profit of enterprises are the factors that hinder investments in fixed assets and development of manpower. In the result of such tax policy of the country, the laborious enterprises carry larger part of burden in comparison with the capital-intensive enterprises and small business, which is on the general taxation system in comparison with big business [1];
- 3) low effectiveness of tax system. Tax collection costs (collection of 100 monetary units in taxes) exceed the analogous index of EU countries by 3-4 times and it testifies unproductive costs of the tax service and its inefficient work. In accordance with calculations of the National Institute for Strategic Studies the budget loses 26.0% of tax from its potential possible receipts in case of minimization and value-added tax evasion [3, p. 8];
- 4) unsystematic and unjustified assignment of tax privileges and exemptions. Wide list of tax preferences distort fiscal space, giving to separate enterprises and industries more favourable starting positions and automatically reducing competitiveness of business entities. We think that it is necessary to conduct further reform of the tax system taking into account strategic objectives, such as building of competitive market economy with following integration into the European community in accordance with the regulations of the Constitution of Ukraine, the objectives of the Cabinet of Ministers program, approved in February, 27, 2014, the Basic directions of budget policy guidelines for 2015, approved by the Order of the Cabinet of Ministers No. 385-p as of 16 April 2014.

Measures concerning simplification of the tax system should be:

 reduction in the number of taxes, charges and payments per year in Ukraine. It is necessary to ground the number of taxes and charges in Ukraine, taking into account revenue from these taxes and collection costs. The leading countries where number of taxes do not exceed 10 should be an example: Germany (9 taxes), China (7 taxes), Spain (8 taxes), the Netherlands (9 taxes), Norway (4 taxes), Portugal (8 taxes) Russia (7 taxes), France (7 taxes), Sweden (4 taxes). It should be noted that innovations in tax legislation can be partly considered as technical innovations because several taxes were merged under one, for example, a situation where the rent includes six payments, so we do not consider this as the reform. By January, 1, 2016, duty in the form of a surcharge to the existing tariff on natural gas is kept. And it is charged both from enterprises (rate 2.0%) and from population (rate 4.0%). This duty is included into the price of natural gas, despite the fact that this price is already high.

Thus, the number of collected taxes is practically not decreased. Changes in their list are formal and, moreover, they are compensated by new taxes and charges.

- giving tax privileges only within the priorities of the state social and economic policy. Based on the European experience the author thinks that preservation of the benefits of social orientation, and also benefits directed on innovations, energy-saving and increase of energy efficiency;
- reformation of special tax regimes. Practical experience of the simplified system usage allows speaking about the positive impact of the tax regime on the small business. However, the Tax Code of Ukraine restricted a little the possibilities of the single tax, which resulted to limitation of opportunities for its usage in some spheres. In our point of view, it is necessary to return the simplified mechanisms of the single tax charging for the subjects of small business with increasing of its rate for more profitable spheres of activity.

It is necessary to form interest in legalization of enterprises profits. In accordance with world practice, reduction in the tax burden makes possible to decrease the level of the shadow economy, but duration of this process is higher in several times (~3) than duration of the process of shadowing. That is why, fast recovery of Ukrainian enterprises from the "shadow" must be accompanied by rendering of additional stimuli, including introduction of administrative and control measures, such as:

- closing down of tax holes (subjects that allow to form a tax credit);
- abolition of agreements about avoidance of double taxation with countries which have tax benefits (primarily, Cyprus);
- improvement of VAT administration, in particular, concerning theft and uncompensation of VAT, introduction of the real current regime of automatic VAT refund.

International practice of application of indirect methods of determination of tax liabilities testifies that they must proportionately be used to both legal entities and individuals – subjects of business activity, and to individuals who are not involved into the commercial sector, in particular, to officials who are empowered and have access to public resources (budgetary funds, land resources, information, power, etc.). There is a procedure to declare incomes of officials, but in fact there are no tools for auditing and evaluation of the data authenticity specified in declarations and it turned this procedure of declaring of officials' income on formal action that is questionable for public.

For example, France uses the procedure taxationd'office – assessment of income. It applies in the case if the taxpayer did not submit a tax return in due time and does not respond to requirements within 30 days, and also in the case of absence of a reply to the requests of the tax authority or in the case of preventing to the tax inspection. Tax authorities assess the tax base on the basis of available information and send the messages that the taxpayer may appeal through the courts [4].

Indirect determination of income may be used in Germany, if the taxpayer does not confirm the data specified in the declaration (if it is impossible to determine real income on the base of existing documents) after receiving the official request of the tax authority. In addition to that, the tax authority gives to the taxpayer the official calculation of tax compiled with usage of the methods of indirect determination of tax liability, and this calculation may be challenged by the taxpayer for a month.

The UK tax authorities may resort for usage of indirect methods of determination of tax liability in the event of fraud or if the tax inspector is not provided with full information about income for the last twenty years.

The example of Greece is interesting and edifying for Ukraine, where personal income tax can be adjusted if the income, which is defined by the methods of indirect assessment, exceeds the declared income and actual taxable person cannot justify the difference [5, p. 298].

This advanced instrument of individual income indirect assessment makes it possible to establish the principle of equality for taxpayers, adjust flexibly of the tax administration, limit the negative social consequences of market forces manifested in excessive income differentiation, and involve mechanisms of tax control that is very important for Ukraine. It gives opportunities to monitor the declared income and actual expenses (financial situation) of persons who perform state public functions and have access to social benefits.

We consider being sensible the suggestion of professor A. Lisovyy about the introduction of purchase tax, which is calculated as a percentage of the value of purchased products. It is a radical approach from the standpoint of today, but it can be revolutionary in the future. The benefits that he proved in his papers [5, p. 299], clearly confirm the prospects of such decision. These advantages, in particular, contain the creating of ideal conditions for the development of business and investment boom, substantial legalization of the economy, the differentiation of tax rates for certain industries and enterprises, optimization of costs for tax administration.

The partnership relations between tax authorities and taxpayers should provide legislative regulation for responsibilities that every party of tax process has.

Therefore, in order to limit the shadow economy in the country and create the partnership relations between tax authorities and taxpayers, public policy should focus more attention on the adoption of simplified tax laws, and not on their complexity, details and decision-explanatory instructions. The tax system should be stable and reflect the interests of citizens of Ukraine. The tax system that is created on the basis of new, transparent and incentive principles will form a favourable business climate; will take the incomes out of the shadows, providing adequate tax revenue.

Having commented the Concept of reforming the tax system of Ukraine, the representatives of the international business community, led by the American Chamber of Commerce in Ukraine believe that high tax rates are not the main difficulties of the interaction between business and Ukrainian tax system, but it is the low administration and the lack of an effective mechanism to make officials be responsible for unlawful acts, or for inaction in relation to taxpayers.

During the reform concept discussion many experts expressed doubts about its effectiveness in the sphere of tax legalization. In particular, the representatives of the Association of Ukrainian Cities consider the source of deficit compensation to be very doubtful, "income from the legalization of payroll due to lower rates of single contribution, legalization of operations by reducing VAT rates and internal operations", since it is impossible to expect the business that has conducted for 23 years in the "shadow" will leave it simultaneously [6].

As a result of radical reforms in 2012 in the index of Transparency International, Georgia ranked 51st place (52 points), leaving behind several EU countries – the Czech Republic, Latvia, Slovakia, Romania, Bulgaria. However, the report of Freedom House-2010 announced that in recent years in the fight against corruption in lower and middle echelons of power Georgia has achieved remarkable success [8].

Georgia's experience in combating corruption could be the basis for reforms made by Ukrainian authorities. Tax reforms in Georgia were based on total tax cuts. So, with more than 20 taxes that existed before 2005, they left only five state ones: income tax, VAT, social tax, excise duties, and two local taxes: property tax and tax on gambling.

There are no import duties in Georgia. It is the result of an unilateral decision, which is intended to make the market more opened to foreign

## Figure 1. Comparison of key performance indicators of Ukraine's tax system and its partners rated by «Paying taxes»



Source: author's elaboration based on [7]

goods and thus to create conditions for a decent competition to local products. There are no quotas on imports for imported products either. On duty-free treatment Georgia lost about \$ 15 million (according to some estimates) [9]. However, the annual doubling of foreign direct investment into the country from 2005 until the war with Russia and the global economic crisis confidently blocked this shortage and loss of other taxes and fees elimination.

In contrast to Ukraine, where the tax system is the barrier to business, in Georgia it is the real way to attract some foreign investment. The transparent and predictable changes (unchanged or lowering rate) are the best factor in the investment climate.

However, it's obviously that the most extensive professional discussions (open, qualified and reasoned) between the concerned parties should be a guarantee that the implementation of a new round of tax reform, that society has to start, will succeed at last.

However, the process of the tax system reforming is continuing, methods of implementing changes are improved, public are involved to discussion. The interim results of reform must necessarily be taken into consideration while developing the conceptual principles and specific tasks for the tax system further reform.

The basis for the further reform of the tax system of Ukraine should be recognition the fact that the Ukrainian tax system has already formed, and despite all its shortcomings, it should not be considered as a fundamental reform. Consequently, creating new legislative framework in the field of taxation should reflect the traditions of the existing tax system and meet the global trends of tax systems development.

Therefore, in our opinion the main objectives of tax reform in Ukraine should be:

- simplification of the Ukrainian tax system by reducing the number of taxes, charges and fees per year;
- luring the capital out of the shadows by creating the companies' interest in legalization of their profits (practice shows that reduction in the tax burden makes it possible to reduce the shadow economy) and through the implementation of indirect methods of determining personal incomes;
- 3) formation of the new institutional environment of taxation favourable for implementation of the principle of equality of all taxpayers before the law, and building partner relations between tax authorities and taxpayers, which are ensuring the legal regulation of responsibility of all parties of the tax process.

In our view, all these measures, if they are implemented rationally and using various foreign experience of reforms of tax systems, will allow Ukraine update national tax system to the level of modern European standards.

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## 3.2. Dialectics of use of tax and debt instruments of fiscal policy

Exacerbation of crisis phenomena in national economy intensified once again the problem of search of effective fiscal instruments aimed at overcoming negative tendencies of the development of economy of Ukraine. It requires from the government rational use of instruments of fiscal policy creating favorable conditions for business activity taking into account regional peculiarities, priority directions and tendencies of regional economic development supporting the most efficient use of natural resource, economic, labor and intellectual potentials of the country. Fiscal policy is known to be realized through regulation of public expenditures, transfer payments, taxation and debt obligations. The degree of the use of public expenditures and transfer payments is defined by the efficiency of the use of tax and debt instruments of fiscal policy, as they ensure the formation of national financial resources.

Tax instruments can be considered as the complex of measures in the sphere of taxation applied by government bodies and coordinated in time for the influence on participants of tax legal relations supporting the development of national economy in which the necessary budget resources for economic growth will be formed [1, p. 137]. Tax regulation is regarded as the measures of indirect influence on economic and social processes made by means of change of types of taxes, tax rates, introduction of tax incentives, decrease or increase in tax burden [2, p. 137].

Successful implementation of economic reforms in Ukraine considerably depends on fiscal policy and stable functioning of tax system, and thus substantial tax reform is necessary to support the expected results.

Significant budget expenditures and also large debt obligations of the state cause that taxation is oriented exclusively on taking financial resources from corporate sector. Priority of funds mobilization objectively causes increasing the level of tax burden on enterprises. Decrease in the main taxes rates, introduction of tax incentives and other measures concerning relief of fiscal burden are leveled by the actions of fiscal bodies as to taking financial resources from enterprises, in particular in the way of delay in VAT refund, advance tax payments collection, blocking the possibility to receive VAT credit, overstatement of customs value of imported goods, etc.

Excessive fiscal orientation of tax system is one of the main factors of restraint on business activity because it causes financial resources withdrawal necessary for support of current activity and investments.

Effectiveness of tax instruments of fiscal policy should be analyzed from the standpoint of impact of taxation on business development. We will evaluate it in comparison with neighbouring countries. This is particularly important in the context of possible attraction of additional foreign capital taking out from Russia nowadays. Under such situation, it is necessary to evaluate competitive advantages of Ukraine. According to Doing Business 2015 elaborated by the World Bank Group in terms of profit tax Ukraine does not differ from neighbouring countries but the level of labor taxation (personal income tax and single social contribution) in Ukraine is the highest (Figure 1). Hence, reform of administration of single social contribution implemented by the government of Ukraine in 2014 did not give positive result for increasing effective demand of population of Ukraine. The lowest total level of taxation in Poland is 38.8%, and in Ukraine it is the highest – 52.9%, what can be seen in Figure 1 and it is caused by the excessive tax pressure on salary.





Source: compiled by the authors based on [3]

The problem of single social contribution and declared and not declared salary is undoubtedly well-known fact. However, Figure 1 shows that if this problem is not solved, investment attractiveness of Ukraine will be considerably lower comparatively with neighbouring countries. Foreign companies pay declared salary in Ukraine and they are in less favorable position comparatively with domestic companies using shadow schemes for paying salaries. Such situation is not attractive for investors.

In spite of reduction in the number of taxes and duties in Ukraine from 22 to 11 the quality of their administration has not improved. The extension of electronic tax administration did not give enough positive effect. As a result, in 2015 Ukraine ranks second by time spent on tax administration and Czech Republic ranks first (Figure 2).

### Figure 2. Time spent on tax administration, hours per year



Source: compiled by the authors based on [3]

In the period of difficult economic situation and military activities on the territory of Ukraine, large amount of time spent on tax administration does not promote the development of business activity.

Tax inspections are the most "painful" for business activity. The positive moment in this sphere is moratorium on inspections of enterprises with annual turnover – not more than UAH 20 million per year (about EUR 770 000 in 2015). It should be mentioned that such domestic enterprises with identified income, which are not allowed to be inspected, have insignificant international competitive advantages. The enterprises exceeding defined limit should be inspected and unplanned inspections are dominant. So, during January-September 2014 24939 inspections were conducted (including 84.0% unplanned inspections and 16.0% planned ones). During the same period of 2015, 16350 inspections were conducted. At the same time, the correlation of additional accruals is about the same (Figure 3).

Efficiency of fiscal policy realization considerably depends on balanced use of its instruments. Besides above-mentioned tax instruments of fiscal policy, debt instruments are effective levers of state influence having special role under the conditions of crisis phenomena in the economy of Ukraine and constant lack of financial resources.

Figure 3. Correlation of additional accruals according to results of inspections conducted by the State Fiscal Service of Ukraine during January-September 2014-



#### 2015, thousands UAH

Source: compiled by the authors based on [4]

Therefore, according to the Budget Code of Ukraine, state borrowings are transactions related to receiving credits (loans) in terms of repayment, interest payment and maturity with the aim to finance the State budget [5]. However, a state as a member of the Cabinet of Ministers of Ukraine, responsible for formation and realization of state financial and budget policy (the Minister of Finance of Ukraine) or as an acting Minister's obligations on behalf of the Cabinet of Ministers of Ukraine can make internal and external borrowings [5].

Regulatory support for state borrowings in Ukraine is shown in Figure 4. Figure 4. Institutional support for state borrowings in Ukraine



#### Source: compiled by the authors

One should note that state borrowings are done according to the Law of Ukraine on the State budget of Ukraine maintaining the state debt ceiling at the end of budget period. Thus, according to the Law of Ukraine "On the State Budget of Ukraine for 2014" in the original version the state debt ceiling in the end of 2014 was UAH 585.5 billion. Herewith, by amending the main financial plan of the state (the State budget) the state debt ceiling was increased by 1.7 times to UAH 968.4 billion [6]. Though the volume of the state debt of Ukraine at the end of reporting period was UAH 947.0 billion [7], what is within the norm, such legislative initiatives are not credible and generate the risks of fiscal space.

In turn, the risks of fiscal policy are connected with the excessive increase in the volume of the state debt (Figure 5). So, for the period 2010-2014 the volume of the state debt increased by 2.9 times, herewith the volume of internal debt increased by 3.3 times and the volume of external debt increased by 2.7 times.

## Figure 5. Dynamics of the state debt of Ukraine for the period 2010-2014, billion UAH



Source: compiled by the authors based on [7]

Such significant increase in the volume of the state debt caused the violation of one of Maastricht criteria by Ukraine in 2014 what defines the "safe" volume of public (the state) and publicly guaranteed debt at the level of 60.0% of GDP (Figure 6). The volume of public and publicly guaranteed debt in Ukraine amounted to 70.3% of GDP as of 31 December 2014.





Source: compiled by authors based on [7; 8]

In our opinion, the given indicator of state debt policy does not show the real state of debt burden. We suggested such indicator as the level of debt coverage with tax revenues [9, pp. 188-189], its dynamics is shown in Table 1.

The level of debt coverage of the state debt of Ukraine with tax revenues for the period 2010-2014

Indicators	2010	2011	2012	2013	2014
Tax revenues of the State budget of Ukraine, billion UAH	166.9	261.6	274.7	262.8	280.2
The state debt of Ukraine (as of the end of reporting period), billion UAH	323.5	357.3	399.2	480.2	947.0
The level of debt coverage of the state debt with tax revenues, %	51.6	73.2	68.8	54.7	29.6

Source: compiled by the authors based on [7]

As seen in Table 1 critical value of the given indicator was reached in 2014 showing that tax revenues would cover only 29.6% of debt obligations.

The significant indicators of fiscal policy of Ukraine are the ratio of the volumes of state borrowings and repayment of the state debt (Figure 7).

## Figure 7. Dynamics of the volumes of state borrowings and repayment of the state debt of Ukraine for the period 2010-2014, billion UAH



Source: compiled by the authors based on [7]

Table 1

Hence, in 2014 the volume of state internal borrowings exceeded in 3.3 times the volumes of repayment of the state internal debt. Herewith the volume of state internal borrowings amounted to UAH 227.6 billion in 2014. In turn, the volume of state external borrowings exceeded in 1.8 times the volume of repayment of the state external debt that is risky from the standpoint of future negative consequences.

One more aspect of the use of debt instruments of fiscal policy is burden on the budget connected with the state debt service. As it can be seen in Figure 8, the share of such expenditures in total expenditures of the State budget of Ukraine during the investigated period fluctuated between 5.1% in 2010 and 11.2% in 2014 and the share of such expenditures in GDP fluctuated between 1.4% and 3.1% respectively.





Source: compiled by the authors based on [7; 8]

Therefore, the use of tax and debt instruments of fiscal policy should be balanced as debt burden leads to increasing burden on taxpayers and inhibiting their business activity that decrease the efficiency of fiscal policy. At the same time, the effective use of borrowings should be ensured.

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# **3.3. Conceptualization essence of institutions of taxation**

Institutional theory, originated at the turn of the XIX – XX centuries, and becoming one of the leading paradigms of modern economic science, is caused by lack of existence of a single categorical and terminological basis and ontological interpretation. In spite of being a fairly heterogeneous and being characterized by the ambiguity of basic concepts, by considerable incompatibility and fragmentation of theoretical principles, the main problem of this science is the research of the impact of institutions on social and economic development in the light of variable approaches and interpretations.

The notion of "institution" is individualized by various representatives of the institutional theory. Thus, on the basis of different interpretations, that are the most "authoritative", specific directions are distinguished. They have been launched by the founders of evolutionary, psychobiological, social, legal and empirical trends. This versatility and vastness of theoretical areas determines multiplicative differentiation of research guidelines and existing approaches of institutions identification as social phenomena, and update the construction of conceptual outlines of a special kind of institution of taxation.

According to Geoffrey Hodgson, institutions is a key element of any economic system that leads to the problem of studying of the processes of conservation, renewal and change [14, p. 27-40]. Initially, "institutions" were interpreted as "natural formations" that serve to meet the vital fundamental needs of society and to provide security and social order [13, p. 108]. Later, along with the "natural" character of social institutions appearance, some theorists begin to interpret it as social constructs, that is "artificial formations", which are formed under the influence of social engineering.

As a result of ongoing controversy in the ontological area, theorists outlines the appropriate justifications with the further definition of relations of theoretical constructs such as "institution" and "institution", "organization", which are considered to be synonymous [1; 4, p. 20-31; 8, p. 110-116; 15, p. 4-13], or there is the necessity of clear distinction.

The term "institution" comes from the Latin "institutum", which meant the establishment, implementation, custom, and "Institutio", "institutions" was the name for a handbook. These terminological constructs, despite the fairly widespread usage in many scientific areas, began to be widely used in the early XIX century due to borrowing research instruments of evolutionary and positivist approaches which predetermined the formation of institutionalism in the most understandable way of perception.

Russian theorist A. Inshakov claims, that the institution is structure by means of which institutions implement its content, that is, institutions must be considered as "hard structures" of certain functional point of view, and institutions as soft structures, which are transmitted and stored only when "solidified" [6, p. 52-62].

We agree with this theoretical argument and we have to state that in our opinion, in the etymological sense they have a little bit different meaning. Depending on the scale and period of evolution these terms are characterized by common features of display as a social phenomenon, as they distinguish character and way of social interaction in the process of creation, usage and distribution of the relevant values.

The statement of facts of a certain "blur" of conceptual framework of institutional theory shows the necessity of authorial search and attempts to explain the essence, the patterns of occurrence, development features and nature of functioning of institutional units, which we consider would be the most successful if institutional and evolutionary approach were used.

Understanding the discrete categorical field, which is typical to institutionalism, we will take the definition made by T. Veblen, the classic of institutional theory, as the starting point of the author's interpretation of institutions of taxation. He stated that that in society there is a set of conventional ways of thinking about the relationship between man and society, as the conventional models of behavior. Having realized the existence of this mechanism, the scientist always specifies and clarifies its definition as the embodiment of category "institutions" and consistently develops its content both conceptually and contextually [3, p. 57].

Having made primary interpretation of institutions, as a new object of economic research, the theorist understands them as *"results of processes that occurred in the past, which are adapted to the circumstances of the past, and thus, not fully meet the requirements of the present time"* [2, p. 202]. During theoretical researches T. Veblen continues to disclose content of this category and, as a result, he defines them as *"the established thinking skills, common to most people"* [17, p. 239]. According to the theorist, they have been formed due to long historical and social experience of interaction between people, their cultural and psychological principles that determined the formation of a certain type of institutions and progress of institutional changes in society.

Formation of the institutional environment of each social formation, from the early primitive form of social organization to the modern civilized states, is carried out according to the laws of evolution. Any historical form of existence of society, being characterized by own institutional model, is determined according to the spatial and temporal limits. Recognition of social institutions as structural elements of socio-economic system, in the context of an evolutionary approach, allows you to explore the mechanisms of society development based on the fundamental principles of the theory of evolution:

"heredity – change – selection". In this context, heredity is seen as continuity of social institution development, providing stability and monism of socio-economic system; change – provides the ability of social institutions to respond to changes of internal and external environment, their impact on individual and social interaction; selection represents the competitive choice of the most efficient in certain circumstances social institutions.

Taxation is one of the most historically ancient social institutions of the state. Its forms, types and mechanisms are the indicators of society evolution, and which, like any other social institution, is the product of the historical process of natural selection. It occurs on the early stages of development of social forms of organization, transforms in the process of social evolution from simple germ, transitional to more mature and sophisticated forms. These forms, varying in the process of social evolution, depend on the level of influence of the relevant objective and subjective preconditions of economic, ideological and political character.

Definition of the institutional essence of taxation requires research of the nature of institution of taxation. According to national theorist T. Merkulova this definition outlines its manifestation as norms, rules of the game and behavior stereotype [9, pp. 43-46].

Considering the tax as the norm in general meaning allows us to define it as the norm of implementation of multilateral relations of economic agents, which regulates their interactions for provision of state funding as to the creation of public goods. Herewith, features that allows to distinguish taxes from non-tax payments, like nature of exclusion, purpose, no equivalence and no returning which in the traditional tax theory, are the classification indicators of tax units and in institutional theory they characterize only specific features of the norm and properties that it can have in certain circumstances.

The presence of such elements as purpose and conditions of action is the main term to define the norm as the institution of taxation constituent. The interpretation of tax in the context of institutional theory not only reduces it to a form of exclusion of the part of economic agent's income to the state but sets the target that deals with forming and financing of public goods in terms of economic and legal independence of economic agents. Tax as a norm of relationship can exist only when taxpayers are free economic agents, having ownership of their incomes, assets, capital. As according to Adam Smith, taxes are a sign of freedom and not slavery for those who pay them [12, p. 420].

Tax is historically the latest form of economic agents relations as the financial basis of the functioning of the state. According to the institutional interpretation earlier forms of incomes did not have the necessary norm features. Chronologically, the emergence of the institution of taxation as the norm can be launched from the XVII– XVIII centuries. In those times legislative bodies in most states had the right to impose taxes and were

delegated to determine the amount and purpose of payment of compulsory contributions to finance national needs.

The interpretation of the taxes as rules of the game argues the specifics of economic agents' activity in accordance with the formal and informal rules of behaviour established by the state. Formation of this approach in institutionalism is due to the transfer of the elements of Keynesian and neo-classical theories, where taxes are the regulators of the economic cycle and reproduction processes.

J. Keynes defending the possibility of achieving consistency between effective demand and the volume of production [7], demonstrated the expediency of extracting through taxes incomes of the population, which are in the form of savings and at their expense ensuring investment development investment and financing public spending. The disadvantage of the Keynesian approach, according to which taxes are defined as automatic macroeconomic regulators, having somewhat mechanistic interpretation, was inconsideration of the change of economic agents' behavior under the influence of increase in taxation.

Interpretation of the "institution" as a behavioral stereotype is typical of sociological paradigm, which brings it to a set of statuses and roles entered into by individuals for their own interests and benefits. In this context, taxes play the role of sustainable norm of economic life of individuals, being fixed in the form of skills, economic ways of thinking and patterns of behavior, embody the transformation of taxation processes as parameters of evolutionary development of institution of taxation.

Understanding contractual nature of taxation relationships, reflecting the dispossession of economic agent's property share and its assignment by the state, defined by the concept of "transaction" as "dispossession and appropriation of property rights and human freedoms, accepted in society" [5, p. 54].

The study of the evolution of institutions, institutional transformations, focused on the existence of a wide range of costs, which are determined by the functioning of the institution as a mechanism for organizing the interaction of economic agents. Expanding the boundaries of institutional analysis led to the including a range of treatments of institutions the research of their specific manifestations in the range from transaction costs for the operation of the economic system [11, p. 53]; expenses related to the search by the agent for appropriate price, organization of negotiations and signing contracts; to transformation and transaction costs, which are costs of processing and transmission of information.

A special role in shaping perceptions of transaction costs take the views of a number of theorists, according to which they are regarded as resources spent by agent on searching information, negotiating, con-

tracting, monitoring compliance with norms and protection from interference of third parties. According to this approach, the first three types of costs are classified as costs on the stage prior to conclusion of contract (ex ante), and subsequent – as the costs of economic agents in the implementation of the contract (ex post).

Review of the institution of taxation from the positions of transaction costs allowed to determine the causes, that provide competitive advantages of various forms and systems of interaction between economic agents as preconditions for the survival and reproduction of institutions in terms of evolutionary transformations. Transactional interpretation actualizes attention to the performance criteria for institutions functioning, proving that the level of expenditure determines the "natural" selection and conditions of further institutional genesis of society.

Transaction costs are directed to reduce losses related to the functioning of the institution of taxation, include: costs of institutionalization; and the costs of tax administration and compliance with the institution norms, that in combination serve as the costs of running the institution of tax (Figure 1).

There is a distinction between transformation and transaction costs, where the first are costs related to the transformation of resources into a product, good or service and second are associated with the processes of exchange.

Besides transaction costs, reflecting the necessary amount of financial resources payed by economic agents to ensure the institution of taxation functioning, there are institutional loss. The lack of a common approach to the treatment of transaction costs and effective diagnostic tools for their quantitative measurement make it difficult to determine transaction costs and transaction loss. The latter can be defined as volume of loss experiencing by economic agents due to the existence of institutional dysfunctions in all forms and varieties.

Transaction loss appear in the result of: inefficiency of joint decision making, composing of plans-forecasts, functioning of structures, unexpected reactions to the appearance of certain factors of impact, inefficient transactions protecting and methods of implementation of one of the agents or refusal to participate in them, loss as a result of conflict of interest.

Overall, institutionalism takes into account the impact of transaction costs in interaction between groups of participants of fiscal processes. According to supporters of institutional direction, the objectives of institutions is to create such a framework, that gives the possibility to save on transaction costs, namely the costs of searching and information processing, protection of property, making and service contracts. Taxes





Source: composed by the author

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in such an approach are characterized by a special type of transaction costs. In exchange for the payment of taxes citizens receive from the state transaction benefits, social and public goods, social system, guarantee of property rights, personal security and others. This in turn greatly simplifies and reduces the interaction of the participants of economic processes, that allows the state to minimize transaction losses.

Representatives of institutional theory and the theory of rational choice consider analysis of correlation between transaction costs incurred by participants of fiscal interactions and direct level of taxation to be important. In their view the degree of transfer of the tax burden on the taxpayers by the state largely depends on the ability of bureaucratic structures to: negotiations with taxpayers; determination of activities which are subject to taxation; and monitoring of the tax burden on individuals, who are its "bearers".

In the domestic professional research on institutions of taxation prevails the approach according to which scientific analysis of institution of taxation is reduced to the investigation of the tax structure, its elements, normative and legal conditions defining the process of tax control, tax administration or determination of the effectiveness of the fiscal authorities. Enhanced, comprehensive study of the institutions of taxation allows you to get closer to understanding not only the trends of transformation, but also to understand the causal relationship of appearance and display of various kinds of institutional dysfunctions.

Complications of social institutions in the process of social development led to their formalization that is consolidation of certain types of social interactions having set their obligatory nature in the context of the whole society, a particular social group or individuals. The processes of formalization first were applied to those types of social interactions, which fixed the most important social needs, satisfaction of which was necessary for the functioning of the society as a whole, that is: management, social control, taxation.

It is necessary to mention that in the theory of institutionalism there is quite a number of interpretations of the meaning of "institution", but one of the most common is the interpretation of the classic of institutional theory D. North, according to which institutions are "formal rules, informal constraints and means of enforcement i.e. procedures for ensuring the effectiveness of these restrictions" or as "rules, mechanisms to ensure their implementation, and norms of behavior that structure repeated human interactions" [11, p. 18]. In this perspective, economic rules that represent the greatest research interest for us and their structure determine for players "opportunities to maximize personal benefit through the implementation of exchange" [11, p. 68]. Being aware that economic agents as the participants of interactions operate according to their own interests, so certainly "providing incentives for economic growth and development will depend largely on the system of formal rules and control mechanisms for their compliance". Here, the mechanism is viewed as the official events used by the state to compel individuals to follow the norms. Domestic theorist T. Merkulova notices that "the ratio between tax and taxation is ratio between norm and mechanism for its maintenance" [10, p. 60-70], which in specialized sources results two approaches: "binary" including the presentation of "norm + mechanism" and "mono" which is embodied in one norm. Taxation as a mechanism that ensures the implementation and sustainability of norm even though going beyond the limits of the definition of "tax" however, according to the researcher constitute components of one institution which on equal terms can be called institution of tax or institution of taxation.

It is necessary to mention that in the society where formal rules are effective in ensuring individual interest, the role of informal institutions is low. On the contrary, giving appropriate reasons, functions of social institution are not formalized, or formalized not properly, greater manifestation is given to informal institutions.

Informal institutions are functioning similar to formal, having common and distinctive features and being formed in the process of historical development, represent a kind of "genetic memory" of the society or a pointer of means of harmonization of relations in crisis situations at interpersonal and intergroup level. The formal rules and informal norms of behavior, being present at different hierarchical levels of society form a complex hierarchical structure of institutions, embodied in the institution of taxation as the symbiosis of opposing types of interactions.

Based on the above we offer our personal interpretation of institutions of taxation as a set of formal and informal norms, rules of behavior and constraints, mechanisms of their implementation aimed at ensuring the implementation and regulation of relations of dispossession and appropriation of the part of taxpayers' incomes by different levels of government, its accumulation in centralized funds of financial resources to ensure the interests of different social groups.

Significant development of the institutions of taxation in the context of the performed range of values, tasks and functions makes their full inclusion in the institutional system of society, and updates their cognition as knowledge system institutional units. Further research of the institutions of taxation in future allows not only to expand the limits of subject field of taxation, but also to clarify the composition and structure of institutions of taxation, reveal their contradictions and patterns of evolution as a unique element of social and economic systems.

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### 3.4. Theoretical aspects of budget and tax regulation

Effective state regulation of the economy is an objective necessity of economic growth of the country in order to reform its economy and strive for equal partnership in the European Union, taking into consideration the unstable economic situation, recession, lack of perfect competition and a number of other destabilizing factors. Budget and tax regulation is an important instrument for such regulation in the medium and long-term perspective. Theoretical understanding of its essential importance in this aspect is crucial and requires scientific substantiation.

Paying tribute to the scientific achievements of domestic and foreign scholars on budget and tax regulation, it is worth noting that there is a need for further study of contemporary theoretical approaches to the definition of budget and regulation and its implementation tools in reforming the country's economy. Therefore, the study of budget and tax regulation contemporary essence and defining its main areas for the purpose of the best possible compliance with public interests and European Community-oriented vector is quite timely.

Such domestic scientists as S.Onys'ko [2], B.Rayzberg [3], T.Kutsenko [4], K.Pavlyuk [5], V.Hrytsyuk [6], A.Buryachenko [7], I.Chugunov [9], V.Susidenko, A.Nikitishyn [10], T.Yefymenko [11], R.Zharko [12], A.Krysovatyy, A.Kizyma [13], N.Kryuchkova [14], E.Berezhnyi [15], P.Layko [16], Yu.Ivanov [17], T.Chernychko [18], and others study the nature and problems of budget regulation and tax regulation, as well as their implementation tools.

During the study, scientists often identify the concepts or operate with different concepts, considering the nature of the same phenomenon. Conceptual disagreements about the nature of budget and tax regulation in some way complicate the understanding of this state regulation method, making the chosen direction of research even more relevant.

The study aims at the systematization of scientific opinions on the essence of "budget and tax regulation" concept together with its tools and substantiation of using comprehensive approach.

The term "budget and tax regulation" is almost absent in economic literature, and to justify its essence, the research of similar meaning concepts, such as regulation, budget regulation, and tax regulation is worth conducting.

The term "regulation" in foreign literature is considered in a broad sense as state intervention in the economy in general, and in the narrow sense as administrative and legal regulation of business.

Great Explanatory Dictionary of Modern Ukrainian defines regulation
as "action with the meaning "to regulate", and for the term two definitions are provided: "put something into order, manage something by subduing it to appropriate rules and certain system"; "to achieve normal operation of machinery, installations, or mechanisms etc. providing a harmonious work of its components and parts" [1, p. 1020].

Most scholars consider the budget regulation and tax regulation separately without focusing on the close relationship between them. S.Onys'ko [2, p. 21], B.Rayzberg [3, p. 51], and T.Kutsenko [4, p. 15] consider budget regulation both in its broad and narrow senses, namely:

As an important economic method of state regulation of the economy (the complex of measures by state authorities);

As a process of funds allocation among budgets of different levels.

The term budget regulation is defined by researcher K.Pavlyuk as a system of interconnected methods, techniques, and legal forms of formation, distribution and redistribution of budget resources to balance the interests of society and citizens in the process of economic and social development [5, p. 342].

V.Hrytsyuk provides another definition of budget regulation: an organized budget management system [6, p. 17].

Scientist A.Buryachenko notes that the budget regulation is a means of redistribution of financial resources between the state and local budgets for the purpose of financial equalization [7, p. 23]. In other words attention is paid to redistributive processes.

In Economic Encyclopedic Dictionary budget regulation is treated as a method of state economic regulation, providing the optimal balance between state revenues (especially tax revenues) and government spending and redistribution of funds between budgets to influence the cyclical development of the economy, structural changes in the economy, the pace of scientific and technological progress, socio-economic policy, and correlation of aggregate supply and demand [8, p. 68].

Domestic scientist I.Chugunov states that budget regulation is the development of the main directions of formation and use of budget funds, based on the necessity of tasks facing society at a certain stage of its development [9].

Regarding tax regulation, the scientists V.Susidenko and A.Nikitishyn provided the following definition of "tax regulation", which is a set of financial relationships that occur when regulatory institutions use legally defined tax instruments, with a view to achieving the desired behavior and change current behavior of taxpayers that in the long-term period allows to achieve certain objectives of socio-economic development of society, or in short-term period to achieve the desired behavior of taxpayers [10].

According to a researcher T.Yefymenko tax regulation through its

inherent methods and instruments allows to achieve more efficient use of material and financial resources, intensify investment and business activity, reconcile the interests of various economic agents, and social strata, national and regional levels of government [11, p. 7]. In this case the scientist focuses only on stimulating function of tax regulation.

By tax regulation researcher R.Zharko means the complex of state authorities' actions to modify the tax system and tax mechanism to achieve certain social and economic goals [12, p. 7]. This leaves methods of such regulation aside.

Ukrainian scientists A.Krysovatyy and A.Kizyma consider tax regulation as "measures of indirect influence on the economy and social processes through changes in taxes and tax rates, tax incentives, reduction or increase in the overall level of taxation, and budget deductions" [13, p. 121].

The scientist N.Kryuchkova regards tax regulation as a standard method of state regulation, carried out by the legislature or local government and involves the stimulation of investment activities, measures aimed at reducing shadow economy and overcoming economic deformations, etc. [14]. The author focuses on stimulating investment activity as the most effective way to overcome the economic deformations.

Researcher E.Berezhnnyi concluded that tax regulation is a set of measures on the state's influence on the level of economic activity in society by means of altering the tax field [15, p. 8]. At the same time, the methods are not specified.

At the same time, P.Layko claims that the tax regulation is the process of imposing certain taxes as well as inclusion them into a purely fiscal mechanism that reflects the essence of the taxes and those elements through which there is a possibility of an uneven impact such taxes might have on different subjects of taxation and different operations conducted by them [16, p. 51]. Analyzing the given definition a clear fiscal direction of tax regulation can easily be traced.

According to Yu.Ivanov, tax regulation should be understood as conscious, active and purposeful state influence on economic players by means of tax policy instruments to achieve the desired social and economic outcomes. It is through the tax policy the state not only creates public expenditures financing sources, thus implementing fiscal function of taxes, but also provides the prerequisites for restructuring of the national economy and its growth. In other words, regulatory function of taxes acts as a basis of tax regulation [17, p. 41].

T.Chernychko provides a somewhat different definition. Research in budget and tax regulation is related to distinguishing of this form of state regulation of the economy as a complex of closely interrelated activities that include as a priority tool not only tax regulation but also regulation of methods of formation and use of financial resources for the implementation of the basic tasks of state regulation of the economy [18, p. 3].

The above-mentioned facts show that most researchers focus on the fiscal function of tax regulation. While in developed countries, taxes not only fulfill its fiscal role but also act as a regulator of taxpayers' behavior, employment in the country, inflation, savings and consumption, production level, investment and innovation processes, socio-economic development and economic growth in general. Thus, along with the fiscal targets tax regulation must solve economic and social problems of society. Budget regulation faces the same economic and social objectives. This clearly shows the relationship between tax regulation and budget regulation, thus giving us reasons to consider them comprehensively. In addition, the timeliness and completeness of tax revenues, which in 2014 accounted for almost 81.0% of the revenues of the consolidated budget of Ukraine and 79.0% of state budget revenues is due to the main source of budget revenues, namely taxes and duties, which in turn are the main source of budget expenditures. This close relationship between the budget regulation and tax regulation confirms the need to consider the budget regulation and tax regulation in symbiosis.

Investigation of essence of tax regulation and budget regulation gave reason to confirm that "budget and tax regulation" is a complex and multidimensional process that includes a set of various kinds of legally binding instruments, methods, techniques, elements, and relations between the state and taxpayers, internal and external mutual influences on formation and use of state financial resources, redistribution of funds between budgets to achieve the main goals of state regulation of the economy that should be considered comprehensively, taking into account possible consequences for the entire socio-economic system.

Currently, the essence of "budget and tax regulation" develops through:

- providing the state with financial base (accumulation of financial resources) necessary for its functioning;
- influencing the allocation of scarce financial resources to provide solutions for strategic and tactical goals of state regulation of the economy;
- establishment of effective mechanisms and favorable conditions for economic regulation;
- leveling income imbalances and either stimulating or suppressing the development of businesses and the economy as a whole;
- the possibility of financial resources concentration by the state and directing them to solve top-priority economic and social problems;

- solving complex social problems through redistribution of financial flows between different categories of the population and by using a transfer payment system;
- solving environmental problems of society, etc.

Separation of instruments in the budget and tax area remains an important issue in providing government regulation through indirect methods. Depending on its goals, budget and tax regulation can be performed using tools that promote or hinder certain economic and social processes.

Ukrainian scientific literature lists several such tools: grants, subsidies, subventions [19]; taxes, credits, tariffs, investment, interest, benefits, licenses, quotas [20, p. 112]; special tax regimes [21; 22, p. 396].

Most scholars do the research of tax regulation and budget regulation in individual areas of activity, namely in the field of environmental management, investment, innovation, or banking spheres. Researches I.Tsurkan and I.Herasymova in making the classification of tax instruments to stimulate investment activities distinguish the following: the tax rate (tax rates differentiation by reduction or increase in rates; the use of a progressive scale; reducing the tax rate for newly established enterprises), tax incentives (tax breaks, preferential taxation of reinvestmentintended dividends, creation of tax-free investment reserve; tax rebate, tax credit), accelerated depreciation [23].

Researcher O.Serbyna states that tax regulation is done by means of various instruments, the most common being the preferential taxation used world-wide as: tax exemptions (exemption of individual objects, elements or activities), tax credits (changing the term of tax payment from one month to one year), low tax rates [24].

Among budget regulation tools scientist O.Tofanyuk distinguishes soft loans, adjustable tariffs, tax breaks, creation of investment funds, direct transfers, budget programs to promote development, enterprise support and development leverage, concession, leasing [25].

In many cases, the use of both budget regulation and tax regulation tools can ultimately provide the same result, indicating their close relationship. Therefore, it is reasonable to use a comprehensive approach to systematization of tools.

Summarizing, it is worth specifying that the tools that can be used in the regulation of the economy in the budget and tax sphere include: transfers (grants, subsidies, subventions), budget loans, investments, tariffs, government orders, government programs, interest deductions from national taxes and revenues (adjustable and fixed revenues), ownsource revenues, licenses, quotas, tariffs, taxes and their elements (tax rates, tax base, tax period, etc.), special tax regimes, tax benefits (full or partial exemption, tax holidays, tax rebate etc.), accelerated depreciation, customs duty, fines and others.

The use of various tools should consider the subject to which they will be applied, its object, stages of the economic cycle, the instrument's operational period and possible risks, result-obtaining efficiency, etc. It should also be taken into account that some tools may be complementary or interchangeable, so their reasonable use is highly advisable in a budget and tax sphere. An integrated approach to their consideration as a comprehensive study of the properties of the whole and its various specific components and conditions that determine this phenomenon makes it possible not only to define and systematize existing tools, but also creates the basis for future selection of the most successful tools that combine most of the above-mentioned features.

Budget and tax regulation is a flexible tool of state regulation of the economy, which enables effective impact on economic growth in the medium and long run. It is a symbiosis of fiscal, incentive and deterrent measures, complex and rational use of which with regard to state regulation of the economy will provide a permanent long-term economic growth.

Effective budget and tax regulation, aimed at economic development, requires a balanced use of a number of tools, methods and techniques to be applied by the state in accordance with the situation, economic, social and political conditions, specific time period or cycle of economic development, and relationships that occur among economic agents at different stages of distribution and redistribution of state financial resources. It is also necessary to approach budget and tax regulation tasks to perform strategic (long-term) tasks of state socio-economic development.

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### 3.5. Priority directions of Ukrainian customs policy

Regulation of foreign trade is carried out according to the following basic criteria: interests of national economy development and country's obligations related to participation in international organizations. Nowadays, the World Trade Organization (WTO) that sets rules together with a favorable mode for entrepreneurs in the world market, and the World Customs Organization (WCO) that administratively and technically assists movement of commodities across the border and counteracts abuse in this field are among the most important collaborating international organizations. Besides, there should also be mentioned an active tariff activity of the European Union as the most progressive association in the world (the Customs Union as well as the Economic and Monetary Union have been created in the EU).

Many aspects of European experience in this field present a practical interest for Ukraine in the process of improving instruments of customs policy. In particular, some features of a uniform customs tariff of the EU deserve attention, for example, high degree of tariff rates differentiation, few peak values of such rates, customs and tariff taxation stability and predictability, flexibility in application of general preferences for countries, the practice of bilateral preferable modes implementation etc.

The mechanism of regulation of foreign trade includes two groups of tools: economic ones that operate through the change of price standard, and administrative ones that directly influence the delivery volume. National customs and tariff systems operate the tools of both these groups. International organizations determine general legal rules, distribute general documents and procedures on realization of trade, as well as presenting a forum basis for negotiations on its liberalization and maintenance, combating law infringement.

Due to the globalization processes, which speed up an increase in international commodity turnover, new approaches and technologies are needed for its development, service and control. The mentioned causes modernization of the trade customs and tariff regulation tools, id est facilitation and providing the stability of foreign markets access, simplification, harmonization of customs laws and practices of their application, as well as improvement of customs clearance and strengthening of countering the world market criminalization. The facilitation of cross-border economic communication results in objectively wider opportunities.

The customs regulation system of Ukraine will be able to provide favorable conditions for the national economy adaptation to more rigorous international competition after joining the global regulation and free resource transfer, and gradual involvement its economy into global and European economic processes [1, p. 94].

In the world economy globalization framework, the issue on collaboration between Ukraine and the European Union combined with recognition of Ukraine as a market economy country, the role and value of the customs regulation as an element of government control over foreign economic activity turns out to become more important. In this view, Ukrainian customs policy directions, related exactly to the customs tariff application of Ukraine, remain significant.

In recent years, the customs and tax system has undergone substantial transformations. The sublegislative legal framework for the Tax Code, enacted in 2011, is still being improved. By far the majority of progressive innovations of the 2012 Customs Code have already become common practice, being implemented by the State Fiscal Service of Ukraine today. Monitoring the improvements in this division performance enables to distinguish the following package of measures (fig. 1) [2].

Activity within the Council to encourage investment and entrepreneurship (Investment Council). The Council to encourage investment and entrepreneurship (Investment Council) as an advisory and consultative department of the State Fiscal Service of Ukraine is recognized to be an important step in this context. Taking into account the specific of the legal regulation in diverse fields of tax and customs business, within the Investment Council framework, a number of specialized working groups, supervising various tax and customs policy issues in Ukraine have been established. In addition, the task force on the customs legislation improvement has been set up. In our view, for the effective implementation of the tasks stated, its practices must be concentrated on the following strategic directions:

- generalization of problematic issues, faced in practice during the valid customs legislation application, and development of system suggestions in relation to the legal acts improvement;
- studying the best foreign practices in customs regulation and promoting their implementation in Ukraine, taking into account the national realities [3, p. 163].

## Figure 1. Measures of improvement of customs policy of the State Fiscal Service of Ukraine



Transfer of measures as for the control over accuracy of determination of customs value of goods to the stage after release of goods. Conflicts between importers and customs authorities on questions of the customs value of goods usually cause delays in customs clearance, prolonged trials, thus contributing to the superfluous tension between business and state agencies. The way out of this situation turns out to be the transfer of control accents over customs value of goods from a short period, while commodities are under customs control – to the stage after release of goods [4, p. 33-34]. Advantages of such approach are the following:

- considerable simplification of international trade that complies with Kyoto Convention on the Simplification and Harmonization of Customs Procedures;
- reducing terms of customs clearance, real reduction in the number of documents for the customs value confirmation, submitted at customs clearance;
- stimulating the customs authorities to the well-reasoned proof of inaccurately declared customs value, constituting realization declarant's presumption of innocence, which is designed in the Code;
- complete realization of declarant's right to argue in favor of the declared customs value (as it is foreseen by WTO Decision 6.1 "Cases where customs administrations have reasons to doubt the truth and accuracy of the declared value");
- unification of the procedure of calculation of tax liability by regulatory authority on the results of adjustment of customs value with the procedure of tax additional charges according to the Tax Code [5, p. 11].

The international cooperation of the State Fiscal Service of Ukraine has become an influential tool that put right an effective information exchange with tax and customs authorities of the majority of foreign countries on the basis of international agreements on a mutual aid in customs and tax affairs.

Regulation of Authorized Economic Operators activity. In Ukraine the institution of Authorized Economic Operators (AEO) has been introduced by the new Customs Code enabling them to use numerous simplifications during customs control and clearance of goods. At present, working out legal acts continues in Ukraine, that will regulate the issues of granting a status of AEO to the domestic enterprises.

During the policy making, we consider it reasonable to take into account the experience of foreign countries, firstly, the EU countries, where the institution of AEO has been functioning. Secondly, the new Customs Code of European Union was enacted in October, 2013, thus extending both possibilities for enterprises via customs control simplifications, and setting up new requirements such enterprises should meet. However, these possibilities implementation for the domestic customs legislation will obviously involve making amendments to the Customs Code of Ukraine. Also, it seems reasonable to implement the following EU legislation guidelines into the domestic customs legislation [6, p. 122]:

- differentiation of an enterprise assessment criteria, depending on

the type of special simplification an enterprise claims;

- possibility of granting certain customs procedures simplifications to the enterprises without an AEO status, but partially meeting the AEO requirements;
- granting simplifications during transit of goods (including the introduction of Authorized Consignor and Consignee status);
- technology of the "centralized customs clearance" suggesting filing a customs declaration to the customs at the enterprise registration place, regardless of actual location of goods.

Harmonization of Ukraine and EU legislation guidelines, regulating the AEO activity, is going to drive recognition the AEO certificates by foreign customs authorities, given out to the Ukrainian enterprises, which is surely beneficial to Ukrainian business.

Besides, control procedures simplification for conscientious enterprises with an AEO status will positively influence the fiscal bodies' activity. It will also give a possibility to concentrate resources on more effective control over risky foreign economic operations.

Application of "Single Window". One of key tools for cross-border trade simplification lies in harmonization of all public institutions performance, granting permissions on import and export of commodities. They number veterinary and sanitary services, and ecological control bodies, certification authorities etc. WTO and WCO comprehensively encourage introduction of the commodities state control according to the "Single Window" principle, through mediation of which a trade operator can promptly get all permissions necessary for movement of goods [7, p. 137].

The "Single Window" principle implementation in Ukraine is possible only under condition of extensive application of modern electronic technologies primary combined information networks with the State Fiscal Service of Ukraine. In addition, a risk-oriented approach to the commodity control should be launched for other government bodies' activity, carrying out control over cross-border movement of goods. Therefore, the "Single Window" principle realization needs bringing out complex changes in the Ukrainian legislation [8, p. 31].

Secondly, it seems important to point out that the strategic measures of customs affairs improvement are direct-coupled with a necessity of implementing the Agreement terms on Ukraine and EU Association, investing in model reforms, and international donors support. According to the specialized representation offices recommendations in the person of the American Chamber of Commerce in Ukraine and European Business Association to the Ukrainian management customs affairs bodies, it is recommended to carry out the following measures in relation to its improvement [9]:

- 1. Work out the project of introducing amendments to the Customs Code of Ukraine, aimed at implementing the EU customs legislation enactments, as outlined in the Association Agreement provisions.
- 2. Work out the model of a personnel reform, allowing for particular basis of service, including establishment of a personnel record keeping system, taking measures about automation of employee rating procedures, and advanced professional training, revision of job compensation principles formation. Within the framework of this enforcement effort it a fundamental agreement with "Ernst and Young company" (EY) [10] has been achieved regarding donor assistance in reference to high-level research into the formation of job compensation principles and amounts of labour remuneration for the fiscal service officials.
- Carry out jointly with the tax and other law-enforcement subdivisions of the automated control, intended for the prior risk exposure of introduced into trade illegally transported commodities, which is going to eliminate a possibility of shadow schemes during importation of goods.
- 4. On getting donor assistance, audit the business processes of customs policy and develop the model of fiscal service transformation in the nearest future.
- 5. Bring in the international technical assistance aimed at increase of Ukrainian customs authorities' performance efficiency.

Moreover, priority directions of Ukrainian customs policy development are supposed to consider the following actions of the public authorities:

- to minimize and unify the rates of customs duty based on foreign practice;
- to improve the development of financial and information systems, especially exchange information procedures before arrival of goods;
- to strengthen application of technical barriers in relation to the normative requirements legislative fixing, aimed at health care and safety of people, animals and plants;
- to activate electronic declaration and record management;
- to assist the development of the customs consulting at macro and micro levels;
- to provide the maximum possible level of automation procedures control over determination of customs value, aimed at leveling a human factor influence on the fiscal decision making;
- to simplify the border customs control system and switch it to the period of post-clearance audit in accordance with international agreements.

Thus, the customs policy takes an enormous importance in the possibility of the state's entry to the world market. However, except an efficient customs policy, for Ukraine to enter the world market, it is necessary to make certain amendments to the legislation applicable to foreign economic activity, on banking and other fields of law. Effective implementation of customs policy needs fixing certain terms that will surely assist this process move on. Expansion of Ukraine's State Fiscal Service customs subdivisions empowerment, in particular, on issues of access to information located in other public authorities subdivisions; creation of documents distribution mechanism in according to the degree of legislation violation risk; counteracting corruption and preventing so-called "administrative resource" tools practices; an increase in level of customs authorities financing from the state budget with regard to retooling and upgrading; increase of advanced professional training for Ukrainian fiscal authorities employees.

To sum up, being on the modern stage of development during destabilization of fiscal and economic situation in regions, Ukraine plays an important role defending the state national interests and guaranteeing economic security to its citizens. In the context of European integration course, for Ukraine the priority directions of customs policy take on special significance, being primarily concentrated on issues of international cooperation, and implementing the world experience of customs regulation.

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# 4. International business in the conditions of tax harmonization

## 4.1. The interaction of investment activity subjects in the tax policy priorities

The Geopolitics introduced into the scientific terminology the notion of "large space" (*Grossraum*) in order to determine the complex civilization measurements. This notion denotes a single political and geographic entity. The globalization has penetrated into all spheres of the society's life, permitting to some entities to become the active creators of the relationships in the global economy, and to others – only to adapt to the global trends influence. In such a space, the level of national sovereignty depends not only on the size of the territory of the state, military power, technological development and economic system, but also on the participation in the global political and economic processes.

Modern institutional transformations have to promote the formation and development of the tax system, which is an important segment of the national financial system. The economy is a complex open system, not stable enough, creates a huge potential for new constructive ideas in economics, particularly in finances – financialisation, that reflects fundamental changes in the structure of the world economy, connected with the exaggerated dominance of the financial sector [1, p. 111].

The first scientific theories about tax are mentioned in the works of F. Akvinskyi, T. Hobbes, S. P. de Vauban, Sh. Montesquieu, O. Mirabeau, J. C. de Sismondi, T. Malthus, A. Thiers. With the development of scientific thought the main contribution to the theory of taxation was made by: W. Petty, A. Smith, D. Ricardo, F. Quesnay, A. Wagner, B. Gilderbrand, R. Hilferding, J. Keynes, M. Friedman, A. Laffer, D. Locke, A. Marshall, J.-B. Say, T. George, J. J. Rousseau and other economists.

The development of the financial sector requires the advanced adaptation of the institutional economic theory conceptual apparatus according to the segment of the financial sector. The problem of the financial sector formation in the conditions of the open economy has been the topic of fundamental studies of such native scientists and economists, as M. Alexandrova, N. Vyhovska, O. Petruk [2]; A. Beschastnyy [3]; O. Herasymenko [4]; M. Zvyeryakov [5]; M. Kapturenko, V. Kuzmenko, I. Mishyna, V. Prykhodko, M. Fomin [6] and others.

The insufficiency of scientific elaboration of the problems of the interconnection of financial science with the development of scientific cognition in general, the impact of the social and crisis phenomena on the financial segment of economy, the identification of the native economists' positions concerning the transformations in the global financial system – all these determine the urgency of the further study of the financial sector and the tax system in order to reveal the gears of its development in the complex economical system for the recovery from permanent recessions and attaining the new level of sustainable development.

There is the economic mentality and the institutional trust among the important determinants of the formation of the national tax systems. Various forms of the globalization are changing not only the global architectonics, the regularities of global markets development or the priorities of their regulation, but also the trends and mechanisms of interaction between the states in the sphere of the tax systems development.

In the social and political, economic studies, and in the legal sphere, the term "tax system" is often used as a concept characterizing the tax law and order in general. It may be noted that the majority of scientists recognize the existence of political, economic and legal components of the tax system, but none of the authors do not share the elements of the tax system according to their proper quarter to the corresponding subsystems, and does not distinguish the legal component of the tax system directly.

The peculiarities of economical systems development and arrangements of taxation are determined by the synergetic effects, which should take into account the principle of "limited sensitivity" (in case of overcoming the threshold the effect of fluctuations increases repeatedly); the principle of "proliferation of a small" (the effects of fluctuations are enhancing); the principle of discrete ways of evolution (a certain range of possible trajectories for further development is possible at every period of time); the principle of the unexpected (emergent) changes admissibility.

The specific measures for implementation of the priority "strengthening of interaction between subjects of tax relations and enhancing its effectiveness" are defined by the sphere (basic complementary interaction), the character (power, legal, partner), the duration (short-term) and methods (direct, indirect) of the tax interactions [7]. The direct interaction in its basic sphere between the tax authorities and the taxpayers makes up the core of all interactions and has the key influence on the development of the control functions of the tax through the mechanisms of state control of tax offenses and facilitates the implementation of the private taxpayers' interests.

There is a decrease of the administrative and taxation requirements to foreign investors and their capital, connected with the increasing of the competitive efforts due to the growing number of offshore jurisdictions. By the beginning of the XXI century, there had already been for about 100 of them. The offshore jurisdictions are converting into the independent members of the global market, affecting the world financial sector. The assets, that remain under the offshore companies' management and are controlled from outside, in the beginning of the current decade have been evaluated up to 32 trillion dollars of the USA. The use of the offshore instruments leads to national budgets' shortfall of more than 3 trillion dollars of the USA annually [8; 9]. Since the volume of assets, placed offshore, has increased their influence began to grow.

The main features of the offshore economy are the following:

– the formation of the intricate ownership models, that allow to hide the actual organizations' beneficiaries and to determine the legal control of them from the foreign offshore companies' side. The greatest danger, concerning the strategic assets, lies in the possibility of their simplified exclusion. The owners' economic responsibility for the taken decisions is reducing and this may affect the enterprises' activities and the quality of management;

 the financial and business transactions with offshore companies in order to reduce the level of tax payments to the budget;

- the usage of the offshore companies for withdrawing funds from the national economy, transferring of the profit centers into foreign jurisdictions and its concealment (for legalization of fraudulent gains).

The funds, exported to the offshore jurisdictions have become increasingly used not for the long-term investments, but for the short-term cross-border transactions, affecting certain national economies. In 2010, Barbados, Bermuda and the British Virgin Islands received more foreign direct investments (FDI) (in total 5.11% of the world volume of FDI), than Germany (4.77%) or Japan (3.76%). During the same year, these offshore jurisdictions made three more investments on a global scale than Germany (in total 4.54 and 4.28%) [10].

In 2009 the activities of the Global Forum on Transparency and Exchange of Information for Tax Purposes were reorganized. In 2015, there were 121 countries among its members.

The advantages of the offshore companies' usage are the following:

– there are more wider opportunities for the funds redistribution from the national economies (in case of their excess or tense in the financial / political situation) to other markets, that offer better conditions for capital investments and due to that the development of new financial centers;

– the increasing of the companies' competitiveness in the global economy through the implementation of the more flexible strategies of development in comparison with the market participants, who don't use the offshore jurisdiction in their work. The approaches of OECD, the EU and the USA, concerning the prevention the process of the economy offshore, have their own peculiarities, although they are aimed at achieving common goals:

 reducing of the level of the beneficiaries' anonymity of offshore companies and conducted operations by them;

 preventing the offshore usage for the unfair tax planning and for the reduction of the level of taxation of the individual companies and citizens;

 increasing of the taxation base due to the taxation payments on income, that are received in the offshore areas;

 raising of the cross-border funds movement stability and reducing of the offshore speculative capital's impact on the national financial markets.

The calculations of the USA government show that the implementation of this initiative will increase the revenues into the national budget for about 1 billion dollars of the USA and strengthen the fiscal discipline. The problem of the usage of the offshore jurisdictions by big companies in order to reduce tax payments is remaining urgent for the United States: 83 out of the 100 largest American corporations, the shares of which are circulating on the stock exchange, have subsidiary companies offshore; moreover the number of controlled structures reaches up to 400.

Requiring from the foreign financial institutions to provide information about the incomes of American taxpayers, the United States keep the bank secrecy de facto with regard to the passive investments into their economy due to usage of the program "Qualified Intermediaries". This program allows to foreign financial organizations during the implementation of the investment operations on the territory of the USA on behalf of the foreigners' interests to preserve their anonymity.

The additional initiative of the European Union, which is aimed at reducing of the offshore companies' opportunities in the investment area, has been the initiative of 11 EU countries about the introduction of the taxes on the financial transactions (financial transaction tax). The mentioned taxes will be charged during the implementation of agreements with securities and derivative instruments. The main purpose of the tax is to reduce the profitability in case of the speculative transactions on the financial markets and due to this to limit the possible pressure on the market from the side of dishonest institutions. As the result: this tax has to promote the efficient allocation of resources in the real sector of economy.

In the global economy, the national financial regulators of those countries, the market of which is forming, face with the difficulties of the transition period [11; 12; 13]. This process causes the growth of the mac-

roeconomic imbalances, and the participation of the foreign investors in the home market of bonds activities creates some countries the additional source of the volatility on the markets and the pressure on the capital flows [14; 15]. The IMF experts believe that these changes have led to the emergence of the "system discrepancy of liquidity", that is to say to the discrepancy between the potential scales of the capital outflow and the possibilities of the local institutions and "market makers" (especially for international banks) to redirect these flows [16].

The international markets of the financial capital have showed the increased number of the investors' contributions into the assets of those countries, the markets of which are developing. During the period from April 30 to May 28, 2014 the net (clear) attraction of the capital into the shares and bonds from the following countries, like Asia, Eastern Europe, Latin America, Africa and the Middle East reached up to 6.1 billion of dollars of the USA, of which 1.9 billion dollars of the USA constitute the investments into shares and the rest of 4.2 billion of dollars of the USA were invested into bonds. The investors who make the investments in share funds were oriented on the countries of Eastern Europe (42.0%) and Latin America (36.0%). The largest volume of the investments into the bond funds refers to Latin America (45.0%).

The process of capitalization of the economic relations determines the increasing role of the capital in the dispossession of labor results. It becomes evident through the increasing amounts of the fictitious capital, the derivatives (derivatives of the finance instruments) as for the real capital. According to the valuable (cost) volume the financial and its instruments, i.e. the derivatives (derivatives of the finance instruments) are the important forms of the capital. Since 2000s there have been changes in the institutional structures on the raw materials markets, connected with the development of the derivatives of the finance instruments, and the financial intermediaries' role has increased, i.e. the process of the financing of the market is taking place.

One of the main reasons of the current financial and economic crisis is the breakdown of the derivatives from the real capital, which causes the formation of the external public debts in many countries. According to the data of the UN Conference on Trade and Development, the share of the institutional investors on the commodity derivatives markets increased from 25.0% in 1990s up to 85.0% in 2012. This led to the increasing of the volatility prices on the raw materials markets, since in the short term period the prices began to depend on the expectations of the members of the financial markets who realize the derivative instruments on the raw materials.

Ukrainian emitters are coming out to the foreign markets of the capi-

tal. The organizational and economic mechanisms of the electronic commerce development require certain system techniques on optimization of the relevant sales as well as the minimization of the taxation of the financial transactions. National emitters have to execute those regulatory requirements that are set out in the current legislation when entering the international stock markets. According to the Law of Ukraine "On Securities and Stock Market" (ch. 2, Art. 37) Ukrainian emitters can distribute the securities outside Ukraine only in case of the National Commission's on Securities and Stock Market permission. The procedure for issuing permits for the distribution and / or circulation of Ukrainian emitters' securities outside Ukraine, is approved by the National Commission on Securities and Stock Market on 20th of June, 2013 and requires from the emitters, who wish to distribute their securities abroad, to keep to the following conditions: the registration of the emission of the securities; the admission of the securities to the stock exchange trade at one of the Ukrainian stock exchange; the corresponding of the securities quantity that are located outside Ukraine to the norms established by the Commission on Securities and Stock Market. The number of shares are planed to be placed abroad should not exceed more than 75.0% out of the total number of shares of the corresponding output.

The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Prevention to Legalization (Laundering) of the Proceeds from Crime" as of 21 April 2011 No. 3267-VI introduced some rules that define the term "stock market manipulation" and the responsibility for such manipulations.

The detection of manipulations is a complex activity that requires the proper financial analysis of the suspicious transactions with the securities. An objective evaluation of the transactions at the stock exchange market requires the necessary information (evidence-based) framework. In practice, the term "stock exchange market manipulation" in the current legislation and at the financial market is used differently, that is why it is necessary to determine the criteria of the rejection of liquid securities in order to counter the manipulation of the securities market.

Since January 1, 2015 some positive changes have been made in the system of traders by securities and depository institutions taxation. They are the following [11]:

 firstly, the special taxation on transactions of disposal of securities and derivatives transactions has been canceled. Starting from the first quarter of 2015 it is not required to prepare and submit a declaration on this tax;

· secondly, the order of taxation of both the collective investment funds

and the non-governmental pension funds has remained unchanged. The collective investment institutions' funds as well as the taxpayers, who are engaged in non-governmental pension provision, are exempted from paying taxes. The amount of the collective investment institutions, released from taxation, was expanded in comparison with the previous version of the Tax Code, as far as the new version allows to exempt from the taxation not only the assets of collective investment institutions or their income from those assets, but also another income from their activity (interest on loans, rental/leasing payments, etc.);

- thirdly, instead of the taxation registering the new procedure, based on the financial result determination (profit before taxation) according to the accounting data and its further correction into the insignificant list of tax differences, determined by the law, has been introduced. The enterprises with annual revenue, that does not exceed 20 million hryvnias, do not keep the tax differences records, as it defined by the Tax Code (this category includes the vast majority of the traders by securities and depository institutions). Thus, the separate tax registering is being cancelled and the importance and accuracy of the accounting for tax purposes is increasing greatly;
- fourth, the financial result from the sale or other disposal of securities is not taxed separately. The taxpayers on income (the traders by securities and depository institutions like banks and other financial institutions) continue to determine separately the common financial result after the transactions with the securities in accordance with the international accounting standards and financial reporting. The common positive financial result of both the trader by securities and the depository institution as a legal entity undergoes to the taxation on income at the rate of 18% as it is defined by accounting rules. The negative common financial result is taken into account in the separate account in the future periods. The expenses of the traders by securities and of the depository institutions are taken into account during the process of determining the common financial result of the traders by securities or of the depository institution as a legal entity.

At the same time, the taxation rate of the investment income from natural persons' transactions with securities has increased from 15% to 20%. In addition to this, the interest (discount) received by bondholders from their emitter, by holders of another debt securities are also taxed at the rate of 20%.

In 2016 the third stage of the currency legislation liberalization in

order to guarantee to the residents of Ukraine whole range of services usage, provided by the international system Internet calculations, is being planned to implement. The National Bank of Ukraine promotes the usage of the modern systems of the Internet calculations (such as Pay-Pal, ApplePay, GoogleWallet and others alike). This will contribute to the expanding opportunities for the residents of Ukraine to use not only reliable and proved systems of international calculations but also extended possibilities for the usage of the electronic money by the residents of Ukraine.

The complex program of the development of the financial sector of Ukraine has foreseen by 2020 the following [17]:

- the introduction in Ukraine the common rules as in the European Union concerning the free movement of the capital, the currency legislation liberalization, the introduction of mechanisms to hedge against currency risks (the dollarization Ukrainian banks liability at below 40.0%);
- the introduction of new requirements concerning the securities' sojourning in the stock exchanges' lists, the modernization of the clearing and calculation systems, and particularly, the realization by the Central depository office the depository accounting of all emissive securities.

From the above-mentioned it is possible to do next conclusions:

- 1. The formation and implementation of the fiscal policy promotes the stable development of the state economy. The fiscal policy, being one of the basic prerequisites of the sustainable economic growth, is a key factor that forms a favorable investment climate and creates conditions for improving the well-being of the population. All changes of the tax system should be predictable, understandable, both for the state and for the taxpayers. Moreover, frequent and systematic reformation of the tax system demonstrates more negative than positive fact, because it creates uncertainty and risks not only for the entrepreneurs but also for the foreign investors.
- 2. The current tax system of Ukraine does not allow to forecast all possible tax revenue in the budget to a sufficient degree, and possess quite a lot of mechanisms for taxpayers to avoid the obligation to carry any tax expenses. In case of improving the tax system, it is necessary to generalize the applied tax system principles in the tax theory and to define their essential characteristics in order to understand their sufficiency for the normal functioning of the taxation system or eliminate redundancy, which obstructs to the tax improvement.
- 3. At the same time, it is important to take the following measures in

order to stabilize the financial system in the tax policy priorities: to create the new tools for protection of the consumers' rights as well as the investors' ones from the financial sector; to form an effective system of investments (deposits) insurance; to construct the structure for resolving of the economic and legal problems of the specific financial institutions in case of financial crisis, as well as providing emergency funding to support the liquidity, if necessary; to evaluate the effectiveness of the fiscal instruments' system with the application of the budgetary and taxation multiplier; to put into practice the monitoring system of risks, which is transparent for both the market participants and the investors.

Accordingly, the new reality is expanding the aggregate supply for the financial capital, the conditions for the economic development are being created, the boundaries between local, regional and international markets of the financial capital and securities are disappearing, that requires providing mechanisms of interaction between the states in the sphere of the tax systems development.

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## 4.2. Taxation of infrastructure bonds: assessment of local realities and foreign practice

The growth of the national economy in terms of deficits of budgetary resources goes impossible without infusion of extra investments drawn on debt basis. Thus, the modernization of the economy, which provides for implementation of investment projects, particularly in the fields of energy and transport infrastructure, as well as ensuring the growth of export and high-tech industries, requires significant financial resources available by the state, which, in terms of budget deficit, can only be obtained through attracting borrowings or issuing government debt liabilities.

The problem of implementation of the government debt through issuing the infrastructure bonds has been thoroughly investigated in the works of E. Bondarenko, V. Varnavskyi, O. Voronchenko, A. Danylenko, I. Zapatrina, T. Motashko, O. Okhrimenko, Yu. Sizova et al. However, a range of issues still remain unsolved and hence require further study.

The conditions of regional infrastructure as the organizational and economic system that maintains the territorial and economic complexes

and ensures a free move of intra- and inter-regional investment, financial, trade, raw, labor and information resources, largely determines the potential for economic growth and the possibility of structural adjustment of the regional economy. Developed infrastructure significantly increases the investment attractiveness of the region, creates a basis for the implementation of business projects, and ensures the growth of revenues of local budgets and population incomes.

Infrastructure projects are featured by significant capital investment, long investment cycle and high risks. Therefore, the local authorities are in dire need of financial resources to be attracted on conditions acceptable for both investors and themselves. Apparently, the tax revenues to the local budgets alone are insufficient to carry out a number of major projects at a time. The objective of the authorities targeted on intensifying the investments in their territory, is to create an attractive image of the region, analyze its investment potential in order to raise investors' interest, and also work out the measures to reduce investment risks [1, p. 52-53].

The development of regional infrastructure requires long, painstaking work and a larger participation of the state and public institutions in this process. The quickly growing socio-economic inequality of regions stands in the way to the further development of the national economy. Actual differences in terms of supply for natural and other resources cannot exculpate the gap in standards of living of the regions, their incomes, quality of the social infrastructure and things like that. Instead, regional differences should be used as the strengths and unique advantages in the development of areas.

An effective tool for the local authorities to draw borrowings serve the infrastructure bonds, whose issuance aims at attracting investment capital, including that of institutional and private investors for implementing large strategic projects of national importance. The issuance of the infrastructure bonds is one of the most effective tools to attract long-term funding to realize the projects with long payback periods. In order to become a universal tool used for implementing projects in various fields, they need to be supported by the normative and legal base that regulates the issues of guarantee, the format of projects, a status of issuers, and more.

Such debt securities as the infrastructure bonds are successfully used in many developing countries, especially in periods of economic transformation. The infrastructure bonds have been widely used in a number of countries like the US, China, Australia, Chile, India and others. In some of these countries the infrastructure projects are financed by the pension funds through issuing government bonds of infrastructure [2, p. 72]. The practice of issuance of the municipal infrastructure bonds is widespread in the US. The municipal bonds are of two types: bonds of the general coverage and bonds secured by revenues generated by the projects. The source of the debt payments is the income from consumer services. Apart from that, the US issues the industrial development bonds, the issuer of which often appear the public authorities at different levels. Municipal borrowings are among the most reliable financial instruments, more than 35.0% of which are owned by different funds, about 15.0% make up the portfolios of insurance companies, and about 10.0% are in bank portfolios.

In Australia, a major issuer of infrastructure bonds is the government. A list of objects considered infrastructural is strictly outlined and the circulation of infrastructure bonds within this list is legally restricted. These include land and air transport, power generating plants, facilities of electricity, gas, and water supply, sewage and water treatment plants. The population is charged for the use of these facilities.

Generally, the Australian infrastructure bonds give their owners the opportunity to:

 get the long-time benefits from the implementation of infrastructure projects;

- get tax preferences (up to 15 years);

- annually review their participation in financing the project.

In Chile, the pension fund assets are invested through the bonds in specific projects – the construction of airports, railways, motorways, etc. A concessionaire appears to be the issuer of infrastructure bonds in Chile. It should be noted that the concession projects in Chile with the use of mechanism of the infrastructure bonds got high credit ratings.

In India, it is mainly banks who are the issuers of infrastructure bonds. In this country, the infrastructure bonds are of two types: the taxsaving bonds and regular income bonds. Tax-saving bonds allow gaining an income tax deduction at about 20.0% of the invested money. At the same time, the legislature fixed the maximum amount of investment in the infrastructure bonds as well as the limit of tax deduction.

Regular income bonds include the pension bonds, educational bonds etc. Banks provide investors with the borrowings secured by the infrastructure bonds (including their mortgage). The amount of borrowings secured by infrastructure bonds depends on the economic indicators of a particular infrastructural project. The amount of interest on the infrastructure bonds does not depend on inflation, and therefore in the long term, these securities may not be very beneficial. Overall, the holder of the Indian infrastructure bonds is not immune from failure to get back the assets invested in these bonds [3, p. 46].

Foreign powers would take all the possible measures to encourage the development of bond financing, including:

- tax benefits for the bondholders in the form of benefits from income tax deduction for natural persons or legal entities;
- providing state guarantees on concessionaire monetary obligations to the holders of the infrastructure bonds;
- enabling to pledge the bonds as collateral provided by the state bank to attract credit institutions as investors.

According to the investment project issues, for which infrastructure bonds are issued, the government guarantees the fulfilment of all the necessary points of the project including the legislation support as well as a decent rate of interest plus tax benefits, and bears joint and several liability with the implementer of the project before investors. In this case, such a debt instrument should not necessarily get rated by the international rating agencies. These infrastructure bonds may be included in the list of securities that are permitted to be purchased by primary dealers and institutional investors, including insurance, investment and financial companies as well as private investors.

The infrastructure bonds have a high degree of reliability approved by the state's joint liability for the obligations of their issuer. The suggested scheme of implementation of the infrastructure bonds, its appropriate legal approval and reliability that are inherent to all the government securities make the tool more attractive for potential investors and allow solving the problem of modernization of infrastructure facilities and addressing a number of nationwide issues [4, p. 45].

Nowadays, in Ukraine the problems of modernization of transport, energy and social infrastructure are of top-importance for both public and regional authorities. The need for enhancing energy efficiency, renewal and development of road network, housing and utility sector is constantly growing. Specifically, the problems of transport infrastructure resulted from economic constraints that occur in the industry.

Insufficient and ineffective financing of various spheres of the transport system led to imbalance and gradual degradation of important areas of the transportation infrastructure. Over the past few years, it featured the rapid physical and mental aging, disproportions in improvement, placement of objects, limited funding, weakness of market mechanisms to regulate the industry, resulting in considerable difficulties for private capital to participate in the development of the transport infrastructure. The acute need for investment resources to solve the traffic problems of the country, its regional development brings to the fore the problem of attracting businesses for implementation of the state transport policy.

The investment project of state or regional significance should also

be assessed at the level of impact on the economy sector, analyzing the competitive advantages of this very investment project, capacity of the domestic and foreign markets. We should also consider the objectives to stimulate private investments drawn by institutional and private investors in large-scale and long-term projects that have a multiplying effect on the national economy as a whole.

In international practice of the issuance and circulation of the infrastructure bonds, compared to the traditional government securities, the following features are allocated:

- targeted use of interest income resulted from the long-term investments in the infrastructure projects (roads and railways, ports, airports, power lines, pipes and oil and gas pipelines);
- institutional investors (pension funds, insurance, financial companies) and natural persons act as the major investors engaged in investments in the infrastructure bonds [5, p. 18-19].

Traditionally, the funding of regional and municipal programs in Ukraine is carried out through intergovernmental transfers and direct borrowings – issues of securities that are generally the bonds of the government borrowings. The current situation in the market of municipal bonds is characterized by a dramatic decrease in issues of these very securities, due to the inability of local budgets to compete with the government which has filled the lion's share of liquidity in the domestic loan market.

At the same time regional budgets are experiencing a significant shortage of funds to cover the current expenses related to the maintenance of the social sphere and ensuring relative stability in terms of the livelihood support of cities and other settlements. Implementation of any new projects is characterized by the fact that the ongoing expenditures on maintaining the urban environment tend to take on the budget revenues that could be directed to the growth.

Thus, the bonded loans enable local authorities to attract funds that are not strictly spent on the targeted programs, but mainly directed at eliminating the budget deficit. Actually, bond issues are not caused by any specific investment projects. This cannot be the reason for these issues to get more attractive. Moreover, the maturity of such borrowings cannot access a year or two as they are not profoundly guaranteed.

Therefore, if to handle the tasks of the regional development, it should be mentioned that the bonded loans are misused by the regional authorities. However, the infrastructure bonds could become a new and far reaching form of financing the infrastructure projects in Ukraine. The Verkhovna Rada of Ukraine of 10 October 2013 in first reading adopted bill No 2072 «On Amendments to Certain Legislative Acts of Ukraine Regarding The Issue Of Securities», which regulates the issue of the

infrastructure bonds to finance infrastructure modernization as part of the public-private partnership [6, p. 122].

On the other hand, there is a problem of payback on attracted borrowings, because if the local authority is unable to make repayment of the honoured debt, it may lose credit rating and the confidence of investors. Thus, the problems caused by the inability of regions to carry out bonded loans are primarily connected with inadequate capabilities to fulfil their commitments to payback by the loan and failure to gain support from the public authorities.

We believe that the regions urgently need to increase their investment attractiveness, which largely depends on their competitive advantages. Formation of competitive advantages based on the investment appeal now seems a promising trend in the economic development of the country's economy as a whole, and that of regions in particular, focused on development, practical implementation, and commercial fostering the technical, technological and organizational innovations [7, p. 235].

Local governments are experiencing a significant lack of long-term investments, and the use of available financial instruments can not solve the problem. Consequently, the most important challenge is to intensify the process of drawing private investments. Nowadays, the regional policy in Ukraine seems to be fragmentary and inconsistent. Therefore, the local authorities themselves should elaborate the programs of development. Innovations, human capital, mobility and access to information and resources have become the top priority factors for ensuring the investment attractiveness.

When selecting priority infrastructure projects, we should take into account public opinion, heed the view of professionals in the area or just members of society ready to collaborate. The employees of specific departments of regional authorities as well as the business-community's experts specializing in the area should draft the team of professionals in charge of the project [8].

It is important that the interest earned from specific bonds, could only be directed to finance certain projects, i.e. the investor himself determines the preferable trend of its use. This will under the market conditions allow evaluating the prospects of each project and sift the ones that have been assessed by the state as profitable and low risk, but are not. And what's more, by the end of the project the investor can avail the additional benefits (other than the interest from his funds) like the construction of toll motorways, which he uses daily, or cut the fuel and lubricant and car-repair costs

We believe, the effectiveness of such projects when applying the mechanism of the infrastructural bonds will increase. Many of the benefi-

ciaries will seem to closely monitor the work of such establishments and strengthen public control over the efficient use of funds. However, the best way to implement the investment projects is to attract the funds of the private companies.

The main criteria for the formation and implementation of the innovative infrastructure projects at the regional level are their relevance, social significance, investment support and innovation. However, along with these criteria, it is also important to determine how actual the idea is, and how it is economically, budgetary, financially and socially proved. We should also be aware that a huge capital intensity of innovative infrastructure projects limits the financial capacity of the region.

Debt financing of investment programs, on the contrary to the funding from the current revenue, allows drawing up a clear plan of yearly payments to contractors and make payments in strict accordance with the supporting financial documents. Thus, the optimization of the management structure of borrowings and investments within the targeted investment borrowings will make possible to decrease the borrowing expenditures on the debt service, significantly reduce credit risk and increase the confidence of investors and creditors, and contractors in their turn will be able to obtain proper funding [9, p. 58].

In Ukraine, there are hardly any noticeable simple models to stimulate investments in the infrastructure, such as exemption from taxes on income earned from ownership and realization of the infrastructural bonds as well as automatically enlisting of the latter in higher quorate list. Finally, the development of infrastructure and market infrastructure bonds requires the availability of the projects themselves. It is quite important for the projects to be thoroughly prepared, for which there is no due monitoring in Ukraine.

Further formation and development of municipal securities in Ukraine requires the implementation of system-wide policy measures in order to stabilize the macroeconomic situation in the country. To develop the municipal securities market and increase their liquidity in the future, local authorities must improve the transparency of financial transactions and thus increase the demand for municipal securities by stimulating the potential investors (banks, households, pension funds, insurance companies).

Financing infrastructure projects at the expense of the infrastructure bonds will allow to lower expenditures of the consolidated budget of Ukraine, and therefore weaken the debt burden. The use of the mechanism of the infrastructural bonds will contribute to the active construction and modernization of transport and production infrastructure, replacement of public investments by the private funding, implementation of mutually beneficial schemes of cooperation between the state and private businesses. Having considered the peculiarities of local borrowing in Ukraine, we may highlight the following measures of improvement of this process:

- the formation of specific investment programs, under which the borrowing are attracted;
- giving tax benefits to the holders of the infrastructure bonds;
- encouraging various businesses to invest in municipal securities;
- ensuring the on-target use of borrowed funds;
- setting up the system of monitoring and control of local borrowings;
- developing long-term strategies of the region with a focus on financial possibilities which include the amount of local borrowings and purposes of their use.

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  – № 10. – С. 39-45.

## 4.3. Customs instruments of Ukraine's trade liberalization with the European Union

Integration tendencies of the world economy require appropriate changes of the vectors of the customs regulation of foreign economic activities, namely foreign trade. Customs policy is considered effective when its guidelines cover, on the one hand, protection of domestic producers, on the other, provision of the competitive position of the domestic economy in the global market and dynamic development of foreign trade. Ukraine's integration into the global economy plays an important role in the development of the national economy, therefore Ukraine is interested in a supportive environment that simplifies access to foreign markets and ensures stable trade flows based on constant improvement of the competitiveness of the domestic producers.

Modern trends in the domestic economy highlight the existing objective conditions, strong export potential and incentives for the development of foreign economic activity. The processes of formation and functioning of the economy are no longer possible to consider outside the context of the European integration, which provides Ukraine with significant opportunities for development of the global economic area in terms of preferential trade regime, access to resources, the expansion of the geographical and commodity structure of export and import and overcoming tariff and non-tariff barriers.

Country's integration into the EU economic area is an important factor that should encourage increasing the competitiveness of individual sectors and the economy as a whole. The advantage of the European integration in the economic sphere is the gradual achievement of the European standards of living, ensuring macroeconomic stability of the economy, the creation of appropriate conditions for free movement of goods, services, capital and labor within the EU Single Market.

The EU market is strategically important and attractive for domestic producers. In 2014 the EU was the main trade partner of Ukraine. The volume of trade amounted to 37.9 billion dollars or 35.6% of Ukraine's total trade amount. Exports of goods to EU countries amounted to 17.1 billion dollars against 20.8 billion US dollars of imports. In January – April 2015 exports of goods to the EU countries amounted to 4.3 billion US dollars. Whereas, imports from the EU countries amounted to 5.1 billion US dollars. Ukraine and the EU maintain a negative balance of foreign trade in goods, which is largely due to a mismatch of the Ukrainian counterparts. Similarly, the negative balance of trade was in 2014 minus 3.7 billion US dollars, which has been the best performance since 2008 (Figure 1).



## Figure 1. Dynamics of Ukraine's foreign trade in all kinds of goods with the EU countries, billion USD (according to the State Fiscal Service of Ukraine)

Source: [5, p. 3]

Ukraine's course toward integration into the EU is proved by signing and ratification in 2014 of the Association Agreement between Ukraine and the EU, when the parties began to build their relations as a qualitatively new form of political association and economic integration. Moreover, in accordance with the provisions of the agreement, the European Union is considering Ukraine as a priority country in the European Neighborhood Policy, and as a result, the Council of the European Union has approved a package of autonomous preferential measures in trade with Ukraine on the reduction or elimination of customs duties on goods originating in Ukraine by 31 December 2015. However, 2014 and the first half of 2015 are generally characterized by negative monthly dynamics of exports from Ukraine to the EU countries (Figure 2).

This is primarily due to the difficult political and economic situation in Ukraine, and the fact that now the export structure is dominated by low processing level and therefore, Ukraine risks becoming a raw materials appendage of the EU.

The Association Agreement between Ukraine and the EU, including the agreement on deep and comprehensive free trade area (FTA) as its integral unit, undoubtedly has been the most ambitious package of agreements since the country became independent. The economic part of the agreement covers all important areas and the domestic economy,





Source: [3]

demonstrating the desire of the parties not only to translate cooperation to a new level, but significantly makes closer the economic system of Ukraine to the respective systems of the EU countries on mutual liberalization that, first of all, certainly comprises the key component of international economic relations, i.e. international trade.

As noted above, since April 2014 the EU has unilaterally introduced a regime of autonomous trade preferences (ATP) for products originating in Ukraine. Preferential trade regime is part of an expanded package of economic and financial EU assistance to Ukraine.

Appropriate Regulation (EU) No. 374/2014 of the European Parliament and of the Council of 16 April 2014 on the reduction or elimination of customs duties on goods originating in Ukraine came into force on April 23, 2014. It has been assumed that autonomous trade regime will be valid until 1 November 2014 (or until the entry into force of the Association Agreement). Despite the postponement of provisional application of the trade agreement and given the difficult economic situation in Ukraine the EU unilaterally introduced and extended to 31 December 2015 the autonomous trade preferences (Regulation (EU) No. 1150/2014 of the European Parliament and of the Council) [2]. The autonomous trade preferences include (Figure 3):

- the reduction or elimination of import duties on 94.7% of the total industrial goods (commodity groups 25-97) and 83.4% of agricultural products and foodstuffs (commodity groups 1-24);
- the application of zero-tariff rate quotas to some agricultural products.



Source: Made by the authors based on [1]

The following conditions must be met in order to use the preferences on the reduction or elimination of customs duties provided by the EU Regulation No. 374/2014 [7]:

- compliance with the rules of origin and procedures associated with them;
- compliance with the methods of administrative cooperation;
- Ukraine's participation in effective administrative cooperation with the EU on fraud prevention;
- Ukraine should refrain from imposing new duties or tariffs which have equivalent effect and new quantitative restrictions or measures having equivalent effect on imports from the European Union or from increasing existing levels of duties or tariffs or imposition of any other restrictions from 23 April 2014;
- respect for democratic principles, human rights and fundamental freedoms and respect for the rule of law as provided in Article 2 of

the Association Agreement.

The basis for receiving trade preferences is the availability of preferential certificate of origin form EUR.1 issued by the competent authorities of Ukraine (currently – territorial units of the Ukrainian Chamber of Commerce and Industry (Ukrainian CCI)).

Mutual trade liberalization between Ukraine and the EU is defined by the provisions of Part IV of the Association Agreement "Trade and Traderelated Matters". These provisions predict the reduction or elimination rates of import duty on goods whose country of origin is a party to the agreements reached in accordance with Annex I-A of the Agreementgraphs during the transition period of maximum 10 years. Liberalization covers over 97% of tariff lines, which accounts for approximately 95% of bilateral trade between Ukraine and the EU. However, as the data in Table 1 show, FTA+ Agreement provides asymmetric tariff liberalization by the EU for Ukraine.

Table1

## Dynamics of tariff liberalization in trade between Ukraine and the EU under the provisions of a deep and comprehensive free trade area

	The average import duty rates, %						
Commodity groups	Base rates		Since the agreement enters into force		After 10-year transition period		
	Ukraine	EU	Ukraine	EU	Ukraine	EU	
All nomenclature	4.95	7.60	2.42	0.50	0.32	0.05	
Groceries (groups HS2 01-24)	9.24	19.80	6.77	0.60	1.38	0.24	
Non-food products (groups HS 25-97)	3.67	3.90	1.12	0.50	0.00	0.00	

Source: Made by the authors on the basis of [6; 8]; The Association Agreement anticipates a transition of Ukraine to European Nomenclature the Harmonized Commodity Description and Coding System (HS) aimed at avoiding differences in customs taxation.

Since the entry into force of the FTA+, the average import duty rate in the EU will decrease by 7.1 per cent – from 7.6% to 0.5%, while import duty rate in Ukraine reduced by only 2.53 per cent – from 4.95% to 2.42%. Particularly radical will become the EU concessions of agricultural production as to reducing the average level of customs duty by 19.2 per cent – from 19.8% to 0.6% [4, p. 5].

The undisputed achievement for domestic producers from trade barriers reduction in accordance with the EU FTA+ will be their adjourning of using tariff escalation – increase in tariff rates with increasing degree of goods processing. The mentioned tool of the domestic market protection is aimed at inhibition of manufacturing and high-tech industries development in the countries – trading partners and stimulates the raw material orientation of the external sector of their economy.

In particular, according to the base tariff rates the level of customs taxation of imported finished products in the EU exceeds the level of customs duty rates on raw materials by 7.7 times, while in Ukraine it is only 3.2 times. Entry into force of the FTA+ eliminates this disparity by providing full tariff liberalization of trade in non-food products and keeping some level of tariff protection on both sides as for sale of food raw materials (meat, poultry, milk, vegetables, etc.) [4, p. 10].

Reduction or elimination of customs duties on goods originating in Ukraine is applicable under Annex I and the provisions of the Regulation (EU) No. 374/2014 of the European Parliament and of the Council on reduction or elimination of customs duties on goods originating in Ukraine. Base import duty rate for 2014 and 2015 [7]:

- is canceled for goods if the transitional period is "0";
- is reduced by 25% for products within a transitional period of "3 years";
- is decreased by 16.7% for goods within the transitional period of "5 years";
- is reduced by 12% for products within a transitional period of "7 years".

Administration of tariff quotas takes place in two ways:

- "first come first served" (Annex I of the EU Regulation No. 1150/2014);
- through import licenses (Annex II of the EU Regulation No. 1150/2014).

Mode "first come – first served" covers 27 quotas and, in particular, applies to such goods as: lamb, honey, sugar, caramel, glucose and syrups of glucose, starch, barley, mushrooms, tomatoes, wine, apple juice, dairy paste, cocoa powder, oats, garlic, mannitol, ethyl alcohol and some others.

Annex II to the Regulation has established a list of products and quotas, whose administration is conducted through licensing of importers (beef, pork, poultry, milk and dairy products (butter, yogurt), eggs and albumins, wheat, barley, maize) from the competent authorities of the EU Member States and for the overall coordination of the European Commission's Directorate-General for Agriculture and Rural Development". The distribution of quotas is not conducted in Ukraine, but by the EU competent authorities at the request of the importing EU Member State. Potential importers of Ukrainian products apply for the right to import (license) to the European Commission's Directorate-General for Agriculture and Rural Development" within 10-15 days from the date of introduction of the

EU decision concerning autonomous preferences for Ukraine.

In fact, in May – December 2014 only 14 out of 27 proposed quotas, provided by the principle "first come – first served", have been used in full. It should be noted that in 2014 the present method was in full use of quotas for honey, apple juice, cereal grains and tomatoes. The data in table 2 show that only 3.5% of quotas have been used for glucose, about 7% for starch and garlic, 10-11% of fructose and bran and almost 29% for malt.

Table 2

#### The volume of the quotas obtained by the principle "first come – first served" in 2014-2015

		2014	2015			
Name	The annual quota for the	Quotas used 23.04-31.12.2014		The annual quota for	Quotas used 01.0131.06.2015	
	ATP period 2014 p., tons	tons	%	the ATP period 2015, tons	tons	%
Honey	5000	5000	100	5000	5000	100
Apple and grape juice	10000	10000	100	10000	9856.535	98.57
Cereals	6300	6300	100	6300	4828.827	76.65
Oats	4000	65	1.6	4000	2658.820	66.47
Tomatoes	10000	10000	100	10000	1983.647	19.84
Raw sugar	20000	522.000	2.6	20070	2248.400	11.20
Fructose	2000	210.832	10.54	2000	96.666	4.83
Bran	16000	1820.077	11.38	16000	473.470	2.96
Starch	10000	725.150	7.25	10000	192.650	1.93
Grist	7000	1990.972	28.44	7000	61.970	0.89
Garlic	500	35.500	7.10	-	-	-
Glucose	10000	350.200	3.50	-	-	-
Other foods	-	-		2000	0.236	0.01

Source: Made by the authors based on [1]

As can be seen from table 2, in general, there is a decrease in the use of quotas on the principle "first come – first served" for many positions in 2015 compared to 2014.

Quotas, administered by a system of import licenses in 2014-2015, were established for such products as beef, pork, poultry meat, milk and dairy products (butter, yogurt), eggs and albumins, wheat, barley and corn.

Under the implementing Regulations of the European Commission which set detailed procedures for licensing importers (economic opera-

tors of the EU Member States) within the application of tariff quotas for products according to Annex II to the Regulation (beef, pork, poultry meat, eggs and albumins, milk products and grains) equal shares are allocated every quarter in 2015 for imports into the EU of meat (beef, pork, poultry) and egg products under licensing the relevant annual quotas, 25% of the total quota. Licensing cereal imports is on a weekly basis, and dairy products are licensed by distribution of quota for the two six-month periods.

As can be seen from table 3 in 2014 all quotas, according to autonomous trade preferences of the EU, were used for wheat – 950,000 tons and corn – 400,000 tons. Moreover, the entire quota for wheat was used by the European importers during the 4-months of ATP treatment, and the quota for corn was mastered for the first 25 days of the current marketing year (from 1 to 25 July). This means that export quotas for these products were not only used completely, but exceeded, as the share of the Ukrainian wheat and corn exports in the EU is 5.8% (371,200 tons) and 37.8% (3,029,100 tons) respectively for the first half of 2015 [5, p. 7] and exporters of these products before introducing liberal trade conditions were present on the EU market and were able to fully benefit from trade.

Table 3

The volume of the quotas obtained by the system of import licenses

		2014		2015			
Name	The annual quota for the	Quotas used 23.04-31.12.2014		The annual quota for the	Quotas used 01.0131.06.2015		
	ATP period 2014, tons	tons	%	ATP period 2015, tons	tons	%	
Wheat	950000	950000	100	950000	325939.657	34.31	
Corn	400000	400000	100	400000	400000	100	
Poultry	16000	12360.025	77.25	16000	8000	50	
Frozen chicken frames	20000	-	-	20000	1180.072	5.9	
Barley	250000	22720.55	9.09	250000	5570.000	2.23	

Source: Made by the authors based on [1]

In 2014 the volume of quota for poultry was not fully used because of the limited period of licensing (7 days). Respectively, the additional quota volume of 20,000 tons of marketable products in subheading 0207 12 "frozen chicken frames" has not been distributed.

In 2014 Ukraine did not export to the EU beef, pork, milk and dairy products, eggs and albumins due to the lack of the European Commission permits to import these types of animal products in domestic producers.

As the conducted analysis shows, the EU provision of preferential trade regime has not allowed most domestic enterprises to take advantage of its benefits, and thus, a lot of export quotas for deliveries of Ukrainian goods to the EU has not been used for, due to the low competitiveness of most business entities, discrepancy of quality of their products with international standards, the need for additional testing and certification, licensing, etc.

In general, the key problem of the Ukrainian economy is that our country does not produce many products competitive in the international markets. It mainly exports agricultural products, steel and raw materials, but has very little to offer in the technological field. But the EU preferences, granted mainly to agricultural products, have more demonstrated the disability of the domestic exports. Ukrainian agricultural producers were not able to fully benefit from the preferences granted. The main reason for this was the existence of significant non-tariff barriers in trade caused by disparity of domestic products to meet the European requirements for quality and safety. For producers of many agricultural products the quota use problem is the failure to fulfill the requirements for product quality and safety for permits and certificates for export to the EU. Therefore, benefits primarily have been used by those exporters that already operate on the EU market.

It should be noted that the EU granting Ukraine autonomous preferential trade regime has a positive impact on the development of trade relations between them, especially in the sphere of agricultural produce trade. This positive effect is particularly evident in the recession of the domestic economy in general and its external trade in particular. Although liberal terms of trade with the EU, by reducing its customs protection through providing trade preferences for Ukraine, have not led to the expected, significant growth in exports from Ukraine to the EU, but in any case, they have given a chance for domestic exporters to assess their opportunities in the European market, identify problems and find constructive ways of their solution.

Increasing export opportunities for Ukraine in the EU market will improve national standards of quality and food safety, and the postponed implementation of the FTA+ will provide more time for Ukrainian businesses to adapt their production processes and standards to the EU requirements to enhance their competitiveness in the European market, as well as the preservation and expansion its position in the domestic market and thus stimulate Ukrainian economy.

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## 4.4. Application of value added tax to e-commerce in the European Union

The EU is still in the process of establishing a full-scale single market for VAT purposes. The specifics of any market (both for goods and for services) also broadly influences the turnover of digital products that make part of the e-commerce.

Naturally, first struggles to analyze the impact of the development of digital technologies started with the very introduction of network technologies. However, the first notable position in the field of taxation was taken by the USA in the report called "Selected Tax Policy Implications of Global Electronic Commerce" in 1996. After this report, several important public events took place across the world under the authority of the OECD [1].

Most importantly, at this time it started to become obvious, that the VAT would be among the most impacted taxes because of the rise of the e-commerce. As a result, eventually the Economic and Financial Affairs Council (ECOFIN) adopted a Communication on the topic of e-commerce and VAT [2]. The report concluded that

(1) the supply of digital goods should be treated as services;

- (2) services to EU consumers should be taxed in the EU without regard to the country of the supplier. This part is very significant, since it started the system that became a cornerstone for the modern MOSS system; and
- (3) the emphasis should be taken on making e-commerce VAT compliance simple and conducted by electronic methods (including invoicing).

Later on, there was a proposal to amend Sixth VAT Directive [3] in order to reflect new policies [4]. This proposal established a beginning of the VAT reflection of technologies that have started to be a part of our society. Still, legislation was struggling to achieve parity with the reality.

However, most notable changes were introduced when there was adopted a "VAT Package" by the EU. The package introduced new place of supply of services rules for VAT in the EU and new intra-Community refund procedures. The first phase of the VAT Package came into force on 1 January 2010. Another change was scheduled for 2015, by introducing Mini One-Stop Shop scheme (MOSS) to the e-services supplies within the EU.

Subsequently, in 2013, the European Commission established the Commission Expert Group on Taxation of the Digital Economy [5]. The Group published a Report, which supported the new MOSS developments, and the new place of supply rules for B2C digital services. It is also worth mentioning that even more substantial One-Stop Shop (OSS) is set as the goal for all goods and services in the EU as a substitute for the current distance selling system. Next year, the European Commission published a Communication entitled A Digital Single Market Strategy for Europe [6].

Finally, as preliminary scheduled, from 1 January 2015, all supplies of telecommunications, broadcasting and electronic services are taxable at the place where the customer belongs. Explanatory notes on the application of MOSS provide, that in order to ensure the correct taxation of such services, EU and foreign businesses need to determine the status of their customer (a taxable or a non-taxable person) and the place where that customer belongs (in EU or outside the EU).

In the EU, e-services for MOSS purposes are called "electronically supplied services". Such services can be referred to as the services delivered by any electronic means (i.e. electronic network or an internet). However, there is one important requirement: in order for those services to be treated as "electronically supplied services", the nature in which their supply is rendered must be essentially automated and involving minimum human intervention and impossible in the absence of information technology [7]. Article 98 of the EU VAT Directive (2006/112) [8] provides that the reduced rate shall not apply to electronically supplied services. Thus, all supplies of electronic services are subject to VAT at the standard rate.

The underlying reason for these changes was to bring the VAT treatment of these services in line with one of the main principles of VAT – revenues should accrue to the Member State in which goods or services are consumed. For non-EU businesses supplying telecommunications, broadcasting or electronic services to customers in the European Union, current rules already ensure taxation in the country where the customer belongs. Until the end of 2014, business to final consumer (B2C) supplies by EU businesses are taxed in the country of the supplier.

This means that for supplies made to final consumers, businesses established in Member States applying lower VAT rates have a competitive advantage over businesses established in other Member States. The new rules of taxation based on the country where the customer belongs provided, as from 2015, a level playing field and should also ensure that the VAT receipts accrue to the Member State of consumption.

Under the place-of-supply rules applicable as from 1 January 2015, all supplies of electronic services follow the destination principle and are subject to the VAT rules of the country of the customer. In the EU, in order to establish who has to account for the VAT due it is necessary to distinguish between business-to-business (B2B) and business-to-consumer (B2C) transactions. If the customer is located outside the European Union, his status is not relevant since the supply is outside the scope of EU VAT.

To assist in practical issues a Council Implementing Regulation was adopted [7]. Article 24a of the Regulation provides that where a supplier of telecommunications, broadcasting or electronically supplied services provides those services at a location such as a telephone box, a telephone kiosk, a wi-fi hot spot, an internet café, a restaurant or a hotel lobby where the physical presence of the recipient of the service at that location is needed for the service to be provided to him by that supplier, it shall be presumed that the customer is established, has his permanent address or usually resides at the place of that location referred to in paragraph 1 of this Article is on board a ship, aircraft or train carrying out a passenger transport operation effected within the Community pursuant to Articles 37 and 57 of the VAT Directive, the country of the location shall be the country of departure of the passenger transport operation.

Article 24b of the Regulation provides that where telecommunications, broadcasting or electronically supplied services are supplied to a non-taxable person:

- (a) through his fixed land line, it shall be presumed that the customer is established, has his permanent address or usually resides at the place of installation of the fixed land line;
- (b) through mobile networks, it shall be presumed that the place where the customer is established, has his permanent address or usually resides is the country identified by the mobile country code of the SIM card used when receiving those services;
- (c) for which the use of a decoder or similar device or a viewing card is needed and a fixed land line is not used, it shall be presumed that the customer is established, has his permanent address or usually resides at the place where that decoder or similar device is located, or if that place is not known, at the place to which the viewing card is sent with a view to being used there;
- (d) under circumstances other than those referred to in Article 24a and in points (a), (b) and (c) of this Article, it shall be presumed that the customer is established, has his permanent address or usually resides at the place identified as such by the supplier on the basis of two items of non-contradictory evidence as listed in Article 24f of the Regulation.

Article 24c provides that where the hiring, other than short-term hiring, of means of transport is supplied to a non-taxable person, it shall be presumed that the customer is established, has his permanent address or usually resides at the place identified as such by the supplier on the basis of two items of non-contradictory evidence as listed in Article 24e of this Regulation.

Article 24d provides that the place of supply rules for e-services shall be determined on the basis of three items of non-contradictory evidence indicating that the customer is established, has his permanent address or usually resides elsewhere.

However, the tax authorities may rebut the presumptions that have been made under Article 24a, 24b or 24c of the Regulation where there are indications of misuse or abuse by the supplier.

According to Article 24e of the Regulation, for the purposes of applying the rules in Article 56(2) of the VAT Directive, the following shall, in particular, serve as evidence:

- (a) the billing address of the customer;
- (b) bank details such as the location of the bank account used for payment or the billing address of the customer held by that bank;
- (c) registration details of the means of transport hired by the customer, if registration of that means of transport is required at the place where it is used, or other similar information;
- (d) other commercially relevant information.

According to Article 24f of the Regulation, for the purpose of applying the rules in Article 58 of the VAT Directive, the following shall, in particular, serve as evidence:

- (a) the billing address of the customer;
- (b) the internet Protocol (IP) address of the device used by the customer or any method of geolocation;
- (c) bank details such as the location of the bank account used for payment or the billing address of the customer held by that bank;
- (d) the Mobile Country Code (MCC) of the International Mobile Subscriber Identity (IMSI) stored on the Subscriber Identity Module (SIM) card used by the customer;
- (e) the location of the customer's fixed land line through which the service is supplied to him;
- (f) other commercially relevant information.

The Regulation includes the explanatory notes on the rules used to determine where a customer is established for specific services [9]. As provided in the notes, their objective is to provide a better understanding of legislation adopted at EU level and in this case principally Council Implementing Regulation (EU) No 1042/2013 of 7 October 2013 amending Implementing Regulation (EU) No 282/2011 as regards the place of supply of services. The explanatory notes were expected to allow Member

States and businesses to better prepare for and adapt to the upcoming changes in time and this in a more uniform way. The notes are intended to be seen as a guidance tool that can be used to clarify the practical application of the new place-of-supply rules for telecommunications, broadcasting and electronic services.

It should be noted that the explanatory notes are not legally binding. They do not represent the views of the Commission nor is the Commission bound by any of the views expressed therein. Moreover, Member States may also prepare their own national guidance for the application of the new VAT rules on the place of supply of telecommunications, broadcasting and electronic services. Naturally, Member States adopt the explanatory notes only in parts that are of interest to them.

It is worth mentioning that Patrick Wille categorizes the types of ecommerce transactions in question into four main types depending on the means of their transition [10]:

- 1. Where telecommunications, broadcasting or electronically supplied services are supplied to a non-taxable person through his fixed land-line, it shall be presumed that the customer is established, has his permanent address or usually resides at the place of installation of the fixed landline.
- 2. For services provided through mobile networks, it shall be presumed that the place where the customer is established, has his permanent address or usually resides is the country identified by the mobile country code of the SIM card used when receiving those services.
- 3. For services for which the use of a decoder or similar device, or a viewing card is needed and a fixed landline is not used, it shall be presumed that the customer is established, has his permanent address or usually resides at the place where that decoder or similar device is located, or if that place is not known, at the place to which the viewing card is sent with a view to being used there.
- 4. Under circumstances other than those referred to above, it shall be presumed that the customer is established, has his permanent address or usually resides at the place identified as such by the supplier on the basis of two separate items of non-contradictory evidence.

In the EU, the supplier may regard his customer as a business (taxable person) if the customer has communicated his VAT identification number to him and the supplier has verified its validity or if the customer has demonstrated that he is in the process of registering for VAT. The reverse charge mechanism [9] will apply to cross-border supplies to businesses (i.e. the VAT liability is shifted to the customer who accounts for VAT on the supply in his VAT return), whereas a simplified registration mechanism (One-Stop Shop, OSS/Mini One-Stop Shop scheme, MOSS) [10] may be used in respect of cross-border supplies to EU final consumers. In the latter case, since the reverse charge cannot be applied, the supplier must determine where his customers are established, have a permanent address or usually reside in order to apply the correct VAT rate [11].

Most notably this issue was under question regarding the kindle books. For example, although Annex III of the VAT Directive provides an option for the application of the reduced rates to "books on all physical means of support"; France and Luxembourg famously applied reduced rates for the sale of electronic books. Such a situation provided a significant fiscal advantage to the suppliers from these countries before the introduction of the MOSS system. The reason for this was that until 31 December 2014 B2C supplies of electronic services were taxed by the rules of the country of the supply.

Even after the introduction of the MOSS system, these countries continued to apply the reduced rates for the kindle books sold under the MOSS system. Luxembourg and France stated that a different treatment of books and e-books violated the principle of neutrality and that the electronic format was an alternative physical means of support.

The European Commission initiated an infringement procedure against Luxembourg and France. As a result, the Court of Justice of the European Union (CJEU) supported the claims of the Commission. The court quoted the Commission statement that the supply of digital or electronic books should be understood as the supply, for consideration, by download or web streaming ('streaming'), from a website, of books in electronic format that can be viewed on a computer, a smartphone, electronic book readers or other reading system (the 'supply of electronic books').

Later on, the court referred to the national legislation and the position of the countries. The French Republic argued that the definition of digital or electronic books to which a reduced rate of VAT under Article 278-0a of the CGI can be applied is stricter than that adopted by the Commission. According to the French Republic, the reduced rate of VAT applies, under that provision, only to 'homothetic' books, namely, books which are analogous to printed books or books supplied on a physical support which are only different from the latter in respect of a few elements inherent to their format.

In that regard, the court stated, it must be held that the argument that Article 278-0a of the CGI applies only, in relation to digital or electronic books, to homothetic books give no grounds, in itself, for concluding that the Commission necessarily intends, by its action, to designate a category of digital or electronic books broader than that to which the reduced rate of VAT applies pursuant to that provision. Digital or electronic books, referred to by the Commission in its application, are defined by the manner by which they are supplied. The French Republic does not dispute that, in the light of that criterion, homothetic books constitute books as designated by the Commission in its application.

Furthermore, the CJEU observed that even if Article 278-0a of the CGI uses the term 'download', that Member State does not claim that the supply of books by streaming is excluded from the scope of that provision. The court concluded that in those circumstances, there is no need to limit the examination of the action to a more restricted category of digital or electronic books than that referred to by the Commission in its application.

However, the court concluded that the fact remains that, as is clear from the second subparagraph of Article 98(2) of the VAT Directive, the EU legislature decided to exclude any possibility of a reduced rate of VAT being applied to "electronically supplied services". Thus, the CJEU provided that the supply of electronic books cannot be subject to the reduced rate [12; 13].

In a related situation, the CJEU ruled in the case K Oy [14] (Case C-219/13) on the issue of application of the reduced rates for books published on another physical medium (e.g. DVD's or USB devices). The CJEU ruled on the case based on the reference from the Supreme Administrative Court of Finland.

However, the court did not meet the expectations of taxpayers regarding the certainty of the system. The CJEU simply ruled that it is up to national courts to decide whether printed books and books on other physical mediums are sufficiently different from each other to justify the application of a reduced rate of VAT to one but not the other. National courts have to assess the issue from the point of view of an average consumer.

Thus, if a national court concludes that printed books and books on other means of support achieve substantially the same purpose from the perspective of an average consumer in that Member State, then the court will have no choice but to rule that the same VAT treatment must be applied to both.

The CJEU did not clarify the VAT treatment of books supplied on other means of support, which would probably again lead to a different treatment of e-books in various Member States.

It is widely agreed that many areas related to single market require harmonization and improvement of regulation. Still, the Commission pays special attention to VAT-related restrictions of single market. "The digital single market strategy aimed at minimizing burdens on cross-border ecommerce arising from the different VAT regimes within the European Union, providing a level playing field for EU companies (big and small) and ensuring that VAT revenues flow to the country where the consumer is based, thus clearly requires EU legislation for which the Commission has announced proposals in 2016" [1].

In order to better understand the need for the new changes to the legislation, the Commission launched a public consultation on 25 September 2015 [15]. The goal of the consultation is to determine the effect of the current system. The closing date for submitting the consultation survey is 18 December 2015. Businesses and researchers should pay a strong attention to this survey, since this is the first real attempt to deeply analyze the impact of the drastic changes to the functioning of e-commerce and the VAT system that were introduced with the 2015 MOSS system.

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## 4.5. Innovative tools of knowledge component of corporate management

Right now, a new post-industrial sixth technological stage based on the integration of nano-, bio- and information technology is being formed. It entails global structural economic change and the formation of entirely new models of production. In these circumstances resources, primarily concentrated within human intellectual capacities and rightly regarded as intellectual basis of technological modernization of innovation-based economy, are especially important. For Ukraine this stage of technological evolution is both challenge and a "window of opportunity", defining the strategic vector of its development, including the national human resources, characterized by lack of highly intellectual innovative and competent workers in many areas of the economy, including industry.

Content, speed and unpredictability of these changes have led many authoritative experts of business to talk about new approaches to its successful development, of new models and even the paradigm of modern management, including those that completely deny management, marketing, and strategy, etc. in their traditional sense [8, p. 14]. One of the characteristics of contemporary global changes, which radically affect the management system, is uneven transition of different countries (nations) to the so-called knowledge-based economy. The formation of knowledge economy and establishing of creative work leading positions put forward a number of theoretical problems caused by the peculiarities of informa-

tion products and technologies domination era, which has already begun. In the latest social, economic and institutional transformation the role of state, including rules and forms of its participation in the economy and the mechanisms of interaction with the private sector, is changing. The concept of the knowledge economy is gradually becoming the main theoretical basis of economic growth policy, and reveals a new role and place of human intelligence in the information society, and the impact of information as the main productive force and production entity on the development of economic systems. To create the conditions for sustainable economic growth, mainly in areas where Ukraine is still competitive, it is necessary to provide strict coordination aimed at modernizing the economy and society in scientific, technological, organizational and industrial areas with domination of education, science and innovation. Thus, the issues of the formation and development of the knowledge economy and characteristics of this process are relevant both from scientific and practical points of view.

Theoretical and practical interest in "knowledge economy" phenomenon is associated with the scientific and technological revolution, gualitative changes in the processes of production, accumulation, and use of knowledge. According to experts, since the mid-twentieth century the available human knowledge has been doubling every 20 years. The very concept of "knowledge economy" is interpreted by different scientists in different ways though all of them point out a common basis of this economy. American researcher F. Mahlup [7, p. 38], using in 1962 for the first time the term "knowledge economy", included in this concept education, research and development, communications, information engineering and information activities. He considered the knowledge economy as one of the sectors that plays a crucial role in the functioning of economic system. However, in 1970s it became clear that the knowledge economy was a new type of economic organization of society in which the main part belonged to the knowledge sector; with production of knowledge being a source of economic growth. The ideology of a new type of economy is studied by such foreign scientists as D.Bell [2], L.Edvinson [15], K.Clock, John.Goldsmith [5], Yu.Karayanis, D.Campbell [16], R.Salmon [8], A.Toffler [11] and others.

Among domestic researchers the following scientists are worth mentioning: V.Heyets [4], whose works state that the knowledge economy is the basis and the main component of "innovation economy"; A.Kolot [6], who considers the knowledge economy as a characteristic of condition and stage of development of both economy and the society in which knowledge is the determining factor in its development; L.Fedulova [12], who analyzes the knowledge economy as a new technological level of management; Yu.Bazhal [1] and A.Chukhno [13], who deal with the study of economic theory and the theory and practice of knowledge economy development; V.Vernadsky [3], who discovered and explained the trend of rapid growth and strong impact of science and scientific knowledge in all areas of public life, including the socio-political sphere.

Meanwhile research on innovative tools of knowledge component of corporate management remains timely and relevant.

The essence of the knowledge economy reflects a broad understanding of the social phenomenon under which the knowledge-based economy combines the features of a post-industrial, global, network, information and innovative economy. These findings occur due to the tendencies and processes that take place in the knowledge-based economy. Its post-industrial character is linked to fundamental change in the balance of material industrial production and service sector, significantly increasing the share of the latter (80% of employment in most developed countries) [14, p. 141-145.].

Network nature of knowledge economy determines new effects, not distinctive of economic system and economic benefits in the traditional, industrial system; network effect in particular. It occurs when consumers evaluate product (network benefit) higher provided it is compatible with other consumer goods. Thus, "the performance of network effect illustrates the positive feedback, which expresses itself in the growth of the marginal rates of return that occurs when the dynamics of revenue increase exponentially" [9, p. 54-55].

The knowledge economy becomes informational due to the fact that it is information (scientific knowledge) that begins to dominate in any production and business. Development of information component is at the same time factor, indicator and outcome of the development of the country, region, or economic agent. According to Toffler, economists have found themselves facing the system of wealth, which in a few decades lost its dependence on exhaustible resources, having switched to knowledge as the main factor of its growth [11, p. 174].

Indisputable is the fact that it is globalization and informatization that have become important prerequisites of knowledge economy, and formed the main factors that caused its appearance, as well as its predetermined characteristics. At the same time close interdependence of globalization and informatization of public life should be emphasized. In fact, "on the one hand, information technologies cause "compression" of space, thus enabling quick interaction between different parts of the globe, while on the other hand the global liberalization, transnationalization, and internationalization of production and capital allow new technologies to spread everywhere" [10, p. 38].

The modern economy is undoubtedly innovative economy in which knowledge can generate a continuous stream of innovation that meets the changing dynamic needs and often forms these needs. Knowledge only has value in economic terms when it is realized in the form of innovation. The activities of production, distribution and use of knowledge in the modern economy play an ever important role in determining its essential features and pace of development. New interaction occurs between science and technology, resulting in more sectors of the economy becoming increasingly knowledge-intensive, as well as in growing investment share in knowledge, education, and intangible assets. It is, above all, the key role of human capital, which under certain institutional conditions becomes a major factor of knowledge-based economic system.

In today's innovative economy, knowledge began to focus on economic results, while education concentrates on the demands of the labor market. Education and science must work closely to facilitate the use of new knowledge to create new products and technologies, as well as human capacity for innovative economy [16, p. 327-372]. The development of human capacity for innovation economy means, above all, investment in the creation of knowledge, which undoubtedly relies heavily on the level of education. Today the total volume of investment in this sector is calculated as aggregate expenditure on R&D, higher education and software. These components are to become the foundation of the knowledge economy.

Thus, in the new paradigm of social development the main social goal should be a person and his/her development, including intellectual, cultural, employment, spiritual, moral and social. The people in the economic system of society are viewed not only as an essential element of the process of production and management, but also as strong and prospective resources with a great potential and capacity for self-development. Only through the use of a specific resource such as a person with his/her knowledge and skills is now possible to achieve significant advantages in the markets, both domestic and international. However, for a reasonable and effective use of human potential it is necessary to apply appropriate tools, which is a combination of different forms and methods of managerial influence on a human. In this context, human development and capitalization tools in corporate management deserve special attention.

In turn, innovative human development can occur under the influence of internal and external factors. Therefore, in terms of internal human development, one can talk about personal development, spirituality, intelligence, knowledge, and intellectual capital, and in terms of external factors, it comes to social development and social relations.

As a continuously updated process, the development of innovative

economy and the knowledge economy incorporate a set of characteristics thus changing sources of added value, which were provided by conveyor type industrial enterprises at previous stages of industrial development. Today the dominant role in the creation of added value is played by hightech, knowledge-intensive production; an ever increasing share of GDP is provided by various services (primarily high-tech). Knowledge and investing in them directly affect economic growth and economic development. The current ratio of prices for raw materials, and products obtained by processing compared to the "know-how" is about 1:10:100 [14, p. 141].

New business environment of Ukraine, i.e. knowledge-based innovative economy needs adequate new leadership. Innovative economy leaders are the people whose activity is based on the constant use of modern knowledge and intellectual capital. Such leaders deeply understand the essence of the modern enterprise, based on the knowledge and ability to apply this knowledge in combination with other company's resources. Also new leading experts have to be the creators of so-called modern value creation context. The main thing in this work is focused qualitative change of both working environment and the company, including its corporate culture so that qualitatively new environment and upgraded culture literally "grow and cherish intellectual capital". These key criteria should become crucial in the development of a new model of Ukrainian higher school educational process management, as well as in the next stages of formation and use of intellectual capital.

Note that innovative development in Ukraine is under adverse conditions. The structure of this growth does not match the structure of emerging "knowledge economy"; scientific and technological progress as well as innovations failed to become factors of the growth in Ukraine. The intellectual potential is the only source that can provide stable social development and economic growth without commensurate increase in use of natural resources. However, the intellectual potential of Ukraine, gained in centuries, in recent years is deteriorating due to transformational and systemic economic crises. Given the limited natural resources and energy, sustainable economic growth is possible only on the basis of capitalized enterprise intellectual capital that enables in the long term strategic development of the organization and the efficiency of the national economy and the state.

Research in the development of intellectual capital in foreign companies, positioning themselves as an innovative, led to the conclusion that the value of intellectual capital can greatly exceed the value of tangible assets. In the largest companies in the world market value of intellectual capital exceeds the average book value of tangible assets of more than 4 times. In the study of foreign experience of intellectual capital companies' development in the era of innovation economy, exceptional urgency of solving these issues for modern domestic management becomes understandable.

The need for the development of intellectual capital in Ukraine is based on the following: the country has to reach post-industrial phase of its development, and this is a vector, where competitiveness is determined by the benefits of knowledge, innovation and information; overcoming the crisis of the national economic system in Ukraine during market transformation period is real with a constant economic growth. The basis of socio-economic progress is potential and real ability of the country to provide the entire process of intellectual reproduction: medicine, business, science, education and culture. Intellectual potential is an important factor that can be mobilized in the short term to gain a stable position in the domestic and foreign markets in competition with foreign firms.

In a highly competitive environment intellectual potential of society is a guarantee of its high quality life and progressive development. Intellectual capital is the socio-economic form of human qualities and abilities that includes human mind for the purpose of new ideas, knowledge, and information. Intellectual capital is the form of the intellectual capacity, which is actively used by society in its economic development.

Formation of a new motion vector for Ukraine means its transition to a radically new management ideology of social development, which should take into account along with the general laws of economic development its national, historical and cultural characteristics, as well as administrative traditions. In view of global trends and the real state of Ukraine's economy further directions of development in intellectual capital reproduction are:

- Strategic investment in intellectual capital;
- Increasing the efficiency of business enterprises, that will make it possible to evaluate intellectual capital;
- Organization of intellectual capital use in either national economic activity, or transfer the right to use intellectual property to third parties, or in a mixed form;
- Use of intellectual capital in different sectors of the national economy, which is essential for its efficiency growth;
- Focused qualitative change of working environment for both employees and the organization, including its corporate culture so that qualitatively new environment and upgraded culture literally "grow and nurture intellectual capital";
- Development of the legal framework for intellectual capital management process;

- Management of knowledge accumulated by national economy subjects;
- Monitoring intellectual capital, its value and quality in a dynamic perspective.

Increase in the efficiency of intellectual capital in transitive economy requires a transition to the innovative development model, implementation of which allows the society to create new conditions for use of the national intellectual potential. The efficiency of human capital reflects the totality of economic relations over the use of accumulated quantitative and qualitative characteristics of human abilities, education, and professionalism in order to provide revenue to its owner and society as a whole. The components of this increase are the forms and methods of organization, management and promotion of intellectual and other highly productive activities that generate economic and social impact, and contribute to expanded reproduction of new human capital quality.

In summary, it should be mentioned that in Ukraine at present there is still a number of conditions that impede its knowledge-based economic development: firstly, it is the unwillingness of the domestic industry to transform new knowledge into new technologies and products; secondly, the lack of adequate state superstructure, expressed in the goals and mechanisms of science, technology and innovation policy and able to provide interaction between science and business in solving social and economic problems; thirdly, poor governance and lack of a system that meets modern requirements of training and retraining of the state apparatus at all administrative levels.

Ukrainian society should work hard to become a mature post-industrial nation based on the principles of freedom and democracy. It is necessary to establish production of highly competitive goods, and actively build and develop nation's intellectual potential.

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# 4.6. Financial and tax regulation of development of agricultural industry in the conditions of deepening international cooperation

Transitional social and economic processes can be managed by supporting demand, maintaining financial stability and conducting structural reforms. Financial and tax regulation plays a dominant role in the harmonization of interests for the subjects of tax relations in the implementation of its strategic guidelines and tactical goals of the dynamic nature in the conditions of bifurcation of economic processes. Deepening of international cooperation in the tax area in order of overcoming the deviations from taxation and creating obstacles for the tax competition between countries allows protecting incomes in developing countries, which are essential for social spending and contribute to the development of economic system. The fundamental theories of taxation are presented in the works of such scientists as: F. Akvinskyi, Thomas Hobbes, Sebastien Le Prestre de Vauban, Charles-Louis de Montesquieu, Honore Mirabeau, Thomas Robert Malthus and Adolphe Thiers. The famous scientists have made a significant contribution to the theory of taxation. Among them are: William Petty, Adam Smith, David Ricardo, Adolph Wagner, B. Hilderbrand, Rudolf Hilferding, John Keynes, Milton Friedman, Arthur Betz Laffer, Alfred Marshall, Karl Marx, Martin Seligman.

The modern scholars, economists and agrarians carried out great contribution to the research of priority directions of the agricultural industry in conditions of social and economic transformations. Thus, I. Ivashkiv explores the changing of trade orientation of Ukraine in the trade of agricultural products with the countries of the world [1, pp. 46-52]; L. Zaburanna and S. Zaburannyi determine the feasibility of cooperation between agricultural producers and creating innovative providing cooperative for the use of innovations in production [2, pp. 4-8]; D. Mishchenko recognizes that government support should be refocused from agricultural production at supporting individual projects that are defined by the only beforehand known criteria that provide their high efficiency [3, pp. 37-39]; M. Domaskinak and A. Stanishevska constructed schemes of forming strategy for foreign economic activity of agricultural enterprises in the implementation of export policy [4, pp. 53-54]. The diversity of directions for cooperation of agricultural producers, priorities of export and import operations remain insufficiently developed and characterized by lack of systematic approach concerning the taxation in spite of the considerable number of scientific researches in the field of taxation.

The main forms of state regulation of economic development are financial and tax regulation as well as monetary and credit regulation. The Global Integrated Monetary and Fiscal Model is used in the world economy to study the short-term and long-term effects of the measures of fiscal and budget policy (taxation and expenditure). Construction of the Integrated Global Monetary and Fiscal Model is carried out with the aim to allow researchers to analyze the impact of public investments in infrastructure on the productivity of the economy of the country. However, the comprehensive structure of this model allows financial analysts to analyze not only the global interconnections but also secondary effects.

The Global Integrated Monetary and Fiscal Model includes Germany, Greece, Ireland, Italy, Portugal and Spain; other countries of the eurozone; Asian countries with the market that is formed; The United States of America; and another world. The following actions are necessary to implement for tracking international relationships: firstly – full accounting of trade transactions of each region; secondly – the flow of goods allows the model to determine the current account, which represent the flows of global savings and investments. China's transition to a new growth model and the normalization of monetary policy of the USA promotes the warning of global unstable effects or "secondary and turning effects".

Corporate debt of non-financial enterprises in the largest countries with the market that is formed has grown from 4 trillion dollars of the USA in 2004 to the level that far exceeds 18 trillion dollars of the USA in 2014. The ratio of corporate debt to GDP during 2004-2014 in countries with the market that is formed has grown by 26.0%, but between different countries there are significant differences [5]. Estimates of leverage of enterprises have increased in China and Turkey, while the debt of companies increased significantly in Latin America (Brazil, Colombia, Mexico, Peru and Chile).

The composition of debt in countries with the market that is formed has also changed. Although the largest share of corporate debt is necessary on bank loans, but the share of securities for these years, including bonds has increased twice in 2014 and reached 17.0%. It is important to implement measures to mobilize state resources in order to optimize debt obligations, since the growth of public investments contributes to improving the infrastructure of the country. The enterprises can use this infrastructure for reducing their costs, and the development of transport infrastructure facilitates the access of economic agents to both domestic and overseas markets. In this context, financial analysts of IMF such as, Selim Elekdag and D. Muir believe that public investments contribute to the modification of infrastructure and increasing productivity and correspondingly decreasing prices on the products of enterprises [6, p. 48].

Financial and tax regulations must meet specific conditions of individual countries with the ability for adaptation in the process of global development. Cyclicity of economic development determines the inevitability of crises that are transformed under the influence of globalization and the deployment of military confrontations and conflicts. According to the economic content "crisis" is restoration of a system, critical stage that contributes to structural alteration of economy.

The economic crisis is a transitional stage that ends the recession and next stage before beginning economic development. In this context we share the view of such scientists as S. Onysko and M. Kits, who recognize that measures of government support for enterprises should differ in crisis and post-crisis periods and at different stages of the cyclical development of the economic system of the country should be formed appropriate the state policy [7, pp. 87-88].

Strengthening the financial system of Ukraine requires the implementation of measures to confrontation of corruption and shadow of financial assets, including in the agricultural sector. We agree with the opinion of such scientist as N. Solovieva who believes that the complexity of implementing innovative methods of public administration is predetermined by a high degree of alienation of significant part of entities from state goals of development [8].

The adoption of the Code of conduct and business action plan to combat corruption by the European Business Association attracts the especial attention in this context [9]. Large enterprises have their internal codes of conduct to prevent the corruption actions. However, the basic types, principles, standards and regulations of state audit (audit of effectiveness of the contracts, audit of effectiveness of information technologies) and financial control should be determined to prevent the risks of corruption at the state level. According to international practice, the state audit has to assess the management and directions for increasing the efficiency of the audited entity and the system of state financial control is aimed at detecting violations and acceptance of measures for reacting.

Implementation of the state audit system and applying measures of reaction is especially important in the case of financial control. International experience certifies advisability of implementing the requirements and principles of the Lima Declaration and international auditing standards in Ukraine, including internal audit standards of the Institute of Internal Auditors, Auditing Standards of the International Federation of Accountants and the International Organization of Supreme Audit Institutions.

Expanding of international cooperation and trade requires the formation of a global system of financial security enterprises, including the agricultural sector. In international practice, application of macro prudential instruments in countries with the market that is formed, contributes to overcoming the problems of leverage of enterprises and external debt. The priority task should be restoring the financial potential of enterprises of the real sector of economy in countries where financial risks can lead to the emergence of pressure from the financial markets.

National agrarian sector has the potential of production that significantly exceeds domestic market needs, and accordingly, is the financial potential for the development of this sector. The larger amount of public investments in agricultural infrastructure can increase aggregate demand in the short term and increase growth rates of potential amount of agricultural production in the medium term.

Credit and financial instrument is one of the main mechanisms for supporting participants of agricultural complex in the conditions of permanent financial uncertainty. A. Buteiko and I. Saraieva recognize that the current system of national credit and financial supporting of business processes is not effective, in particular this applies of the imperfection of the organizational and legal support for microfinance startups, insurance of business risks and underdeveloped system for providing of credit guarantees [10].

Financial and tax regulation and monetary policy play an important role in supporting aggregate demand, reducing risks and ensuring medium-term sustainability of the debt situation [11; 12; 13]. The main methods of tax policy include regulation of the ratio of direct and indirect taxation; regulation of objects of taxation, the procedure of accruals and timing of payment of taxes; regulation of the ratio of state and local taxes; regulation of the ratio of proportional and progressive rates of taxes [14]; transferring burden from one category of taxpayers to others; regulation of tax exemptions, preferences and deductions.

Financial and tax regulation is explored in the modern economic literature considering its multiple and alternativeness [15, pp. 58-61]. Among Ukrainian economists I. Bohdan has made significant contribution to the development of this theme. He focused on the scientific and methodological approaches to application of indicator "fiscal sustainability". The role of the indicators of fiscal gap S1 and S2 for its identification was shown. The method for identifying indicators of fiscal gap considering the effect of the devaluation of national currency was proposed [16, pp. 66-72].

I. Lunina and N. Frolova found significant changes in the level of revenues, depending on economic conditions of taxes (to income individuals and legal entities) and revenues from the taxation of goods and services (value added tax) [17, pp. 11-17]. A. Kulai devoted his research to the harmonization of the system of indirect taxation in the EU and its convergence for the economy of Ukraine [18, pp. 98-114]. L. Sidel-nykova defined methodological basis for reducing the tax burden on the background of optimizing the volume and structure of public expenditure, which will contribute to the prevention for increasing in the budget deficit and strengthen the debt expansion of the state [19, pp. 46-49].

The taxation system of agricultural enterprises in developed countries is based on direct taxation [20]. Methods of changing tax burden on the taxpayer, changing the area for dissemination of taxes, replacement of some methods and forms of taxation by others, the introduction of a differentiated system of tax rates, introduction or cancellation of tax privileges and preferences are widespread in the tax practice. Since the main aim of activity of agricultural enterprises is ensuring the food security of the country, therefore taxes fulfill regulatory function, which is implemented through various forms of government intervention in the agricultural sector.

Financial and tax regulations in the field of direct taxation of agricultural enterprises by reducing the tax burden contributed to achieving positive changes of financial indicators. During 2012-2013 only 10.8% of the total number of agricultural enterprise had unprofitable financial results, while at the beginning of reforms in 1996 - 68.5%, in 1997 - 87.2%, 1998 - the number of unprofitable agricultural enterprises has reached a critical value - 91.9% [21, p. 40].

In practice, agricultural producers have the right for choice of taxation systems – the general system of taxation of their activities or special regime of taxation. The basis of taxation for agricultural producers from the 1<sup>st</sup> of January 2015 is normative monetary evaluation of one hectare of agricultural lands (arable land, hayfields, pastures and perennial crops) taking into account the indexation coefficient and basic tax (reporting) year that is determined as at the 1<sup>st</sup> of January in accordance with the procedure that is established by chapter XIII of the Tax Code of Ukraine. The basis of taxation for lands of water fund (internal reservoirs, lakes, ponds, reservoirs) is normative monetary evaluation of one hectare of arable land in the region taking into account the indexation coefficient and basic tax (reporting) year that is determined as at the 1<sup>st</sup> of January in accordance with the procedure that is established by chapter XIII of the Tax Code of Ukraine. The basis of taxation for lands of water fund (internal reservoirs, lakes, ponds, reservoirs) is normative monetary evaluation of one hectare of arable land in the region taking into account the indexation coefficient and basic tax (reporting) year that is determined as at the 1<sup>st</sup> of January in accordance with the procedure that is established by chapter XIII of the Tax Code of Ukraine.

Cancellation of fixed agricultural tax and the introduction of the single tax for payers of fourth group are formal, since the rules of taxation of agricultural producers have not changed.

Registration of a single tax payer is perpetual according to paragraph 299.10 of the Tax Code of Ukraine [22]. However, agricultural producers have to confirm annually their right to be in the part of single tax payer of fourth group. The procedure of such confirmation is analogical for a procedure of choosing the simplified taxation system that is outlined in paragraphs 298.8.1-298.8.4 of the Code. For the transition to a single tax of the fourth group or annual confirmation of right on this tax, agricultural producers need to submit the documents corresponding to the current legislation until 20<sup>th</sup> of February of this year.

If during the conducting inspections you find that agricultural commodity producer unlawfully applied the simplified system (does not meet the requirements of subparagraph 4 paragraph 291.4 of the Code or violation of any terms from paragraph 291.5-1 of the Code has been revealed), thus all taxes are accrued by the regulatory body for the whole period that a single tax payer was not paid, the penalties for non-payment of these taxes and also penalty. From the next month, after the establishment of the infringement, agricultural commodity producer has to move to a general system of taxation. At the same time it will be possible to come back to the fourth group of the single tax payers only in general procedure. Financial and tax regulation of the agricultural industry development requires an effective monitoring system that anticipates the collection and accumulation of information on the dynamics of agricultural and industrial complex development; forming a database that reflects the level of financial stability of participants of agricultural and industrial complex [23]; forecasting the dynamics for criteria of financial stability of participants of agricultural and industrial complex; evaluation of the effectiveness of preventive measures, which take place within the system of state regulation of agriculture; research of systemic risks of agrarian sector.

In our study we are guided by the following definition of "monitoring" is a systematic collection of information about the importance of previously selected indicators for ensuring managers and other interested parties by information about how the program is successfully executed, the degree of achievement of the set goals and how to use the funds allocated to this program [24]. The following principles reflect most fully the intrinsic characteristics of monitoring: continuity; adequacy; expediency; interactivity; optimization; consistency; periodicity; integrity; efficiency and objectivity.

The effectiveness of the monitoring system depends on the compliance of expediency, continuity, comparison of data and availability of financial results for monitoring. In practice, it is necessary to consider diagnostic and predictive orientation – comparison of the received information during monitoring with previous received indicators and criteria, as well as forecasting the process of financing programs concerning the development of agro-industrial complex.

Improving the effectiveness of financial and tax regulation for the development of agricultural industry in the conditions of deepening international cooperation requires:

- firstly, the adoption of "qualified and thoughtful" measures in the conditions of decline in rates of macroeconomic growth and the strengthening of uncertainty. The IMF experts admit that regulation should be improved in three areas: "faster and more flexible", "deepening integration" and "orientation to the Member States of the IMF";
- secondly, state regulators obliged to apply preventive measures of monetary, tax and budget policy to stabilize the financial sector for the protection of economic and financial stability during the massive capital outflow;
- thirdly, the effectiveness of fiscal policy depends on principles that the government establishes in its basis, whether they coincide with principles of formation of the tax system (the ratio of direct and indirect taxes, the use of progressive rates of taxation and the extent of their progression, or preference of proportional rates; use of deduc-

tions, discounts and exemptions and their target orientation; methods of forming the tax base);

 fourthly, complete its cycle should be provided in the monitoring process in order to get accurate monitoring information to make effective management decisions in the implementation of financial and tax regulation for the development of the agricultural industry.

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