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PECULIARITIES OF GDP FORMATION AND APPLICATION IN UKRAINE AND IN THE EU COUTRIES UNDER THE STRUCTURAL POLICY OF PROPORTIONALITY

Summary

In recent decades increased integration with globalization processes and crisis manifestations in the global economy resulted in significant changes in the main trends of the world economy and actualized changes in the economic structure of many countries. Formation of a new economic paradigm of the world reflected accordingly in the international division of labour, nature and principles of economic relations and structural transformation of national economies. Subject of structural transformation becomes increasingly urgent for Ukraine, which is caused by the need to overcome the consequences of the financial-economic crisis and qualitative renewal of the economic system based on the implementation of effective economic policy, especially structural one, that should provide economic growth and promote economic development in the long term.

Introduction

According to domestic and foreign experience, structural policy is a double-edged weapon, which should be used quite carefully to avoid damage.

Compliance with safety rules means foremost availability of carefully considered strategy that takes into account main direct and indirect, positive and negative effects. Still Ukraine does not have totally objective information about real and potential competitive advantages of domestic industries and sectors.

Ukraine has the highest level of interregional disproportion among the EU member states. Main reasons for maintaining a high level of intra-regional

disproportionality consist in inefficient state regional policy, implemented mainly based on two instruments: fiscal equalization (through subsidies and subventions from the state budget) and financial incentives (through the State Regional Development Fund (SRDF), aimed to create favourable opportunities for formation of «points of contact» in order to attract additional investment to problem regions of the country). Using these tools would have a synergistic effect in overcoming interregional disproportionality of economic development, but instead it furthered old and new risks for regional economic development [1].

The end of the twentieth century was marked by large-scale social transformation at global, regional and national levels. A special place among them was occupied by post-socialist transformation, analyzed by numerous domestic and foreign researchers. However, after more than twenty years since the beginning of «velvet revolutions» in Central and Eastern Europe results require in-depth analysis of transformational change, improvement of research methodology of the theory of transient economic processes, including such important issues as the characteristics of the starting point of transformation, driving (national and international) forces of fulfilled reforms, the criteria for transition completeness and many others.

Researchers O. Amosh, V. Antoniuk, S. Bandura, I. Baranovska, I. Bevz, B. Brytch, V. Blyzniuk, I. Hnybidenko, O. Hryshnova, A. Kolota, S. Kuznets, E. Libanova, L. Lisohor, V. Mandybura, O. Makarova, O. Novikova, I. Petrova, O. Sukhariov, L. Shynkaruk and others dedicated their works to theoretical and applied aspects of structural disproportion problems. However, study of structural imbalances problems in the labour sphere, synthesis and classification of the main determinants of these processes, assessing their impact on makroproportions of a country are quite topical and timely.

Analysis of empirical research proved the existence of scientific and practical direction to assess the impact of structural changes on the effectiveness of economic development in the long run.

Part 1. Essence of Structural Transformations in terms of Macroeconomic Disproportions

The development of market relations in Ukraine led to the need for deeper theoretical and methodological research of structural transformation in the national economy. «*Structural transformation* is the process of significant changes in the economy, which means a scale transfer of resources from the

primary to the manufacturing sector of the economy, as it happened in many newly industrialized countries (NICs). It may involve changes in the methods of economic organization – from a planned to a market economy, as in many countries of the former Soviet Union, Central and Eastern Europe» [2].

Structural transformation is any change in general, without considering nature of outcomes of this process. Transformation without development is a lack of positive economic change in social production (which is typical for Ukrainian structural transformation), and development is a positive economic change. Important features of structural transformation in the economy are their quantitative determinacy, the duality of nature (that is description as a dynamic process and a result of development) and inevitability.

In other words, structural transformation as a qualitative leap is preceded by gradual quantitative accumulation of structural changes that go into structural changes. This process occurs in a situation when the structural transformation is present and development of the domestic economy is almost absent. Transformation without development is the absence of positive economic change in social production (namely, characteristic to Ukrainian structural transformation), because development itself is a positive economic change.

Analysis of structural cut of economic development of Ukraine allows revealing the main macroeconomic imbalances inherent in the domestic economy, and showing that macroeconomic balance of the country is possible only via structural transformation.

It should be borne in mind that Ukraine's economy is a complex system that is formed by a set of different types of structures (reproductive, institutional, administrative, sectoral, industrial and technological, regional, foreign trade, etc.), which action is implemented through the multi-level socio-economic relations.

But the integrity of the domestic economy and the positive implementation of its growth potential can be achieved only if these mentioned structures operate smoothly on the basis of such a development model that meets national and state interests. With the deployment of globalization and increasing openness of an economy, structural changes in the global economy, which can be both positive and negative, have considerable influence on economic processes in the country.

The structural changes are significantly affected by the governmental economic policy and economic and legal norms. If structural policy is based on the objective laws, then it accelerates progressive structural changes; and if it is directed against the objective economic development, then it inhibits it. That's why a well-considered state policy in the area of structural modernization and sustainable economic development is absolutely necessary.

Contradiction is in the basis of each structural change. The problem of the contradiction between the elements as sources of structure development is one of the major problems studying the dynamics of socio-economic structures. All economic systems are characterized by certain sustainability and variability. The notion «structure» characterizes, first of all, sustainability of the system. System division into opposites ensures its relative equilibrium and possibility of long-term existence, during which changes occur mainly in the quantitative proportion of opposing elements.

As a result, quantitative changes inevitably lead to qualitative ones. Insoluble contradictions between the old structure of the national economy and its corresponding allocation of resources lead to conflict with the changed structure of national needs. The inertia of the old structure hampers restructuring, complicating it and continuing in time. And while the established structure yet prevails, the overall rate of growth falls sharply; it disrupts functioning of markets and financial sector, and the general conditions of economic situation remain negative.

The main feature of the structural crisis is increasing moral and physical wear of fixed assets, which leads to burdening the economy by old manufacturings and by output of poor quality goods, not able to compete with imported counterparts. Structural crisis is overcome when old structure is finally starting to give way to new industries and sectors of the economy, new organization forms and production regulation.

J.Fourastie noted that consumption becomes dominant factor in new society and that there is profound modification of the structure based on it. In particular, he mentioned that rapid growth of the tertiary sector in the «public services». The optimal structure of this society can be achieved when tertiary sector will be about 85% of the economically active population, and the secondary will be 10% and the primary will be 5% [3].

Structural changes form a new system of proportions taking off ratio prevailing between the needs structure and the structure of resources allocation, consumption and production patterns. In this sense, one of their

main functions is to ensure their dynamic compliance between indicated structures.

Basic contradiction results in derivative contradiction of structural changes in the economy, such as the conflict between exogenous and endogenous structural changes. Its variation is a contradiction between global changes in the structure of the world economy and local structural changes within economy of the country.

Research of this contradiction is particularly important at the present stage of economic globalization.

All listed contradictions of structural changes can be divided into solvable and unsolvable (antagonistic) within a particular economic structure. Deepening the former ones causes economic structure modernization in an evolutionary way; others favour a revolutionary transformation, destruction of developed relationships, and appearing new ones when one economic system comes instead of another one.

Nature of structural changes is linked to the objective interdependence, balance and proportionality of all reproduction factors for an extended and intensive character of this process. Alexander Sukharev considers «an innovative causality to be the basis of the structural transformation of the economy. Depth and efficiency of economic transformation are defined by modifications in its structure, changes in the proportions of labour division, investment, gross output and GDP, exports and imports between the various branches, reproductive sectors and regions. The nature and changes in the structure of the economy determine eventually its commitment, competitiveness and efficiency» [4].

As a system economic process, structural changes to a certain extent cover all aspects of the economic system structure, including reproductive, industrial, production, innovation, spatial, technological, personnel, raw material, export-import and other subsystems of the economic structure of the country.

According to S.Kuznets, there are four main types of structural changes in the economy [5]:

- technological structural changes that determine the appearance of fundamentally new classes of hardware that found a new economic structure;
- institutional structural changes, which result in their objects, namely, local system of economic institutions and institutes, industry and administrative structure;

- reproductive structural changes associated with changes in the proportions of sectors, areas and segments of the national economy: public and private sector, industrial and agricultural production, production and circulation;
- spatial structural changes that determine definition and displacement of boundaries of clusters, regions and economic zones.

We believe that the structural changes in the economy are qualitative changes in the relationships between comparable elements of the macroeconomic system caused by uneven dynamics of their quantitative characteristics correlation. It is possible to distinguish the point when a change in the economic structure develops into a structural shift.

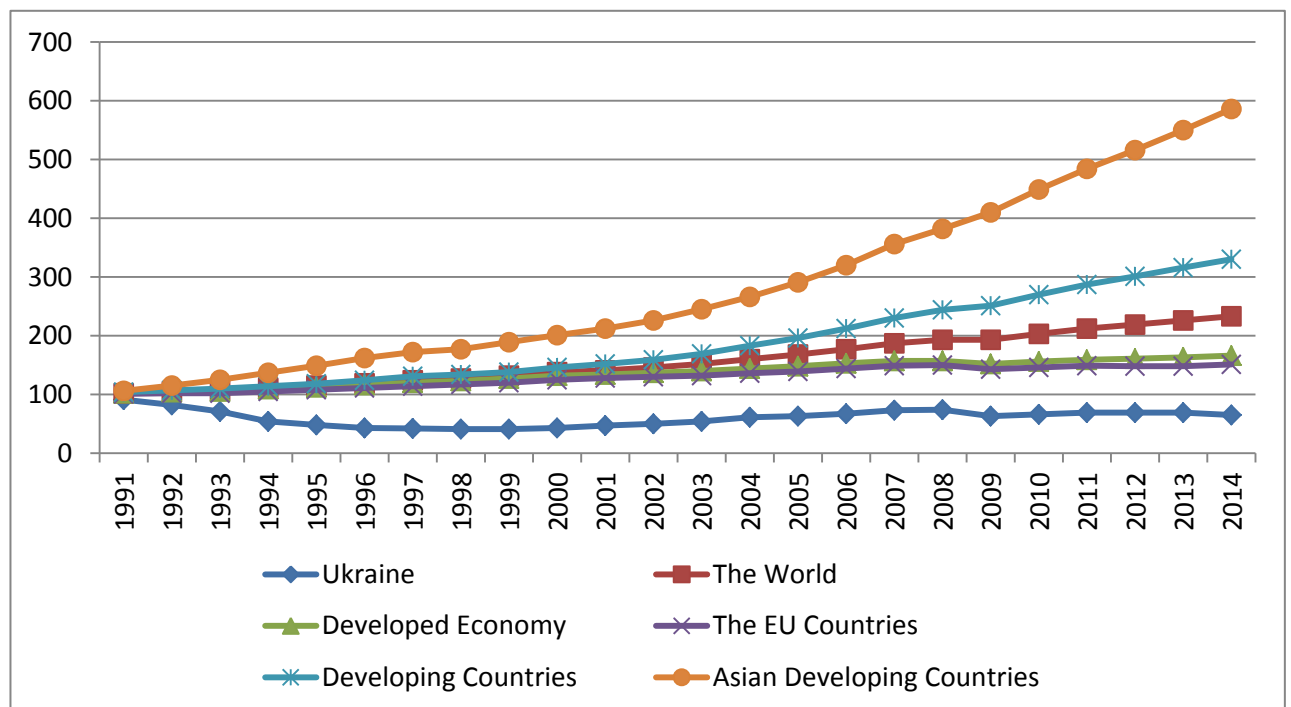


Fig. 1. GDP of the countries of the World, in order of sum increasing, 1990=100%

The prospect of the EU membership has become an engine of transformation that took place in Central and Eastern Europe. The EU has developed a clear strategy as involvement of the countries of Central and Eastern Europe: at early stages of the transformational reforms it provided financial assistance to countries through specially created funds (PHARE, ISPA, SAPARD), connecting countries to the activity of the European Bank of Reconstruction and Development; gradually it opened the market for products from Central and Eastern Europe (introduction of special

preferential regime, signing asymmetrical association agreements, etc.); in 1993 at the European Council in Copenhagen it developed and adopted criteria for the EU membership for countries seeking to join the integration association.

Table 1

GDP of countries of the World, % till 1990

	Ukraine**	The World	Developed Economy	The EU Countries	Developing Countries	Asian Developing Countries
1991	91	102	102	101	104	106
1992	82	105	104	102	107	115
1993	71	107	105	102	110	125
1994	54	111	109	105	114	137
1995	48	115	112	108	118	149
1996	43	119	116	111	124	162
1997	42	124	120	114	131	172
1998	41	127	123	117	134	177
1999	41	132	127	120	138	189
2000	43	138	132	125	146	201
2001	47	141	134	128	152	212
2002	50	146	137	130	159	226
2003	54	152	140	132	169	245
2004	61	160	144	136	183	266
2005	63	168	148	139	196	291
2006	67	177	153	144	212	320
2007	73	187	157	149	230	356
2008	74	193	157	150	244	382
2009	63	193	152	143	251	410
2010	66	203	156	146	270	449
2011	69	212	159	149	287	484
2012	69	219	161	148	301	516
2013	69	226	163	148	316	550
2014*	65	233	166	151	330	586

One of the most popular indices that characterize economic dynamics of world development is the change of GDP. During the period from 1990 (Fig. 1) Ukraine has not only failed to increase GDP growth, but even it

didn't regain it which certainly negatively affected the structural characteristics of the GDP components and living standards [6].

Research of GDP (Table 1) shows a substantial backlog of Ukraine in terms of economic development as the global economy over the past 23 years has doubled; developed countries have increased GDP by 66%; the EU has increased it by half; developing countries tripled it and Asian developed countries increased it nearly sixfold, and Ukraine's GDP fell by 35% [6].

Thus, for the examined period Ukraine lowered its level by more than three times compared to the global economy growth and by 2.5 times compared with the EU countries, having moved from the group of middle development level to the group of developing countries. Instead, we should note faster growth of developing countries compared to developed countries, indicating the alignment of the world economic development.

Part 2. GDP of Ukraine and the EU countries under the Structural Policy of Proportionality

The share of agriculture in GDP of Ukraine (11.8%) is much higher than average values (Table 2) of the 28 EU countries (1.6%) and is close to such new EU members as Bulgaria (5.3%) and Romania (6.2%), the least developed countries of Europe. Compared with the crisis 2009 the share of agriculture in GDP of the country increased by 1.5 times, while its growth in European countries was more moderate (+7%).

The contribution of Ukrainian industry is close to European (19%), but tends to decrease (-9.7%), while in the EU, except in Sweden, it grew moderately (+ 2.7%). Instead, the processing industry of Ukraine, being at the average European level before the crisis, suffered a reduction of almost 20% and in 2014 (13.1%) was inferior (sometimes twice) to all countries selected for comparison, where its share remained stable (except France and Sweden).

Thus, while the share of Ukrainian industry is close to the EU level, its structure is imperfect, and the dynamics demonstrates the phenomenon of de-industrialization.

Table 2

**Sectoral Structure of Gross Added Value
(% before GAV according to the 2008 SNA methodology)**

Types of activity acc.to NACE (Ukr.KBE/2010)	Years	Ukraine*	EU-28	Bulgaria	Czechia	Germany	France	Hungary	Poland	Roumania	Slovenia	Slovakia	Sweden
Agriculture, Forestry and Fish industry	2009	7,9	1,5	5,1	1,8	0,8	1,5	3,5	2,9	6,0	1,9	3,3	1,5
	2010	8,4	1,6	5,1	1,7	0,7	1,8	3,6	3,0	6,3	2,0	2,8	1,6
	2011	9,4	1,7	5,4	2,4	0,8	1,8	4,7	3,3	7,3	2,3	3,4	1,6
	2012	9,0	1,7	5,4	2,6	0,9	1,9	4,5	3,2	5,3	2,2	3,6	1,5
	2013	9,9	1,7	5,5	2,6	0,9	1,7	4,4	3,3	6,2	2,1	4,0	1,4
	2014	11,8	1,6	5,3	2,6	0,8	1,6	4,4	3,3	:	2,2	3,7	1,4
	2014 to 2009,%	149,6	106,7	103,9	144,4	100,0	106,7	125,7	113,8	:	115,8	112,1	93,3
Industry	2009	25,3	18,5	21,7	30,0	23,5	13,8	25,0	24,8	26,3	23,6	24,3	21,1
	2010	25,3	19,2	20,8	29,9	25,7	13,5	26,3	24,7	31,3	24,2	26,5	23,0
	2011	25,2	19,4	23,8	30,9	26,0	13,7	26,1	25,4	32,5	25,0	26,8	22,5
	2012	24,8	19,2	24,2	31,2	26,1	13,8	26,6	25,2	27,8	25,9	26,4	21,3
	2013	22,7	19,2	23,2	31,1	26,1	13,8	26,3	25,8	27,0	26,7	24,7	20,4
	2014	22,8	19,0	23,5	32,6	25,9	13,8	26,4	25,9	:	27,1	24,7	19,7
	2014 to 2009,%	90,3	102,7	108,3	108,7	110,2	100,0	105,6	104,4	:	114,8	101,6	93,4
Processing Industry	2009	16,3	14,8	:	22,9	19,8	11,5	20,4	18,3	21,6	19,6	17,7	17,3
	2010	14,8	15,4	:	23,4	22,0	11,3	21,9	17,5	23,9	20,2	20,9	18,6
	2011	13,6	15,7	:	24,5	22,7	11,4	22,1	18,1	24,5	21,0	21,3	18,3
	2012	14,1	15,4	:	24,9	22,6	11,4	22,6	18,0	21,5	21,6	21,0	17,2
	2013	12,7	15,3	:	24,9	22,2	11,3	22,8	18,8	:	22,3	20,2	16,5
	2014	13,1	15,3	:	26,7	22,2	11,4	23,3	19,2	:	22,8	20,4	16,0
	2014 to 2009,%	80,4	103,4	:	116,6	112,1	99,1	114,2	104,9	:	116,3	115,3	92,5
Construction Industry	2009	3,0	6,2	9,2	6,7	4,2	6,3	4,8	8,3	11,4	7,8	9,8	5,8
	2010	3,7	5,8	7,0	6,9	4,3	6,1	4,1	8,3	10,1	6,4	9,0	5,9
	2011	3,5	5,7	6,2	6,2	4,4	6,1	4,0	8,3	9,1	5,9	8,8	5,8
	2012	3,2	5,5	5,9	5,8	4,5	6,1	3,8	7,6	9,6	5,8	8,9	5,6
	2013	2,9	5,4	4,8	5,6	4,6	6,0	4,0	7,4	7,4	5,3	8,5	5,5
	2014	2,6	5,4	4,8	5,3	4,8	5,7	4,3	7,5	:	5,7	8,3	5,9
	2014 to 2009,%	86,3	87,1	52,2	79,1	114,3	90,5	89,6	90,4	:	73,1	84,7	101,7

Continuation of Table 2

Trade, Transport, Accommodation and public catering Industries	2009	25,7	19,2	20,4	18,2	17,0	18,1	17,6	25,9	20,5	20,0	21,9	17,2
	2010	26,2	19,0	20,7	18,6	16,0	17,9	17,7	25,9	15,3	20,0	21,8	17,1
	2011	27,6	18,9	19,9	18,2	16,1	17,8	18,1	25,3	13,1	20,2	21,6	17,0
	2012	25,8	19,0	20,2	18,2	15,8	17,8	17,7	26,5	19,7	20,0	21,4	17,3
	2013	25,8	18,9	21,4	18,1	15,6	17,8	18,6	26,3	17,7	20,2	22,0	17,3
	2014	25,1	19,0	21,3	17,9	15,5	17,7	18,5	26,8	:	20,4	22,4	17,4
	2014 to 2009,%	97,8	99,0	104,4	98,4	91,2	97,8	105,1	103,5	:	102,0	102,3	101,2
Information and Telecommunications Industry	2009	25,7	19,2	20,4	18,2	17,0	18,1	17,6	25,9	20,5	20,0	21,9	17,2
	2010	26,2	19,0	20,7	18,6	16,0	17,9	17,7	25,9	15,3	20,0	21,8	17,1
	2011	27,6	18,9	19,9	18,2	16,1	17,8	18,1	25,3	13,1	20,2	21,6	17,0
	2012	25,8	19,0	20,2	18,2	15,8	17,8	17,7	26,5	19,7	20,0	21,4	17,3
	2013	25,8	18,9	21,4	18,1	15,6	17,8	18,6	26,3	17,7	20,2	22,0	17,3
	2014	25,1	19,0	21,3	17,9	15,5	17,7	18,5	26,8	:	20,4	22,4	17,4
	2014 to 2009,%	97,8	99,0	104,4	98,4	91,2	97,8	105,1	103,5	:	102,0	102,3	101,2
Financial and insurance activity	2009	6,2	5,7	6,3	4,5	4,7	4,0	4,7	3,9	2,4	5,3	3,9	4,4
	2010	6,3	5,6	8,2	4,7	4,6	4,5	4,7	4,1	2,6	5,4	3,6	3,9
	2011	5,1	5,4	8,5	4,7	4,1	4,3	4,5	4,3	3,2	5,2	3,7	4,1
	2012	4,9	5,4	7,8	4,5	4,1	4,2	4,3	4,0	3,4	4,3	3,6	4,3
	2013	5,1	5,3	7,2	4,8	4,1	4,4	3,9	3,9	3,4	4,0	3,6	4,5
	2014	5,1	5,5	7,7	4,6	4,0	4,7	3,8	4,3	:	4,4	3,9	4,6
	2014 to 2009,%	83,1	96,5	122,2	102,2	85,1	117,5	80,9	110,3	:	83,0	100,0	104,5
Real Estate Transactions	2009	6,3	10,7	10,8	9,0	12,1	13,1	8,9	5,2	9,3	8,3	6,9	9,1
	2010	6,0	10,8	11,6	9,0	11,6	12,8	8,8	5,3	9,5	8,0	6,7	8,3
	2011	6,2	11,0	11,0	8,8	11,6	12,7	8,8	5,2	9,1	7,7	6,9	8,5
	2012	6,9	11,1	10,6	8,9	11,2	12,7	8,9	5,2	9,2	7,5	7,0	8,5
	2013	7,4	11,2	10,7	9,0	11,1	12,8	8,8	5,0	10,6	7,2	7,1	8,7
	2014	7,5	11,2	10,6	8,4	11,1	12,9	8,3	5,0	:	6,9	7,1	8,4
	2014 to 2009,%	120,1	104,7	98,1	93,3	91,7	98,5	93,3	96,2	:	83,1	102,9	92,3
Professional Activity and Administrative Servicing	2009	6,3	10,7	10,8	9,0	12,1	13,1	8,9	5,2	9,3	8,3	6,9	9,1
	2010	6,0	10,8	11,6	9,0	11,6	12,8	8,8	5,3	9,5	8,0	6,7	8,3
	2011	6,2	11,0	11,0	8,8	11,6	12,7	8,8	5,2	9,1	7,7	6,9	8,5
	2012	6,9	11,1	10,6	8,9	11,2	12,7	8,9	5,2	9,2	7,5	7,0	8,5
	2013	7,4	11,2	10,7	9,0	11,1	12,8	8,8	5,0	10,6	7,2	7,1	8,7
	2014	7,5	11,2	10,6	8,4	11,1	12,9	8,3	5,0	:	6,9	7,1	8,4
	2014 to 2009,%	120,1	104,7	98,1	93,3	91,7	98,5	93,3	96,2	:	83,1	102,9	92,3
State Administration, Education and Healthcare	2009	15,8	19,5	12,5	15,2	18,2	22,6	18,2	15,3	12,2	17,3	14,6	24,2
	2010	15,2	19,4	12,7	15,2	17,9	22,5	17,8	15,4	11,9	17,8	14,5	23,4
	2011	14,2	19,2	12,0	14,9	17,7	22,5	17,1	15,0	11,2	17,7	13,8	23,3
	2012	15,3	19,2	12,3	14,9	17,9	22,7	17,3	14,8	10,8	17,9	13,7	24,0
	2013	15,5	19,4	13,4	15,0	18,1	23,0	17,3	14,8	10,8	18,0	14,2	24,3
	2014	15,2	19,3	13,2	14,9	18,2	23,2	17,5	14,2	:	17,0	14,5	24,5
	2014 to 2009,%	96,2	99,0	105,6	98,0	100,0	102,7	96,2	92,8	:	98,3	99,3	101,2

Ending of Table 2

Art, Sport, Entertainment and other types of activity	2009	1,7	3,5	2,9	2,3	4,3	3,0	2,9	2,3	2,6	2,8	3,1	2,9
	2010	1,5	3,5	2,8	2,3	4,2	3,0	2,9	2,4	2,9	2,7	3,1	2,8
	2011	1,6	3,5	2,4	2,3	4,1	3,0	2,8	2,4	3,3	2,7	3,3	2,9
	2012	1,8	3,6	2,4	2,2	4,1	3,0	2,8	2,4	3,4	2,7	3,4	2,9
	2013	2,1	3,6	2,6	2,3	4,1	3,0	2,8	2,3	3,3	2,8	3,5	3,0
	2014	1,9	3,6	2,5	2,2	4,1	3,0	2,8	2,3	:	2,7	3,3	3,0
	2014 to 2009,%	109,0	102,9	86,2	95,7	95,3	100,0	96,6	100,0	:	96,4	106,5	103,4
Share of Commodity Production	2009	36,1	26,2	36,0	38,5	28,5	21,6	33,3	36,0	43,7	33,3	37,4	28,4
	2010	37,3	26,6	32,9	38,5	30,7	21,4	34,0	36,0	47,7	32,6	38,3	30,5
	2011	38,1	26,8	35,4	39,5	31,2	21,6	34,8	37,0	48,9	33,2	39,0	29,9
	2012	37,0	26,4	35,5	39,6	31,5	21,8	34,9	36,0	42,7	33,9	38,9	28,4
	2013	35,5	26,3	33,5	39,3	31,6	21,5	34,7	36,5	40,6	34,1	37,2	27,3
	2014	37,2	26,0	33,6	40,5	31,5	21,1	35,1	36,7	:	35,0	36,7	27,0
	2014 to 2009,%	102,9	99,2	93,3	105,2	110,5	97,7	105,4	101,9	:	105,1	98,1	95,1

Note: for Ukraine data of 2014 is given without considering temporarily occupied territory of AR Crimea and Sevastopol

The share of construction in GAV of Ukraine (2.6%) is almost twice lower than the EU-28 (5.4%), and reducing its contribution to GAV for the considered period (-13.7%) exceeds a similar reduction in the EU-28 (-12.9%), while in Germany, its share even increased. In trade, transport, accommodation and catering spheres a GAV share of Ukraine was more stable, decreasing only by 2.2%, resulting in the contribution of these sectors in 2014 (25.1%) was higher than the EU rates in general (19.0%) and most of considered countries, except Poland (26.8%). Ukrainian information activity indicator remained lower (3.5%) than the EU indices (4.7%).

Financial crisis led to a sharp reduction in financial and insurance activity, which from level exceeding the EU level in 2009 (6.2 as compared to 5.7%) declined to below the average (5.1 and 5.5%) respectively, and its physical volume decreased by 16.9%, which was similar to the reduction of this activity in Germany, Hungary and Slovenia.

Despite significant growth (+20.1%) contribution of transactions with real estate (7.5%) was almost twice lower than the average European (11.2%) and similar to new member states. The contribution of professional activity underwent a slight reduction remaining twice lower than the European level, which is typical for new EU member states. The contribution of public administration, education and health underwent certain reduction and stayed similar to new EU-28 countries as opposed to the old ones, where this sector is traditionally more significant. In comparison with 2009 the value added

share of material production industries in Ukraine has not changed substantially, remaining at 37.2%, which is typical for new EU member states. Lower level of material production was in Germany (31.5%), France (21.1%) and Sweden (27.0%).

GAV rate of change on certain economic activities of Ukraine differed significantly from EU-28 countries (Table. 3) [7]. For Ukrainian GAV a decline in 2009 (-14%) was one of the deepest among the EU-28 countries (-6%). A similar decline occurred only in the Baltic States. Among the EU member states Poland was the only country to not only prevent but also to ensure economic growth of 3%. Economic recovery in 2010-2011 in Ukraine was twice faster than in the EU-28 countries, but in 2012-2013 it was changed again by the second crisis wave that deepened by economic war of Russia in autumn of 2013 and which in 2014 trasfered into an open war. As a result of military operations, shutdown of enterprises in the east and breakdown of economic ties between the regions, GAV of Ukraine, even excluding the temporarily occupied territory of Crimea and Sevastopol, in 2014 it decreased by 7%, and in general during the whole period by 12%, actually staying at the 2009 crisis level. The EU-28 countries for the same period achieved the level similar to the one before the crisis in 2008. The greatest progress was demonstrated by Poland, which GVA for this period increased by 19%. Slovakia follows Poland in efficiency of economical performance during the crisis (+8%) [7].

In contrast to other activity types Ukrainian agriculture was quite quick and successful in its development, as during this period it increased by 31%. In the EU-28 countries its GAV remained at its pre-crisis level. Similar to Ukraine, although lower growth in this area was demonstrated by Slovakia (20%) and Poland (+9%).

Industry of Ukraine showed sharp decline since 2012, four times less compared to the pre-crisis 2008. It almost reached pre-crisis level in the EU-28 countries, although significant growth in this area was shown by Poland (+ 30%), Germany (+ 7%), Slovakia (+ 4%).

Added Value of Ukrainian processing industry catastrophically decreased in Ukraine. This reduction caused by the global financial crisis began in 2008 (-5%) and became catastrophic in 2009 (-22%).

Table 3

Gross Value of Activities (acc. to SNA-2008 methodology)

Types of activity acc. to NACE (Ukr.KBEJ2010)	Years	Ukraine*	EU-28	Bulgaria	Czechia	Germany	France	Hungary	Poland	Roumania	Slovenia	Slovakia	Sweden
Total	2009	86	96	97	95	94	97	93	103	94	93	95	94
	2010	104	102	101	103	104	102	101	104	99	101	105	106
	2011	105	102	102	102	104	102	102	105	100	100	102	103
	2012	100	100	100	99	101	101	99	102	100	98	103	100
	2013	101	100	101	99	100	100	102	102	104	99	101	101
	2014	93	101	102	103	102	100	104	103	:	103	102	102
	2014 to 2008, %	88	100	103	100	104	102	100	119	:	94	108	106
Agriculture, Forestry and Fish Industry	2009	98	100	91	121	97	106	89	113	91	91	98	97
	2010	100	97	94	84	76	97	78	93	110	102	85	94
	2011	120	102	99	102	86	104	114	101	114	108	119	100
	2012	96	96	93	103	114	92	77	95	74	92	103	101
	2013	113	103	103	91	98	99	115	105	129	96	120	103
	2014	103	103	105	106	106	103	113	103	:	107	99	101
	2014 to 2008, %	131	100	84	102	75	99	78	109	:	94	120	95
Manufacturing Industry	2009	82	89	92	88	85	94	86	100	99	86	84	83
	2010	105	108	98	106	116	102	109	109	105	107	120	119
	2011	105	103	109	107	106	103	100	109	100	102	104	104
	2012	98	99	103	99	101	101	99	102	93	98	99	96
	2013	93	100	100	97	100	100	97	105	104	100	97	99
	2014	88	101	102	105	101	100	105	104	:	104	104	99
	2014 to 2008, %	73	98	103	100	107	98	94	130	:	95	104	9
Processing Industry	2009	78	87	:	88	81	94	83	101	97	84	85	80
	2010	104	109	:	111	119	103	111	109	104	107	127	123
	2011	103	105	:	110	109	104	101	109	98	103	104	105
	2012	98	99	:	99	100	101	100	102	95	97	100	93
	2013	90	100	:	98	100	99	96	106	:	100	99	99
	2014	88	102	:	106	102	100	107	106	:	105	104	99
	2014 to 2008, %	66	99	:	110	106	100	94	137	:	94	117	94
Construction Industry	2009	61	92	100	97	97	94	96	112	86	87	92	90
	2010	102	98	82	104	108	98	90	106	97	82	95	104
	2011	101	98	98	93	104	98	103	111	81	90	103	98
	2012	91	95	98	96	100	99	94	97	99	93	106	94
	2013	89	98	99	99	100	98	107	101	105	91	96	99
	2014	80	101	101	103	104	96	114	105	:	111	98	110
	2014 to 2008, %	41	83	79	92	113	83	102	134	:	60	89	94

Continuation of Table 3

Trade, Transport, Accommodation and Public Catering Industries	2009	86	94	93	91	94	95	86	103	89	91	93	95
	2010	106	101	112	104	99	103	100	103	101	101	103	105
	2011	108	102	101	101	104	103	102	101	101	102	99	104
	2012	98	100	102	98	98	100	99	105	133	96	102	102
	2013	100	100	103	99	100	100	105	100	94	100	102	103
	2014	89	102	101	102	101	101	104	103	:	103	102	103
	2014 to 2008, %	86	99	113	95	96	101	94	116	:	93	100	112
Information and Telecommunications Industry	2009	90	99	98	99	99	96	106	104	90	96	109	99
	2010	98	103	103	100	100	104	100	101	109	103	101	108
	2011	104	104	103	102	111	106	103	107	80	100	103	106
	2012	106	103	97	98	105	103	104	110	92	100	113	104
	2013	102	100	102	99	101	100	101	103	108	101	101	100
	2014	96	101	102	104	102	101	103	100	:	101	103	104
	2014 to 2008, %	95	110	105	102	120	110	118	126	:	101	133	123
Financial and Insurance Activity	2009	57	99	113	109	94	107	102	91	93	101	108	104
	2010	121	99	104	100	103	100	96	98	103	100	94	101
	2011	93	101	102	100	101	107	96	109	120	96	104	109
	2012	102	100	94	107	102	102	97	90	106	95	100	100
	2013	108	99	99	114	99	102	94	101	105	100	107	106
	2014	95	100	101	97	99	101	99	114	:	102	107	104
	2014 to 2008, %	67	98	112	130	97	120	86	101	:	94	121	12
Real Estate Transactions	2009	94	101	98	97	102	101	103	101	102	100	94	97
	2010	107	101	105	101	99	102	99	106	74	102	99	96
	2011	103	102	100	102	103	99	103	104	100	100	110	103
	2012	106	100	100	101	98	101	98	102	103	100	106	104
	2013	107	101	101	103	101	101	101	99	106	100	100	103
	2014	97	102	101	100	101	101	100	101	:	100	101	101
	2014 to 2008, %	114	107	105	104	104	104	103	113	:	102	108	103
Professional activity Administrative Servicing	2009	92	93	109	93	90	93	97	105	102	94	102	96
	2010	93	103	96	99	104	104	101	100	100	105	105	109
	2011	97	103	105	102	102	103	103	105	126	101	99	106
	2012	121	100	97	101	101	100	101	104	109	98	105	101
	2013	108	101	102	100	101	100	104	103	115	100	105	103
	2014	89	103	102	104	102	101	105	102	:	104	100	104
	2014 to 2008, %	96	103	111	99	99	100	112	122	:	102	118	118
State Administration, Education and Healthcare	2009	104	101	99	101	102	101	100	105	96	102	107	102
	2010	100	101	100	101	102	101	101	101	96	102	103	101
	2011	100	101	99	99	101	101	102	101	101	100	96	100
	2012	104	100	100	98	101	102	102	100	97	101	101	101
	2013	100	100	102	99	100	101	105	101	100	100	104	100
	2014	101	101	101	102	101	101	100	100	:	101	104	102
	2014 to 2008, %	109	104	100	100	107	108	110	108	:	105	115	106

Ending of Table 3

Art, sport, entertainment and other types of activity	2009	82	99	105	95	97	100	95	101	86	97	132	97
	2010	96	100	101	99	99	103	101	106	81	98	102	102
	2011	109	101	96	104	101	98	103	104	111	100	108	102
	2012	113	100	95	98	100	102	96	104	105	97	108	100
	2013	107	99	101	103	98	100	103	96	102	103	101	103
	2014	93	101	100	100	101	100	103	102	:	100	98	102
	2014 to 2008, %	97	100	98	98	96	103	101	112	:	95	156	106

Note: for Ukraine data of 2014 are given without considering temporarily occupied territory of AR Crimea and Sevastopol

Certain economic recovery in 2010-2011 failed to block this decrease, and since 2012 it continued again. It resulted in reduction of the Gross Added Value by 34%. For most of the EU-28 countries, despite similar reduction of production in 2009, the consequences of the crisis were more moderate, as in Poland, due to continuous growth in the period production of this sector was increased by 37%, and in Slovakia by 17%.

The added value of a construction industry in Ukraine underwent a catastrophic decline in 2008 (-13%), 2009 (-39%) and in the period since 2012, cumulatively decreased by 59% compared to 17% in the EU-28 countries.

It did not experience recession, but on the contrary it had grown rapidly during the whole period, increasing in general in Poland by 34% and in Germany by 13%.

Trade, transportation and accommodation sector of Ukraine also suffered a sharp decline in 2009 (-14%), as in most EU countries (-6%), with the exception of Poland. Naturally, Euro 2012 was accompanied by a decline beginning in these areas. For the entire period Ukrainian GAV of this activity decreased by 14%, and in the EU-28 countries it remained at pre-crisis level, and leaders in the growth of this industry were Poland (+ 16%), Bulgaria (+ 13%) and Sweden (+ 12%).

The development of information and telecommunications industry in Ukraine in this period was moderate and decreased in 2014, especially in comparison with such European countries as Poland (+26%), Germany (+20%), Sweden (+23%), Hungary (+18%).

During this period financial activity of Ukraine experienced maximum fluctuations. GAV reduction of this industry began in 2008 (-3%), while in 2009 it decreased by 43%, restoring volumes in 2010, declining again in 2011, growing at 2012-2013 and declining in 2014.

In general for the period added value of financial activities decreased by one third, which was the largest decline compared with European countries, while as a whole the EU volumes remained almost unchanged compared to 2008.

Activity in the field of real estate transactions in this period grew moderately and despite a slight reduction in 2009 (-6%), it increased added value by 14% which is twice more than in the EU-28 countries and Poland (+ 13%).

Sharp fluctuations observed professional activity, which had peak highs in 2012-2013, experiencing a reduction in the period of 2009-2011. And 2014, and as a result decreased by 5%. In the EU-28 countries it remained stable, with increase in Poland (+22%), Sweden (18%) and Hungary (+12%). Added value of Ukrainian public administration, education and healthcare industries remained fairly stable, increasing GAV during this period by 9%, twice more than the EU-28 countries (+4%). Consideration of GDP structure by categories of final application and dynamics of these indicators allows conclusions about the observance of fundamental macroeconomic proportions (Table 4) [7].

During the period under review Ukraine tended to increase spending on final household consumption in GDP, increasing this figure to 73% in 2013; and only the beginning of hostilities in 2014 led to a slight reduction in these costs to 71%, and in general during the period they increased by 10% (6 corresponding points (c.p.) in GDP).

Table 4

**Structure of GDP by categories of final application
(% of GDP acc. to the SNA-2008 methodology)**

Category of GDP final application	Years	Ukraine*	EU-28	България	Czechia	Germany	France	Hungary	Poland	Rumania	Slovenia	Slovakia	Sweden	USA
State Administration Sector	2009	19	22	16	21	20	24	22	19	18	20	20	26	17
	2010	20	22	16	21	19	24	22	19	16	20	19	25	17
	2011	18	21	15	20	19	24	21	18	15	21	18	25	16
	2012	19	21	15	19	19	24	20	18	15	21	18	26	16
	2013	19	21	17	20	19	24	20	18	14	20	18	26	15
	2014	19	21	17	20	19	24	20	18	14	19	19	26	15
	2014 to 2009, %	96	96	107	95	98	102	91	95	79	96	94	100	88

Ending of Table 4

Household and NPO	2009	65	57	63	49	57	56	53	62	61	55	61	47	68
	2010	65	57	64	49	56	56	52	62	63	56	58	46	68
	2011	68	57	62	49	56	56	53	61	63	56	57	46	69
	2012	69	57	66	49	56	56	54	62	63	56	58	47	69
	2013	73	57	63	50	56	55	53	61	62	54	57	47	69
	2014	71	57	62	49	55	55	51	60	63	53	57	47	69
	2014 to 2009, %	110	99	98	99	97	98	95	98	102	97	94	99	100
Gross Accomodation of Fixed Assets	2009	18	21	29	27	19	22	23	21	26	24	22	22	19
	2010	18	20	23	27	19	22	20	20	26	21	22	22	18
	2011	18	20	21	27	20	22	20	20	27	20	24	23	18
	2012	19	20	22	26	20	23	19	19	28	19	21	23	19
	2013	17	19	21	25	20	22	20	19	24	20	20	22	19
	2014	14	19	21	25	20	22	21	20	22	20	21	23	19
	2014 to 2009, %	76	94	73	93	105	98	93	93	84	83	97	104	104
Export of Goods and Services	2009	43	35	44	59	38	24	75	38	27	57	68	45	11
	2010	46	39	55	66	42	26	83	41	32	64	77	46	12
	2011	49	41	64	72	45	28	88	43	37	70	85	47	14
	2012	47	43	65	77	46	28	87	45	37	73	92	46	14
	2013	43	43	68	77	46	28	89	46	40	75	93	44	14
	2014	49	43	68	84	46	28	91	47	41	77	92	45	13
	2014 to 2009, %	115	123	155	142	121	118	121	124	150	134	136	100	122
Import of Goods and Services (-)	2009	45	34	52	55	33	26	71	38	34	55	69	39	14
	2010	49	38	58	63	37	28	77	42	38	63	78	41	16
	2011	55	40	63	68	40	30	81	45	42	68	86	42	17
	2012	55	41	68	72	40	30	81	45	42	69	88	41	17
	2013	51	40	69	71	40	30	81	44	40	69	88	39	17
	2014	53	40	69	77	39	30	84	45	41	69	88	41	17
	2014 to 2009, %	120	118	131	140	119	117	118	118	121	124	127	105	120

Note: for Ukraine data of 2014 are given without considering temporarily occupied territory of AR Crimea and Sevastopol.

In the EU-28 countries they remained at a stable level of 57%, which could be considered a proportion close to optimal for developed countries and fluctuated from 46% in Sweden to 63% in Romania and 69% in the developed US.

Quite high level of spending of Ukrainian population suggests dangerous tendency to shift the main economic proportions in favour of consumption. Considering structural relationship of the EU countries, household consumption is overstated fourfold.

Expenditures of State Administration of Ukraine (19%) were 2% below the level of the EU-28 countries (13.5%) and since 2011 had a similar downward trend. However, it should be noted that the share of these expenses was higher from such new EU members as Romania (5 c.p.), Bulgaria (2 c.p.), higher by 4 c.p. than the US and closer to the level of such old EU members as Germany, for example, though lower than the socially oriented economies of France (24%) and Sweden (26%).

The share of gross fixed capital accumulation of Ukraine decreased by almost a quarter, primarily as a result of military operations, reaching only 14% of GDP, which is 5 c.p. less than the indicators of the EU-28 countries (19%). And in all countries except Germany, Sweden and the United States it tends to decrease. It should also be noted that higher rates of accumulation decline were achieved by new EU members with its higher level at the beginning. Consequently, according to the portion of this index convergence of proportions occurs among the EU countries.

According to export indices as a part of GDP (49%) Ukraine holds a position higher than the EU-28 countries as a whole (43%). It is clear that the share of exports and imports significantly depend on the size of the economy, that's why small countries have a higher share of exports in GDP, as for example, Hungary (91%) and Slovakia (92%). And large countries have a lower share: Germany (46%), France (28%), the USA (13%). It is worth noting that growth of this indicator in most countries is a consequence of economic globalization and deepening of the global division of labour. Similarly import share in GDP grew briskly, reaching 53% in Ukraine. Ukraine's development was hampered by a negative balance of a foreign trade, which in 2008 reached 8% of GDP; due to the global crisis caused by hryvnia devaluation it fell to 2% in 2009, but then, as a result of keeping a fixed exchange rate of hryvnia it rose again to the critical figure of 8% in 2013-2014. It should be noted that the EU-28 countries had a rising trade surplus from 1% in the early period up to 3% in 2013-2014. Among them those new EU member countries with significant negative balance as Bulgaria (-9%) and Romania (-6%) brought it down to acceptable values (-1% and + 0.1% respectively) in 2014. This indicates the economic recovery of these countries through their membership in the EU-28.

Consideration of GDP growth rates by categories of final use helps to supplement the previous analysis starting from the crisis 2009 (Table 5).

As revealed in the analysis of component structures of the GDP, the main disparity of Ukrainian economy, being an excessive growth of expenditure

on final consumption of households, is clearly reflected in comparison with GDP growth rates with an increase of final consumption expenditure. During the period every year, except in 2009 and in 2014, the growth of population spending exceeded GDP, particularly in 2011 by 10%, so that they increased compared with pre-crisis 2008 figures to 9%, while reducing GDP by 13%. Such a gap between the dynamics of these indicators was not observed in any of the EU countries considered. Unlike the old EU member states (Germany, France, Sweden and the USA), among most of new EU member states GDP growth rates outpaced an increase in final consumption expenditure. Thus, the EU countries provided a constant balance between production and consumption. The volume of consumption expenditure of general government of Ukraine in the period underwent sharp fluctuations periodically either falling below the GDP rate (2011 and 2013) or outgrowing it (2009, 2012, 2014).

In total during the period it rose by 4%, exceeding the rate of GDP by 17 c.p. In the EU-28 countries during this period it also grew by 4%, but in contrast to Ukraine it outwent the GDP growth of these countries only by 4 c.p.

Table 5

**Volume of Gross Domestic Product by categories of final use
(% of GDP by the 2008 SNA methodology)**

Category of GDP Final Application	Years	Ukraine*	EU-28	Bulgaria	Czechia	Germany	France	Hungary	Poland	Roumania	Slovenia	Slovakia	Sweden	USA
Gross Domestic Product	2009	85	96	95	95	94	97	93	103	93	92	95	95	97
	2010	104	102	101	102	104	102	101	104	99	101	105	106	103
	2011	105	102	102	102	104	102	102	105	101	101	103	103	102
	2012	100	100	101	99	100	100	99	102	101	97	102	100	102
	2013	100	100	101	99	100	100	102	102	103	99	101	101	102
	2014	93	101	102	102	102	100	104	103	103	103	102	102	102
	2014 to 2008, %	87	100	101	100	104	102	99	119	100	93	108	106	108
State Administration Sector	2009	98	102	92	103	103	102	101	104	104	102	107	102	104
	2010	104	101	102	100	101	101	99	103	95	100	102	101	100
	2011	97	100	102	97	101	101	100	98	101	99	98	101	97
	2012	104	100	99	99	101	102	99	100	100	99	98	101	99
	2013	99	100	103	102	101	102	103	102	95	99	102	101	99
	2014	101	101	104	102	101	102	102	103	104	100	104	102	100
	2014 to 2008, %	104	104	101	104	108	111	105	110	98	98	112	108	99

Ending of Table 5

Household and NPOs	2009	84	99	94	99	100	100	93	103	90	101	100	100	98	
	2010	107	101	101	101	101	102	97	103	101	101	100	104	102	
	2011	116	100	102	100	102	101	101	103	101	100	99	102	102	
	2012	108	99	104	98	101	100	98	101	101	97	100	101	102	
	2013	107	100	98	100	101	100	100	101	101	101	96	99	102	102
	2014	90	101	102	102	101	101	102	103	105	100	102	102	102	103
	2014 до 2008, %	109	100	99	101	106	103	91	115	98	95	100	112	110	
Gross Accumulation of Fixed Assets	2009	50	88	83	90	90	91	92	98	63	78	81	87	87	
	2010	103	100	82	101	105	102	91	100	98	86	107	106	101	
	2011	107	102	93	101	107	102	98	109	103	95	113	106	104	
	2012	103	97	104	97	99	100	96	99	100	91	91	100	105	
	2013	92	99	100	96	99	99	105	101	92	102	97	100	103	
	2014	77	102	103	105	103	99	112	110	96	105	106	107	104	
	2014 to 2008, %	41	88	67	89	104	93	91	116	57	62	92	103	103	
Export of Goods and Services	2009	78	88	88	90	86	89	89	94	95	83	83	86	91	
	2010	102	111	117	115	115	109	111	113	115	110	116	112	112	
	2011	103	107	112	109	108	107	107	108	112	107	112	106	107	
	2012	95	102	100	104	103	101	99	104	101	100	109	101	103	
	2013	93	102	109	100	102	102	106	105	116	103	105	100	103	
	2014	86	104	102	109	104	103	109	106	108	106	105	103	103	
	2014 to 2008, %	62	112	130	128	115	110	119	132	155	107	129	106	120	
Import of goods and Services (-)	2009	61	88	79	89	90	91	85	88	79	81	81	86	86	
	2010	110	110	104	115	113	109	110	114	113	107	115	113	113	
	2011	117	104	109	107	107	106	105	106	110	105	110	107	106	
	2012	104	100	105	102	100	99	97	99	98	96	103	101	102	
	2013	97	101	105	100	103	102	106	102	104	101	104	99	101	
	2014	78	104	104	110	103	104	110	109	108	104	105	107	104	
	2014 to 2008, %	61	106	101	123	117	109	111	116	108	92	114	111	110	

Note: for Ukraine data of 2014 is given without considering temporarily occupied territory of AR Crimea and Sevastopol

Gross Fixed Capital Accumulation (GFCA) underwent a sharp reduction in most of the considered countries during 2008-2009 and 2012-2013. This resulted in a sharp decrease of GFCA during the period under consideration in almost all EU-28 countries (22%), with the exception of Poland (+16%), Germany (+4%) and Sweden (+3%) and the USA (+3%). Reducing GFCA of Ukraine (-59%) was one of the deepest in comparison with Slovenia (-48%) and Romania (-43%).

Export of concerned countries declined sharply due to the financial crisis in 2009, but compared with the EU-28 countries (12%) it was much deeper

reduction for Ukraine(-22%). Second significant export reduction in Ukraine occurred in 2012-2014, although most EU countries continued increasing its volume for the whole period, increasing it by 12% while Ukraine's export reduced by 38%.

Ukraine's import also decreased sharply in 2009 (-39%), with its much smaller reduction in EU-28 states (-12%), and the second time it happened in 2013-2014 (-39%, -22% and -3% respectively). Thus, the levelling of proportion between export and import occurred during devaluation (2009 and 2014). In particular, in 2014 difference between the rates of these indicators was 8 c.p., which allowed to some extent improvement of foreign trade negative balance, while in the EU-28 states there were opposite changes and export increase (+12%) significantly outpaced import growth (+6%), as well as in the US (+20% and +10% respectively), creating a positive trade balance.

Conclusion

The shift in the structure of the economy is a complex transformation system of interrelated proportions influenced by existing technical basis, social production mechanisms, distribution and exchange according to social needs, available resources and achieved productivity level.

The evolution of the economic structure can be presented as a multilevel system of structural changes. Hence the main task of the state regulation of structural changes at any level is to ensure their balance in institutional, technological and reproduction aspects. Structural imbalances in modern Ukrainian economy significantly reduce effectiveness of the economic mechanism, deepen socio-economic contradictions and impede an access to the path of sustainable innovational development. Thereby the problem of quality strategic transformations in Ukraine today can not be solved without implementation of the structural transformation strategy at the national level taking into consideration specific character of the regions.

Thus, Ukraine's GDP characteristics prove unstable economic growth and a high level of response to negative changes in external and internal conditions of economic activity requiring a deep analysis of the national economy structure.

References:

1. Structural Transformations in the Economy of Ukraine: Dynamics, Contradictions and Influence on Economic Development: research report /

[Shynkaruk L.V., Bevz I.A., Baranovska I.V. etc.]; edited by corresponding member of NASU L.Shynkaruk; NASU, SO «Institute for Economics and Forecasting» NASU. – K., 2015. – 304 p.: tab., fig.

2. Black J. Economics. Explanatory Dictionary / J. Black; edited by I.M. Osadcha. – Moscow: INFRA-M, Ves Mir, 2000. – 832 p.

3. Krasilnikov O.Y. Problems of Structural Transformations in Economy / O.Y. Krasilnikov // Economist. – 2005. – № 8. – P. 52-58.

4. Sukharev O.S. Institutional Theory and Economic Politics: To New Theory of the Transfer Mechanism in Macroeconomics. Book II: Economic Politics. Problems of Theoretical Description and Practical Implementation / O.S. Sukharev // RAS, Institute of Economics. – Moscow: Economics, 2007. – P. 381.

5. Kuznetz S. Modern Economic Growth: Results of Research and Reflections: Nobel lecture / S. Smith // Nobel Laureates in Economics: View from Russia / edited by Y.V. Yakovets. – SPb.: Gumanistika, 2003. – P. 104.

6. Source: for groups of the countries built according to data of: International Monetary Fund, World Economic Outlook Database, April 2014: [electronic resource]. – Available at: <http://www.imf.org>; for Ukraine – according to the State Statistics Service of Ukraine [Electronic resource]. – Available from: <http://www.ukrstat.gov.ua/>

7. Source: Eurostat data [Electronic resource]. – Available at: <http://epp.eurostat.ec.europa.eu>; for Ukraine – State Statistics Service of Ukraine [electronic resource]. – Available at: <http://www.ukrstat.gov.ua/>