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STATISTICAL CHARACTERISTIC OF THE MAIN INDICES OF THE NATIONAL ACCOUNTS OF UKRAINE

The methods and the results of the statistical analysis of the structure of macroeconomic aggregates are given in the article. The results of the analysis are used for estimating the fulfillment of government plans of Ukraine's development.

Keywords: regularity; the system of national accounts; indices; dynamics; structure.

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СТАТИСТИЧНА ХАРАКТЕРИСТИКА ОСНОВНИХ ПОКАЗНИКІВ НАЦІОНАЛЬНИХ РАХУНКІВ УКРАЇНИ

У статті подано методи та результати статистичного аналізу структури макроекономічних агрегатів. Результати аналізу використано для оцінювання виконання державних планів розвитку України.

Ключові слова: закономірність; система національних рахунків; показники; динаміка; структура.

Табл. 5. Літ. 10.

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СТАТИСТИЧЕСКАЯ ХАРАКТЕРИСТИКА ОСНОВНЫХ ПОКАЗАТЕЛЕЙ НАЦИОНАЛЬНЫХ СЧЕТОВ УКРАИНЫ

В статье представлены методы и результаты статистического анализа структуры макроэкономических агрегатов. Результаты анализа использованы для оценки выполнения государственных планов развития Украины

Ключевые слова: закономерность; система национальных счетов; показатели; динамика; структура.

Introduction. Cyclicity in the development of the market economy is substantiated in the works of many scientists including the Nobel Prize winners. In their works it is proved, and the practice corroborates this, that the periodic economic crises is the inevitable regularity. The result of the economic crises is the slowdown of the social-economic development of all the countries in the world. It is possible to lessen the negative influence of the economic crisis of a separate country only by way of developing appropriate preventive measures. Organization and realization of such measures requires permanent control by the governing body over the tendencies of its development. Such control will enable to reveal, even at the initial stage, the first signs of arising economic crises. But, the characteristics of the evolution of any economic index can't be the basis neither for the estimation of economic phenomenon, nor for the conclusion about its future condition.

The aim of this research is the analysis of the structure of the phenomenon and the reasons which caused its condition and tendencies. In the article the attempt of such analysis is made on the grounds of the information about output (OUT) and gross domestic product (GDP) of Ukraine in 2005–2010.

The statistic analysis of macroeconomic aggregations. At the first stage of the analysis the dynamics of some elements of OUT and GDP are compared. The usage

of the indices in the constant (2004) prices ensured the objectivity of comparison, that not only allowed eliminating the distorting influence of inflation but making additional research.

In Tables 1 and 2, among the types of economic activities (TEA) producing the products, special attention must be paid to the construction sector. It is very easy to prove that the reason of high rate of the volume in this type of activity was not higher demand for its products (in the first place – for dwellings), which in the conditions of the reduction of population in Ukraine couldn't be expected. Extra investments in construction were connected with the artificial price rise (and the profitability) for the production of construction companies. Their rate of growth was much higher than in other TEA producing products. Especially fast price rise – more than 5 times – was observed in construction. From our point of view, just this economically non-grounded tendency of price rise predetermined the top-priority negative reaction of construction branch to the first signs of financial crises of 2008.

Table 1. Volume indices of output (I_q) and deflators of output (I_p) in Ukraine, 2005–2010 (% , 2004 = 100.0)

Years \ TEA	OUT		Agriculture, forestry		Construction		Education		Healthcare	
	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n
2005	104.5	119.2	99.9	110.8	93.4	130.7	103.6	128.4	101.3	122.2
2006	112.5	132.1	101.5	112.2	102.6	166.0	106.5	153.3	105.8	144.9
2007	123.8	156.2	95.4	137.4	118.6	212.0	107.6	193.5	108.3	179.7
2008	124.4	209.5	111.1	162.7	99.9	313.3	111.4	252.1	106.3	234.0
2009	100.8	243.8	108.9	167.7	51.8	400.1	109.5	291.7	107.8	271.7
2010	106.2	273.4	107.8	203.8	49.0	535.0	114.3	334.6	108.7	323.5

Based on the data "Quarterly gross domestic product estimates of Ukraine".

Table 2. Volume indices of gross value added (I_q) and deflators of gross value added (I_p) in Ukraine, 2005–2010 (% , 2004 = 100.0)

Years \ TEA	GDP		Agriculture, forestry		Construction		Education		Healthcare		Financial intermediation services	
	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n	I_n
2005	103.0	124.2	100.4	108.4	86.7	130.5	100.0	128.4	100.2	127.3	135.3	103.7
2006	110.6	142.7	103.8	106.0	87.2	167.8	102.1	158.1	102.7	157.6	214.3	115.1
2007	119.0	175.7	97.7	130.3	99.6	211.5	100.0	202.3	102.8	200.3	278.4	150.4
2008	121.8	225.5	109.0	153.6	70.6	285.9	99.5	268.9	101.8	262.2	271.2	255.3
2009	103.7	254.8	106.8	158.1	40.6	366.8	100.3	302.0	107.8	293.1	310.2	310.7
2010	108.1	293.1	105.5	192.4	39.9	562.7	100.9	351.5	108.1	355.3	276.7	313.8

Based on the data "Quarterly gross domestic product estimates of Ukraine".

In order to be sure that the above mentioned price rise was not caused by objective reasons, it is quite enough to pay attention to the deflator of gross value added in construction, which in 2005–2010 was 562.7% against its level of 535.0% deflator of OUT. The only reason for such excess was the predominant increase of gross operating surplus (GOS) in 2007 in construction as compared with two other components of gross value added (GVA) – compensation of employers (CE) and taxes on production and imports (TPI). The rate of GDS in construction as compared with other TEA was also much higher (except the financial intermediation services, where the GOS grew 3.5 times quicker than in the economy as a whole, but this TEA is very specific and requires additional consideration) (Table 3).

Table 3. Rise of elements of GVA in construction and of GOS in some TEA of Ukraine by income categories, 2005–2010 (% to 2005)

TEA \ Years	Construction			Gross operating surplus, mixed income (GOS, MI)							
	CE	TPI	GOS, MI	Agriculture, forestry	Manufacturing	Electricity, gas, water supply	Transport, communication	Education	Healthcare	Financial intermediation services	GOS, MI
2006	18.1	64.2	68.6	-0.6	43.1	6.6	6.5	6.1	16.9	75.6	19.5
2007	66.1	117.0	154.3	9.9	96.4	45.9	47.8	6.1	24.3	198.6	66.3
2008	81.1	201.4	57.1	55.7	128.1	65.6	56.5	12.1	16.3	393.2	113.6
2009	14.2	92.0	91.4	50.4	95.4	95.1	105.7	42.4	24.4	586.5	105.3
2010	39.4	123.6	305.7	84.6	103.6	54.1	185.2	69.7	164.2	518.9	149.1

Based on the data "Quarterly gross domestic product estimates of Ukraine".

But the above mentioned rise of GOS didn't have the impact on the increase of the role of construction in the economy of Ukraine, the share of its GVA in GDP in the period under investigation didn't change (Table 4).

Table 4. Structure of GVA by TEA of Ukraine in 2005–2010 (GDP = 100.0%)

TEA	Years	2005	2006	2007	2008	2009	2010
	Agriculture, forestry		10.4	8.6	7.5	7.9	8.3
Manufacturing		22.4	23.1	22.6	20.0	17.8	17.3
Construction		4.2	4.5	4.8	3.5	2.7	3.4
Education		5.4	5.5	5.2	5.3	6.2	6.0
Healthcare		3.5	3.6	3.6	3.5	4.3	4.4
Financial intermediation services		-1.9	-2.7	-3.5	-4.4	-6.4	-4.7

Based on the data "Quarterly gross domestic product estimates of Ukraine".

It is possible that the government control of such artificial price and GOS rise in construction would have allowed, to some extent, lessen the influence of economic crises on the economy of Ukraine.

At the same time, a very fast growth of the indices of prices of GVA and "healthcare", along with the practical lack of increase of OUT in "education" were the evidence of a "very specific" attitude of the government to the solution of social problems.

As it is known almost the whole GVA in "education" and "healthcare" consists of compensation of employees from state budget. In connection with this we can make the conclusion about the disproportionality low financing of these top priority sectors for the population and future of the country TEA. The above insufficient financing took place against the background of almost triple growth of prices of these TEA.

For estimating the efficiency of the part of GDP of Ukraine used for accumulation the attempt was made to compare the rates of increase of the elements of GDP by final expenditure (Table 5).

Comparing the rates of increase of GDP and the gross fixed capital formation allows detecting that in 7 years the capital productivity ratio in the economy of Ukraine went down by 1,92 times. In this case the increase of final consumption expenditure as compared with the rates of increase of GDP could be caused by unfa-

vorable negative foreign trade surplus (40,9 points). It is quite natural that the above mentioned tendencies led to the increase of domestic and foreign debts of Ukraine, the beginning of repaying them in the nearest future is quite problematical because of two reasons:

- inefficient management of the economy,
- lasting world financial and economic crises.

Table 5. Volume indices of GDP of Ukraine by final expenditure in 2005–2010
(%, 2004 = 100.0)

Years \ GDP	GDP	Final consumption expenditure	Gross fixed capital formation	Export of goods and services	Import of goods and services
2005	105.2	116.0	103.9	87.3	106.7
2006	115.3	131.5	125.6	82.2	115.6
2007	129.2	150.6	156.3	84.5	143.2
2008	133.1	165.8	154.4	89.4	167.5
2009	143.0	145.6	76.4	69.7	102.4
2010	154.0	154.2	80.2	72.8	113.7

Based on the data "Quarterly gross domestic product estimates of Ukraine".

Conclusions. Summarizing the above stated we come to the conclusion that the plans on the development of Ukraine and the control of their fulfillment in many cases boiled down to determining and to the attempts of ensuring the achievement of the rate of GDP growth with no account taken of the structural changes in the economy of the country and the analysis of the reasons for such changes. As can be seen from this publication such estimations wouldn't have required much effort and time, but their account would have allowed to solve more substantially the main tasks of the social and economic development of the country.

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