

THE PROBLEMS OF ECONOMIC GROWTH IN UKRAINE: REASONS OF CONSTRAINTS AND THEIR SOLUTION



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Abstract. The most important problem in the development of Ukraine is the slow pace of economic growth, which causes it to lag behind the developed countries and the low level of welfare of the population. It is important for Ukraine to search for and actively use modern growth factors. The purpose of the article is to analyse the reasons for limiting the growth rate of the Ukrainian economy in the context of modern growth theories and to identify ways to overcome them. For this purpose, a brief overview of the main methodological platforms of economic growth is made, the essence of the theories of endogenous growth and structural transformation of the economy are presented in more details. Economic and statistical analysis revealed that there is a weak use of endogenous growth factors in Ukraine: the level of capital investment is insufficient; due to the narrowing of the employment sector and the deterioration of its structure, human capital is not fully utilized; there is a stagnation of the research sphere. There is a negative structural dynamics of the economy, which is manifested in the reduction of the share of industry in favour of smaller technological sectors. These processes slow down dynamic economic development. At the same time, it is revealed that a number of high-tech industries (mechanical engineering, pharmaceutical, computer manufacturing, etc.) are emerging in Ukraine, which can become drivers of economic growth. The ways of activating modern growth factors in Ukraine have been determined.

Keywords: *economic growth, theory of endogenous growth, investments, human capital, structure of economy, industry.*

Introduction

Economic development of Ukraine has a slow pace. The gross domestic product (GDP) index was 102.4% in 2016, 102.5% in 2017, and 3.3% in 2018 [3]. As GDP fell significantly in 2014-2015 (more than 15% compared with 2013), slow growth did not ensure GDP recovery to the level of 2013. This led to a decrease in employment and the level of unemployment increased by 9% of the economically active population. The living standards decreased leading to social discontent and significant labour migration. The only way out is to achieve higher economic growth. This requires finding and activating all possible growth factors through theoretical analysis of the problem and development of effective economic policy measures.

The problems of economic growth in Ukraine are comprehensively covered in the monographic study of specialists of the NASU Institute of Economics and Forecasting [10]. The monograph presents the analysis of fundamental factors for acceleration of growth in main macroeconomic sectors of Ukraine. They are real, budget, financial and crediting, international sectors. Modelling of economic development in the conditions of unstable economic condition was carried out. In her article, O. Lyashenko studies the possibilities of economic growth through investment and knowledge [6]. It is worth to consider the analysis of the evolution of the theories of economic growth by Russian scientists O. Zamulin and K. Sonin [12, 7], in which various models of growth and their constraints are analyzed. There are many other publications and recommendations on this issue in Ukraine, but no significant progress has been made so far in ensuring high rates of economic dynamics, which indicates the relevance of further studies of growth mechanisms.

The objective of the article is to analyze the reasons of constraints of the growth of the Ukrainian economy in the context of modern theories of growth and to find ways to overcome them.

Main material. The problem of economic growth has always been important for every country. Therefore, it is thoroughly studied, and recognized methodological platforms for understanding growth factors were developed. They are *Keynesian*, where economic growth is driven by the dynamics of total demand, the ratio between savings and investment; *neoclassical*, in which growth is ensured by factors of production - volumes of labour, capital and technological progress; *institutional*, which prefers the quality of public institutions as growth factors. However, the slowdown in economic growth in recent decades in most countries of the world has necessitated the search for and involvement of new factors capable to sustain growth in the long run.

This has led to the emergence of new concepts of economic growth, among which the theory of endogenous growth and the theory of structural transformation are important for countries trying to overcome the gap. The theory of endogenous growth focuses on the internal sources of development. Its founders, Paul Romer and Robert E. Lucas, consider scientific and technological progress to be the main driver of growth, which is shaped by investments in physical and human capital, development of knowledge and research. Positive dynamics of labour productivity and production are achieved through: training in practice and dissemination of knowledge; the accumulation of human capital by increasing the share of the population with higher education; development of research, creation of new technologies and introduction of innovations. The classical model of economic growth by P. Romer (1990), includes the research sector and the production of intermediate capital goods (means of production) that provide technological progress [8]. In the research sector, the use of existing human capital generates new knowledge that materializes in the form of new technologies. The increase in new knowledge depends on the number of employees in the research sector and the parameters of scientific productivity. The production of capital goods is a condition for the formation of production facilities of higher technological level and the spread of training in practice.

In another concept, economic growth is associated with *the structural transformation of an economy* that provides development or formation of those sectors that drive economic growth. This approach is substantiated in the studies of R. Hausman, D. Rodrick, and others. [4]. For sustainable growth, it is necessary to create the conditions for the development of modern high-tech industries that have significant export potential, that is, to provide progressive structural dynamics. This is especially important for developing countries that have not reached the stage of high-tech

development of leading industries. When progressive industries decline, negative structural dynamics occur in favour of smaller technology sectors, which impede economic growth.

The analysis shows that in Ukraine low economic growth rates are due to both negative dynamics of endogenous factors and deterioration of the structure of the economy. Endogenous factors are formed through investment, education, science and innovation. Capital investments (Table 1) at current prices increased until 2012. In 2013-2014 their volume decreased sharply. The

positive dynamics recovered in 2016, and in 2018 they exceeded 2010 by 3 times. However, in the unchanged prices of 2010 there was a significant fall of this indicator, which in 2016 amounted to 80.3% and only in 2018 its volume exceeded the level of 2010. The share of investment in GDP declined and in 2014 had a very low level (13.8%). There has been a significant decrease in foreign direct investment, which is a real source not only of the necessary funds for economic development, but also of modern technologies and progressive forms of business organization.

Table 1

Dynamics of Capital and Foreign Direct Investments in Ukraine during 2010 - 2018

Indicators	2010	2012	2014	2016	2018
Capital investments in real prices, millions of UAHR	189061	293692	219420	359216	578726
Capital investments in % to GDP	17,5	20,9	13,8	15,1	16,3
Capital investments in prices of 2010, in millions of UAHR	189061	238000	151953	151760	200251
Direct foreign investments, in millions of US Dollars	38993	48198	53704	32123	31606

Source: formed on the basis of [1]

To make investments to be the source of growth, it is necessary to direct them not only to the replacement of worn-out means of production, but also to their growth, which ensures the development of the material and technical base of enterprises and industries. The analysis of the dynamics of fixed assets of Ukraine in 2016 showed that the funds were put into effect for 202120 million UAHR, and dropped to the amount of 271874 million UAHR. [11], therefore, no simple reproduction of the means of production took place. This is due to the fact that out of the total investment in 2016, 227336 million UAHR were directed into engineering structures, machinery and vehicles. Investment deficit makes it impossible to modernize production and create new high-tech jobs. This limits the ability to expand training on own investment, leading to a decrease in demand for highly skilled labour, and therefore to inefficient use of available human capital.

The endogenous growth model is based on the growing use of human capital. Today this factor is not fully realised in Ukraine. The level of economic activity of the population has decreased: from 64.9% in 2013 to 62.7% in 2018 [2]. The number of employed population decreases, which increased until 2013; in 2014-2015 it decreased sharply due to the occupation of Crimea and parts of Donbas region. In the following years the number of employees decreased and only in 2018 this dynamics was changed (Table 2).

Table 2

Dynamics of Employed Researchers and Population with Higher Education in 2010 - 2018

Indicators	2010	2013	2014	2017	2018
Employed population at the age of 15-70, in thousands of people	19180,2	19314,2	18073,3	16156,4	16360,9
Including those with full higher education, in thousands of people – in % to the employed	5017,1	5401,8	5661,7	5332,6	5524,0
Share of employed people with full, basic and undergraduate education, in %	26,2	28,1	31,3	33,0	33,8
Share of employed people with full, basic and undergraduate education, in %	47,8	49,7	52,7	53,4	54,0

Formed on the basis of [2]

On the positive side, the share of people with higher education is growing in the employment structure. If in 2010 there were almost 48% of such employees, then in 2018 there were 54% of them. The number of employees with higher education is growing more dynamically. The quality of the workforce is increasing, but the national economy does not ensure its efficient use. Thus, there is a growing proportion of employed people who work in low-skilled jobs in the economy of Ukraine. The structure of people employed by occupational groups in 2018 was the following: the largest share was made by people employed in the simplest professions – 19.1%, which exceeded the share of professionals (18.4%). In 2014 the share of such employees was smaller. In recent years, the number of employees in all occupational groups has declined, with the exception of the simplest professions and employees in the trade and services sectors, who also have low levels of skills. In 2018, there were 4,845,000 professionals and specialists and 5,871,000 trade, service and basic occupation employees [2]. In the conditions of the shortage of jobs and low remuneration, the population with a high level of professional training is forced to seek employment in other countries. Labour migration has become widespread and leads to loss of human potential of the state.

Incomplete use of human capital is proved by the decrease in employment in the research sphere, where the number of researchers decreased by almost 36% (Table 3). However, they are the specialists who provide the development of the economy on an innovative basis. Although the volume of completed scientific and technical works has increased at actual prices, this has not affected the innovation activity of enterprises. Their share in 2013-2018 remains low and equals about 16%. In 2018 there were 777 innovative enterprises in the industry [9], almost twice fewer than in 2010.

Table 3

Dynamics of R&D Indicators and Innovation Activity of Ukrainian Enterprises in 2010 - 2018

Indicators	2010	2013	2014	2017	2018
Number of specialists that do scientific and technical research, thousands of people	89,6	77,9	69,4	59,4	57,6
The amount of completed scientific and technical works, at real prices, millions UAhr	9867	11781	10951	13379	16774
Share of innovatively active industrial enterprises, %	13,8	16,8	16,1	16,2	16,4

Formed on the basis of [9]

The low level of innovative development of the industrial enterprises affected the level of their competitiveness and production volumes. A significant fall in industrial production had a negative impact on the structure of economic activities, an increase in the share in the gross value added (GVA) of low-tech sectors (Table 4), especially in the agricultural sector from 8,4% in 2010 to 14,2% in 2015, in 2017 it exceeded 12%. The share of industry decreased. In 2016 it was 20.5%. Its growth in 2017 is a positive phenomenon, but the 2010 figure has not been restored. The structure of industries is dominated by low-tech activities that cannot provide dynamic economic development.

Table 4

*Structure of gross value added of Ukraine in 2010-2017, % **

	2010	2013	2014	2015	2016	2017
Agriculture, forestry and fishery	8,4	10,0	11,7	14,2	12,2	12,1
Mining industry	6,7	6,3	5,7	5,6	5,5	7,0
Processing industry	15,0	12,8	14,0	14,0	11,8	14,3
Supply of energy, gas, steam and conditioned air	3,2	3,3	3,2	3,2	2,8	3,4
Water supply, drainage, processing of waste	0,8	0,5	0,5	0,5	0,4	0,4
Industry as a whole	25,7	22,9	23,4	23,3	20,5	25,1
Construction	3,7	2,9	2,7	2,3	2,4	2,6
Sphere of services	62,2	64,2	62,2	60,2	64,9	60,2

Formed on the basis of [3]

Ukraine's economy has slowly grown since 2016, but this is mainly due to agriculture, construction and trade, and the contribution of industry to growth dynamics is negligible. It should be noted that the pace and structure of industrial development of Ukraine in the last five years has been significantly influenced by the loss of industrial potential of the Donbas region and Crimea. The industry is gradually recovering, but at a slow pace. Generally, industrial output grew by just 2% over the 2017, 2018 and nine months of 2019. However, a number of industries with the investment and innovative products had higher growth rates: production of railway locomotives increased by 2.8 times, metalworking machines and machines by 1.5 times, computers, electronic and optical products by 19%, major pharmaceuticals and medicine by 17% [5]. These areas of production can be the drivers of development and dynamic growth of Ukraine's economy. At the same time, there is a number of important industries for the technological development of the country, such as manufacturing of machinery and equipment, electrical equipment, vehicles which have a decline in production. The decline of many industries reduces the need for highly skilled labour and research, which negatively affects the formation of human capital.

Conclusions

The study showed that endogenous growth factors are poorly used in Ukraine, and there is a negative structural transformation that is holding back growth. The Government of Ukraine has identified the main objective for the next five years of economic growth by 40%. Achieving this goal requires the implementation of economic policies aimed at active use of modern growth factors by: forming a favourable investment climate for significant growth in the national and foreign investment; implementation of industrial policy aimed at modernization and development of industrial complex based on industry 4.0; creation of high-tech jobs in all spheres of economic activity, which will increase the demand for human capital; ensuring the development of educational and scientific spheres in the context of the needs of economic modernization; creation of decent working conditions and remuneration for the widespread reproduction of human capital.

A promising area of research for this issue is to look for growth factors that are specific to Ukraine and that can provide it with competitive advantages in the global economic growth race.

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