

# INTEGRAL IMPROVEMENT OF ECONOMIC SAFETY OF THE REGIONS

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## ABSTRACT

The article examines the nature of the economic security of the region, influencing factors and indicators of its assessment. The human development index is analyzed as an integral indicator of the economic security of the region.

## CCS CONCEPTS

• **economic security**; • **region**; • **competitiveness**; • **stable economic growth**; • **economic development**; • **human development index**;

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## 1 INTRODUCTION

In today's globalization, the imbalances in the socio-economic development of the Republic of Uzbekistan and its regions depend on a number of factors, their impact reflects in the gross regional product, budget and economic security of the regions. In this paper number of factors limiting the development of the Republic of Uzbekistan and its regions are identified, which determines the relevance of the study of economic security of the country and its regions.

In this regard, the need to address a number of social, economic and political threats to the national economy and its regions, in order to in-depth theoretical study of methods and tools to ensure economic security of the country and its regions and measures to prevent new threats in the socio-economic sphere special plan should be developed and implemented.

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## 2 LITERATURE REVIEW

Foreign scholars U. Albrect, A.Vesting, Dj.Gelbright, S.Gudwin, V.Kable, R.Keyli, G.Mauk, K. Merdyuk, H. Mall, L. Olvi, A. Pat-toks, T. Williams, L. Hoffman, F. Hampson, P. and Russian sci-entists Abalkin L.I, Bodrunov S.D., Menshikov, Yu.V. Yakovets, S.Yu. Glazev, M.A. Jironkin, O.Yu. Krasilnikov, Yu.V. Yaremenko and others have conducted research on economic security of the regions. Amongst the economists of our country H.P. Ab-ulkasimov, T.T.Jo'raev, T.S.Rasulev, A.A.Mamatov, Sh.X.Qobilov, Sh.A.Allayarov and B.O.Tursunov conducted detailed research on theoretical and methodological issues of ensuring economic secu-rity of the regions.

However, in the context of globalization, it is necessary to con-duct scientific research aimed at studying and assessing the im-pact of external and internal threats to the economic security of the national economy. These aspects determine the relevance and importance of the research topic and the basis for choosing the research topic.

The research methodology is based on the research work of Uzbek and foreign economists to ensure the economic security of the region. The study used scientific abstraction, dialectical research, induction and deduction, monographic observation, systematic and comparative analysis, expert evaluation, and economic statistical methods.

The economic security of the region is the current and future state of protection from external and internal threats due to a set of strategic measures for the continuous development of the region's economy and increase its competitiveness. The economic security of the regions considered at the following levels:

Local, legislative, environmental, resource, socio-economic and other impacts are studied;

Structurally, it is studied as a whole as a set of factors affecting economic security.

In his address to the Oliy Majlis on December 29, 2020, President of the Republic of Uzbekistan Shavkat Mirziyoyev said, "We all know that today the whole of humanity is experiencing a global catastrophe called the coronavirus pandemic. If we say that such a catastrophe has not happened on a global scale in the last hundred years, we are telling the same truth [1].

The concept of socio-economic development of the Republic of Uzbekistan until 2030 addresses the existing socio-economic problems, risks and threats that limit the sustainable development of the economy in the long run, as well as goals and priorities

**Table 1: Grouping of the regions of the Republic of Uzbekistan in terms of GDP per capita (compared to the national average in current prices in 2020) [6]**

Grouping of regions in terms of GDP per capita in relation to the Country level indicator 1-group.	Contribution of regions (%)		
	GDP per capita (%)	GDP (%)	Population (%)
Regions performing highest indicators (100%)	154,2	27,8	19,2
A) Navoi	181,8	5,3	2,9
B) Tashkent	173,2	13,1	7,6
D) Tashkent r.	107,8	9,4	8,7
2-group			
From 81 to 100%	90,7	5,2	5,7
A) Bukhara r.	90,7	5,2	5,7
3-group			
To 80%	65,6	48,4	75,1
A) Syrdarya	80,6	2,0	2,5
B) Kashkadrya	72,2	7,0	9,7
D) Andijan	72,2	6,7	9,2
E) Jizzakh	71,4	2,9	4,1
F) Khorezm	67,3	3,7	5,5
G) Samarkand	67,0	7,7	11,4
H) Karakalpakstan	61,8	3,5	5,6
I) Fergana	55,7	6,2	11,1
J) Surkhandarya	54,2	4,2	7,7
K) Namangan	53,8	4,5	8,3

set up for the transition from economic and social to sustainable development [2].

The new Strategy of Uzbekistan provides for sustainable economic development of regions, districts, cities and villages. For the development of the economy developing a comprehensive and balanced socio-economic development of regions, districts and cities, effective and optimal use of their potential is necessary [3].

### 3 METHODOLOGY AND RESULTS

Threats to economic security arise when conditions arise that hinder the sustainable growth of the national economy and its regions. To assess the economic security of the region, it is necessary to identify the problems of the regions, as well as under crisis regions. To do this, it is necessary to determine the stability indicators of the regions. For a comprehensive assessment of the development of regions, a method of multidimensional comparative analysis can be used, using which any region is studied on the basis of a set of indicators written in the form of a matrix (a u). Then the best values of the indicators are selected and the best indicator matrix (a i y max) is created. Then the monthly indicators are divided by the month max:

$$X_{ir} = \frac{a_{ij}}{a_{imax}} \quad (1)$$

Ratings of each region estimated by using following formula:

$$R_i = VK_1 X_{11}^2 + K_2 X_2 + \cdot s + K_n X_n f \quad (2)$$

As a result of the calculation of the rating, the regions will be ranked among other regions. In foreign practice, the method of

adding the results of ranking regions is used, which primarily involves determining the level of the region for each indicator. The overall rating of the region is determined by the sum of all indicators. The region with the lowest score will have the highest rating [4].

The share of the region in the country's GDP is a key indicator of its role in the creation of this product, changes in the quality of its economic growth [5]. According to the changes in the quality of gross regional product and economic growth of the regions of the Republic of Uzbekistan, ie GDP per capita can be divided into 3 groups. 81-100%, the third group includes regions with a share of less than 80%.

The regions of the Republic of Uzbekistan differ sharply in the levels of economic development. There is a sharp difference in the quality of economic growth between the highest and lowest developed regions in terms of GDP per capita. In particular, in the first group of regions, this figure is 3.0 times higher than in the third group of regions.

The first group lives in the regions with the highest quality of economic growth, 19.3% of the population and 29.8% of GDP, the three groups and 74.9% of the population live in the provinces 46.3% of the country's GDP is produced. In the Republic of Uzbekistan, the main place of GDP production is occupied by seven regions. These are Tashkent city, Fergana, Tashkent, Bukhara, Kashkadarya, Samarkand and Andijan regions. In 2020, 56.7% of the country's GDP was produced in these regions.

Inequality in the socio-economic development of the regions of the Republic of Uzbekistan can be expressed by analyzing the

differences in their contribution to the gross domestic product of the republic. In 2020, the city of Tashkent made the largest contribution to the formation of GDP in the country with a share of 14.6%. Tashkent region is next with 9.8% and Samarkand region with 7.3%. The lowest share in the formation of the country's GDP is in Syrdarya (2.0%), Jizzakh (3.0%), Khorezm regions (3.7%) and the Republic of Karakalpakstan (3.7%).

These data show that the share of GDP in the formation of GDP is the lowest in the Republic of Karakalpakstan, Khorezm, Jizzakh and Syrdarya regions. This is due to the size of these regions, their GDP and the level of socio-economic development lagging behind other regions.

In 2020, the highest share of agriculture, forestry and fisheries in GDP is in Jizzakh region (56.8%), the highest share of industry is in Navoi region (66.8%), the highest share of construction and services is in Tashkent (respectively), 10.2% and 53.3%, respectively). The lowest share of agriculture, forestry and fisheries in GDP is in Navoi region (16.7%), the lowest share of industry is in Surkhondaryo region (7.9%), the lowest share of construction and services is in Navoi region (respectively, 4, 5% and 12.0%, respectively).

According to the results of the analysis, the reasons for the sharp differences in the level of changes in the quality of gross regional product are:

- different levels of industrial development in the regions;
- diversity of the network structure depending on the geographical location, natural climate and other features of the region;
- differences in the level of employment in the economy relative to the total population;
- differences in the quality of labor potential of the regions and the efficiency of its use;
- The main reason for the sharp differences in the level of changes in the quality of gross regional product of the regions is that they differ in the level of industrial development [7].

In the study, it is important to assess the impact of disparities in the level of socio-economic development of the region on its economic security. In this regard, one of the important integral indicators of assessing the competitiveness, socio-economic development and economic security of the regions is the Human Development Index (HDI), developed by UN experts, which characterizes the living standards and quality of life. The development of the ITI indicator on a single methodology allows to assess its dynamics not only in individual countries but also in the regions of the country, living standards, regional competitiveness, level of socio-economic development and economic security. A country's Human Development Index (HDI) depends on three indicators:

#### 1. Life expectancy index

$$\left( LEI = \frac{LE - 20}{85 - 20} \right) \quad (3)$$

#### 2. Literacy index

$$EI = \frac{MYSI + EYSI}{2} \quad (4)$$

#### 3. Average length of literacy index

$$\left( MYSI = \frac{MYS}{15} \right) \quad (5)$$

#### 4. Expected length of literacy index

$$EYSI = \frac{EYS}{18} \quad (6)$$

3. Income index (II) =  $\frac{\ln(GNIpc) - \ln(100)}{\ln(75000) - \ln(100)}$  HDI is equal to sum of average geometrics of aforementioned indexes:

$$HDI = \sqrt[3]{LEI * EI * II} \quad (7)$$

LE — Life expectancy

EI — Education index

EEY — expected period of educating population

$$GNI - - - \text{Gross national income per person (USD)} \quad (8)$$

life expectancy and 25 years as the minimum life expectancy. These three indices are standardized in the form of numerical values from 0 to 1, the average of which is an aggregate indicator of the human development index in the range from 0 to 1. Accordingly, the higher the numerical value of the human development index, the higher the level of human development [8].

We make a comparative analysis of the Human Development Index by regions of the Republic of Uzbekistan. The following table shows the main socio-economic characteristics of living standards in the regions of the Republic of Uzbekistan in 2020.

The table shows that the largest GDP per capita increased in Navoi region

- from 3058.7 dollars per capita in 2010 to 4770.5 dollars by 2020, and Tashkent

- from 2802.5 dollars to 3584.24 dollars. The reason for the predominance of Navoi region over Tashkent is the population of Navoi region, which is 2.9% of the population, while Tashkent city is 7.6%.

The smallest gross regional product per capita in Namangan region increased from \$ 884.6 per capita in 2010 to \$ 947.75 by 2020 and in Surkhondaryo region from \$ 974.1 to \$ 905.76, respectively. The reason why these regions are below the national average is the population. Namangan region has the largest population of 8.3% of the country's population in 2020.

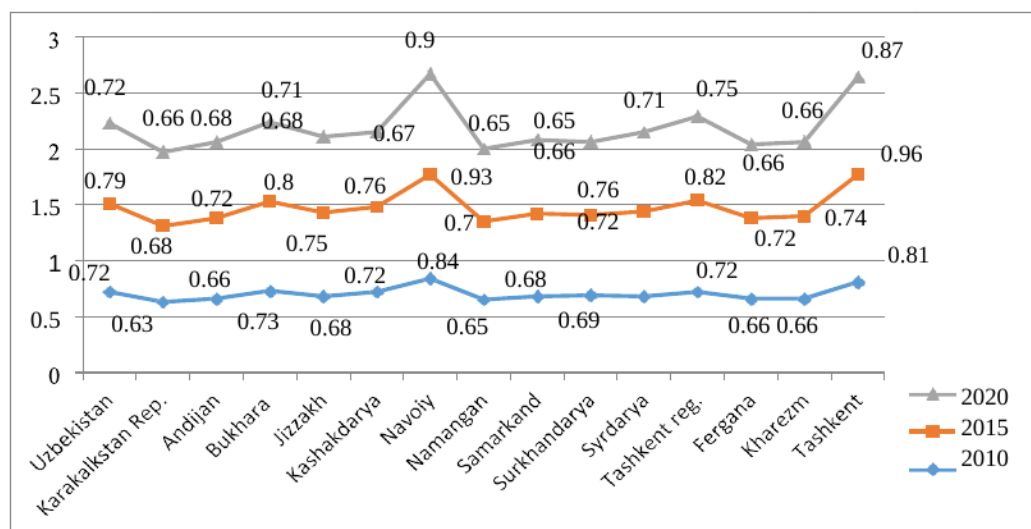
The highest life expectancy is 74.6 years in Fergana region. The lowest life expectancy is 72.1 years for the Syrdarya region. These three indices are standardized in the form of numerical values from 0 to 1, the average of which is a cumulative indicator of the human development index in the range from 0 to 1. Accordingly, the higher the numerical value of the index, the higher the human development index and the level of economic security of the region.

In a country where the Human Development Index is zero and the region's economic security is at its lowest, the average life expectancy should be 25 years, GDP per capita should be \$ 100, and the population should be 100% illiterate. A country with a Human Development Index of less than 0.5 is considered to have a "low level of development", a country with a Human Development Index of less than 0.5 is considered to have a "high level of development" and a region with a high level of economic security is considered to have a maximum level of 0.5 to 0.8 corresponds to "average development".

According to the data, the largest indicator of the Human Development Index in the period under review is Navoi, Tashkent. The main factor of this is the location of the main industrial enterprises

**Table 2: Living standards of the population of the Republic of Uzbekistan (by regions for 2010-2020) [9]**

YearsRegions	2010			2015			2020		
	GDP per capita, \$	The averag e life expect ancy (years)	Liter acy rate	GDP per capita, \$	The averag e life expect ancy (years)	Liter acy rate	GDP per capita, \$	The averag e life expect ancy (years)	Liter acy rate
Uzbekistan	1685,2	73,0	99,84	2516,8	73,6	99,98	1697,39	73,4	99,99
Karakalpakstan	803,05	70,4	99,83	1342,5	72,6	99,97	1107,54	72,5	99,98
Andijan	1050,4	72,0	99,84	1716,9	72,3	99,98	1176,61	73,3	99,99
Bukhara	1720,9	73,7	99,85	2444,9	75,0	100	1570,75	74,0	100
Jizzakh	1183,2	75,8	99,83	1896,3	75,9	99,97	1253,36	74,4	99,98
Kashkadarya	1586,2	74,8	99,83	2051,2	74,8	99,96	1049,91	74,4	99,97
Navoiy	3058,7	73,0	99,84	4076,4	74,3	99,99	4770,5	73,7	99,99
Namangan	884,6	72,9	99,85	1494,1	73,1	99,97	947,75	73,4	99,98
Samarkand	1256,8	72,7	99,86	1856,2	73,7	99,98	1080,42	73,4	99,99
Surkhandarya	974,1	74,3	99,82	1658,5	74,4	99,97	905,76	73,3	99,97
Syrdarya	1428,0	70,1	99,83	2305,1	70,7	99,97	1453,69	72,1	99,98
Tashkent reg.	1779,3	71,7	99,86	2831,5	72,7	100	2108,47	72,4	100
Fergana	1048,0	72,8	99,84	1673,6	73,8	99,98	958,0	74,5	99,98
Khorezm	1113,8	72,6	99,83	1837,8	72,9	99,99	1108,66	72,2	99,99
Tashkent	2802,5	72,1	99,88	4458,9	73,7	100	3584,24	72,4	100

**Figure 1: Changes in the Human Development Index in the regions of the Republic of Uzbekistan in 2010-2020**

of the Republic in these regions, as a result of which the main part of the GDP of these regions is produced in Navoi region by 5.3% and Tashkent by 9.4%.

The data shown in the figure show that in 2020 in the Republic and its regions can be observed a downward trend in the human development index. The main reason for this is the coronavirus pandemic in Uzbekistan and the global crisis. the volume of directed gross investment decreased by 12.8% [10].

During the period under review, a number of negative trends in the national economy: production of goods and services by industry - by 6.7%, construction - by 16.4%, trade - by 9.2%, services - by 4.6%. decreased by -3.9% in freight [11].

The continuation of the coronavirus pandemic in the world and in Uzbekistan throughout 2020 is also reflected in the results of socio-economic development of Uzbekistan in 2020. Compared to 2019, the GDP growth rate fell from 105.8% to 101.6%. This, in turn,

led to a decrease in GDP growth per capita to -0.3% in the context of annual population growth of 101.6%.

#### 4 CONCLUSION

1. The main reason for the sharp differences in the level of changes in the quality of gross regional product of the regions is that they differ in the level of industrial development.

2. While changes in the quality of gross regional product in 2020 will be relatively insignificant in regions with low levels of industrial production per capita, there is a tendency to shift to groups with a high level of industrial development.

3. In 2020, the share of industrialized regions in GDP decreased compared to 2005. It should also be noted here that the reduction of differences in the levels of industrial development of individual regions can be achieved only through the rational use of their existing production resources and the expansion of production capacity.

4. The Human Development Index for Uzbekistan is 0.72, which corresponds to the average level of development in general.

5. The highest indicators of the Human Development Index and, accordingly, the standard of living are typical of Navoi region (0.90) and the city of Tashkent (0.89), which are areas with the highest level of development and the highest level of economic security in the region. is calculated. By all of the above, it is significantly higher than the national average.

6. The lowest value of the Human Development Index is typical for Surkhondaryo (0.65), Khorezm (0.66) and Namangan (0.66) regions of the country, which correspond to the average level of development and the lowest level of economic security in the region. . In all other regions of the country there are untapped opportunities to improve the living standards of the population.

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