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Features of Formation of the National Income

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Abstract. Significant indicator of economic progress of the country is the specific income per capita. Experts consider such indicator important from the point of view of forecasting of economic development. Influence of various factors is presented in references, but influence of psychological indicators, in particular, influence of personal characteristics of the population isn't considered. On material of the population of various countries of the world features of formation of the national specific income per capita are considered. The assumption that a measure of professional qualities is linear superposition of level of competence, creative abilities and specific national wealth is made. For simplification of the analysis the sum of these indicators were used as a superposition prototype to a first approximation. It is established that the sum of competence-based indicators, factors of creative opportunities and an indicator of national wealth per capita forms a specialized indicator. It is revealed that this indicator is connected with specific GNP per capita on dependence with high coefficient of correlation. Dependence linearization increases this coefficient to 0.949. It is established that in process of the movement in a zone of the countries with more considerable development of economy, influence of this indicator increases as dependence in an initial look has square character.

Keywords. Specific GNP per capita, Competence, Creative abilities, Specific national wealth per capita.

JEL. A10, C00, E25, O15.

1. Introduction

Among the indicators of economic development of the country has obvious merits such a simple indicator as level of the specific income per capita. Specialists not without reason consider it one of the main factors determining the many economic and social phenomena and processes. According to a number of experts, the specific income depends on the most different factors.

From that, how precisely the key factors were correctly defined, also the correctness of the analysis which is carried out by means of this indicator depends. Particularly important it may be the right choice during prediction.

2. Literature review

Mitsek and Mitsek (2009) believe that on the specific per capita income across regions influenced capital-labor productivity, capital productivity, the share of employment in the total population, the share of exports, the share of agriculture, the share of manufacturing industries, the share of extractive industries, the share of transport, the share of the construction industry, the share of trade, etc. This

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approach is purely phenomenological and doesn't lead to disclosure of internal driving factors.

Daude, and Fernández-Arias (2010) show that productivity would entail use of accumulated physical and human capital stocks. These researchers partially mentioned essence of a question, but not fully.

The same can be attributed to the work of Berger (1997) who emphasized, that among these factors can be the higher education levels, which are measured by the percentages of the population over age 25 that are high school and college graduates.

In order to understand the impact of various parameters on the studied parameters, it is necessary to determine how it affects the personality characteristics of the population. This article is devoted to this question. Sometimes believe that personal characteristics can be estimated using the competency approach (Krasil'nikova, 2012).

This view on the environment requires the effective use of skills, the acquisition of knowledge, skills and abilities to develop cooperation with colleagues and professional interpersonal environment, integrated combination of knowledge, skills and attitudes, the ability to do anything effectively with a high degree of self-regulation, self-reflection, self-assessment - possession of fast, flexible and adaptive response. However, competence-based approach suffers from narrow-mindedness as reduces a creative component of activity.

3. Materials and methods

As object of research in this work representatives of the population of various countries of the world concerning whom necessary data are available are elected. Research method is to collect data from the literature, "Internet", in particular, the search engines Yandex, Yahoo, Google and Mail. For data obtaining were used sources of Klenowa (2006), Leonidova (2012), Website of World Intellectual Property Organization (2012), Geographical reference book «About the countries» (2015), The World Bank (2013), The World Bank (2006), Bezglasnaya (2015).

4. Theory

It is supposed that a measure of professional qualities is linear superposition of level of competence, creative abilities and specific national wealth

$$F = a_1 K + a_2 T + a_3 B \quad (1)$$

where a_1, a_2, a_3 - dimensional coefficients,

K - level of competence,

T - the level of implementation of creative possibilities,

B - specific level of national wealth per capita.

It is possible to make a matrix with measurements of F (K, T, N) and with number of the persons holding a certain position in society. Convolution of this matrix with certain coefficients has the form $\sum F_i \alpha_i$, where α_i - the number of people in this category. This convolution with a certain coefficient is equal to return of this society.

$$\sum F_i \alpha_i = \beta_i V_i N \quad (2)$$

where V_i - GNP per capita,

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N-population of the country,
 β_i – dimensional coefficient.

Quantities in the formula (2) can't always be determined, therefore, for simplicity we can use a simplified version of the formula $K + T + B$. This sum can be collated with the real value of GNP per capita for various countries.

5. Results

Results of comparison are presented in Fig. 1. The correlation coefficient of 0.917 is essential for all levels of significance greater than 0.01. After linearization the coefficient of correlation reaches 0.949. The regression equation is of the form $y = 0.93x^2 + 0.21x$.

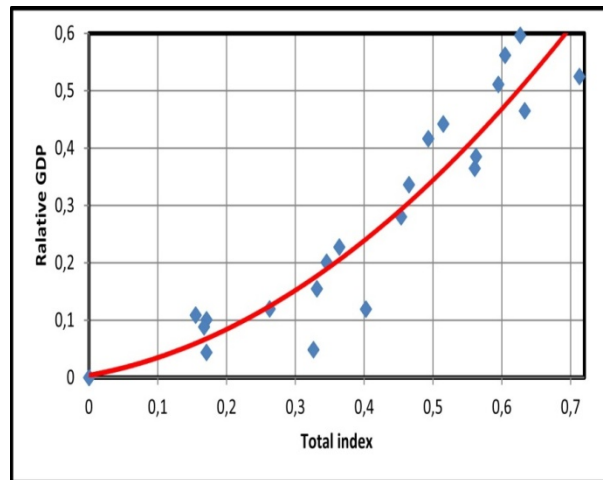


Figure 1. Interrelation of specific GNP and total indicator

6. Discussion and Conclusion

Consideration of the schedule of dependence in Fig. 1 shows, that it has square character that is the growth rate of specific GDP per capita increasing with the indicator. It indicates growth of influence of an indicator, that is, mainly psychological factors for the countries having higher level of economic development.

Existence of high coefficient of correlation indicates obvious existence of dependence of specific GNP per capita from the total indicator, which include competence-based factors, factors of creative opportunities and level of national wealth per capita.

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