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SYSTEM ANALYSIS OF THE ECONOMICS OF DEVELOPING COUNTRIES OF THE WORLD

BAIZAKOV SAILAU (ORCID 0000-0002-7199-1281)¹,
BAIZAKOV NAURYZ¹

¹Institute of Mathematics and Mathematical Modelling

Abstract. The application of the culturological approach allowed building a qualitative theory of money, which ensures the innovative development of the economies of the countries of the world. Thanks to the model of social and political order, it becomes possible to correctly assess the indicators of the quality of national money. This opens the way for further development of methods for analyzing regulatory policy.

Keywords: GDP, money, model, modeling, analysis, situation assessment.

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1. The structure of the presented report consists of 7 sections:

- a model of analysis and assessment of the macroeconomic situation in the country;
- a model for analyzing and assessing the situation in microeconomic processes;
- a model for analyzing and assessing the situation in the management economy sector;
- an algorithm for analyzing the innovativeness of projects (and operational plans) in the real sector and estimating the cost effectiveness of their implementation based on multipliers;
- an algorithm for analyzing the innovativeness of projects (and operational plans) in the financial sector and assessing the cost-effectiveness of their implementation;
- an algorithm for analyzing the equilibrium in commodity and financial markets to manage the balance of the growth of the country's economy.

The concept of the report is aimed at building a system of models of digitalization processes in Kazakhstan's economy and

determining the appropriate system of algorithmic task operators for conducting mutually agreed calculations for assessing the efficiency of the country's economy in terms of its regions and activities. Each section of the concept is represented by integrated indicators of macro-and microeconomics.

2. It is interesting that the ratios of well-known macroeconomic indicators, like nominal GDP and intermediate consumption of the national accounts system, or the ratio of normal profits and wages express production-economic relations. In the Western economic school, more oriented towards the theoretical legacy of Adam Smith, rather than Karl Marx, very little attention is paid to researching and solving the problems of developing production-economic relations, to assessing their compliance with the level of development of productive forces of labor and capital.

More recently, the 1979 Nobel Prize in economics, Theodor Schulz, showed that knowledge not only increases individual productivity, but also the economic value of working time, which is a hallmark of modern economic growth. It is the rise in the price of working time that becomes the most important criterion for the sustainable development of the economy. With a simultaneous increase in the price of working time and normal profit, as the main representative of the financial sector of the economy, ensuring that the previous level of

profitability of the business is maintained, all other conditions being the same.

Raising the educational level of not only workers, but also the entrepreneurs themselves, as well as government employees, is becoming the same effect of investments in science and education, like scientific and technological progress and higher technology.

It is investments in human development, as the main component of the development of the country's productive forces that express progress in the development of the country's scientific and technological, socio-economic and socio-political potentials, and trends in their movement. At the same time, the report contains three calculated indicators, which are called "multipliers of scientific and technological, socio-economic and socio-political progress, respectively". They are the new carriers of three different types of progress, expressing a system of relations between:

- the natural environment and representatives of the real sector and SMEs, in the structure of full costs (indicated in the SNA system, issue (X)), thereby simultaneously evaluating the productivity of intermediate consumption in the country and the efficiency of the distribution of the country's environmental and economic resources between regions and sectors of the real economy, respectively on the production of GRP and GVA;

- a fund for labor compensation and gross profit in the structure, respectively, of nominal GDP, GRP, GVA (NGDP), thereby simultaneously evaluating the productivity of savings (gross capital formation) in the country and the efficiency of the distribution of the country's investment resources among regions and sectors of the real economy;

- average annual remuneration and used for the production and consumption of time spent by employed people in the economy.

On their basis, situational models of the multipliers of the scientific and technological potential (c), socio-economic progress (q) and socio-political progress ($c * q$) are built. Only at first glance, these multipliers are well-known ratios, and in fact they express the levels of knowledge and culture of busy

people in the economy among themselves and with the natural environment.

3. With the development of their knowledge and the growth of the culture of production, distribution, exchange and consumption, the dynamics of all "these well-known relationships" will grow. Thus, the dynamics of the "multiplier of the scientific and technological potential", which statically expresses the share of nominal GDP in the total output, and in dynamics represents the productivity function of the local ecological and economic resources used in production.

Similarly, the "socio-economic progress multiplier" is defined, which in the short-term expresses the share of labor remuneration in GDP, and in the long-term, its dynamics represent the productivity function of investment resources used in the economy and thus allows to evaluate the level of project innovativeness.

The "multiplier of sociopolitical progress" is the product of the above two multipliers and determines their labor equivalent in the working time of employed people in the economy. Simply put, as a result of the work of this multiplier, the price of one hour of work for busy people in the country's economy is established. Thus, this multiplier allows to solve the problem posed by Michael Baye, in his monograph "Managerial Economics and Business Strategy" (1999), which is devoted to modeling the problems of human capital development.¹

4. To solve the problem of M. Baye, for each progress multiplier, its own situational model for analyzing and evaluating the innovativeness and effectiveness of the project is built.

4.1. According to the situational model of scientific and technological progress, an increase in the share of GDP in output means an increase in the efficiency of the real sector, which uses resources in smaller quantities or more efficiently in the production of goods and services. This, in turn, implies an increase in revenues, which should then be effectively distributed in order for human

¹ Baye M.R. Management economics and business strategy: a textbook for universities / Per. from English by ed. A.M. Nikitin / UNITI 1999, p.129

capital to multiply, which, in turn, will be further directed to improving the efficiency of the real sector of the economy. That is, it increases the share of GDP in the issue of X. The proposed model of economic relations between agents of production and consumption of environmental and economic resources will be focused on human development, in the international scientific community, is absent.

4.2. In the model of socio-economic progress or the model of analysis and situation in microeconomic processes, a function is described that calculates the multiplier of socio-economic progress and their laws of its movement. Specific calculations will describe the state of this parameter in the historical period of the analysis.

4.3. In the situational model of socio-political progress, or the model for analyzing and assessing the situation in the sector of managerial economics, the change in the multiplier of socio-political progress is described. The concept states that the nature of the change of this multiplier is the basis for the relevant state policy, since its

change expresses the price of one unit of the total amount of working time fund used in the economy. This is generally known and logical, but its establishment determines the monitoring and evaluation of the entire process of development of the national economy of the country.

5. The final part of the report outlines the algorithm for analyzing the innovativeness of projects (and operational plans) in the real and financial sectors and evaluating the cost effectiveness of their implementation and the algorithm for analyzing the equilibrium in product and final markets to manage the balance of economic growth based on the above three multipliers. This part consists of the algorithm for calculating the analysis of innovativeness of projects in two ways, and will be presented in tabular form with indicators for the base year 2016 and the calculated year 2028. On the basis of these two options, the advantages of the principles of the macroeconomic approach will be analyzed in comparison with the principles of the work of the direct-costing system for analyzing innovative projects.

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