

EMERGENCE AND DEVELOPMENT OF INNOVATIVE ECONOMY

Abstract: This article discusses the essence, emergence, and stages of development of an innovative economy.

Key words: economics, innovation, development, economic indicators, innovative economy

An innovative economy (knowledge economy, intelligent economy) is a type of economy based on the flow of innovations, on constant technological improvement, on the production and export of high-tech products with very high added value and the technologies themselves. It is assumed that in this case, profit is mainly created by the intellect of innovators and scientists, the information sphere, and not material production (industrial economy) and not the concentration of finance (capital).

Some researchers (E. Toffler, F. Fukuyama, D. Bell, J. Naisbitt, and others) believe that for most developed countries in the modern world, it is the innovative economy that provides the world economic superiority of the country that creates it.

At present, the USA, Germany, Japan, Australia, Canada, Sweden, Finland, Singapore, Israel and other countries are among the countries with an innovative economy and a developed venture business - the most important component of an innovative economy.

The theory of an innovative economy was created by the Austrian economist Josef Schumpeter at the beginning of the 20th century. His monograph *The Theory of Economic Development* was published in 1911 and reprinted in 1926 and 1934. The theory of economic development has been

constantly deepened by many eminent scientists, including the Nobel laureates in economics. Joseph Schumpeter was the first to introduce the distinction between economic growth and development, define innovation and classify them as follows:

This concept (innovation) includes five cases:

Creation of a new product that consumers are not yet familiar with, or a new product quality.

The creation of a new method of production that has not yet been tested in a given branch of industry, which is not at all necessarily based on a new scientific discovery and may consist in a new form of commercial circulation of goods.

The opening of a new market, that is, a market in which a given industry in a given country has not yet traded, whether or not that market has existed before.

The discovery of a new source of factors of production, again regardless of whether this source existed earlier or had to be created anew.

Creation of a new organization of the industry, for example, achieving a monopoly or eliminating a monopoly position.

By the middle of the 20th century, a separate vector of encouraging the innovative development of national economies began to form, including the development of specialized higher education, investments in the implementation of practical scientific achievements, the encouragement of creative ideas and entrepreneurs, etc. The perspective of this model was recognized not only in the developed countries of the West, but also in the communist bloc. In the USSR, the outstanding Russian economist and sociologist Nikolai Dmitrievich Kondratyev was one of the first to consider the key trends in the dynamics of macroeconomic development and, in particular, focused on the technological development of European countries.

In the second half of the 20th century, the leading countries of the world in terms of science and technology created a post-industrial society in which the sector of the innovative economy became dominant. And this economy is usually called innovative, since innovations were created and used in all sectors and spheres of the economy and life.

The main impetus for the mass generation of innovations and the creation of an innovative economy was the accumulated high-quality and creative human capital.

Bell's work on the postindustrial economy describes the following transformation, in which surplus profits are created not through production, but through the organization of new markets. The innovative economy is the next economic formation that is replacing the industrial economy.

The innovative economy first appeared in the United States. The well-known American futurist E. Toffler indicates its beginning - 1956 "the first symbolic indicator of the disappearance of the economy of the smoke pipes of the Second Wave and the birth of a new economy of the Third Wave: "white collars" and employees outnumbered factory workers with "blue collars" (E. Toffler "The third wave").

Substitution of capital occurs at every stage of the innovation process. The state finances basic science through scientific grants and investments in innovative infrastructure. This attracts all sorts of research teams that compete with each other to receive funding for all kinds of research and development. The task of this stage is to get a surplus of innovative ideas, realizing that most of them will not be crowned with success, but this allows creating conditions for capital replacement. The patents are acquired by private firms, whose shares are bought by investors in the hope of generating super profits. Thus, the innovative economy receives the next inflow of financing not at the expense of the state, but at the expense of private investors.

Once development reaches the next level, innovative companies grow to the point where they become interesting to larger corporations, innovation and venture funds and other organizations. Thus, even before the stage of bringing future developments to prototypes, the market is warming up, foreign investors and manufacturing companies are beginning to be attracted, buying developments, on the basis of which they can launch technological innovations. For example, Intel Corporation, announcing that by 2015 it will create a computer based on nanotechnology, is already ensuring the growth of its shares. At the end of the process, there is a substitution of capital by the end consumer of products, which contain a wide variety of developments, about which he knows only what is contained in their advertising. At the same time, no one finances the entire chain from a scientific idea to the final product.

Capital substitution occurs in several markets at the same time. At each subsequent stage of the innovation process, substitution occurs with increasing benefits. An innovative economy is based on the fact that still non-existent developments or ideas, most of which have no practical value in and of themselves, are already being laid in the basis of new markets for innovative products. Substitution of capital occurs several times.

In an innovative economy, the main process of capital replacement is the replacement of physical and natural capital in national wealth with human capital [4].

The national human capital of Russia lags behind in the growth of its value and quality from the leading countries of the world and competitors.

An innovative economy presupposes an excess of its products, services and agents at each stage of the innovation process: an excess of knowledge, ideas, developments, patents, high technologies, companies, entrepreneurs, scientists, infrastructures, etc. This redundancy initiates and sustains competition, which leads to an increase in the variety and quality of goods and services and to an increase in labor productivity due to the redundancy of

innovations and competition between them. Effective innovation systems in developed countries support competition. This is the main difference between a market economy with competitive markets in all sectors and spheres of the economy from a non-market economy with a low index of economic freedom. Competition is the engine for the development of personality, economy, society and human capital, as the main intensive factor of development.

An innovative market economy presupposes the simultaneous growth of various kinds of markets, which is ensured if there is a variety of redundancy, which can only be obtained with very high labor productivity and high technologies. Redundancy of scientific discoveries, inventions, ideas, professionals, etc. initiated by scientific and innovation systems, depending on the needs and demands of consumers. At the same time, the creativity of scientists and innovators, the competition between them encourage them to outstrip the growth of the supply of innovations over their demand from the economy and society. This is the manifestation of the advanced development of human capital and its leading role in the modern economy as a development factor.

Within the framework of the innovation system, together with science and the education system, there is a stimulation of the creation of various companies - developers of innovations. This is done through the construction of centers for the collective use of scientific equipment, technology parks, special tax zones, benefits and subsidies. At the same time, a surplus of financial institutions involved in the innovation economy should be created so that investors compete with each other for the purchase of shares in startups.

References:

1. *Голиченко О. Г.* Российская инновационная система: проблемы развития // ВЭ №12, 2004 — С. 16-35
2. *Дынкин А. А.* Контуры инновационного развития мировой экономики. Прогноз на 2000-2015 годы. - М.: Наука, 2000. - ISBN 5-02-008411. - 143 с.