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**STATE REGULATION OF SCIENTIFIC-TECHNICAL PROGRESS
AS A CONDITION OF INNOVATIVE DEVELOPMENT OF ECONOMY***ANTON PAVLOV*

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The article described the fundamentals of investment activities state regulation in the state. It defined the peculiarities of state regulation in different countries including England, Germany, etc. It presented the features of the scientific -technical achievements of progress in European countries. It is developed and presented comparative analysis of approaches to stimulate innovation activity here.

Currently, an important aspect of state regulation is the formation of a system of methods of stimulation of scientific and technical progress. This is due to the fact that in conditions of instability and uncertainty without strong centralized measures sharp decline in the effectiveness of the NTP is possible. A more detailed consideration of problems of strengthening of the intensive nature of production on the basis of progressive forms of NTP leads to the conclusion that in the new management system of NTP, which is formed during the transition to market should be included the following components: development of overall strategy R & d; funding for major programs; the system of scientific and technical information, benefits and subsidies, stimulating innovation activity of enterprises and their departments, and several others [1].

In developed countries, the state largely controls and determines the development of new forms of NTP, and its functions are not confined to the microeconomic market regulation, although it is a very important sphere of activity, for precisely controlling functions of the Central authorities, for example, protection of the industry from excessive monopolization, thereby promoting more rapid deployment of NTP. Particularly large role of the state in supporting and encouraging the development of R & d, and in recent years it is primarily manifested in the formation of the state scientific and technical policy based on priority economic development goals. It includes specific activities such as direct funding of R & d, development of infrastructure for this sector, use of contract system for the large scientific projects and programs implementation. But it seems that NTP has especially large opportunities in the regulatory system in the tax and depreciation implementation policy.

For example, in Japan industrial companies are engaged in investment in advanced equipment used for research and development of new technologies. Tax legislation provides the right to deduct from the profit tax 7% of the value of such investments [2]. In the UK 50 years ago a tax credit on investment was introduced, which is available to companies in the first year of machinery and equipment operation. In Ireland, the number of rebates received by the companies in the first year of the equipment operation reaches 100%. It should be said that tax incentives for investment in new productive assets in one form or another are used in almost all developed countries. However, in countries such as the UK, France, Germany tax credits and depreciation policy do not play a crucial role in promoting investment in certain industries. In the UK, for example, many companies can write off the full cost of technically advanced equipment in the first year of its operation.

We present a number of facts confirming the importance and role of state regulation of STP in developed capitalist countries, however it sometimes encountered the opinion in the special literature that the high rate of NTP in the advanced countries is due only to the laws of market economy (although, of course, a strong market is a prerequisite for the acceleration of NTP, but much in this is the role of the state). In most leading countries, the state covers about half of all R & d expenditure, while adhering to certain political, economic and scientific-technical priorities. So, in the US, where in the last decade the role of the private sector has been dramatically increased, the government finances almost half of the spending on science, more than 50% of R & d expenditure is borne by the state of the UK and France, more than 40% in Germany.

The government actively promotes the integrated automation implementation. So, the development, production and implementation of robotics in almost all developed countries is carried out with the active assistance of the state government incentive. Such activities are carried out in Japan, Germany, France, the UK, Canada and other countries. The development of robotics is erected in a rank of national priorities. Largely the same can be said about the state stimulation of biotechnologies development, space exploration development the development of semiconductor technology, nuclear energy and other critical areas of STP. Sources of funding for NTP in the developed capitalist countries are state budgets, state special funds, own industrial companies funds, private non-profit organizations and universities as well as foreign capital.

Economics

Public promotion of STP in developed countries is carried out in two main forms: direct government funding, encouraged by establishing favorable conditions for both private and public organizations that expand research activities, introducing progressive techniques and technology [3]. The first form to a greater extent has influence on accelerating scientific and technical progress in the field of research and development of the modern industries, the second – on the General level of technology. In all developed capitalist countries they apply both of them, and the ratio between them in different countries and at different stages of development can vary very much. For example, in Japan government encouragement of NTP in addition to the direct budget financing is also carried out using indirect methods of tax incentives and accelerated depreciation, and first major stimulator is the policy of tax exemptions.

It plays a much bigger role than accelerated depreciation. In some other countries, the ratio of different state promoters types may be different (the contrast with the specialization in certain types of scientific and technological activities is visible when comparing the structure of total expenditure for this purpose in Japan and France. In this regard only in French and Japanese models stimulate NTP).

Forms and methods of state stimulation and regulation process of intensification in the transition period can be very diverse. In this connection, it is useful to use modern foreign experience. This includes the following forms of stimulus funding from the budget of different levels, from special funds – innovation, investment, research; accelerated depreciation of fixed assets; preferential allocation of costs associated with the strengthening of the intensive nature of production the cost of production; differentiated credit and taxation. Moreover it is important to take into account income sources and expenditure profit areas. It is important to differentiate pricing and targeted subsidies for scientific-technical products; customs and currency privileges for export and import transactions, facilitate further intensification; provision of Advisory, information and other services of public organizations, etc.

REFERENCES

1. Гапоненко, А. Инновации и инновационная политика на этапе перехода к новому технологическому порядку / А. Гапоненко // Вопросы экономики. – 1997. – № 9. – С. 84–97.
2. Государственное финансирование научно-технического прогресса в развитых капиталистических странах / А.В. Жемчужников [и др.]. – М. : Финансы и статистика, 1989. – 239 с.
3. Павлов, К.В. Интенсификация экономики в условиях неопределенности рыночной среды / К.В. Павлов. – М. : Магистр, 2007. – 271 с.