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“The theory is dry, my friend…”

It is axiomatic that social and economic progress is impossible without obtaining new knowledge about the world around us, which is used to create new means of interaction between Man and Nature as well as forms and ways to improve life and activity of Man himself.

Moreover, knowledge that Man acquires and uses can be very different – from fundamental – essentially new knowledge related to understanding of laws and principles of the universe around us to applied knowledge aimed at solving certain problems and tasks of a different nature. At the same time, applied knowledge can be universal (i.e. used everywhere, regardless of the place and conditions of application) or local, closely related and conditioned by the place and specific conditions of its application.

An idea of the structure of knowledge, even if rather generalized, is extremely important for understanding how and to what extent it is possible to influence the processes of their generation and subsequent use.

Fundamental knowledge is extremely seldom added to, and rather quickly becomes the property of all humanity. The process of their renewal, as a rule, has an explosive (in a certain sense – revolutionary) nature and relies on the results of a long evolutionary process of accumulation and generalization of colossal volumes of knowledge in various fields of science and practice.

The country, which was on the “cutting edge” of this event, gets certain advantages in solving both scientific and technological and socio-economic problems (i.e. in the sphere of applied knowledge). However, the most important aspect of the process of acquiring knowledge of a fundamental nature is not so much this result, but rather the promotion of the overall scientific and technological level of the state. It is rather difficult to establish a correlation between the level of fundamental science and the dynamics of socio-economic development.

It is quite different in the case of applied science, both universal and local. The “connection” of fundamental knowledge with the specifics of solving certain applied problems and tasks has an enormous influence on the level and dynamics of socio-economic development. In modern society the given connection, as a whole, occurs occurs under the influence of both economic circumstances, and a set of political factors

and conditions. Economic circumstances are associated with the desire of economic agents to obtain due to the possession of unique knowledge and skills certain advantages (to extract additional profits). Political interests of the state and society, as a rule, proceed from their interest in a stable (progressive, sustainable) socio-economic development of the country and in increasing its sovereignty.

An important feature of applied knowledge (especially local knowledge) is that its generation does not require a fundamental novelty in understanding not only the fundamental laws of the surrounding world, but also widely known phenomena that characterize it. In fact, they are aimed at finding new forms of combining previously obtained knowledge and new conditions of interaction of economic agents with the environment. This process, called "innovation", is a distinctive feature of modern scientific and technological and socio-economic civilization. The state and dynamics of innovation processes directly affect the target settings of states and societies in most countries of the modern world.

But understanding the role and place of innovation alone is not enough. It is important to orient the development of domestic science in the directions that would provide the necessary (desired) socio-economic return and effective use of the funds allocated for these purposes. The solution of such "social choice problems" involves taking into account and correlating the domestic contribution to the development of science with the possibility of obtaining the same knowledge from abroad, comparing the effectiveness of this activity with the work of domestic researchers.

The increasing role of the state and society in solving such problems is promoted not only by the increasing turbulence of the modern world as a consequence of the shift of the geopolitical center to the South-East (and, recently, by the pandemic threat), but also by the increasing complexity of interaction between different fields of knowledge in the process of creating new innovative solutions and products. A consequence of the noted factors today is the increase of autarchy in the process of formation and implementation of scientific and technological policy (the paper by I. G. Dezhina and S. V. Egerev). A striking example is Russia, which is also subject to various instruments of sanctions.

Despite the increased attention to the issues of localization and development of domestic scientific and technical potential, nevertheless there is a tendency to compare the results obtained with the achievements of foreign colleagues. At the same time it must be

admitted that the attempt to apply to the evaluation of the quality of domestic research the scientometric approaches developed abroad in general contradicts not only the desire of the state to strengthen its influence on the processes of scientific and technical development, but also such a development in general (the paper by V. A. Kryukov and P. N. Teslia).

The result of the combination of two contradictory processes – autarky, on the one hand, and the desire to integrate into the global publication trends – on the other hand, was the actual failure of the Strategy for Innovative Development of the Russian Federation for 2011–2020. As it was noted at the conference "Evolution of academic economic science in Russia" held under the aegis of the RAS Department of Social Sciences on December 1–2, 2021, none of the Strategy's target indices was attained[11].

What is the reason? It seems that the main problem lies in the excessive abstractness of both the document itself and the proposed measures and approaches, their focus on generalized abstract indicators (including the scientometric ones). At a time when various "road maps" are adopted to solve the accumulated problems, the technical level of the most important sectors of the domestic economy stagnates at best.

Where is the way out? We see it not only and not so much in the return to a rigid directive control of the processes of creation and "introduction" of specific scientific and technological innovations and achievements as in the formation of the framework and conditions of interaction between the state (society) and business in solving the problems and tasks of innovation and technological development (on the basis, for example, of the communication approach – see the paper by A. G. Fonotov). This task is much more complex, intellectually capacious and mutually responsible than the development and promotion of "road maps" that are abstracted from reality.

What exactly are we talking about? The forms and frameworks of interaction. The state, for example, is responsible not so much for funding developments (this is not always necessary) as for the formation and maintenance of a certain communication environment, including the regulatory framework. Among the most important conditions in this case is the definition of the composition and forms of interaction

[1] Scientific Conference "The Evolution of Academic Economic Science in Russia" (scientificrussia.ru) Volchkova N. Cook's Dreams. Economists dream about changes in the management of science and country// "Poisk". № 49. 2021. 3 December.

of participants of innovative processes in a concrete branch or sphere of knowledge and competence.

The reference point for us can be, for example, the oil and gas sector of Norway, which has now become the world leader in technologies of work on the sea shelf and in creation of elements of innovative environment in this sphere. Its distinctive features are as follows: "compulsion" to participate in projects of several companies (irrespective of whether they are competitors or not); determination of the "vector" of scientific and technical development on the basis of discussions and multilateral consultations; availability of mutual obligations of all parties fixed in the contractual form[2]. Solving scientific and technological problems of the leading sector of the Norwegian economy had far-reaching consequences both for other sectors and industries, and for the sustainable dynamics of socio-economic development of the country as a whole.

Can we find a domestic framework and forms of interaction between the state, business and science, and the focus of the scientific and technical sphere on changing the current stagnant model of functioning? We believe that it is quite possible. However, achieving tangible results is only possible if we move away from an excessively generalized approach to solving urgent problems, relying on cooperation, mutual responsibility on a contractual basis, a clear understanding of scientific and technological goals and priorities in their very concrete form (based on solving practical problems rather than achieving values of generalized "target" indicators). A correctly formulated task is a half-solved task. We hope that this issue and our considerations will find support and understanding among interested colleagues and real participants of innovation processes.

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[2] Martin Sandbu The Iraqi who saved Norway from oil – AUGUST 29 2009 The Iraqi who saved Norway from oil | Financial Times (ft.com) Farouk Al-Kasim Managing petroleum resources: the "Norwegian model" in a broad perspective//OIES30. Oxford: Oxford Institute for Energy Studies. 2006. 264 p.