

# Main Tasks Of State Regulation In Innovation Processes

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**Abstract**—The article analyzes the main tasks of regulating innovation processes and explores the main tasks and methods of state regulation. The article also analyzes foreign experience and comments on the work done by the state to support innovation processes in developed countries.

**Keywords**—Capital, credit, government, industry, innovation, investment, research, tax.

## Introduction

It is well known that it is important to organize and manage innovation processes based on the stimulating and regulatory methods of the state. According to the analysis, the ways of the state's influence in the field of innovation are direct and indirect, it has the task of regulating and stimulating all innovation processes in the country. Their ratio is determined by the economic situation in the country and the concept of state regulation in this regard. The state takes a mainly financial approach to supporting innovation processes.

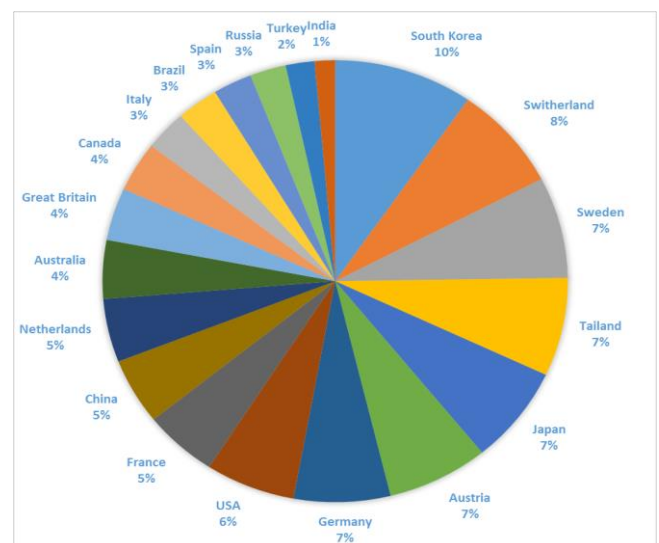


Direct methods of state regulation of innovation processes are mainly implemented in two forms. These are administrative and program-targeted forms.

In this case, government incentives are provided in the form of direct funding in accordance with special laws. It also includes government targeted programs to support innovation, i.e. contract financing through small research-intensive firms. It is known that in order to implement innovations in practice, a system of government contracts for the purchase of certain innovations (goods, technological processes, services) will be created and firms will be given credit

incentives to implement innovations. Contract financing is one of the elements of the current system of contractual relations - contracts between customers and tenants. The contract clearly states the terms of termination of work, the exact distribution of labor among the executors, the nature of the material reward. Mutual obligations and economic sanctions are strictly defined. Also, in the system of methods of direct influence of the state on innovation processes, measures to encourage cooperation of industrial enterprises (firms, corporations) and universities with industry in the field of innovation play an important role. The second part of these forms of cooperation is related to, on the one hand, the need to bring advanced scientific ideas to the stage of commercial implementation, and, on the other hand, the need to create conditions for industry interest in financing basic and exploration work. In this direction of the state innovation policy it is shown that its industrial innovation is focused on scientific innovations, which are often secondary in the implementation of the interests of industrial firms and enterprises that primarily solve production and commercial tasks.

Experience has shown that in countries leading the world economy, the bulk of investment in research (ITI) is made by industry (private investor). The public sector can spend on research, taking into account its specific characteristics.



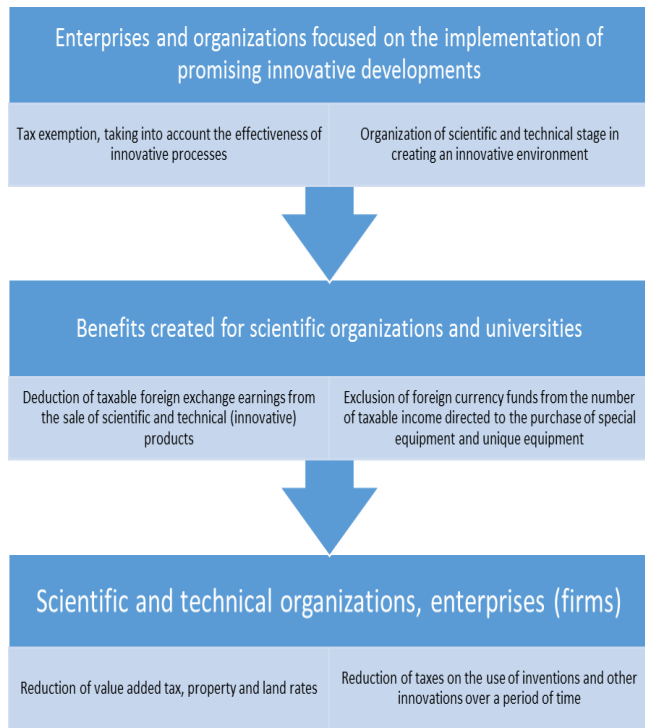
**Figure 1. Funding for research and development in the world (R&D) in 2019. (% of GDP)**

According to the analysis, in 2019, a large percentage of GDP allocated for research in GDP will go to South Korea, but the United States leads in the implementation of research. It should also be noted that another experience of developed countries is that they have established an integral link between industry and education.

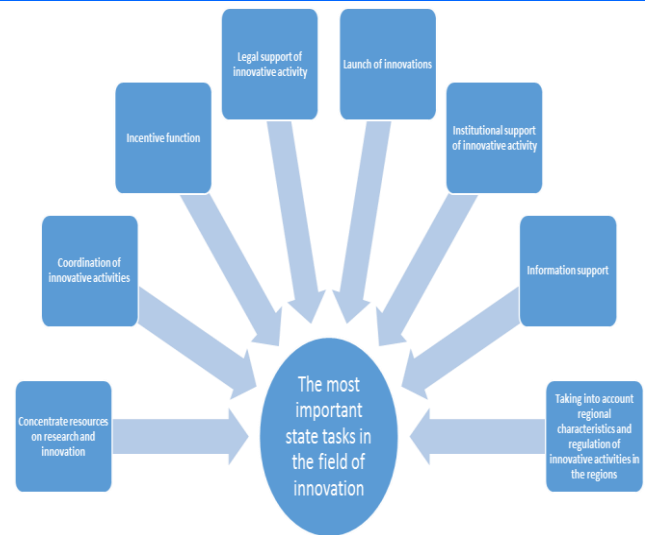
Indirect methods also play an important role in the state regulation of innovation processes. Indirect methods used in the implementation of state innovation policy, on the one hand, are aimed at stimulating innovation processes, on the other hand, creating a favorable (social, economic, psychological) climate for innovation activity. The composition and content of direct methods of state regulation of innovation processes are very diverse.

It is known that indirect methods should include tax benefits and deductions, credit benefits.

Tax benefits and deductions are as follows:



Direct measures of government regulation of innovations that are effective in certain circumstances may be, for example, credit incentives, i.e., lending to enterprises, joint stock companies and potential consumers of innovative developments and innovations (e.g. low interest rates). The main tasks of government agencies in the field of innovation are reflected in the tasks aimed at regulating all processes. The most important government tasks in the field of innovation are as follows.



**Figure 2. The most important state tasks in the field of innovation.**

**Concentrate resources on research and innovation.** This is achieved primarily through the redistribution of financial resources through the budget; secondly, at the expense of the formation of special funds. The state not only directly finances innovation processes from its own funds, but also helps to accumulate resources in private, joint stock, mixed, public, joint organizations, along with other countries. The state accumulates not only money, but also material, technical and intellectual resources.

**Incentive function.** The stimulating effect of the state on innovation is manifested through the promotion of competition, financial subsidies, incentives for innovative participants. The state may provide partial or full insurance of innovative risks. The state is able to punish business entities through the production of obsolete products, the introduction of sanctions for the use of obsolete technologies.

**Coordination of innovative activities.** To identify common strategic directions of innovation activity and their implementation, the state promotes cooperation and interaction of various structures implementing innovations. The state forms a single technological space, which ensures the harmony of innovations.

**Legal support of innovative activity.** The formation of a legal framework that ensures the sustainability and timely correction of innovative projects in accordance with real social and technological changes - the creation of an existing legal mechanism, a system of compliance with legal norms - all this provides legal protection of innovations. Second, the protection of intellectual and industrial property rights has a special place.

**Launch of innovations.** Basically, the profession starts with learning. The content of curricula at any level (Higher Education, Postgraduate) should be based on a combination and balance of basic,

universal and specialized knowledge, aimed at developing continuous self-education skills throughout all active work activities.

**Information support.** The state should promote the spread of innovations through the creation of scientific and innovative infrastructure. It can mediate between innovative entities, help find partners, and enter into state-guaranteed deals. Government agencies should provide legal, business, consulting services, and more to innovators.

**Institutional support of innovative activity.** Ensured through the establishment of government agencies and departments implementing R&D and the implementation of innovations in the public sector; these include defense, health, education, and more. The state also helps to *create* the most effective organizational structures in terms of production and implementation of innovations, such as large corporations, small businesses.

**Ensuring the social and economic direction of innovation.** The state, on the one hand, supports innovations that ensure social stability, achieves ecological balance, and, on the other hand, prevents and eliminates the negative effects associated with scientific and technological progress.

Ensuring the social status of innovative activity is achieved through the promotion of scientific and technological achievements and innovations, moral encouragement of participants in innovative activities, increasing their social security and others.

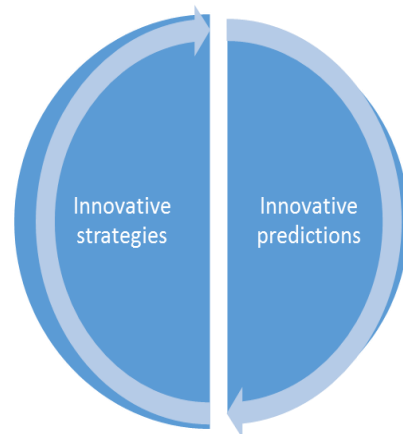
Taking into account regional specifics and regulating innovative activities in the regions. In order to fully realize the innovative resources of the regions, the state will implement various regional benefits, help to rationally deploy scientific, technical and innovation potential. This will help to equalize the conditions for the distribution of innovations in the country.

The state carries out all types of organizational, economic, financial, regulatory and legal regulation of innovative activities, a brief description of which is shown in Figure 3 below.

| organizational  | economic and financial  | legal and innovative   |
|---|---|--|
| <ul style="list-style-type: none"> <li>• development of innovative infrastructure;</li> <li>• ensuring the priority of innovations;</li> <li>• encouraging authors of innovations;</li> <li>• assistance in modernization;</li> <li>• development of integration processes;</li> <li>• development of international relations.</li> </ul> | <ul style="list-style-type: none"> <li>• development of innovative proposals;</li> <li>• growing demand for innovations;</li> <li>• development of competition in innovation;</li> <li>• business development;</li> <li>• employment;</li> <li>• development of high-tech leasing</li> <li>• increase investment efficiency.</li> </ul> | <ul style="list-style-type: none"> <li>• protection of the rights and interests of innovative entities</li> <li>• protection of the right to own, use and dispose of innovations;</li> <li>• protection of industrial and intellectual property;</li> <li>• development of contractual relations.</li> </ul> |

**Figure 3. Types and methods of state regulation of innovative activities**

Innovation strategy and innovation forecasting will also be seen as an important factor in government support for innovation processes.



**Innovation strategy** is the definition of priorities for innovation; the state encourages international scientific, technical and innovation cooperation, regulates the international aspects of innovation and uses the following tools:

- Socio-economic and scientific-technical forecasts of public policy in the field of finance, prices, money circulation, structural restructuring policy, etc.;
- Public administration, general economic and market regulators;
- regional and regional programs, models for optimizing economic processes;
- government orders and modern contract systems;

- State-owned enterprises, as well as indicative mechanisms and regulatory bodies of other types of ownership;
- Mechanism of integration of regulators and structures.

The main task of innovation policy is to create a favorable innovation environment for the implementation of state priorities of scientific and technological development in the economic sphere. The measures that are part of the innovation policy at the national level include:

- Initiation of innovative programs (projects) aimed at the production of scientific and technical innovations created in the implementation of state scientific and technical programs;
- Transfer of new technologies from the public sector and state scientific and technical institutes to the production sector;
- Creation of an innovative market and its infrastructure (financial and information services, etc.);
- Coordination of innovative activities;
- Organizing and supporting cooperation at all stages of the innovation process.

Government agencies formulate and coordinate proposals for economic development by improving innovation. The main mechanisms for solving this problem are:

- development of research and production infrastructure, including the research base of leading universities;
- creation and development of research centers (laboratories) in different organizational models;
- Expansion and coordination of work on the creation of scientific and technical resources in the field of applied research, including in the field of technology;
- development of fundamental science, including support for its university sector and state academies of sciences;
- Development of new tools for funding and organization of science, improving the mechanism of funding grants;
- Coordination of work to expand the interaction of companies in the real sector of the economy with the research and production sector (research departments of universities, state research academies and other research organizations).

Activities related to solving this task include:

- Financing and co-financing the development of research and production infrastructure, including the development of the material and technical base of all types of organizations in the field of research and production;
- A system of measures to support the development programs of research universities, the development of the research base of leading universities in the framework of programs for the development of innovative infrastructure of higher education institutions;
- expansion of international scientific cooperation;
- organization of financing and cooperation in a wide range of research areas;
- organization and coordination of international research projects at the commercial stage.

Important principles of this activity are:

- mobilization of priority resources, integration of research and educational processes, increasing the demand for quality work;
- Assimilation of grants, expansion of international experience and international cooperation, expansion of scientific competition and elimination of duplication of work.

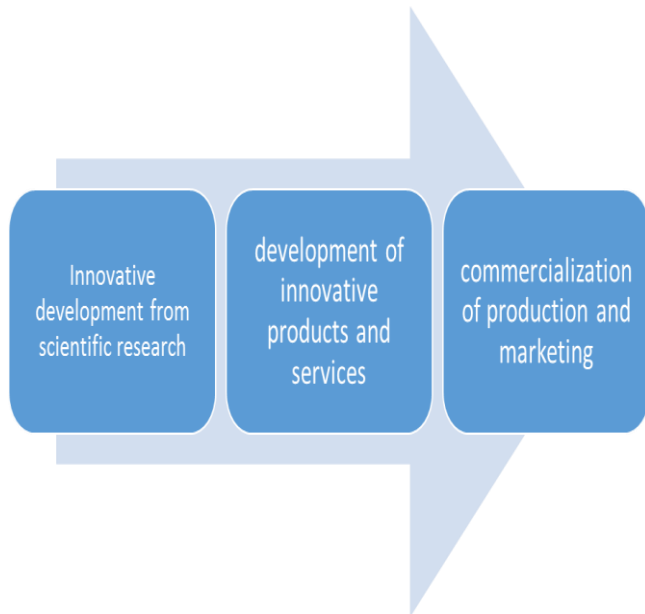
Innovative forecasting is the knowledge of the basic parameters of innovative activity (its directions, types, objects, consequences, etc.).

Innovative forecasts are developed in accordance with the laws of the Republic of Uzbekistan and are an integral part of the forecast of socio-economic development of the Republic of Uzbekistan. They are building scenarios for the socio-economic consequences of the adoption and dissemination of key innovations, the practical application of new science-intensive products and technologies. The tasks of the Ministry of Innovation Development are important in this regard.

The purpose of developing innovation development forecasts is to make management decisions to increase the competitive advantages of the object or process being studied through the introduction of innovative technologies in the long run. It means an innovative technological process, product or management technology that leads to an increase in the efficiency of the production or management being carried out. As a result of the introduction of innovative technologies, the technical and economic characteristics of the designed object, process or



event are improved. It is also improving production resource savings, increasing labor productivity, i.e., unit costs of a product or service. Therefore, in the process of predicting innovative development (in the narrow sense of the word), we understand the prediction of the development of innovative technologies and their impact on the efficiency of the process, event, or object being studied.



**Figure 4. Stages of innovative development**

Innovation development forecasting is based on the principles of continuous forecasting of all stages of the complete innovation cycle, ranging from scientific research to innovative development, development of innovative products and services, production and commercialization of marketing.

In forecasting innovative development, they use the results of innovation, that is, the theoretical foundations and technologies to create a qualitatively new product, as well as the construction and implementation of a continuous innovation process that covers all stages of the full innovation cycle. Within the framework of innovation, a number of important rules have been developed to promote innovative development:

- Qualitatively new products can be created only using some new components of development - innovation;
- The innovation process based on information technology is continuous because it covers and connects all stages of the transformation of scientific knowledge into innovations, and then creates more efficient products and services based on them, including its production and application. Its consistency and continuity are important for the innovation process. This is only possible if each

previous step prepares the conditions and information for the next situation;

- One of the basic rules of innovation defines the importance of experimental methods in the process of creating new competitive products, because new data must be tested experimentally;
- In the development of the regulation on the continuity of the innovation process, it can be said that the development process is continuous, as it is an integral part of the ongoing innovation process;
- The successful introduction, creation and use of new technologies and products can only be achieved with a systematic approach. Therefore, on the one hand, it is necessary to develop integrated systems in which the efficiency of new products or technologies is realized, rather than individual products.

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