Modeling of state priorities of management in the conditions of globalization: Financial, technical-technological and resource aspects

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Abstract. Purpose of the research. The purpose of the study is to explore the financial, technical, technological and resource aspects of modelling state management priorities in the context of globalization. Methodology. The following special methods of scientific cognition were used in the research process: historical-logical method; method of systematization, classification and theoretical generalization; method of institutional analysis; method of system analysis; method of logical analysis and synthesis; method of graphic analysis. Results. It is determined that in the process of formation of state priorities of business development it is necessary to take into account scenario foresights of innovative economy and on this basis to form own strategy of definition of state priorities. The stages of definition of the state priorities of business development in innovative economy according to the scenario “New innovative course” are offered. It is specified that the effectiveness of the implementation of the proposed stages is directly dependent on the intellectual level of government officials, their administrative experience in the direction of strategy. This update identifies the need to reform the labour market and the infrastructure elements represented in it. The priority of state regulation of the infrastructure of business development and the need to create a critical mass of intellectual human resources in the labour market are determined. Practical meaning. According to the presented research, the developed format of horizontal and vertical relations between participants of the institutional system - researchers, innovative entrepreneurs, venture investors and institutes of support of innovative entrepreneurship is of practical importance, which is a key and necessary condition for creating a successful innovation system. Prospects for further research. Given that the main supplier of intellectual potential for entrepreneurship is the labour market, emphasis is placed on the need to take it into account when forming a mechanism of state

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support for innovative development of entrepreneurship. The directions of business infrastructure improvement necessary for realization of neo-innovative formation methodology of the state priorities of business development at the national level are offered.

Keywords: management, innovation, resources, modelling, state priorities, entrepreneurship, means of regulatory outflow, institutional environment.

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Моделювання державних пріоритетів управління в умовах глобалізації: фінансові, техніко-технологічні і ресурсні аспекти

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Анотація. Мета дослідження. Метою статті є дослідження фінансових, техніко-технологічних і ресурсних аспектів моделювання державних пріоритетів управління в умовах глобалізації. Методологія. У процесі дослідження використані такі спеціальні методи наукового пізнання: історично-логічний метод; метод систематизації, класифікації й теоретичного узагальнення; метод інституційного аналізу; метод системного аналізу; метод логічного аналізу і синтезу; метод графічного аналізу. Результати. Визначено, що в процесі формування державних пріоритетів розвитку підприємництва необхідно враховувати сценарні форсайти інноваційної економіки та на цій основі формувати власну стратегію визначення державних пріоритетів. Запропоновані етапи визначення державних пріоритетів розвитку підприємництва в інноваційній економіці за сценарієм «Новий інноваційний курс». Конкретизовано, що ефективність реалізації запропонованих етапів знаходиться у прямій залежності від інтелектуального рівня державних посадовців, їх адміністративного досвіду у напрямку стратегування. На цій основі визначено необхідність реформування ринку праці та інфраструктурних елементів, що на ньому представлене. Визначено пріоритетність державного регулювання інфраструктурної розвитку підприємництва та необхідність створення на ринку праці критичної маси інтелектуального кадрового потенціалу. Практичне значення. Практичне значення за представленим дослідженням має розроблений формат гідридних та вертикальних відносин між учасниками інституційної системи – дослідниками, інноваційними підприємцями, венчурними інвесторами та інститутами підтримки інноваційного підприємництва, що є ключовою і необхідною умовою створення успішної

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The formation of horizontal and vertical relations between the participants of the institutional system – researchers, innovative entrepreneurs, venture investors and institutions to support innovative entrepreneurship – is a key and necessary condition for creating a successful innovation system, which can only be implemented by the state.

The role of the state as the most important institution of innovative entrepreneurship is difficult to overestimate. In particular, the state as an organization has a competitive advantage in the implementation of regulatory means (coercion, control, responsibility, punishment), which, if successfully applied, enhances the effectiveness of already established priorities for business development. This is the uniqueness of the influence of the state apparatus as an institutional entity on domestic business and its external environment. These facts determine the relevance of the study.

2. Literature review.

The question of the need for state participation in the formation of the institutional environment was the focus of research by K. Balabukha, K. Brochka, V. Bykhovchenko, V. Chaban, V. Diatlova, Y. Diatlova, V. Dovbush, O. Fatkhudinova, N. Golomsha, I. Hnatenko, O. Holomsha, O. Hryshchenko, Y. Hutareva, O. Isai, S. Kapitanets, I. Klochan, V. Klochan, O. Kvtun, N. Krakhmalova, I. Kuksa, P. Kutsyk, I. Ovcharenko, O. Parkhomenko, I. Petryk, O. Pokataieva, O. Prokopenko, S. Prylipko, Z. Rakhmetulina, V. Rossokha, V. Rubezhanska, O. Samborskyi, A. Sava, N. Shevchenko, I. Shtuler, O. Trokhymets, O. Tyshchenko, V. Tyshchenko, N. Vasyliova, O. Vasyliova, R. Voloshyn, S. Yeletsykhy, N. Zaritska, M. Zos-Kior, T. Zubro, etc (Brockova et al., 2021, p. 130; Diatlova V. et al., 2021, p. 165; Diatlova Y. et al., 2021, p. 307; Kutsyk et al., 2021, p. 430; Prylipko S. et al., 2020, p. 310; Rakhmetulina et al., 2020, p. 240; Zos-Kior et al., 2020, p. 505; Kuksa et al., 2019, p. 10; Prylipko, Shevchenko and Hryshchenko, 2016, p. 18).

State protectionism of innovation, creativity, creativity and unusual thinking of startups in general determines the effectiveness of the transformation of the institutional matrix under market conditions (Rakhmetulina et al., 2020, p. 240). It should be borne in mind that the commercialization of any innovative project of startups requires a guarantor who would legislate and protect their intellectual property rights, so the state in this sense acts as an external force that monitors the rights of business entities that commercialize the idea (Prylipko, Shevchenko and Hryshchenko, 2016, p. 18). Another important institutional function of the state is that state institutions must create effective conditions for competition, through the synthesis of residents ‘and non-residents’ access to domestic entrepreneurship, which is a factor limiting the monopolization of national entrepreneurship and unfair competition (Kutsyk et al., 2021, p. 430).

Therefore, the fairer the conditions created by the state to, for example, the financial support of innovation by various economic entities, the more effective business activities.

Thus, analyzing the role of the state in the formation of the institutional matrix by means...
of determining effective state priorities for entrepreneurship, we can see that, first, the state is a leading actor in this matrix and is the owner – entrepreneur (state enterprises), providing large-scale production of public goods. Secondly, it acts as a large consumer of goods. Thirdly, it regulates the activities of business units through the legislature, the executive and the judiciary. This conclusion leads us to the importance of the development of both collective or private entrepreneurship and public, which is essential for the formation of an innovative economy.

3. Methodology.

The following special methods of scientific cognition were used in the research process: historical-logical method (in studying the evolution of changes in state priorities of management under the influence of globalization); method of systematization, classification and theoretical generalization (in the study of subsystems of formation of state priorities for business development); method of institutional analysis (in the study of the transformation of the process of modeling state priorities); method of system analysis (in the study of the ordering of financial, technical, technological and resource aspects of modeling); method of logical analysis and synthesis (in the construction of forms of interaction of branches of government); method of graphic analysis (when developing the scheme of formation of state priorities and the quadrangle of subsystems of formation of state priorities of business development).

4. Research objectives.

The purpose of the study is to explore the financial, technical, technological and resource aspects of modeling state management priorities in the context of globalization.

5. Results and discussions.

Thus, in determining the state priorities for business development, the leading role belongs to the state as the initiator of changes in the institutional environment. With the help of legislative, executive and judicial branches of government, within which state priorities are formed, the state participates in the formation, support and promotion of innovation and business policy (Figure 1).

Agreeing with the opinion of the authors regarding the role of the state in regulating innovation, where the state acts even as a participant, their opinion is going to be specified.

To do this, the conceptual essence of the business of innovation diffusion will be recalled. Thus, entrepreneurial activity is one of the riskiest activities in the innovative economy and is based on the initiative personal startups of the entrepreneur, which are associated with significant financial, technical, technological and resource costs.

For these reasons, innovation is often unprofitable for businesses. This circumstance determines the leading role of state regulation in this area, the main purpose of which should be to determine by the legislative, executive and judicial branches of government such priorities that interest businesses to engage in innovation, creating the conditions for modernization of the institutional environment.

The state, unlike the firm and the household, is not only obliged to obey the rules and restrictions established by it, but also to develop a formal part of these rules with the use of subsystems (Figure 2).

Thus, a picture emerges of the fourfold role of the state from the standpoint of the formation of state priorities. The state creates a legal framework (rules for doing business in an innovative economy), which should stimulate the innovative development of entrepreneurship, as an example: protection of private property; encouragement of innovative ideas; attracting investment in innovative projects; providing benefits to entrepreneurs who create new jobs and intensify non-standard forms of employment; protection against unfair competition; antitrust law, etc. All the above rules of doing business, which are fundamentally established by the state, represent the formal rules related to the protection of innovation as the most important concept of business development, without which the existence of an innovative economy is impossible.
**Principles of ensuring subsystems of state regulation in the priorities formation for business development:** parity, balance, science, adaptability, goal setting, transparency, objectivity, decentralization, dynamism, efficiency, integrity, comprehensiveness, stability, hierarchy, innovation, responsibility, professionalism, law

**Fig. 2. Quadrangle of subsystems of formation of state priorities of business development**

*Source: Suggested by the authors.*
Switzerland, Singapore, Germany, Austria, France, Portugal, Poland, South Korea, Great Britain, Sweden and other countries with a significant state-owned business sector, which provides national production strength and is a backup safeguard for social guarantees in case of inefficiency of the private sector. It is a well-known fact that within the framework of Keynesian, neoclassical and other theories there have always been disputes about the need for general development of state property, as well as state regulation of entrepreneurship in an innovative economy. As an example, representatives of classical political economy believed that there was no need for the state to interfere in the functioning of the market (which with the help of market forces is self-regulating and able to provide a balance of supply and demand). However, in conditions of fierce competition between entrepreneurs, imperfect institutional matrix, which have a negative impact on innovation, an active public policy is necessary. Thus, having become an immanent phenomenon in the national economy, state regulation of entrepreneurship creates the desired institutional environment, which is based on a set of improved regulations (regulations), rules, bases, principles, etc., which stimulate transformation in the innovation economy. Interaction within the institutional matrix of market actors and systematic state regulation form the normative (norm guiding principle, rule) system of the institutional environment, which leads to intensive economic growth of the national economy.

Normativeness can serve as a motivator for the generation of domestic scientific and technological development, but it must be targeted, i.e. based on the principle of goal-setting, which is implemented by the state in the formation of state priorities for business development. The relationship of goals forms a close circle of state strategies with national ideas (missions, sub-goals) of business development, the effective implementation of which is possible if:

- the institutional environment for business development (systems of rules, regulatory and distributive institutions), which determines the conditions for the functioning of entrepreneurship and coordinates the activities of people;

- an interested government that is able to ensure the solution of strategic and tactical tasks of innovative development by means of developing effective regulatory and legal support (legal institutions);

- economic system capable of accepting administrative and economic methods of influence by public authorities;

- resources and capacity, which makes it possible to achieve the goals.

At the same time, it should be borne in mind that the definition of state priorities for business development is not always reduced to a directive systematized set of commands or recommendations aimed at improving the business environment by improving the functioning of formal institutions. Because the very definition of state priorities involves the development of a set of updates to both formal and informal rules or regulations that outline a model of the institutional matrix that shapes the behavior of stakeholders in an economy aimed at producing innovation. Under such regulation, a “duet” of the formation of state priorities for business development with the involvement of formal and informal institutions can be traced.

It is well known that in the national environment (of any segment) the presence of foresights is determined, which are sometimes based on unpredictable reactive change of the institutional matrix of entrepreneurship, which automatically leads to changes in informal attitudes – mentality, norms of behavior of individuals. Further trend of national economy development. Global trends in the innovative development of entrepreneurship demonstrate the need to take into account the scenario foresight in the process of determining state priorities, which determine the institutional transformation and lead to a rethinking of the philosophy of supporting the business system.
From the standpoint of individualism, special attention should be paid to the development of the human factor through which institutional transformations are formed. Already today, the process of forming a fundamentally new model for setting priorities for business development is clearly visible, which increases the ability to adequately perceive existing technological, economic and other global challenges provoked by strengthening the synergy of supranational institutions within regional integration.

6. Conclusions.

It is determined that in the process of formation of state priorities of business development it is necessary to take into account scenario foresights of innovative economy and on this basis to form own strategy of definition of state priorities. The stages of definition of the state priorities of business development in innovative economy according to the scenario “New innovative course” are offered. It is specified that the effectiveness of the implementation of the proposed stages is directly dependent on the intellectual level of government officials, their administrative experience in the direction of strategy. This update identifies the need to reform the labour market and the infrastructure elements represented in it. The priority of state regulation of the infrastructure of business development and the need to create a critical mass of intellectual human resources in the labour market are determined. Given that the main supplier of intellectual potential for entrepreneurship is the labour market, emphasis is placed on the need to take it into account when forming a mechanism of state support for innovative development of entrepreneurship. The directions of business infrastructure improvement necessary for realization of neo-innovative formation methodology of the state priorities of business development at the national level are offered.

References

Brockova, K., Rossokha, V., Chaban, V., Zos-Kior, M., Hnatenko, I. and Rubezhanska V. (2021), “Economic mechanism of optimizing the innovation investment program of the development of agro-industrial production”, Management Theory and Studies for Rural Business and Infrastructure Development, vol. 43, no. 1, pp. 129-135. https://doi.org/10.15544/mts.2021.11

Diatlova, V., Diatlova, Y., Petryk, I., Hutareva, Y., Zubro, T., and Tyshchenko, O. (2021), “Innovative development: model and evaluation method in the context of integration processes”, Management Theory and Studies for Rural Business and Infrastructure Development, vol. 43, no. 1, pp. 161–171. https://doi.org/10.15544/mts.2021.14

Diatlova, Y., Yeletskykh, S., Bykhovchenko, V., Balabukha, K., Ovcharenko, I. and Tyshchenko, V. (2021), “Banking security monitoring: development of a methodical support to valuation”, Management Theory and Studies for Rural Business and Infrastructure Development, vol. 43, no. 2, 206–216. https://doi.org/10.15544/mts.2021.17

Golomsha, N., Voloshyn, R., Holomsha, O., Sava, A., Zaritska, N. and Dovbush, V. (2021), “Strategic management of Ukraine’s competitive position in the world wheat market in the context of COVID-19 and active marketing”, Laplage in journal, vol. 7, no. 3, pp. 303–314. https://doi.org/10.24115/S2446-62202021731298p.303-314

Kuksa, I. M., Parkhomenko, O. P., Hnatenko, I. A. and Rubezhanska, V. O. (2019), “Synergistic effect in innovation clusters: essence and features of evaluation”, Economies’ Horizons, no. 4(11), pp. 4–12. https://doi.org/10.31499/2616-5256.4(11).2019.200795

Kutsyk, P., Kovytn, O., Klochan, V., Klochan, I., Krakhmalova, N. and Prokopenko, O. (2021), “The use of economic engineering in the context of strategic enterprise management”, Laplage in journal, vol. 7(Extra-E), pp. 427–456. https://doi.org/10.24115/S2446-622020217Extra-E1215p.427-456

Prylipko, S., Shevchenko, N. and Hryshchenko, O. (2016), “Efficiency of small farms functioning in Ukraine”, Economic Annals-XXI, vol. 158, no. 3–4, pp. 17–21. http://dx.doi.org/10.21003/ea.V158-04

Prylipko, S. M., Vasylieva, N. V., Vasylieva, O. I., Kapitanets, S. V. and Fatkhutdinova O. V. (2020), “Approaches to the formation of Public Administration in the Context of Decentralization Reform in Ukraine”, Cuestiones Politicas, vol. 38.66, pp. 501–520. https://doi.org/10.46398/cuestpol.38e.19
Rakhmetulina, Z., Pokataieva, O., Trokhymets, O., Hnatenko, I. and Rubezhanska, V. (2020), “Optimization of the structure of an innovative cluster on a competitive basis in a free market”, *Financial and credit activities: problems of theory and practice*, vol. 35, no. 4, pp. 238–247. [https://doi.org/10.18371/fcaptp.v4i35.222069](https://doi.org/10.18371/fcaptp.v4i35.222069)

Zos-Kior, M., Hnatenko, I., Isai, O., Shtuler, I., Samborskyi, O. and Rubezhanska, V. (2020), “Management of Efficiency of the Energy and Resource Saving Innovative Projects at the Processing Enterprises”, *Management Theory and Studies for Rural Business and Infrastructure Development*, vol. 42, no. 4, pp. 504–515. [https://doi.org/10.15544/mts.2020.52](https://doi.org/10.15544/mts.2020.52)