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FINANCING OF INNOVATION ACTIVITY IN UKRAINE

The innovative development of the national economy is impossible without the systematic development of science, which ensures the transformation of new knowledge into technologies, competitive goods, and services. It is the research and education sectors that form the foundation of the innovation model, determining the state's capacity for technological modernization. Therefore, a key task is the concentration of resources on priority areas of scientific and technological development in the context of an open economy. At the same time, the reduction in the number of scientific institutions and higher education establishments in Ukraine over recent decades indicates a weakening of the scientific base, which restrains the country's innovative progress.

In particular, as of 2026, 517 higher education institutions are operating in the Register of Educational Activity Entities "Higher Education Institutions" of the Unified State Electronic Database on Education (EDEBO) [1] (for comparison, in 2023 there were 736) [2]. The number of scientific institutions and organizations conducting research and development is also decreasing – from 1,303 units in 2010 to 208 in 2026, representing a decline of 84%. Such trends are mainly driven by the contraction of the business sector, which in most industrialized countries accounts for the largest share of expenditures on research and development (R&D), as well as reductions in the public sector and the higher education sector (Fig. 1).

Ukraine is also experiencing a downward trend in the number of personnel involved in research activities (Fig. 2) [4]. In particular, during 2010–2023, the number of personnel engaged in research and development decreased by 68%, including a 71% decline in researchers, a 58% decline in technicians, and a 77% decline in support staff.

The reduction in the number of scientists is accompanied by the devaluation of scientific labor, brain drain, reduced R&D funding, and declining activity of organizations conducting research. This leads to a decrease in the volume of research, innovation, and new knowledge. As a result, the share of scientific and technical activities in Ukraine's GDP remains below 1%, which constrains technological development, innovation activity,

and reduces the country’s competitiveness in both domestic and international markets.

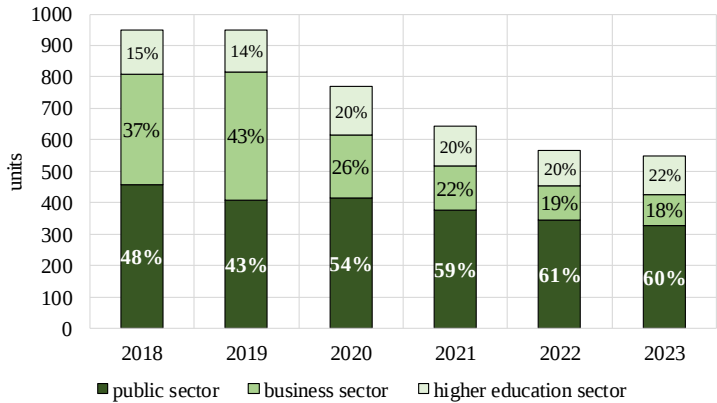


Fig. 1. Structural dynamics of the number of organizations performing R&D in Ukraine

Source: compiled based on: [3]

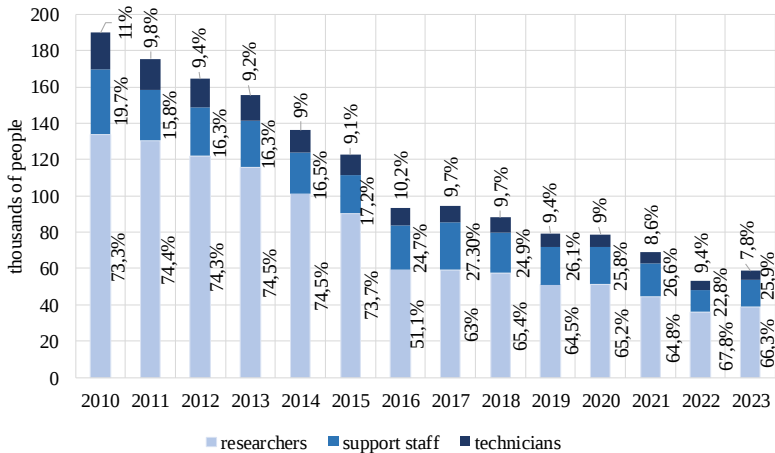


Fig. 2. Structural dynamics of personnel engaged in research and development in Ukraine, thousand persons

Source: compiled based on: [3]

Expenditures on R&D are an indicator that characterizes the efforts of the government and business to gain competitive advantages in science and technology and are measured as a percentage of GDP. The dynamics of R&D

expenditures as a percentage of GDP in Ukraine, according to World Bank data, compared with other countries that invest in research and innovation, are shown in Fig. 3.

The share of expenditures on research and development as a percentage of GDP in Ukraine is the lowest compared to other countries and is characterized by a downward trend (Fig. 3). In Ukraine, the level of funding for scientific development is legally established at no less than 1.7% of GDP; however, during 2000–2022 it declined from 0.93% of GDP in 2000 to 0.33% of GDP in 2022 (Fig. 3).

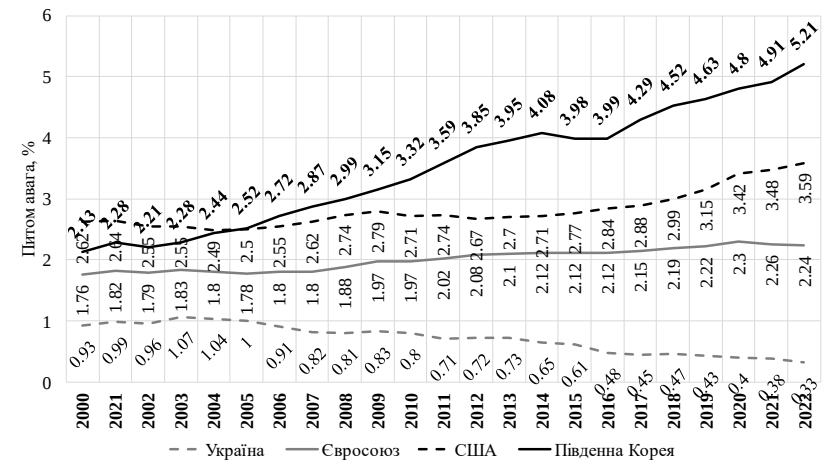


Fig. 3. Dynamics of expenditures on research and development in selected countries as a percentage of GDP

Source: compiled based on: [5]

Developed countries pay significant attention to the development of science, allocating around 3% of GDP to R&D, with funding volumes steadily increasing. In particular, in South Korea, which is a leader in terms of R&D expenditure, this indicator increased from 2.13% in 2000 to 5.21% in 2022 (Fig. 3), ensuring dynamic scientific and technological development of the economy.

In contrast, in Ukraine the level of science funding remains critically low: on average 0.55% of GDP, declining to 0.33% in 2022, which is 6.8 times lower than in the EU. Under such conditions, science does not perform a full-fledged economic function, and research results are not transformed into innovations. Insufficient government support and the lack of prioritization of R&D lead to inefficient use of resources and the loss of potential outcomes. This necessitates the introduction of effective mechanisms for the accumulation and efficient allocation of resources to finance research and development.

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