SYSTEM OF INTEGRATED INDICATORS
FOR THE ASSESSMENT OF R&D AND INNOVATION ACTIVITIES
IN THE CONTEXT OF EUROPEAN INTEGRATION

Brief Info on the Project

As of the present time, the role of science and innovations are continuously increasing. Almost all of the highly developed nations put a lot of effort to boost the development of their research and innovation potential. Current Ukrainian government recognises the necessity to transition into an innovation model of economic growth and has also defined the promotion of innovation processes in the economy and a full-blown application of the scientific potential to the benefit of technological modernisation of the economy. Further development of domestic R&D sector and of innovation potential in order to stimulate processes of economic growth presents itself as a pressing matter with which the entire society is to be preoccupied. One important component of this process is to conduct an impartial analysis of the retrospect and of the current state of affairs in the R&D and innovation realms. Such an analysis is to be founded on the usage of contemporary statistical instruments that will allow to conduct a comparative analysis by using other countries as a reference and to build complex indicators the meaning of which are used to conduct generalisations on a macroeconomic level.

Moreover, signing of an Association Agreement with the EU imposes certain obligations upon Ukraine in terms of harmonisation of statistics, including statistics pertaining to R&D and innovation activity whereas the anticipated signing of an agreement on associated membership in Horizon-2020, the EU programme to promote research and innovation, adds to the pressing urgency of the issue of promotion of efficiency of R&D activities. Accomplishment of the subject assignment, in turn, calls for a need to study international experience in the realm of establishment of a harmonised system of corresponding indicators of R&D and innovation activities, preparing comparisons with the current global approaches to assessment of R&D and innovation activities, elaboration of recommendations on how to apply such a system of indicators to support R&D and innovative activities pursued in Ukraine. In this context, one also needs to perform an impartial revision of domestic statistic
practices in the realm of R&D and innovation activities as per standards applied across the globe by the world’s developed countries.

In the EU countries, a relatively developed system has been developed that is applied to assess R&D and innovation activities encompassing various levels throughout the hierarchy. On the higher level, this system is based both on a comparison of the values of separate report indicators both on calculation of a range of complex indicators characteristic of the innovative development of a certain country. At the same time, alongside such a methodology, EU has introduced sector analysis of innovation activities (for public and commercial sectors separately). The subject system has plenty of advantages as compared to other similar systems (for instance, a system of assessment applied by the Global Economic Forum to assess innovation development), first and foremost due to the fact that it is based on objective statistical indicators and not on the results of selective polls. At the same time, it is worth noting that, on the level of separate countries, the systems of indicators are not unified and are, as a rule, being developed on the base of maximum compliance with the national interests of the country. In Ukraine, too, specific indicators exist which, and if they should they ever be ditched, this will not only cause a loss of information on the dynamics of certain processes in the R&D and innovation realms but also to a distortion of the actual state of things. Therefore, within the framework of the research, it has been proven which exact «traditional» indicators that are incompliant with international standards should be left and also which directions should be defined and relevantly applied in further analytical work and administrative activities.

Apart from an assessment of the condition of the state of the R&D potential capacity on a macro-economic level, issues specifically important for the scientific community of Ukraine as of the present time are issues of complex assessment of research activities of institutions and individual scholars. It is obvious that approaches to such an assessment must not be copies of approaches assumed in the EU countries since Ukrainian and European Union’s research systems have been formed in different conditions whereas the scientific productivity has been measured by indicators differing in terms of content. On the other hand, the European integration processes urge Ukraine to more actively apply international practices in this realm. We should therefore develop a balanced system of assessment which would be compliant with standards that allow to undertake correct international comparisons and, at the same time, reflect the specifics of research activities in Ukraine.

Within the project implementation framework, the aforementioned issues have been examined from the standpoints of novel tendencies that are being observed in the developed countries (primarily across the EU); the condition of R&D and innovative realm in Ukraine has been analysed; and corresponding recommendations on changes in the domestic statistics and assessment procedures have been elaborated. Unlike most works undertaken by Ukrainian authors, the present project draws particular attention to indicators of performance of activity which complies with the course towards the increase of the efficiency of functioning of all of the subsystems of the national economy. As far as the issue of compliance with the EU standards is concerned, within the framework of project implementation, recommendations have been developed on how to bring the domestic system of assessment of the condition of R&D and innovation activities in the conditions of activation of European integration processes, particularly:

+ peculiarities have been ascertained of contemporary systems of complex indicators (that exist in developed countries, particularly in the EU) and of how these systems can be used to assess R&D and innovative activities;
+ possibilities have been ascertained as to how similar systems can be applied in the Ukrainian environment together with suggestions as to which changes can be made to prepare statistic reports of the corresponding forms and which changes can be made in the procedures of collection and processing of information;
the existing EU indicators have been adapted to Ukrainian conditions (on a macro level) and corresponding calculations have been performed which have allowed to undertake a correct analysis of the condition of development of science and innovation in Ukraine and in the European countries.

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СИСТЕМА КОМПЛЕКСНИХ ІНДИКАТОРІВ ОЦІНКИ НАУКОВО-ТЕХНІЧНОЇ ТА ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ В КОНТЕКСТІ ПРОЦЕСІВ ЄВРОІНТЕГРАЦІЇ

У роботі розглянуто найважливіші індикатори інноваційного розвитку держави в умовах подальшої інтеграції України у європейський економічний та науково-технологічний простір.

Ключові слова: інноваційний розвиток, технологічний трансфер, модернізація, науково-технологічний простір, євроінтеграція.

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СИСТЕМА КОМПЛЕКСНЫХ ИНДИКАТОРОВ ОЦЕНКИ НАУЧНО-ТЕХНИЧЕСКОЙ И ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ В КОНТЕКСТЕ ПРОЦЕССОВ ЄВРОИНТЕГРАЦІЇ

В работе рассмотрены важнейшие индикаторы инновационного развития государства в условиях дальнейшей интеграции Украины в европейское экономическое и научно-технологическое пространство.

Ключевые слова: инновационное развитие, технологический трансфер, модернизация, научно-технологическое пространство, евроинтеграция.

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