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THE INNOVATION AND R&D FINANCING SYSTEM OF UKRAINE FROM A TRIPLE HELIX PERSPECTIVE: VIABLE PRACTICES AND BOTTLENECKS[14]

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The study purposes to examine the innovation financing system of Ukraine from a Triple Helix policy perspective. The analysis was provided based on the survey data collected from qualitative interviews with researchers and firms, as well as visits to incubators. The research outcomes provide insights regarding the innovative performance of the post-socialist economies achieved after Soviet Union collapsed. Our findings might be useful for Ukraine to enrich understanding of the pitfalls and failures, as well as other countries as guidelines in designing policies, aimed to develop their systems of innovation financing.

The access to the financial resources plays a crucial role in the country's innovative development. J. Schumpeter recognized the financial and financial institutions to be the system-forming elements of the national innovation systems, and financing as a pivotal determinant of entrepreneurial initiative to develop a new economy (Schumpeter and Backhaus, 2003). The financial system provides specific institutional frameworks and interlinkages with financial markets, government agencies, financial institutions, regulatory authorities, and research organizations to support innovation activities and strengthen technological capabilities at sectoral and national levels

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(Wonglimpiyarat and Khaemasunun, 2015). The financing provides the resources that allow the transformation of new ideas into large-scale commercial activities while linking the various actors that make this process possible, through the sharing of risks and rewards (UNECE, 2009). Therefore, financing of R&D and entrepreneurship determine enabling conditions for national Triple-Helix systems development.

In the late 80s, the USSR was among the leaders of world science, owing largely to involvement in the military programs; having developed a substantial research infrastructure, it lacked effective mechanisms for the commercialization of research findings. The demise of the Soviet Union revealed the elements of fragmented and dysfunctional national R&D systems, heavily government led and with weak links between institutional spheres, despite ideological principles of integration and science-based progress as a core strategy for the scientific techno-logical revolution (Ranga and Etzkowitz, 2010).

Following the collapse of the Soviet Union, both Russian and Ukrainian innovation systems were reformed during the 1990s, the transformation of their R&D systems, similar to other post-Soviet countries, was aimed at the re-orientation of scientific activities away from military and towards civilian industries (Yegorov, 2009). Therefore, the innovation policies introduced to transform the countries from a resource-based (Russia) and agriculture-based (Ukraine) to a knowledge-based haven't been accomplished yet, remaining transition issues on a high agenda.

The Triple Helix is treated as a universal innovation model providing holistic understanding of the roles of university, industry, and government in developing ‘an innovative region’ of self-renewal and sustainable innovative capacity, but rarely applied as a framework for innovation studies in Ukrainian research literature (Leydesdorff and Etzkowitz, 1998). The academic circles in Ukraine acknowledge that implementation of the Triple Helix concept for transformation of the Ukrainian national R&D and innovation system can open

new opportunities for its development (Yegorov, 2015). While, the Triple Helix model is increasingly relevant as a conceptual framework for innovative advance (Etzkowitz and Ranga, 2010), the national discourse in Ukraine still develops outside it.

While huge body of studies address issues with regard to the innovation systems development (Nelson, Lundvall, etc.), R&D or innovation financial systems and financing policies, as well as the role of financial system in R&D and entrepreneurship promotion, need to be further explored. Because it's a financial innovation system that provides necessary resources required for financing enterprises to enhance economic performance within the national innovation systems (Wonglimpiyarat and Khaemasunun, 2015.)

The major questions guiding this study are: 1/ How do companies in Ukraine reach support to finance their R&D within the Triple Helix model? 2/ What restrictions and/or requirements impede the financing of R&D on every stage of innovation processes in Ukraine? As the central rationale to be analyzed, we target relevance of R&D and entrepreneurship financing in the national innovation systems studied, by examining the major funding and financing options, key financiers, means and mechanisms available for the innovation financing Ukraine and try to shed light to the evolving problems.

Another issue intended to address in this study is the following, if Ukraine faces any 'cultural barrier' to develop its innovative system with regard to funding issues. What we are lacking more: available funds, access to financing or funding-seekers? This concerns the field of entrepreneurial climate for new firm formation, because the reputation of entrepreneurs or business owners within a society influences the propensity for entrepreneurial activity (Fuerlinger et al., 2015). Is any financial support available to develop cross-sector networks between public and private institutions on mutual trust basis, like associations and clubs, etc., which can be gradually lead to a 'social infrastructure' for R&D and entrepreneurship promotion. A vibrant innovation culture, being an important factor of success with regard to public initiatives promoting

innovation, should be a policy target in itself (UNECE, 2013). What policies are in need to be designed in order to affect social values and attitudes towards entrepreneurship? How to enhance the appreciation of innovative activity in the society? Meanwhile, it should be taken into account that the lack of demand for R&D findings further widens the gap between the remaining R&D institutions and industrial enterprises (Yegorov, 2015).

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