

Experiences of the Baltic Countries in Innovation Activities: Lesson for South East European Countries

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Abstract

Development of a public innovation support system and innovation policy are receiving interest recently at European Union (EU) and national levels. A strongly structured and coordinated innovation policy can enforce better performance of EU actors and develop their competitiveness in a globalized world. This paper examines innovation policy and governance capability in the Baltic countries (BC) to present some lessons for the South Eastern European (SEE) countries. For the BC, innovation policy has not been only a field of specific attention during the period of accession to the EU, but also the process of accession has had a significant impact on raising awareness about the necessity of innovation. This paper aims to create awareness of the needs of innovation for the SEE countries. Through analysis of the statistics from the Innovation Scoreboard and Innovation Trend Chart Country Reports, the paper tries to assess innovation capacity and innovation governance of the BC.

Keywords: Innovation, Baltic countries, South East Europe, European Union, Innovation Activities

JEL Codes: A10, F01, F39, O39, Q39

1. Introduction

SEE is the most complex region in contemporary Europe. Well-structured innovation infrastructure has vital role in the candidate countries in order to foster social and economic development. Development of a public innovation support system and innovation policy are receiving interest recently at EU and national levels as well as at SEE. A well-coordinated innovation policy can enforce better performance of EU actors and develop their competitiveness in a globalized world. This paper focuses on innovation policy and governance capability in Central and Eastern Europe (CEE) especially in the Baltic States to present some lessons for the SEE countries and also to evaluate the possibilities to benefit the positive experience of Baltic States in innovation management. For the CEE countries innovation policy has not been only a field of specific attention during the period of accession or transition to the EU, but also the process of accession has had an important impact on raising awareness about the importance and necessity of innovation. This paper aims to provide awareness of the needs of innovation for the SEE countries and also for further possible candidates of EU. Furthermore, this paper tries to assess the governance capabilities of Baltic States in the area of innovation policy and indicate positive experiences that may be relevant for potential new members. Through analysis and evaluation of the statistics from the Innovation Scoreboard and also the Innovation Trend Chart Country Reports for the Baltic States, the paper tries to assess innovation capacity and innovation governance.

2. Lessons from new member countries: innovation policy and governance capability

To begin with, in order to assess experience of the Baltic States, innovation policy development in CEE should be analyzed. The analysis on CEE states, experience in developing and implementing innovation policy refers to a deficiency of specific prerequisites and infrastructure for development that area (Lundvall 2007). Regarding to Radosevic 2009, in order to analyze industrial policy it is important to focus on the needs to focus on obtaining the right policy process. Although having a reasonable plan takes important place on innovation policy making, the main focus should be on efficient system involves (Nelson 2006a).

According to Perez (1986) “A successful strategy in one country cannot be transferred to another”. Furthermore, Lundvall (2007) argue on policy learning that, “Policy making itself is a process of learning. The goals, the instruments, the models, the data, the competence of the bureaucracy, the organizations and the institutions develop over time in interaction with each other and not least with the experience and feed-back from implementing specific policies.” It should be argued that how development occurs in the CEE region. This being of argumentation bases on neoclassical approach regarding the role of investment in productive potential on innovation competency (Bell and Pavitt 1993, Abramovitz 1986). According to Lundvall (2009), institutional regulations and instruments for achievement are context-specific and diverge from Western ideals. The role of the educational and scientific structure is seen as an unquestioningly significant feature to utilize the existing technology potentiality for development (Verspagen 1991, Reinert 1999, Perez 2001). Radošević 2009 mentioned that, the progress of CEE states has been confined extremely to the outcome-based framework of the policy-making mechanism. European Union’s annual reports significantly bonded to structural funds’ programming context touching on necessity to have certain purposes for the development, containing issues such as competitiveness, innovation and research (EIPR 2009).

The key hypothesis which emerges is that type of policymaking mechanism needs the elements and inputs proper for innovation policies and also for economic (Lundvall 2010). Moreover, especially since 2000s, the notion of systems of innovation has raised as a feature in building and implementing innovation policies in CEE (Soete 2007). According to Dobrinsky 2009, the perspective and focus on an extensive area of assorted structural elements has provided the way for state intervention potentiality in terms of policy intervention. Actually, the mentioned transformation has become discrepancy for transition countries in general and in CEE (Fagerberg and Srholec 2008, Veugelers and Mrak 2009). Numbers of studies have found technological potential, and in wide terms the efficacy of industrial policy, to be concerned to growth in important terms, the concept has essentially vanished from the policy language of developed countries (The economist 2010, Soete 2007). In other words, there is a disconnection among the general trends and various contextual needs in developing countries and also the same at advanced countries, but while the first group is to remain the wider economic, social and organizational integration of new technologies, the other side have to be faced by more technology policy and traditional industrial science (Freeman and Soete 2009). The situation in the CEE countries is suppressed by the lack of experience in using different industrial policy instruments (Török 2007). “Industrial policy may change over time and across individual companies” (Okimoto 1990). As the industrial development is getting progressively complicated and dynamic in order to the general characteristic of innovative technologies, touching in turn the occurrence of a broad set of new comprehend gaps for industries, innovation, business models etc., the concept of systems of innovation is not satisfactory in presenting principles for context-specific policy-making. This concerns not only the attention to be given to variations as derived from the technological change within different sectors and industrial fields, but also the notion that “industrial policy may change over time and across individual companies” (Okimoto 1990). Furthermore, according to Nelson (2009), as a system of innovation bases largely on institutions of an extensive economy-wide context, these industry or technology specific ones are easier to control and direct than those foundations.

Perez in her various works emphasized and argued that, The deepest understandings dedicated to technical change combined with socio-institutional aspects as well as economic. Furthermore, she emphasized the nexus between mastering technology and the development (Perez, 2002, 2004, 2010b). Hereby, finally this article leans to analysis the specific development if CEE region with touching on technology-centered point of view. According to Metcalfe (1995), the discussion emerges from the needs of various policy measures with regard to “certain technology fields, technology development stages and the organizational-institutional context and in doing so to solve the issue of context-specific policy-making in CEE in fundamental conditions”. Andersen (1988) emphasized on the needs of technology-cycled-based development for the developing countries in order to advancing industry and also argued on the “windows of opportunity” in terms of CEE countries (See also Phaal et al. 2011). The comprehension of the relation and nexus between technological development and the policy framework and interaction to socio-institutional circumstances is getting a core methodological problem in the future (Kattel 2009).

3. Innovation performance of the Baltic States

During the accession process, the recent member States have transferred several key instruments and elements of innovation policies which supported by EU, through the benefit of pre-accession aid and community programmers. Thus, various instruments and mechanisms applied either in EU15 or in new member States in order to foster the interaction between actors and innovation activities (Bucar and Stare, 2003). Furthermore, Bucar and Stare (2006), under the title “Innovation Policy and Governance Capability: Experiences of New EU Member States and Lessons for SEE Countries” discussed that “the governance mechanisms required for the implementation of innovation policies were either not in place in these countries or were only partially developed. No analyses of how new Member States governed this transfer and how it affected their indigenous innovation policy developments exist”. Moreover, they emphasized the importance of the European innovation scoreboard (EIS) and European Innovation Trend Chart Annual Country reports in order to examine innovation policy governance. The innovation union scoreboard was developed to present key indicators for highlight progress regarding the EU’s aim to become the most dynamic and competitive knowledge-based economy in the world. The EIS was introduced in 2000 and it included Baltic States in 2002 (EIS 2002), however, the report was not effectively indicating the real measures of the indicators for the Baltic States. The tangible statistic has been done after the membership in 2005 (EIS 2005) and it had some notable finding about innovation performance in Baltic countries. For example, according to EIS (2005), Estonia scores higher innovation performance comparing with some EU15 countries. However, Lithuania and Latvia took place only as the modest innovator. The main energy source for Estonia in innovation performance has seen as the strong relation with Nordic countries. According to EIS 2015, Lithuania has scored better performance and took place in the group of moderate innovators and Latvia remains to be as modest innovator. However, Latvia has highest growth rate among all EU countries with 3, 4% though the EU’s average is only 1, 0%. Lithuania 2, 1% and Estonia scored as 2, 2%.

According to EIS 2015 Estonia is a Moderate innovator. The report specifies Estonian innovation performance as “Estonia’s performance relative to that of the EU has also been improving from 81% in 2007 to 94% in 2013 but strongly declined to 88% in 2014. Estonia’s relative strengths in dimensions are Finance and support (based on one indicator only) and Firm investments. Estonia performs well above average on International scientific co-publications, Non-R&D innovation expenditures and Community trademarks. Performance is well below the EU average for License and patent revenues from abroad and Non-EU doctorate students. Performance has improved most strongly in the dimensions of Open, excellent and attractive research systems (14%) and Intellectual assets (17%), in particular due to a strong performance increase in Non-EU doctorate students (26%) and Community designs (24%). Growth has been negative in three dimensions: Innovators (-3.5%), Firm investments (-1.9%) and Linkages and entrepreneurship (-1.1%)”. Lithuania also is a Moderate innovator.

However its performance is above the 50% threshold value among Modest or Moderate innovator. “Lithuania performs below the average of the EU for most dimensions, except for Human resources and Finance and support. Relatively worst performing indicators are Non-EU doctorate students, PCT patent applications in societal challenges, License and patent revenues from abroad and PCT patent applications. Performance above average is observed for Non-R&D innovation expenditures, Population with completed tertiary education and Youth with upper secondary level education.” The highest performance observed as “License and patent revenues from abroad (61%), but also Community trademarks (18%) and Community designs (18%) show high growth. The largest performance declines are for PCT patent applications in societal challenges, Sales share of new innovations and Non-EU doctorate students”.

And finally, the report indicates Latvia as modest innovator. According to the EIS 2015, “Latvia performs well below the EU average for most dimensions, particularly for Open, excellent and attractive research systems, Linkages and entrepreneurship and Innovators. The relatively worst performing indicators are Public-private co-publications, Non-EU doctorate students and License and patent revenues from abroad. Relative strengths for Latvia are in Non-R&D innovation expenditures, Population with completed tertiary education and Youth with upper secondary level education. Despite the fact that Latvia performs below the average of the EU for almost all indicators, performance is increasing for about two-thirds of the indicators. High growth is observed for Non-EU doctorate students (32%), Community trademarks (17%) and new doctorate graduates (14%). A large decline in performance is observed for R & D expenditures in the business sector (-9.0%)”. The broad database structured for innovation scoreboards is a significant start point and it helps to display the innovation capacity in recent members of the EU compared with EU average.

Furthermore, it provides key insufficiencies that hinder their performance in this area. Examining at the trend reports right after the membership of the Baltic States present us that this countries have diminished their lag with EU average in some considerable indicators while in some indicators they even have performing better than EU average such as ICT expenditure in GDP (EIPR 2006).

4. Conclusions

Building of national innovation support system, innovation capacity and governance capability needs long-term endeavor, which simply is the first move and should be supported by the creation and implementation of an efficient policy focused on the main lacks in innovative capacity and capability. The accordance of innovation policy is a main obligation for achievement in innovation activities, and must be followed by coordination of key public agencies and ministries. The constant alterations in institutional set-up, the mission of public agents and policy orientation, which experienced in Baltic States, have hindered their governance capabilities in innovation policy. These problems and risks should be aware and avoided by SEE countries. Development of the governance capability requires long-term monitoring and benchmarking exercises, thus, involvement of SEE countries in various European projects and programmers provides awareness for the candidate countries to foster development of governance capability and capacity. Transfer of innovation policy practices and concepts had positive impact for Baltic States innovation policy which is also notable for candidate countries to be as priority. Nevertheless, one of the significant elements of effective governance is the capability to determine instruments, measures and best practice from other member countries. In general, the experiences and lessons learned from recent member countries can be very effective guide for SEE countries in order to formulating their innovation policies, where problems in management can be faced.

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