International Conference Better Policies for More Innovation Minsk, 17-18 November 2015

The role of innovation in international economic integration Some lessons from five reviews

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International integration increasingly Important for innovation

- Success in external markets is a necessary condition for innovation performance
 - particularly for small and open economies.
- But internationalization a significant challenge for companies and should be supported by policy initiatives facilitating international trade in scienceintensive goods and technologies.
 - Role for public procurement (testing platform for new technologies).
 - Addressing certification, standards and similar barriers that can restrict trade. Special attention should be given to building competencies of export-oriented SMEs, which are often most affected by barriers to trade.

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Scale can be achieved through cooperation...

- Need to share costs of large scale scientific investments.
 - Initiating international agreements on the sharing of S&T resources for innovation activities such as sharing of equipment, establishing joint laboratories and virtual networks of libraries and databases of scientific information, materials and samples.
 - Promoting further initiatives for the creation of international scientific research centres.
 - Potential for CIS, Eurasian Customs Union, European Union cooperation but also diaspora based – informal linkage important, including building on traditional linkages.
 - Reciprocal opening up of national innovation support schemes to sustain innovation projects involving cross-border collaboration.
 - Or establishing bilateral/multilateral funding instruments
 - Making some funding conditional on international partnership

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...which can help attract and develop talent

- Strong scope for international learning in areas of technoparks, tech transfer and commercialization by attracting foreign experts
 - May need to ease immigration regimes, create special Visa regimes as necessary
- Grants to attract internationally-renowned academics in priority fields.
- Strong training in foreign languages and access to international journals important for international cooperation.
- Training and financial support for submitting to international journals/ coauthoring in refereed journals.
- Training on preparation of good quality project/funding applications.
- Database with information regarding previous, upcoming and regular Open Calls launched by international funding bodies



Researcher/student mobility is important...

- Mobility of graduate students, researchers and educators very important.
 - Facilitate participation in conferences, study opportunities and internships abroad
 - Standardization of the educational system in accordance with the Bologna Process (mutual recognition of diplomas, academic credits, etc.)
 - Establish dual diploma/degree programmes or joint graduate programmes with major international universities.
 - Specific examples: e.g. Bolashak (KAZ),
 Durakhshandagon (TAJ), Luys grant scholarships (ARM)

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...but need to ensure domestic attractiveness

- Introduce incentives/employment opportunities encouraging return of scientists from abroad and ensuring adequate reward of domestic talent, through appropriate career and pay incentives.
- Put in place schemes that seek to facilitate the preservation of contacts with scientists who have migrated abroad, and facilitate communication with them.
- Diaspora networks e.g. Armenia, Tajikistan.



and upgrade standards

- Need to improve quality of education, through upgrading of equipment, investment in infrastructure, and curricula development, including through cooperation with international partners or companies.
 - This will also help attract international students.
 - Upgrading infrastructure and equipment to make domestic research institutions more attractive for international research cooperation
 - Establishing/strengthening research-led universities as beacons of excellence



Potentially important role for FDI

- Foreign direct investment can become an important driver of improved innovation performance, but need to take a targeted approach
 - e.g. programme of cooperation with investors to train local staff
 - support to SMEs in supply chain, etc.
- FDI with appropriate complementary measures can help integration into global value chains.



Important role for diaspora

- Possible measures could include:
 - Developing mobility schemes for temporary stays of diaspora researchers and establishing international research groups between diaspora researchers and colleagues in home country.
 - Targeting cooperation with diaspora researchers active in applied research and have good experience with innovation.
 - Attract students from the diaspora communities to study in home country through enhanced information and promotion measures.

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Sectoral approaches can be promising

- Possible sectoral approaches
 - Extend existing Strategy of Export-led Industrial Policy to include other knowledge-intensive sectors beyond ICT (Armenia).
 - Promising sectors should be identified systematically through appropriate screening, assessment of potential niches and foresight studies.
 - Specific sectoral strategies could be elaborated/ implemented.
 - Identifying and prioritizing sectors where the procurement of innovative goods and services from abroad is most important, and facilitating access to them.
 - Improving linkages between companies from promising export sectors and research organizations/research intense universities, including through support to joint projects that serve to better use the research potential and encourage collaboration.

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Thank you !

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