Industry-Science Linkages: Evidence and Policy Approaches

Mikhail Gershman, Dirk Meissner


National Research University  Higher School of Economics
Institute for Statistical Studies and Economics of Knowledge
Perception of research is changing in Russia

• Scientists & engineers typically ambitious in efforts to solve a problem
  • Initial description and decomposition of problem to uncover all possible facets and fully understand
  • Activity to solve the problem follows in the tradition of scientific work
• Features of approach
  • Targeted at directing efforts to each feature of the problem and finding a solution for this
  • Each sub-components of the wider problem is in most cases treated independently
  • Missing incorporation of solutions into an overarching consistent system

BUT

problems are now:
  • Typically larger in scale
  • More complex

HENCE

cooperation is needed to solve challenges and issues
Practice of science aims at understanding problems

- Scientific results often very sophisticated and specialized.
- Ability to be integrated into broader systems is limited.
- Broad challenges demand broad solutions.
- Clear need to shift how problems are perceived and solved.

‘Thinking in Opportunities’ instead of ‘Thinking in Problems’
## UI induced policy measures

<table>
<thead>
<tr>
<th>No.</th>
<th>Description of policy</th>
<th>Year</th>
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<tbody>
<tr>
<td>1</td>
<td>Building a system of national research universities (29 currently) annually evaluated by their performance and largely supported from the federal budget</td>
<td>Since 2008</td>
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<td>2</td>
<td>Allowing PRIs and universities to commercialize their scientific outputs through spin-offs</td>
<td>Since 2009</td>
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<td>3</td>
<td>Developing innovative infrastructure of universities and their co-operation with industry</td>
<td>Since 2010</td>
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<td>4</td>
<td>Attracting leading scientists and PhDs to Russian universities</td>
<td>Since 2010</td>
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<td>5</td>
<td>Increasing gross domestic expenditures on R&amp;D to 1.77% of the GDP with the share of universities of 11.4% by 2015</td>
<td>Since 2012</td>
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<tr>
<td>6</td>
<td>Increasing wages of research personnel in public research institutions and universities up to 200% of the regional average by 2018</td>
<td>Since 2012</td>
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<td>7</td>
<td>Raising the budgets of public research foundations up to 25 billion rubles by 2018</td>
<td>Since 2012</td>
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<tr>
<td>8</td>
<td>Supporting the leading national universities to enter world’s universities rankings</td>
<td>Since 2013</td>
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Broader change in Russian STI policy understanding

- design and implementation of consistent and coherent STI policy mix
  - clearly addressing features of ‘Thinking in Opportunities’
  - crucial for countries to generate momentum and take advantage of the full potential of STI
- Increased emphasis on public-private partnerships for STI policy design
- Reshaped public STI framework
  - Balance opportunity vs. solution driven knowledge production
  - Include opportunity thinking in Foresight for strategic STI planning / priority setting
  - Extend evaluation schemes of public STI towards ‘opportunity thinking’
Thank you for your attention!

mgershman@hse.ru
dmeissner@hse.ru
11, Myasnitskaya str., Moscow, Russia, 101000
Website: www.hse.ru/ma/sti