



## How Latvia can reach its true research and innovation potential

***PSF experts have reported on Latvia's research funding system, and the governance, policies and practices needed to drive innovation, economic development and growth. While Latvia needs to raise its overall R&D spending, more private-sector investment is seen as particularly urgent to boost growth and new skilled jobs. To reach its true research and innovation potential, it needs to anticipate medium- to long-term solutions to reduce dependence on EU budgets.***

Latvia's innovation system is clearly feeling the pressure of a lost decade of stagnant public research spending and a disjointed national response to regional and global forces. While the latest European Innovation Scoreboard ranks Latvia as a "moderate innovator" and there are signs of growing internationalisation and advances in production, more work is needed to increase the size and quality of the research effort, stimulate research-industry links and industrial innovation, and boost Riga's nascent start-up community.

According to the Policy Support Facility (PSF) report, total public funding for research in 2017 was only € 73 million; half of this came from EU Structural Funds. Most of the national contribution was funnelled through institutional funding, leaving little scope for competitive, project-based programmes.

Innovation funding aimed at industry was € 43 million in 2016, entirely financed by Structural Funds. Total business R&D expenditure (2016) in Latvia was just 0.1 % of GDP, compared to the EU average of 1.3 %. Latvian firms tend to be smaller and oriented towards low- and medium-tech sectors.

Many companies lack people able to do research and innovation – partly because some companies do not see the benefits of innovation for their business and partly because many of the people who could do this work leave the country in search of work and higher wages.

### **Reforms and returns**

The PSF report, released in February 2018, is the result of 'Specific Support to Latvia' activities funded under the Horizon 2020 Policy Support Facility. The study was requested by the government of Latvia and ran from February 2017 to February 2018. It involved two fact-finding visits to Latvia for consultations with research and innovation stakeholders by a panel of experts from Austria, Denmark, Spain, Estonia and the United Kingdom.

The panel drew attention to Latvia's academic credentials, including a strong technological university in Riga and some university-based 'competence centres' that support industrial innovation. But the small Baltic nation has few organisations able to play a vital intermediary role like the VTT in Finland, or to act as a magnet for innovation and talent similar to the Fraunhofer Society in Germany.

*"Increasing the amount of R&D done is important but will be ineffective unless Latvia can slow down the brain drain, which is robbing its innovation system of the talent and skills needed to nurture new ideas, technologies and entrepreneurial opportunities,"* said the chair of the PSF expert panel, Dorothea Sturn, who formerly ran the Austrian Science Fund and was head of the Quality Assurance and Evaluation Unit at Vienna University.

*"Several reforms will be needed, including improved researcher careers and raising the status of research and innovation in society."*

The state has guidelines for science, technology and innovation as well as for industry, which together with Latvia's National Development Plan and Smart Specialisation Strategy, represent a "framework for development". But a long-term vision bringing all the actors together – Ministry of Education and Science, Ministry of Economy, Latvian Council of Sciences, Academy of Sciences and innovation agencies, as well as leading universities and industry bodies – is sorely missing.

### **The big five**

So, how can Latvia increase the size and quality of its research effort, stimulate research-industry links and industrial innovation, and boost its nascent start-up community? The experts' policy recommendations are grouped under **five broad headings**, which the report then breaks down into steps for Latvia to take in the short, medium and long term:

- 1) Funding for research and innovation, especially from national sources, needs to be boosted to drive performance and growth.
- 2) The structure and governance of state organisations should be streamlined to meet national needs.
- 3) Higher education governance should be modernised, including further consolidation of research-performing organisations.
- 4) Competitively-won research funding should increase in both scale and scope to meet national needs.
- 5) Investment in innovation by both the private and public sectors should be increased, broadened and better mediated by so-called "boundary organisations".

Smooth-running innovation systems depend on fluid knowledge flow among enterprises, universities and research institutions, the report's authors point out. And this covers 'tacit and codified' knowledge exchanged through informal channels, as well as publications, patents and other sources.

*"Overall, the roles and functions of different agencies in implementation, monitoring, project selection etc. are overlapping, unclear and complicated,"* notes PSF rapporteur Erik Arnold, Adjunct Professor in Research Policy at the Royal Institute of Technology, Stockholm and chairman of R&I policy consultancy Technopolis Group. *"Our recommendations can help Latvia develop policies and institutions that are more effective in promoting the national goal of sustainable economic development."*

### **For more information**

Specific Support to Latvia webpage: <https://rio.jrc.ec.europa.eu/en/policy-support-facility/specific-support-latvia>

Specific Support to Latvia: final report – the Latvian Research Funding System: <https://rio.jrc.ec.europa.eu/en/library/specific-support-latvia-final-report---latvian-research-funding-system-0>

2017 European Innovation Scoreboard: [http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards\\_en](http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en)

Learn about PSF activities: <https://rio.jrc.ec.europa.eu/en/policy-support-facility>

