Reader's guide

This report presents the main outcomes of the OECD TIP Working Party's *Assessing the Impacts of the Policy Mix for Knowledge Transfer* project (2017-18). The report targets in particular policy makers, and contains the main findings and policy recommendations of the project. The report is a synthesis of different materials produced in the context of the project.

The following highly detailed policy papers form the basis for discussions and conclusions presented in this report:

- *Assessing the impacts of public research institutions on industry inventions* (Borowiecki, El-Mallakh and Paunov, 2019) provides evidence on the trends in patenting of public research institutions, and on the co-location of public research and industry. The evidence builds on a dataset compiled for the purposes of this OECD-TIP project on the location and patenting activities of universities and public research institutes (PRIs) across 35 OECD countries and China for 1992-2014. The policy report also presents evidence of the impacts on local innovation of geographical proximity to universities.
- *What role for social sciences in innovation? Re-assessing how scientific disciplines contribute to different industries* reviews the data sources and associated methodologies available to measure different types of science-industry interaction (Paunov, Planes-Satorra and Moriguchi, 2017). The paper also discusses the available evidence, which is mostly based on case study and patent data, and offers new statistical information from labour force and university graduate surveys. Such data allow exploring the numbers of social science graduates who move into different economic sectors; they thus capture the flow of human capital from university to industry – often considered one of the most important channels of science-industry knowledge transfer.
- *Science-industry knowledge exchange: Mapping policy instruments and their interactions* describes the different types of policy instruments aimed at strengthening science-industry knowledge transfer (Guimón and Paunov, 2019). It also discusses the positive and negative interactions between policy instruments. The paper draws on evidence from the case studies countries produced for the purposes for the purposes of this OECD-TIP project.
- *How is research policy across the OECD organised? Insights from a new policy database* provides a first systematic comparison of the governance of public research policy across 35 OECD countries from 2005 to 2017, using a newly created policy indicator database (https://stip.oecd.org/resgov/). The paper shows that diverse mechanisms of policy action regarding higher education institutions (HEIs) and PRIs are in place across these countries (Borowiecki and Paunov, 2018).

The report also builds on twenty case study contributions to this project. This includes fourteen country policy studies – focusing on new policy initiatives for science-industry knowledge transfer, or a country's overall policy mix – and six studies on European

research and technology organisations that provide new insights into institutional spin-off support schemes. The case studies are available here: LINK TO WEBSITE.

The report benefited from discussions with experts from industry, academia and government during four project workshops organised jointly with France Stratégie, France; Massachusetts Institute of Technology – MIT, United States; and the Foundation for Science and Technology – FCT, Portugal. Brochures containing summaries of the workshop discussions are available at the websites of each of the events:

- MIT/OECD: Towards effective science-industry co-creation, Paris, 5 December 2018
- France Stratégie/OECD: Boosting knowledge transfer between science and industry: New models and business practices, Paris, 14 March 2018
- OECD: Semantic analysis for innovation policy, Paris, 12-13 March 2018
- FCT/OECD: Stimulating knowledge transfer: Challenges and policy responses, Lisbon, 7-8 November 2017.

This project has been conducted jointly with the OECD TIP project on *Digital and Open Innovation*, which explores how the digital transformation is changing innovation practices and outcomes, and identifies the innovation policy priorities and adjustments needed to foster innovation for inclusive and sustainable growth in the digital age.

References

Borowiecki, M. and C. Paunov (2018), "How is research policy across the OECD organised? Insights from a new policy database", *OECD Science, Technology and Industry Policy Papers*, No. 55, OECD Publishing, Paris, https://doi.org/10.1787/235c9806-en.

Borowiecki, M., N. El-Mallakh and C. Paunov (2019), "Assessing the impacts of public research institutions on industry inventions", *OECD Science, Technology and Industry Policy Papers*, OECD Publishing, Paris.

Guimon, J. and C. Paunov (2019), "Science-industry knowledge exchange: A mapping of policy instruments and their interactions", *OECD Science, Technology and Industry Policy Papers*, OECD Publishing, Paris.

Paunov, C., S. Planes-Satorra and T. Moriguchi (2017), "What role for social sciences in innovation? Re-assessing how scientific disciplines contribute to different industries", *OECD Science, Technology and Industry Policy Papers*, No. 45, OECD Publishing, Paris, https://doi.org/10.1787/8a306011-en.