Innovation for Inclusive Growth
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The project

The OECD project “Innovation for Inclusive Growth” analyses the impacts of innovation on income inequality. It also focuses on novel approaches for innovation to support development. Addressing the needs of policymakers, the aims of the project are to:

- **Provide evidence on the impacts of innovation and knowledge-based economies** on income inequality; and

- **Develop concrete policy solutions** to help reconcile innovation and inclusive growth.

Implemented under the auspices of the OECD Committee for Scientific and Technological Policy (CSTP), the project benefits from inputs from the Territorial Development Policy Committee and the Centre for Educational Research and Innovation. The project contributes to the OECD’s Inclusive Growth Initiative.
Innovation and inclusiveness

Income inequalities have grown in most countries over the past three decades. The increase in inequality has affected all segments of the income distribution. The median household’s income has declined relative to the average, pointing to an increasingly “vanishing middle” income group while the income share of the top 1% has increased precipitously.

Globalisation and skill-biased technical change (SBTC) have been identified as factors that have led to rising inequalities. These factors may reflect a fundamental change in modern economies and in particular the growing role of innovation and of ICT-empowered knowledge-based capital (KBC) (i.e. research & development, intellectual property, software, databases and organisational capital).

These drivers of growth may result in structural changes in the way economies operate and, consequently, how the rewards of growth benefit different groups in society.

Did you know…
Income inequality has widened in most OECD countries, driven in part by a growing concentration of income among the top earners: In the United States 47% of total income growth over 1976-2007 went to the top 1%, 37% in Canada, and around 20% in Australia and the United Kingdom.

Innovation is a major factor of economic growth, hence of increase in income and well-being in the long term. However innovation does not necessarily affect the income of all categories in the population in the same way. Moreover structural policies, including innovation policies play a major role in shaping the knowledge-based economy and consequently the distribution of rewards and losses among different groups in society.

The “Innovation for Inclusive Growth” project analyses how increasingly knowledge-based economies shape innovation’s impacts on income inequality.

Policy questions

In the current context where income inequalities have surged in most countries, the major policy questions this project addresses are the following:

• **What is the impact of innovation on income inequalities?**
• **What are the implications of such an impact on innovation policies?**

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**Did you know…**

The number of patent applications¹ per million inhabitants has increased 8-fold between 1990 and 2012 in the OECD.

¹ Patent Cooperation Treaty (PCT) applications.
Inclusive innovations

Inclusive innovations – innovations that directly serve the welfare of lower-income and excluded groups – can contribute to development and create work opportunities integrating marginalized groups into circuits of economic activity.

The current context is particularly favourable to inclusive innovations: information and communication technologies (ICTs) and other emerging technologies offer new opportunities. The growing importance of emerging markets, including China and India, also contributes by orienting business interests towards innovations that serve lower-income markets.

However, a variety of challenges and market failures specific to inclusive innovation hinders the scaling up of most initiatives, resulting in missing markets and calling for policy action.

The 2015 “Innovation Policies for Inclusive Growth” publication focuses on a variety of inclusive innovations and identifies obstacle to scale such as high delivery costs, restricted access to finance and limited information on consumer needs.

Did you know…
In 2011, one in two of the poorest 40% in Kenya used mobile telephony to transfer money whereas only 19% held a regular bank account.

Source: World Bank Global Findex (Global Financial Inclusion Database), 2012
Priority areas for policy intervention include:

- Facilitating cooperation between actors and supporting intermediary institutions, involving poor communities, the private sector, the financial sector, public research institutions and NGOs.
- Adapting the regulatory framework to support inclusive innovation activities while ensuring consumer protection.

- Developing **financing mechanisms** in support of inclusive innovation initiatives.


Beyond inclusive innovations

Innovation has implications for industrial and territorial inclusiveness, i.e. the distribution of innovation capacities across the economy, between firms, regions, universities and public research institutes.

As economies become increasingly knowledge-based, different trends can be observed across countries: Successful ideas can easily capture entire markets at low marginal cost, possibly leading to a stronger concentration of innovation capacities in those actors with winning ideas.

By contrast, ICTs have opened new opportunities for small-scale entrepreneurs to become successful innovators, supporting the “democratisation of innovation”. For example, smartphone apps can be distributed at minimal marginal cost on dedicated platforms, and software have reduced production costs for certain products (e.g. music editing can now be done on a simple laptop). With lower costs of entry on certain markets, small entities can compete against large incumbents and the group of successful innovators widens to include actors that did not previously participate in innovation processes.

Industrial and territorial inclusiveness also depend on policies that generate a favourable environment for innovation, the diffusion of innovation and other framework conditions.
Globalization, emerging economies and ICT

Demand factors
- Emerging economies' middle class

Supply factors
- Reduced development costs of inclusive innovations

Number of inclusive innovations

Missing scale

Policies in support of inclusive innovation

Social inclusiveness

Increasing role of innovation for growth

Democratization of innovation

Islands of excellence / laggards

Innovation policies

Territorial and industrial inclusiveness
**Project timeline**

**2013: Project set-up and start of analyses**
- Creation of Advisory Group and experts network
- Scoping questionnaire
- Newsletters
- Project development

**2012: Incubator phase**
- November: Conference on Innovation and Inclusive Development, Cape Town, organised with the South African Department of Science and Technology
- Scoping document

**2013-2014: Producing evidence**
- Policy framework and background analyses
- Advisory Group meetings
May 2015: Publication

The "Innovation Policies for Inclusive Growth" publication focuses on how innovation can serve inclusive development. It discusses a variety of inclusive innovations aimed at improving the welfare of excluded groups, notably in terms of essential public services and policy approaches to support inclusive innovation. It also looks at industrial and territorial inclusiveness.

More information can be found at: http://oe.cd/inclusive-inno-report

February 2015: International Conference on Innovation for Inclusive Growth

Organised jointly with the Confederation of Indian Industry (CII), the World Bank Group (WBG) and the United Nations University - Maastricht Economic and social Research and training centre on Innovation and Technology (UNU-MERIT) in New Delhi, India.
October 2015: Ministerial Meeting of the OECD Committee for Scientific and Technological Policy (CSTP), Korea

The project’s findings contributed in particular to policy discussions around the break out session on global inclusiveness.

February & March 2015: Advisory Group Meetings
- Defining the project scope
- Setting up priorities and timelines

28 September 2015: Report

The report “Boosting Malaysia’s National Intellectual Property System for Innovation” assesses how the country’s national intellectual (IP) system supports innovation and offers recommendations to improve its design, looking in particular to enhancing opportunities for users. More information can be found at: http://oe.cd/Malaysia-IP

April - December 2015: Producing evidence

Analytical work including:
- Framework and econometric evidence on the innovation-income inequality relationship
- Policy toolkit with country policy cases on inclusiveness

2016: Deliverables
- Final publication
- Policy toolkit
- Policy experts conference
2015-2016 activities

*Module 1: Innovation policies and inclusive growth*

This module explores the impacts of increasingly knowledge-based growth on income inequalities and upward social mobility in OECD and non-OECD economies. Specific questions the project addresses include:

- Is there any **evidence of impacts of innovation on income inequality**? What are the impact channels?
- What are implications of **knowledge-based capital** and innovation on **employment**? Are the rewards for capital increasing?

*Advisory Group*

Composed of representatives from the project’s partner countries, delegates from the OECD CSTP and experts, the Advisory Group contributes through:

- inputs at key stages on the scope of the project
- information on policy developments
- analyses in support of the project and case studies

**Current Advisory Group members:** Austria, Chile, China, Colombia, Costa Rica, India, Israel, Korea, Mexico, South Africa.

- Does the new economic context create new opportunities for the participation of individuals, entrepreneurs and small companies in innovation, e.g. a “democratisation of innovation”?
- How can **innovation policies address internal imbalances in innovation capacities**, including imbalances at territorial levels, while supporting growth?

*Module 2: Novel approaches for innovation to support development*

The project also analyses innovation for development. Inclusive innovations are a good example of how innovation can directly help address development challenges, providing perspectives on global inclusiveness as discussed at the CSTP Ministerial.
**Evidence on innovation and inequalities**

The project aims at providing **statistical evidence on the effects of innovation on inequalities**. A framework linking innovation to income inequality will be released by the end of 2015 jointly with statistical analysis of the possible dynamics.

The analyses within the project use data at country, industry and firm level aimed at identifying whether and, if so, how innovation affects income inequality so as to identify policy implications.

**Scope of the policy toolkit**

The database collects examples of national policy programmes with one of the following characteristics:

- **Target lagging and less innovative regions** (outside of regions that are highly innovative) or by design are more likely to support these lagging / less innovative regions.

- **Aim to include in innovation activities individuals and groups that are not usually participating** in those activities and in support of broadening the group of innovators.

- **Aim to foster innovation activities in non-innovative firms**, in particular by targeting non-innovative sectors and non-innovative Small and Medium-sized Enterprises (SMEs).

**Policy toolkit**

A **policy toolkit containing examples of policies that addressed territorial, industrial and social inclusiveness** will be produced and made available in early 2016 on the OECD-World Bank Innovation Policy Platform.

The toolkit will provide a set of policy examples from different countries that addressed innovation policies’ contribution to inclusive growth. To maximise impacts, the toolkit will be implemented through the project’s Community of Practice on the Innovation Policy Platform, allowing the repository of best practices to be searched in a customised and interactive manner and providing an opportunity for exchange across project cases.
The team

**Caroline Paunov** is Senior Economist and manages the project. She also leads work on national IP systems and on the evaluation of impacts of public research. Previously, she worked for the World Bank and the United Nations. She holds a B.A. and M.A. (Hons) from the University of Oxford, a M.Sc. from the University Pompeu Fabra and a Ph.D. in Economics from the University of London.

**Dominique Guellec** is Head of the Science and Technology Policy Division, covering notably: innovation and science policies, innovation for inclusive growth and the Science, Technology and Innovation Outlook. Dominique Guellec joined the OECD in 1995. In 2004-2005, he was Chief Economist of the European Patent Office (Munich). He is a graduate from the École Nationale de la Statistique et de l'Administration Économique (ENSAE).

**Cynthia Lavison** is a consultant junior policy analyst. Her work currently focuses on developing a policy toolkit on national innovation policies in support of inclusiveness. Cynthia Lavison has previously worked at the French Ministry of Economics. She holds a M.A in Economics and Public Policy from Sciences Po Paris, a M.Sc. in Economics from École Polytechnique, a BSc from Paris 6 University and a BA from Sciences Po Paris.

**Stefano Baruffaldi** is a Young Economist working on the project. The objective of his current activity is to study empirically the relationship between innovation and the distribution of income. Before joining the OECD, Stefano Baruffaldi worked at the École Polytechnique Fédérale de Lausanne, where he had obtained a PhD in Economics of Innovation.

**Sandra Planes-Satorra** is currently working on the impact of public research on different economic sectors. Prior to joining the OECD, she worked at the European Commission and at a policy consulting firm. Sandra Planes-Satorra holds a BSc in Economics and BSc in Political Science from Pompeu Fabra University. She also holds a M.Sc in Local Economic Development from the London School of Economics.

**Chen Zhao** is an expert from the State Intellectual Property Office of China currently working on national intellectual property systems for development at the OECD. He is also studying for a Master of Public Affairs at Sciences Po Paris. Chen Zhao holds a Master of engineering from Tsinghua University and has studied at the Centre d’Études Internationales de la Propriété Intellectuelle (CEIPI).

**Andrés Barreneche** is a junior economist who recently joined the team. His work focuses on collecting evidence on the different impacts of innovation on income inequality. His past research has centred on how investments in knowledge-based capital lead to innovation in firms. He holds a Ph.D. in Management Science from Université Paris-Sud (France) and a M.A. in Economic Development from Ritsumeikan University (Japan).
Reports

- 2015: *Boosting Malaysia’s National Intellectual Property System for Innovation*
- 2015: *Innovation Policies for Inclusive Growth*
- 2014: *National Intellectual Property Systems, Innovation and Economic Development with Perspectives on Colombia and Indonesia*
- 2013: *Innovation and Inclusive Development: Discussion Report*
- 2012: *Innovation for Development*
For more information

http://oe.cd/inclusive

https://www.innovationpolicyplatform.org/innovation-inclusive-growth-oecd-project

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