RESEARCH, INNOVATION AND PRODUCTIVITY

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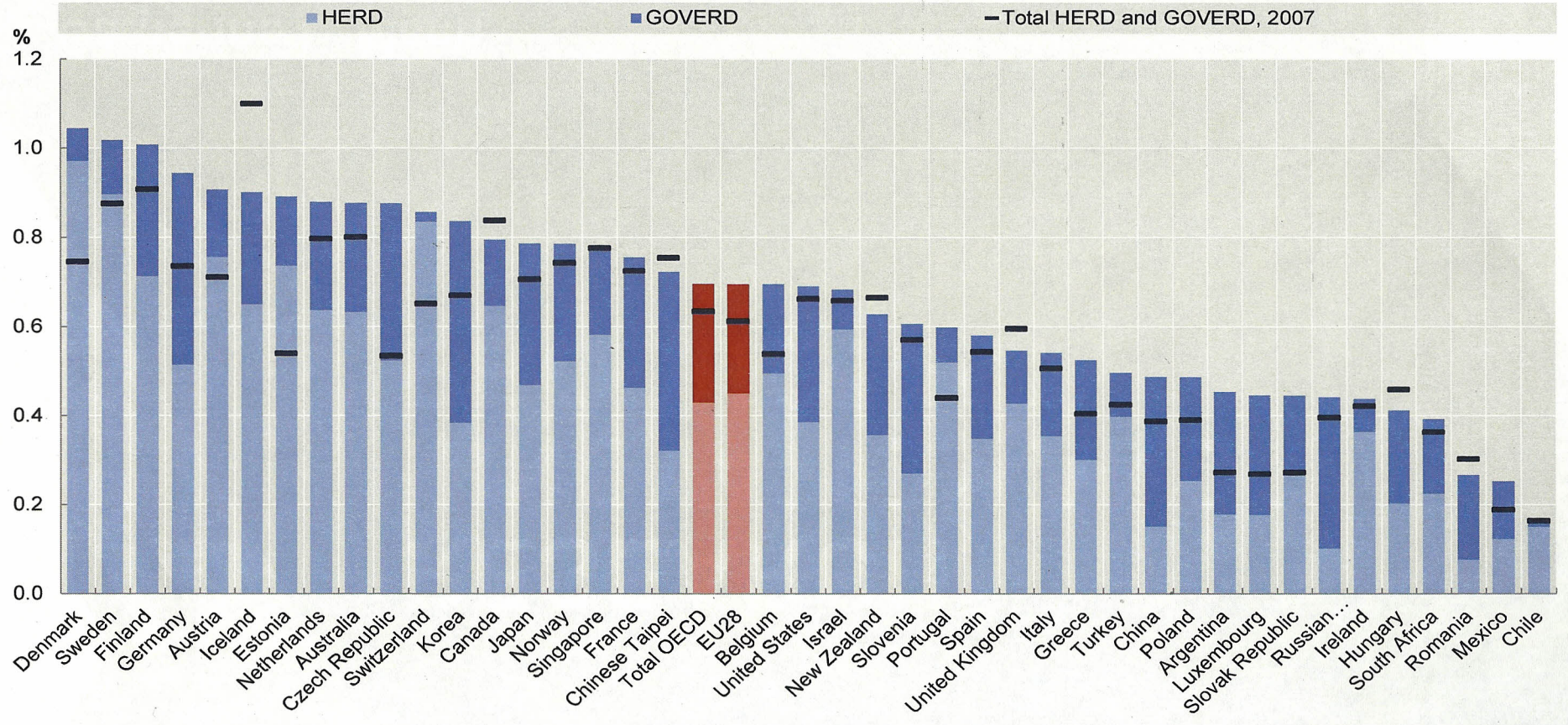
OECD
BETTER POLICIES FOR BETTER LIVES

The good news: *public investment in research has held up following the crisis*

Public R&D expenditure by type of research system

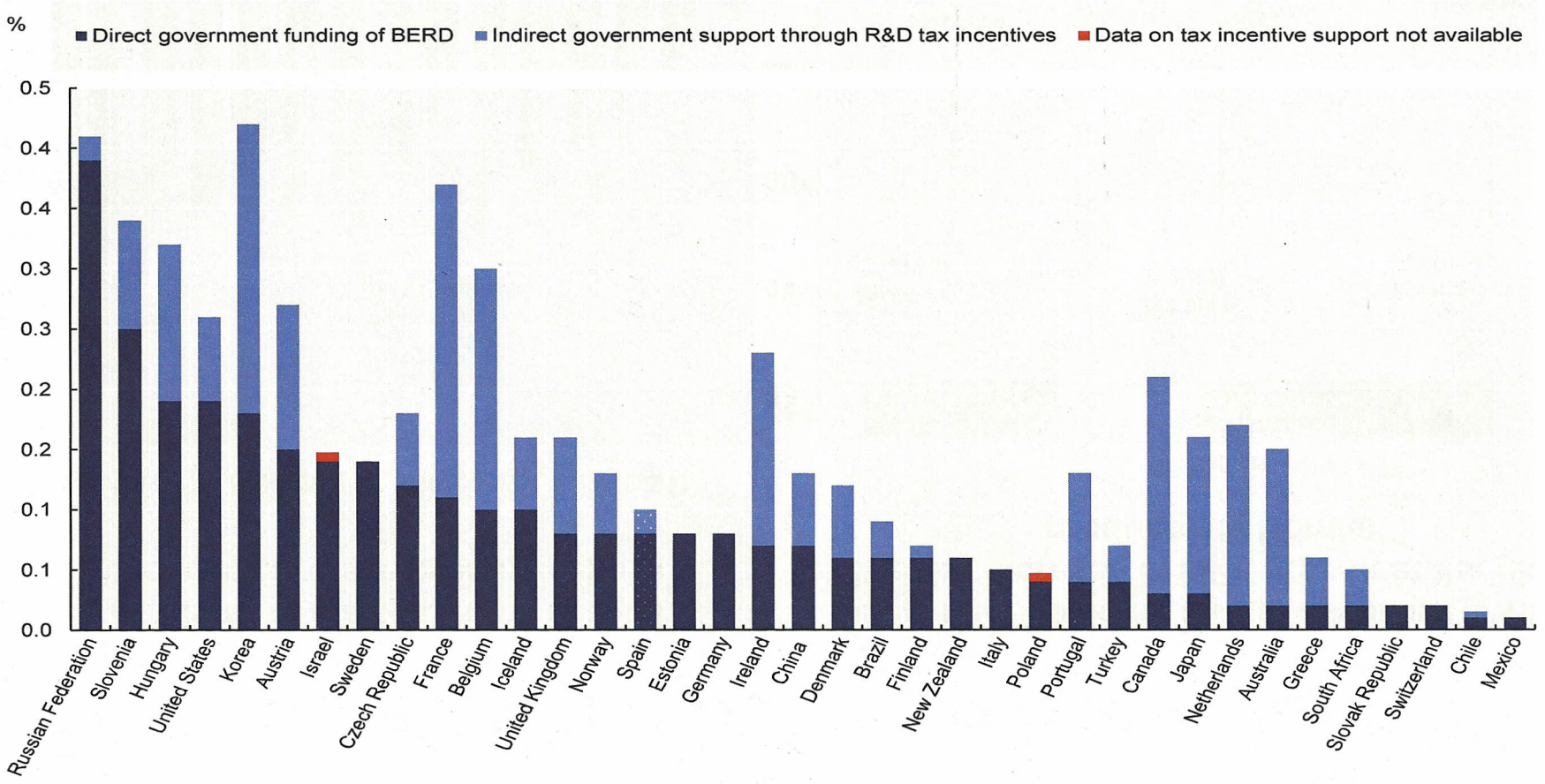
HERD and GOVERD, as a percentage of GDP, 2013, and total HERD and GOVERD in 2007



Source: OECD, *Main Science and Technology Indicators*, June 2015, www.oecd.org/sti/msti

Has funding been structured in the right way? *The innovation policy mix matters*

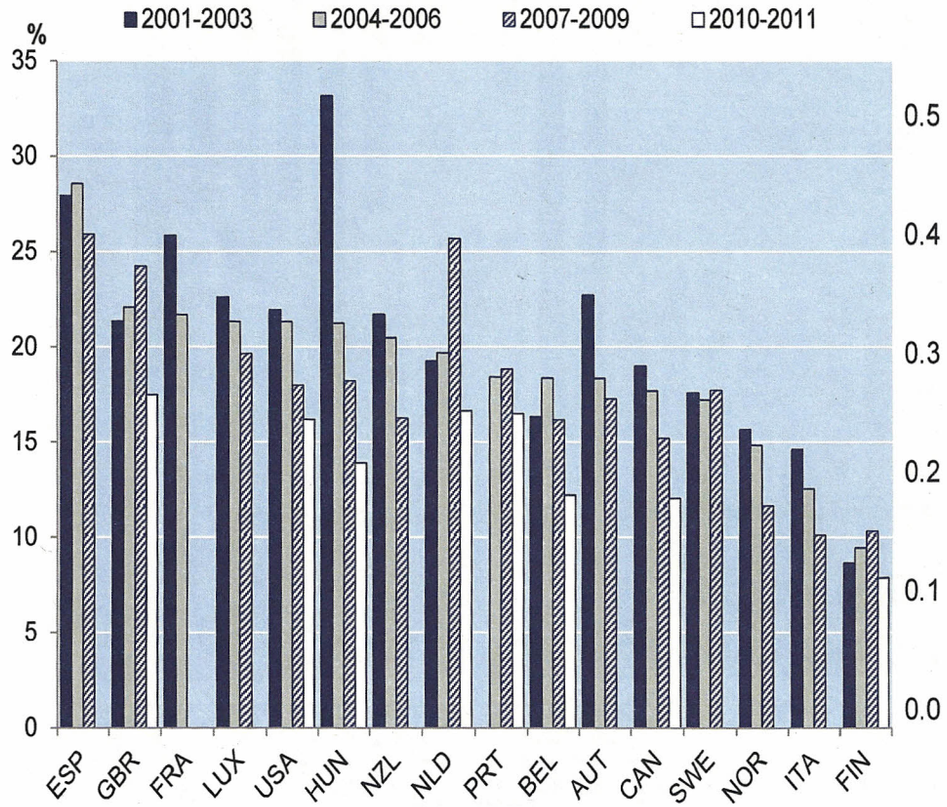
Direct funding of business R&D and R&D tax incentives, as a percentage of GDP, 2013



Source:OECD, R&D Tax Incentive Indicators, www.oecd.org/sti/rd-tax-stats.htm and *Main Science and Technology Indicators*, June, 2015, www.oecd.org/sti/msti.htm

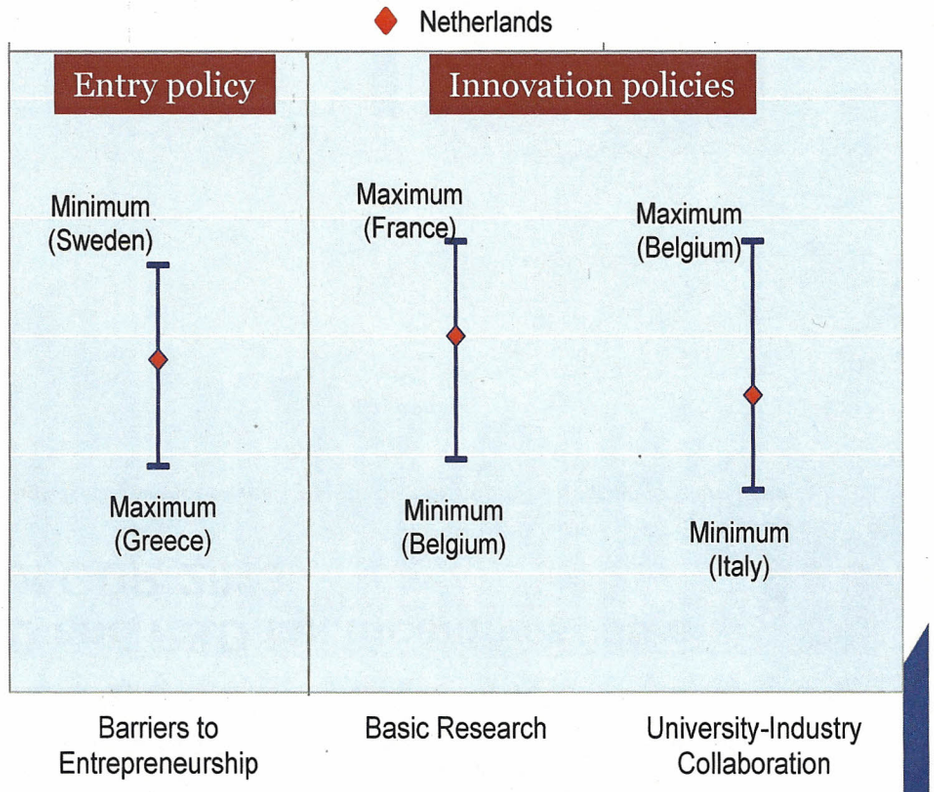
Are innovation policies creating start-ups? *What other policies matter?*

A: Share of start-up firms in total
Per cent; average over the periods



Source: Criscuolo, C., P. Gal and C. Menon (2014), "The Dynamics of Employment Growth: New Evidence from 18 Countries", OECD Science, Technology and Industry Policy Papers, No. 14.

B: Frontier spillover (% pa) associated with a 2% point increase in MFP growth at the global productivity frontier

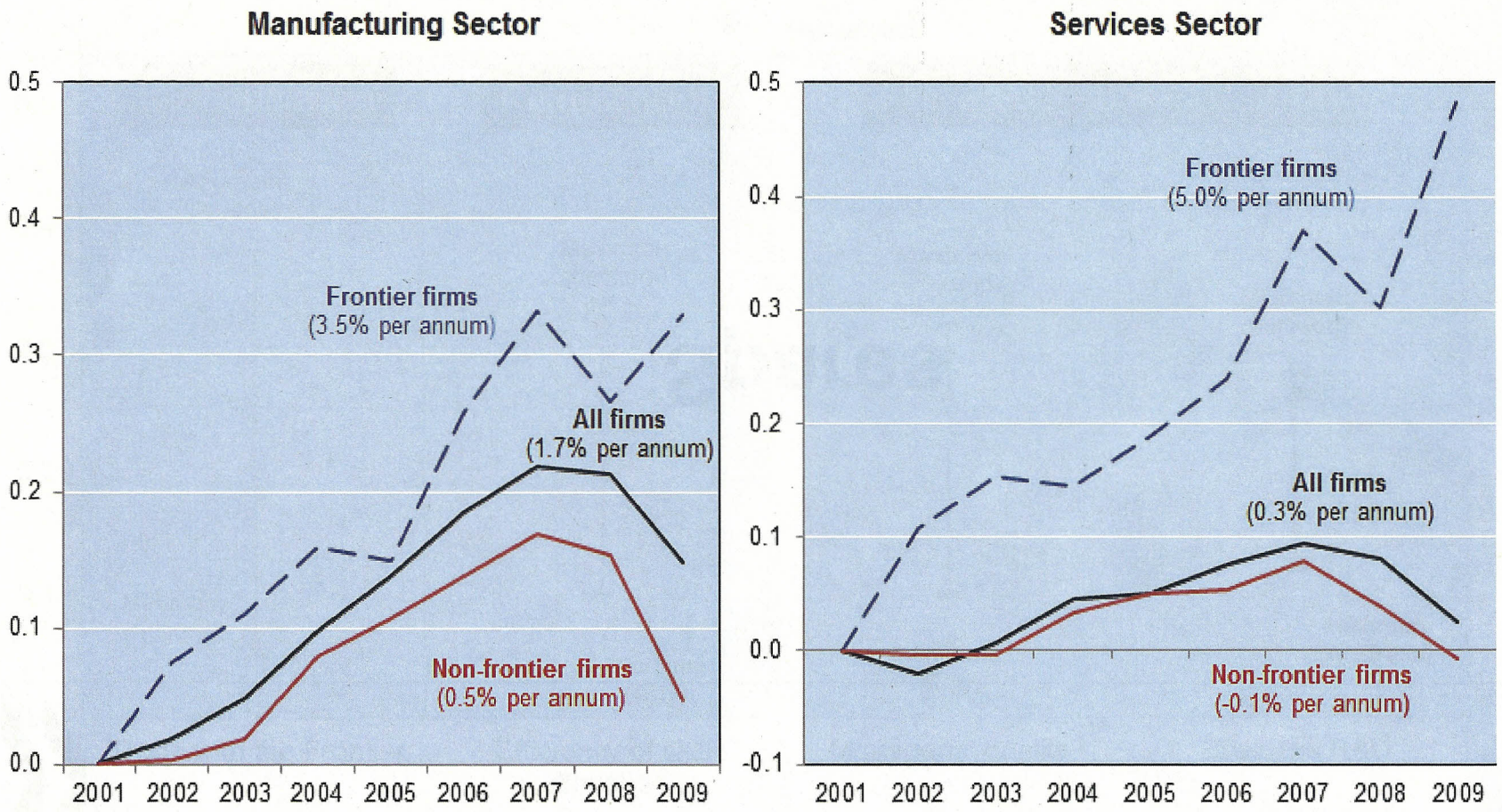


Source: Saia, A., D. Andrews and S. Albrizio (2015), "Public Policy and Spillovers From the Global Productivity Frontier: Industry Level Evidence", *OECD Economics Department Working Papers*, No. 1238.

Innovation vs. diffusion of innovation: *Where should policy emphasis be?*

Solid growth at the global productivity frontier but spillovers disappoint

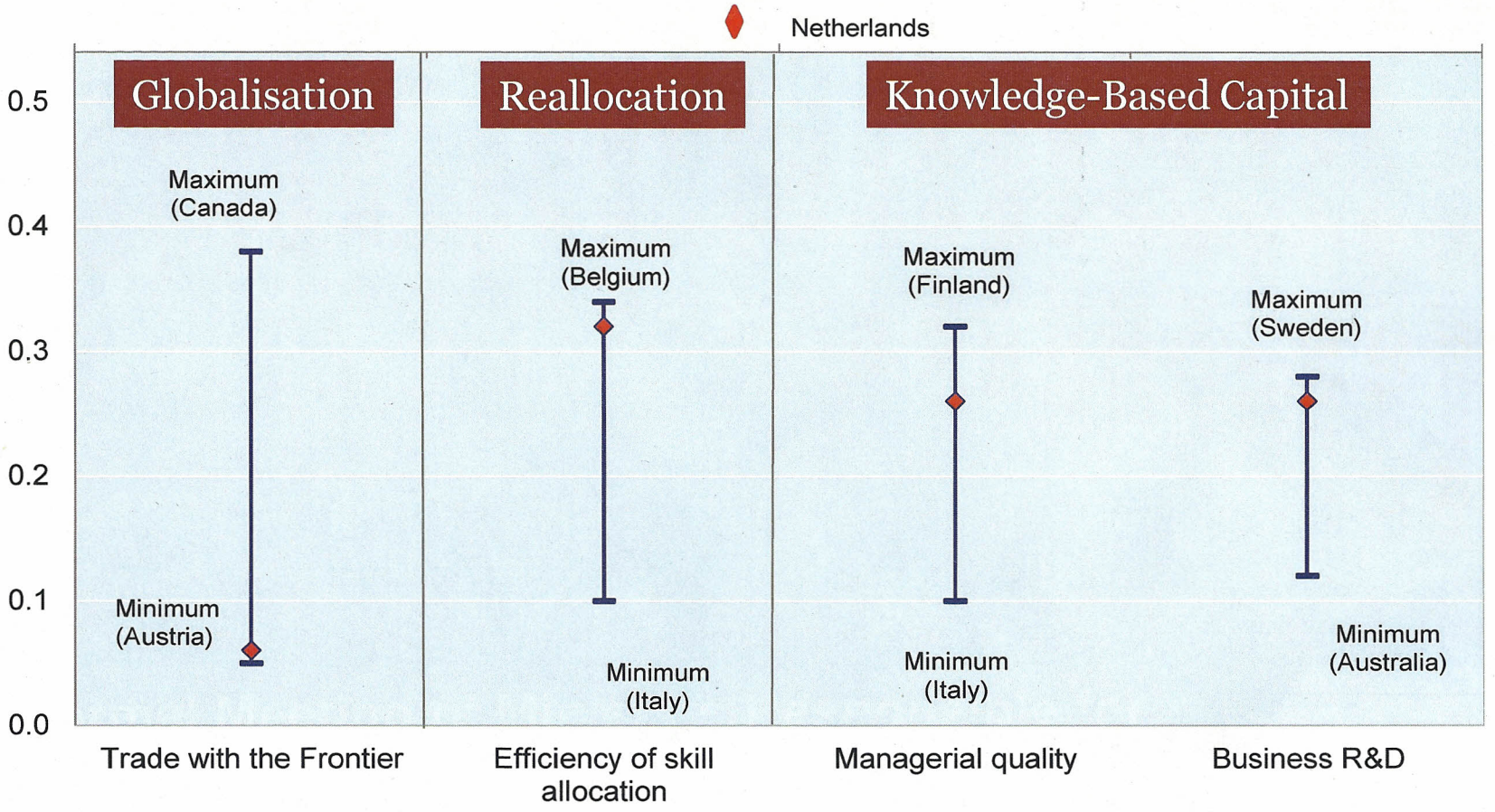
Labour productivity; index 2001=0



Source: Andrews, D. C. Criscuolo and P. Gal (2015), "Frontier firms, technology diffusion and public policy: micro evidence from OECD countries", OECD Productivity Working Papers No. 2.

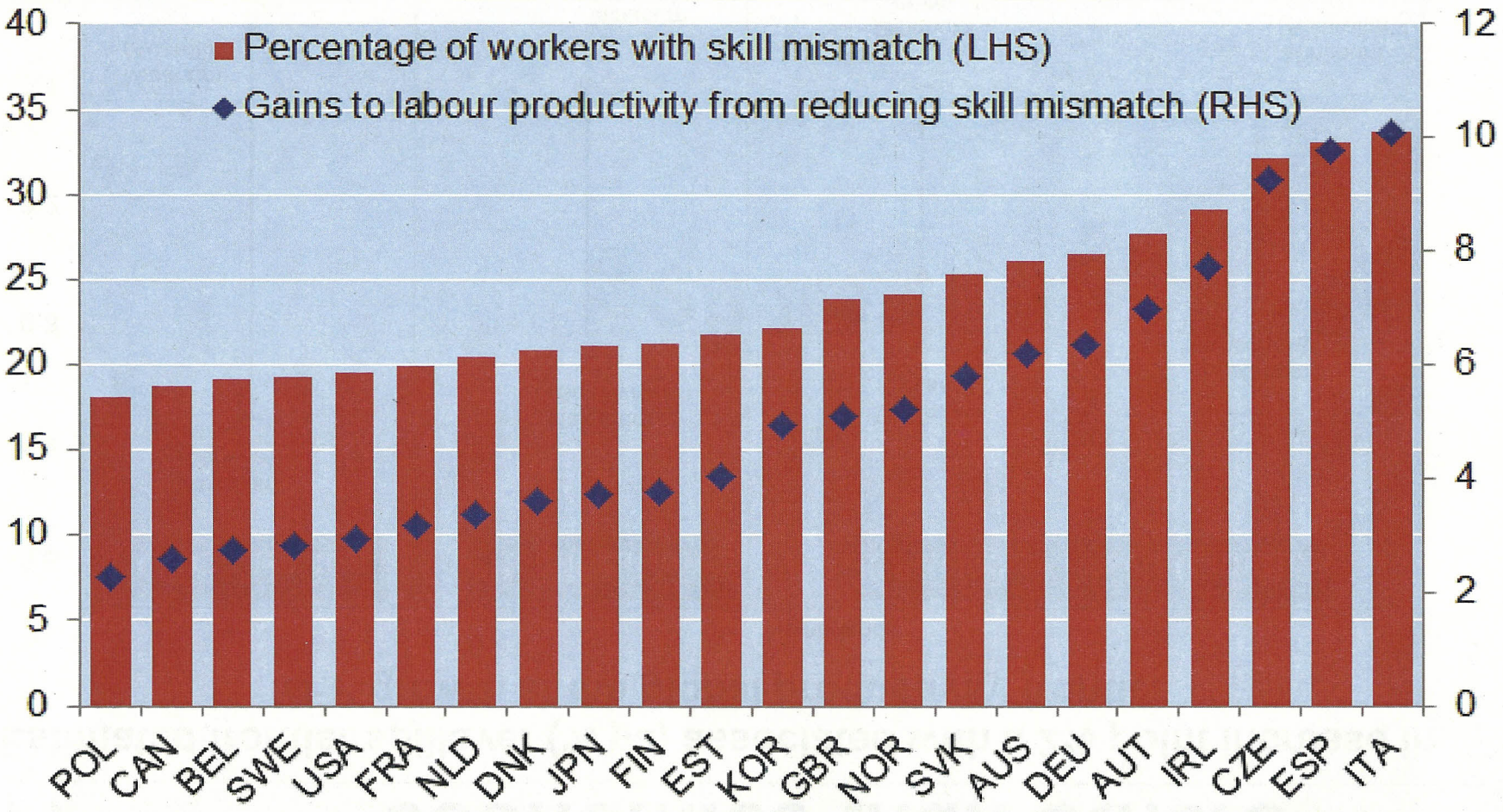
Diffusion comes easier to some economies than others

Estimated frontier spillover (% pa) associated with a 2% point increase in MFP growth at the global productivity frontier



Source: Saia, A., D. Andrews and S. Albrizio (2015), "Public Policy and Spillovers From the Global Productivity Frontier: Industry Level Evidence", OECD Economics Department Working Papers, No. 1238.

Skill mismatch constrains the growth of innovative firms



Skill mismatch, particularly over-skilling, is harmful for productivity because it constrains the ability of innovative firms to attract skilled workers and grow

Source: Adalet McGowan, M and D. Andrews (2015), "Labour market mismatch and labour productivity: evidence from PIAAC data " *OECD Economics Department Working Paper,* No. 1209.