INNOVATION AND INDUSTRIAL DYNAMICS

IN THE ERA OF TECHNOLOGY DISRUPTION

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BETTER POLICIES FOR BETTER LIVES

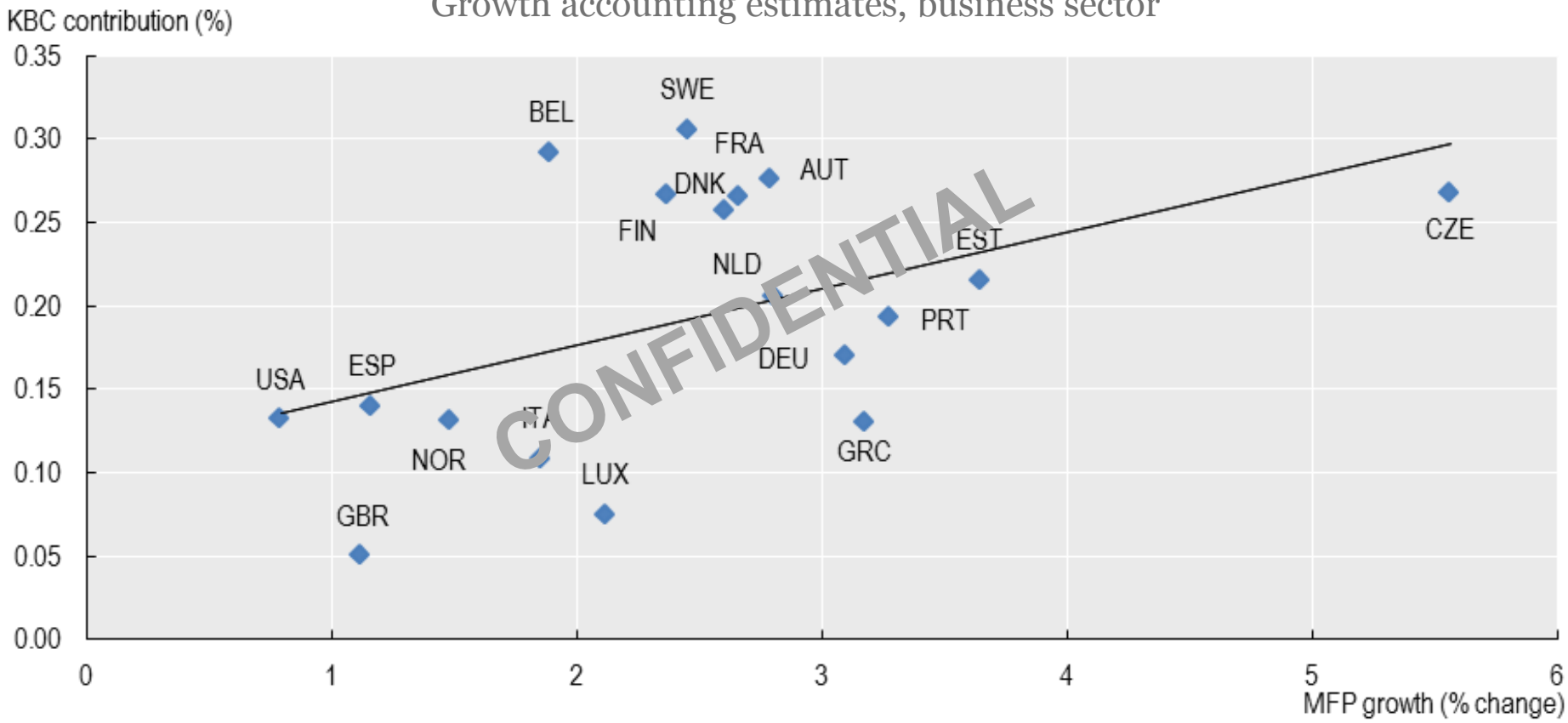
CHALLENGES FOR EVIDENCE BASE POLICY ADVICE IN THE ERA OF TECHNOLOGY DISRUPTION

- Digital transformations and the fast pace of change
- New sources of growth (domestic and globally)
- Technology disruption and diffusion (who is leading and who is lagging behind)
- Implications for jobs and skills (and if we were to be replaced by AI?)
- Assessment of policy programs (follow the money)

KBC AND PRODUCTIVITY

The contribution of KBC and MFP to KBC-augmented labour productivity growth, 2000-14

Growth accounting estimates, business sector

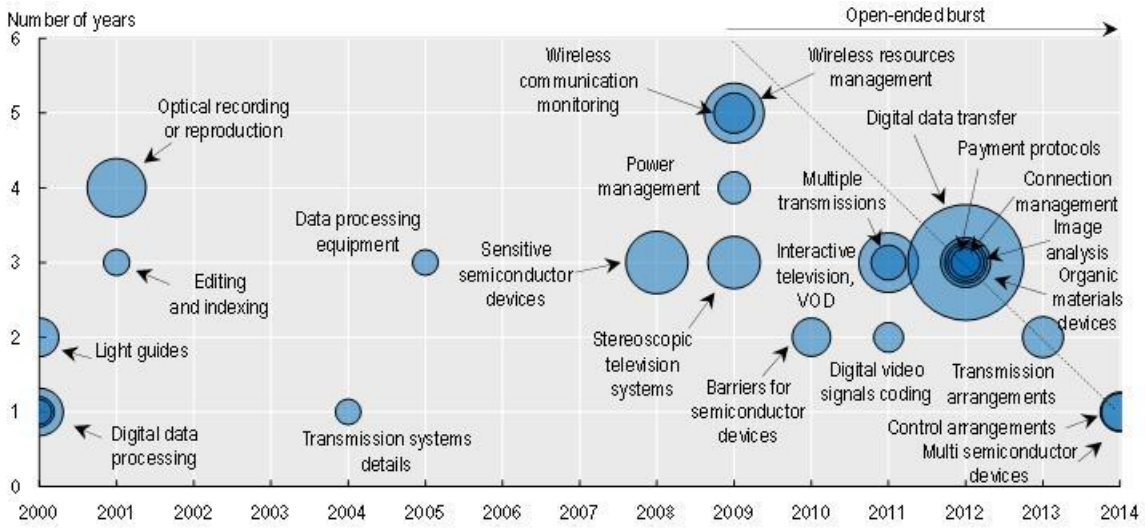


OECD STI SCOREBOARD, FORTHCOMING 2017

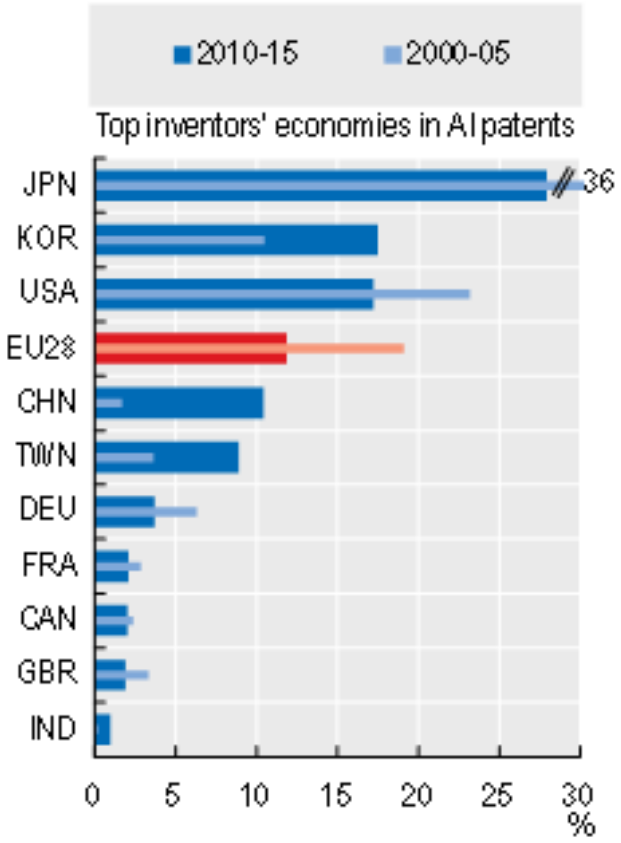
TECHNOLOGY DISRUPTION

Intensity and development speed in ICT-related technologies, 2000-14

Intensity of bursts (bubble size) and duration over time



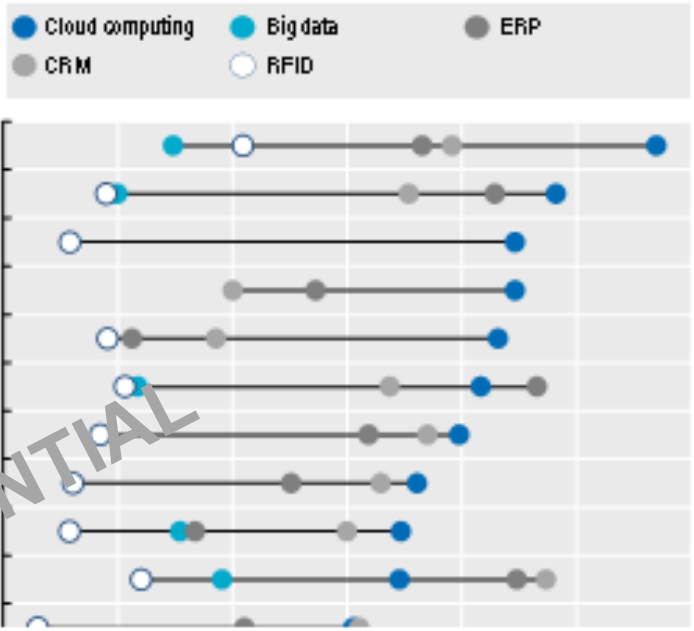
Patents in artificial intelligence technologies, 2000-15



TECHNOLOGY DIFFUSION

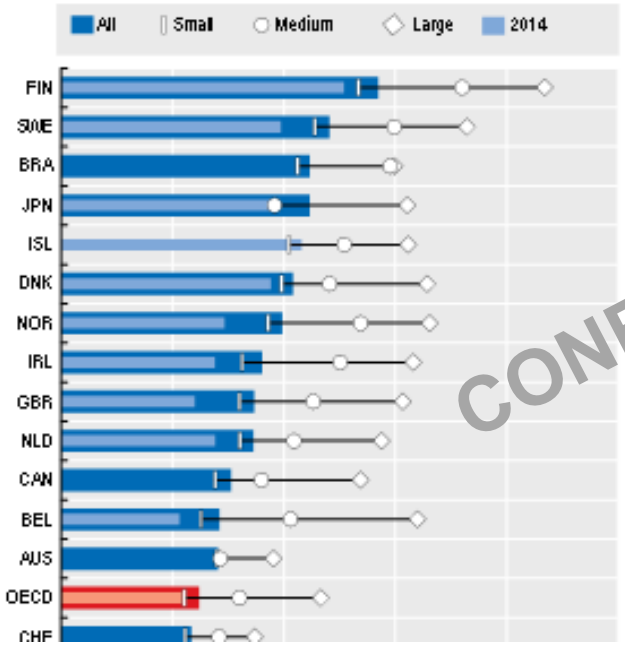
Diffusion of selected ICT tools and activities in enterprises, by technology, 2016

As percentage of enterprises with ten or more persons employed



Enterprises using cloud computing services, by size, 2016

As a percentage of enterprises in each employment size class



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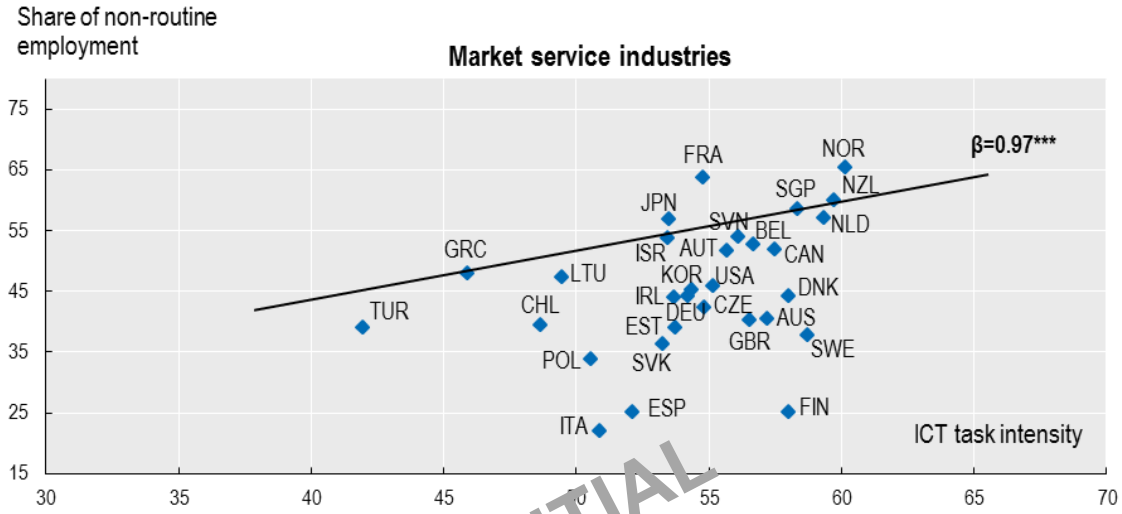
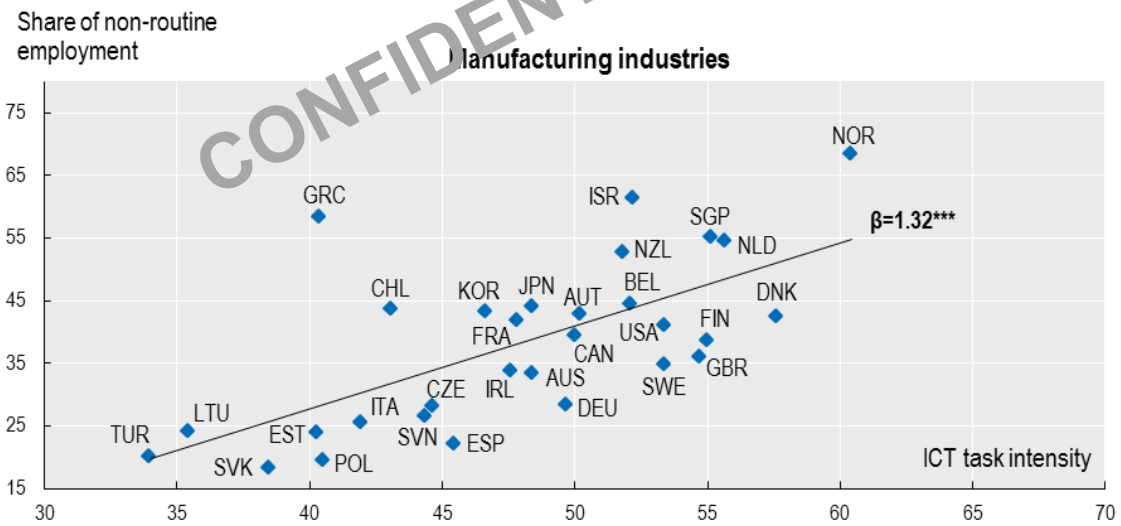
JOBS AND SKILLS





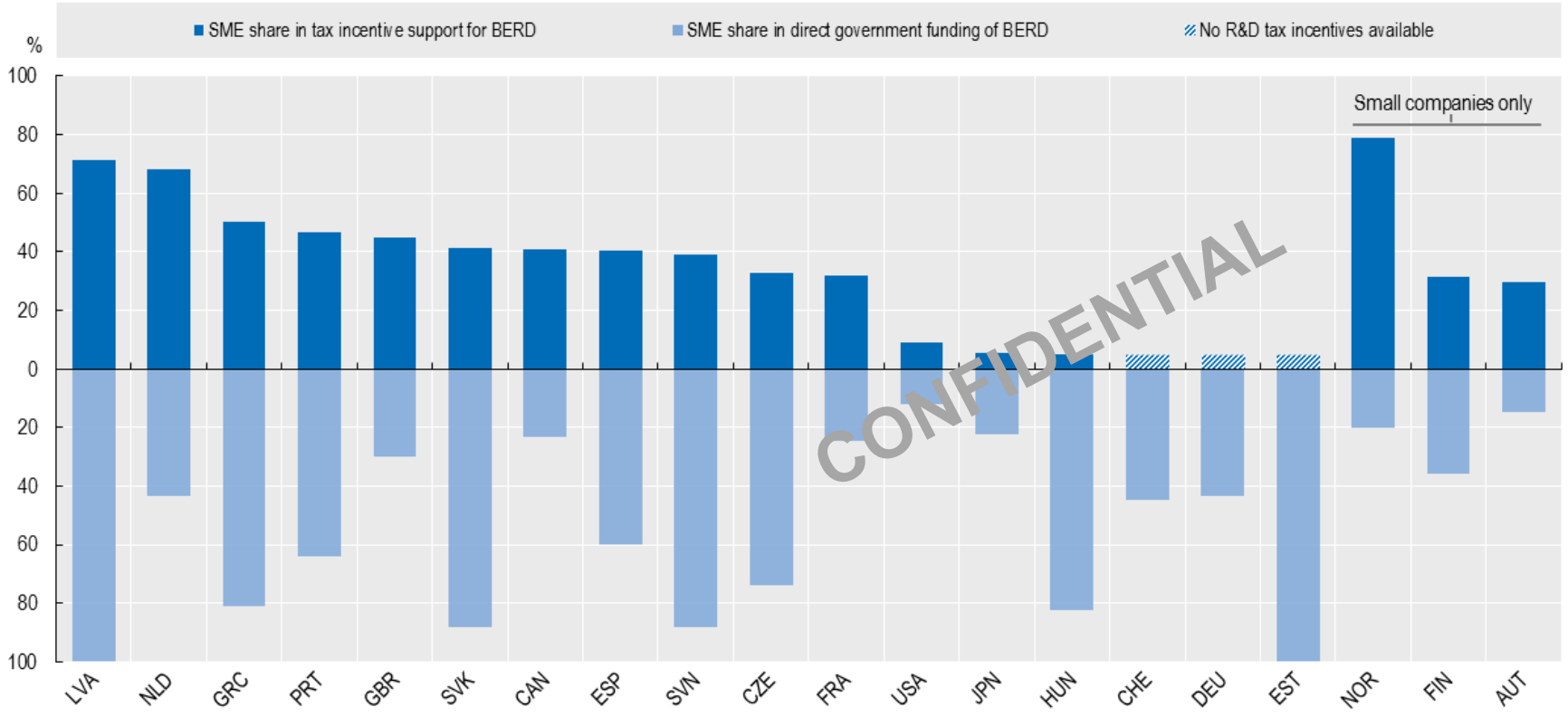
Share of non-routine employment and ICT task intensity, 2012 or 2015

Correlation of average industry values in the macro sector

SUPPORT TO INNOVATION & IMPACT

Direct funding and tax incentive support for business R&D by SMEs, 2015

As a percentage of government support for BERD in each category



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Working together on the next generation data infrastructure for STI policies

- New data – big data, web data and open data – data combinations and interactive mapping and reporting tools: exciting opportunities or "**uncomfortable data**"?
- The need for **granular, interoperable** and **reusable** data (standards for persistent identifiers in datasets)
- **Efficiency of programs** and the **joint impact of policies** (embedding metrics in programs)

OPEN QUESTIONS

- **Human-centered policy design** (user/consumer innovators, free/open innovation, geographical and cognitive peripheries, citizens /public engagement/participatory processes)
- **Trust and long-term thinking** (public understanding and acceptance of new technologies, role of foresight, framing of policies beyond election cycles)