

World's Best Practice in Research Translation

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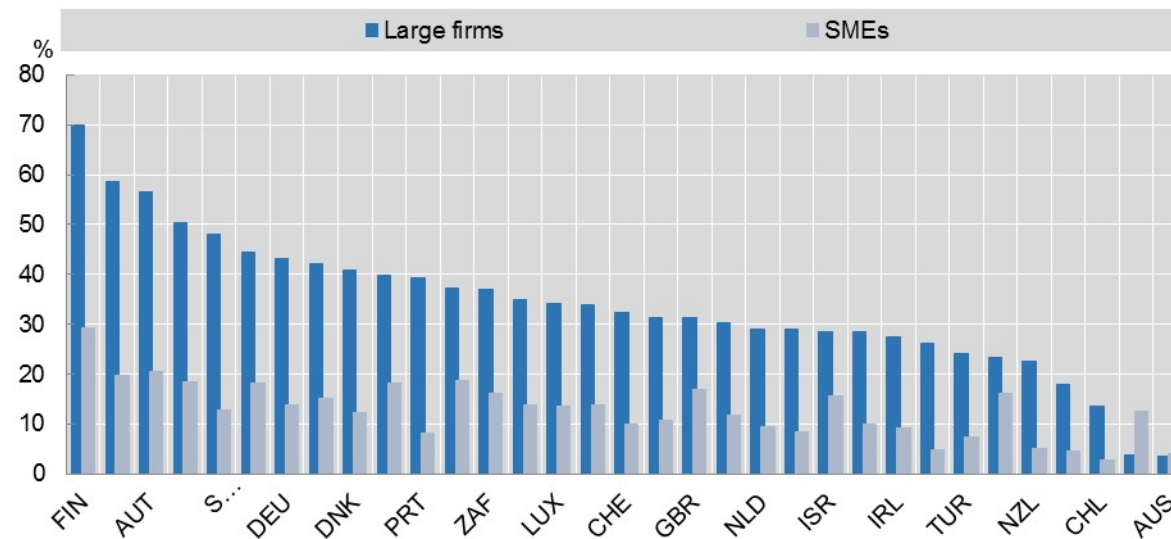


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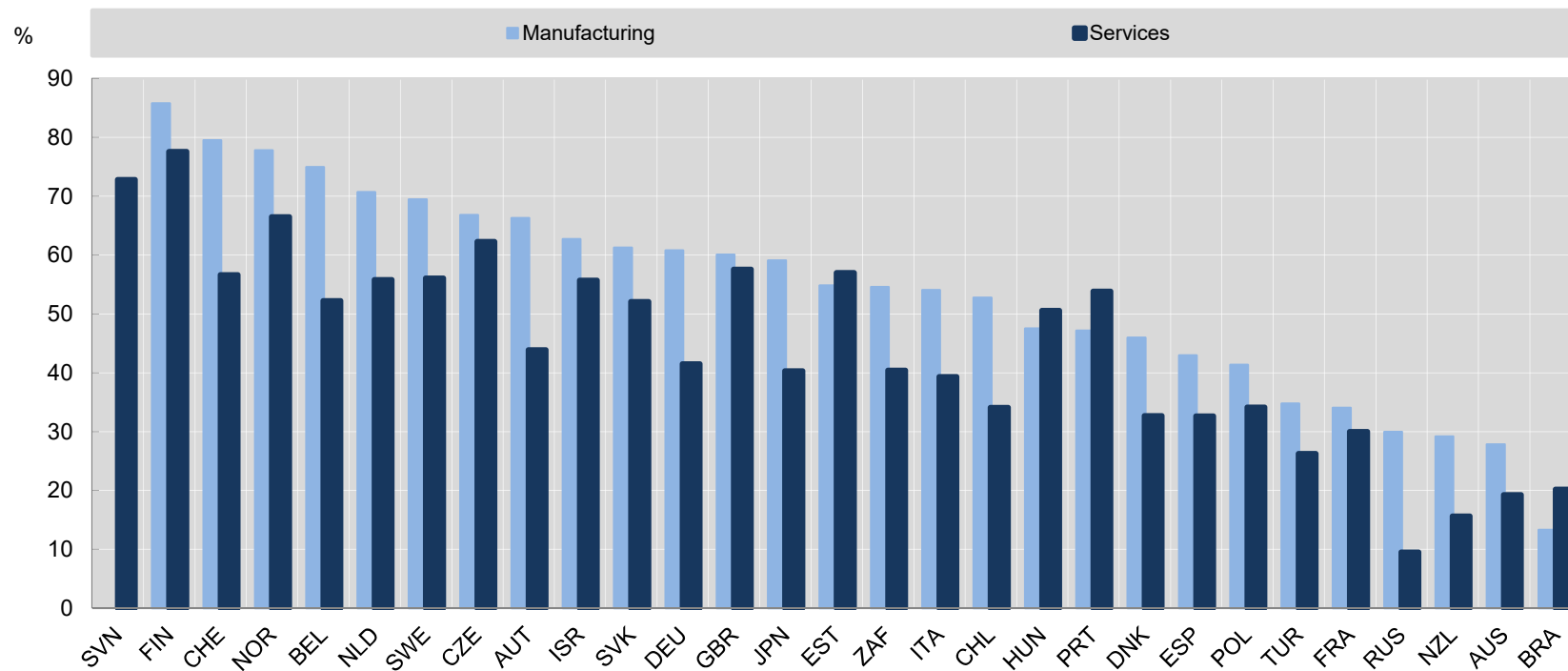
ACOLA - SAF09

- **Securing Australia's Future –**
- **SAF09 Aim:** Analyse international approaches to lifting research translation and business-researcher collaboration in best practice countries and examine their applicability for Australia.
- **Objectives:**
- Review approaches in selected countries and Australia in regard to commercialisation of research and support for collaboration.....
- Compare models for enhancing collaboration between researchers, business, government and not-for-profits

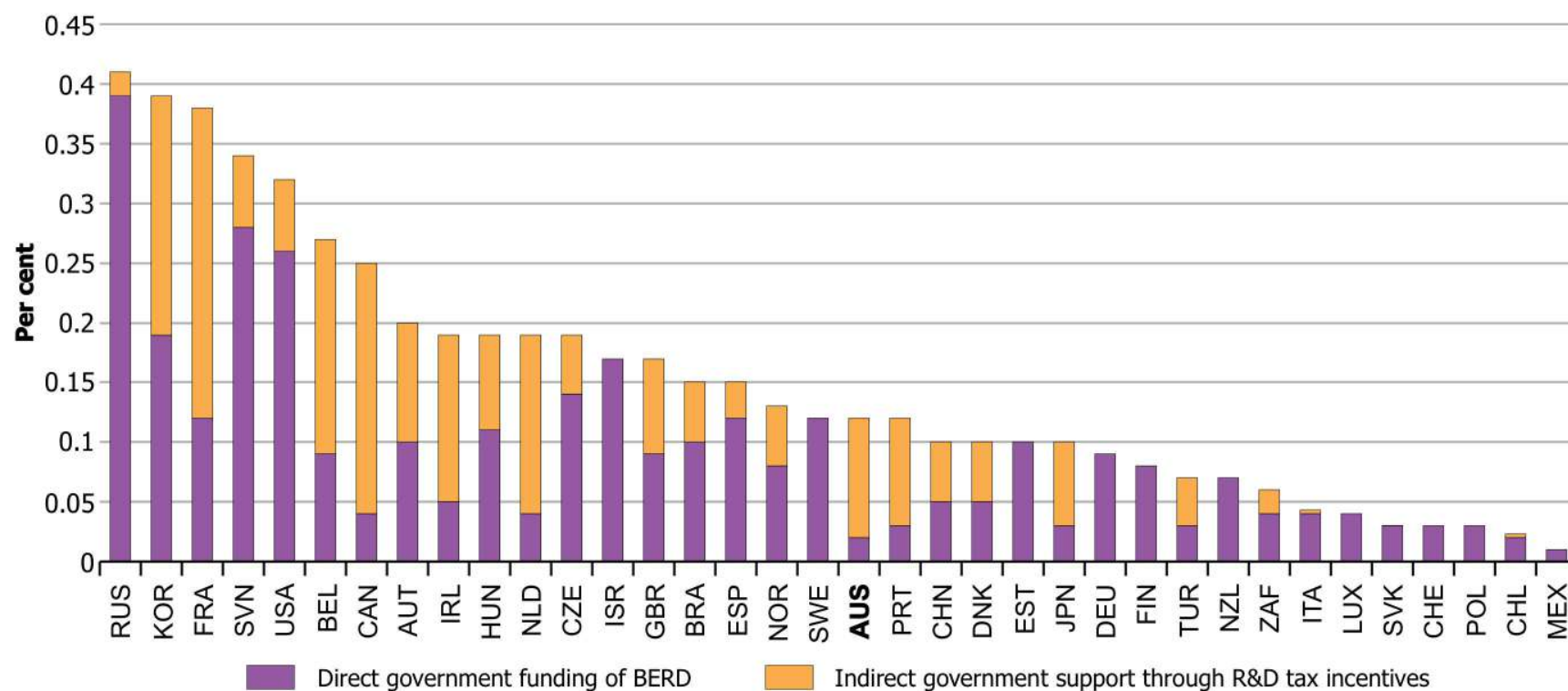
Research collaboration



R&D-active firms



Direct plus indirect support for BERD



Analysis of measures

Targets of measures used to promote translation of research

- business
- small and medium sized enterprises
- public sector researchers
- students and recent graduates
- both business and researchers
- university administrations
- technology transfer organisations
- Intellectual Property
- university start-up companies
- innovation intermediaries
- investment capital

World's best practice - government

- Program stability and continuity
- Business leadership of collaboration activities
- Minimal bureaucracy
- Funding to 'make a difference'
- Rapid assessment of proposals

World's best practice - universities

- Recognise engagement in mission statements
- Ensure strong efficient technology transfer arrangements
- Coordinate research management functions
- Facilitate the creation of start-ups
- Streamline collaboration agreements
- Provide researcher training in research translation and entrepreneurship

Measures targeting business

- Mostly focussed on SMEs
- Grants (e.g. Canada's Engage, Germany's ZIM)
- Mix of grants and loans (Finland's young innovative companies)
- Vouchers (Denmark, UK)
- Technology transfer (US Small Business Technology Transfer)

Selected examples of best practice

- Germany's ZIM KOOP Program
- Denmark's innovation vouchers
- Finland's new knowledge and business from research ideas
- United Kingdom's Knowledge Transfer Partnerships
- United Kingdom's HEIF Program
- Germany's SIGNO Program

Germany's ZIM Program

- ZIM Koop – R&D projects involving two or more companies and one or more research institutes. Budget approx. \$A515 million pa.
- ZIM Koop Networks – Funds networks (at least six SMEs). Phase 1 network design, contracts, technology. Phase 2 network supervision, projects, consulting, preparation of market launch. Budget approx. \$A31.7 million pa.

Denmark's Innovation vouchers

- Basic vouchers for a research-based business development project (40 per cent of project costs, up to a maximum of \$A22,000. The aim is the successful transfer of knowledge to an SME.
- Extended vouchers for larger scale R&D collaboration projects (25 per cent, up to a maximum of \$A108,000. The main finding new solutions to current industry problems.
- Annual budget \$A7.3 million

Finland's new knowledge and business from research ideas

Encourages the development of new businesses based on public sector research

- Projects can received \$A0.55 million
- Commercialisation must be 30% of costs
- Operated by TEKES
- Two funding rounds annually. In 2012, TEKES provided a total of €28 million to around 100 projects (mainly ICT)

UK's Knowledge Transfer Partnerships

Target is students and recent graduates

- Three way partnership between business, academic institution and graduate
- Been in place since 1975
- Net additional \$A8b in new sales, \$A3b gross value added and around 6,000 jobs (2001-2 to 2007-8)

KTP opportunities

Area	Info	Salary	Closing date	
East of England	KTP Research Associate - Animal Health Products	£21000 to £25000 per annum	12/10/2015	Info (3042)
London	Product Developer (Associate 1)	Up to £34,200 pa plus training budget up to £5,000	11/10/2015	Info (3109)
London	Mobile Application Developer (KTP Associate 2)	Up to £30,700 pa plus training budget up to £5,000	11/10/2015	Info (3110)
North West of England	Control Systems Engineer (KTP Associate)	£30,434 to £37,394	19/10/2015	Info (3111)

UK's HEIF Program

UK's Higher Education Innovation Fund

- 'Third stream funding' since 2002-03
- Rewards engagement
- Between 28 and 41 % of knowledge exchange attributed to HEIF
- Review found that investment of \$A1.3b generated \$6.3b in gross additional income over 6 years

Germany's SIGNO Program

Addresses intellectual property issues

- Provides information to German industry about patent-protected university IP
- Up to \$A67,000 to SMEs for first time use of IP
- Information to inventors, inventors awards
- Supports 23 patent commercialisation centres
- Program budget in 2012 was \$A26m

Best practice measures

- National strategies for innovation and a national agency to manage them
- Tax incentives targeting business collaboration with public sector researchers
- Measuring and rewarding universities for engagement with external parties
- Use of innovation intermediaries
- Loans (usually in conjunction with grants)

National Innovation Agencies

Most best practice countries have, in addition to a national innovation strategy, an independent agency (at arms length from government) to deliver it:

- Innovate UK
- Tekes (Finland)
- VINNOVA (Sweden)
- Innovation Fund of Denmark

Innovate UK (former TTSB)

- Incorporated
- Business-oriented Board
- Major focus on collaborative R&D (\$A368 in 2013-14)
- Supports a range of measures (Catalysts, Catapults, vouchers, Smart and KTPs)
- Has a five-year strategy (\$A2.2 billion)

Tax incentives for business

Research collaboration between industry and publicly funded research organisations is likely to have significant spillover effects

- Australia's current rate of collaboration between the research and industry sectors is the lowest in the OECD
- Australia's R&D tax incentive could be adjusted to provide companies with a greater benefit for collaborative work with public sector researchers

Conclusions

- Australia lacks the range of policies and programs that are used by other countries to encourage research collaboration and translation
- The level of funding for these activities in Australia is significantly lower than the OECD country leaders
- The research community needs to press government to adopt best practice in relation to research collaboration and translation

“Translating research for economic and social benefit”

The SAF09 report and supporting country studies can be accessed via the ACOLA website :

www.acola.org.au

Israel's Kamin Program

Kamin targets both business and researchers. It funds public sector researchers to continue a research project into an applied phase. Aim is to transfer technology (often to a start-up).

- \$A130,000 for up to 12 months (90% of costs)
- \$A245,000 up to 24 months (85% of costs)
- \$A95,000 for a further 12 months (66% of costs)