Council of the European Union
General Secretariat

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LIMITE

RECH

WORKING PAPER

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WORKING DOCUMENT

From:	ERAC Secretariat
To:	ERAC (European Research Area and Innovation Committee)
Subject:	Research and Innovation policy in Finland

Dear ERAC delegates,
Please find attached the following presentation of the agenda of the ERAC plenary on 2 October 2019:
item 3: Research and Innovation policy in Finland

Research and Innovation policy in Finland

ERAC Plenary, 2 October 2019, Helsinki

The Best Basic Education in the World
WEF, The Global Competitiveness Report 2016-17

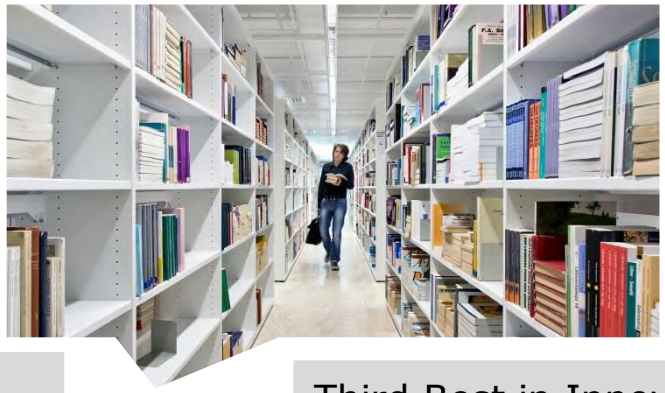
World's Best in Press Freedom
Press Freedom Index 2016

Top-Ranking Country in PISA
OECD PISA

The Safest State
WEF, Travel and Tourism Competitiveness Report 2015

World's Least Failed State
Fund for Peace Failed States Index, 2016

Second best performing Higher Education graduates
OECD Education at Glance 2016



World's Second Least Corrupt Country
Corruption Perceptions Index, 2014

The Best Public Administration
Lagatum Institute, The Lagatum Prosperity Index 2016

Greatest amount of Human Capital
WEF, The Human Capital Report 2016

Third Best in Innovation
WEF, The Global Competitiveness Report 2016-17

World's Third Best in Gender Equality
WEF, Global Gender Gap Report 2015

World's Second Best Place to Be a Mother
Save the Children's annual State of the World's Mothers report 2015

Photo: Tuomas Uusheimo / University of Helsinki

SUOMI 100+

Proposal for Finland: Finland 100+

EDUCATION AND LEARNING, KNOWLEDGE , SCIENCE AND TECHNOLOGY FOR THE BENEFIT OF PEOPLE AND SOCIETY

Over 50% of all young people complete a higher education degree

Development of higher education and expertise in different life situations

4% of GDP allocated to research and development: new creative power of science, sustainable growth, more wellbeing

INNOVATIVE UNIVERSITIES AND UNIVERSITIES OF APPLIED SCIENCES

More pre-emptive and able to react

Strong internationally attractive knowledge clusters

Actively involved in the world's most interesting networks

Open, international and globally responsible

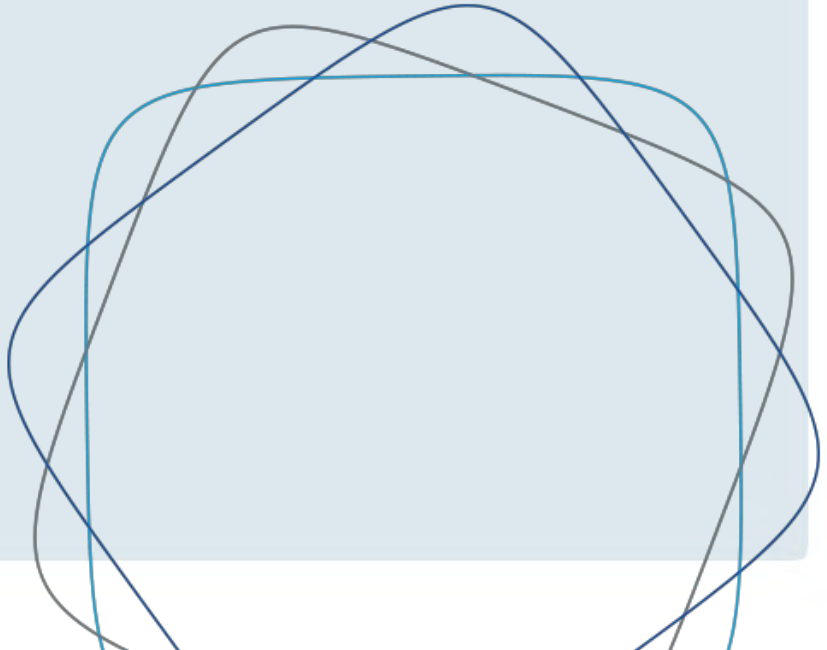
Robust RDI activities and versatile higher education as engines for change in the economic structure and society

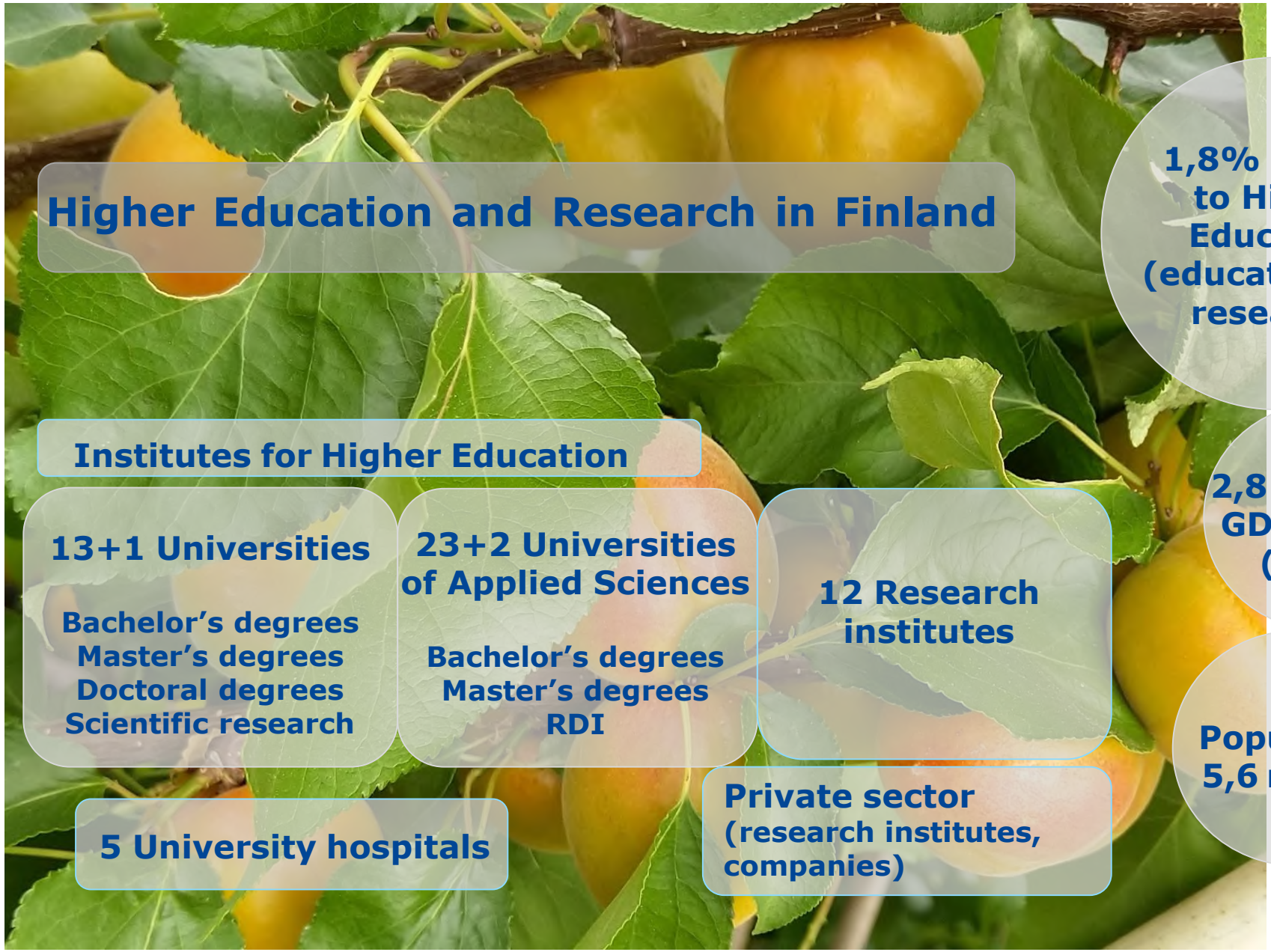
The world's most competent labour force brings a competitive edge and promotes wellbeing

Ethical and socially responsible

ENABLING STEERING, RESOURCES AND STRUCTURES

Creativity, dynamics and potential for action!





Higher Education and Research in Finland

1,8% of GDP to Higher Education (education and research)

Institutes for Higher Education

13+1 Universities

Bachelor's degrees
Master's degrees
Doctoral degrees
Scientific research

23+2 Universities of Applied Sciences

Bachelor's degrees
Master's degrees
RDI

12 Research institutes

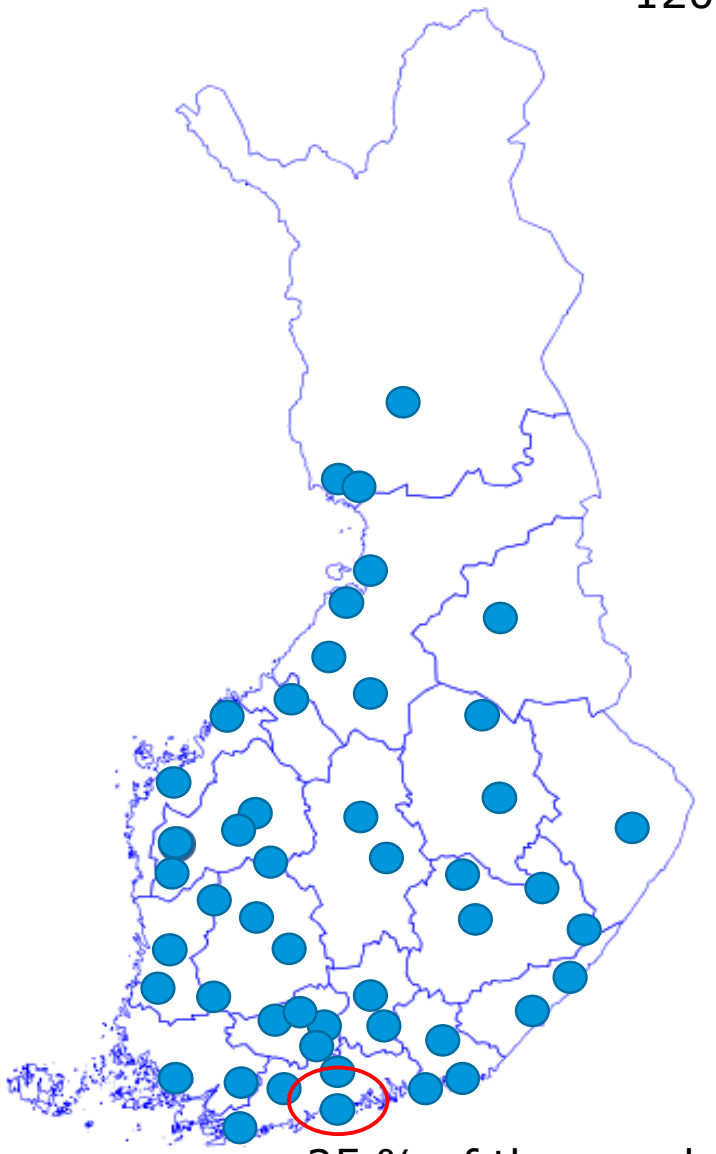
2,8 % of the GDP to R&I (2017)

Population 5,6 million

5 University hospitals

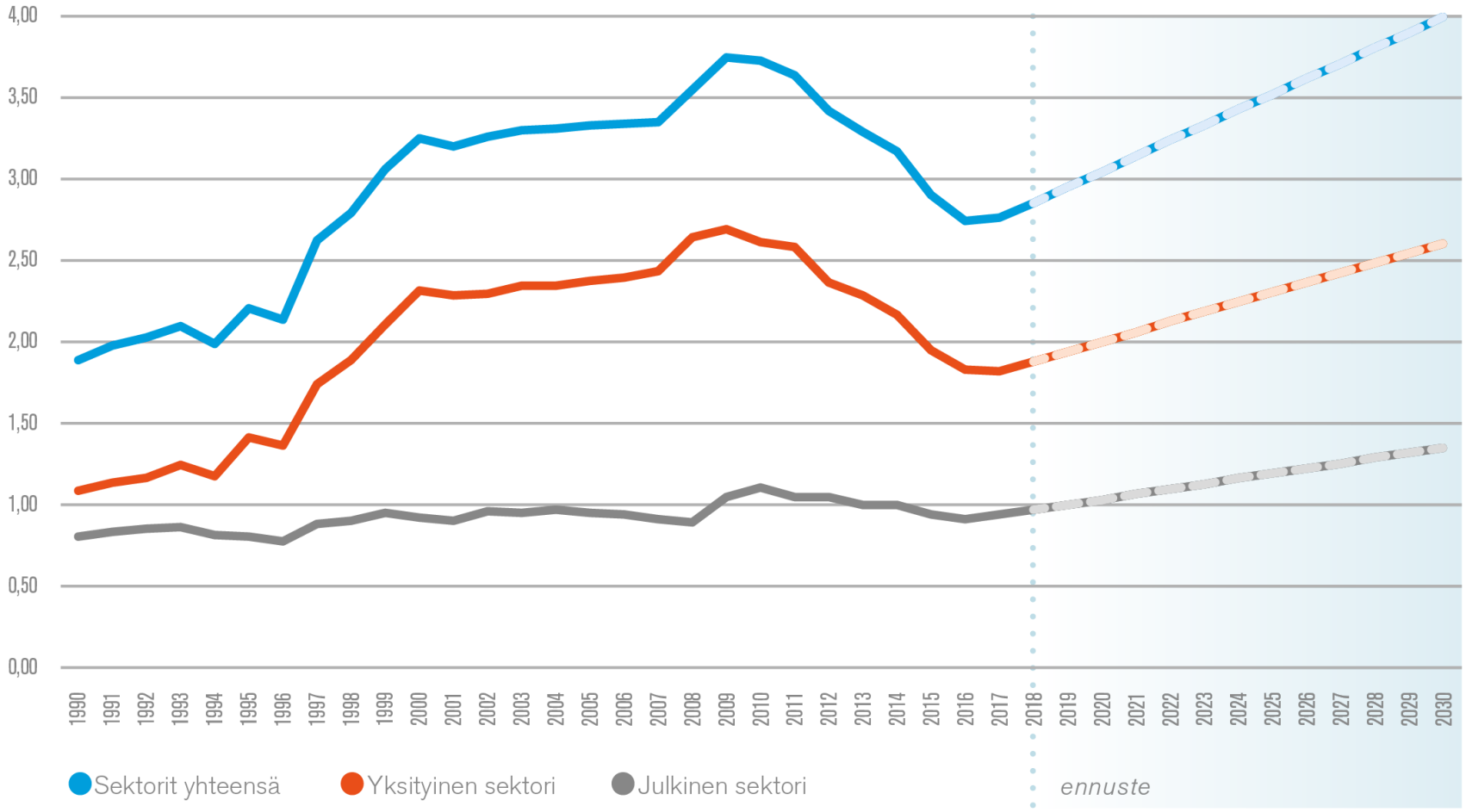
Private sector (research institutes, companies)

1200 km



25 % of the population

R&D share of GDP by 2030 in Finland

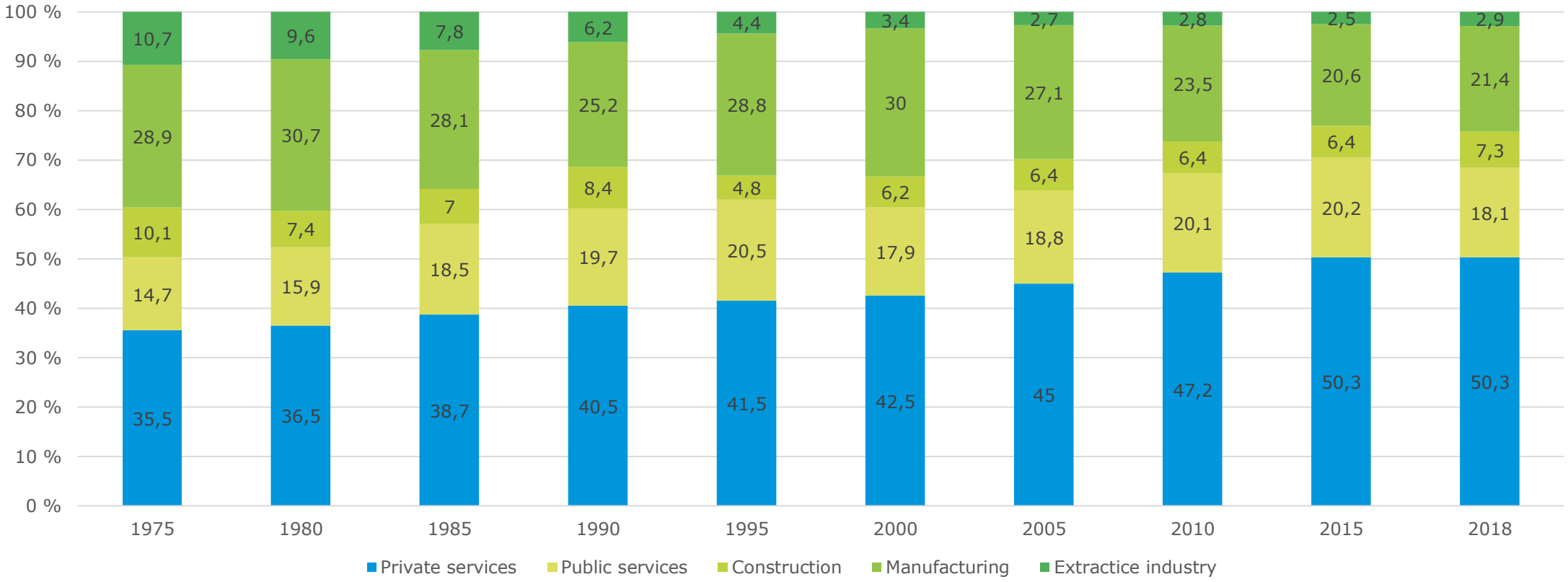


Both sectors Private sector Public sector projection

Finland is an innovation leader.

Source: European Innovation Score board 2019

Structure of the Finnish economy
(as percentages of the GDP)



source: https://ek.fi/mita-teemme/talous/perustietoja-suomen-taloudesta/3998-2/

EuroHPC – leading the way in the European supercomputing

- The EU and national governments are **jointly investing in high-performance computing** (HPC) to help advancing research, innovation and industrial growth and keeping Europe globally competitive
- **EuroHPC Joint Undertaking** has 29 European member countries. Budget includes public investments from the EU and participating states as well as investments from private sector
- Application process resulted in a decision to place three exascale precursor supercomputers in **Finland**, **Italy** and **Spain**

LUMI – a unique joint endeavor in high-performance computing

- First co-investment ever of **this scale** in scientific computing.
- LUMI provides a **high-quality, cost-efficient** and **environmentally sustainable** HPC ecosystem based on true European collaboration.
- Consortium members are **Finland, Belgium, Czech Republic, Denmark, Estonia, Norway, Poland, Sweden** and **Switzerland**
- Consortium continues a solid tradition of collaboration in HPC training and education, user support and data management services.

- EuroHPC-video

Sustainable Growth – Presidency R&I priorities

Europe's prosperity and competitiveness in the global context should be enhanced by creating an economically, environmentally and socially strong Europe.

Elements of sustainable growth include:

- Effective Single Market including modern Industrial policy,
  - *ERA as a single market for research, increased investments to R&I*
- Transformation to low-carbon economy,
- Digital economy as competitive edge,
  - *Digitalisation should be further promoted, e.g. through more transparent practices and thus improving quality and increasing effectiveness*
- Skills and inclusive society.
  - *Coherent development of research, education and innovation systems*

FINNISH PRESIDENCY - KEY PRINCIPLES

Sustainable meeting arrangements

Transparency and active communications

Respect for principles of better regulation

Use and further development of digital tools in the Council Work

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Ms Jonna LEHTINEN, Senior Specialist, Attaché for Research & Innovation, Space, Euratom, Chair of Research working party

Kiitos!

Tack!

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Photo: Jorma Luhta / Visit Finland