# Competitiveness and wellbeing based on knowledge

Finland invests in research and development. Education, science and technology policies have been developed on a long term with a view to strengthening the national research and innovation system. The aim is to promote knowledge based competitiveness and to raise the quality and visibility of Finnish research. Finland supports the international success of Finnish research by competed funding and promoting open science and capacity building e.g. by establishing and developing creative research environments. Public research funding is used to strengthen the knowledge and competence base underpinning sustainable economic growth and the country's material and intellectual welfare. The objective of science policy is to promote science, ensure positive development of the quality, effectiveness and internationalisation of research and postgraduate education, and to bring about an efficient and balanced research system.

# Higher education institutions

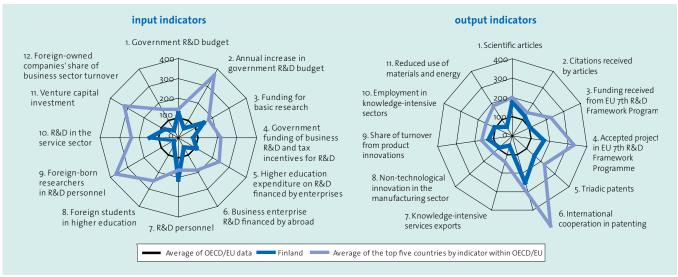
The Finnish higher education system comprises of 14 universities (yliopisto/universitet/университет) and 25 polytechnics (ammattikorkeakoulu, AMK/yrkeshögskola, ҮН/профессиональный институт). Both sectors educate, based on research, at bachelor and at master degree level. Only universities confer doctoral degrees. The research emphasis of universities is in

scientific research, whereas polytechnics are more engaged in research and development work. Despite their autonomy and legal entity status, two thirds (approaching two billion euro) of universities' funding consists of resources directed from the state budget. As for polytechnics, the proportion of direct state budget support is around 85 % (around a billion euro). The share of research activities of

the total budget is around one third in universities and approximately one tenth in polytechnics.

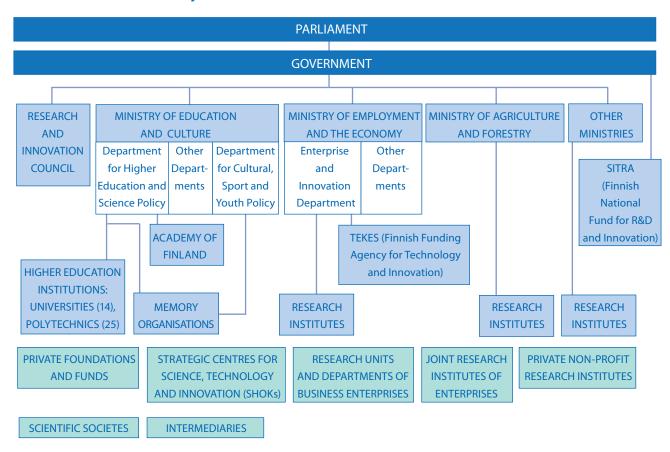
There are five university hospitals in Finland. They perform both scientific research in collaboration with universities and other partners as well as clinical research. Research in university hospitals is partly covered by targeted funding from the Ministry of Social Affairs and Health.

Finland's innovation system in international comparison



Source: Research and Innovation Council

## **Finnish Research and Innovation System**



#### State research institutes

In addition to higher education institutions, research is conducted also in 18 research institutes steered by each administrative branch. Many institutes conduct noteworthy research activities and all of them have authoritative tasks. Altogether, the institutes spend over 300 million euro a year to research activities.

# The private sector R&D

The role of private sector in Finnish research and development work investments has remained significant (over 70 %) despite the structural changes taking place both in traditional smoke stack industries and in the IT sector. There is a long tradition of private-public partnerships in R&D in Finland supported also by public funding

agencies like Tekes – the Finnish Funding Agency for Technology and Innovation and the Academy of Finland.

#### **Funding**

The GDP share of Finnish R&D expenditure was 3,6% in the year 2012 and that of public research funding was around 1%.

The profile of the Academy

of Finland is towards scientific research with an annual budget of 320 million euro. The Academy as the Finnish research council operates in the administrative branch of the Ministry of Education and Culture.

Tekes – the Finnish Funding Agency for Technology and Innovation is steered by the Ministry of Employment and the

Economy and allocates 550 million euro a year to development of innovations that aim at growth and new business operations. Private foundations provide 250 million euro funding annually to research.

# the international success of Finnish research by competed funding and promot-

"Finland supports

ing open science and capacity building."

### Read more:

The Ministry

of Education and Culture: <a href="http://www.minedu.fi/OPM/Tiede/?lang=en">http://www.minedu.fi/OPM/Tiede/?lang=en</a>
The Academy of Finland:
<a href="http://www.aka.fi/en-GB/A/">http://www.aka.fi/en-GB/A/</a>
Research.fi: <a href="http://www.research.fi/en.html">http://www.research.fi/en.html</a>