

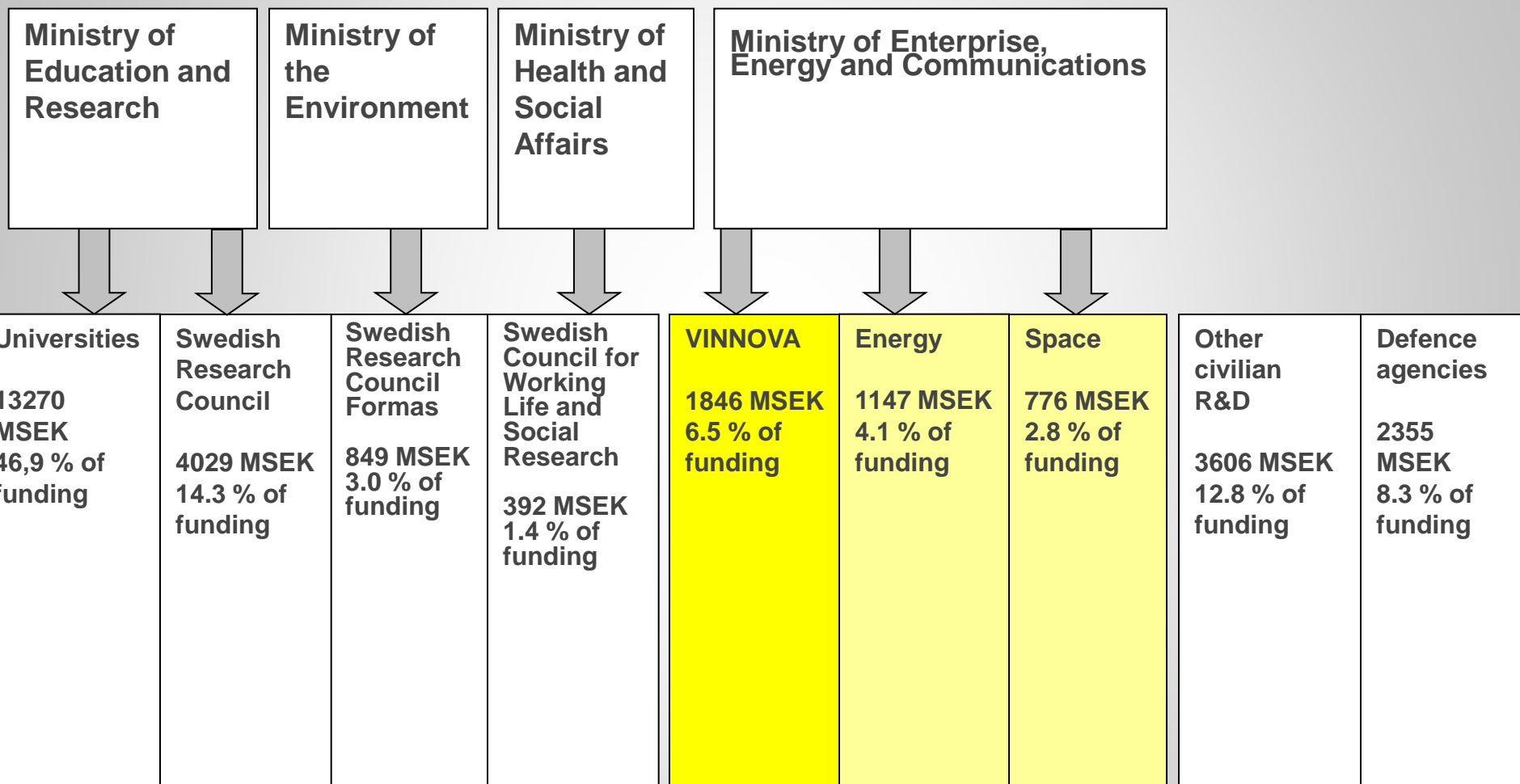
VINNOVA´s role in the Swedish Innovation System

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2010-10-26

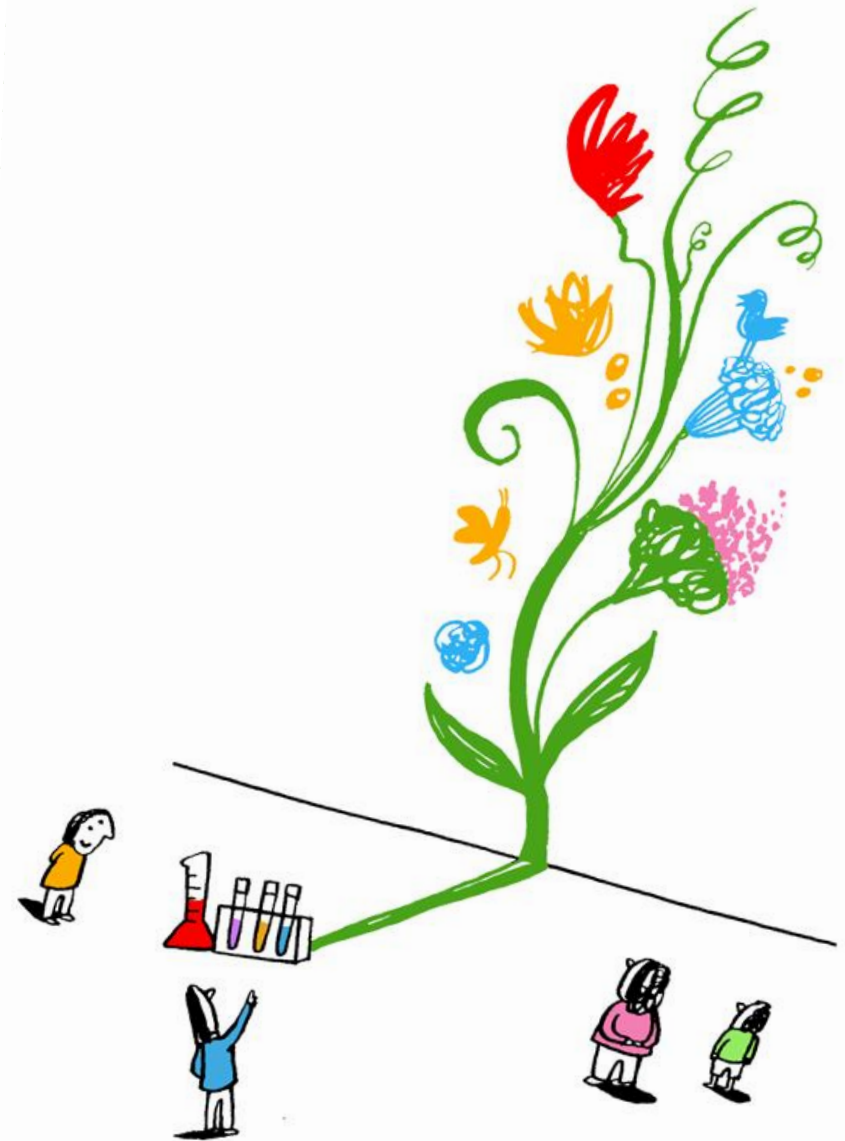
Governmental R&D funding in Sweden distributed by Government agencies, 2009

Governmental R&D-funding (excluding Public Research Foundations): 28270 MSEK = 0,93% of GDP



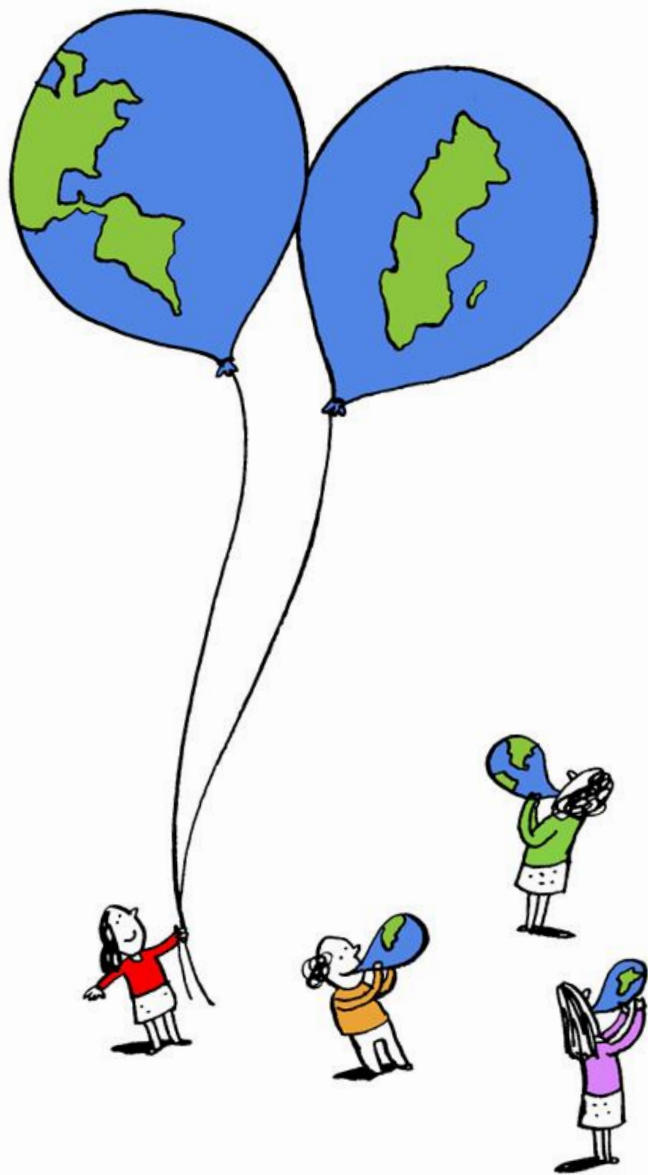
VINNOVA is Sweden's innovation agency

VINNOVA invests in research and develops Sweden's innovativeness for sustainable growth



About VINNOVA

- VINNOVA = Swedish Governmental Agency for Innovation Systems
- Established January 1, 2001
- Under the Ministry of Enterprise, Energy and Communications
- Director General: Charlotte Brogren
- Budget approx. SEK 2 billion (appr. 200 M€) - doubled through co-financing
- VINNOVA's R&D appropriation for 2009 was equivalent to 6.5% of the national public R&D funding
- Around 200 employees
- Offices in Stockholm and Brussels



The aim is competitive
businesses,
researchers and
regions in Sweden

The Swedish Innovation System

Characteristics I

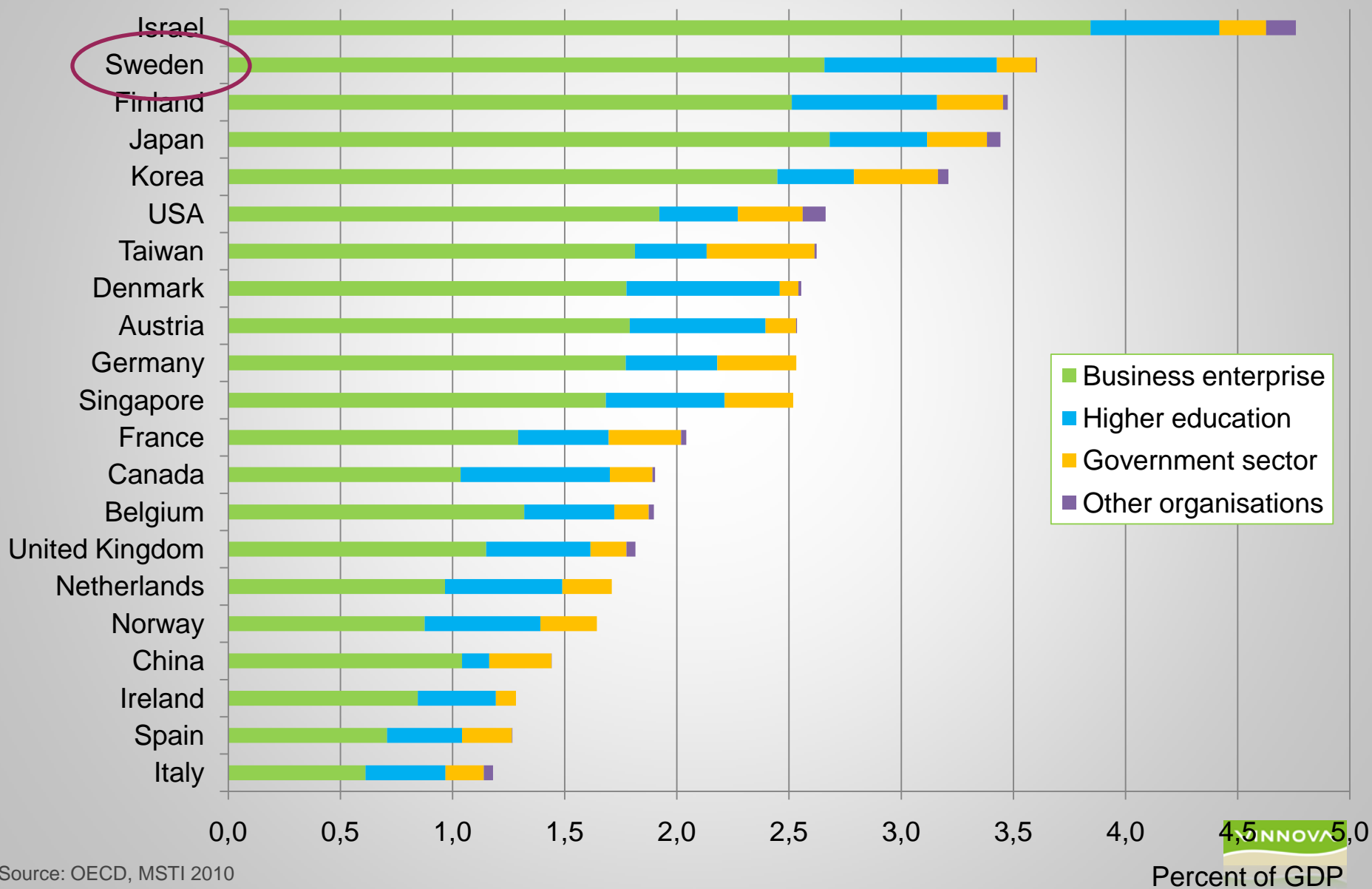
- ❑ In relation to size Sweden invests much resources to education, R&D and innovation
- ❑ Sweden has a relatively high share of well educated people
- ❑ Sweden performs well when it comes to scientific production as well as technology production
- ❑ According to EIS and World Economic Forum, Sweden ranks among the top countries when it comes to innovation and competitiveness

→ **However, there are weaknesses and threats**

Characteristics II

- ❑ A large share of the R&D in Sweden is performed by a small number of very large firms
- ❑ In relation to GDP, R&D-expenditure has declined compared to 2001, especially among the high-tech firms
- ❑ Low rates concerning SME start-ups
- ❑ The government R&D funding has declined since 2003. However, there was a change of trend in 2009 in the research and innovation bill
- ❑ Sweden performs relatively better on the input side than on the output side

Total R&D expenditure in relation to GDP, 2007



Sweden ranks high in innovation and competitiveness

European Innovation Scoreboard 2009	Global Innovation Scoreboard 2008	Global Competitiveness Index 2008/2009
Switzerland	Sweden	USA
Sweden	Switzerland	Switzerland
Finland	Finland	Denmark
Germany	Israel	Sweden
United Kingdom	Japan	Singapore
Denmark	USA	Finland
Austria	Denmark	Germany
Luxembourg	Korea	Netherlands
Belgium	Canada	Japan
Ireland	Germany	Canada

Source: European Innovation Scoreboard 2008 – Comparative analysis of innovation performance & World Economic Forum, Global Competitiveness Report 2008-09

Note: European Innovation Scoreboard is based on 29 indicators, Global Innovation Scoreboard is based on 9 indicators and Global Competitiveness Index is based on 110 indicators.

Overview of VINNOVA's programmes



Strengthening the knowledge base through R&D programmes



Strengthening R&D capacity in SME's



Promoting the creation of strong research and innovation milieus



Developing the utilisation and commercialisation of R&D



Promoting international cooperation



Strategy and analysis

Our tools

Thematic, sector-specific, programmes – Strengthening the knowledge base

- Main funding mechanism at VINNOVA
- Program period of 3-6 years
- One or several open "call-for-proposals"
- Project requirements:
 - Industry-relevant, strategic, focus
 - Industry-academy-institute partners
 - Co-funding, VINNOVA max. 50%, industry >50%
 - 2-4 year projects
 - Level of funding usually € 0.3 to 1 M per project

Strong Research and Innovation Milieus (Centers of Excellence)

Such environments are characterised by

- internationally outstanding research
 - strong links to small and large R&D-based companies, creation of new R&D-based growth companies
 - attractive to domestic and international companies to perform collaborative R&D
 - cooperation with the best environments globally
 - attractive to foreign researchers
 - innovations with a high market potential and processing value
 - mobility of people
- VINNOVA programmes; Vinn Excellence Centre, Berzelii Centre, Institute Excellence Centre, VinnVäxt
- “Global Links” - to enhance capacity for internationalization

Research and Innovation in small and medium sized companies



Forska&Väx (Research&Grow)

- VINNOVA has a mission from the Government to conduct programs to stimulate R&D in small and medium sized companies.
- Objective: R&D will strengthen the international competitiveness of the companies, and thereby give economic growth and new job opportunities in Sweden.
- Open for proposals from any company that needs access to R&D and/or make own R&D.
- Budget €10 to €14 million per year

Internationalization

- Increasingly important for successful innovation (both from demand and supply side)
- VINNOVA activities should:
 - Add value to the substantial international activities already carried out by firms, researchers and other organizations:
 - Create critical mass for Swedish initiatives in other countries
 - Be proactive and forward-looking
 - Adapt to different needs and contexts

Currently prioritized countries

- China
- India
- Japan
- USA

Bilateral programs

→ Japan

- Biotechnology; "Multidisciplinary Bio" (JST), 2005-2013, 50 Mkr (together with SSF)
- General; "VINNOVA-JSPS Joint Projects" (JSPS), 2009-2012, around 3 Mkr

→ China

- IKT; "IMT Advanced & Beyond" (MOST), 2008-2011, 27 Mkr

→ India

- Biotechnology; Biology, treatment & diagnosis of TB" (DBT), 2009-2012, 16 Mkr

→ India

- ICT; "E-health / Visualization" (DIT) 2009-2012, 5 Mkr
- ICT; "Embedded systems" (DST), 2010- 2013, 21 Mkr

EU and multilateral cooperation

- VINNOVA responsible for information on most thematic areas in the Framework Program (NCP)
- VINNOVA participates in >20 ERA-, INNO-, or INCO-Net
- Eureka/Eurostars – Multilateral research and innovation cooperation; VINNOVA has national responsibility in Sweden
 - Total budget of appr 8 million € 2010 on the Swedish side

Thank you for your attention!

