

# Promoting innovative entrepreneurship — Policy challenges

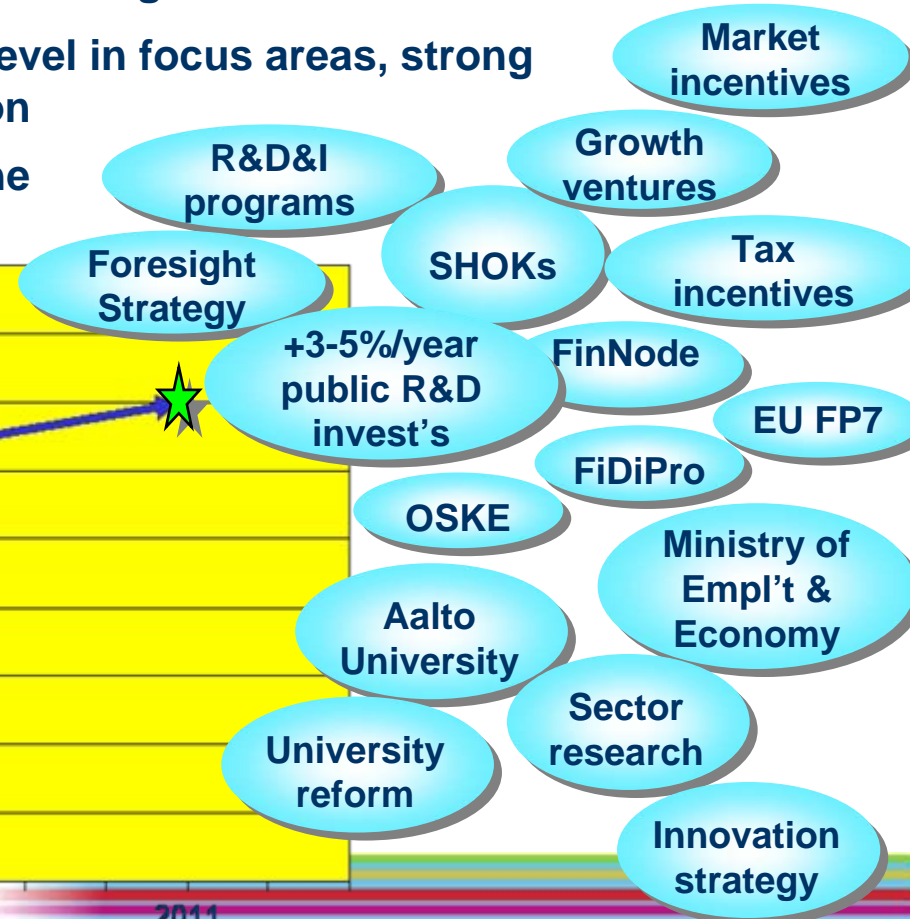
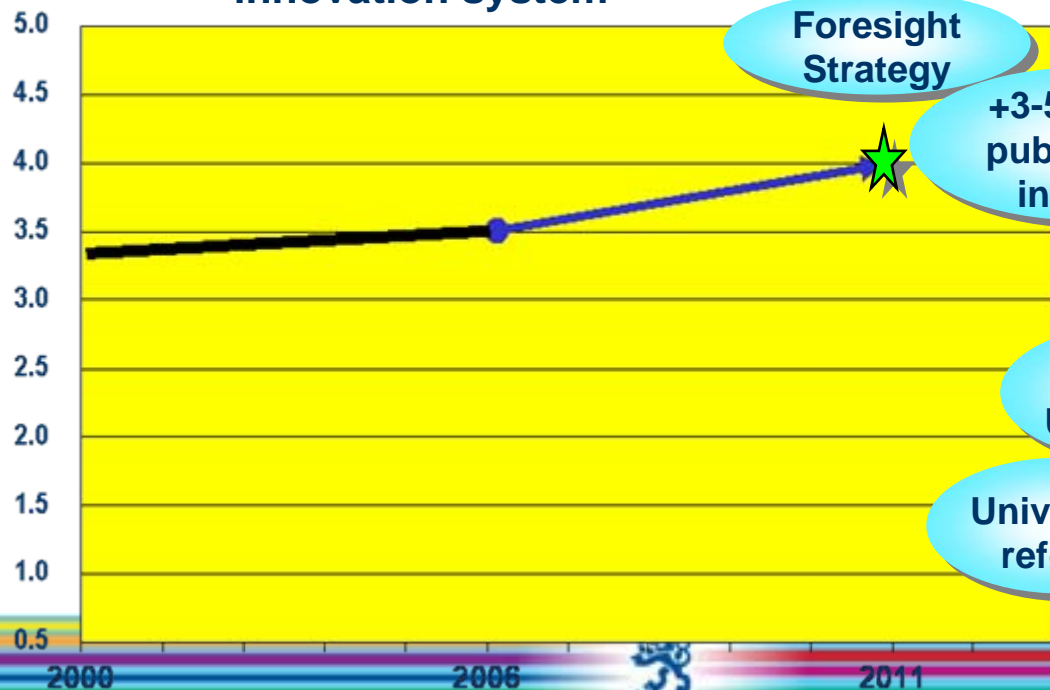
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Director General  
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Ministry of Employment and the Economy



# Key directions of Finland's RDI policy 2007-2011

1. Strengthened public R&D investments catalysing growing corporate R&D investments in Finland → aiming at 4% GDP share of R&D
2. Wider-range promotion of innovations:
  - technologies, services, business, branding/design, public sector
  - direct support, market-driven incentives, tax incentives
3. Strategic choices and focusing of resources
4. Reaching world-class level in focus areas, strong international interaction
5. Structural reforms of the innovation system

R&D's share of GDP (%)

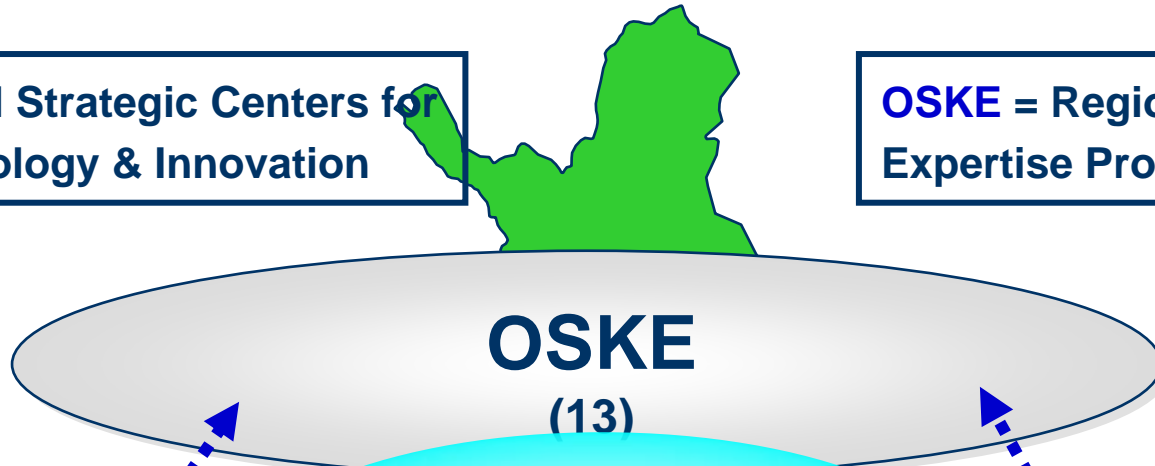


# National R&D Programmes –

## Traditional strong point of Finland since the 1980s

**SHOK** = National Strategic Centers for Science, Technology & Innovation

**OSKE** = Regional Centres of Expertise Programme



**EU FP7**

- JTI, ETP, EIT
- Eureka
- ERANET, art. 169



**SHOK**

(6)



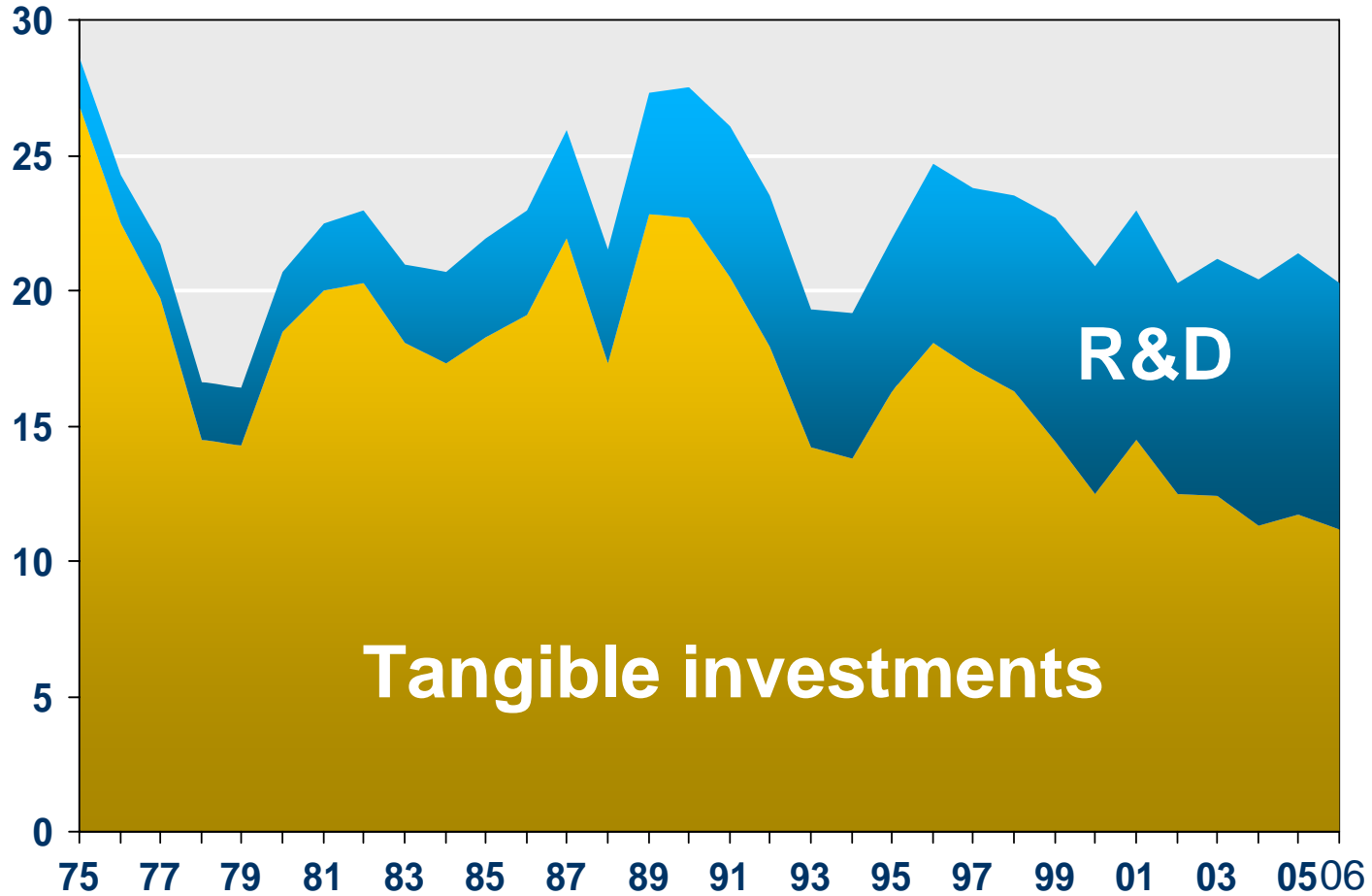
# “FI 2020”

...past success does not  
guarantee future  
performance...



# Industrial investments in Finland

Share of value-added %



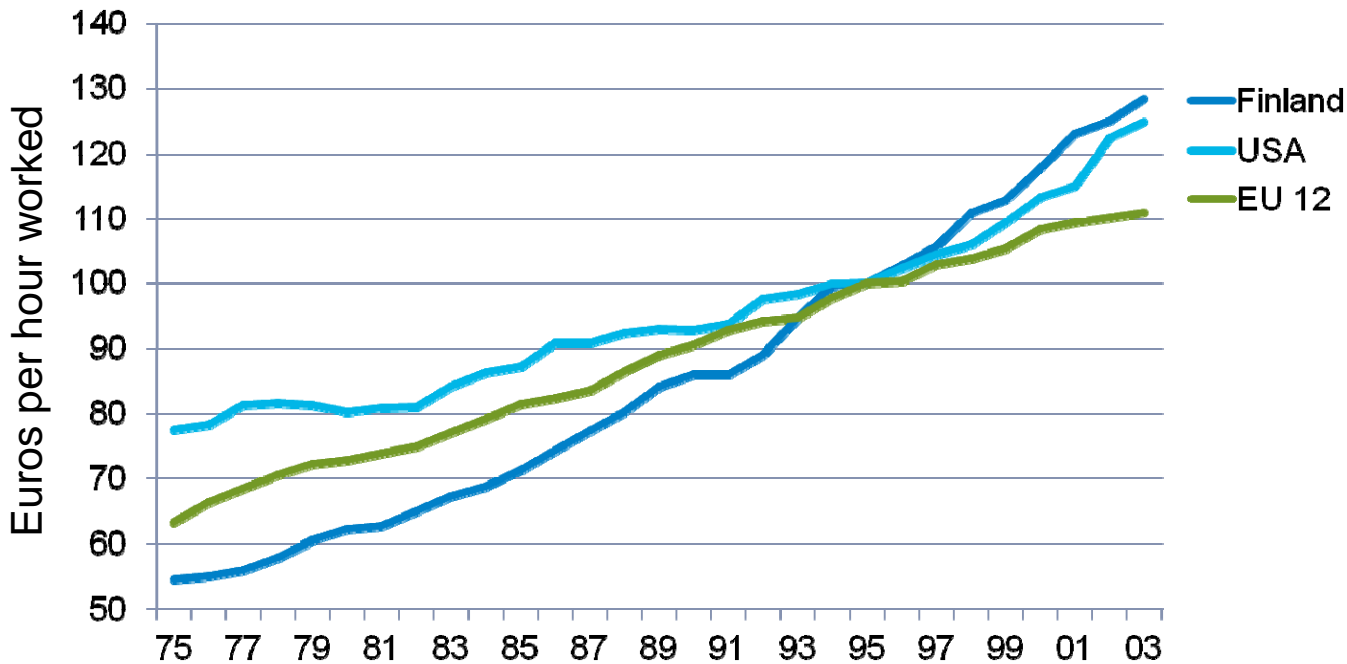
Sources: Statistics Finland, EK, VM, Tekes



# Firms in Finland have moved close to the international productivity front

→ This calls for a change of emphasis in RDI policies from Catch-Up to Experimentation

## Labour productivity in industry and private services



Sources: Structural Business Statistics (SBS), EU KLEMS, calculations by ETLA



# Strategic Centres for Science, Technology and Innovation (SHOKs)



**Forest Cluster**



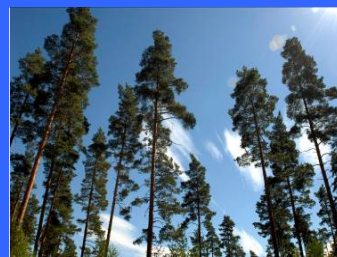
**Metal products  
and mechanical  
engineering**



**Built  
environment**

- **Excellence & Relevance**
- **Radical renewal**
- **Focus & Impact**
- **Visibility**
- **Attractiveness**

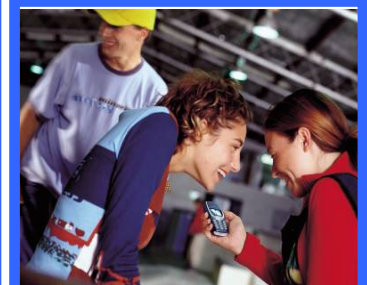
- **Industry steered research plans and agendas**
- **20-50 M€ per SHOK p.a., from private and public funding sources**
- **Basis for stronger international partnerships**



**Energy and  
environment**



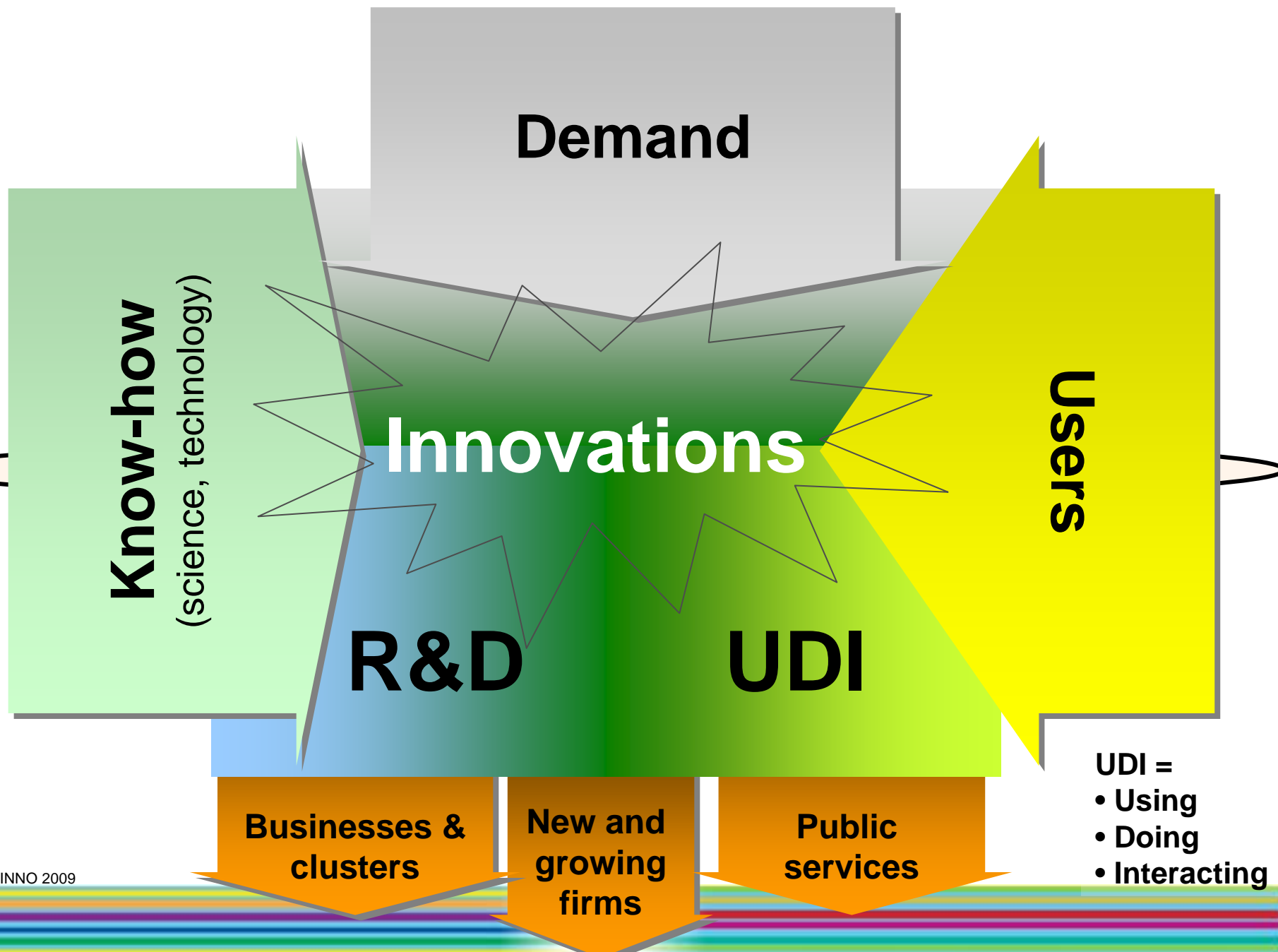
**Health and well-  
being**



**ICT industry  
and services**



# Three dimensions of innovation promotion



**Know-how**  
(science, technology)

**Demand**

**Innovations**

**Users**

**R&D**

**UDI**

**Businesses &  
clusters**

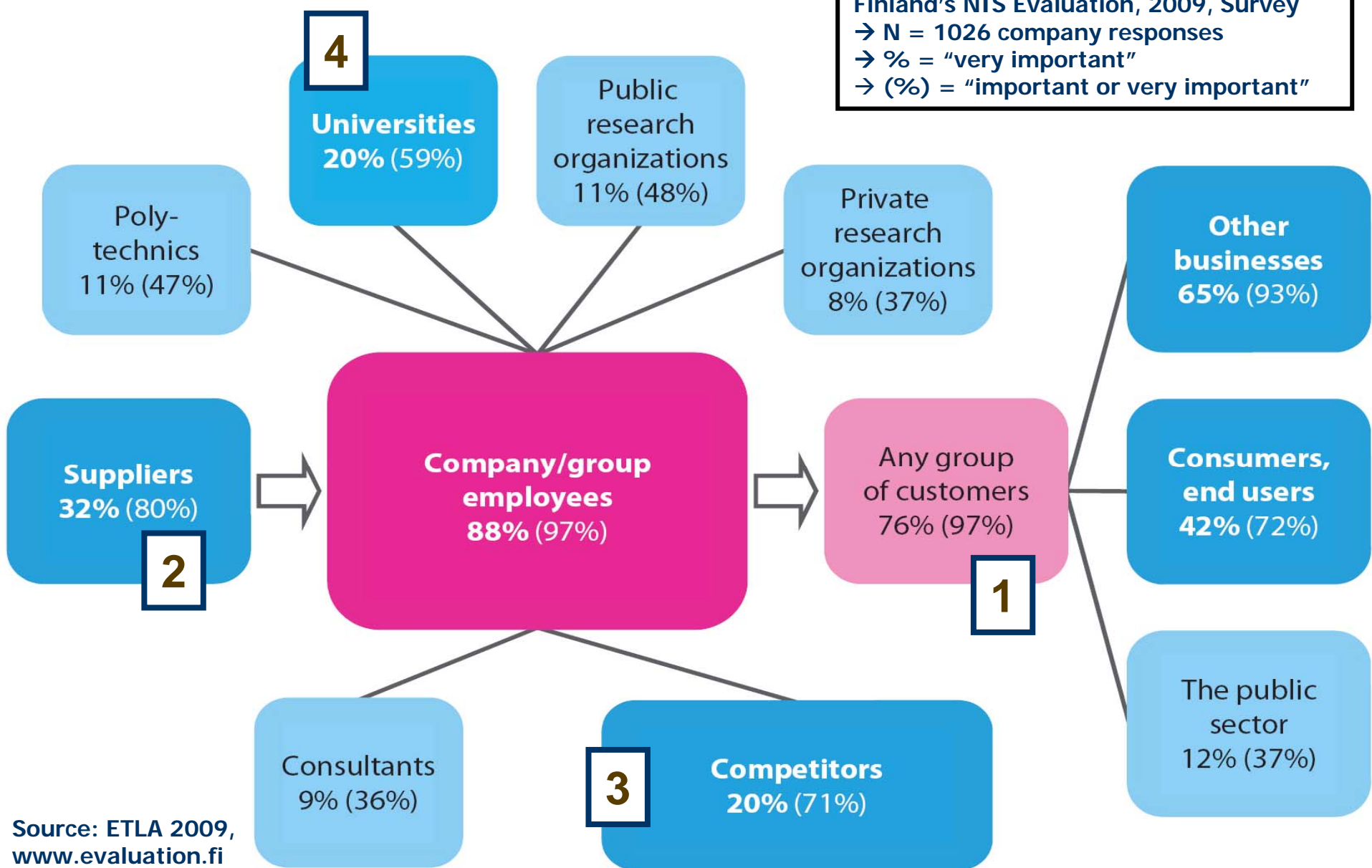
**New and  
growing  
firms**

**Public  
services**

**UDI =**  
• Using  
• Doing  
• Interacting

# Customers, suppliers and competitors are the most important external sources of new ideas

Finland's NIS Evaluation, 2009, Survey  
 → N = 1026 company responses  
 → % = "very important"  
 → (%) = "important or very important"



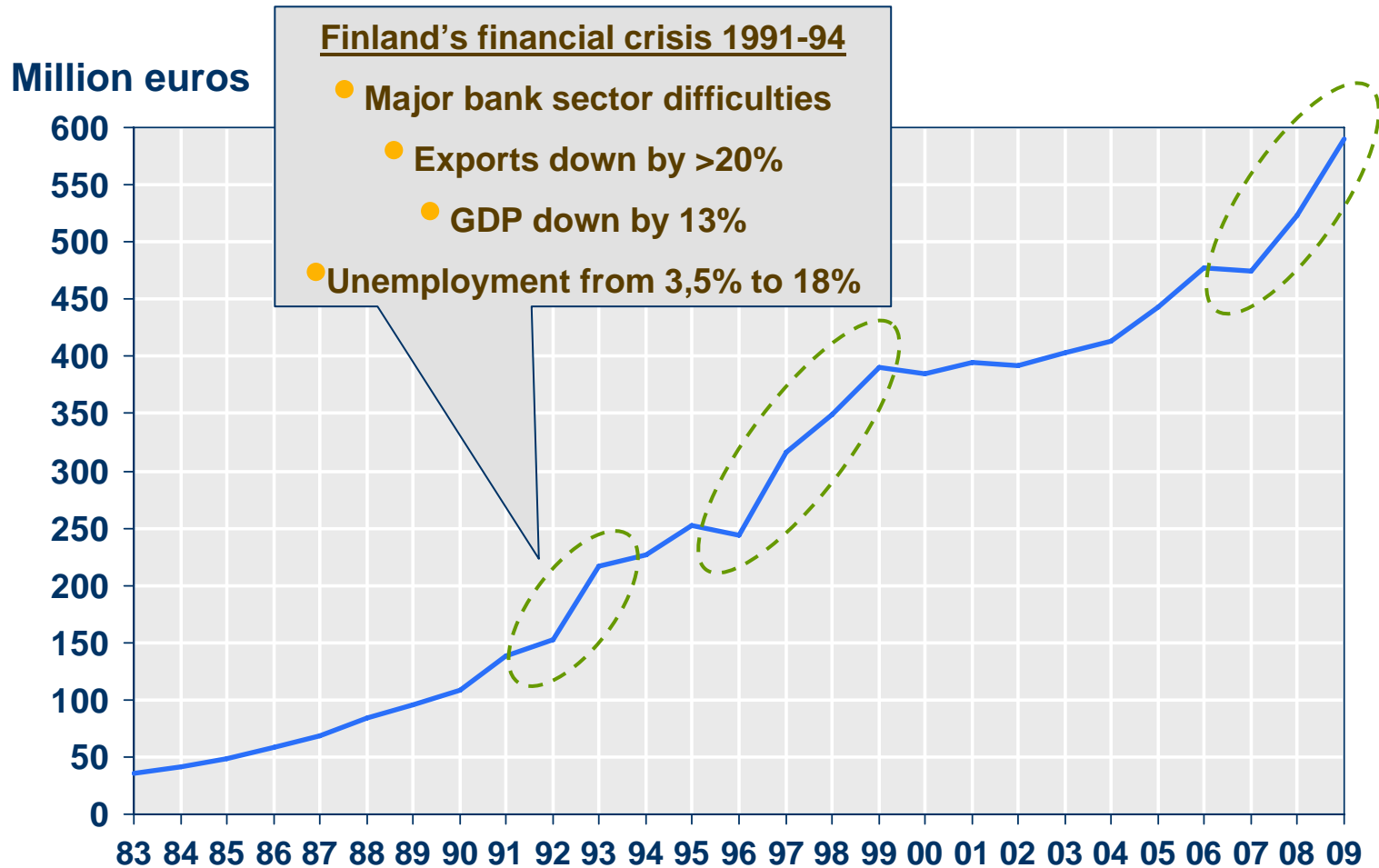
Source: ETLA 2009, [www.evaluation.fi](http://www.evaluation.fi)

# ...impact of the financial crisis on Finland's innovation policy...



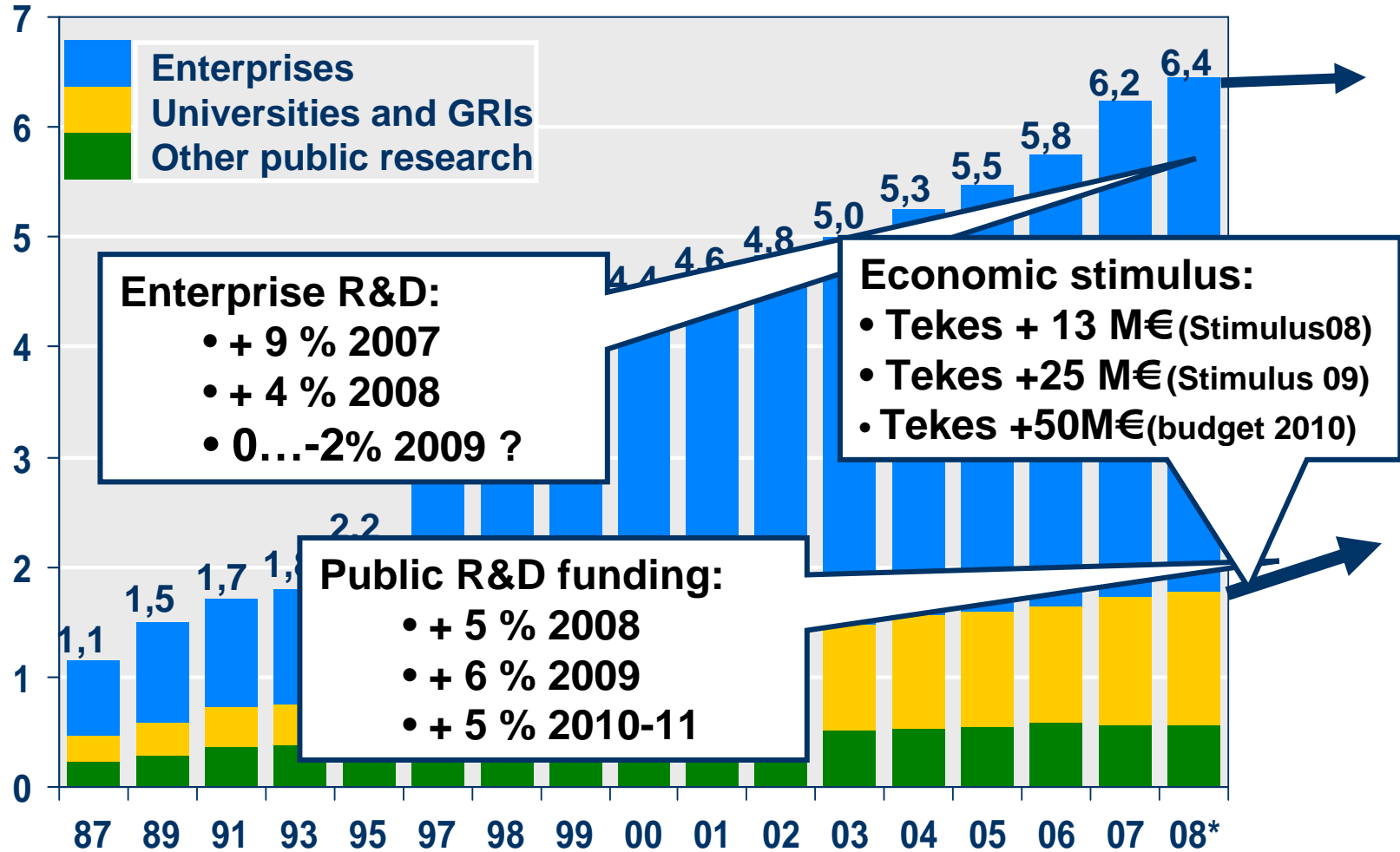
# Finland's recovery from the recession of early 90's

## Development of Tekes' public funding for industrial R&D 1991-99... and 2007-



# R&D expenditure and outlook in Finland

Billion euro



Source: Statistic Finland & Tekes



# Innovation policy in economic downturn

## Incentives and funding

- Firms' innovation time-span shortens and risk-averseness increases
  - Longer-term and higher-risk R&D projects delayed or stopped
  - Firms' capabilities to co-fund research in universities and institutes diminishes
  - Public RDI funding support levels and swift payments gain importance
  - Private venture market for growth funding "frozen"
  - R&D tax incentive ?
- **Public RDI support critical in maintaining innovation activity**

## Demand and user orientation

- Competition increases as demand slows
  - Downturn reduces demand, but also creates new needs, e.g. as firms modify business models, supplier networks and outsource
  - Customer-focused and user-driven innovation gains even more importance
  - Speed and cost-effectiveness emphasised in firms' innovation activities
  - Open innovation rather than internal R&D
- **Fast and agile innovation models needed**

## Broad-based innovation

- Innovation = Knowledge-based competitive advantage
  - Using and combining both technological/scientific and non-tech/non-sci know-how as sources of innovation
  - Service, business model, operational, management, work-life innovations
  - Support for training required in taking new innovations in use
  - "Every-day innovations"
- **Broad-based innovation (continous innovation) supports "cost-chase" and increases productivity**

## Spring-board for new growth

- Firms' longer-term RDI activity has to be maintained also in downturn
  - Firms' co-operation with universities & institutes has to be supported
  - Programs for developing and renewing industrial clusters (Tekes, Academy, EU)
  - SHOKs, local and int'l innovation hubs
  - Public R&D investments played significant role in Finland's quick recovery in 1990's
- **Maintaining longer-term RDI crucial to support renewal ("creative destruction") and build basis for future growth**

# EU 2020

...from  
aiming to be world's most  
competitive continent  
to  
keeping up with the global  
competition...



# EU 2020

## Smart, Inclusive and Sustainable Growth

### HEADLINE TARGETS

#### INNOVATION UNION

...”refocus R&D and innovation policy on challenges facing our society, such as climate change, energy and resource efficiency, health and demographic change...

...Every link should be strengthened in the innovation chain from 'blue sky' research to commercialisation”...

#### RESOURCE EFFICIENT EUROPE

...”to decouple our economic growth from resource and energy use, reduce CO2 emissions, enhance competitiveness and promote greater energy security”...

education from 31% to at least 40%.

– Reduce the number of Europeans living in poverty lines by 25%, lifting 20 million out of poverty.

#### SMART GROWTH

#### SUSTAINABLE GROWTH

#### INCLUSIVE GROWTH

#### INNOVATION

EU flagship initiative "Innovation Union" to improve framework conditions and access to finance for research and innovation so as to strengthen the innovation chain and boost levels of investment throughout the Union.

#### CLIMATE, ENERGY AND MOBILITY

EU flagship initiative "Resource efficient Europe" to help decouple economic growth from the use of resources, by decarbonising our economy, increasing the use of renewable sources, modernising our transport sector and promoting energy efficiency.

#### EMPLOYMENT AND SKILLS

#### INDUSTRIAL POLICY FOR THE GLOBALISATION ERA

...”will draw up a framework for modern industrial policy...develop strong, competitive and diversified industrial base in Europe”...

#### EDUCATION

EU flagship initiative "Youth on the move" to enhance the performance of education systems and to reinforce the international attractiveness of Europe's higher education.

#### COMPETITIVENESS

EU flagship initiative "An industrial policy for the globalisation era" to improve the business environment, especially for SMEs, and to support the development of a strong and sustainable industrial base able to compete globally.

#### FIGHTING POVERTY

EU flagship initiative "European platform against poverty" to ensure social and territorial cohesion such that the benefits of growth and jobs are widely shared and people experiencing poverty and social exclusion are enabled to live in dignity and take an active part in society.

#### DIGITAL SOCIETY

EU flagship initiative "A digital agenda for Europe" to speed up the roll-out of high-speed internet and reap the benefits of a digital single market for households and firms.

#### DIGITAL AGENDA

...”to deliver Digital Single Market based on fast and ultra fast internet and interoperable applications”...

...thank you...

