



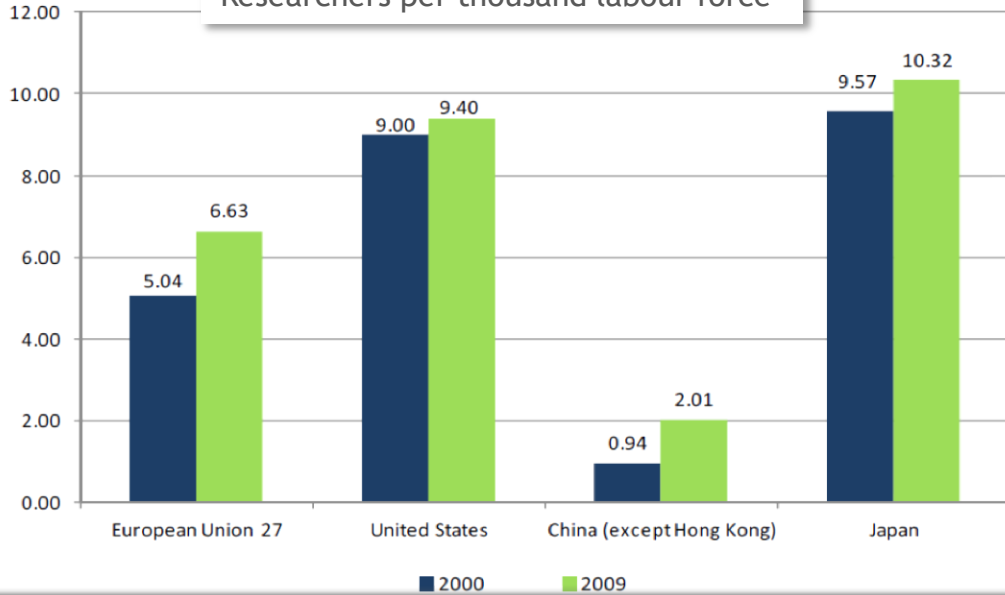
International Workshop
Developing research careers in and beyond Europe
Oslo, 21-23 May, 2013



Investing in research careers for a smart, sustainable, inclusive growth

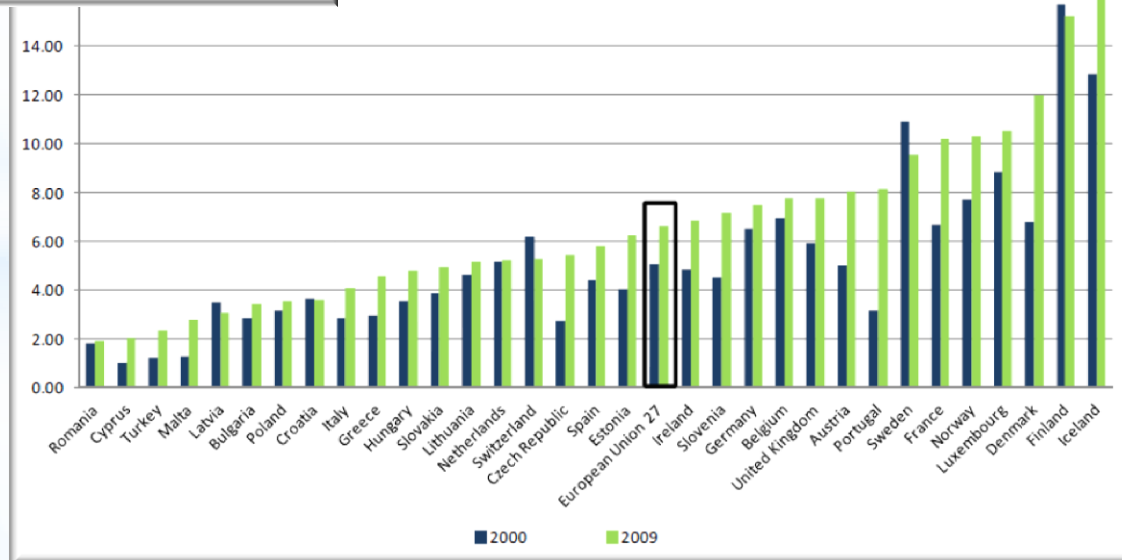
Fulvio Esposito
ERA Steering Group on Human Resources and Mobility
University of Camerino, Italy

Researchers per thousand labour force

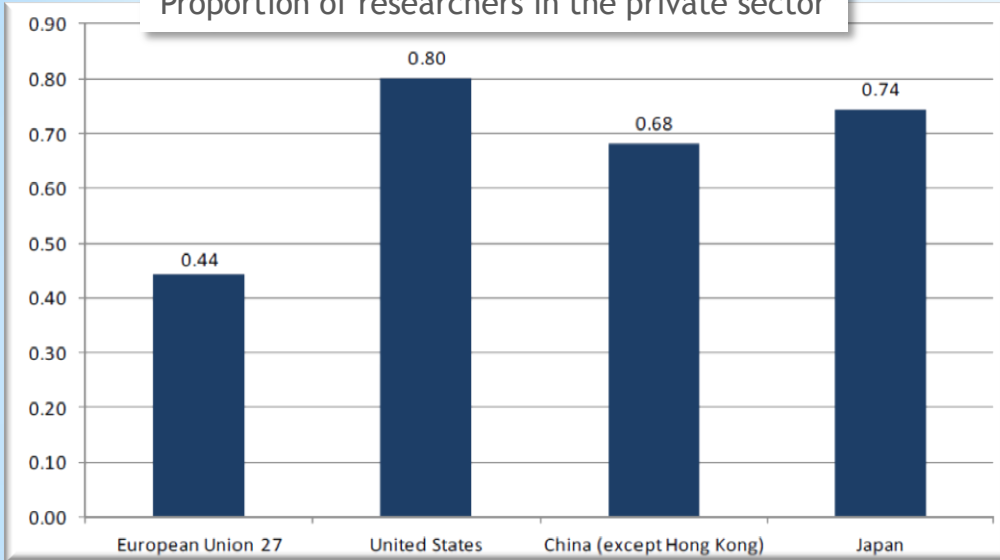


The number of researchers, as a share of the labour force, is nearly 50% higher in the US and 60% more in Japan (as for China, the absolute number matters!) with respect to Europe, with an extremely wide spread among European countries.

The limited
European stock
of researchers

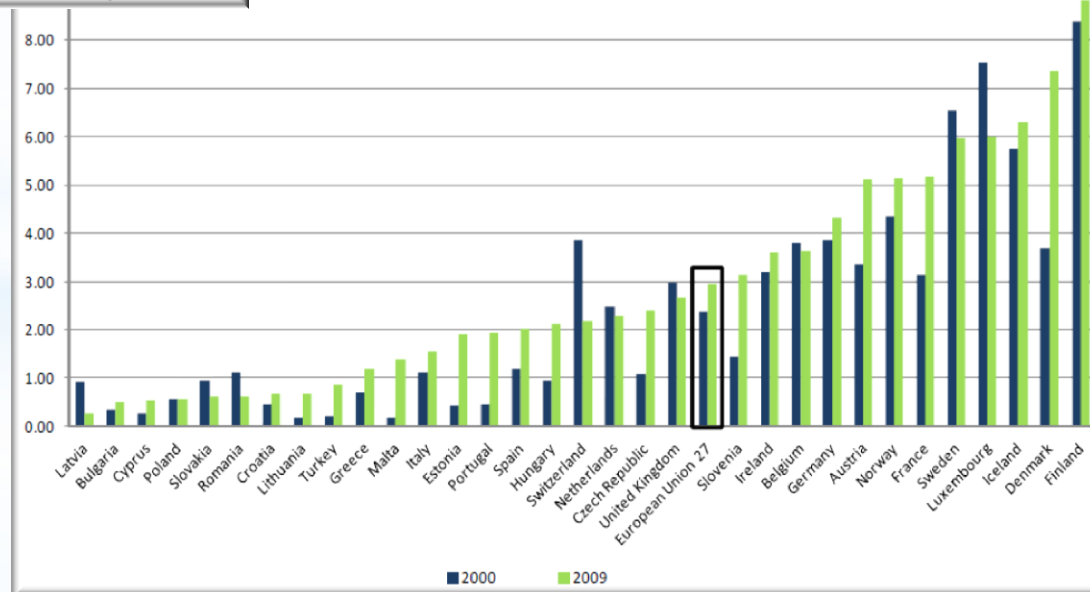


Proportion of researchers in the private sector



The US and Japan have more than 1.5x as many researchers per thousand in the private sector than does the EU (again with a huge spread among its countries)

The 'black hole' is in the private



The European paradox

Innovation Union Commitment #1

“By the end of 2011, Member States should have strategies in place to train enough researchers to meet their national R&D targets...”

BUT, in several European countries, currently, many researchers are facing long periods of **unemployment, underemployment and insecurity.**

A FEW QUESTIONS (& ANSWERS)

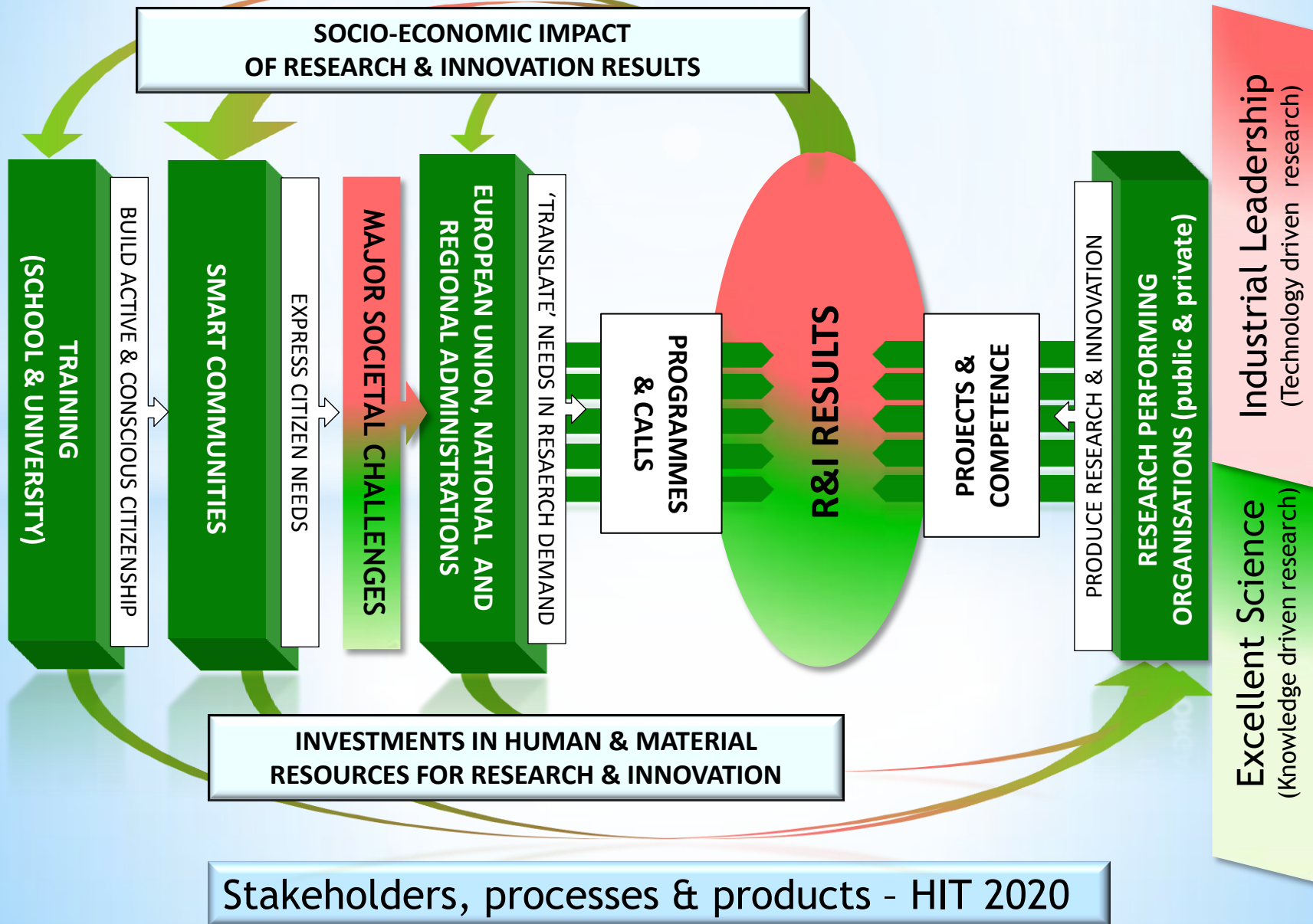
- To increase the stock of researchers OR to increase the stock of **research positions** (especially in the private sector) ?
- Is it realistic to aim at increasing **research positions** in times of fiscal constraints?

To prioritise research and researchers,
even/especially in times of fiscal constraints,
a better **matching between demand & supply**
should be promoted.

Yes, but **HOW?**

Horizon 2020 Italy: a tentative 'model'

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The virtuous circle



may work, upon the condition
that research and researchers'
demand and supply smoothly
match



The 'model' may be applied more generally,
and an «**European Researchers' Professional
Development Framework**» may play a
catalyst role to make it work efficiently!

HUMAN RESOURCES FOR R&I

MATERIAL RESOURCES FOR R&I

**DOCTORAL DEGREE HOLDERS
& «invisible» RESEARCHERS**

PIDT

**European Researchers'
Professional Development
Framework**

EFRC

**RECOGNISED, ESTABLISHED &
LEADING RESEARCHERS (public
& private)**

**TRACKING & MONITORING
RESEARCH CAREERS**

**SKILLS & MOBILITY
WORKING CONDITIONS (INCL.
SOCIAL SECURITY)
EQUALITY & DIVERSITY
VALUED BY PEER REVIEW**

**Technology driven research
(Industrial Leadership)**

**Knowledge driven research
(Excellent Science)**

**PROJECTS &
COMPETENCE**

R&I RESULTS

**PROGRAMMES
& CALLS**

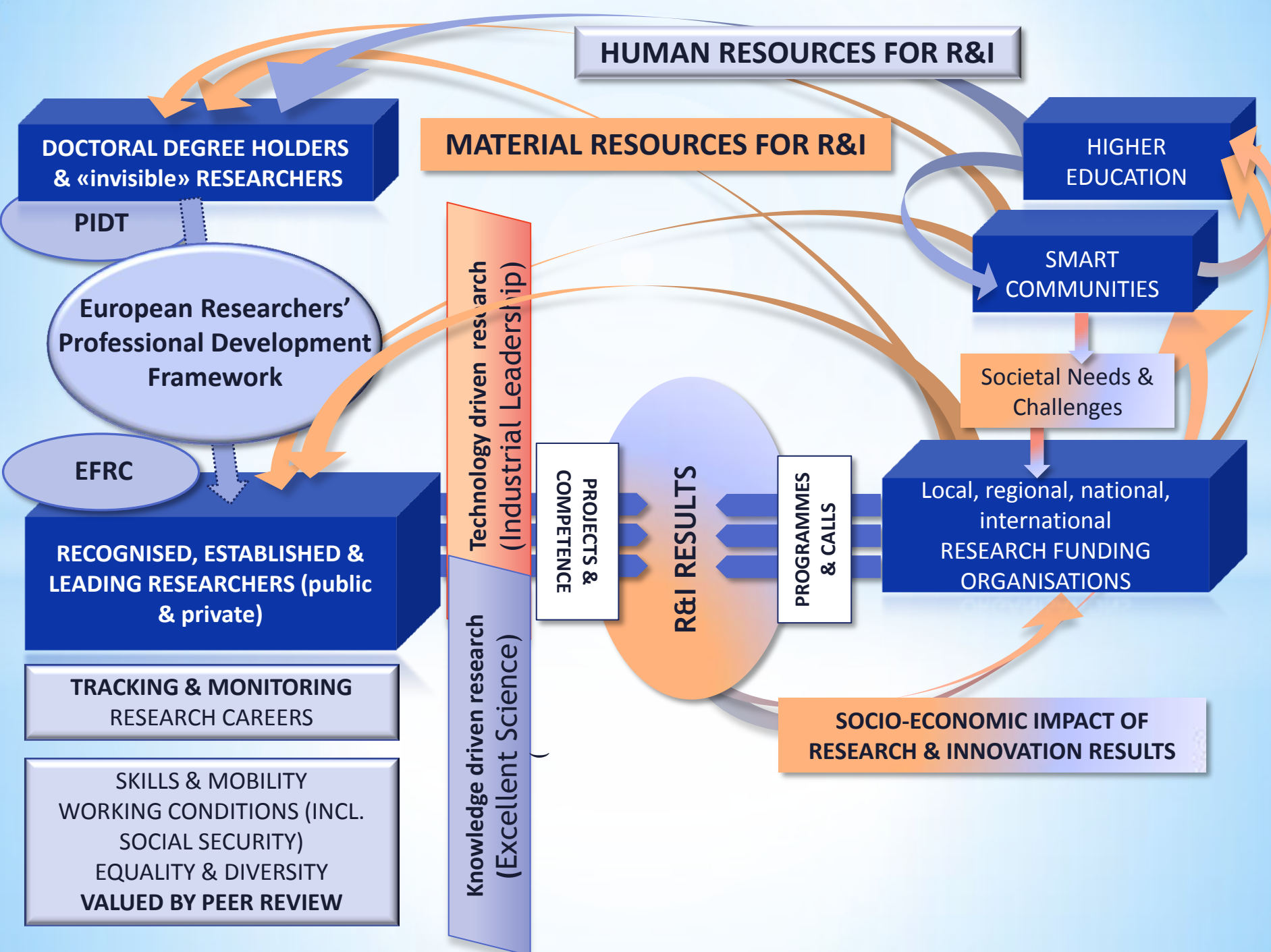
**Local, regional, national,
international
RESEARCH FUNDING
ORGANISATIONS**

**Societal Needs &
Challenges**

**SOCIO-ECONOMIC IMPACT OF
RESEARCH & INNOVATION RESULTS**

**HIGHER
EDUCATION**

**SMART
COMMUNITIES**



The 'model' may work Europe-wide, making it possible to increase both the stock of researchers and the stock of research positions, but a European dimension is needed, in terms of

- a generalised implementation of the Principles for Innovative Doctoral Training;
- a wide adoption of the European Framework for Research Careers;
- the development of a truly **European Researchers' Professional Development Framework**, with its accompanying measures in terms of monitoring and peer reviewing.



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How to prevent allergic reactions?

The story of a patchwork and a masterpiece



With essentially the same series of different colors,
a patchwork or a masterpiece can be produced

There is nothing sinful with patchworks, but



here are the masterpieces

and here are the patchworks





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The new generations of Europeans in general, and European researchers in particular, have to decide if they want to be part of a patchwork or **part of a masterpiece...**