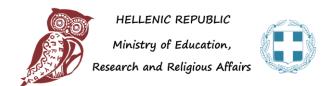
# National Hellenic Research Foundation

60 years YOUNG!

## Building the Knowledge Economy as an antidote to crisis

## Costas Fotakis Alternate Minister for Research & Innovation







### The Greek "paradox"

Greece ranks within the first 25 countries (among 186) in terms of scientific output (publications impact is above the OECD average) and 57% of the enterprises include some type of innovation (above the EU average).

But,

is a "moderate innovator" scoring an Innovation Index of 69 vs 100 which is the EU average in 2017

#### Innovation in Greece



Percentage (%) Greek innovative companies

Percentage (%) Greek companies with product and/or process innovation

Increase of high added value innovation i.e. innovation of product or/and process

Source: EKT 2018

## **Innovation and Competitiveness**

- Types and added value of Innovation
- "Innovate here Exploit elsewhere"
- Instruments for supporting high risk but also high added value innovation particularly in crisis conditions
- Knowledge intensity in innovative enterprises

#### A key issue in the post-memorandum era:

Development based on a new production model:

The Knowledge Economy

Creating policies and environments for the rising 4<sup>th</sup> Industrial Revolution and its impact is important.

#### The Knowledge in the Knowledge Economy

- Demand driven Research meets the market and societal needs of today
  - It is primarily transactional, short term and visible
  - It supports the needs of current economy
- Supply-side, i.e. scientific curiosity-driven Research addresses the needs of tomorrow
  - Breakthroughs are accumulative with potential high added value and major impacts in real economy and society
  - It transforms the economy and has long-term perspectives



The pursuit of scientific quality and excellence is a necessary condition for success

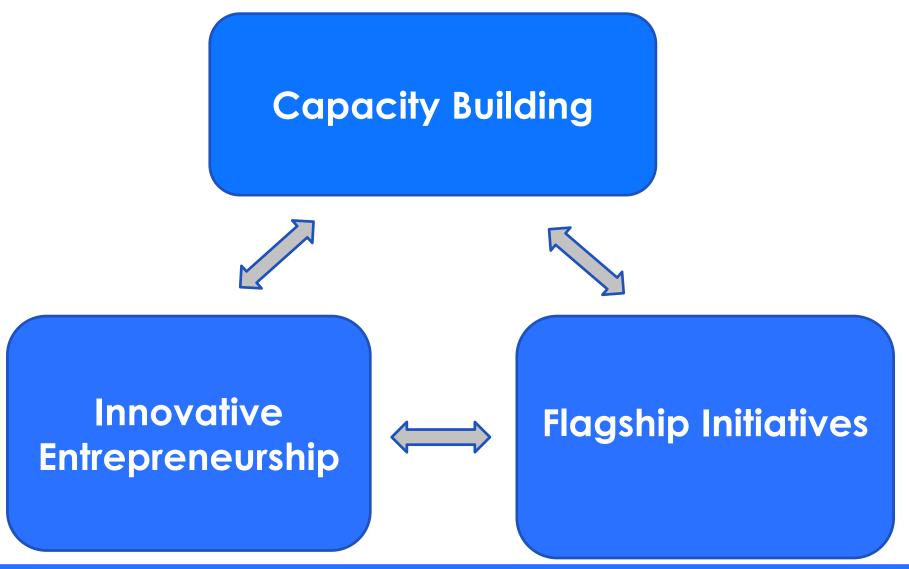
## **R&D** expenditure

In times of crisis Research is an easy target! However,

During the last years the total R&D expenditure has increased reaching 1.8 b€ in 2017 (vs 1.4 b€ in 2014) exceeding 1% of the GDP

The private sector contribution has increased by 31%

#### Research and Innovation (R&I) in Greece



### The most important asset: PEOPLE!

The human capital, especially the highly qualified young scientists and entrepreneurs is the most important asset for building the Knowledge Economy. This has been grossly affected by the brain drain and brain waste during crisis.

#### For highly qualified scientists:

2000-2005 Migrated 2.552 young scientists
2009-2014 Migrated 20.281 young scientists



Replace the brain drain by a healthy brain circulation!



#### Reversing the brain drain:

Quality jobs and career prospects in both the public and private sector



Attractive environments



Inspiring prospects

#### A new initiative inspired by ERC:

The Hellenic Foundation for Research and Innovation (HFRI)

A new long term Institution for supporting capacity building and "blue sky" research with initial funds budget of 240 m€ for 2017-2019 (EIB and Public Funds)

A first concrete signal of inversing the brain drain through HFRI, is already visible.

#### Research Infrastructures (RI)

#### "Access" to RI is a key issue

- 28 core facilities covering all fields are supported
- Also there is support for high cost equipment through the HFRI
  - Participation in major European RI including the ESFRI RI is encouraged

## Support of innovative entrepreneurship (through GSRT)

In 2018 373 m€ public funds
support 685 collaborative projects
including 488 collaborations between
Companies, Universities and
Research Organizations

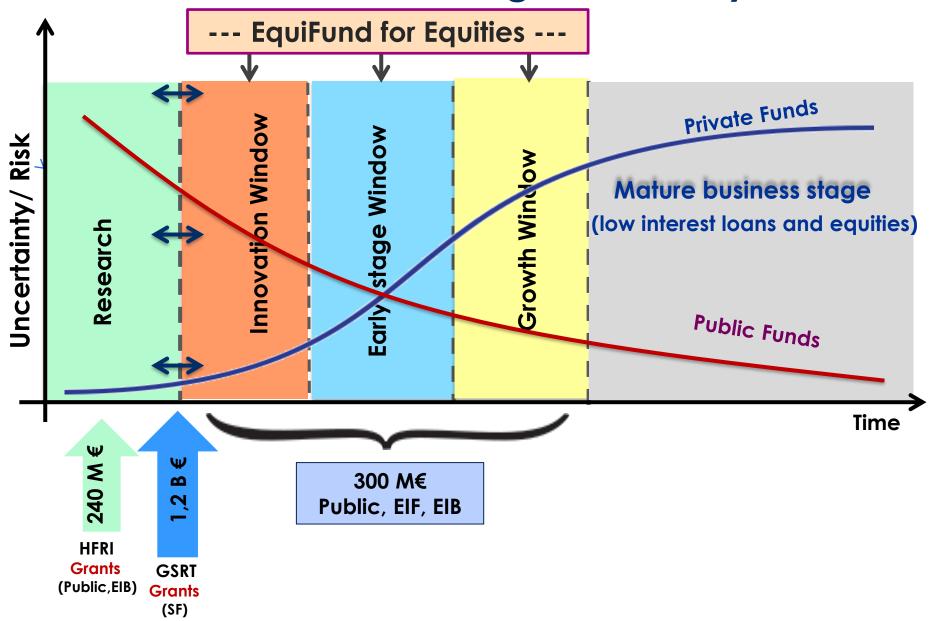
Support of R&D personnel in innovative companies

#### New opportunities for innovative companies

## The establishment of a Fund-of-Funds for equities capital supply

- An initiative involving the Public Sector, EIF and EIB with an initial investment of 300 M€ (200 M€ public) to be increased with leverage
- Transforming Research ideas into start-ups through the "Innovation Window"
- Emphasis on innovative products and services
- A holistic and systematic step by step approach for building the Knowledge Economy

#### Towards a Knowledge Economy



## Flagship Initiatives

Horizontal actions with a strong and visible social impact coordinated by the State

Precision Medicine in:

Oncology
Cardiological hereditary diseases
Neurodegenerative diseases

> Agrofood: Genomic and Innovative technologies

Climatic Change

## Our vision:

To create a strong Knowledge Economy by releasing the human potential and talent without lock-ups and interventions and promoting joint ventures in vibrant scientific and entrepreneurial environments