

# Building the Knowledge Economy

(in times of crisis)

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# A central issue:

The development of a new production model for Greece which is placing emphasis on the **Knowledge Economy**

# The innovation gap

Greece ranks within the first **25 countries** (among 186) in terms of **Scientific output** (e.g. high quality publications).

But,

is a “**moderate innovator**” scoring an Innovation Index of **68 vs 100** which is the EU average in 2016

# PRIMA

The **PRIMA** initiative fits our strategy for  
Development based on the Knowledge  
Economy

# The **Knowledge** in the Knowledge Economy

- **Demand driven Research** meets the market 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**
  - It **transforms** the economy and has long-term perspectives
  - Breakthroughs are accumulative with potential high added value and major impacts in real economy and society



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

# The role of the State:

- **“Enabler”** of research opportunities and the environments for their implementations
  - capacity maintenance and capacity building
- **“Supporter”** and **“Regulator”** for realizing what **CANNOT** be done by the private sector
- **“Inspirer”** of flagship initiatives in emerging sectors of high added social, scientific and economic values

# The most important asset: **PEOPLE!**

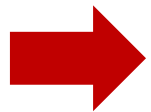
The human capital, especially young scientists, is the most important asset for building up the Knowledge Economy.

**However,**

During the years of crisis the working conditions, the high unemployment and most important the limited career prospects have led to an increase of **brain drain**, as well as **brain waste**.



Our aim is to reverse the **brain drain** and replace it by a healthy **brain circulation** !



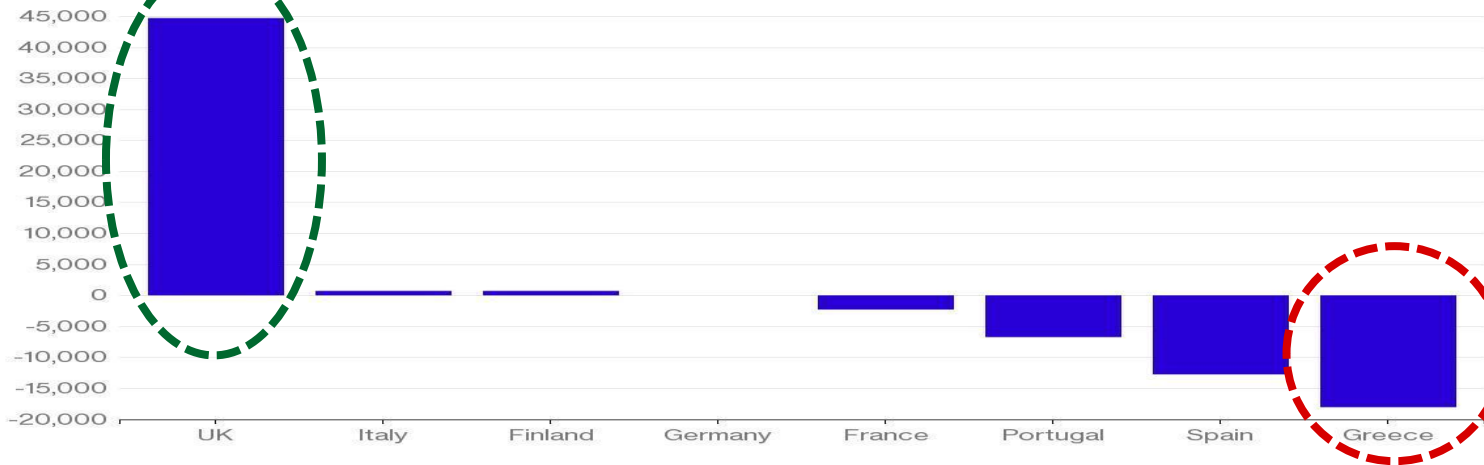
Also, to strengthen the links with the **scientific diaspora!**

# Data for the brain drain during the year of crisis

## Brain Drain in the Crisis Years

Greeks depart on Odyssey for jobs

■ Net gain or loss of talent between 2009 and 2014



Source: Eurostat.

\*The chart calculates the difference between professionals seeking to leave the country and professionals seeking to come into the country. A negative number indicates more people seeking to leave than those seeking entrance.

Bloomberg

(Ref: Bloomberg, June 2015)

2000-2005



2.552 young scientists

2009-2014



20.281 young scientists



# What should be done (or is done)

- ➔ Create new **stimulating** research/academic careers
- ➔ Create scientific and entrepreneurial environments and conditions which are **attractive** for young scientists as well as prominent researchers
- ➔ Create **funding opportunities** for start ups and innovative entrepreneurship adapted to the particularities of the economic landscape
- ➔ Encourage jobs for highly skilled personnel in the **private sector** with emphasis in R&D Departments of innovative companies

**The brand name counts:**

**Excellence attracts excellence!**

# Funding possibilities

Research is usually a prime target for cutbacks!



## Public Expenditure

- Serious limitations due to the austerity measures but **~30%** increase of the regular budget in 2016
- In 2015 the R&D expenditure reached **0,97%** of GDP



## HORIZON 2020

Strongly competitive but very good performance so far. Greece ranks **10<sup>th</sup>**.



## Structural Funds 2014-2020

- Serious hold-ups due to thematic and geographic limitations but high available funds (**~1,2 b€** for 2014-2020)
- At least **9000 scientists** will be benefited!

## A new initiative:

# ➔ The Hellenic Foundation for Research and Innovation (HFRI)

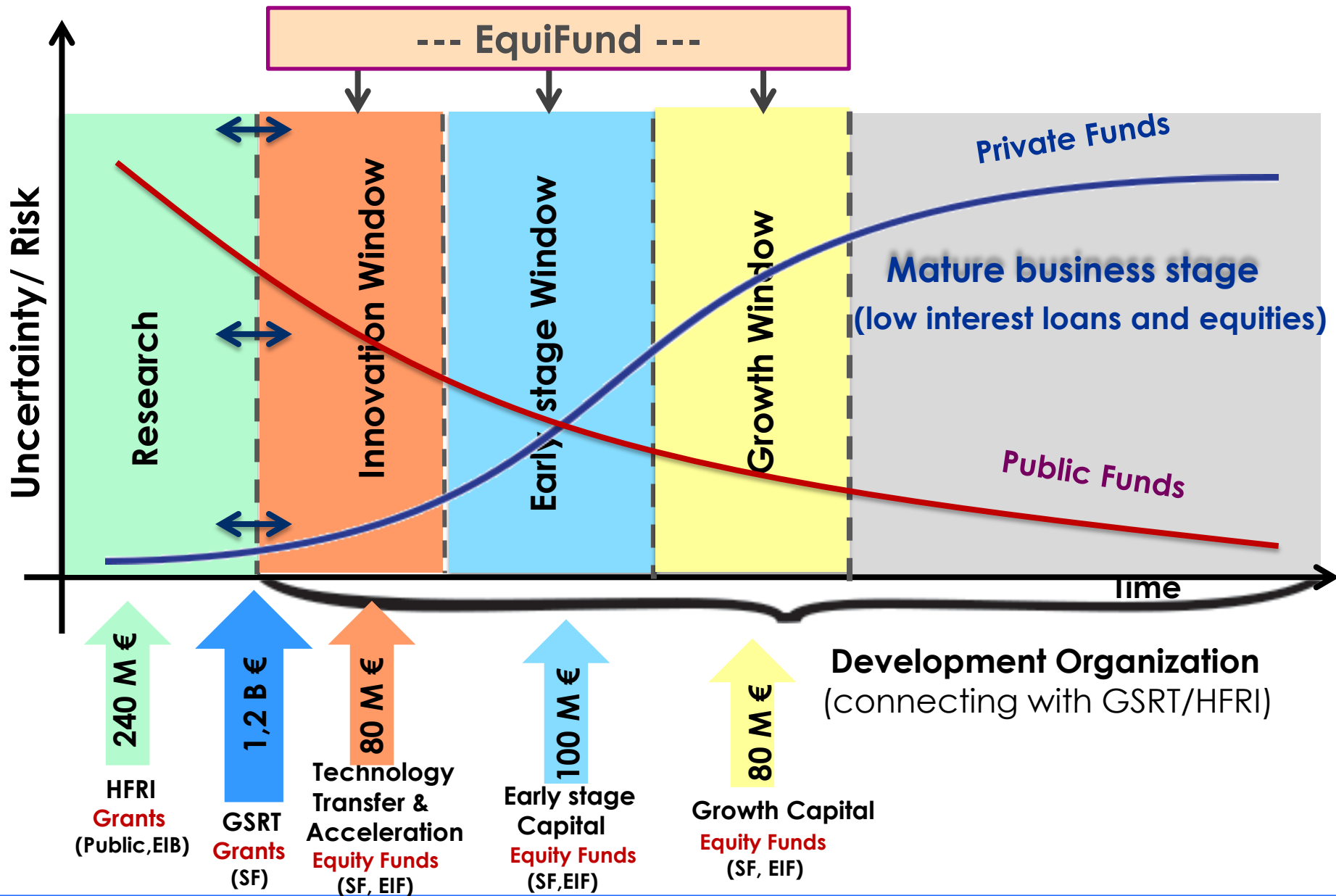
- A new long term Institution with an initial additional budget of **240 M€** for capacity building through blue sky research during 2017-2019
- Mix of public (60M€) and EIB (180M€) funds
- **Adaptable** to the particular needs for Research
- **Continuity** and **consistency** of funding
- **Complementarities** to Structural Funds (no thematic and geographic criteria)
- **Openness** and pursuit of international collaborations.

# Building up a Knowledge Economy: Opportunities for innovative companies

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

- A PPP initiative involving the EIF and an initial investment of **260 M€**
- Transforming Research ideas into start-ups through the **“Innovation Window”**
- Incubators, TTO, Accelerators, seed capital and equities
- Operation at regional level

# Towards a Knowledge Economy



# Flagship Initiatives (a top down approach)

➔ **Culture:**  
Culture, Cultural Heritage, Science and Technology

➔ **Life Science and Health:**  
Precision Medicine: Personalized medicine for  
Prevention and Therapy

➔ **Agrofood:**  
-Advanced genomic technologies for diagnostics,  
verification, standardization and improvement.  
“The roads of **vineyards**”  
“The roads of **olive groves**”  
“The roads of **bees**”

# A key issue

Openness and international collaboration are important elements for maximizing mutual benefits of Knowledge Economy.

**The **Prima** Euro- Mediterranean programme for joint ventures in Agrofood and Water supplies management**

## Our vision:

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