

# European Industry in High Added Value Manufacturing – Facts and Challenges

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## Three guiding questions

- Why the industrial base is an asset for Europe?
- Where should future development go?
- How can we strengthen our position?

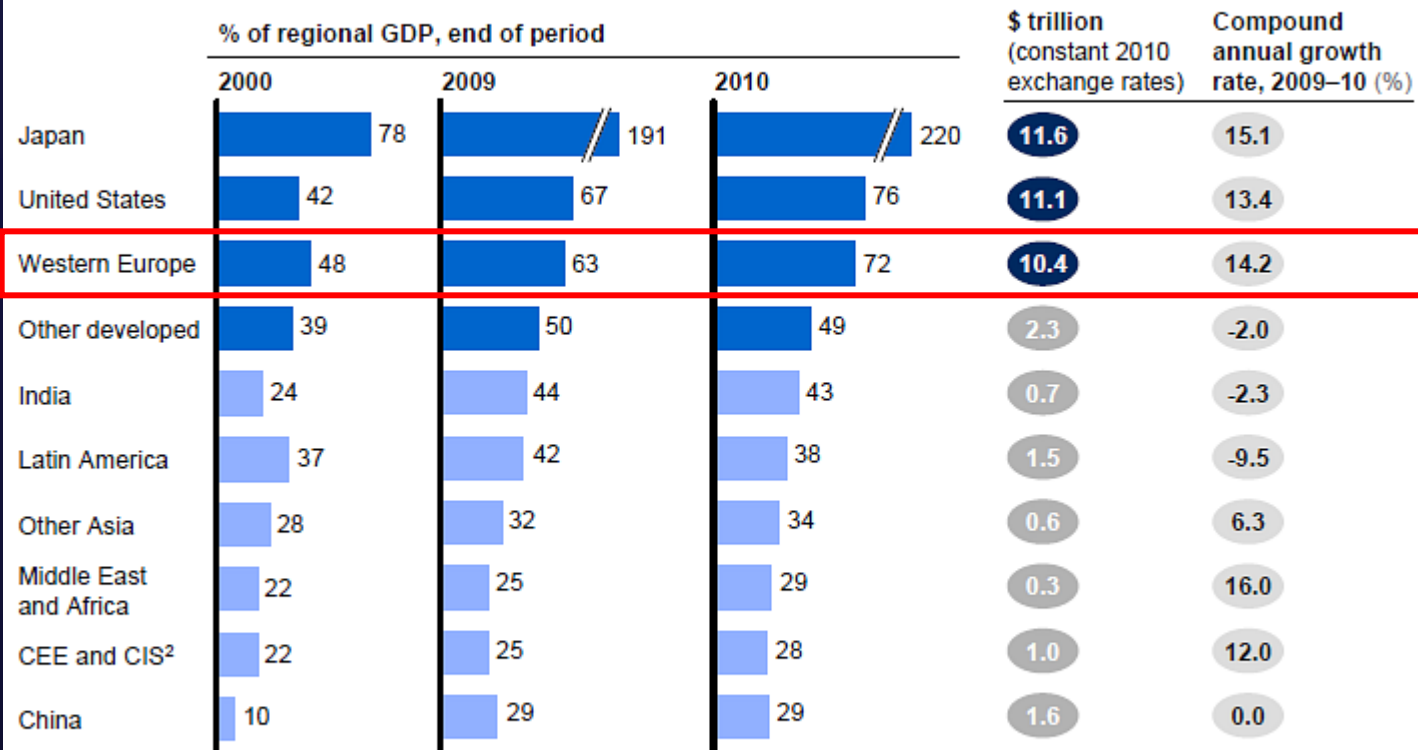




# Government debt in many developed countries has risen to unprecedented levels

## Governments in many developed economies have steadily increased public debt over the last ten years

### Gross public debt outstanding<sup>1</sup> per region



1 Defined as general government marketable debt securities; excludes government debt held by government agencies (e.g., US Social Security Trust Fund).

2 Central and Eastern Europe and Commonwealth of Independent States.

SOURCE: Bank for International Settlements; McKinsey Global Institute analysis

## European Industry “Facts and Figures“

### Jobs

33.0 Million directly (24,2 %)  
~ 70 Million via related services  
(> 50 %)  
2.1 Million Enterprises

### Turnover

7 136 Billion €

### Value Added

1 670 Billion € (27,1 %)

## Most relevant sectors > 70%



Transport Equipment

Electrical and Optical Equipment

Food Products and Beverages

Chemicals

Basic Metals and Fabricated  
Metal Products

Machinery and Equipment



## Manufacturing the Driving Force of the European Economy

- Manufacturing has a huge potential to **generate wealth, jobs and a better quality of life**
- Manufacturing is a **dominant element of the international trade**
- Manufacturing is important in view of its **environmental impact**
- Manufacturing is **important for SMEs**
- Manufacturing **strengthens and supports the service economy**
- Manufacturing is **critical for emerging markets**
- Manufacturing is **critical for research, education and innovation**

**Importance can hardly be overestimated**



## Core Elements



- **Smart Growth:**  
Economy based on knowledge and innovation
- **Sustainable Growth:**  
Greener, more resource efficient and competitive economy
- **Inclusive Growth:**  
High employment delivering social and territorial cohesion



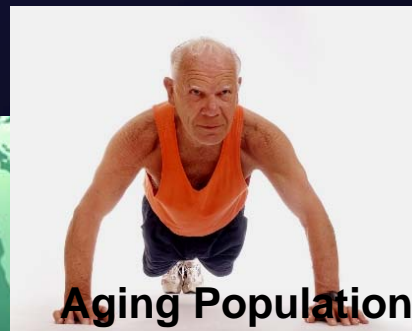
**Manufacturing addresses all of them**

## Horizon 2020: European research and innovation policy will tackle "societal challenges"

These cover issues such as

- climate change and clean energy,
- sustainable transport,
- sustainable industrial production,
- sustainable food production and consumption,
- aging population and public health

### Clean Energy

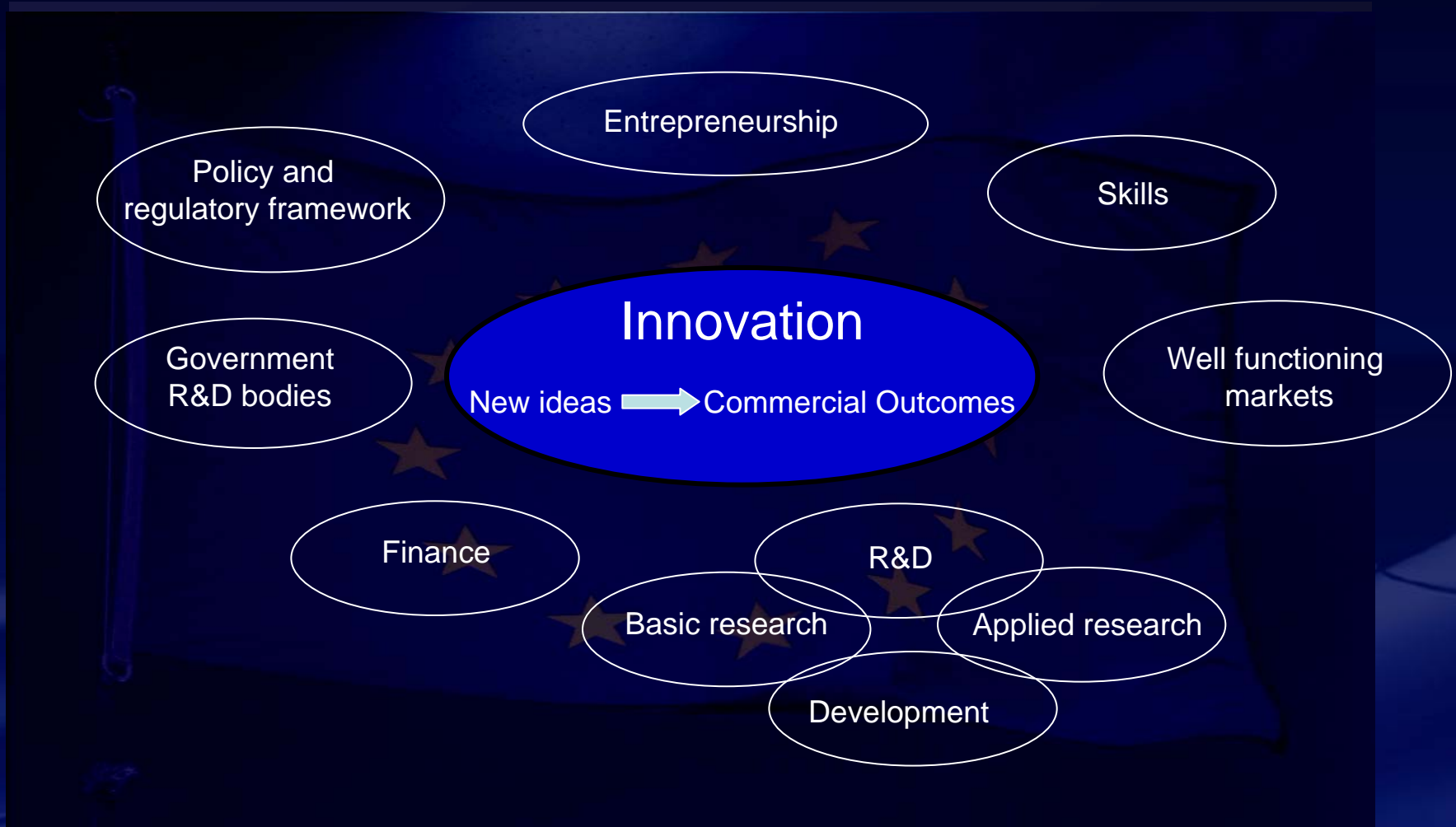


Industry will be the engine of the new low-carbon, resource-efficient and knowledge-based economy

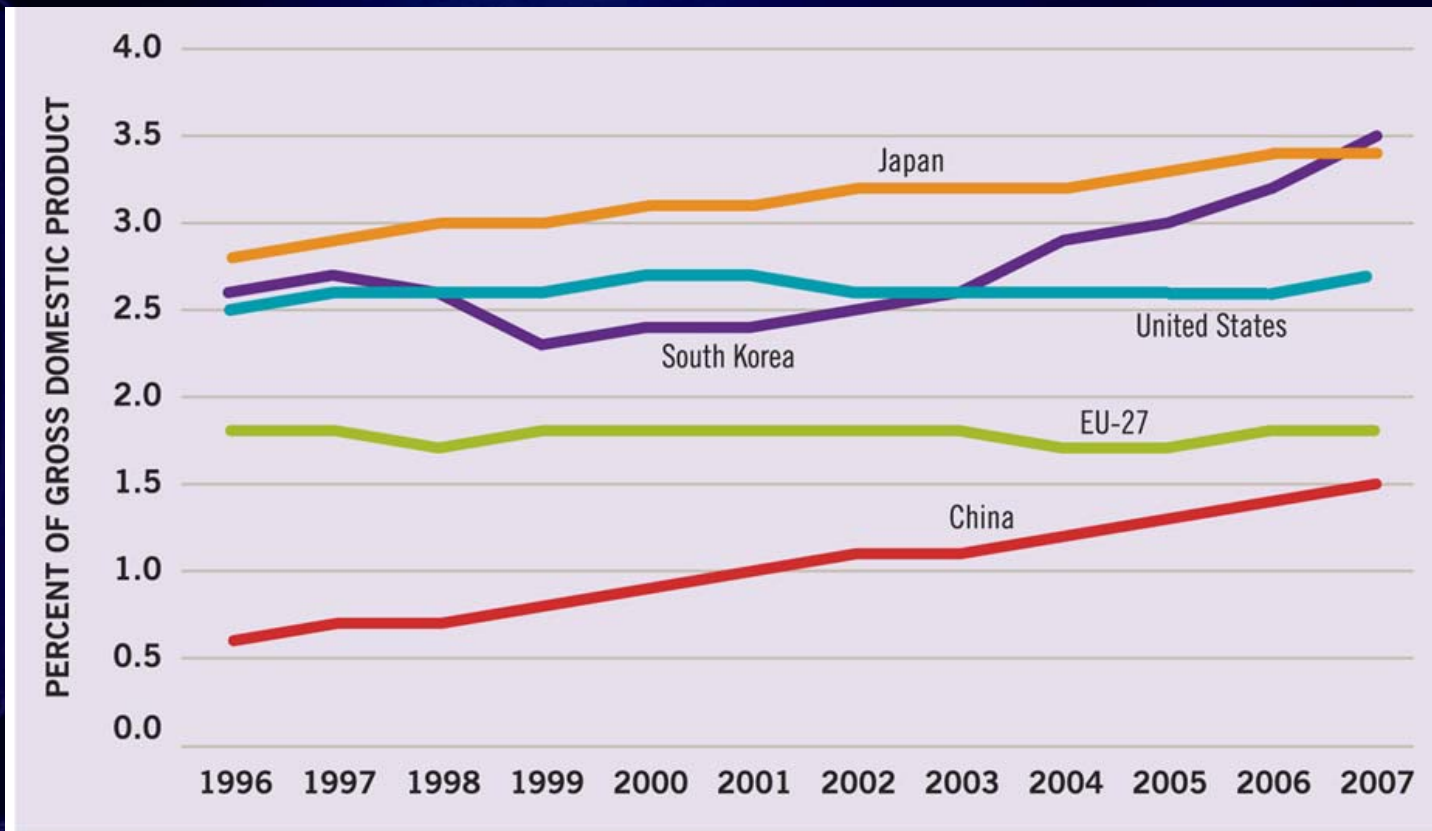




## Coordinated interaction of various actors needed

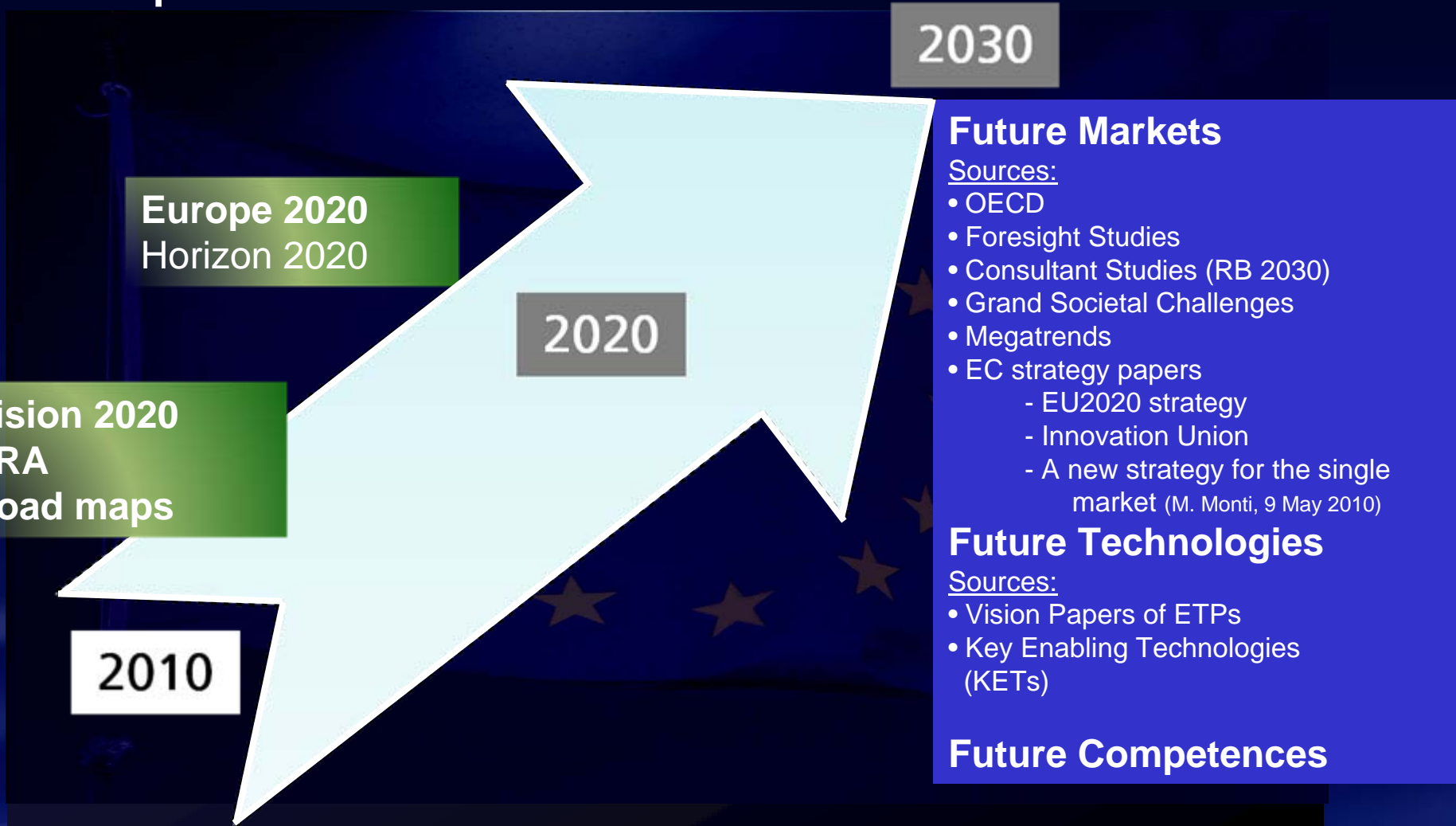


## R&D expenditures as share of economic output for selected countries: 1996 - 2007



SEI 2010: Comparison of Country R&D Intensities, Chapter 4.

## Development of Vision 2030



## Societal Challenges and Competitiveness

**Nano-  
technologies**

**Micro and  
Nanoelectronics**

**Biotechnology**

**Photonics**

**Advanced  
materials**

**Advanced Manufacturing  
Systems**

## Societal Challenges, Jobs, and Industrial Competitiveness

### Factory as a Good Neighbor



### Factory and Nature (green factory)



### Factory and Humans (volume production)



### Factory and ICT (next generation IT for production)



## Perspectives for the future

- Public debt can be reduced to an acceptable level only by high added value products and services
- Competitive sustainable manufacturing generates wealth, jobs and a better quality of life and is the backbone of the European economy
- Vision 2030 recommends to deploy a wide range of advanced traditional and enabling manufacturing technologies
- Horizon 2020 is a unique opportunity to strengthen the European manufacturing base



**The future is in our hands**