PUBLIC RESEARCH FOR OPEN INNOVATION

Public research programmes for business and academia
1. The Europe 2020 Growth Strategy

2. Horizon 2020 – The programme for Research and Innovation in the EU

3. Open Innovation for investing in industry
1. The Europe 2020 Growth Strategy
LONG TERM EUROPEAN TRENDS - 1

SERVICES PLAY A GROWING ROLE

1950

2015

Employment

76% in Services
No Single Market

21% in Industry
Single Market

3% in Agric. & Fish.
Union Policy

78% in Services

20% in Industry

2% in Agric. & Fish.

Gross Nat° Income

Union Policy

21% in Industry
Single Market

3% in Agric. & Fish.
Union Policy

78% in Services

20% in Industry

2% in Agric. & Fish.
LONG TERM EUROPEAN TRENDS - 2
REAL INCOME & PRODUCTIVITY, Work vs Leisure

GDP per head of population - 000 €
Source: Eurostat - 2004

GDP per person employed - 000 €

GDP per hour worked - €

EU | US
---|---
20 | 35
15 | 30
10 | 25
5 | 20
0 | 15

EU | US
---|---
50 | 70
40 | 60
30 | 50
20 | 40
10 | 30
0 | 20

Source: Eurostat - 2004
Long term European Trends - 2

Productivity Growth SloWS DoWN

Abb. 2: Wachstum der Arbeitsproduktivität pro Stunde
(gleitender Durchschnitt)

Quelle: EU-Kommission, AMECO-Datenbank
LONG TERM EUROPEAN TRENDS - 3

AN INCREASING OLD AGE DEPENDENCY

Old dependency ratio
( age group 65+ as share of age group 15-64)

Source: UN World Population prospects (2002 Rev. - Medium Variant); For EU25: Eurostat 2004 Demographic Projection (Baseline scenario); CC= BG, RO, HU, TR

Green Paper on Demography

1 B$ year in National Ageing Institute?

20 Million humanoid robots in 2030?
LONG TERM EUROPEAN TRENDS - 3

A NEW GENERATIONAL DEAL

1889 Bismarck "old age" bill
For 70 years workers…

…an age most Germans would never reach

Pension at 65, still only lasted for 3 years for most Germans in 1950…

…10 years in 1975…

…and 15 in 2000!
EUROPE 2020

Presentation of J.M. Barroso, President of the European Commission, to the Informal European Council of 11 February 2010
1. The crisis has wiped out long-term progress

2. Europe must react to avoid decline

3. Our room for manoeuvre is constrained

4. We must learn the lessons and turn to the future

5. Where do we want Europe in 2020?

6. From exit to lasting recovery

7. Three priorities for sustainable growth and jobs

Presentation of J.M. Barroso to the Informal European Council, 11 February 2010
Acting together at EU level pays off

Medium-term impact (2020) on EU GDP of specific EU-level measures – model simulations.

- Venture capital (removal of cross-border regulatory and tax barriers): 94
- 25% reduction in administrative burden (EU contribution equal to 35% of overall reduction): 75
- Services Directive (conservative estimate): 63
- Unbundling electricity markets: 50

Source: European Commission

Presentation of J.M. Barroso to the Informal European Council, 11 February 2010
Three priorities for sustainable growth and jobs

◆ Growth based on knowledge and innovation
  – Innovation
  – Education
  – Digital society

◆ An inclusive high-employment society
  – Employment
  – Skills
  – Fighting poverty

◆ Green growth: a competitive and sustainable economy
  – Combating climate change
  – Clean and efficient energy
  – Competitiveness
Growth based on knowledge and innovation

**INNOVATION**

**Key facts**
- R&D spending is below 2%, compared to 2.6% in the US and 3.4% in Japan; our smaller share of high-tech firms explains half of the gap with the US
- Google spends more on information and communication technologies R&D than the EU FP7 does

**EUROPE 2020**

**INNOVATION UNION**
- R&D/GDP = 3% (from 2%)

**EDUCATION**

**Key facts**
- Less than 1 person in 3 aged 25-34 has a university degree, compared to 40% in the US and over 50% in Japan
- 1 in 7 young people drop out of school, and 1 in 4 have poor reading skills

**EU DIGITAL AGENDA**

**Key facts**
- The world market in information and communication technologies is worth € 660 billion and employs 1/3 of research workforce: EU firms make up only 23% of this
- 56% of households have a broadband connection, but many users have doubts about safety and financial transactions on the internet

**Youth on the Move**
- 40% tertiary ed. (from 31%)

Presentation of J.M. Barroso to the Informal European Council, 11 February 2010

April 2017 - N°

Uni TRENTO / Crash course on Research funding...
An inclusive high-employment society

**JOBS**

**Key facts**
- Despite progress, only 2/3 of our working age population is employed (66%), compared to over 70% in the US and Japan.
- Only 46% of our older workers (55-64) are employed compared to over 62% in the US and Japan.

**SKILLS**

**Key facts**
- About 80 million people have low or basic skills, but lifelong learning benefits mostly the more educated.
- By 2020, 16 million more jobs will require high qualifications, while the demand for low skills will drop by 12 million jobs.

**FIGHTING POVERTY**

**Key facts**
- 80 million people were at risk of poverty in the EU prior to the crisis; 19 million are children; unemployed are particularly exposed.
- 8% of people in work don’t earn enough to make it above the poverty threshold.

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**An EU agenda for new skills and jobs**

- Empl. Rate = 75% (from 69%)
- Early School leavers 10% (from 15%)
- Lift 20 million out of poverty

EU Anti-poverty platform

Presentation of J.M. Barroso to the Informal European Council, 11 February 2010

April 2017 - "N°"
**Green growth: a sustainable and competitive economy**

<table>
<thead>
<tr>
<th>COMBATING CLIMATE CHANGE</th>
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<th>COMPETITIVENESS</th>
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**A Resource efficient Europe (20/20/20 plan)**

- Reduce green gas by 20% (`90)
- Increase renewable energy by 20%
- Reduce energy waste by 20%

**E-Bay, E-tickets, You Tube, Customer evolution, Pyramid power...**

**Combating Climate Change**

- Achieving our goals means reducing emissions by twice as quickly in the next decade than in the last decade.
- Jobs in the eco-industry have increased by 7% every year since 2000; meeting our renewable target would mean 2.8 million jobs in the sector.

**Energy**

- Meeting our goals will result in €60 billion less in oil and gas imports by 2020.
- Further progress with the internal market for energy can add 0.6% to 0.8% GDP.

**Competitiveness**

- The market for green technologies is forecast to triple by 2030.
- Improving resource efficiency by 20% would increase EU growth by around 1 percent.
- Using the single market to the full / improved market access and regulatory convergence can boost growth and jobs.

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**Quality not quantity**