



EUROPEAN COMMISSION

EUROPE 2020

Background Information for the Informal European Council, 11 February 2010



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* Sources and notes at the end

1. Recovering from the crisis

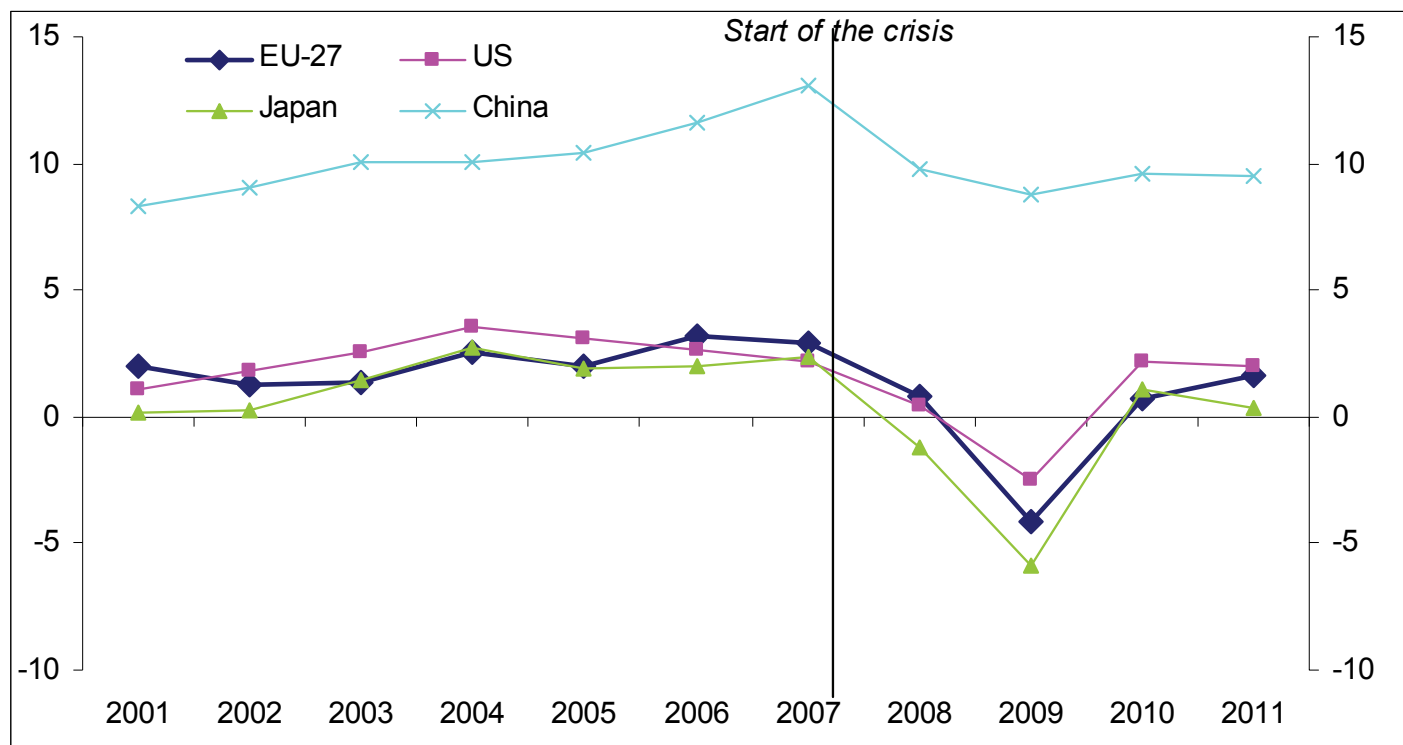
1

- Europe's growth was severely hit
- Unemployment has spread
- Young people are particularly at risk
- Industrial production declined sharply
- Our financial system still needs fixing
- Private investment is heavily constrained
- Public finances are very severely affected
- Fiscal consolidation will be demanding
- The situations of Member States differ
- Financial imbalances have a cost for all
- Successful exit is an immediate priority

Europe's growth hit by the crisis

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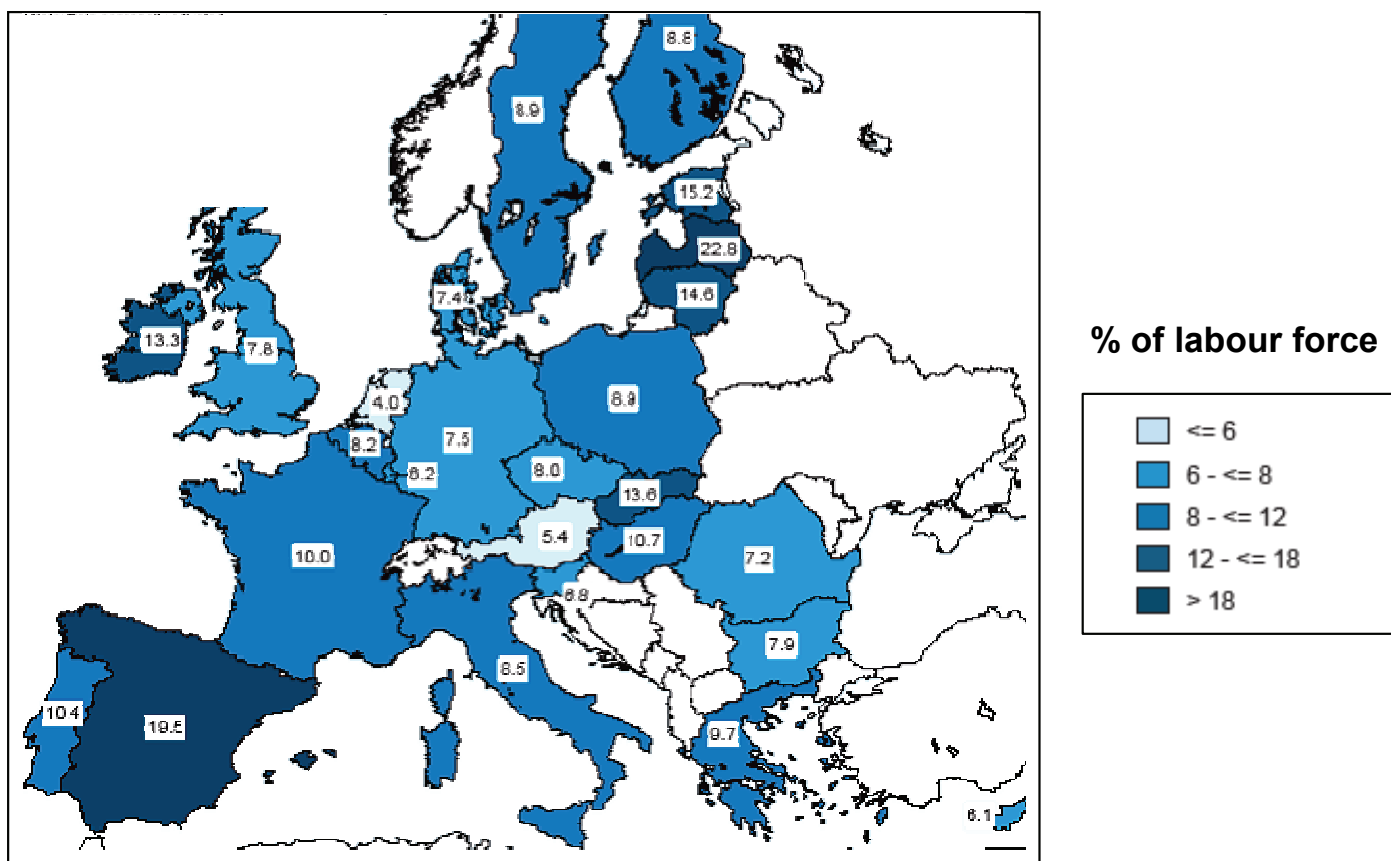
Annual GDP growth (%)



We went through the worst contraction since the 1930s. In the EU, GDP has fallen by 4% in 2009, with +0.7% forecast in 2010.

Unemployment has spread (1)

Unemployment rates in Europe (Dec. 2009)



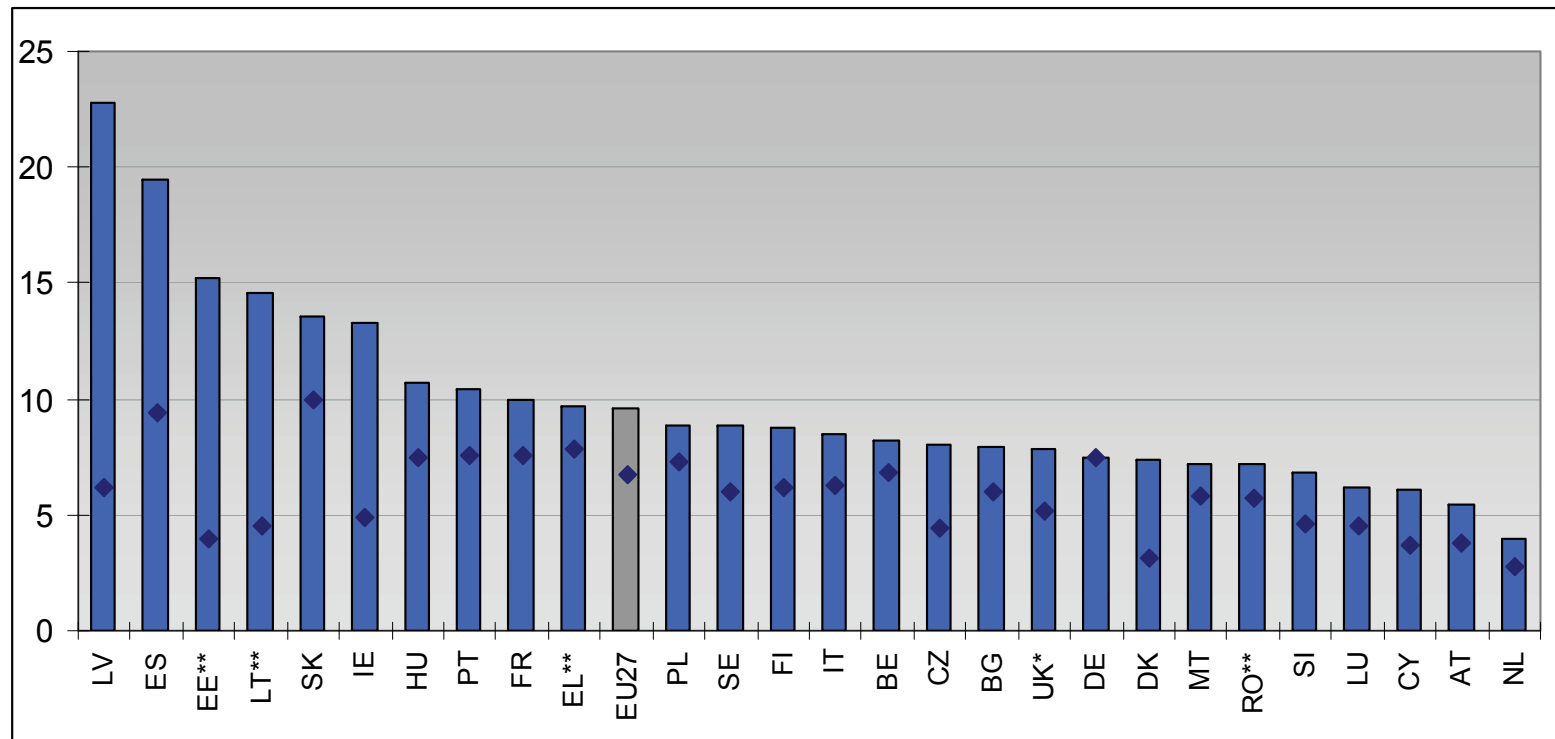
There are 23 million people unemployed today in the EU, an increase by 7 million in about 20 months (March 2008 – December 2009).

Unemployment has spread (2)

4

Unemployment rates in the EU, December 2009 (and increase since March 2008)

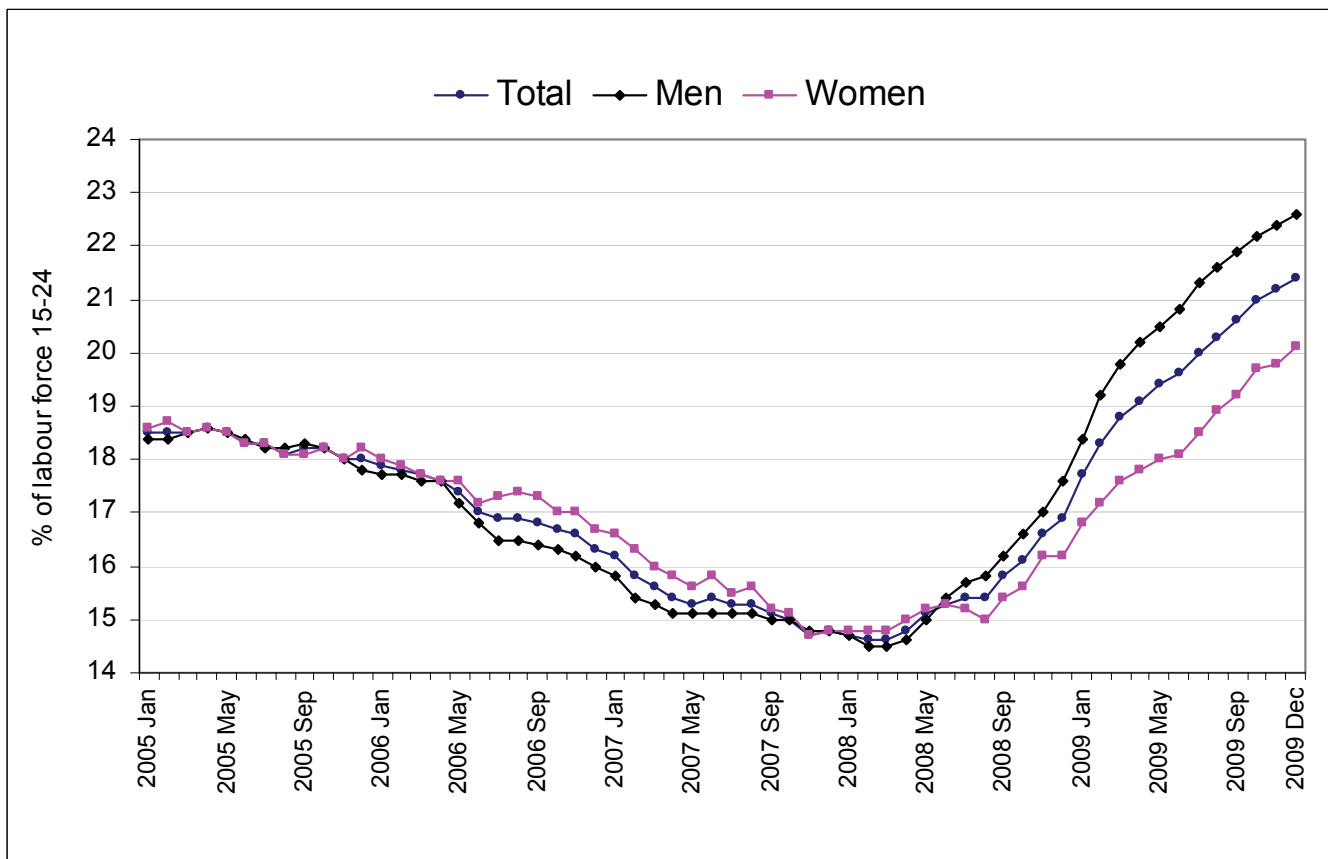
■ December 2009 ◆ March 2008



Unemployment rates are on the rise, with some countries particularly hit. The EU average is expected to reach 10.3% in 2010 (back to 1990s levels).

Young people are particularly at risk

Youth unemployment rate (%)

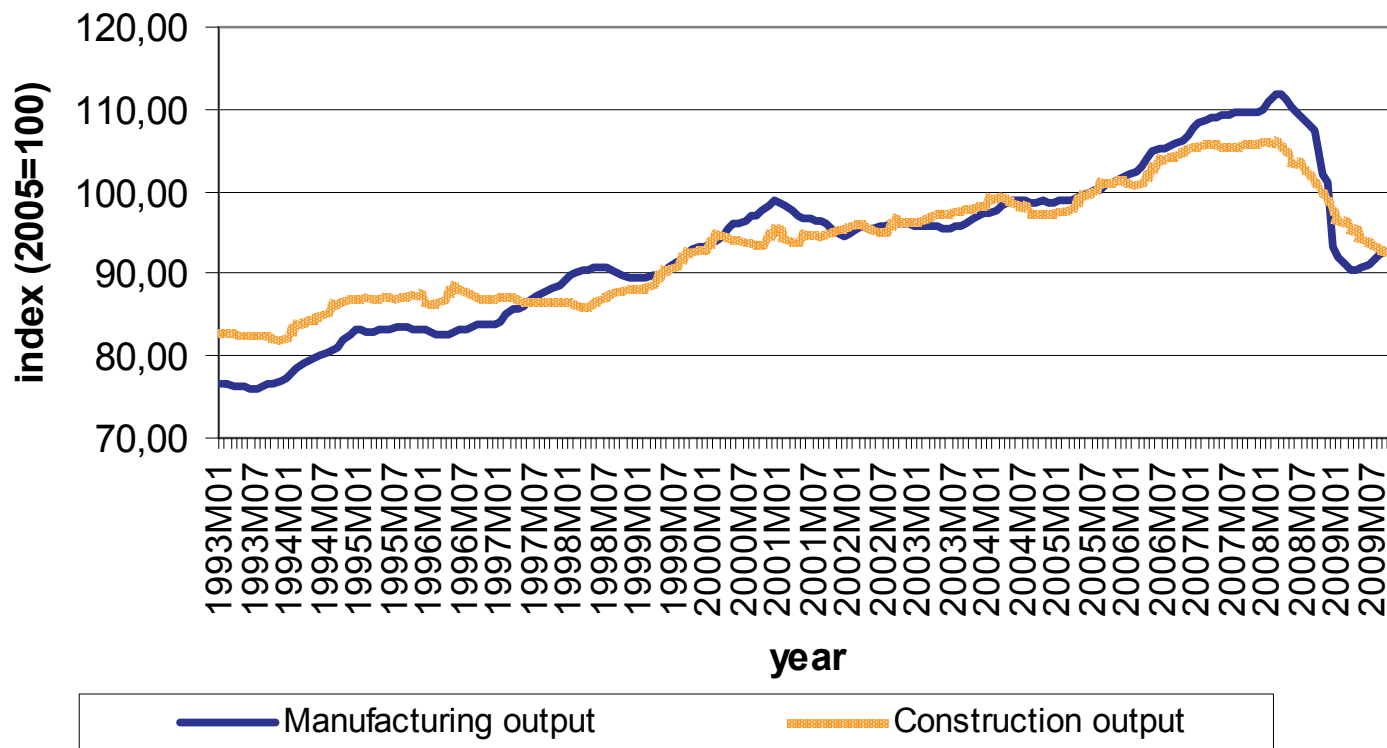


Youth unemployment reached 21.4% in December 2009, an increase by 7 percentage points since March 2008.

Industrial production declined sharply

6

Manufacturing and construction outputs

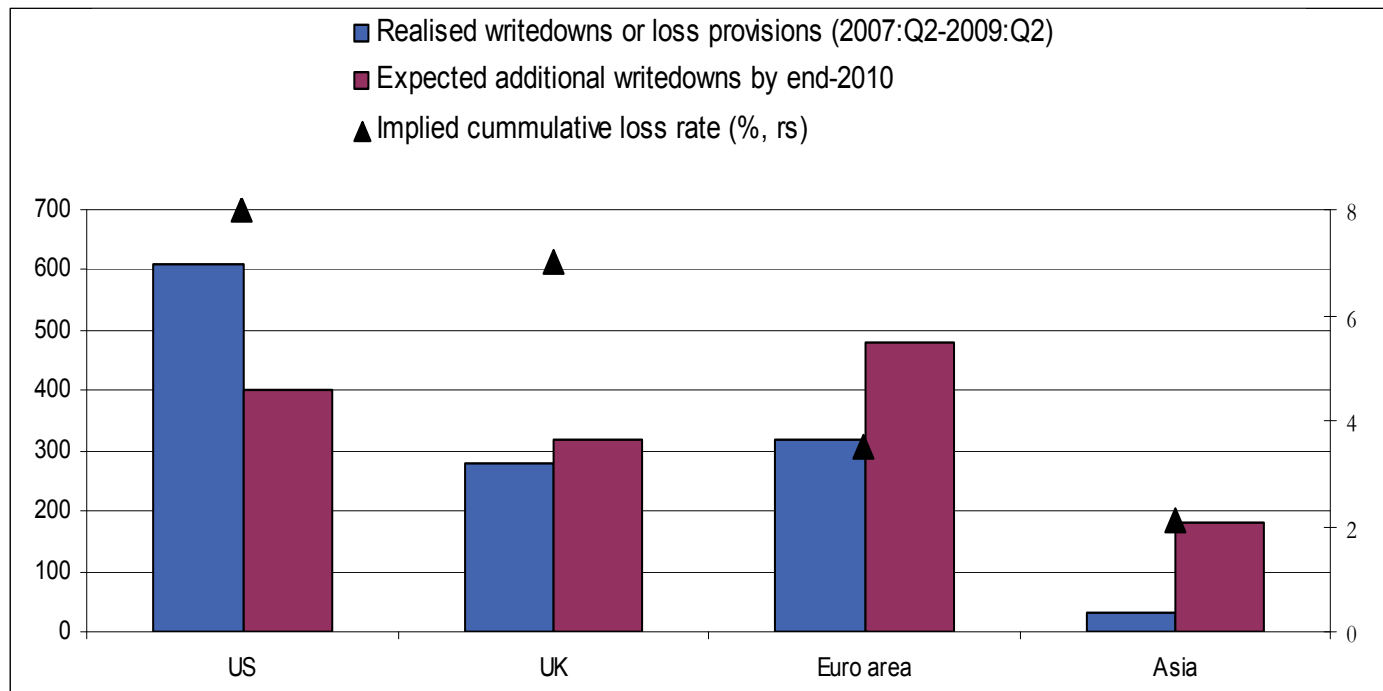


Industrial production fell by 20% compared to its peak in 2008 to reach a level not seen since the 1990s. It has now stabilised and is beginning to increase, although the recovery is still fragile.

Our financial system still needs fixing

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Realised and expected write downs or loss provisions for banks by region

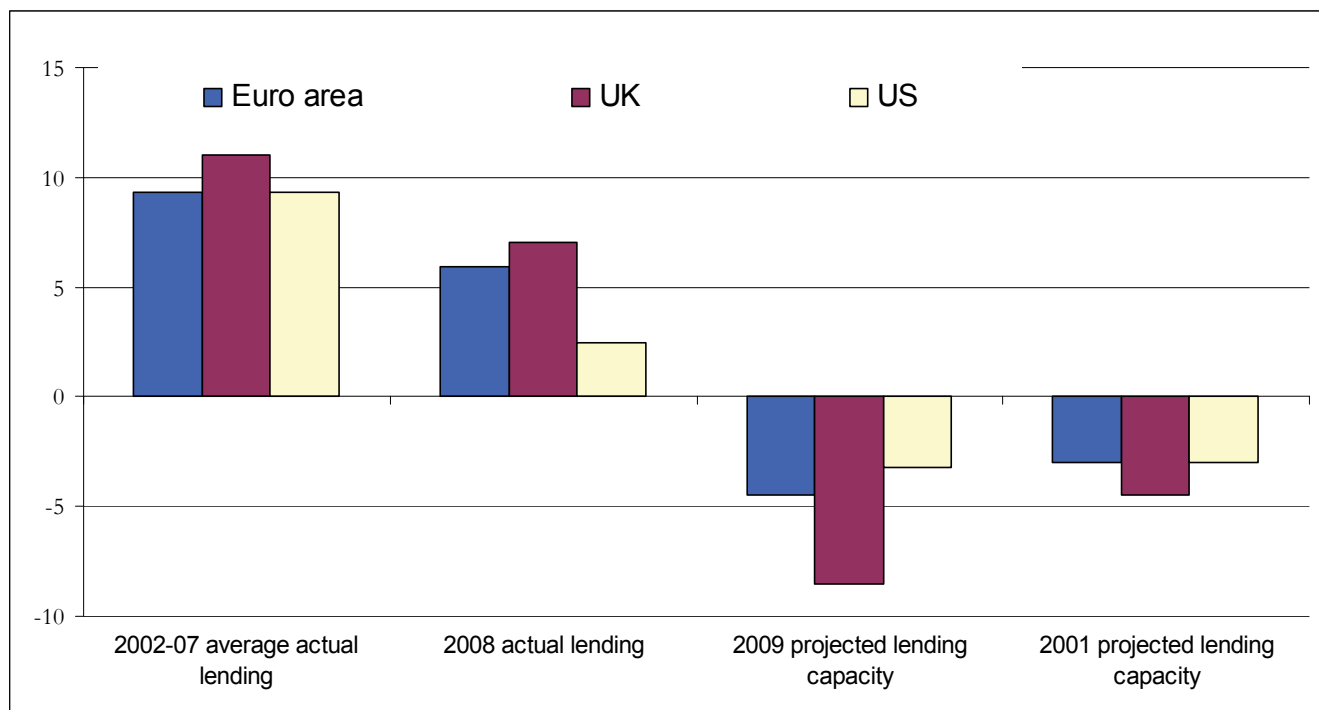


There is still a significant adjustment in the financial sector to come, and possible damaging effects on our recovery.

Private investment is heavily constrained

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Bank lending capacity (growth in %)

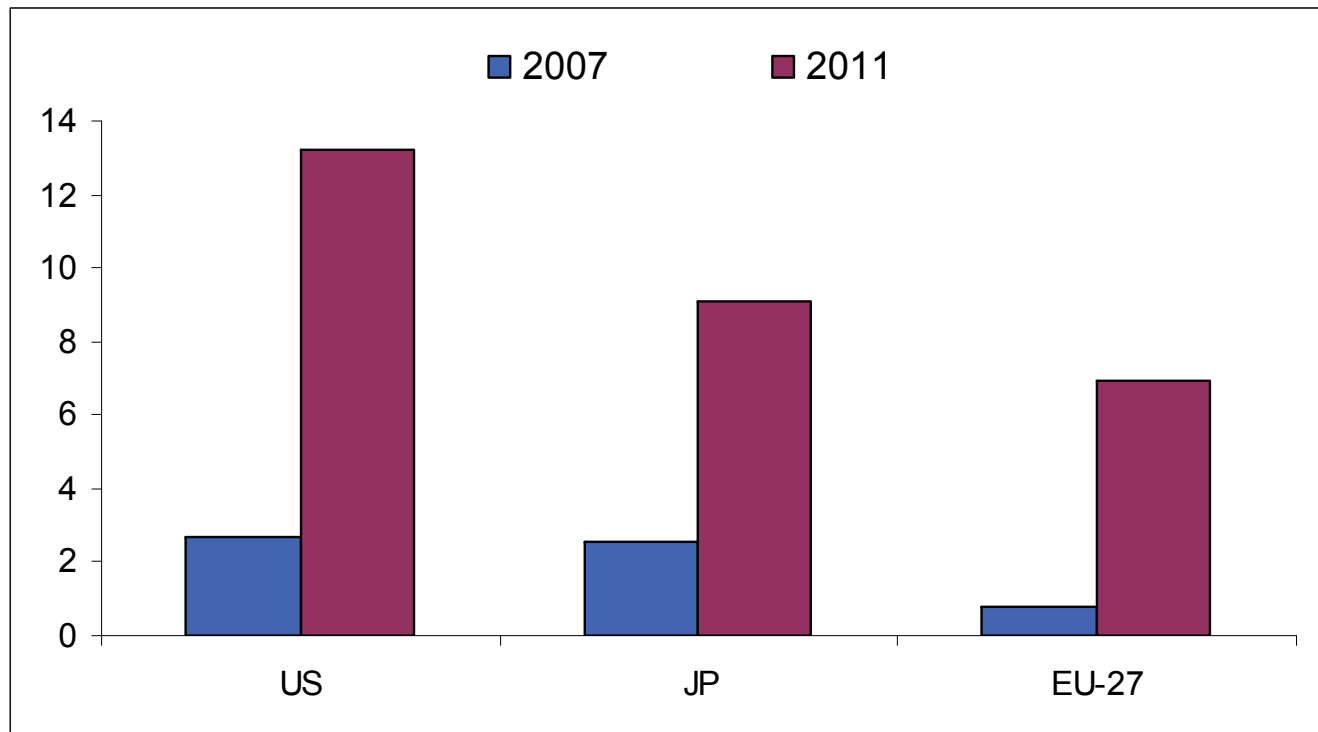


Because of pressure on their balance sheets, banks have diminished capacity to increase their lending. Confidence is weakened and credit is scarce. Firms and households face difficulties to borrow and invest.

Public finances are very severely affected

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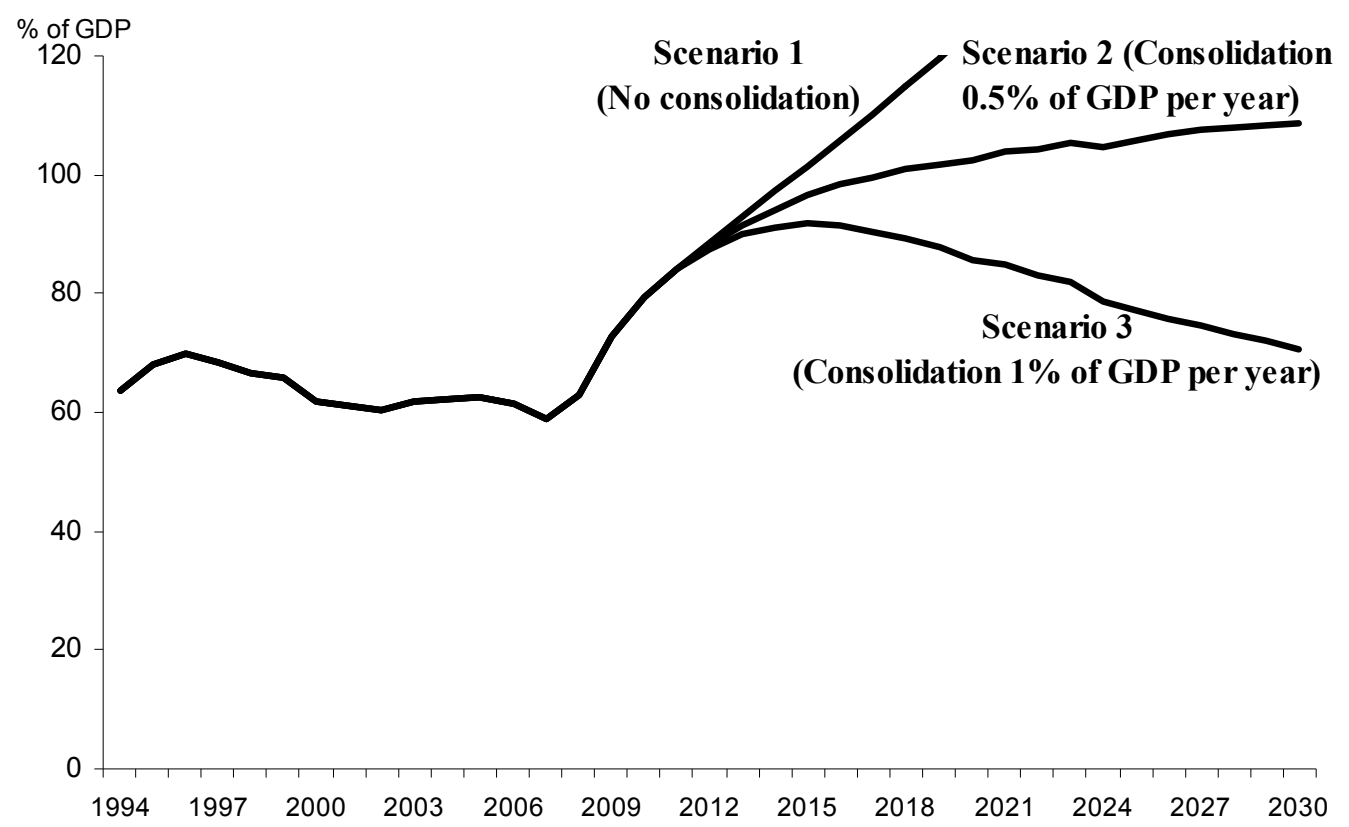
Budget deficit in the EU, Japan and the EU (% GDP)



Public deficit is over 7% GDP. Debt is forecast over 80% GDP in 2011 (2008: 61.5%). 2 years of crisis erased 20 years of fiscal consolidation.

Fiscal consolidation will be demanding

Public debt level: medium-term projections

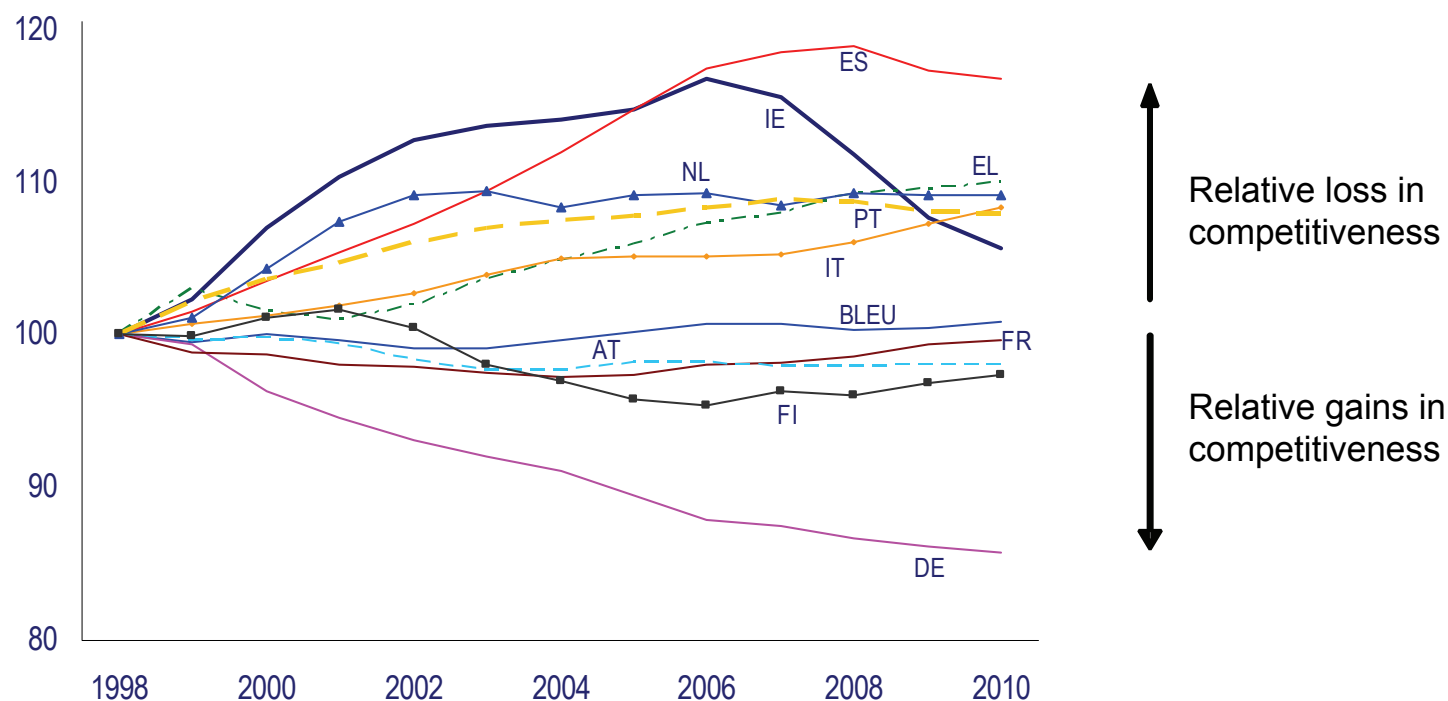


Even a consolidation of 1% of GDP per year over 20 years may not fully bring back debt to the 60% GDP reference.

The situations of Member States differ

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Evolution of (price) competitiveness relative to the euro area average (1998 = 100, NB: increases represent losses in competitiveness)



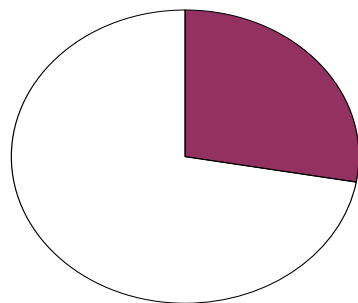
Member States have experienced different developments of their real effective exchange rates (a measure of competitiveness reflecting price trends) since the start of monetary union in 1999.

Financial imbalances have a cost for all

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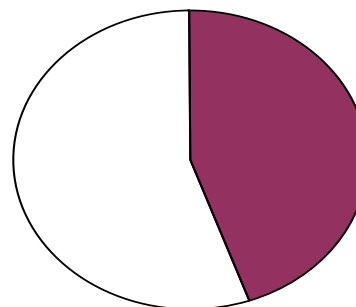
**Estimated impact of additional spending on debt servicing if borrowing costs rise by 50 basis points (0.5% point):
38 bn € per year**

Equivalent to 28% of public spending on tertiary education



130 bn €

Equivalent to 46% of public spending on R&D



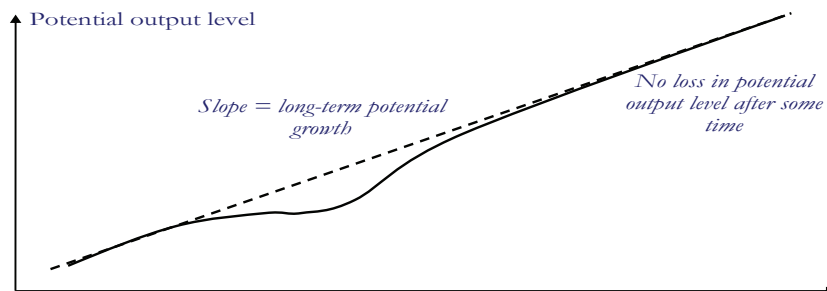
81 bn €

Not managing debt and imbalances in the euro area may raise borrowing costs for all.

Successful exit is a priority

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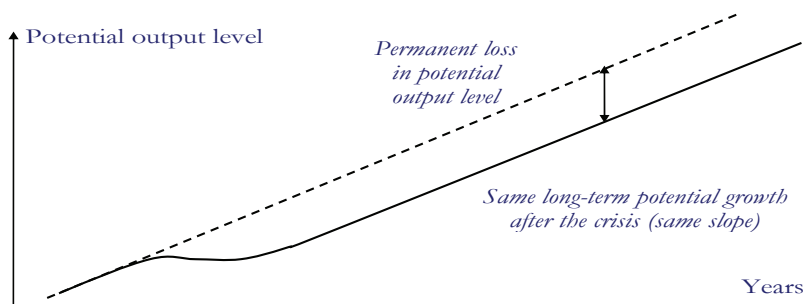
Different scenarios for GDPs



Case No 1:

« Strong recovery »

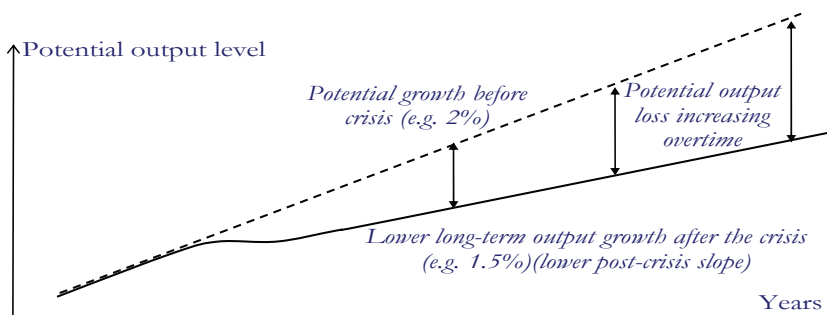
a full return to earlier path



Case No 2:

« Sluggish recovery »

a permanent loss in level terms only or a permanent loss on growth rates



Case No 3:

« Lost decade »

a permanent loss on growth rates

2. Global challenges intensify

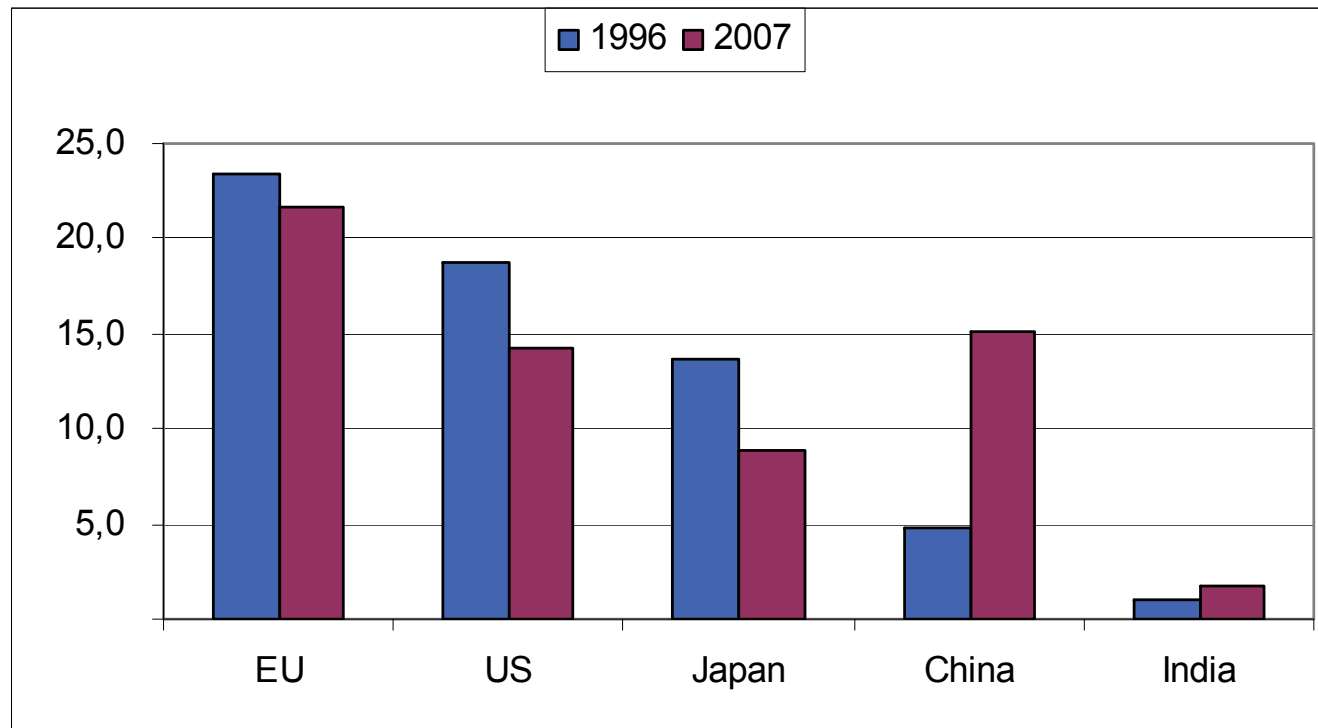
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- Global competition is fierce
- Intra-EU trade is a catalyst for growth
- Asia will remain the fastest growing market
- Our futures are interlinked
- Our demographic path is known
- Ageing accelerates
- Old-age dependency will rise fast
- Ageing impacts our capacity to grow...
- ... and limits our room for manoeuvre
- Climate/energy goals require drastic action
- Acting together at EU level pays off

Global competition is fierce

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Export share (% world exports)



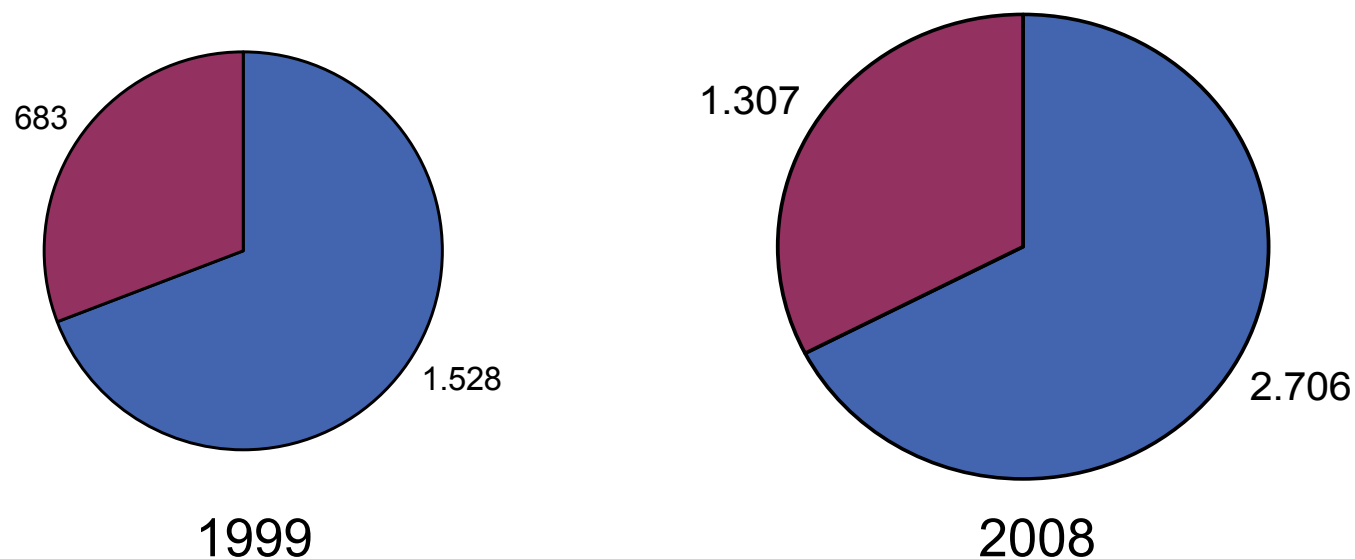
The EU benefits from being one of the most open economies in the world, but its external position is eroding.

Intra-EU trade is a catalyst for growth

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Intra-EU and extra-EU exports of goods

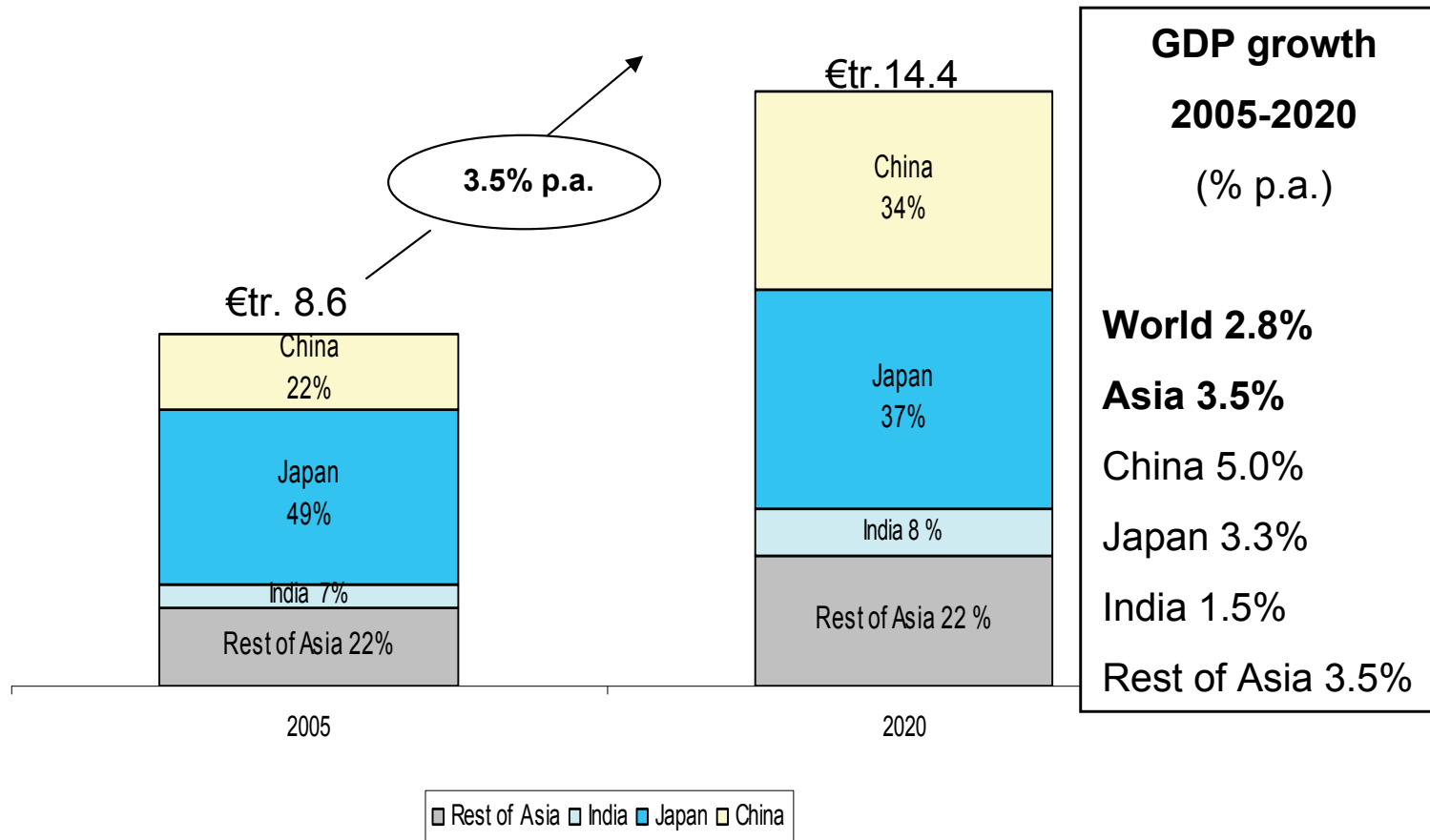
- Intra-EU exports of goods in bn euro
- Extra-EU exports of goods in bn euro



Intra-EU trade has been high and growing over the last decade. For every 1000 € of wealth created in a Member State, it is estimated that about 200 € end up benefiting other EU Member States through trade.

Asia will remain the fastest growing market

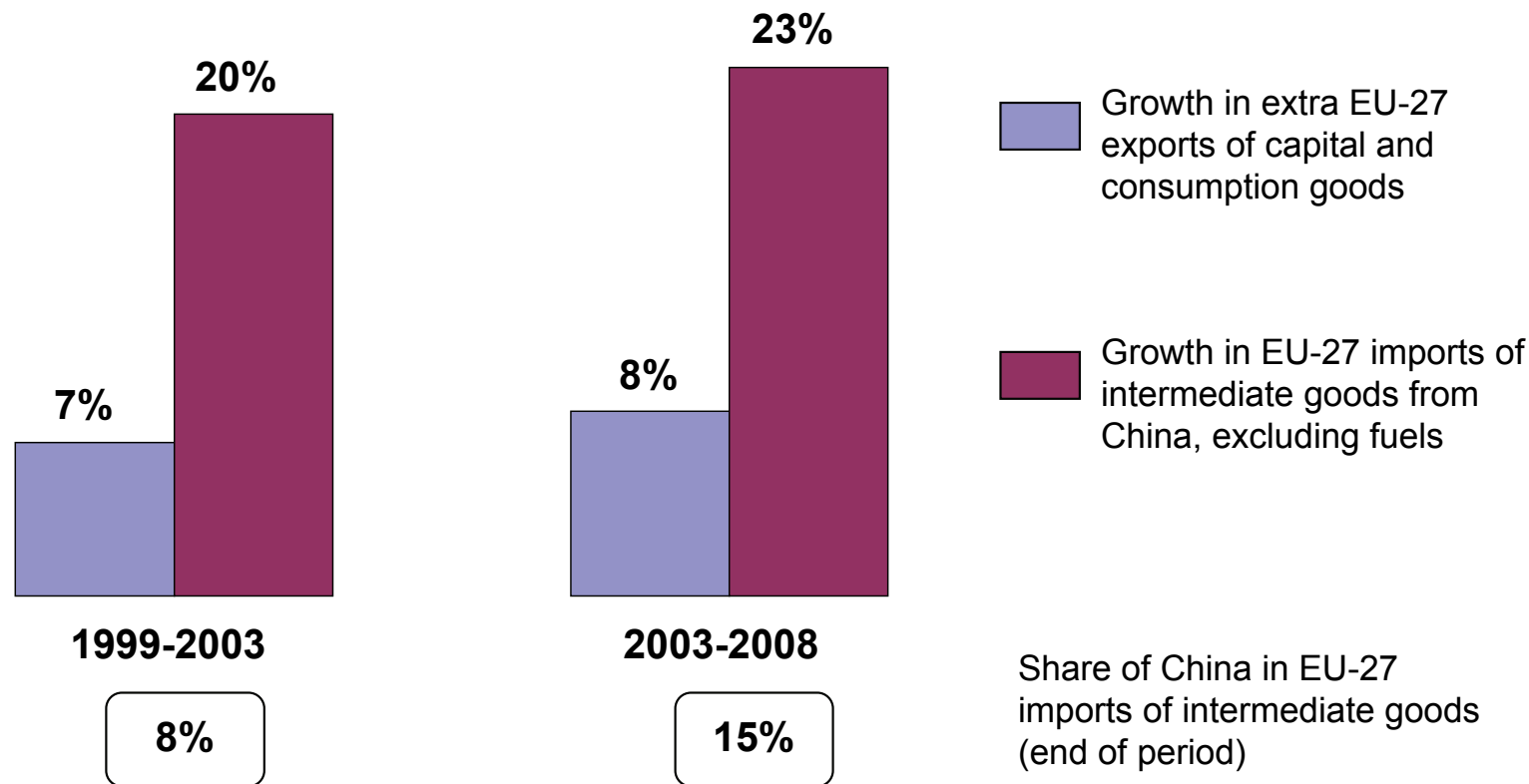
GDP in Asia in 2005 and 2020, in trillion euros



Asia – and especially China – is expected to continue expanding at a growth rate largely superior to the rest of the world.

Our futures are interlinked

Relation between EU imports and exports of goods

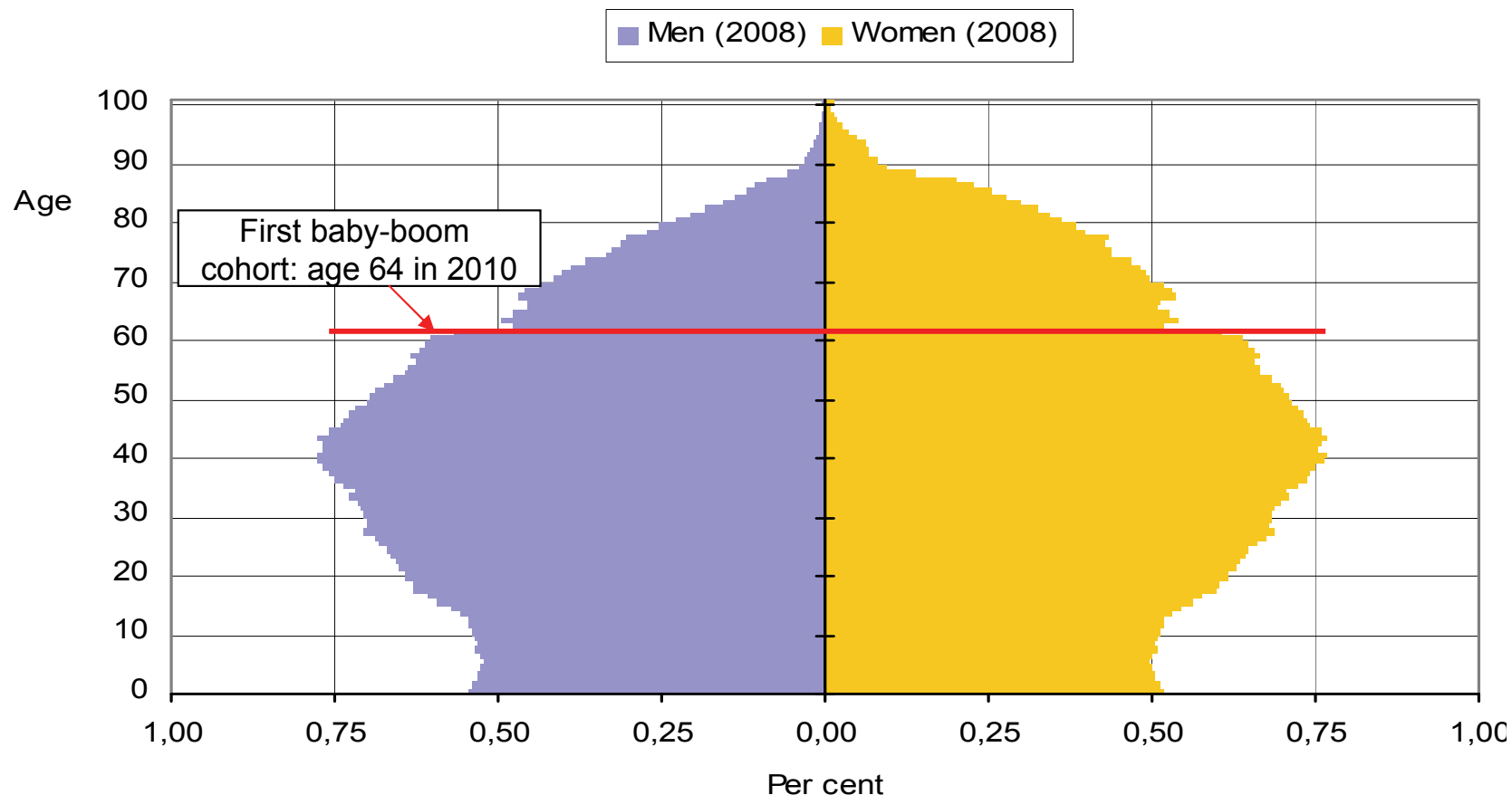


Two thirds of our imports are key intermediates for production and exports, and they come increasingly from BRIC countries. China doubled its share in EU imports of intermediate goods since 1999. These imports have contributed to the strong growth of EU exports of final goods.

Our demographic path is known

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Population by sex and age on 1. January of each year



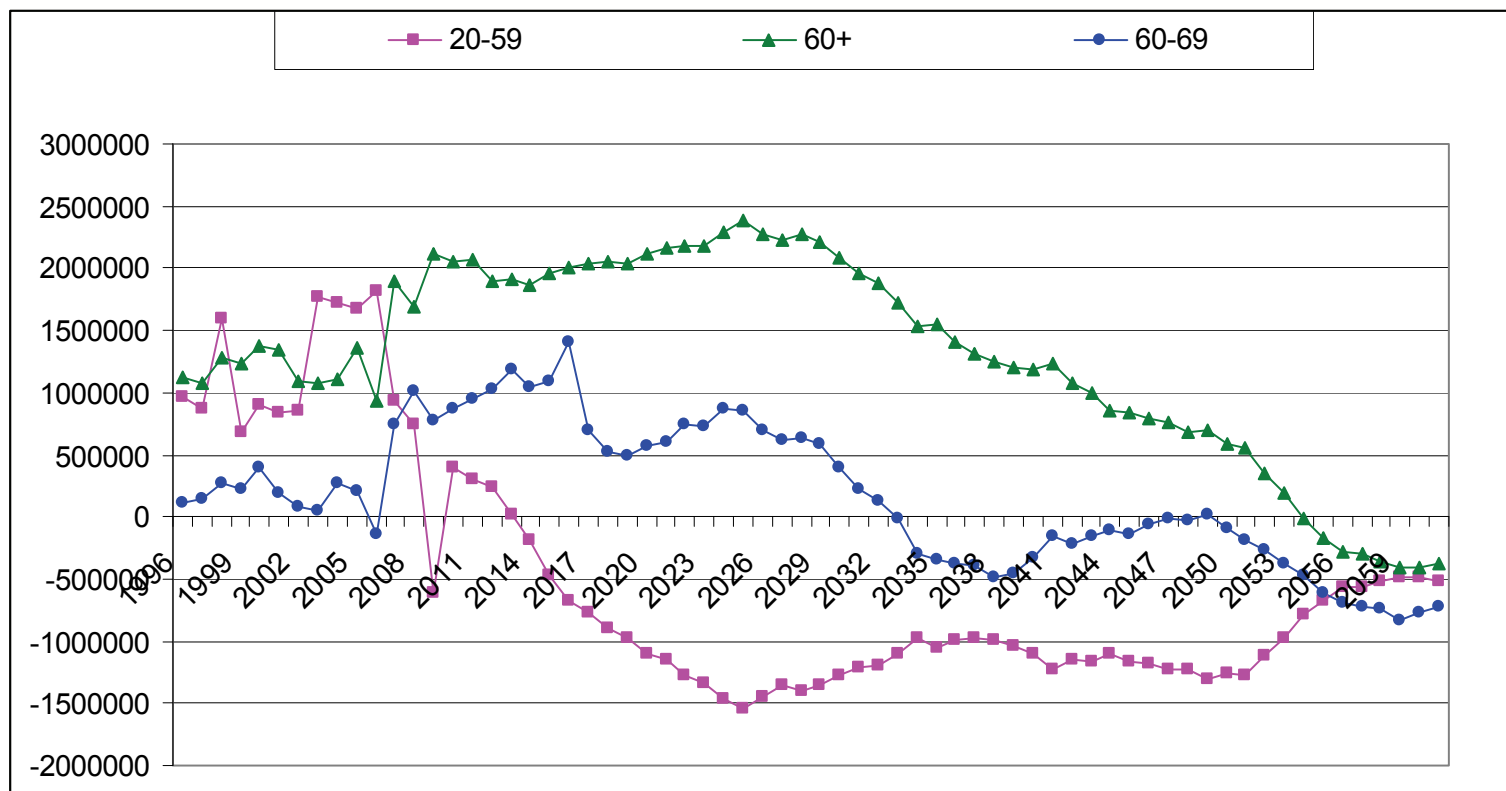
Baby-boomers start retiring. This marks the end of the demographic dividend, i.e. the fact that the working age cohorts were particularly large compared to the rest of the population.

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Ageing accelerates

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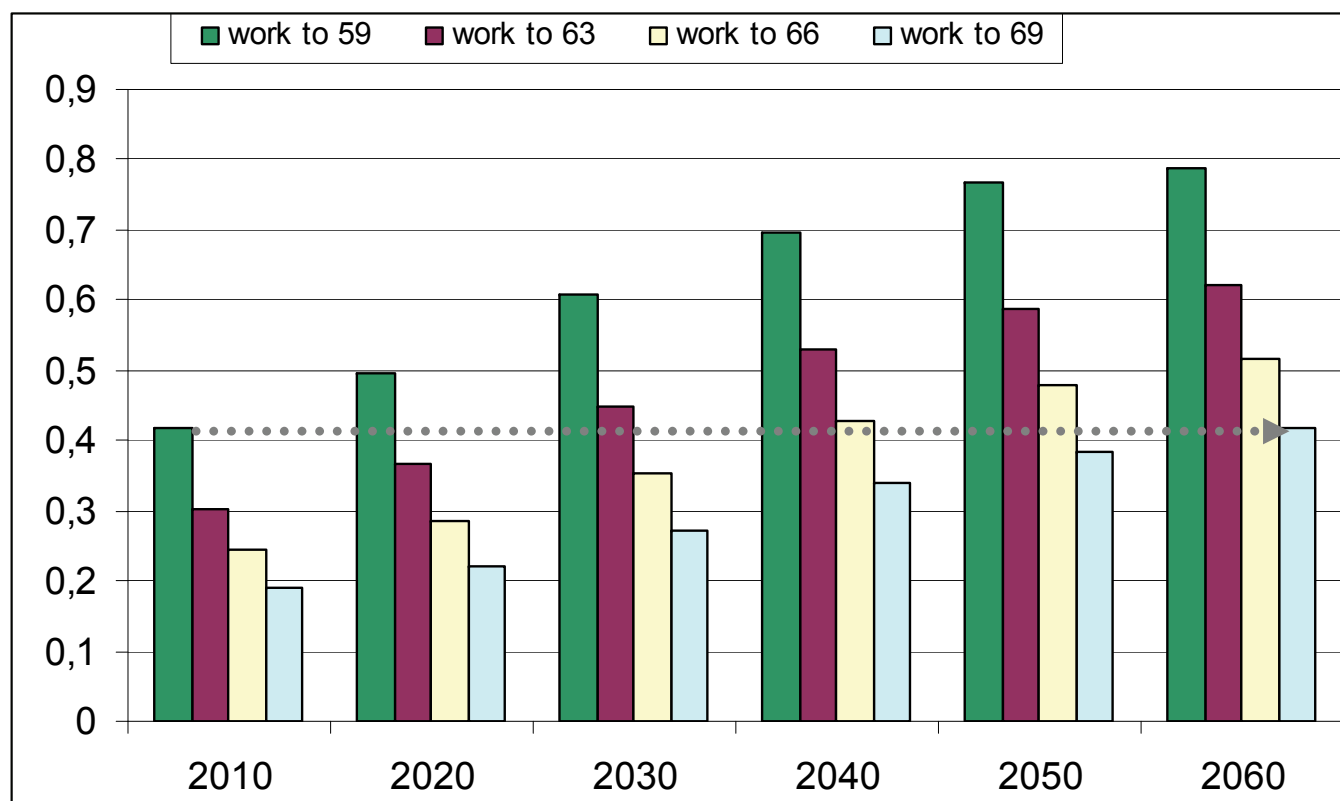
Population change over previous year



The number of people over 60 is growing almost twice as fast as it did up to 2007 (about 2 more million annually compared to 1 million previously). With smaller younger cohorts, the working age population will start shrinking from 2013/2014, and be reduced by about 2 million in 2020.

Old-age dependency will rise fast

Old-age dependency ratios under four retirement age assumptions (59, 63, 66 and 69 year-old)

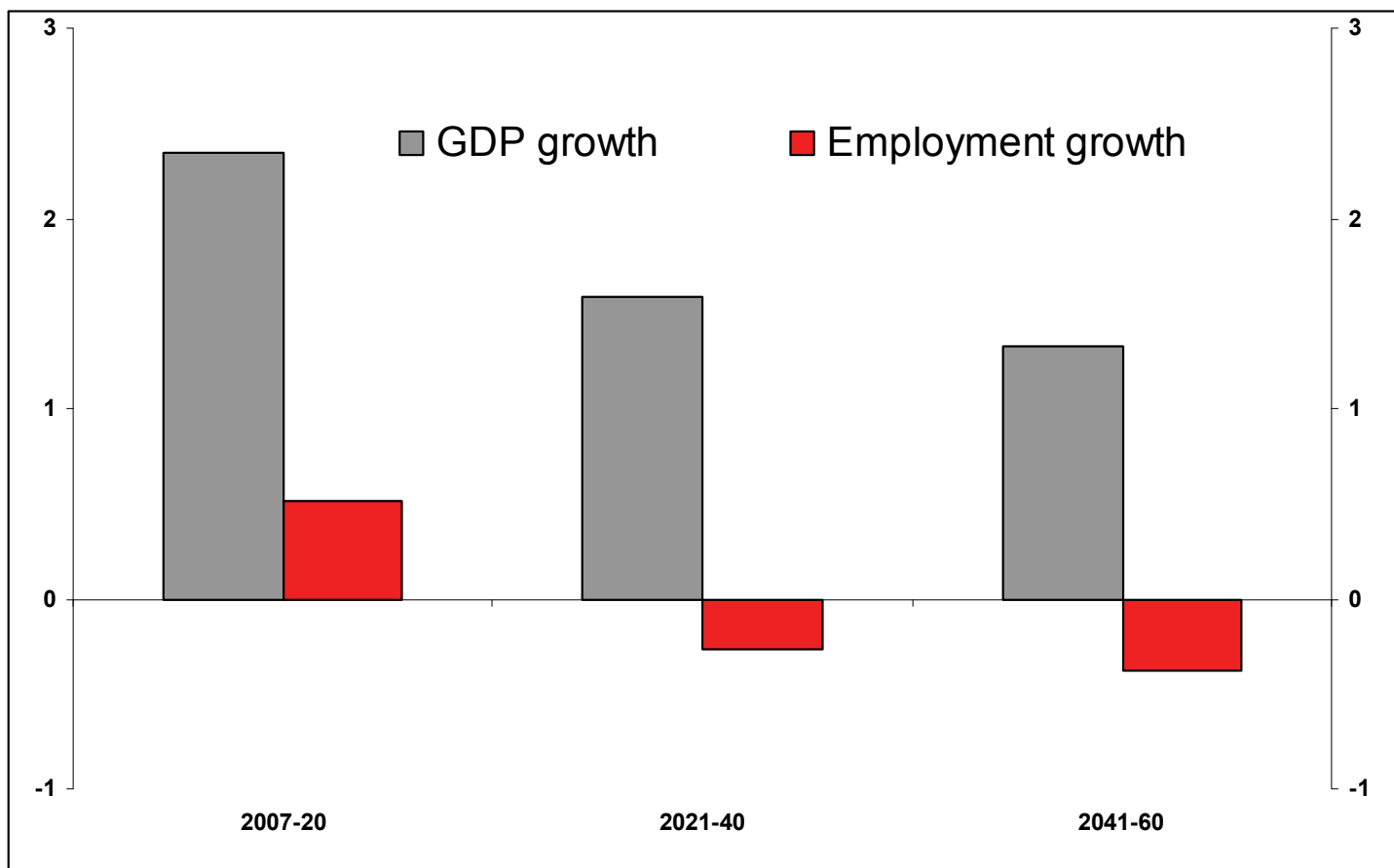


The old-age dependency ratio – the ratio of people above retirement age for each person in active age – is rising fast and would almost double by 2060 if current demographic and retirement patterns persist.

Ageing impacts our capacity to grow...

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EU growth potential (pre-crisis)

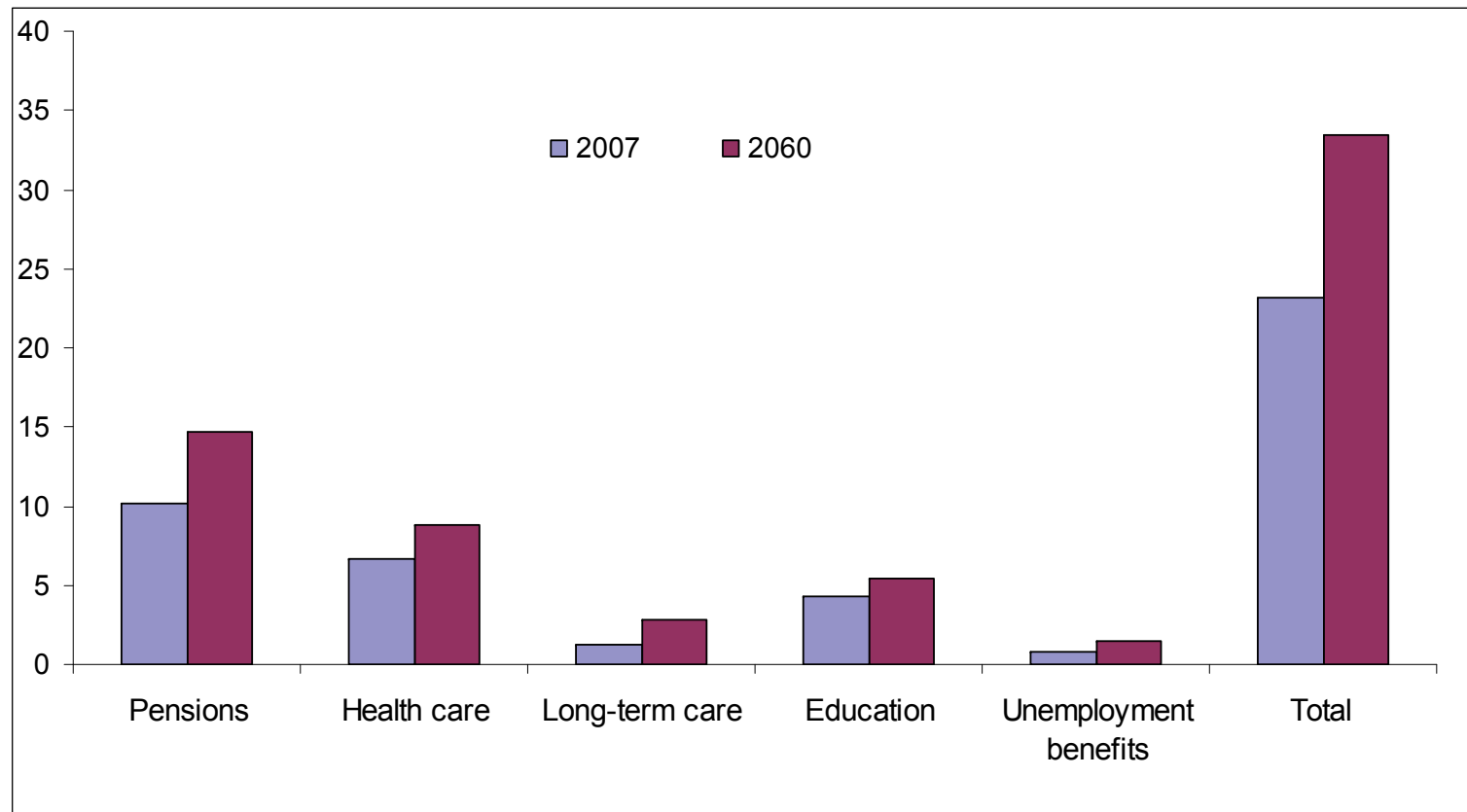


The reduction of the size of our workforce will have a lasting impact on our capacity to grow.

... and limits our room for manoeuvre

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Increase in age-related public spending (% GDP)

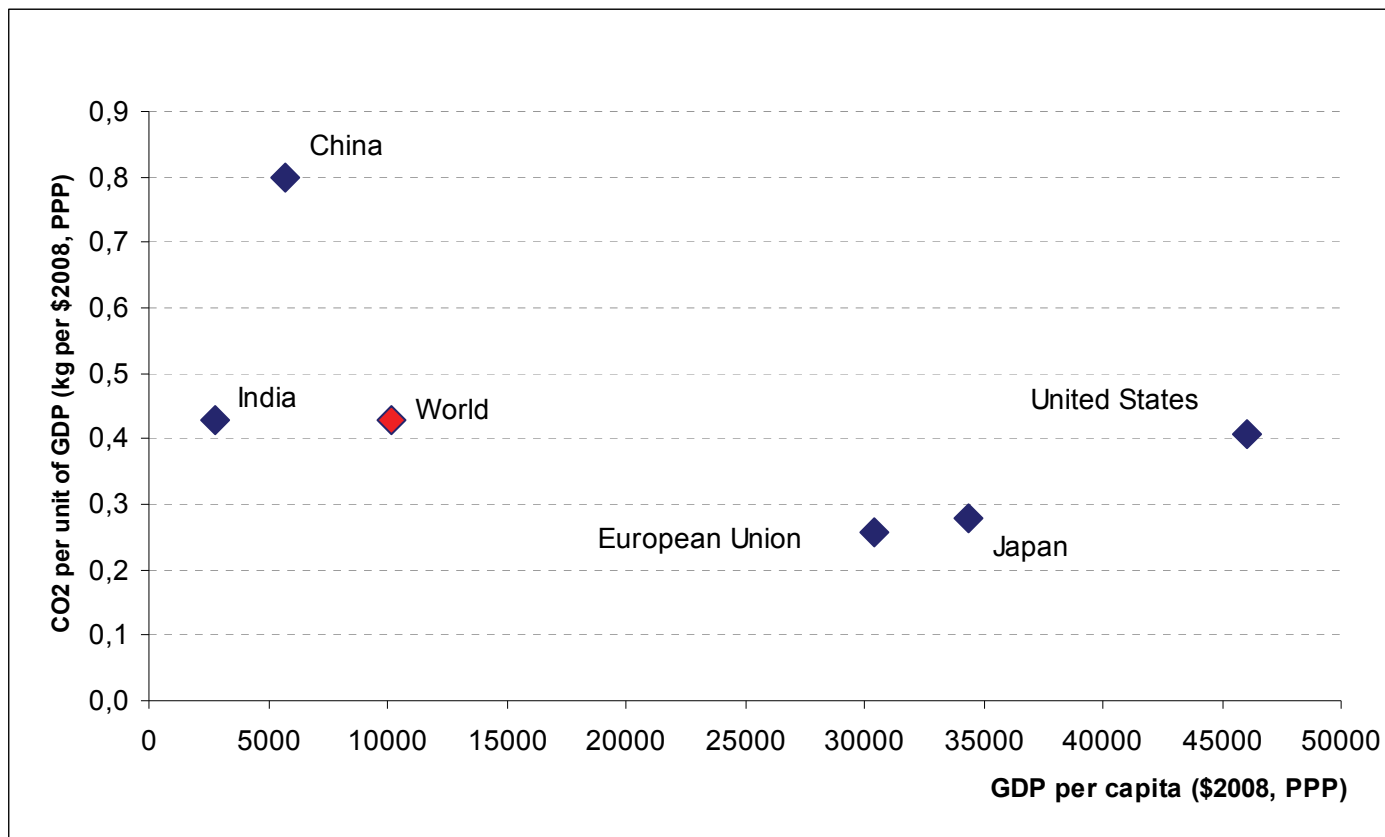


In 2060, there will be only 2 persons of working age for every person aged 65+, compared to 4 for one today. Our capacity to fund our welfare model is at stake.

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Climate/energy goals require action

CO2 intensity and GDP per capita

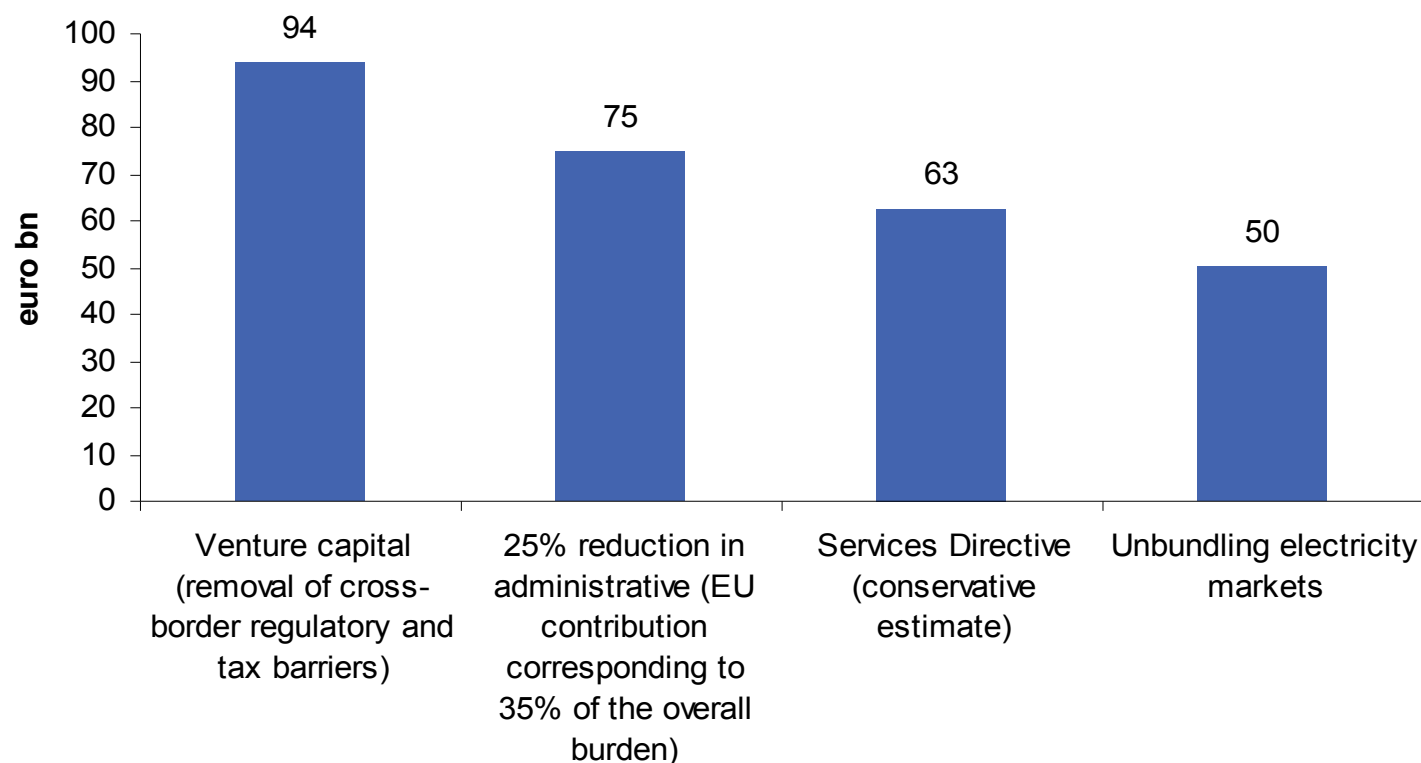


Europe is already the major low-carbon economy but its climate goals and energy vulnerability call for drastic action.

Acting together at EU level pays off

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



Taken together, the four policies mentioned in this graph could boost EU potential growth by 10% to 20%.

3. Our aim: sustainable growth and jobs

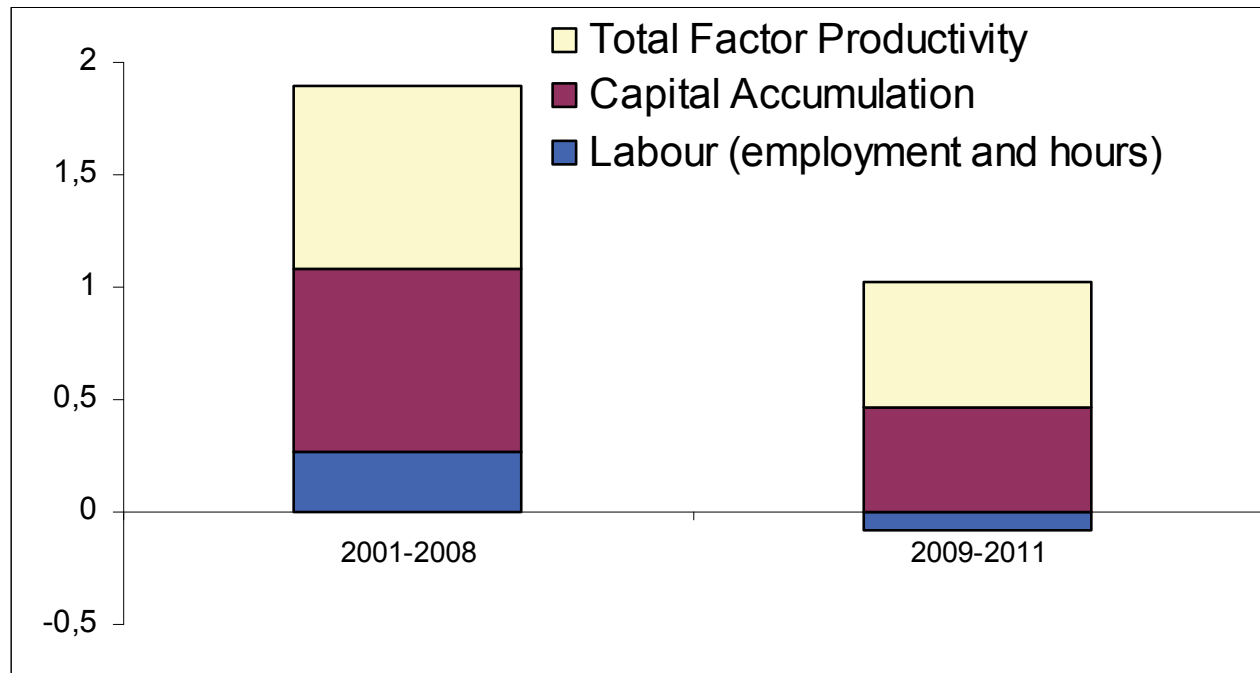
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- Our GDP potential must be restored
- Employment must be boosted
- We must act on our productivity levers

Restoring our GDP growth potential

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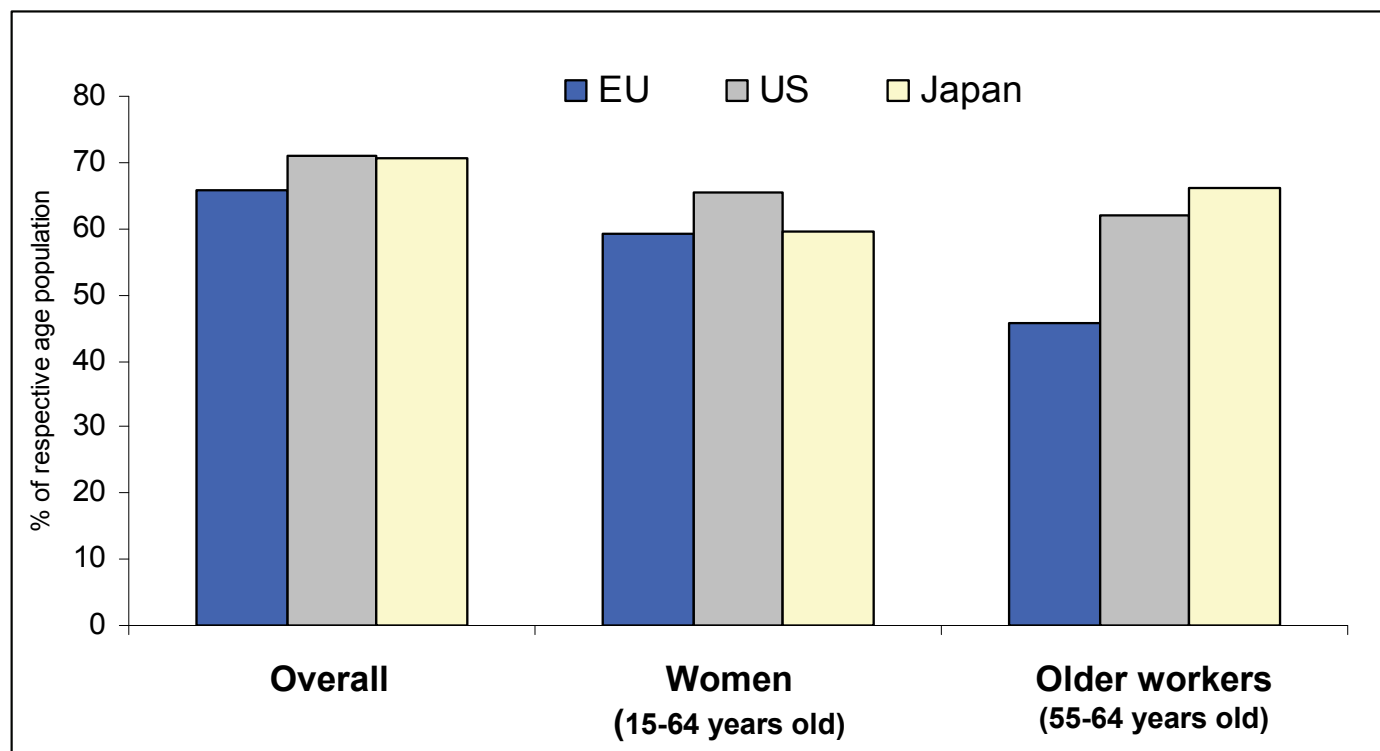
Average annual potential growth in the EU



The crisis will halve our potential output growth in the period 2009-2011 compared to the start of the century.

Raising our employment rates

Employment rates (2008)



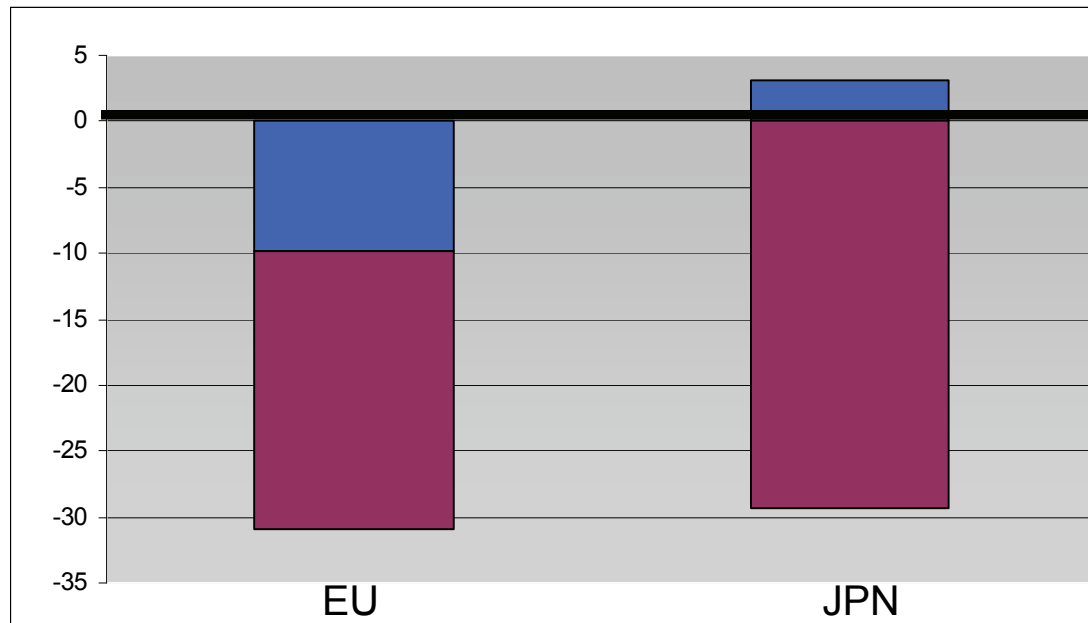
The employment rate went up from 62% in 2000 to 66% prior to the crisis, but it remains too low, especially for female (59% as opposed to 73% for men) and older workers (46%).

Acting on our productivity levers

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Sources of real income differences compared to the US (2007)

- Employment and hours worked
- Labour productivity (per hour worked)



Notwithstanding a slight catching up in employment and hours worked, the EU still has a substantial income gap with the US. Two thirds of the gap is explained by lagging productivity.

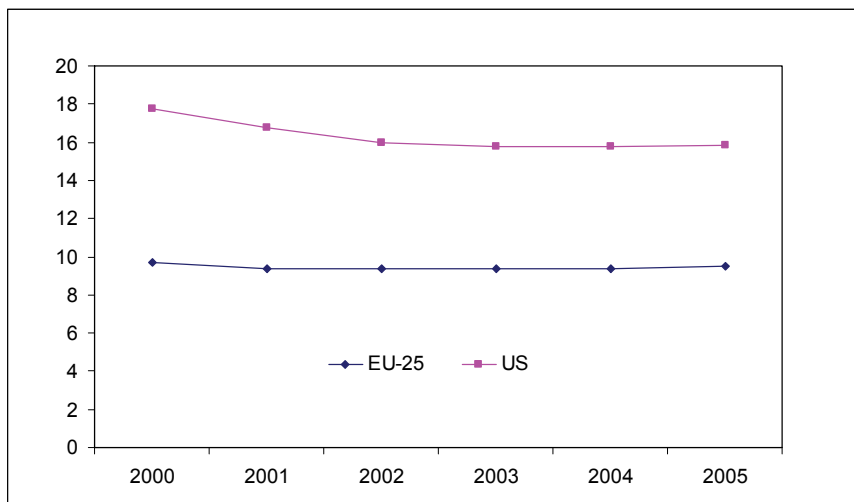
4. Growth based on knowledge and innovation

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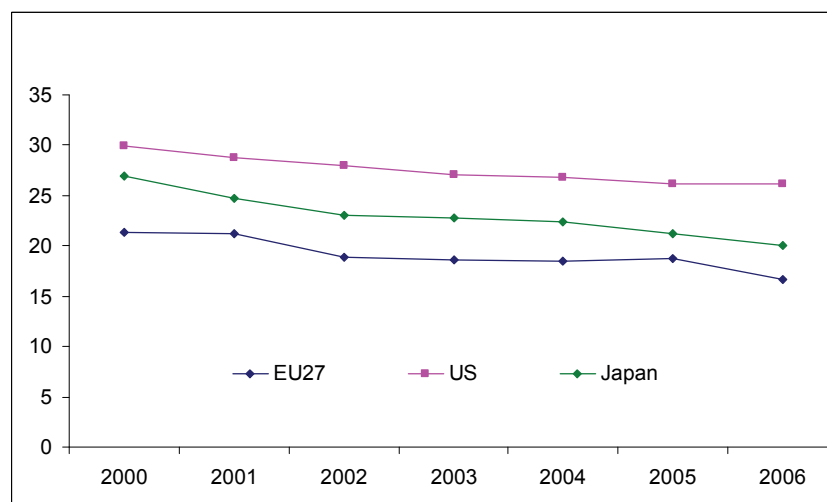
- Nurturing high-tech, high-growth sectors
- Spreading innovation across firms
- Raising our levels of R&D investment
- Matching the pace of competition
- Coordination of R&D efforts boosts results
- Investing in our students and universities
- Broadening access to tertiary education
- Taking up the global fight for knowledge
- Catching up with high-capacity broadband

Nurturing high-tech, high-growth sectors

High-tech sectors' share in manufacturing value added



Share of high-tech exports (% of total exports)

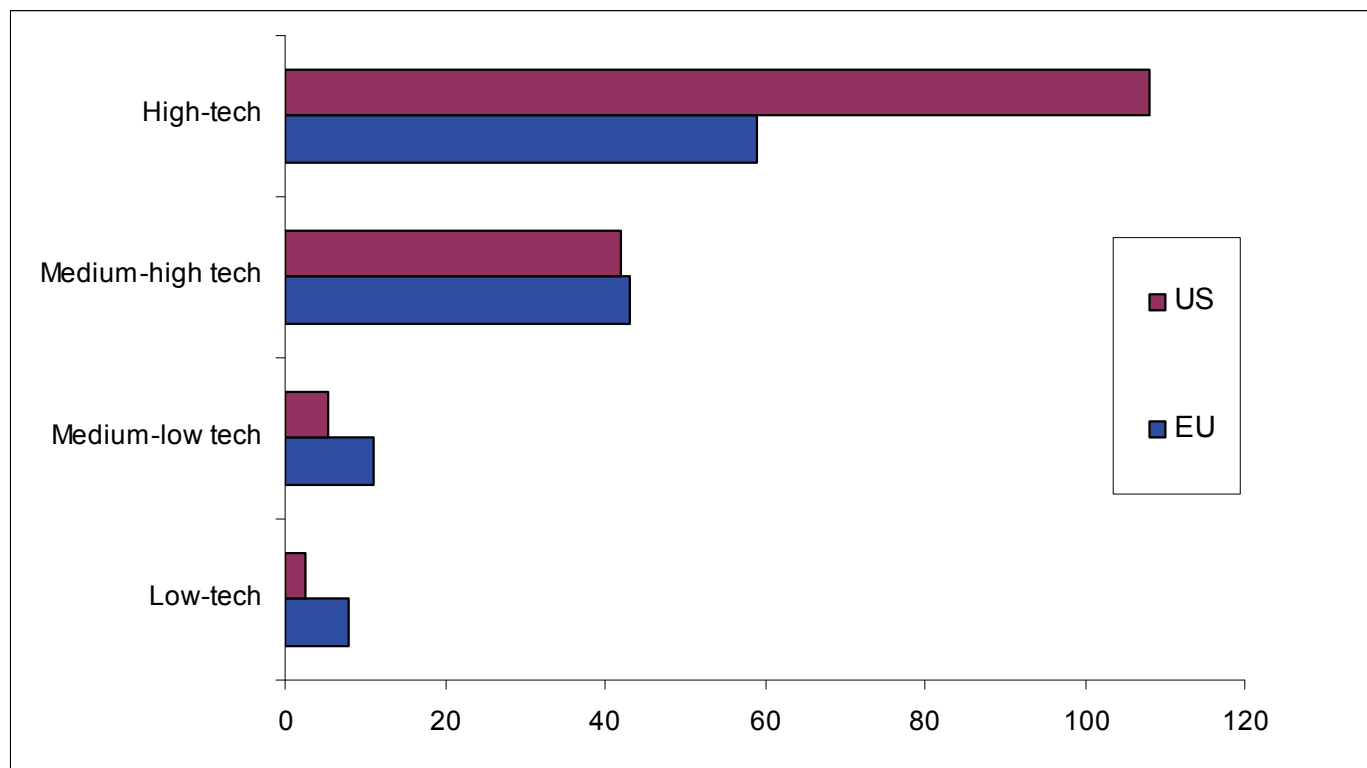


The EU is lagging behind major partners as regards the ‘smartness’ of its economy and high competitive pressure arises from developed and emerging economies.

Spreading innovation across firms

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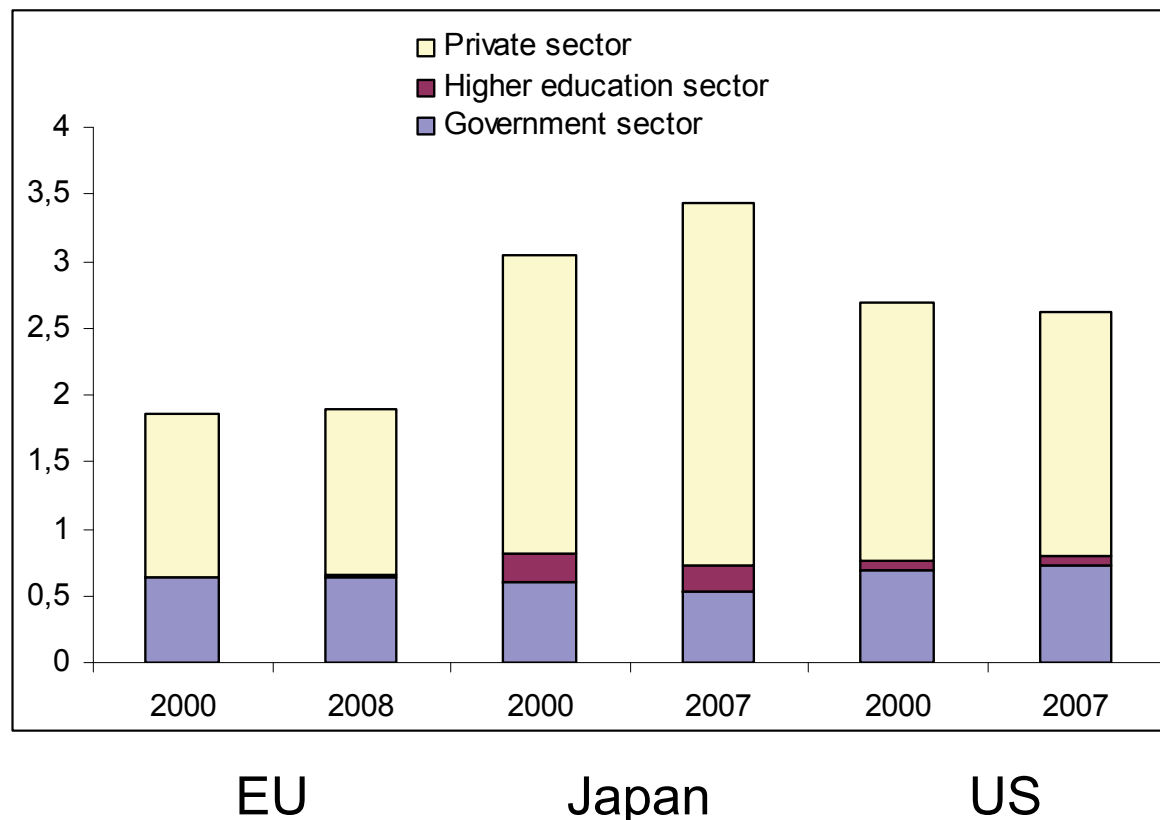
R&D spending (€ bn) and industrial structure (2008)



R&D investment in the US is driven by high-tech sectors. The number of firms in high-tech sectors in the EU is much lower: differences in sectoral composition explains $\frac{1}{2}$ of the total gap in R&D intensity with the US.

Raising our levels of R&D

Expenditure on R&D (% GDP)

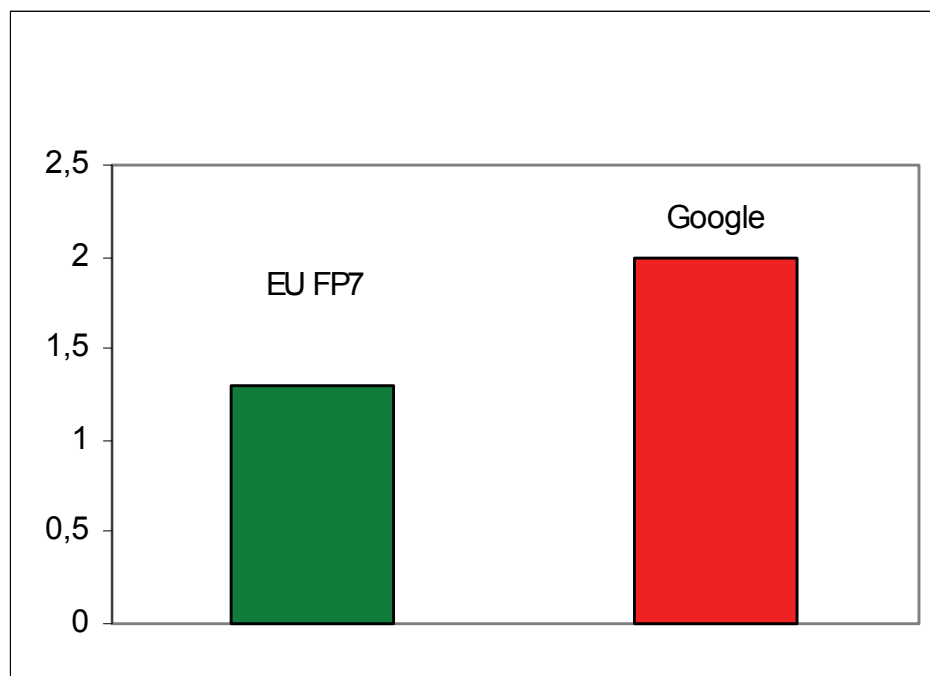


In spite of our 3% target, there has been little progress on R&D spending since 2000. The EU is particularly lagging in terms of private R&D spending.

Matching the pace of competition

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Investment in ICT R&D in 2009 (billions €)

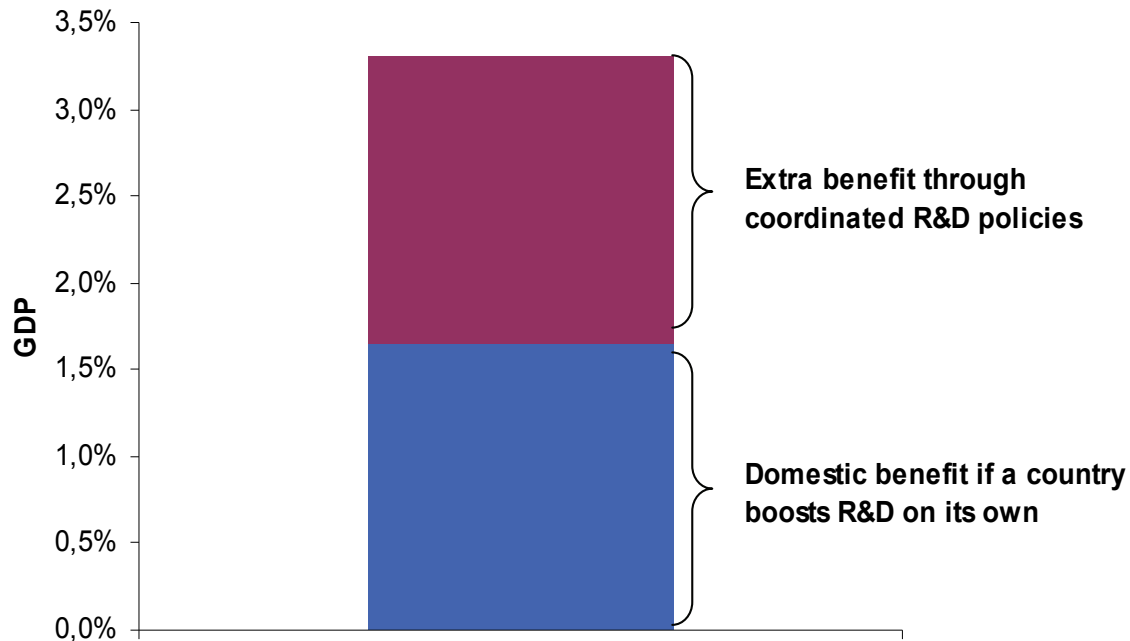


The EU Framework Programme for Research (FP7) invests about 1.3 billion € in ICT R&D every year. In 2009, “Google” invested 2.843 billion USD - the equivalent of 2 bn € - in R&D.

Coordination of R&D efforts boosts results

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Estimated benefits of coordinated R&D policies

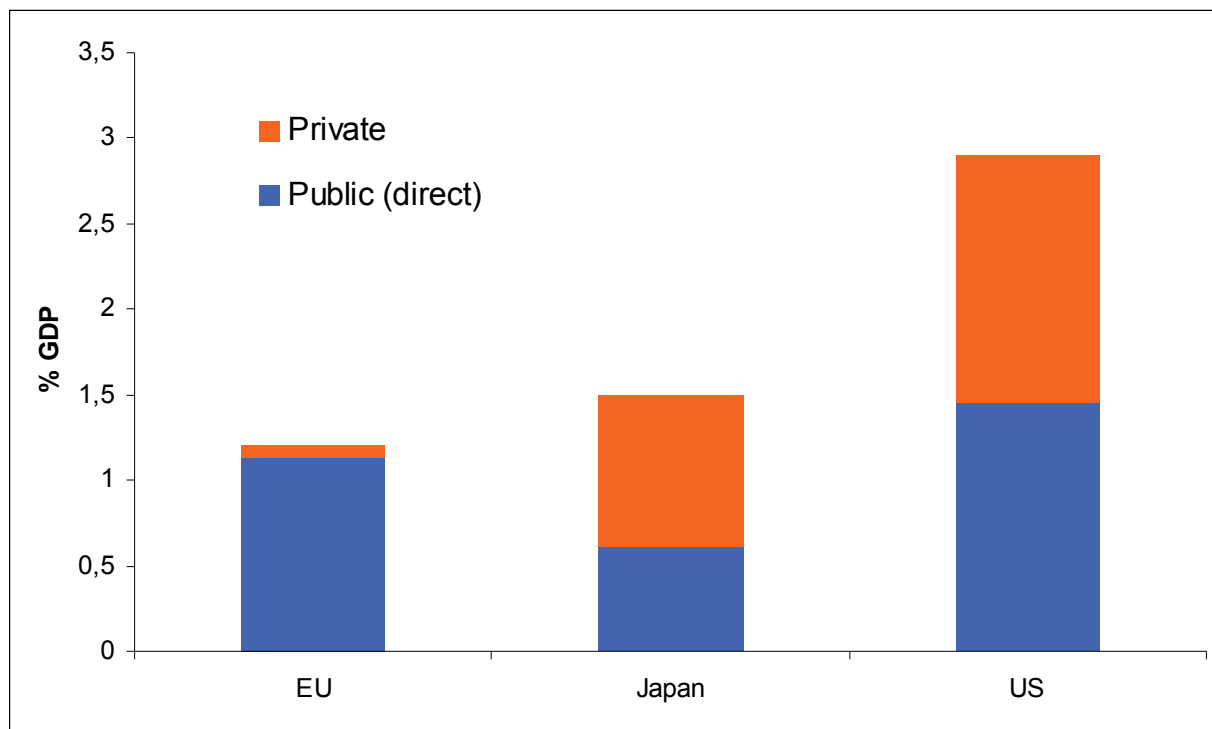


Model simulations show that coordinated R&D policies could double the potential benefits of R&D investment.

Investing in our students and universities

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Expenditure on tertiary education (% GDP)

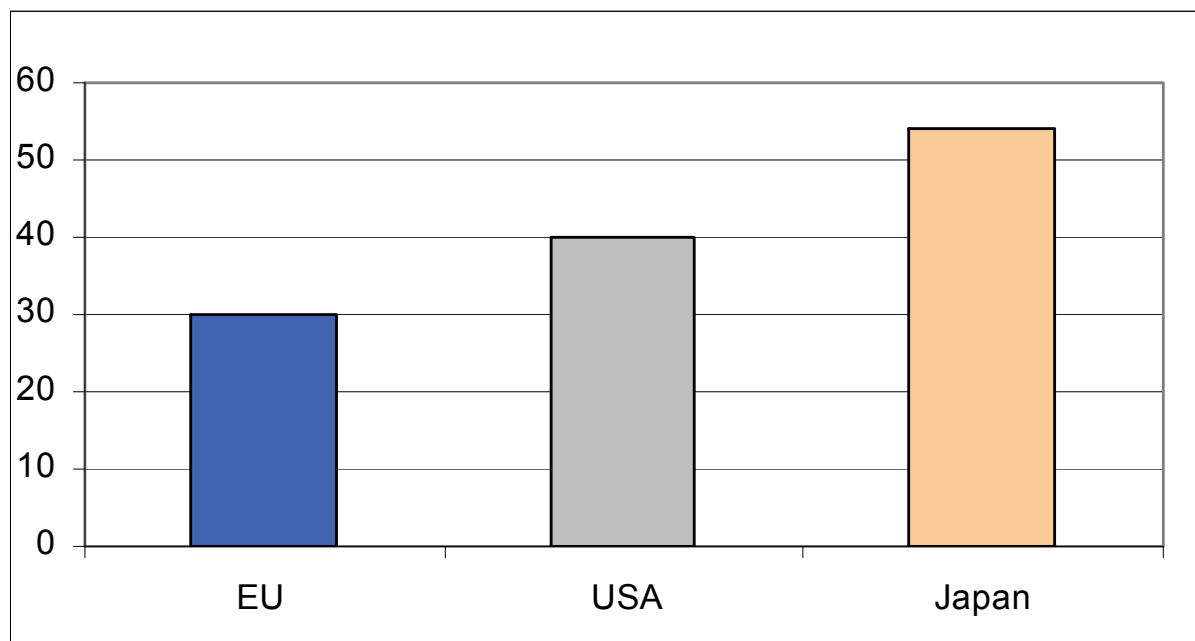


Total spending on tertiary education in the EU (as a % of GDP) is less than half the US level, mainly as a result of lower private spending in Europe.

Broadening access to tertiary education

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Share of population aged 25-34 with tertiary education

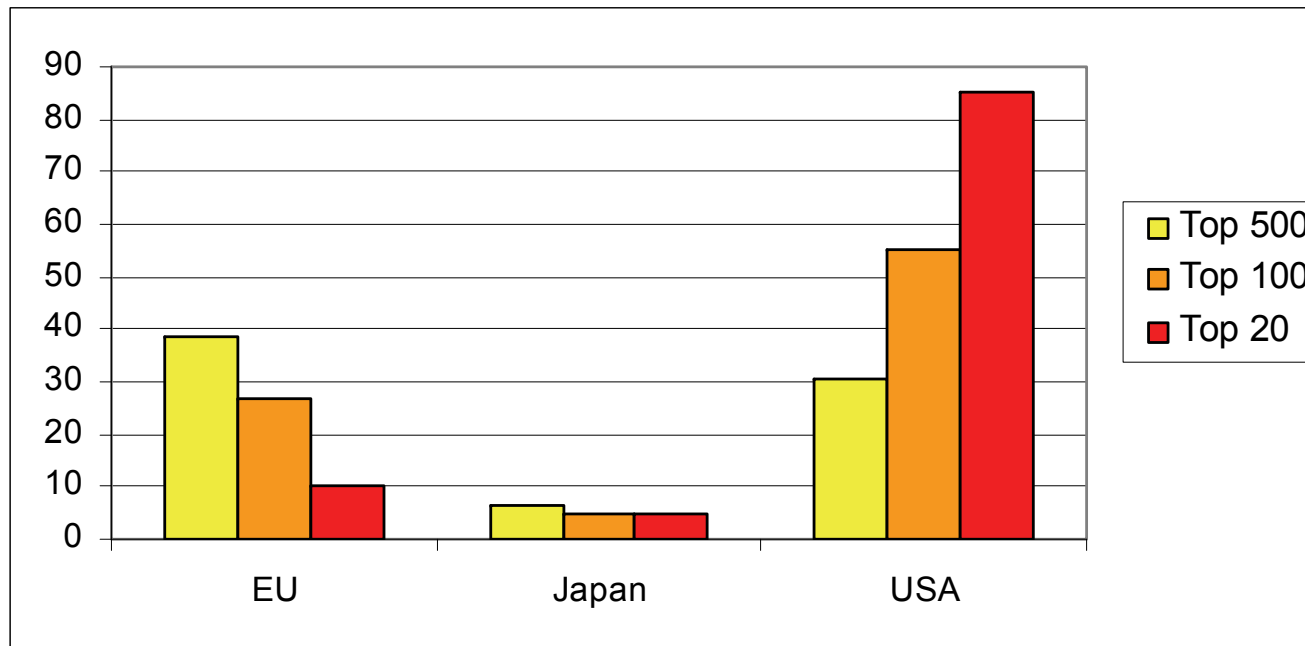


Today in the EU, less than one person in three aged 25-34 has completed a university degree, compared to more than 50% in Japan and 40% in the US.

Taking up the global fight for knowledge

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Share in the top institutions of the 2009 Shanghai list

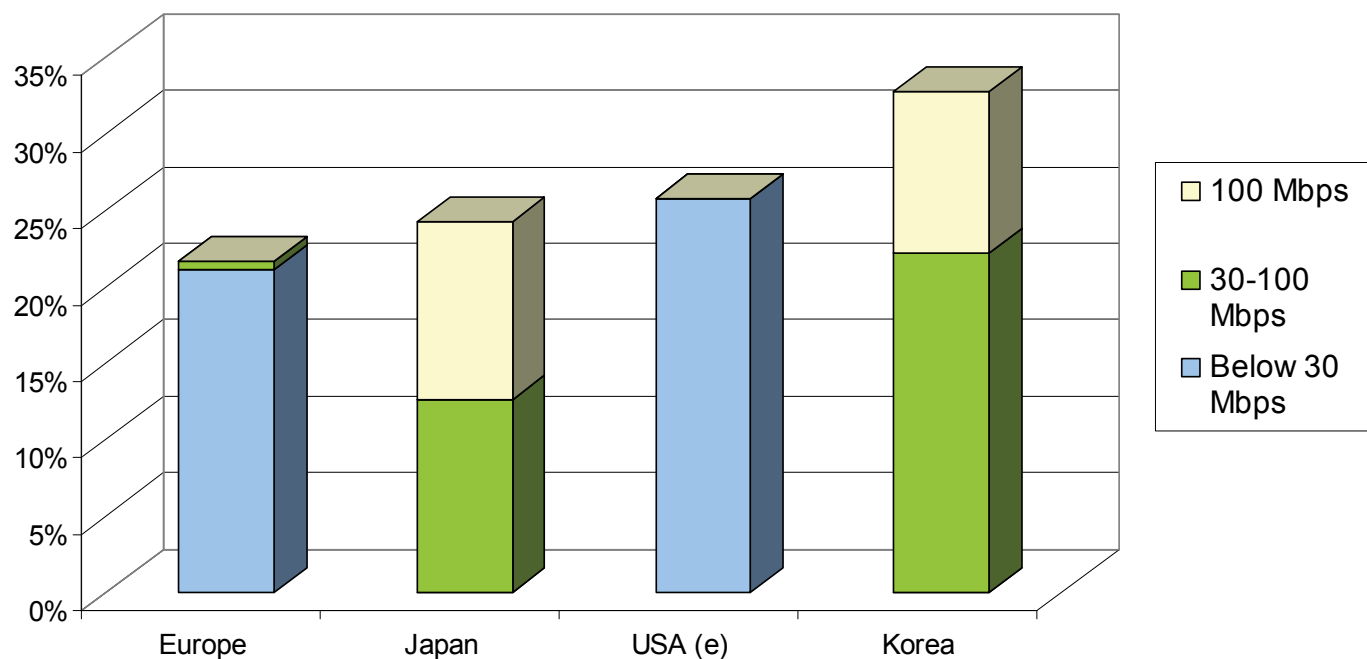


While the EU has 40% of the universities in the top 500 of the Shanghai ranking, the top end is clearly dominated by the US (17 of the top 20 institutions are located in the US).

Catching up with high-capacity broadband

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Fixed broadband subscribers per population (December 2008)



More than 50% of all broadband lines in Japan and 40% in Korea are fibre, delivering high-capacity connections. Only 1% in Europe.

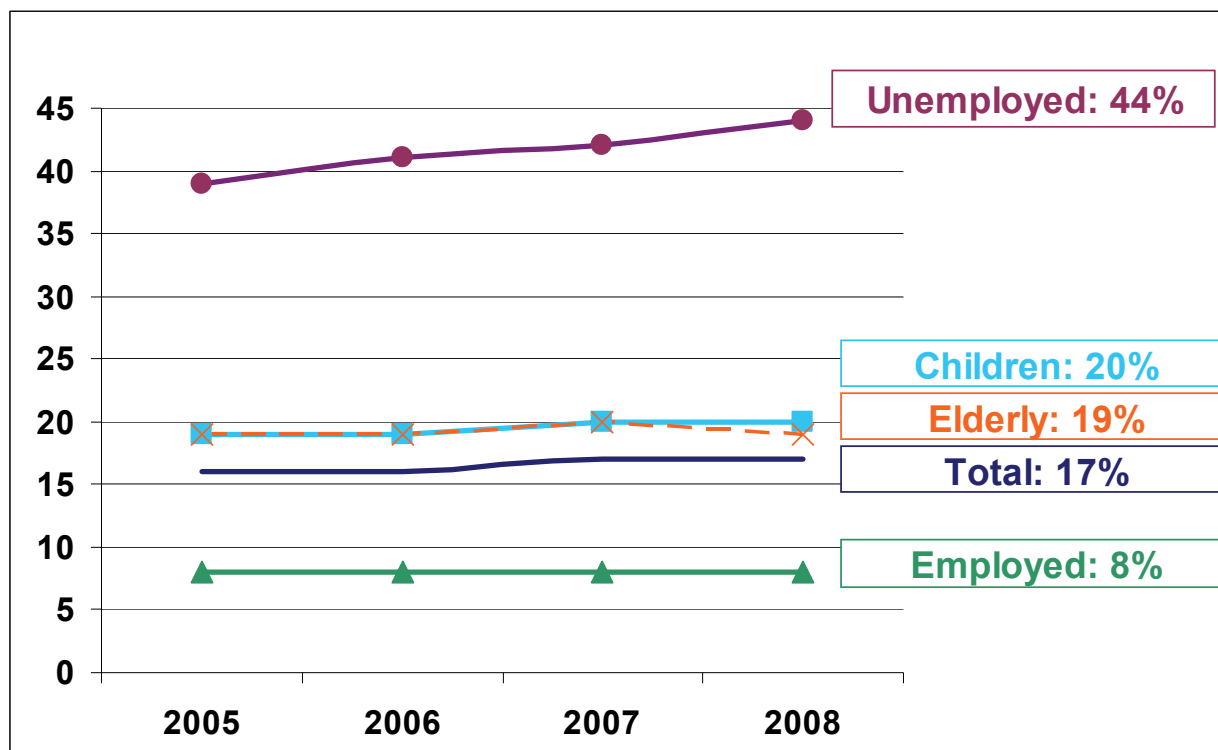
5. An inclusive high-employment society

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- Combating risks of poverty
- Tackling early school-leaving
- Meeting future skills needs
- The PISA survey rang the alarm bell
- Promoting active ageing and lifelong learning
- Investing in human capital pays off
- Societal change creates new opportunities
- Building job-friendly tax systems

Combating risks of poverty

At-risk-of-poverty rates by groups in the EU, 2005-2008

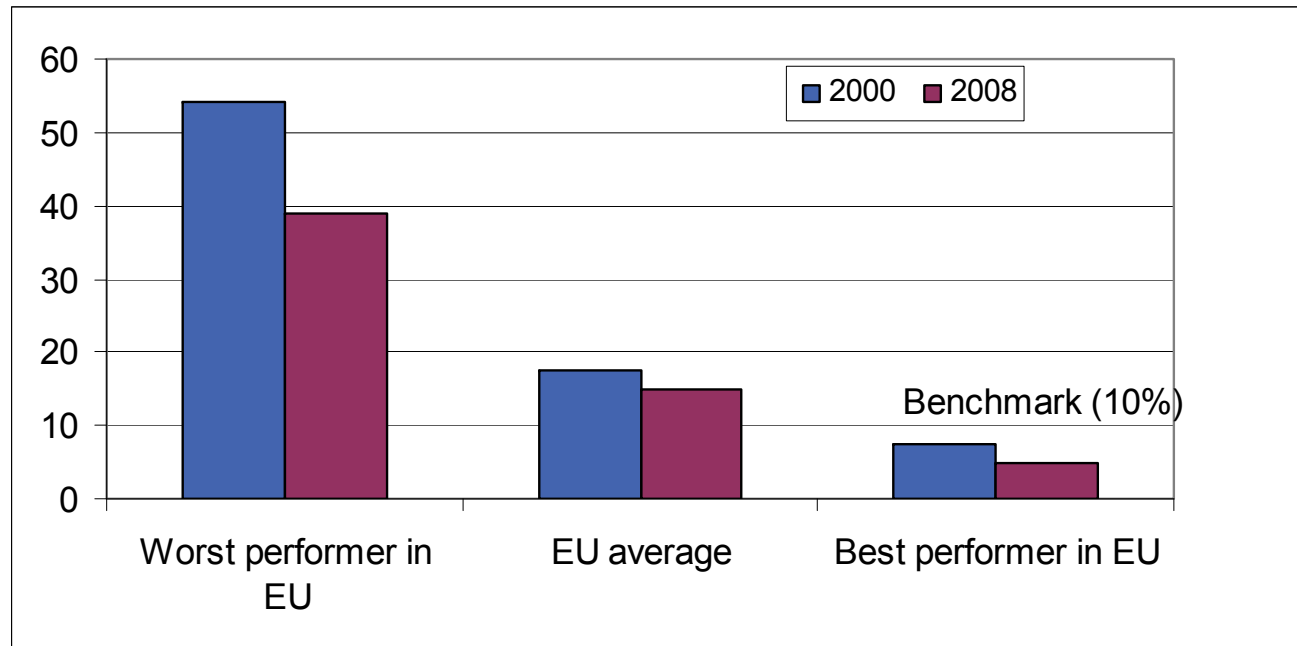


Almost 80 million Europeans (17%) were at risk of poverty before the crisis. 19 million of these are children. 8% of people in work don't earn enough to escape from it. Women, the young, the elderly, people on precarious contracts and migrants are especially exposed.

Tackling early school-leaving

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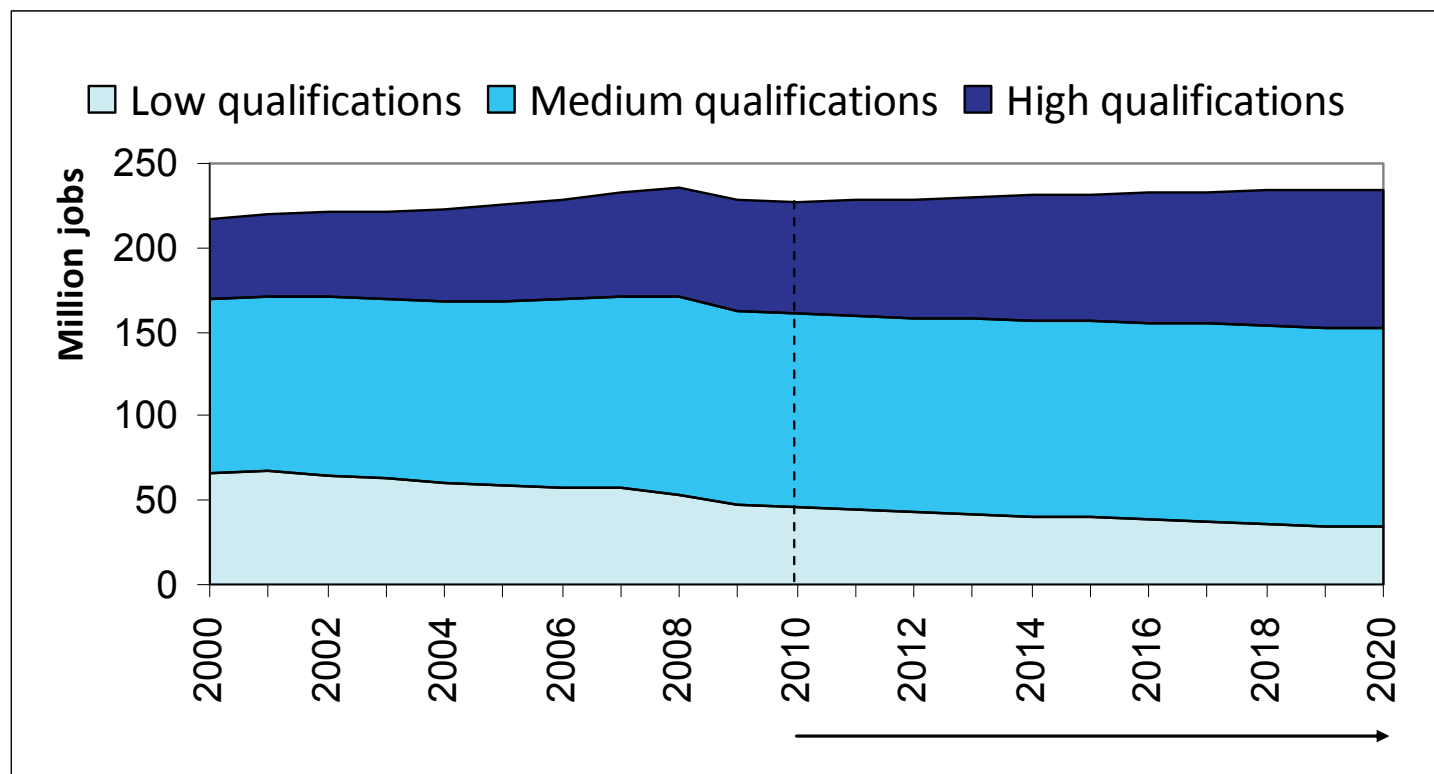
Share of population aged 18-24 with at most lower secondary education and not in further education or training



Today, one in seven young people (18-24) leave school early (6 million dropouts in EU 27). The rates are declining too slowly, and several Member States are lagging behind.

Meeting future skills needs

Skills needs in 2020

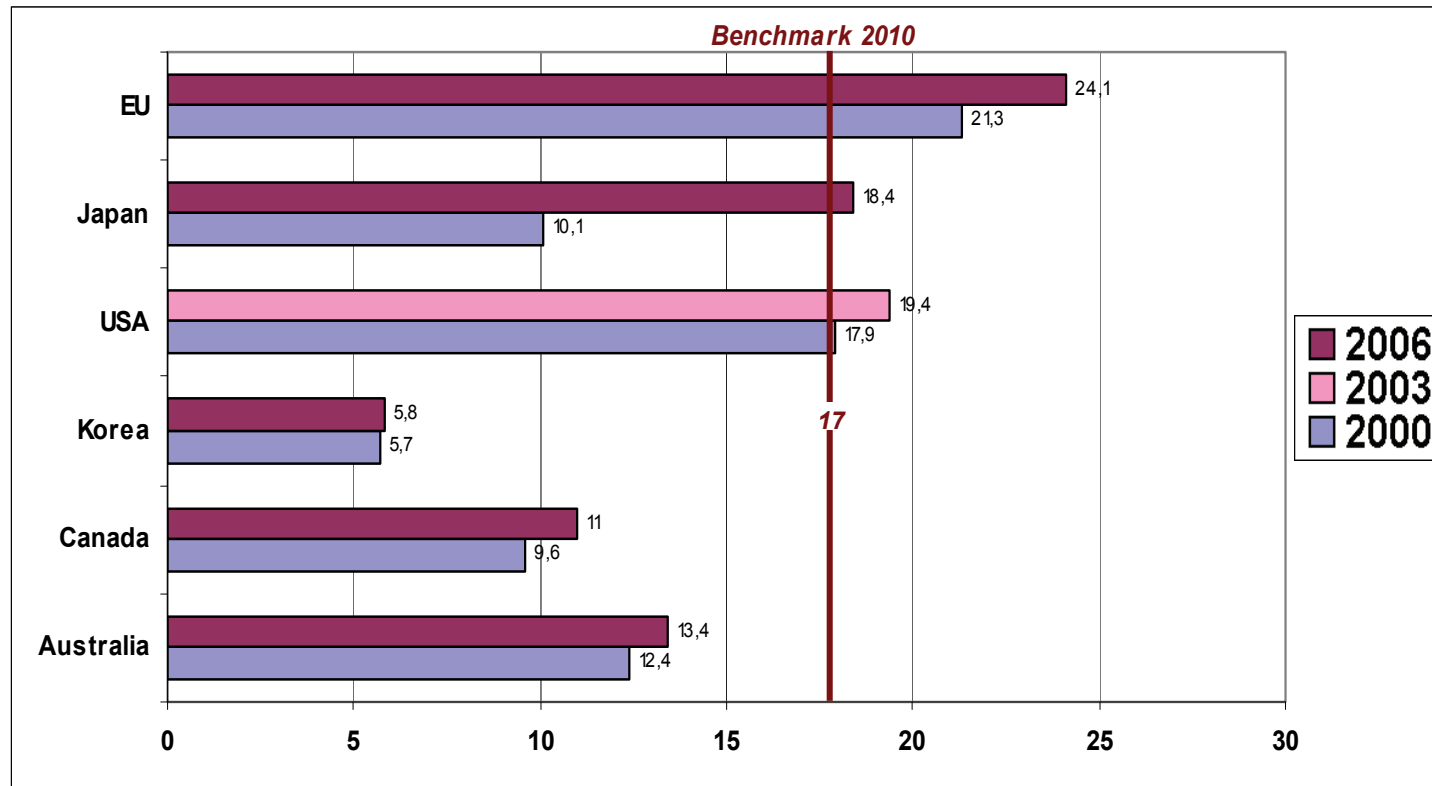


By 2020, 16 million more jobs will need high qualifications and 4 million more jobs will need medium qualifications, while 12 million jobs less will require low qualifications.

The PISA survey rang the alarm bell

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Share of pupils with poor reading competences

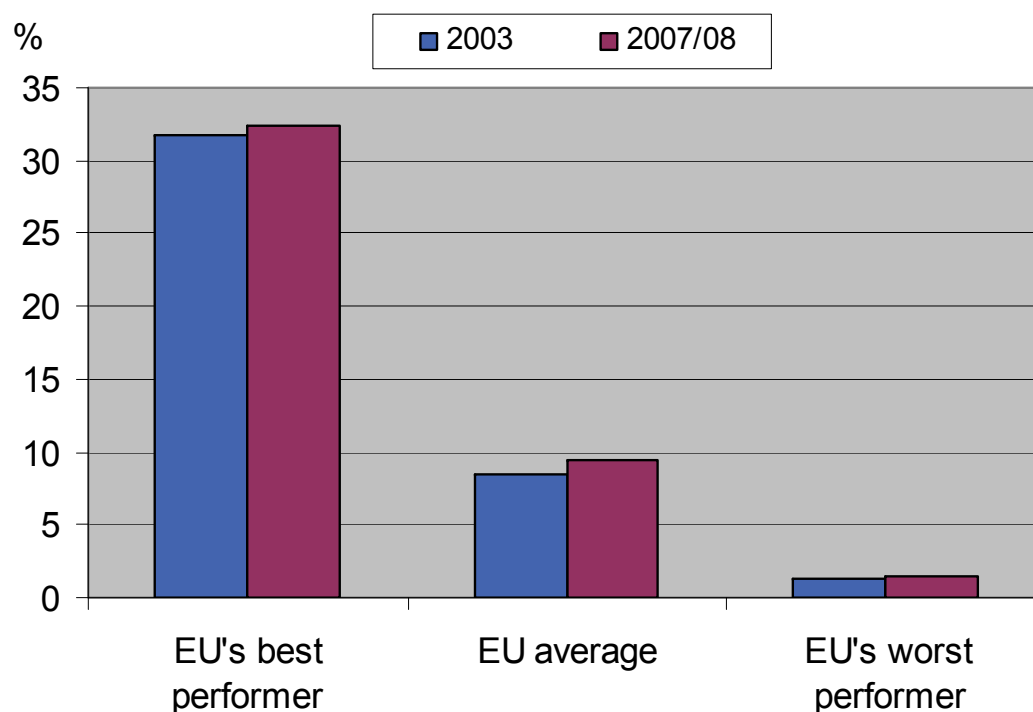


One in four 15 year-old has poor reading competences. The EU average is declining. Migrant populations succeed better in Canada and Australia.

Promoting active ageing and lifelong learning

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Share of adult population (25-64) participating in lifelong learning



About 80 million people only have low or basic skills in the EU. Adult participation in lifelong learning is stagnating, and participation is highest for the youngest, the most educated and the employed, and lowest for those who need it most.

Investing in human capital pays off

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If, over the next 20 years, student performance in each country would improve to reach the level achieved by Finland today...

... the effect on GDP by 2090 (the lifetime of the generation born in 2010) will be:

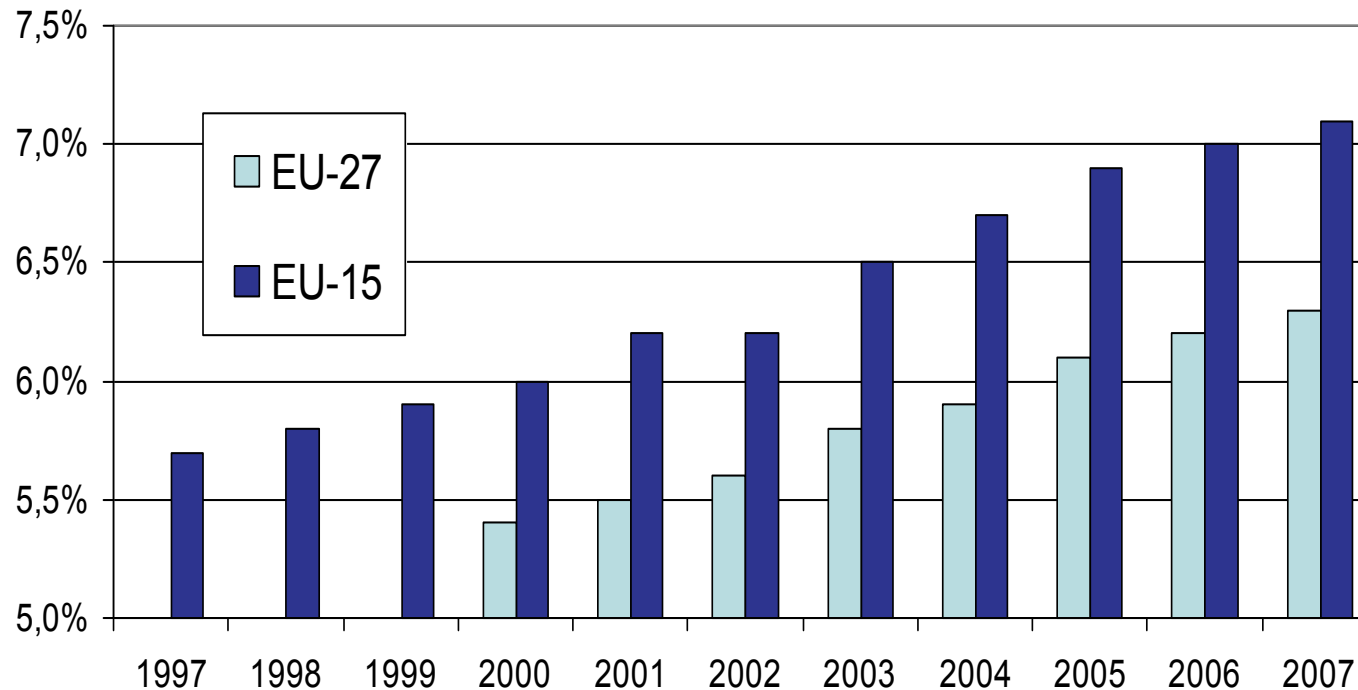
- + 606% for the OECD,
and between
- + 177% (NL) and
- + 1073% (EL) for EU countries

Source: OECD 2010 “The High Costs of Low Educational Performance: The long-run economic impact of improving PISA outcomes”.

Societal change creates new opportunities

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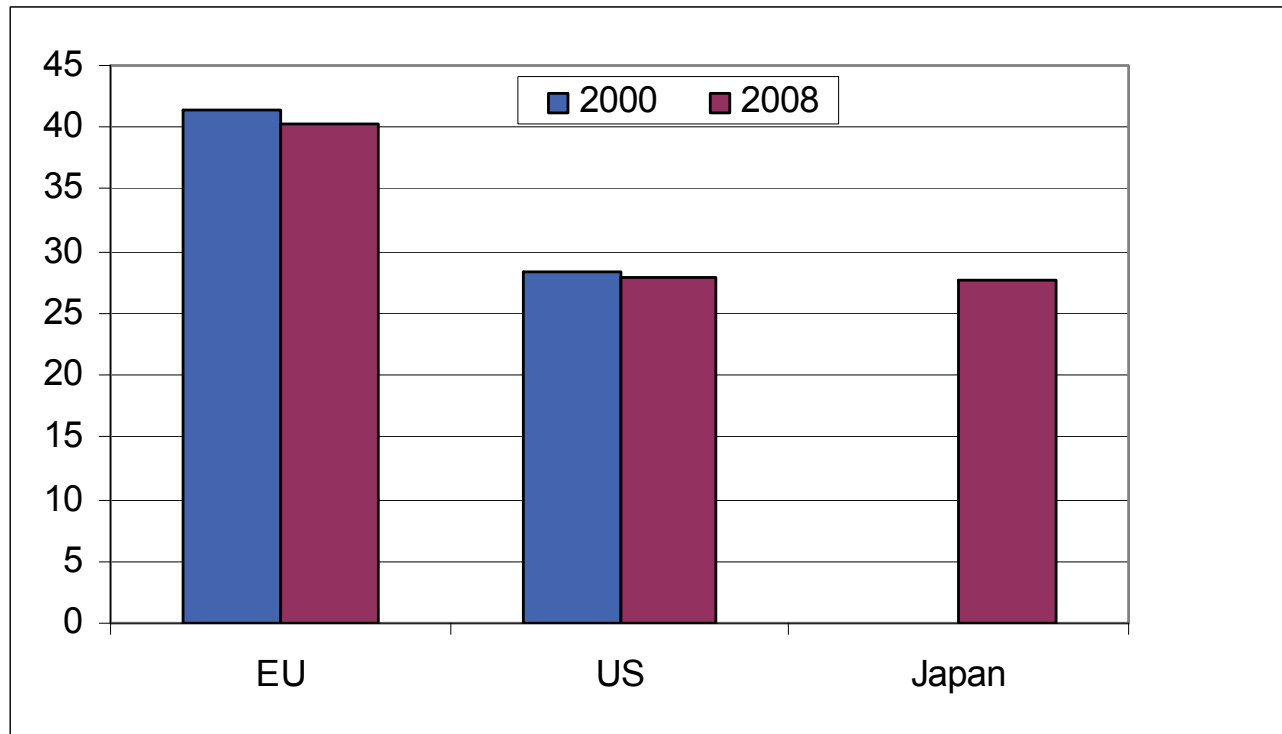
Employment in the health and social sector
(share of population 15-64)



“White jobs” have been one of the engines of employment growth in recent years (+ 3.3 million since 2000) and now represent more than 10% of all jobs in DK, FI, NL and SE. Ageing will reinforce this trend.

Building job-friendly tax systems

Labour tax rate on low-wage earners



Earlier reforms shifting the tax burden away from labour have paid off and need to be pursued.

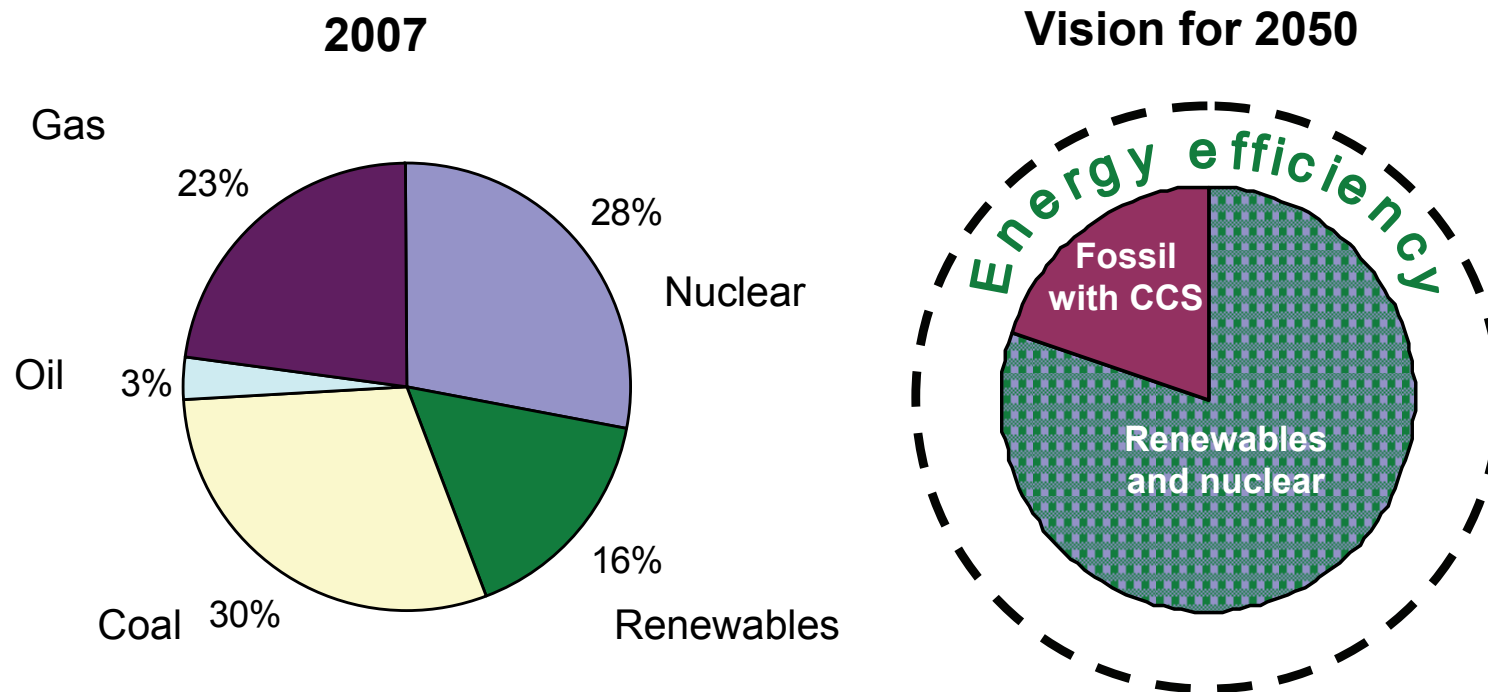
6. Green growth: a competitive and sustainable economy

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- Decarbonising our electricity supply
- Decarbonising our transports
- Resource-efficiency matters
- Europe's lead in green sectors
- Green growth creates new jobs
- Tackling our missing energy links
- The internal market helps us grow
- Still a large potential in services
- Using e-commerce
- Helping our SMEs to grow in new markets
- The case of automotive production

Decarbonising our electricity supply

Sources of electricity production in the EU today and tomorrow



Our ambitious climate policy will transform our energy mix and can reduce our import bill for oil and gas by EUR 60 billion by 2020 and EUR 150 billion by 2030.

Decarbonising our transports

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Moving towards an efficient and integrated transport network

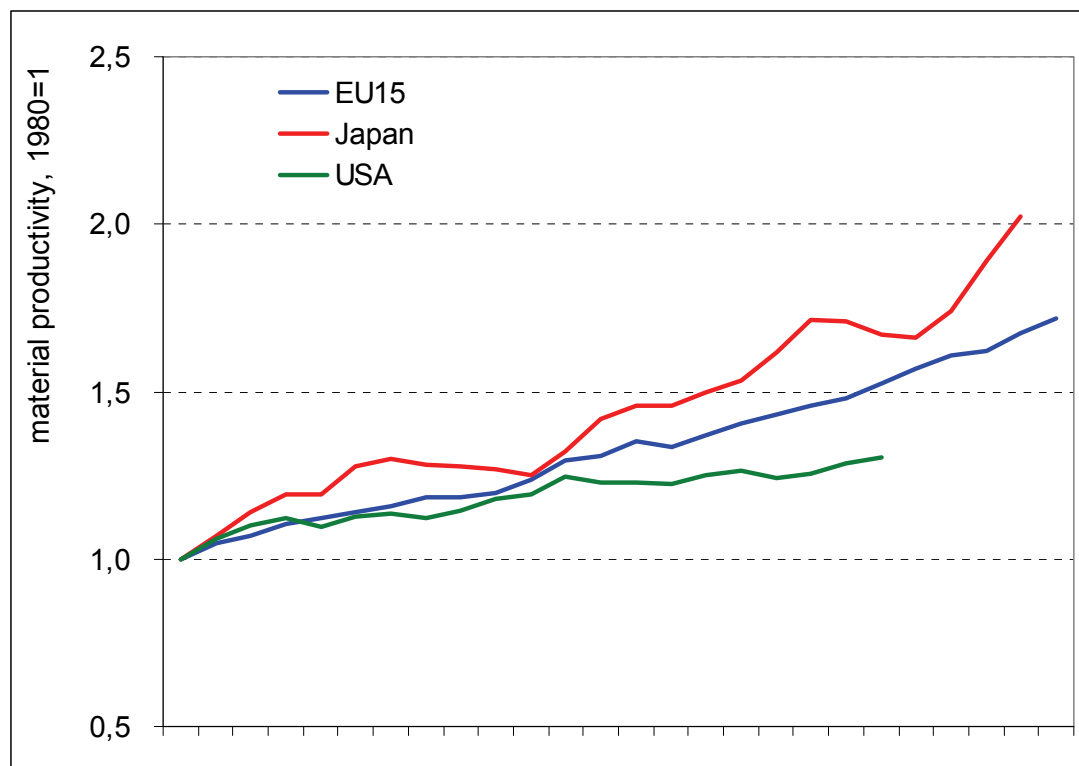


The transport sector represents 7% of EU GDP and emits one quarter of total CO₂ emissions. 97% of the sector depends on oil and is vulnerable to price shocks. Congestion costs more than 100 billion € per year. The move towards decarbonisation opens up opportunities for new vehicles, standards and infrastructures, in the EU and abroad.

Resource-efficiency matters

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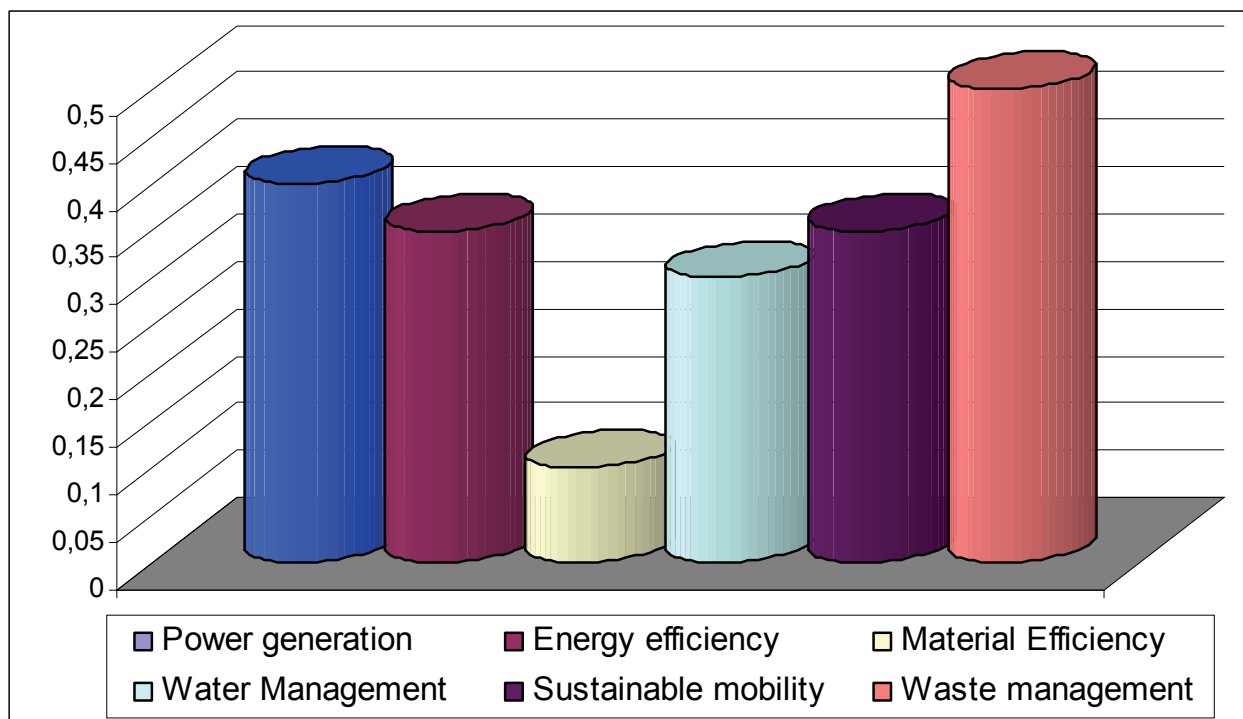
Material efficiency



Materials are a cost to industry. Europe is improving but Japan - for example - is already more efficient and improving even faster. If Europe could improve its resource efficiency by 20%, this could boost growth by around 1 per cent.

Europe's lead in green sectors

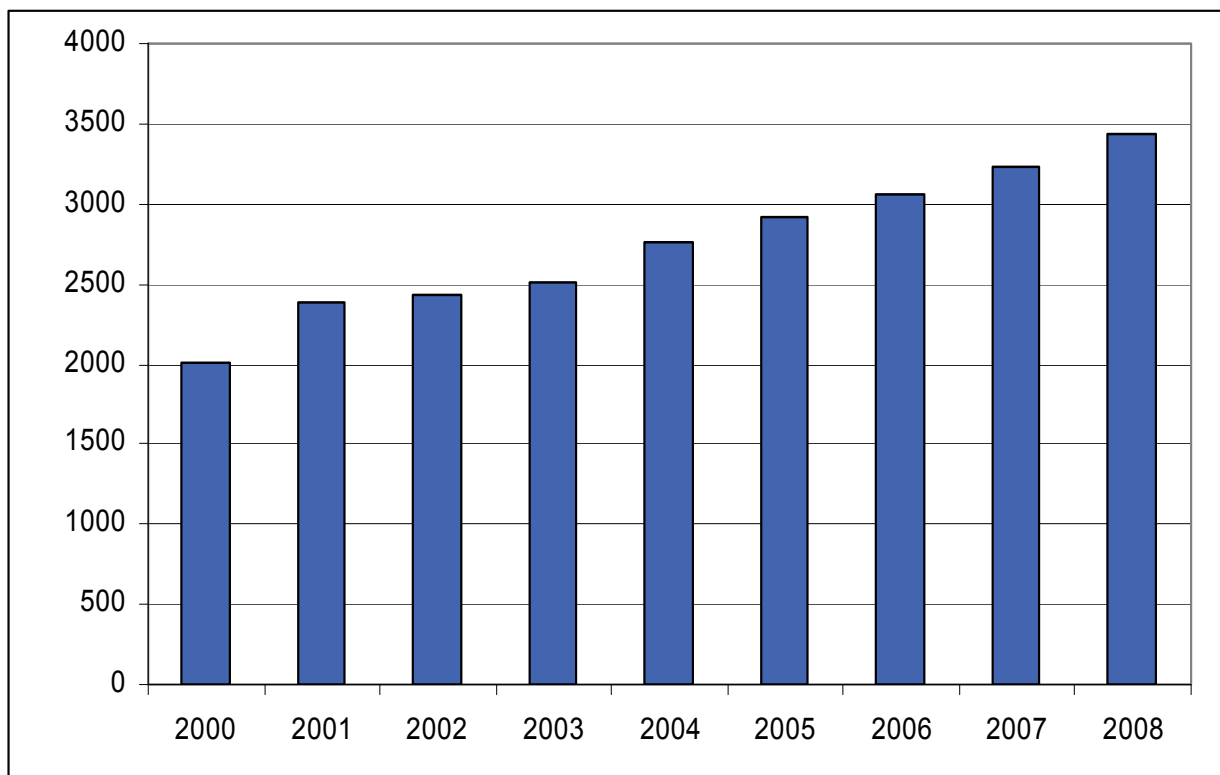
Europe's share of the world market in "green" sectors



Europe is a world leader in many environmental technologies, and this has boosted our export performance. This market is forecast to triple by 2030 and Europe must strengthen its competitive edge.

Green growth creates new jobs

Employment in EU eco-industry (thousands)

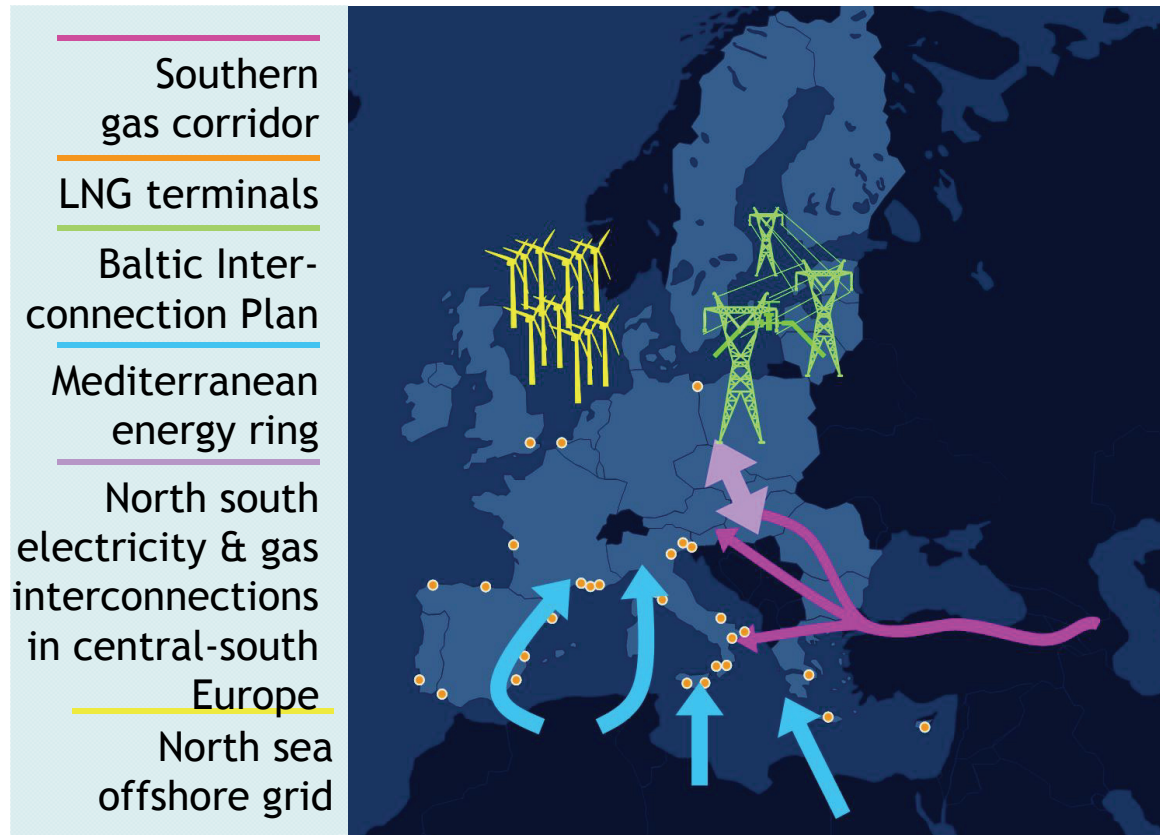


Jobs in the eco-industry have increased by 7% every year on average since 2000 to reach 3.4 million. Achieving the 2020 renewable target could deliver 2.8 million jobs in the renewable energy sector in total.

Tackling our missing energy links

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Connecting our energy internal market

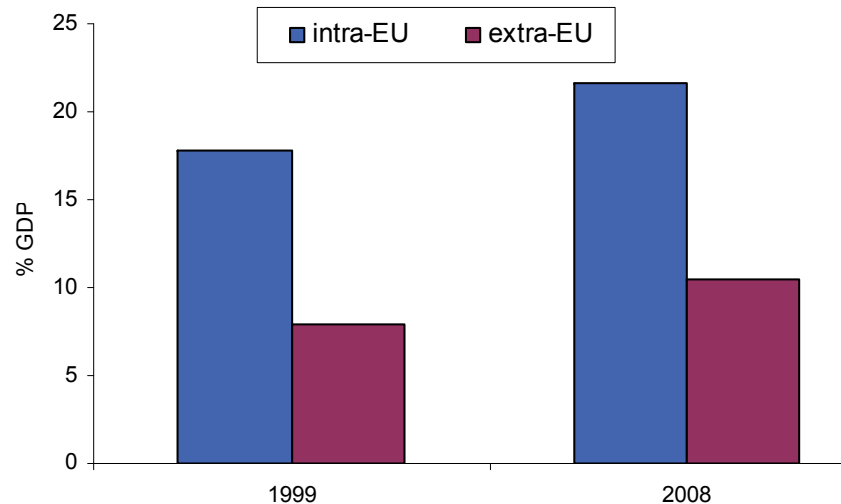


Completing the internal energy market will reduce prices for firms and consumers and may add 0.6%-0.8% to GDP. It will also help reduce energy dependency and diversify imports for all Member States.

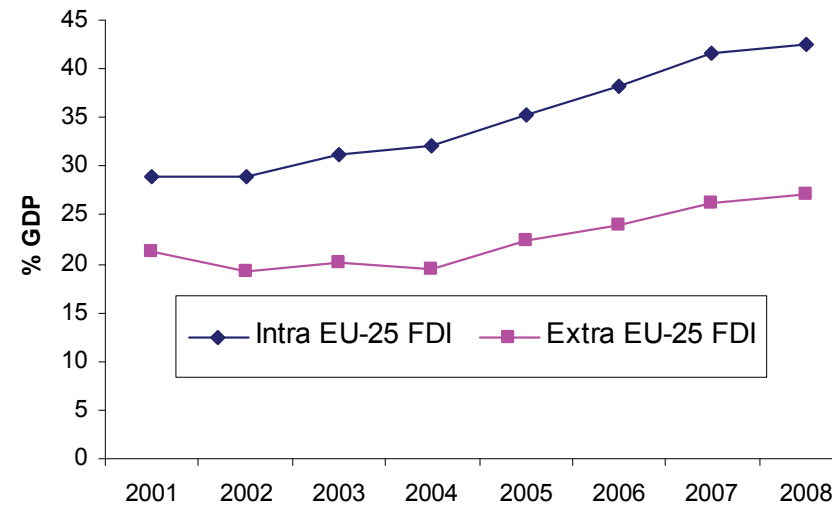
The internal market helps us grow

57

EU-27 exports of goods (%GDP)



EU Foreign Direct Investments (%GDP)

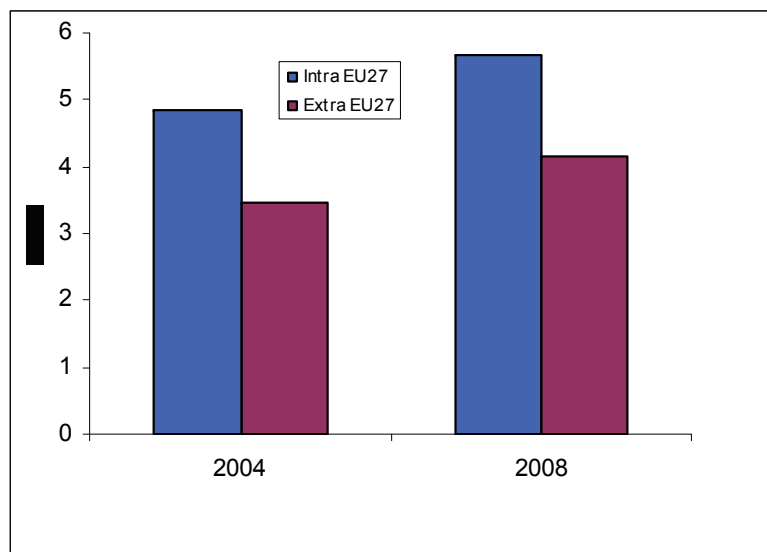


The single market has borne fruit in terms of higher economic integration: intra-EU exports (67% of total exports) and intra-EU FDI (62% of total FDI) have increased markedly. This resulted in significant economic gains: 2.1 % of EU GDP over the period 1992-2006 (€ 500 per head) and 2.75 million jobs.

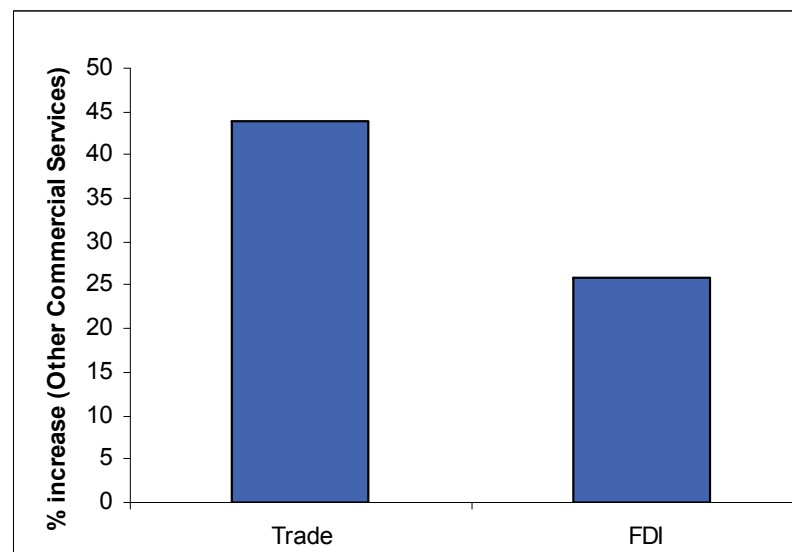
Still a large potential in services

58

EU-27 exports of services (%GDP)



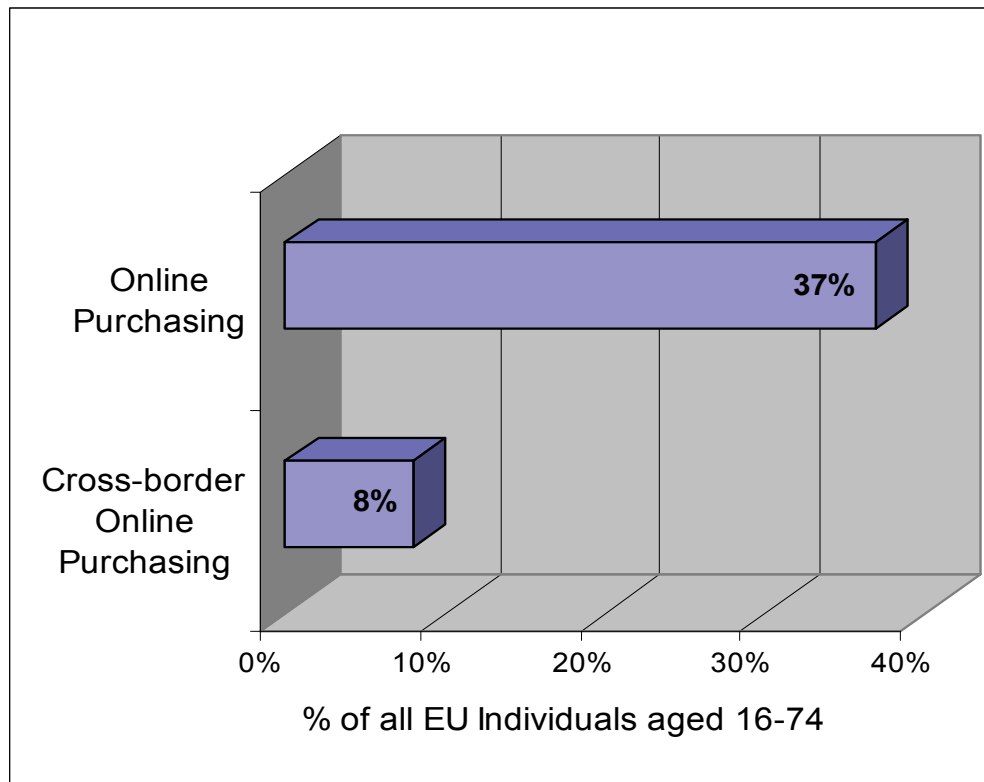
Effects of Services Directive



The EU is a significant market for cross-border trade in services - but the intra-EU dimension for services (58% of total) is weaker than for goods (67% of total). The full implementation of the Services Directive could increase trade in commercial services by 45% and Foreign Direct Investment (FDI) by 25%. It can bring 0.5 to 1.5% increase in GDP.

Using e-commerce

Share of consumers using e-commerce, 2009

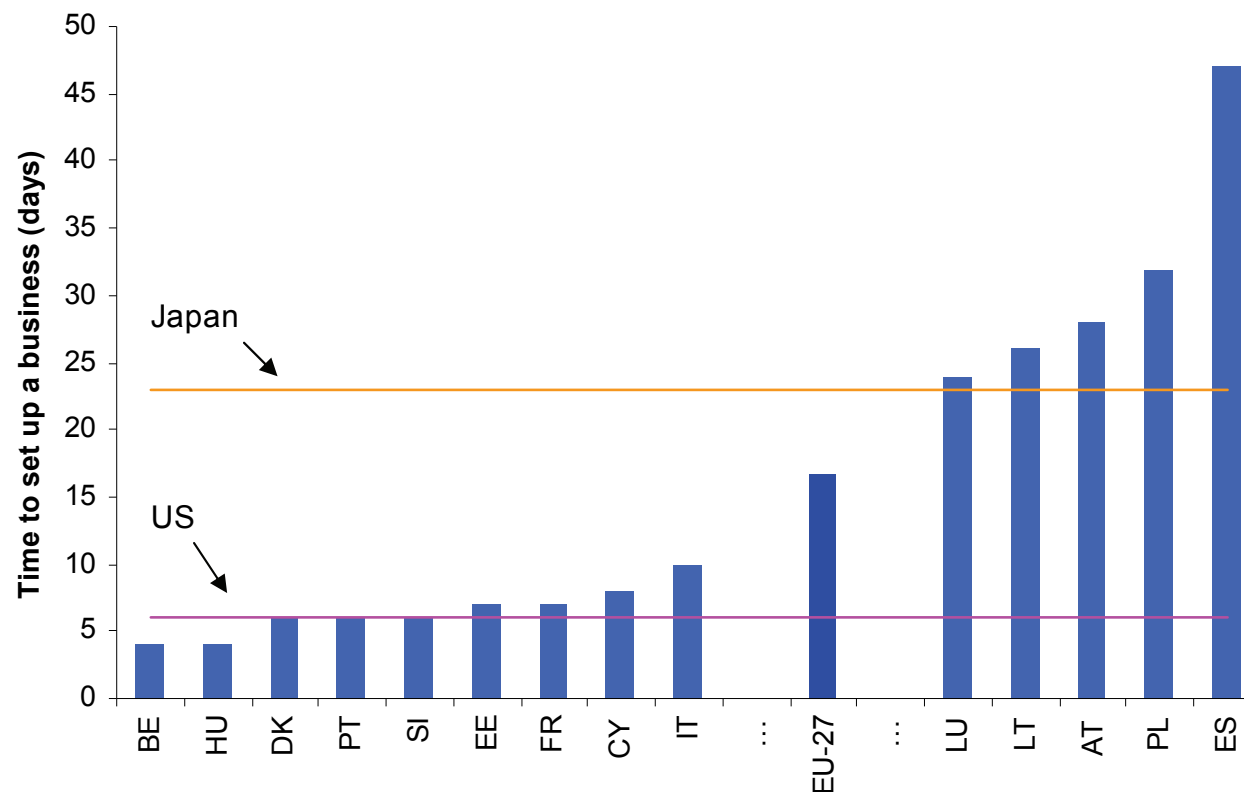


The total estimated value of online transactions is around 150 billion € in 2009. About 40% consumers have used internet to purchase goods and services, but only 8% have done so from abroad. Too many users have doubts about safety and financial transaction on the net.

Helping our SMEs to grow in new markets

60

Conditions for start-ups

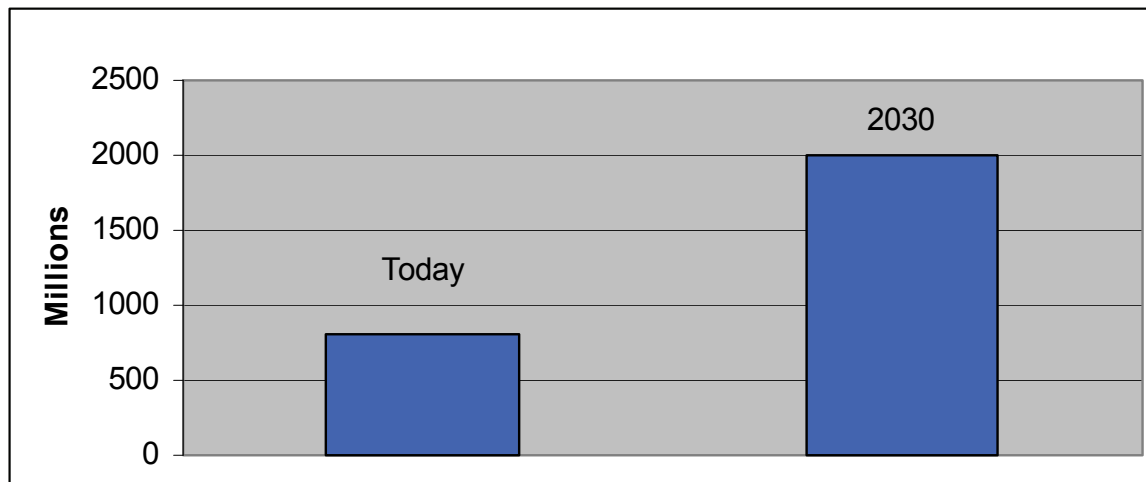


It takes 15 days to set up a business in Europe. Despite progress made, unfavourable conditions remain for new or “small” entrepreneurs.

The case of automotive production

61

Global vehicle park – number of vehicles



Given GDP and population growth across the world, the global vehicle park will increase from the current 800 million vehicles to about 2 billion by 2030-2035. How many of these will be «green» and produced by European firms?

References for slides 2-20

- **Slide 2 - Europe's growth hit by the crisis**
Source: European Commission Services (Ameco)
- **Slide 3 - Unemployment has spread (1)**
Source: European Commission Services
Notes: UK: Oct. 2009. EE, EL, LT & RO: 3rd quarter 2009.
- **Slide 4 - Unemployment has spread (2)**
Source: European Commission Services
Notes: UK: Oct. 2009. EE, EL, LT & RO: 3rd quarter 2009.
- **Slide 5 - Young people are particularly at risk**
Source: European Commission Services
- **Slide 6 - Industrial production declined sharply**
Source: European Commission Services
- **Slide 7 - Our financial system still needs fixing**
Source: International Monetary Fund (Global Financial Stability Report - October 2009)
- **Slide 8 - Private investment is constrained**
Source: International Monetary Fund (Global Financial Stability Report - October 2009)
- **Slide 9 - Public finances are very severely affected**
Source: European Commission Services (Forecast – 1/2010)
- **Slide 10 - Fiscal consolidation is demanding**
Source: European Commission (2009 Sustainability Report and 2009 Autumn Economic Forecast)
- **Slide 11 - The situations of Member States differ**
Source: European Commission Services
Notes: BLEU: Belgium and Luxembourg
- **Slide 12 - Financial imbalances have a cost for all**
Source: European Commission Services (Ameco)
- **Slide 13 - Successful exit is a priority**
Source: European Commission Services
- **Slide 15 - Global competition is fierce**
Source: European Commission Services (Comtrade)
- **Slide 16 - Intra-EU trade is a catalyst for growth**
Source: European Commission Services /
Model simulations: WorldScan model
- **Slide 17 - Asia will remain the fastest growing market**
Source: CEPII / European Commission Services
- **Slide 18 - Our futures are interlinked**
Source: European Commission Services (Comext)
- **Slide 19 - Our demographic path is known**
Source: European Commission Services (forecast)
- **Slide 20 - Ageing accelerates**
Source: European Commission Services (forecast)

References for slides 21-42

- **Slide 21 - Old-age dependency will rise fast**
Source: European Commission Services (forecast)
- **Slide 22 - Ageing impacts our capacity to grow...**
Source: European Commission Services (forecast)
- **Slide 23 - ... and limits our room for manoeuvre**
Source: European Commission (2009 Ageing Report)
- **Slide 24 - Climate/energy goals require action**
Source: International Energy Agency (World Energy Outlook 2009)
- **Slide 25 - Acting together at EU level pays off**
Source: European Commission Services
- **Slide 27- Restoring our GDP growth potential**
Source: European Commission Services
- **Slide 28 - Raising our employment rates**
Source: European Commission Services
- **Slide 29 - Acting on productivity levers**
Source: OECD (Going for Growth 2009) / European Commission Services
- **Slide 31 - Nurturing high-tech sectors**
Source: European Commission Services
- **Slide 32 – Spreading innovation across firms**
Source: European Commission Services
- **Slide 33 – Raising our levels of in R&D**
Source: European Commission Services / OECD
- **Slide 34 - Matching the pace of competition**
Source: European Commission Services / Google's website
- **Slide 35 - Coordination of R&D efforts boosts results**
Source: European Commission Services / Model simulations
- **Slide 36 - Investing in our students and universities**
Source: European Commission Services
- **Slide 37 - Broadening access to tertiary education**
Source: OECD / European Commission Services
- **Slide 38 - Taking up the global fight for knowledge**
Source: Shanghai ARWU ranking
- **Slide 39 - Catching up with high-capacity broadband**
Source: European Commission Services
Notes: (e) estimates for the US based on projections
- **Slide 41 - Combating risks of poverty**
Source: European Commission Services
- **Slide 42 - Tackling early school-leaving**
Source: European Commission Services

References for slides 43-61

- **Slide 43 - Meeting future skills needs**
Source: CEDEFOP study for the European Commission
- **Slide 44 - The PISA survey rang the alarm bell**
Source: OECD (2006 PISA study)
- **Slide 45 - Promoting active ageing and lifelong learning**
Source: European Commission Services
- **Slide 46 - Investing in human capital pays off**
Source: OECD (Report "The High Costs of Low Educational Performance" 2010)
- **Slide 47 - Societal change creates new opportunities**
Source: European Commission Services
- **Slide 48 - Building job-friendly tax systems**
Source: OECD (Going for Growth 2009) / European Commission Services
- **Slide 48 - Building job-friendly tax systems**
Source: OECD (Going for Growth 2009) / European Commission Services
- **Slide 51 – Decarbonising our electricity supply**
Source: International Energy Agency (World Energy Outlook 2009) / European Commission Services
- **Slide 52 – Decarbonising our transports**
Source: European Commission Services
- **Slide 53 - Resource-efficiency matters**
Source: Aachen Foundation / European Commission Services
- **Slide 54 - Europe's lead in green sectors**
Source: Roland Berger / European Commission Services
- **Slide 55 - Green growth creates new jobs**
Source: European Commission Services
- **Slide 56 - Tackling our missing energy links**
Source: European Commission Services
- **Slide 57 – The internal market helps us grow**
Source: European Commission Services
- **Slide 58 - Still a large potential in services**
Source: European Commission Services
- **Slide 59 – Using e-commerce**
Source: European Commission Services
- **Slide 60 - Allowing our SMEs to grow in new markets**
Source: World Bank Doing Business 2010
- **Slide 61 - The case of automotive production**
Source: Global Insight / European Commission Services



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