"The future of the work and its impact on vulnerable people: 10 years of the Incorpora Program"

## Future Prospects for the Labour Market

Inaugural session of the cycle of seminars in the Palau Macaya Date: 24<sup>th</sup> February (09:15 – 12:30) Palau Macaya, Conference Hall (Passeig de Sant Joan, 108, 08037 Barcelona)

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- 1. WHY produce employment forecasts?
  - The value of skills projections and their limitations - What skills forecasts can and cannot achieve
- 2. HOW do we go about it?
- **3. RESULTS: Key messages** from the Cedefop Projections for the whole of the EU and for Spain



## **1. WHY FORECAST?**

## Why Not?

Forecasting is *impossible* Forecasting is *unnecessary* Forecasts are *inaccurate* and based on *invalid assumptions* (They are *illegal* ...... (at least in the UK!))



#### Act Against Conjuration, Witchcraft and Dealing with Evil Spirits

First enacted during the reign of James I, partially repealed in 1736, but nevertheless:

"prediction of the future is illegal as are any pretence to such arts and powers whereby ignorant people are frequently deluded and defrauded"

However, practitioners were no longer condemned to death:

"shall for every such offence suffer imprisonment for the space of one whole year without bail, and once every quarter of the said year shall stand openly in the pillory for the space of one hour"



#### However.....

Fortunately for UK forecasters at least this was further amended more recently in: the Fraudulent Mediums Act, 1951 in which such activities are excused if:

"done solely for the purposes of entertainment"



### Is systematic anticipation possible?

Nobody can **predict** the future with certainty or precision – "All forecasts are wrong!"

- Everybody can prepare or **plan** for the future Government, employers, educational institutions & individuals
- These plans and related decision help to determine actual outcomes – such planning involves some element of forecasting: either implicitly or explicitly

In this sense not only is forecasting **possible** it is **inevitable** 

Comprehensive, systematic, consistent projections, based on explicit and transparent assumptions provide useful information for all labour market participants, helping to inform all those making choices & decisions

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## **Is Forecasting Necessary?**

Rapid change, uncertainty & evidence of market failure

- Long lead times on investment decisions such as education and training choices
- Need for a regular and systematic assessment of future prospects to:
  - guide & inform policy formation;
  - guide & inform individual decision making;
  - > avoid future imbalances & mismatches;
  - need for a counterfactual to assess policy or different choices

The only meaningful questions are therefore **how**, by **whom** and with **what end** in mind?

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### So, Forecasts: Who Needs Them?

A Variety of audiences The State - planners/policy makers Education and training providers **Companies/Employers** labour market pressures other reasons Individuals: career choices Careers advisors



## **Aims & objectives**

Understanding past trends

#### Future employment prospects:

- Numbers employed by sector & occupation -job openings
- Education and training requirements qualifications and skills needed
- Supply/demand balances (including terms and conditions of employment (pay)

#### Caveats:

Implicit assumptions about the labour market

Not mechanistic manpower planning

Focus on the formal economy

The Future is not fixed or predetermined

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## 2. HOW WE FORECAST

Folk-lore – Crystal balls and other methods!

More systematic approaches:

- Quantitative computer models
- Delphi
  techniques
- Scenario
  development



### **How to Forecast / Anticipate**

Formal, quantitative models:

- Extrapolation of past trends
- Time series methods
- Need for behavioural content

Other approaches:

- quantitative & qualitative
- surveys
- scenario development

Key elements:

- Where are we now?
- What happens next?



### Advantages of quantitative modelling

Natural desire to quantify, measure and evaluate:

- Benefits of a formal model
- Value of benchmark forecasts

Technological progress and statistical infrastructure International best practice - Quantitative modelling approaches, based on macroeconomic, multisectoral models



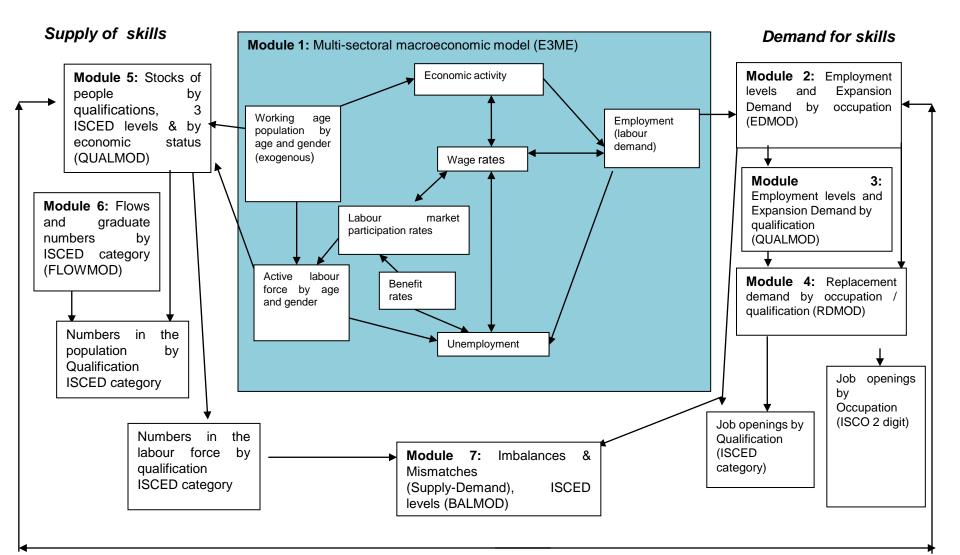
# The CEDEFOP framework for skills forecasting in Europe

Developments in the labour market are crucially dependent on what happens to the economy more generally

- The typical quantitative modelling approach therefore involves two key elements:
- Multi-sectoral macroeconomic model
- Modules to translate the results into implications for skills demand and supply

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### **Overall approach – modelling framework**



## Role of the E3ME multi-sectoral macroeconomic model

Model the links between the labour market and the wider economy

Provide a consistent modelling framework for projecting skills demand and supply together allows analysis of imbalances (unemployment)

#### Take key drivers into account

e.g. the impacts of the financial crisis and demographic change

Include analyses of key uncertainties

develop alternative scenarios to see how these will impact on skills in the future

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## **3. KEY RESULTS**

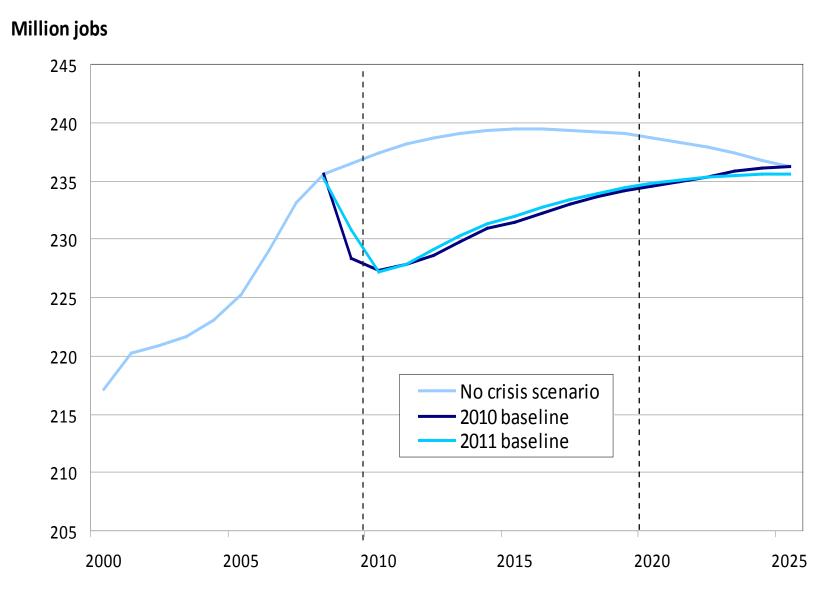
## The future of employment – the rise of the Professionals



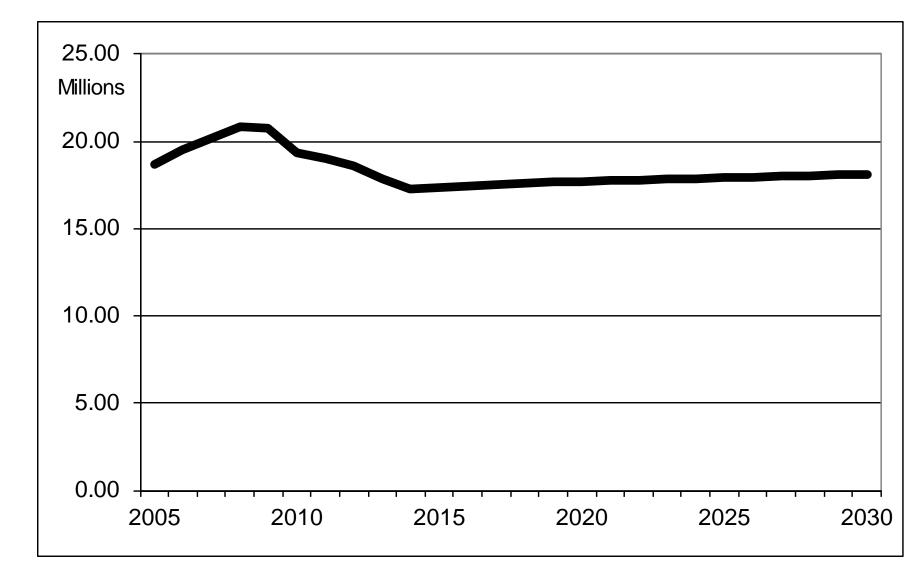
### Key issues and drivers

| Driver                          | Demand:<br>employment<br>trends | Supply:<br>labour force<br>trends |
|---------------------------------|---------------------------------|-----------------------------------|
| Government spending             |                                 |                                   |
| GDP forecast                    |                                 |                                   |
| Competitiveness & trade         |                                 |                                   |
| Technology & innovation         | ✓                               |                                   |
| Ageing population               |                                 |                                   |
| Higher statutory retirement age |                                 | ✓                                 |
| Migration                       |                                 | ✓                                 |
| Education policy                |                                 | ✓                                 |
| Gender equality                 |                                 |                                   |

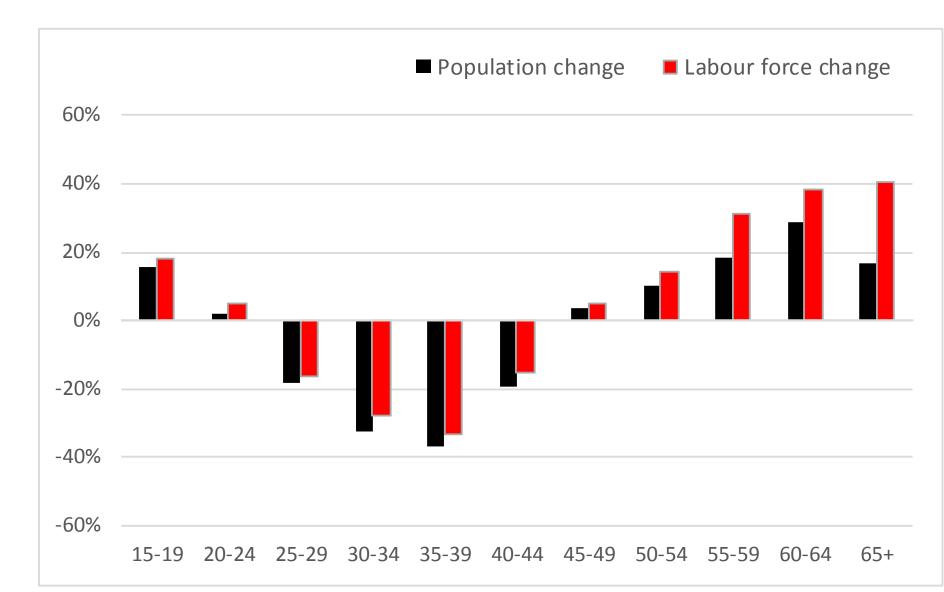
## Macroeconomic Impact of the 2008 financial crisis (EU)



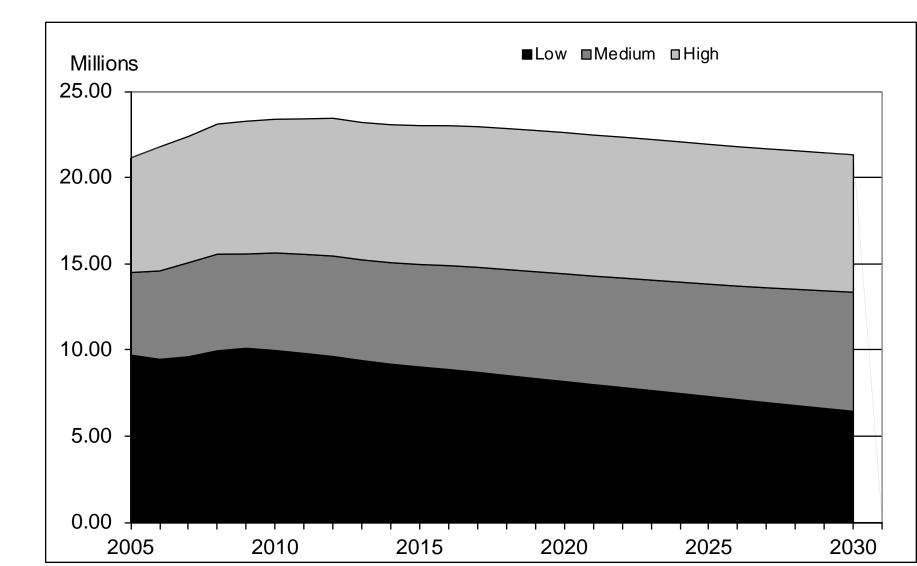
### Employment prospects, 2005-2030: Spain (ES)



## Demographics, 2015-2025 (ES)

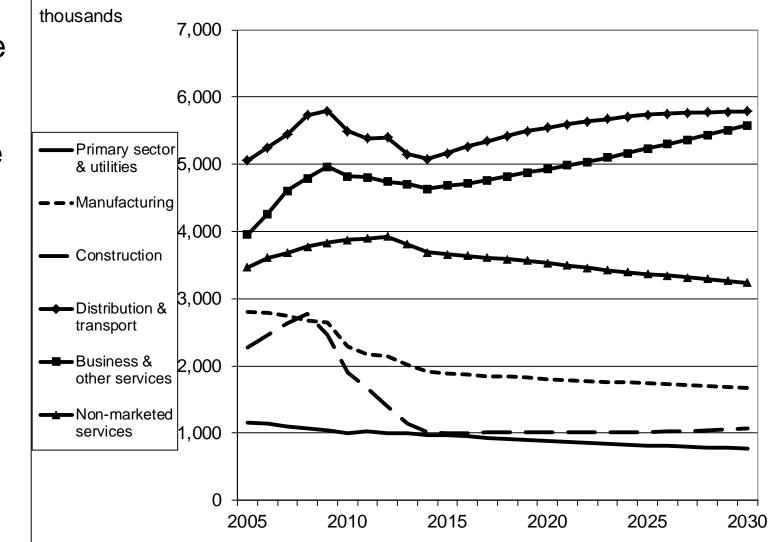


### Declining labour force (falling population) but increasingly well qualified (ES)

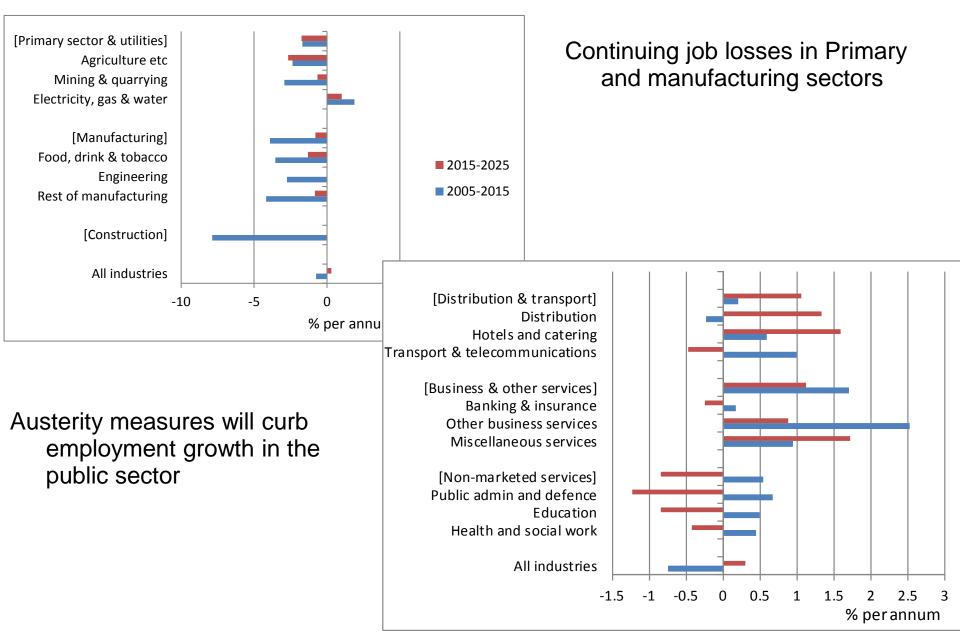


## Slow, but significant and inexorable sectoral change (ES)

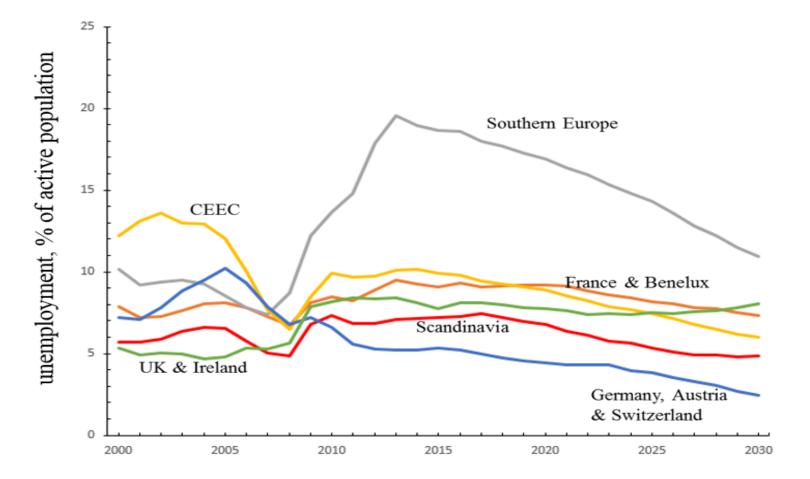
The Service Sector will continue to provide the main source of job growth



### Sectoral details, 2015-25 (ES)



## In many countries unemployment will remain higher than pre-recession rates (EU)



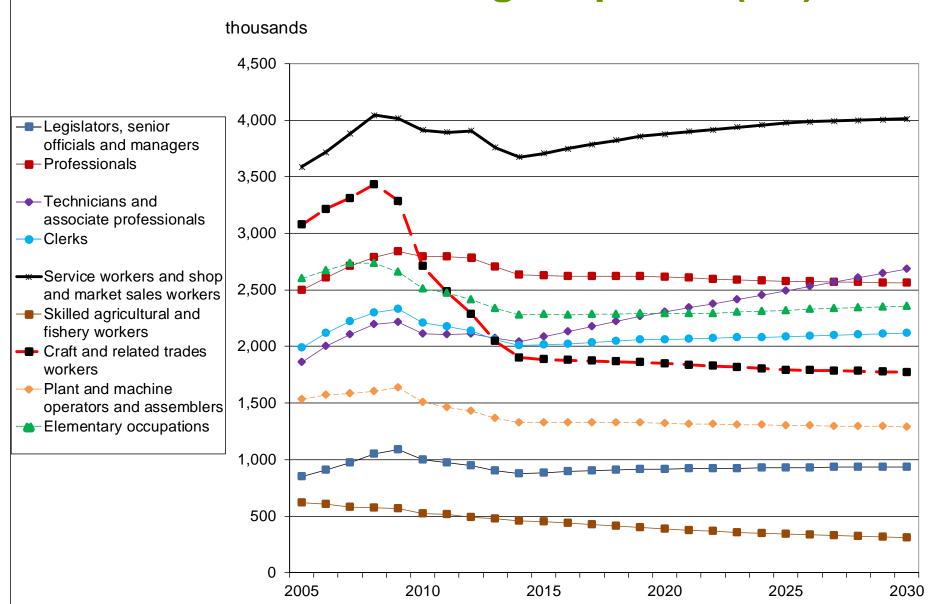
Note(s): Scandinavia is Denmark, Finland, Sweden and Norway; Benelux is Belgium, Luxembourg and the Netherlands; Southern Europe is Spain, Italy, Portugal, Greece, Malta and Cyprus; CEEC is Czech Republic, Slovakia, Poland, Hungary, Latvia, Lithuania, Estonia, Bulgaria, Romania and Slovenia.

## Measurement of skills supply and demand

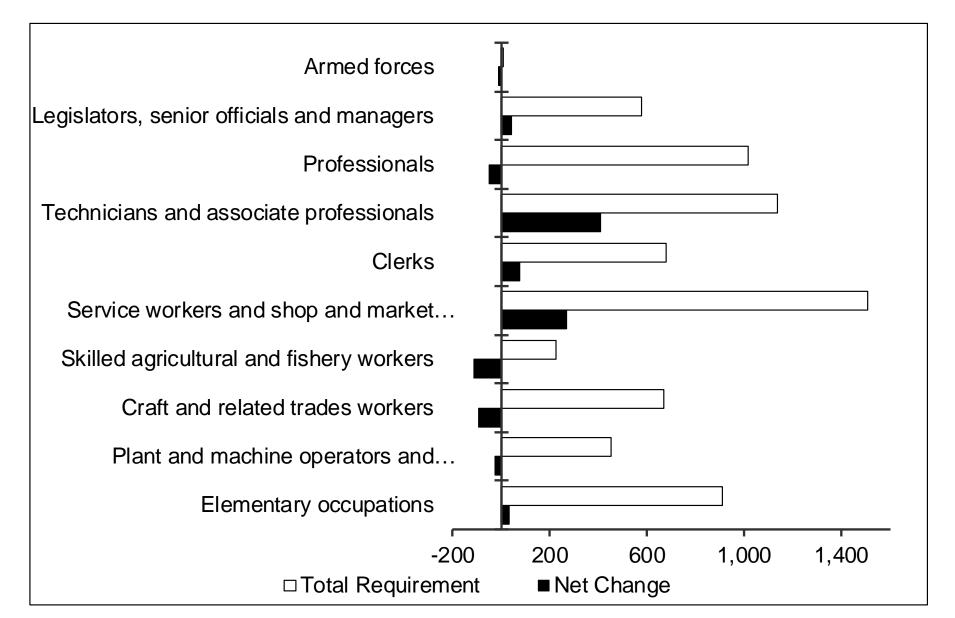
- Skills measured by occupation (ISCO) and qualification (ISCED)
- Demand proxied by employment
- Supply economically active by highest qualification (HQ,MQ, LQ)



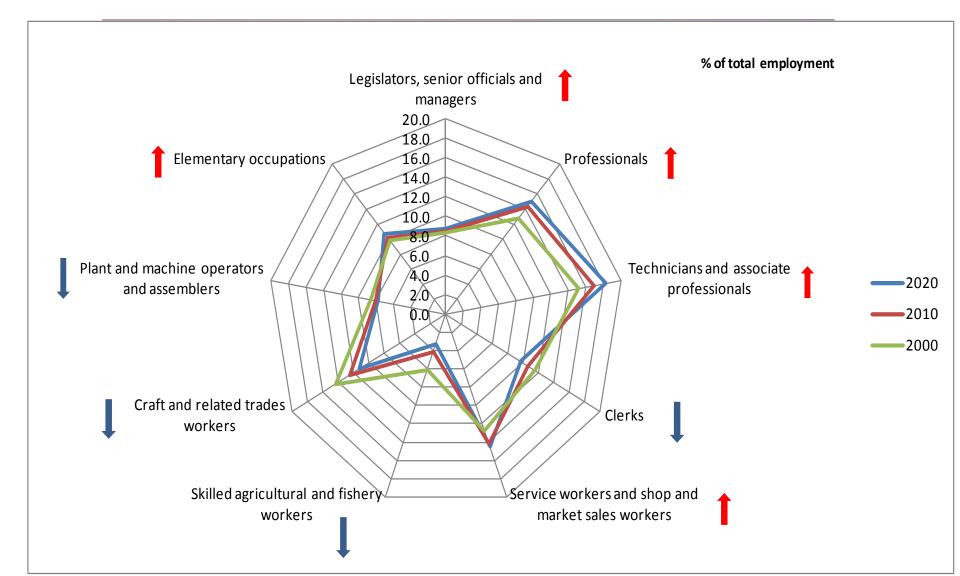
#### Significant structural change by Occupation too - but few big surprises (ES)



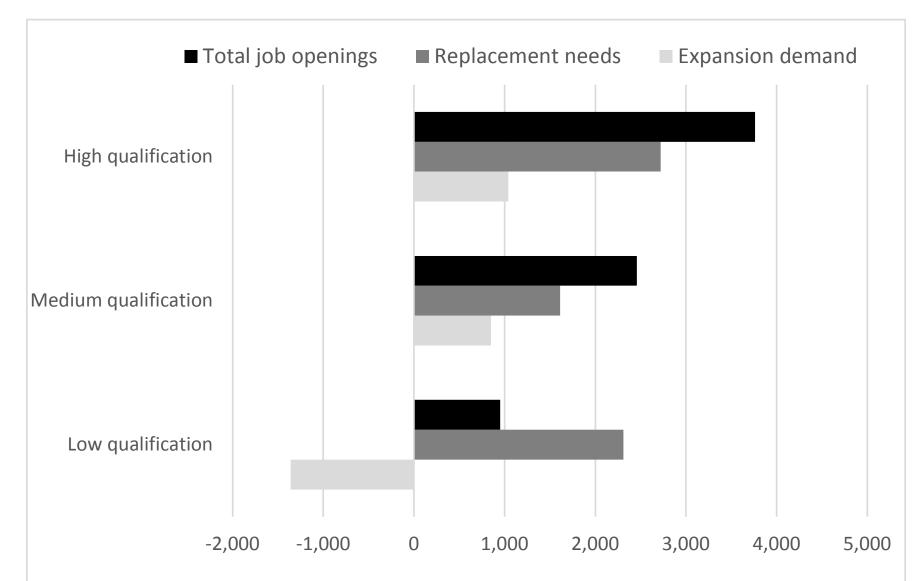
### Replacement demands, 2015-25 (ES)



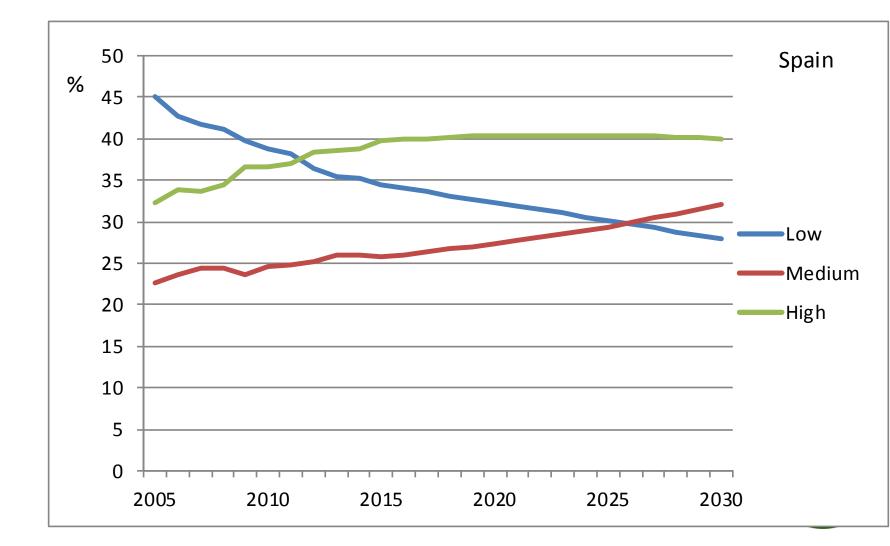
## Knowledge- and skills-intensive jobs on the increase (EU28)



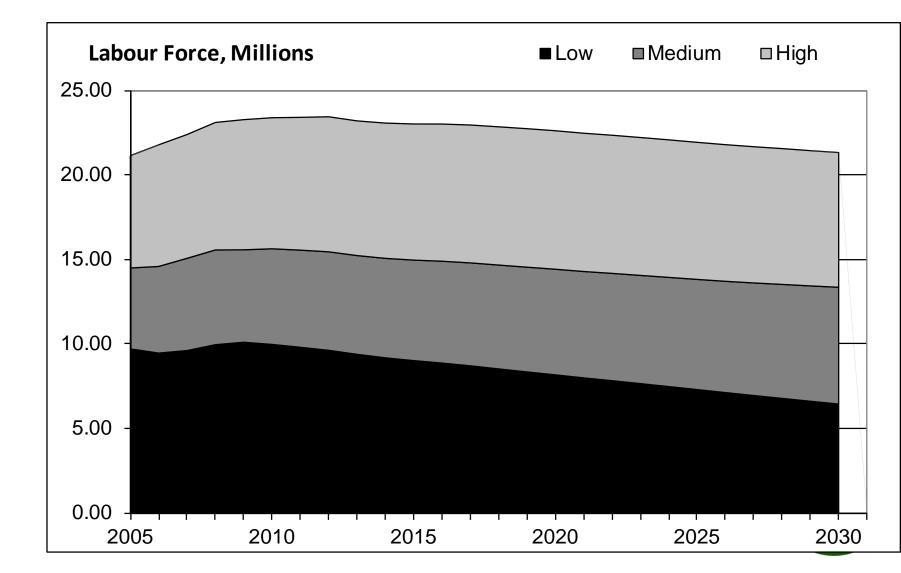
## And also by qualifications held, net changes 2015-2025 (ES)



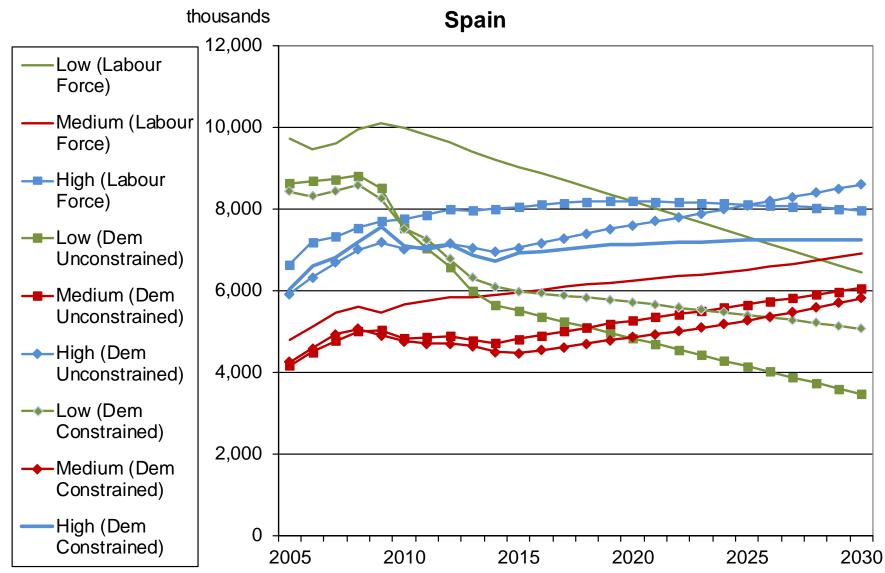
## ..... a greater % share of jobs for the better qualified (ES)



## Driven in no small part by supply side trends (numbers economically active, ES)



#### Comparison of supply and demand trends -BUT Imbalances not easy to measure



### Increasing diversity, imbalances, mismatches & risks of over qualification

Increasing diversity of Higher & Further Education (HE) HE no longer a "minority sport" (participation rates >>50%) Demand for skills: crisis has accelerated changes

- Fewer job opportunities for the low-qualified (but some growth)
- Some better qualified may need to accept lower level jobs
- Science, Technology, Engineering & Mathematics is a key area
- But Quality more important than Quantity
- Skills mismatches and imbalances are a persistent phenomenon, we need to develop the right skill mix to:
  - manage transitions & adjustments in the labour market
  - match & anticipate knowledge- & skills-intensive jobs

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### **On the right track ?**

Europe is on track to raise its qualifications profile

> more Europeans acquiring better qualifications

Fewer low-qualified Europeans

younger cohorts the best qualified ever

Rising supply mirrors projected growth in demand

**BUT Concerns about over- qualification & mismatch:** 

- High level qualifications may no longer guarantee success
- Results suggest some polarisation in skills demand many graduates may need to find jobs in non-traditional areas
- Looking beyond formal qualifications need "T-shaped" individuals with general as well as specific core technical skills

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## **Conclusions & Key results**

Labour supply: expanding but also ageing *Employment:* rising slowly, constrained by supply Unemployment: falling slowly but persistent Macroeconomic uncertainties: Brexit & Trump Sectoral change: significant change (relentless shift from primary and manufacturing towards services) Skill Supply: increasing number formally qualified Skill demands: rising demand but polarisation *Replacement needs:* Even where employment is falling Imbalances and mismatches: problems remain but markets will adjust if allowed to operate freely

# **Contact details for further information:**

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#### Cedefop Pan-European projections:

www.cedefop.europa.eu/skillsnet

