“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: 24th February (09:15 – 12:30)
Palau Macaya, Conference Hall (Passeig de Sant Joan, 108, 08037 Barcelona)

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OVERVIEW

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First enacted during the reign of James I, partially repealed in 1736, but nevertheless: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.
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?
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
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, multi-sectoral 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
Overall approach – modelling framework

**Supply of skills**

**Module 5**: Stocks of people by qualifications, 3 ISCED levels & by economic status (QUALMOD)

**Module 6**: Flows and graduate numbers by ISCED category (FLOWMOD)

Numbers in the labour force by qualification ISCED category

Numbers in the population by Qualification ISCED category

**Module 1**: Multi-sectoral macroeconomic model (E3ME)

- Working age population by age and gender (exogenous)
- Active labour force by age and gender
- Benefit rates
- Labour market participation rates

Economic activity

Wage rates

Unemployment

**Module 2**: Employment levels and Expansion Demand by occupation (EDMOD)

**Module 3**: Employment levels and Expansion Demand by qualification (QUALMOD)

**Module 4**: Replacement demand by occupation / qualification (RDMOD)

**Module 7**: Imbalances & Mismatches (Supply-Demand), ISCED levels (BALMOD)

**Demand for skills**

Job openings by Occupation (ISCO 2 digit)

Job openings by Qualification (ISCED category)

**Module 2**: Employment levels and Expansion Demand by occupation (EDMOD)

**Module 3**: Employment levels and Expansion Demand by qualification (QUALMOD)
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
3. KEY RESULTS

The future of employment – the rise of the Professionals
## Key issues and drivers

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<th>Driver</th>
<th>Demand: employment trends</th>
<th>Supply: labour force trends</th>
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<td>Government spending</td>
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<td>Gender equality</td>
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Macroeconomic Impact of the 2008 financial crisis (EU)

Million jobs

- No crisis scenario
- 2010 baseline
- 2011 baseline
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
Austerity measures will curb employment growth in the public sector.
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)

- Armed forces
- Legislators, senior officials and managers
- Professionals
- Technicians and associate professionals
- Clerks
- Service workers and shop and market workers
- Skilled agricultural and fishery workers
- Craft and related trades workers
- Plant and machine operators and assembly workers
- Elementary occupations

□ Total Requirement  ■ Net Change
Knowledge- and skills-intensive jobs on the increase (EU28)

- Legislators, senior officials and managers
- Professionals
- Technicians and associate professionals
- Clerks
- Service workers and shop and market sales workers
- Skilled agricultural and fishery workers
- Craft and related trades workers
- Plant and machine operators and assemblers
- Elementary occupations

% of total employment

- 2020
- 2010
- 2000
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

- Low (Labour Force)
- Medium (Labour Force)
- High (Labour Force)
- Low (Dem Unconstrained)
- Medium (Dem Unconstrained)
- High (Dem Unconstrained)
- Low (Dem Constrained)
- Medium (Dem Constrained)
- High (Dem Constrained)
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
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
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
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Cedefop Pan-European projections:
www.cedefop.europa.eu/skillsnet