



CEDEFOP

European Centre for the Development
of Vocational Training



Future skill needs in Europe

Presented by

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Cedefop

Overview

- **Introduction: policy background, rationale and objectives**
- **Methodology: the framework and modules**
- **Results: Europe's changing skill needs**
 - Sectoral prospects
 - Occupations
 - Replacement needs
 - Implications for qualifications
 - Focus on health and social work
- **Summary and conclusions**



Policy background

- Council resolution New Skills for New Jobs 2007/C 290/01
- Integrated Guidelines for Growth and Jobs 2008-2010 Council resolution COM (2007) 803
- Anticipating and matching labour market needs: A New Job and Skills Strategy

What forecasts...

can provide?

- systematic analysis of the implications of continuation of past trends and patterns of behaviour
- alternative scenarios based on alternative assumptions
- basis for intelligent and informed debate and further research

cannot provide?

- precise predictions that can be used for detailed manpower planning (not a crystal ball)
- qualitative information on skills and competences

European skills forecasting

Cedefop's Skillsnet pro-active approach

- comparable information Europe-wide
- feasible & cost-effective

First stage: demand side (skill needs - jobs)

Second stage: supply side (available skills – people) and identification of possible imbalances

Next stages: further improvement of methods and data bases; additional research; joint European approach

Medium-term forecast of occupational skill needs

Objectives:

- consistent pan-European skills projections using comparable data
- new methodological framework
- systematic dialogue and discussion

BUT data issues and concerns

Team effort



+ INDIVIDUAL COUNTRY EXPERTS (Skillsnet)



Modular approach to skill needs forecasting

Overview of the Framework

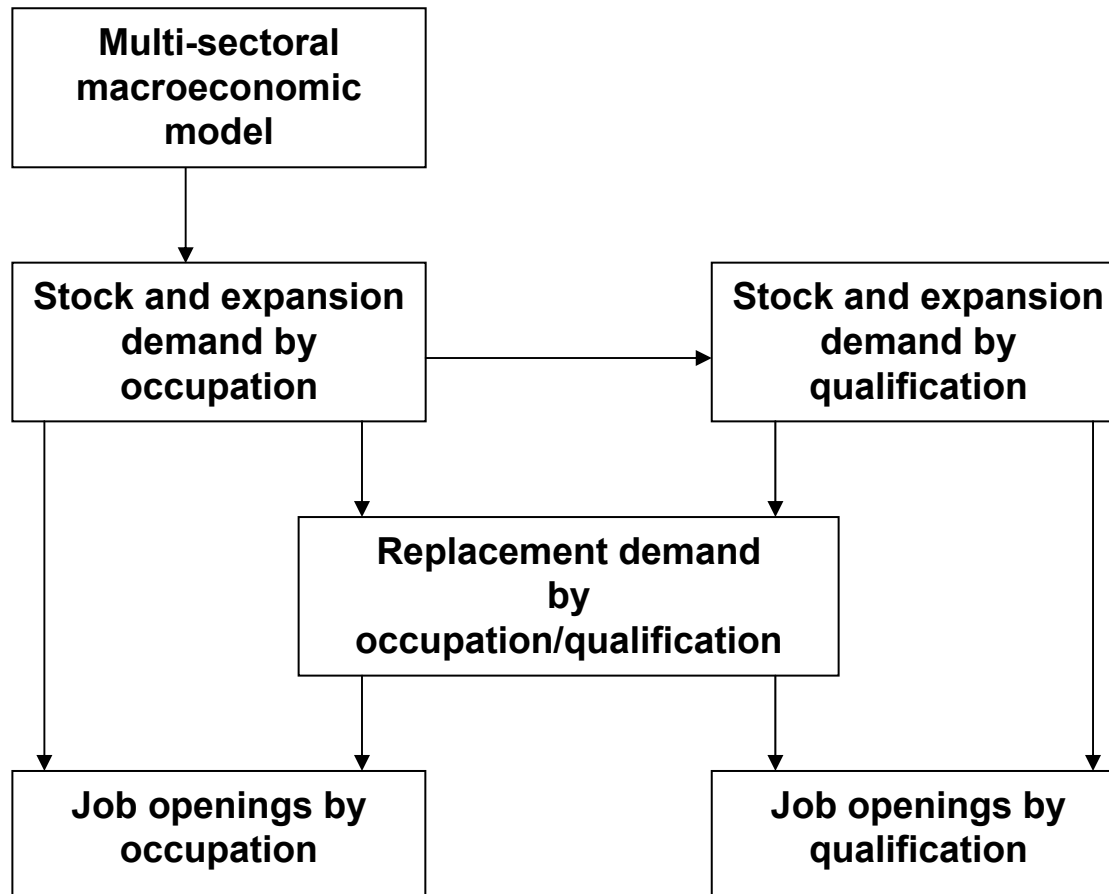
Module 1: **Macroeconomic and sectoral scenarios**

Module 2: **Expansion demand by occupation**

Module 3: **Expansion demand by qualification**

Module 4: **Replacement demand**

Modular approach $\Rightarrow$ the Framework





Modelling sectoral employment

- Sectoral employment a function of:
 - gross output; labour costs; average hours worked; energy prices and technical progress (mostly defined by country and sector)
- Specification:
 - short-term dynamics and move towards long-term equilibrium
- Modelled independently for each country:
- Key employment elasticities (27 country average)

Projected Sectoral change by country, 2006-2015: continued transition to a knowledge based, service economy

	BE	CZ	DK	DE	EE	GR	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT	NL	NO	AT	PL	PT	CH	SI	SK	FI	SE	GB	EUR (27)	EU (25)		
Primary & utilities																															
Manufacturing																															
Construction																															
Distribution & transport																															
Business & other services																															
Non-marketed services																															
% increases 2006-2015																															
> 20 10 to 20 0 to 10 -10 to 0 < -10																															



Alternative possible futures: exploring different scenarios

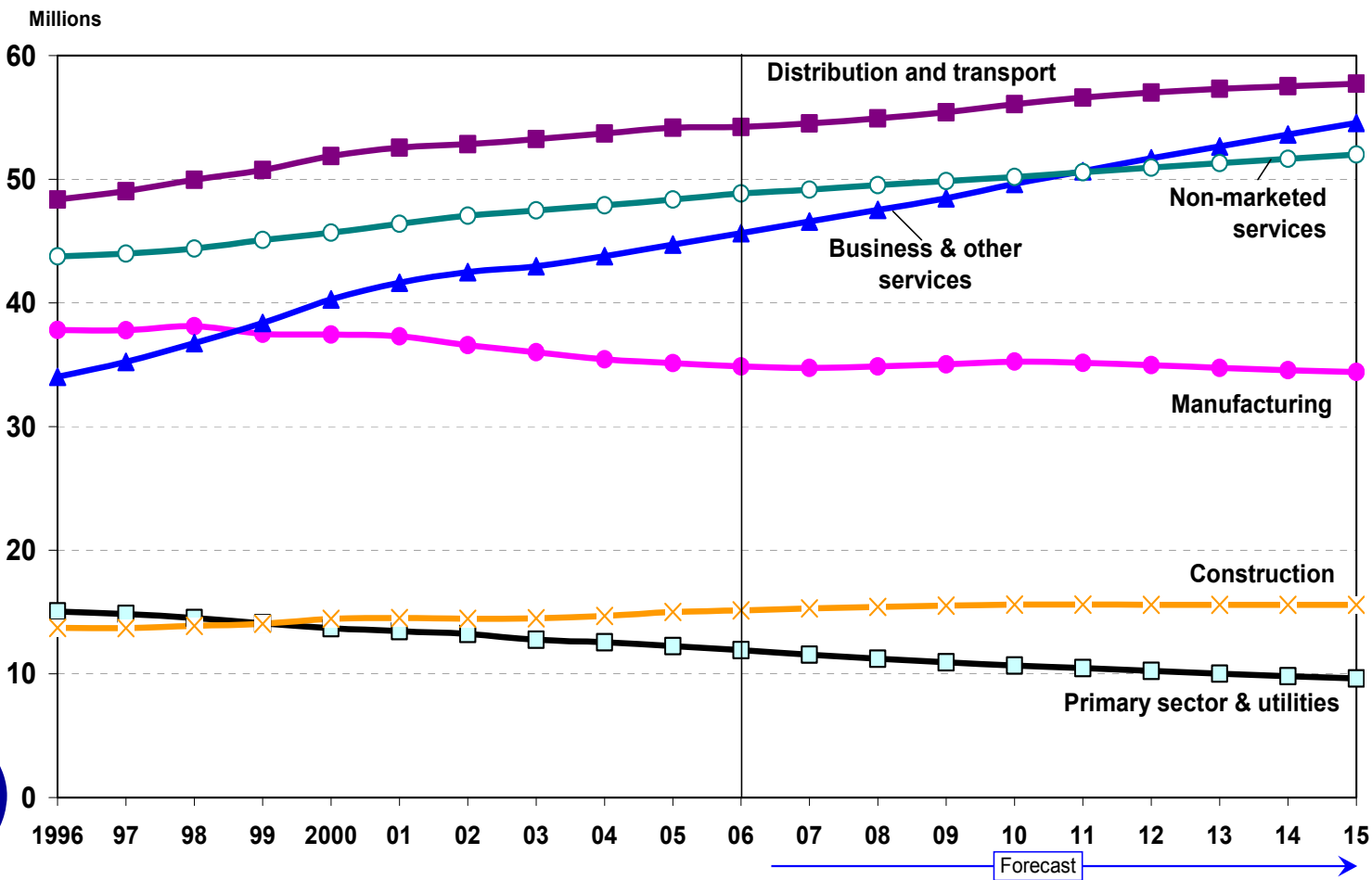
Scenario	Economic growth and competitiveness	Social welfare and government	Technological change	Globalization and mobility	Demography
A: Baseline	Base	No change	Medium	Base	Base (ageing population)
B: Optimistic	Higher	Lower taxes and benefits	Higher	Higher	Higher working age population
C: Pessimistic	Lower	Higher taxes and benefits	Lower	Lower	Higher life expectancy, even higher dependency

Future trends at a pan-European level (EU-25⁺)

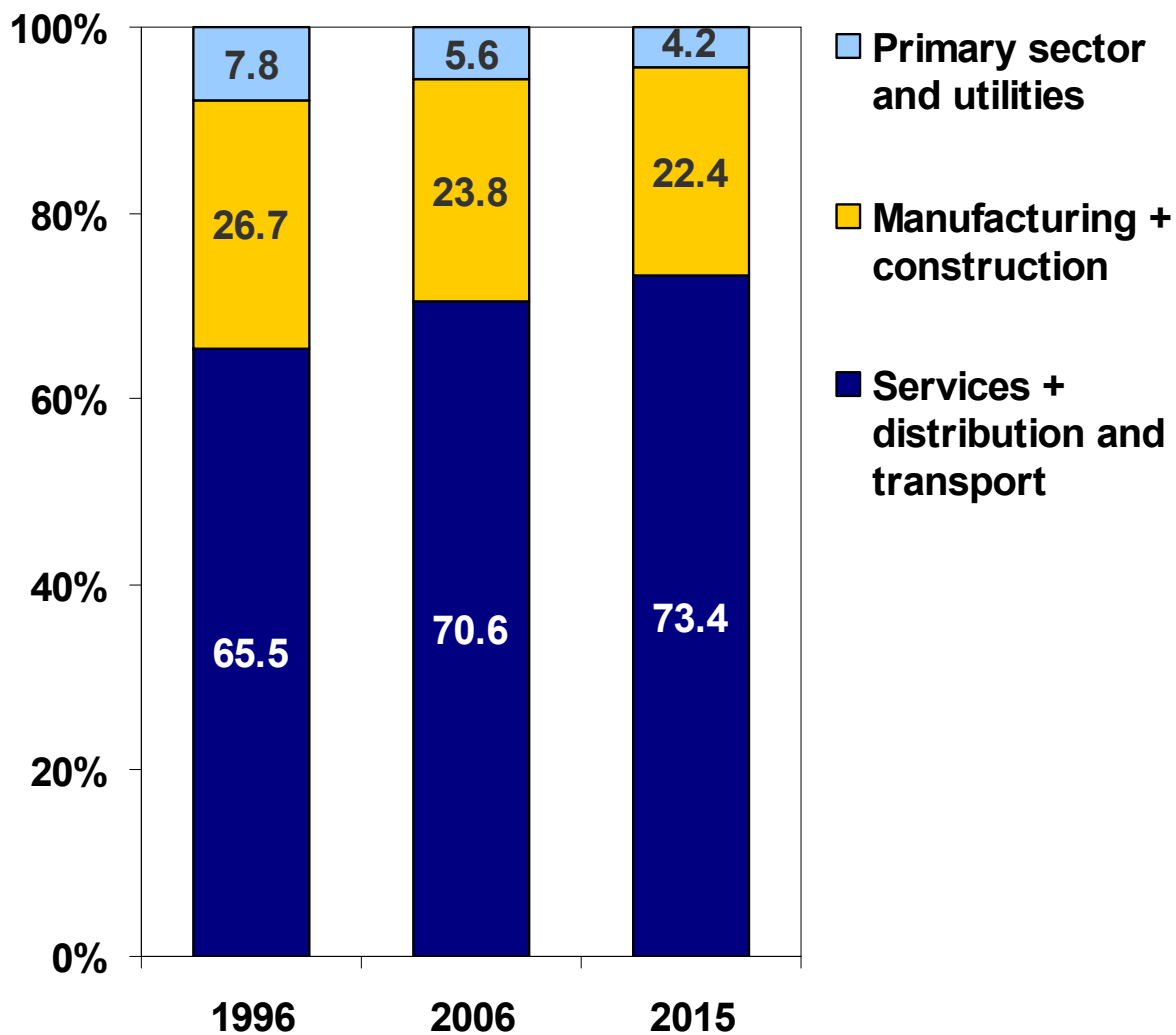
- by sector (up to 41 industries)
- by occupation (up to 27 occupations)
- by qualification (3 broad levels)
- plus replacement demands

EU-25⁺ = EU-25 + Norway and Switzerland

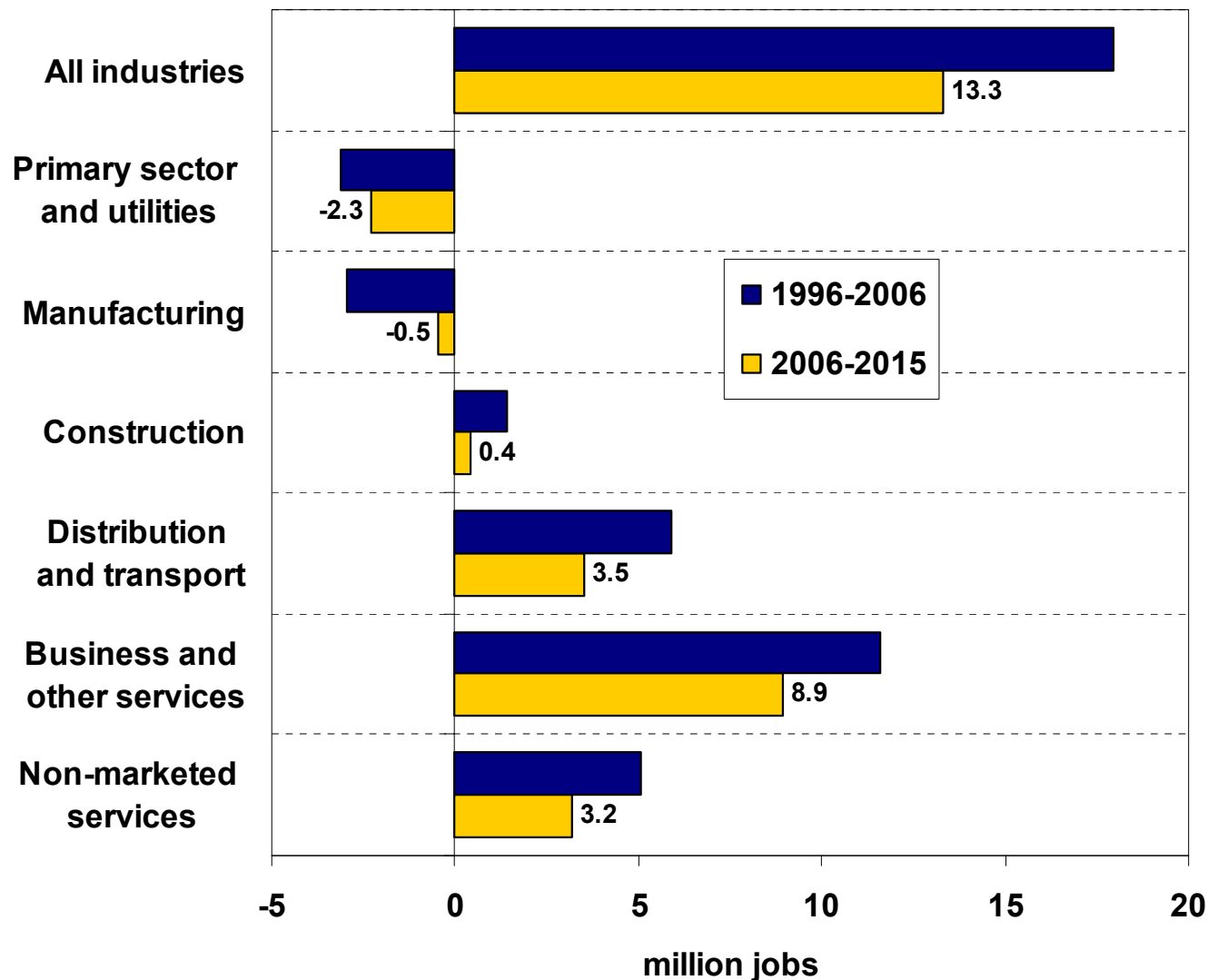
Past and likely future trends by sector (EU-25+)



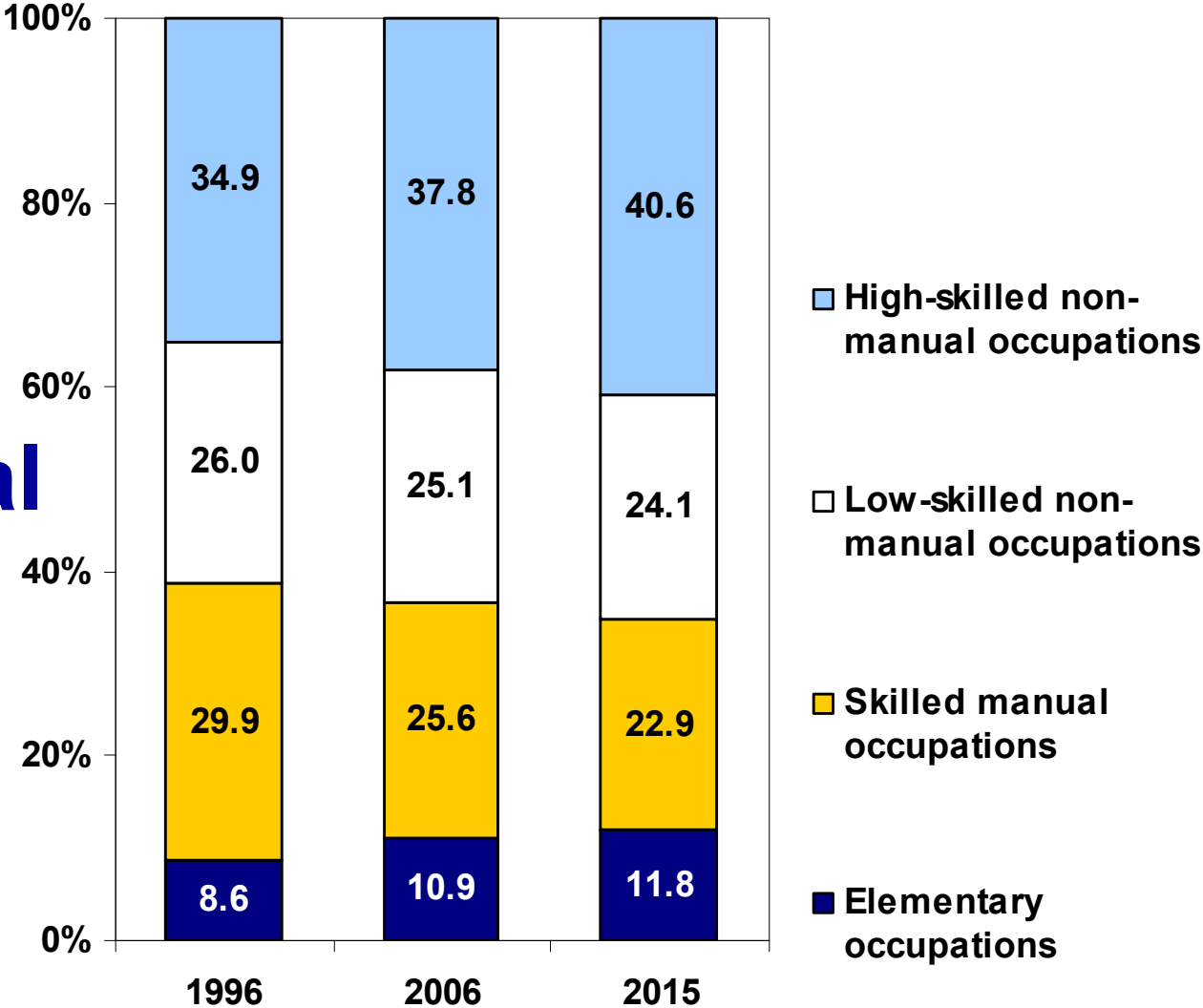
Past and likely future sectoral structure (EU-25⁺)



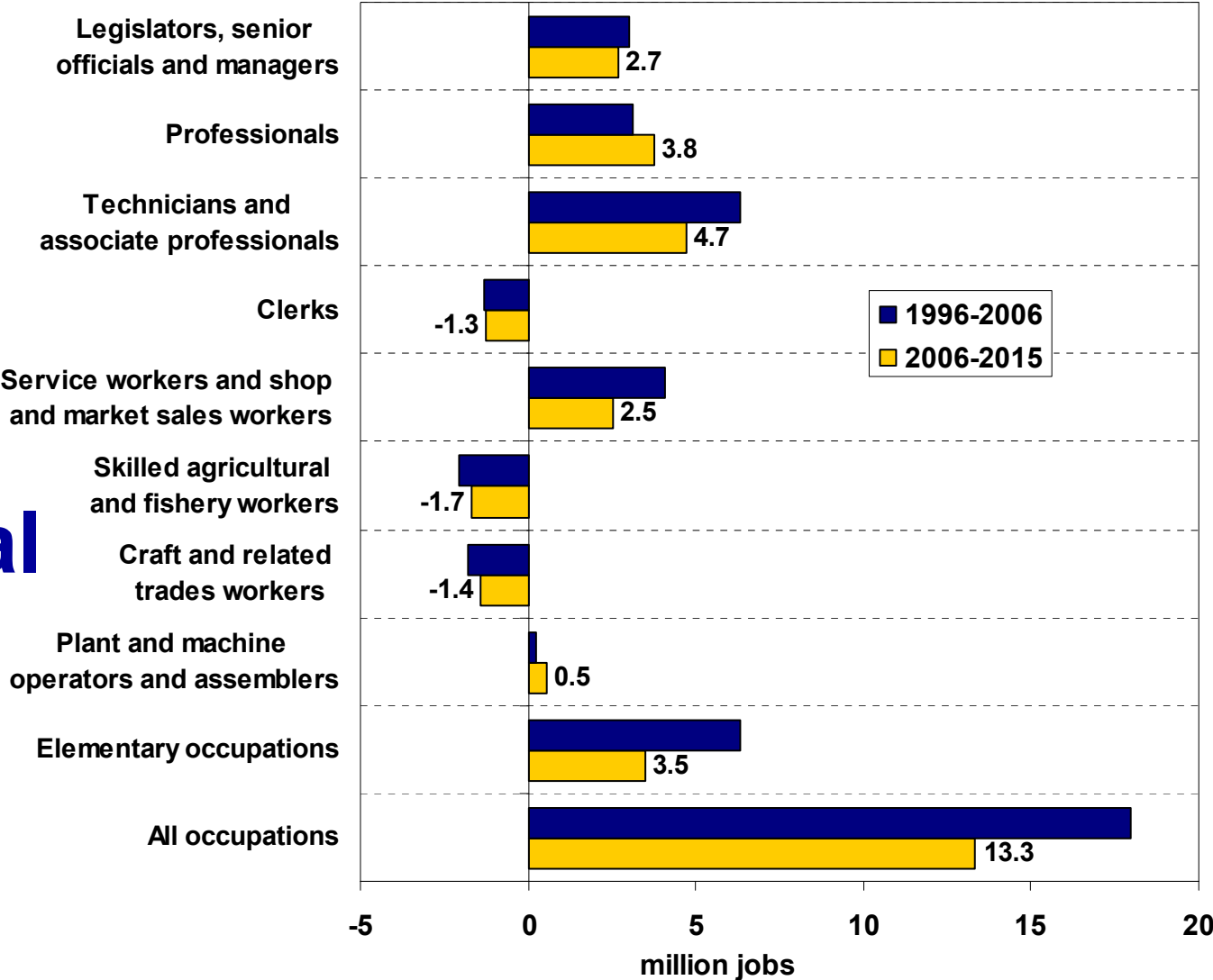
Past and likely future sectoral change (EU-25⁺)



Past and likely future occupational structure (EU-25+)

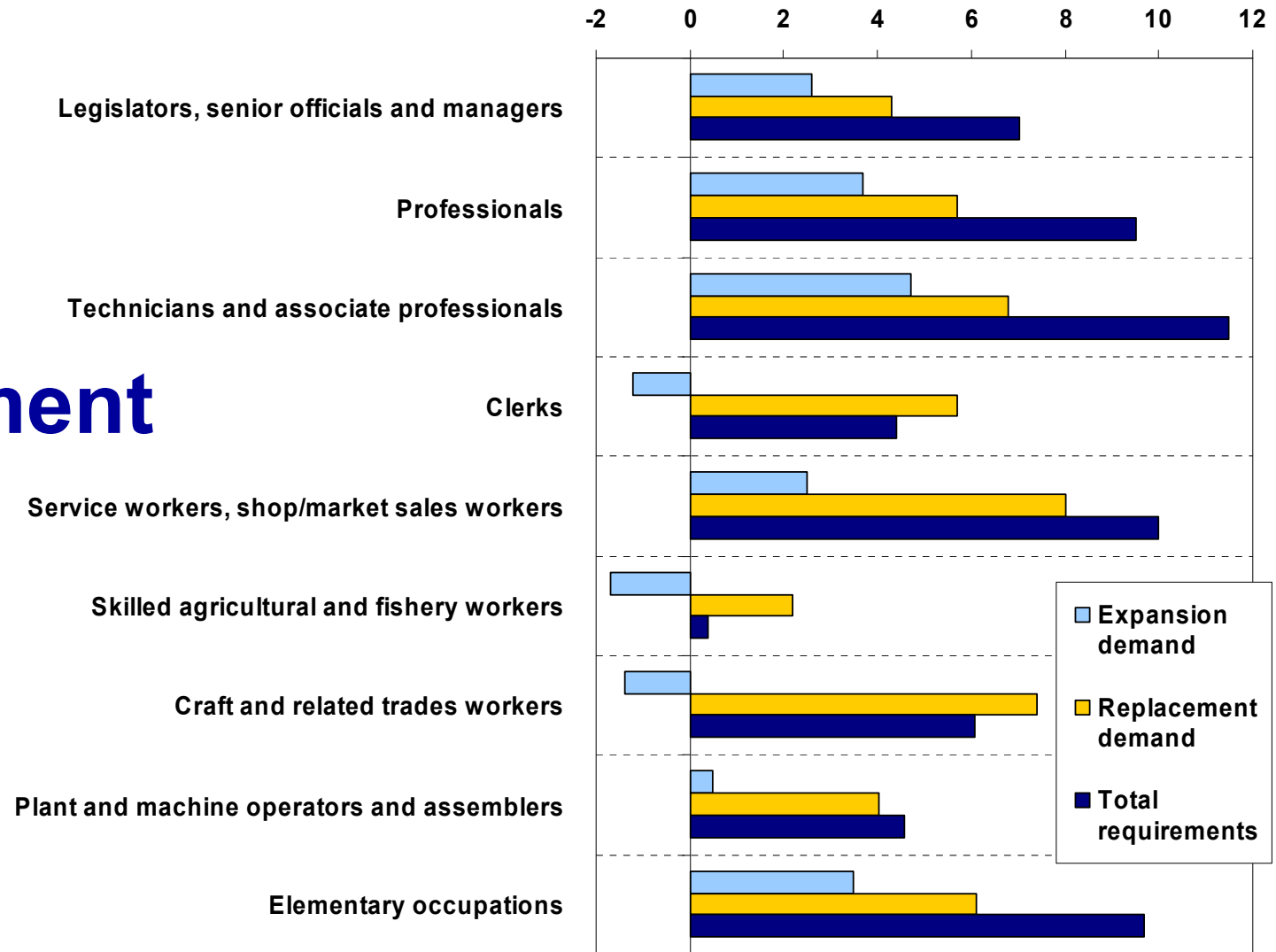


Past and likely future occupational change (EU-25+)

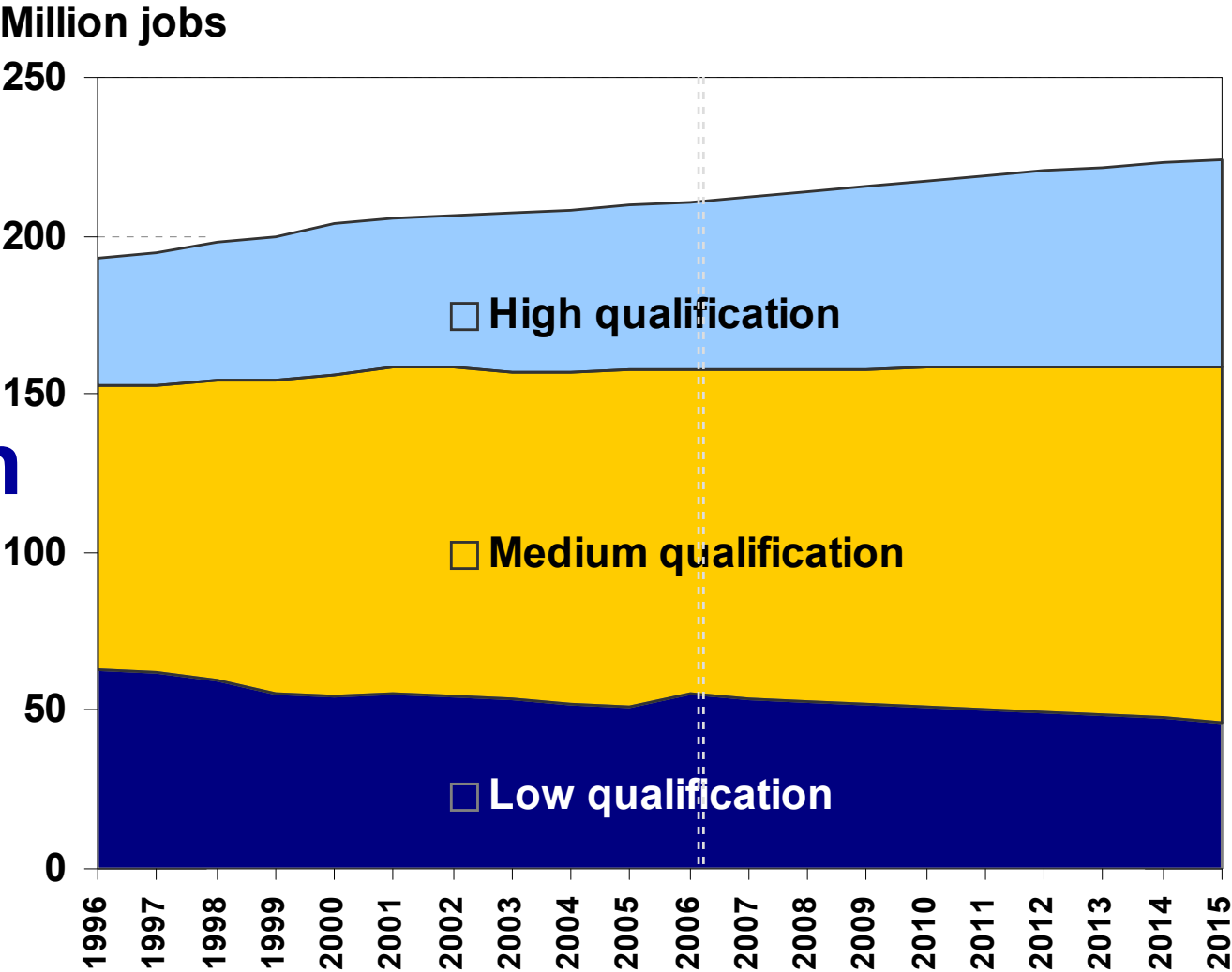




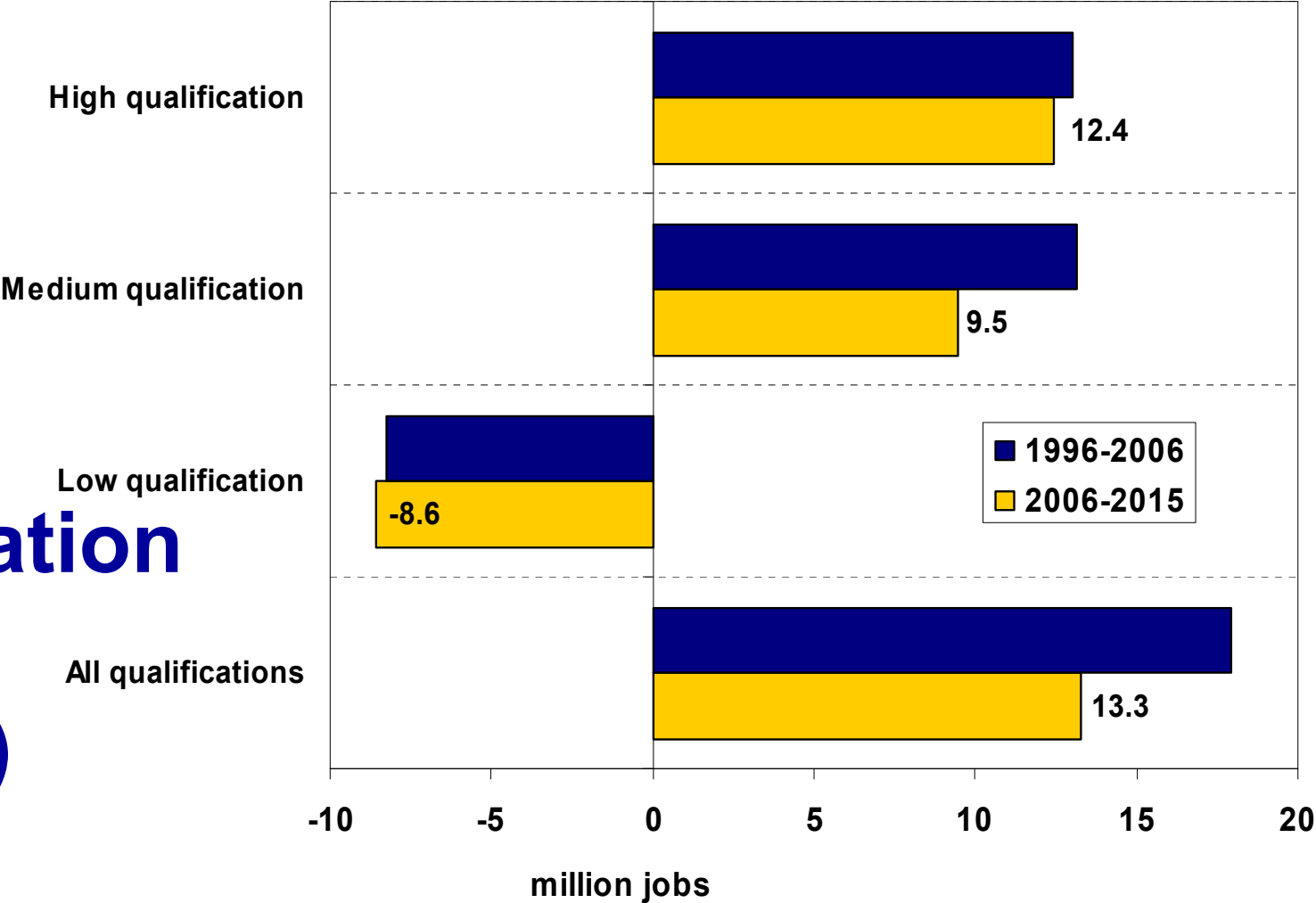
Replacement demand (EU-25⁺)



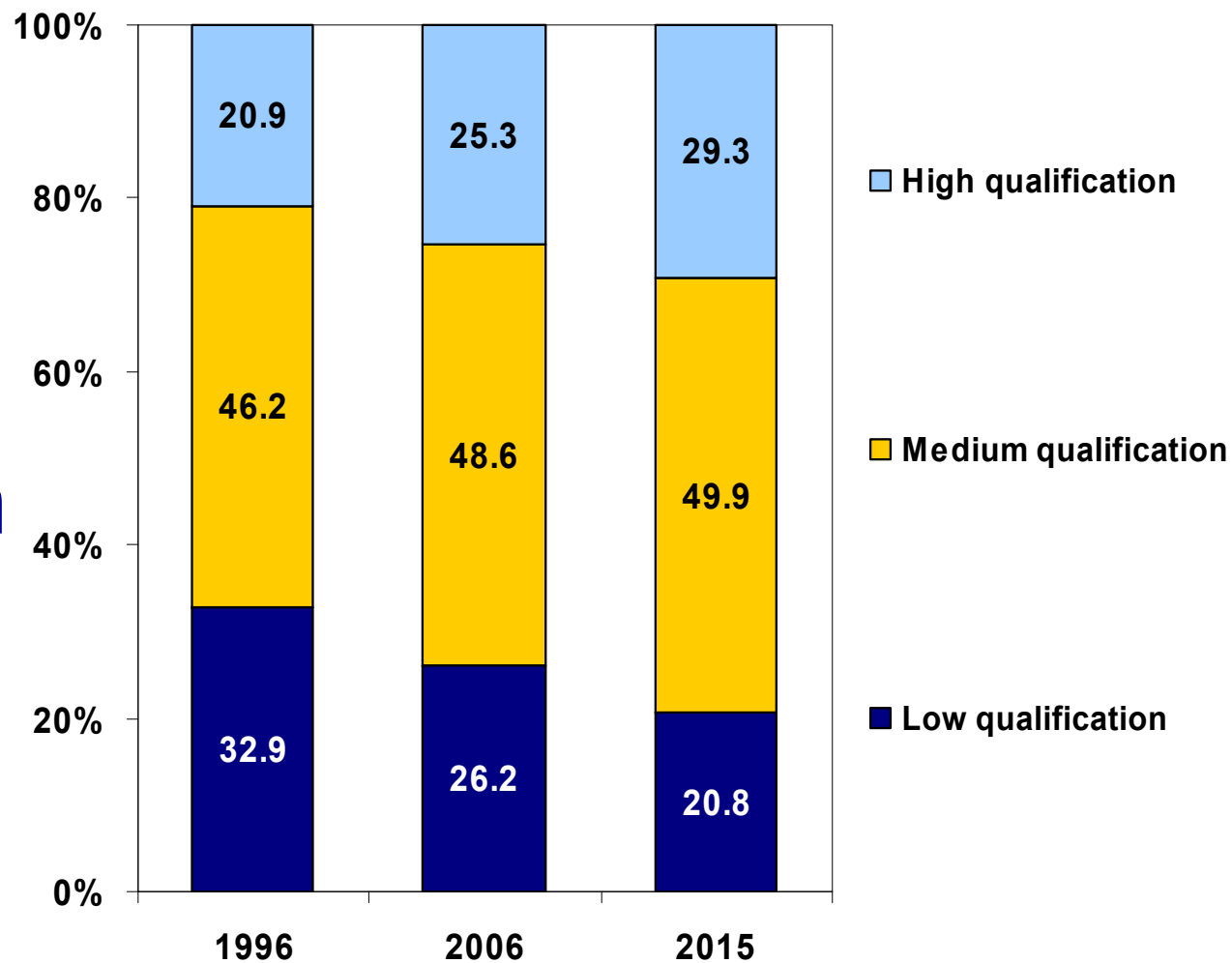
Past and likely future qualification trends (EU-25+)



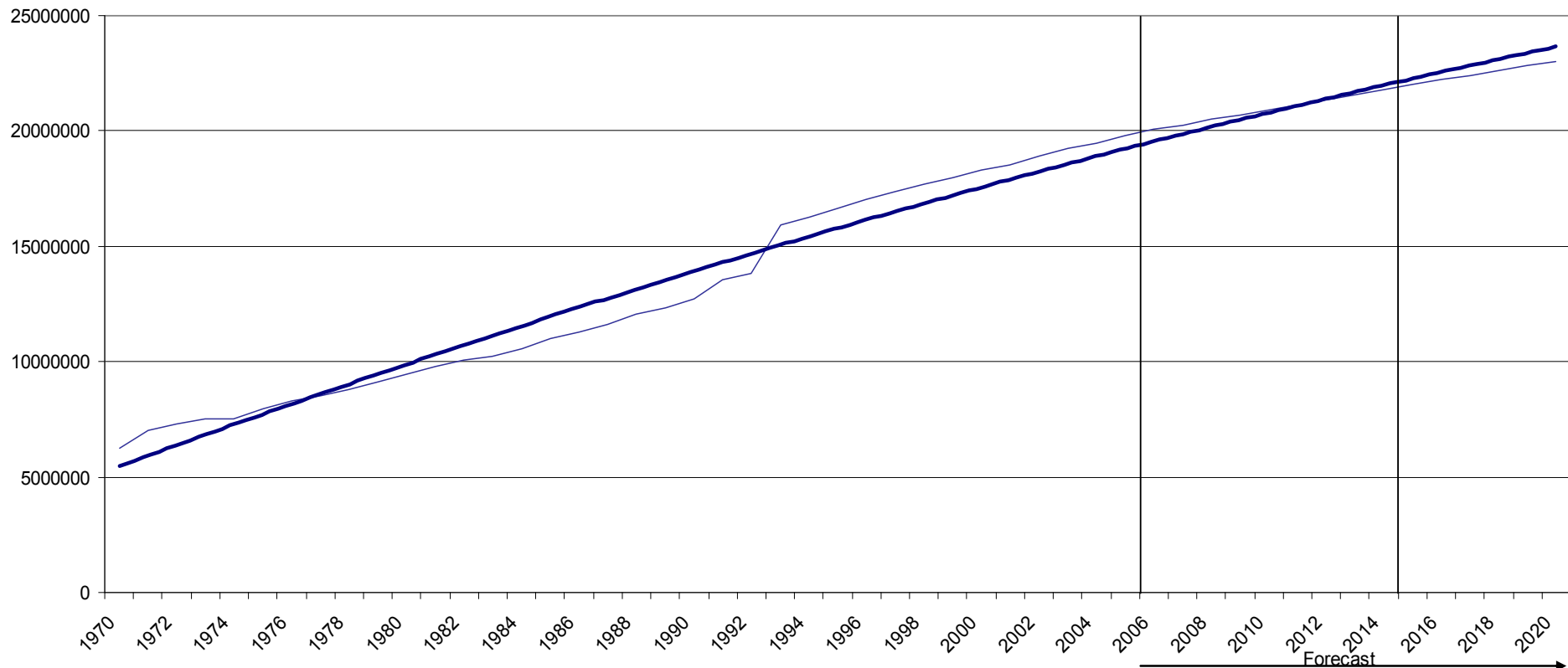
Past and likely future qualification change (EU-25⁺)



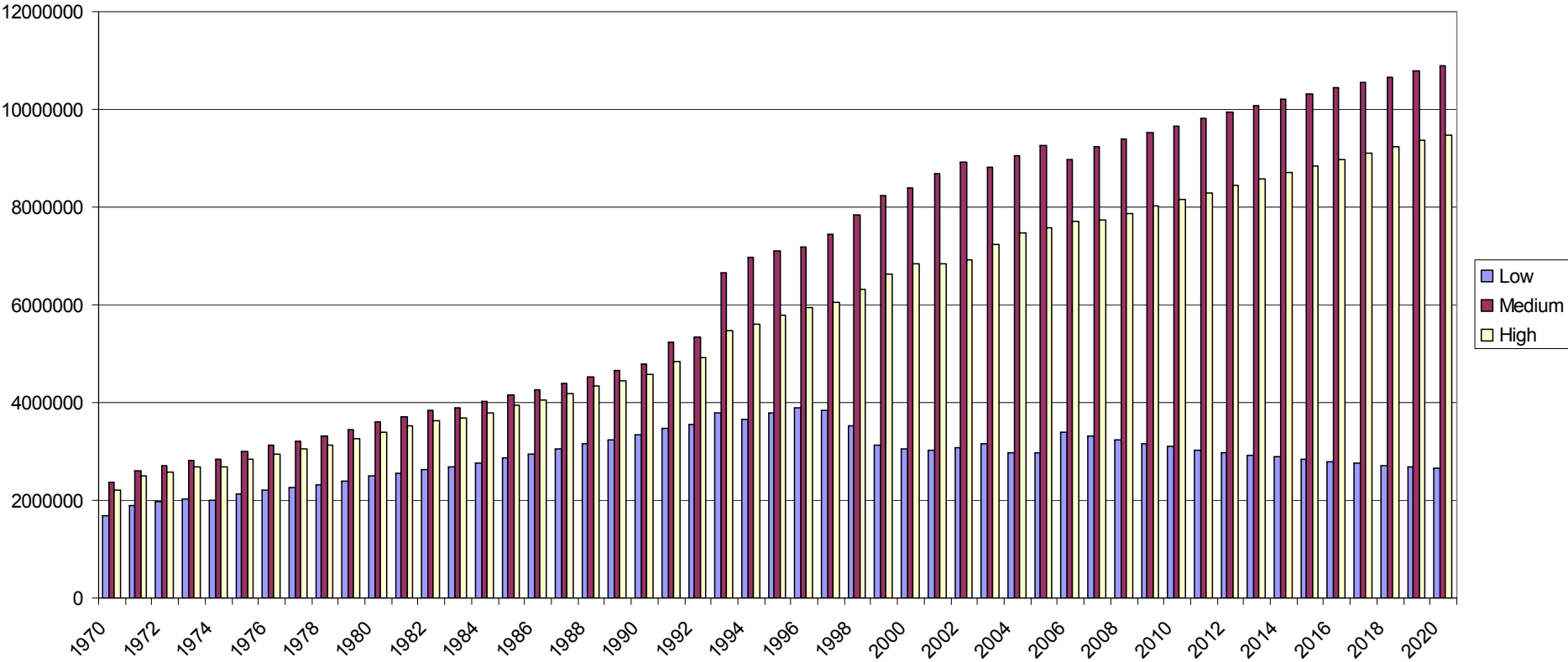
Past and likely future qualification structure (EU-25⁺)



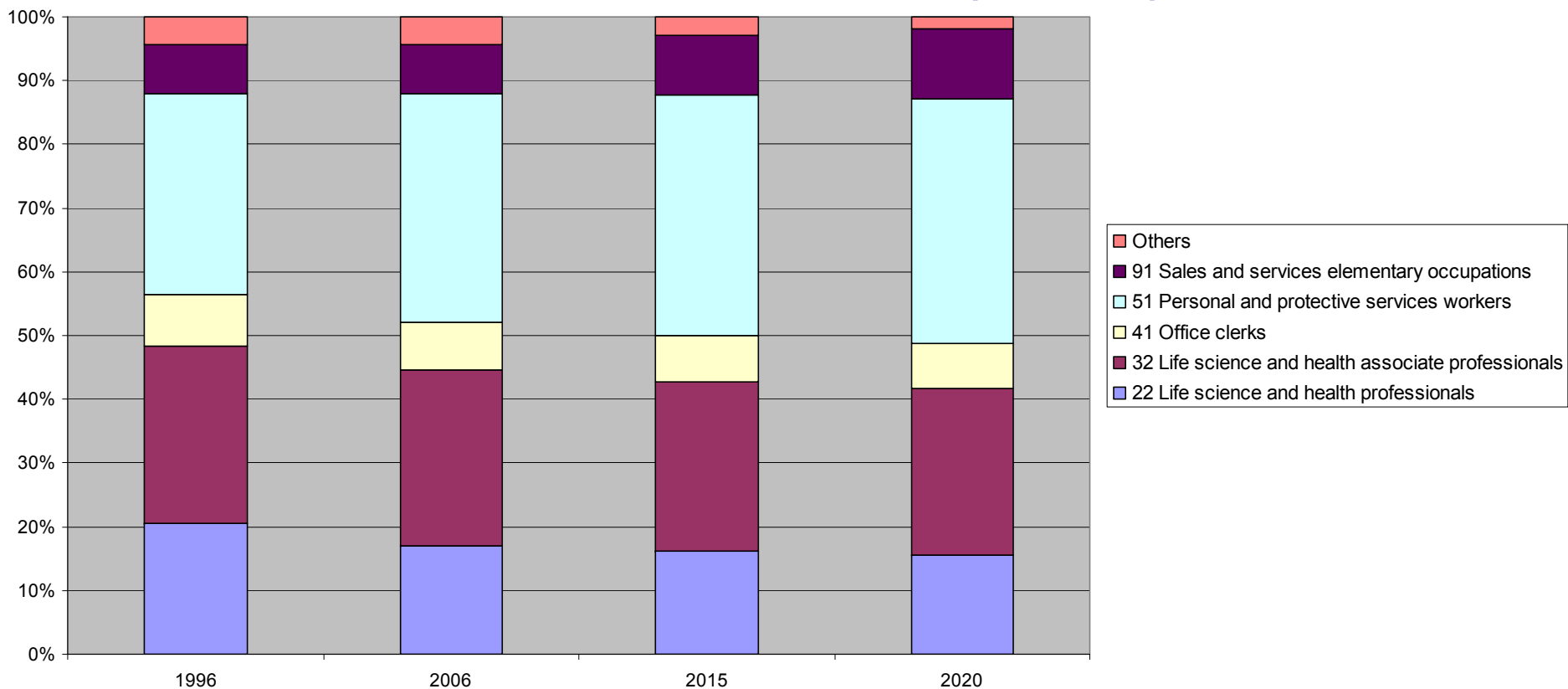
Employment trends for Health and Social Work, (EU-25+)



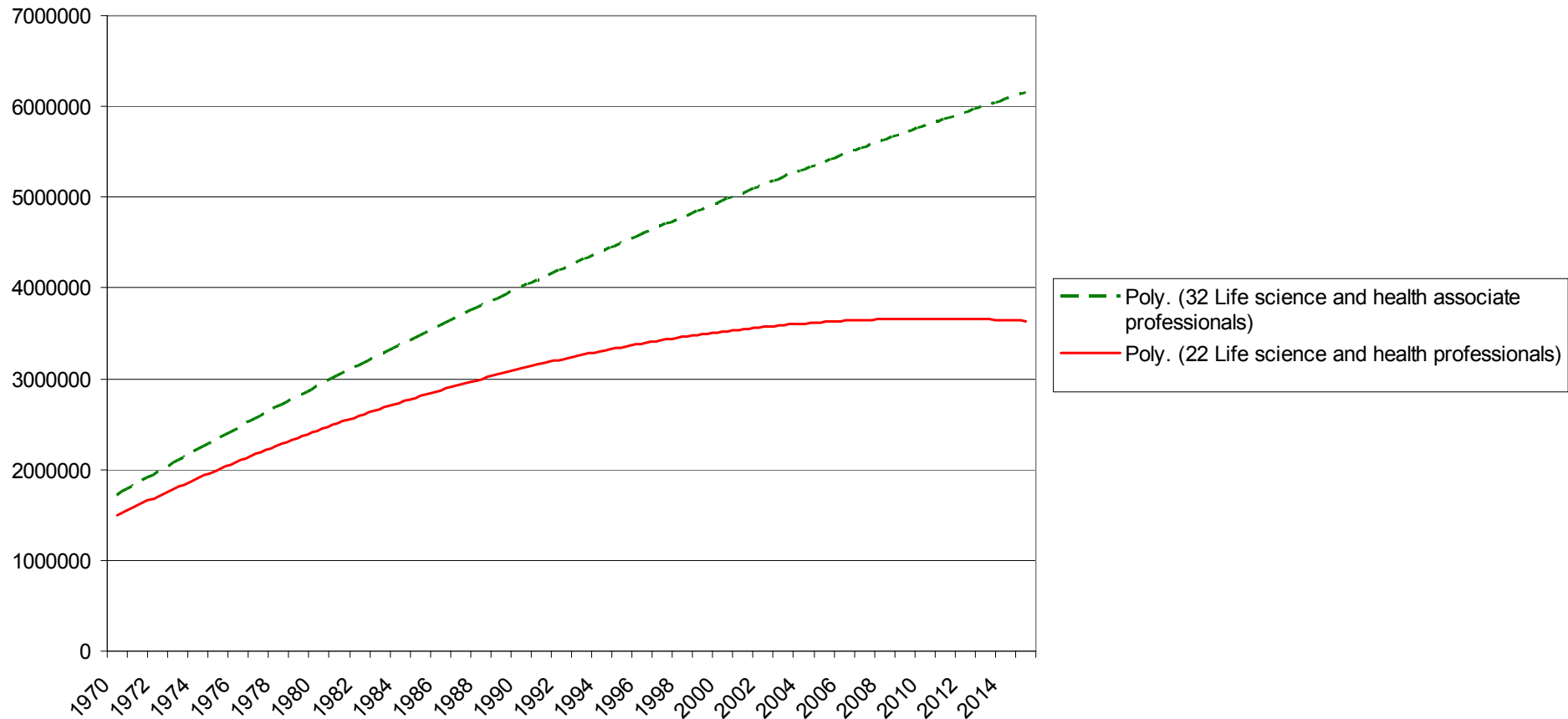
Employment trends for Health and Social Work by qualification, (EU-25+)



Past and likely future qualification structure for Health and Social Work sector (EU-25+)



Life science and health professionals and associate professionals (all sectors), (EU-25+)



22 Health professionals

221	Medical doctors	
2211	Generalist medical practitioners	
2212	Specialist medical practitioners	ISCO-08
222	Nursing and midwifery professionals	
2221	Nursing professionals	
2222	Midwifery professionals	
223	Traditional and complementary medicine professionals	
2230	Traditional and complementary medicine professionals	
224	Paramedical practitioners	
2240	Paramedical practitioners	
225	Veterinarians	
2250	Veterinarians	
226	Other health professionals	
2261	Dentists	
2262	Pharmacists	
2263	Environmental and occupational health and hygiene professionals	
2264	Physiotherapists	
2265	Dieticians and nutritionists	
2266	Audiologists and speech therapists	
2267	Optometrists and ophthalmic opticians	
2269	Health professionals not elsewhere classified	

Key similarities and differences across countries

- **Many common trends:**
 - sectors, occupations, replacement needs, qualifications
 - **Some differences:**
 - stage of economic development, different industrial & occupational structures
- **process of convergence**

Key results: summary

- Further sectoral shifts towards services
- Growing demand for highly and medium skilled workers, losses for low skilled
- Losses offset by replacement needs
- Increasing qualification requirements across all jobs but at the same time growing demand for elementary occupations

Implications for policies

Adaptation of workforce and their skills to new requirements and structural change
⇒ *retraining, active LM measures, up-skilling,...*

Prevention of skill mismatch ⇒ *reducing drop-outs, guidance and counselling, social policies, migration, recognition of non&in-formal learning*

► INVOLVEMENT OF STAKEHOLDERS AND SOCIAL PARTNERS

Achievements to date

- consistent and comprehensive projections for EU-25⁺
- valuable insights for policy makers and others
- sound foundation for further development
- ▶ **ongoing process:** need to improve data and methods

Future priorities

Continuing dialogue: with country experts and stakeholders

Overcome data problems: policy support needed to refine data

Further refinement: the models/framework

Complementary research: forecast of skills supply and more detailed analysis of skill needs at enterprise and sectoral level



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