

The Skillsnet project on Medium-term forecasts of occupational skill needs in Europe: an overview

Paper presented at the Workshop on Medium-term forecast of occupational skill needs in Europe: Interim results.

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Researchcentrum voor Onderwijs
en Arbeidsmarkt

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Summary

- **The Team**
- **Overview - Modular approach**
- **Data sources and preferred employment estimates**
- **Progress on main Modules**
- **Initial results**

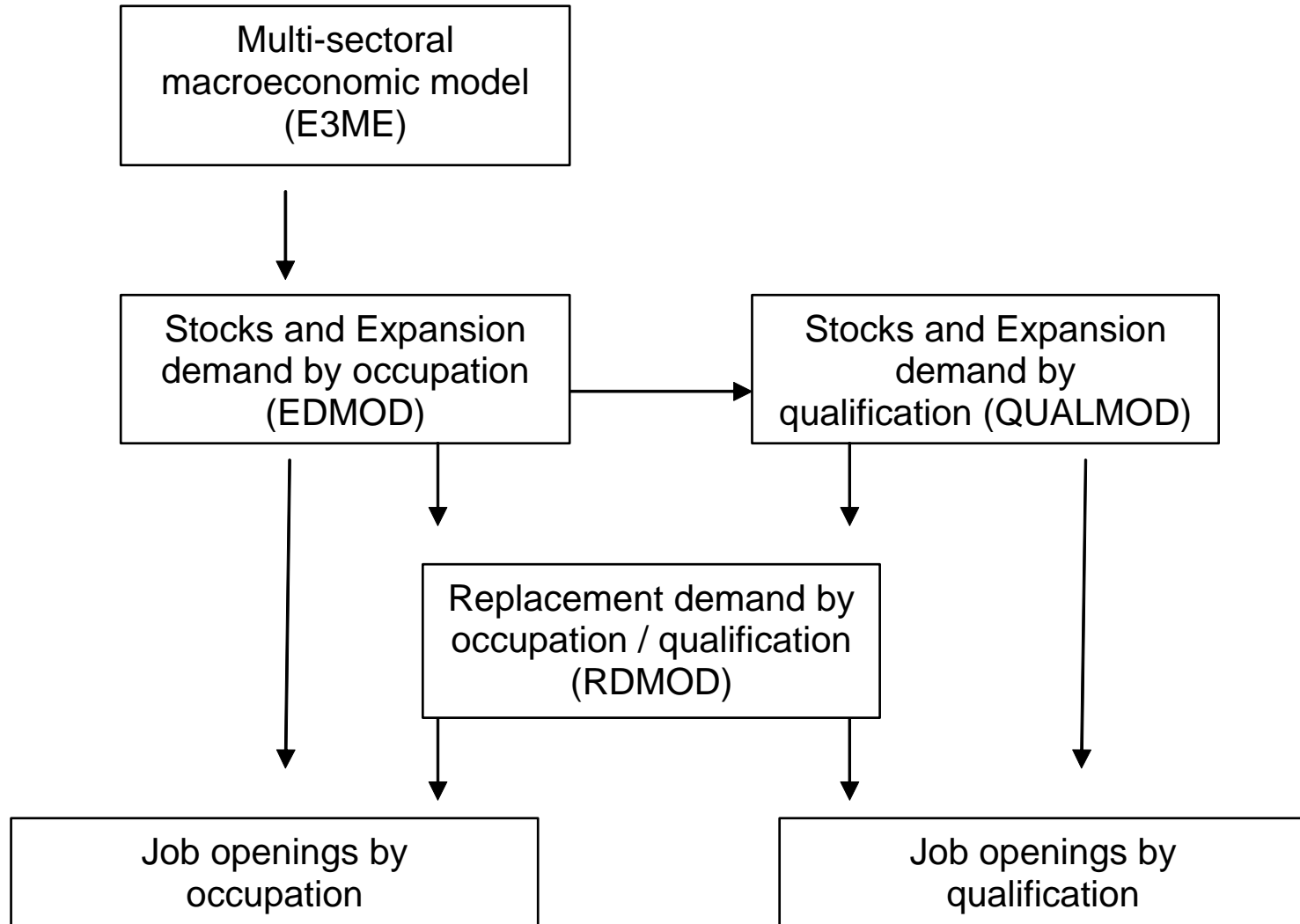
Introduction

- **Aims: Consistent Pan-European Skills Projections using existing data**
- **Approach**
 - **Module 1:** multi-sectoral macroeconomic model (E3ME) and forecasts;
 - **Module 2:** occupational expansion demand model, (EDMOD);
 - **Module 3:** qualifications module (QUALMOD);
 - **Module 4:** replacement demand module, (RDMOD).

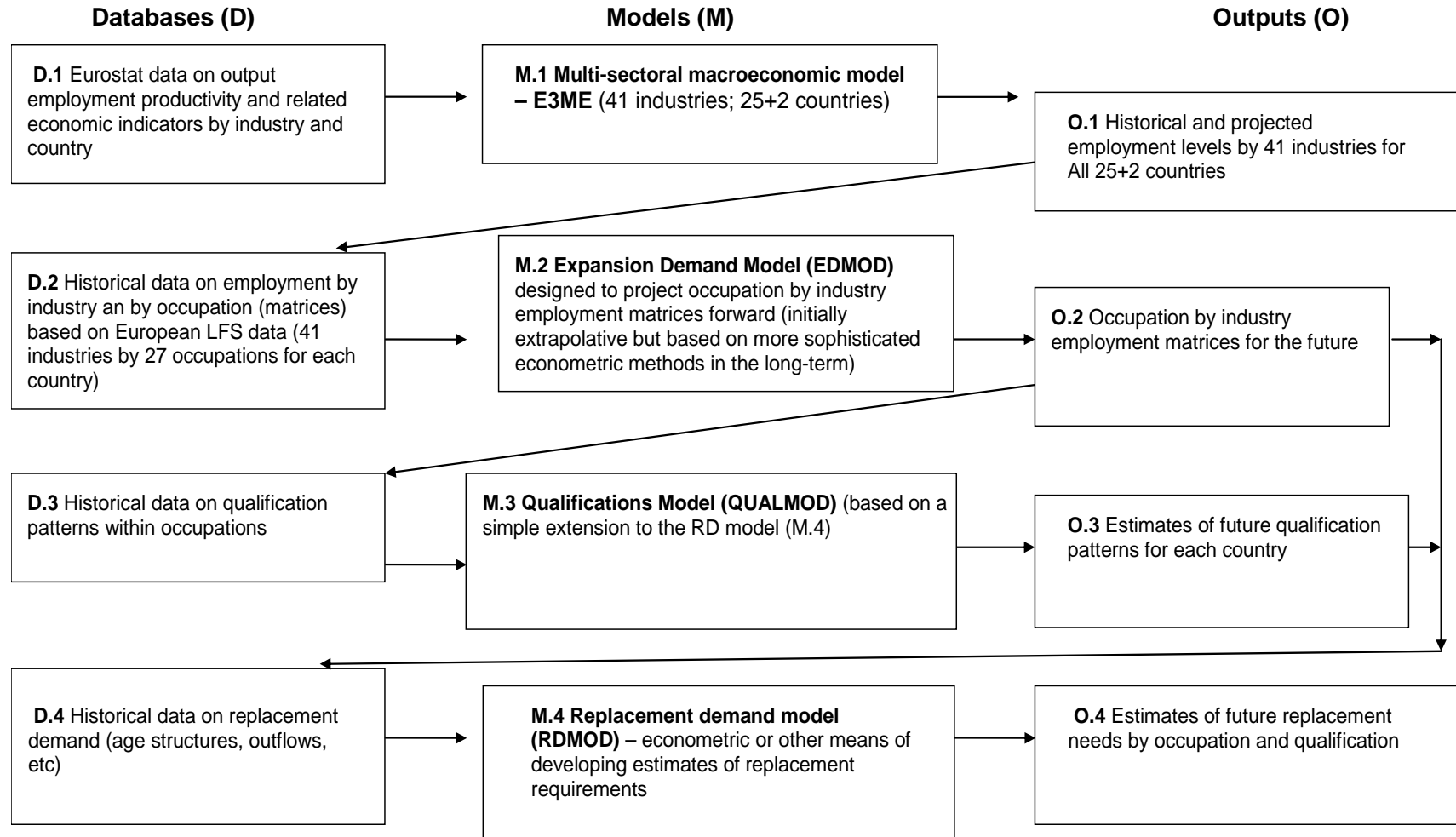


Modular Approach to Skills Forecasting

Overview of the Framework



Modular Approach to Skills Forecasting: Details



Data Issues

- **LFS versus National Accounts estimates:**
 - strengths and weaknesses
- **Other data issues:**
 - Published LFS versus Microdata set
 - Data gaps
 - Data inadequacies
- **The *Country Workbooks***

Module 1: Macroeconomic and Sectoral Scenarios

- **E3ME outline & overview**
- **Expanding the E3ME results to include gender and status**
- **Development of alternative scenarios**

Modules 2 and 3: Expansion Demand by Occupation and Qualification

- **Previous research- Key drivers:**
 - Sectoral specifics
 - Technology
 - Cyclical indicators
 - Price (wage) indicators
 - Other economic factors (trade performance, etc)
- **Key Data Issues**
- **Towards a Preferred Specification**
- **The Qualifications Dimension**

Module 4: Replacement Demands

- **The importance of replacement demands**
- **General approach (cohort components)**
- **Data gaps and limitations**

Interim Results

(Modules 1 and 2 only)

- **Revised Results (Using the New macro and Sectoral Employment Scenario)**
- **Typical individual country results (Greece) *Series 3***
 - by sector
 - by occupation
 - replacement demands
- **Pan European results**
 - by sector; occupation & replacement demands

And more....

- **Detailed Pan European results**
 - showing individual country detail)
- **Revised Results (Using the New macro and Sectoral employment Scenario) (*Series 4*)**
 - Key differences between LFS & NA estimates
- **Details for individual countries**
 - the *Country Workbooks*

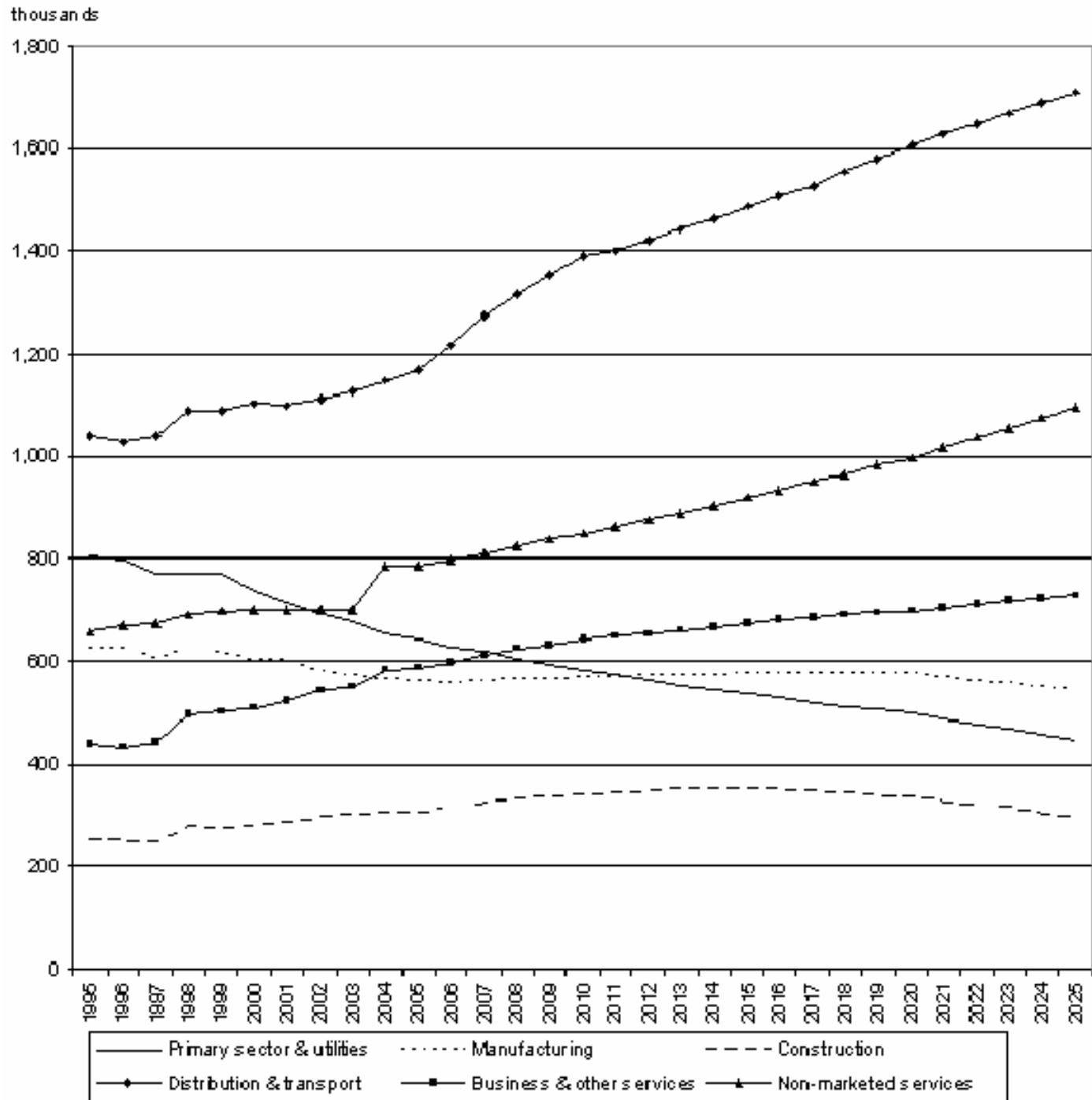
Assumptions underlying the different Country Workbook Series

Country Work-book Series	E3ME	LFS	Constrained match	to	Expansion demand	Qualifications demand	Replacement demand	Published
Series 1	Ad hoc scenario	Published data	E3ME		Time series extrapolation	Time series extrapolation	Average rates imposed	Wilson (2006)
Series 2	Ad hoc scenario	Published data	LFS (E3ME growth rates only)		Time series extrapolation	Time series extrapolation	Average rates imposed	n/a
Series 3	Interim revised scenario	Published data	E3ME		Time series extrapolation	Time series extrapolation	Average rates imposed	Wilson (2007)
Series 4	Interim revised scenario	Published data	LFS (E3ME growth rates)		Time series extrapolation	Time series extrapolation	Average rates imposed	Wilson (2007)
Series 5		Micro data set	To be decided					
Series ?	Final scenarios	To be decided	To be decided		Econometric model	Econometric model	Cohort component model	Final Report
Possible alternatives	Alternative macro and Sectoral scenarios	Published data; Micro data set; EuroFound data set.	E3ME/ NA; LFS; Other		Time series extrapolation Econometric models (various specifications)	Time series extrapolation Econometric models (various specifications)	Fixed rates Cohort components model Alternatives?	

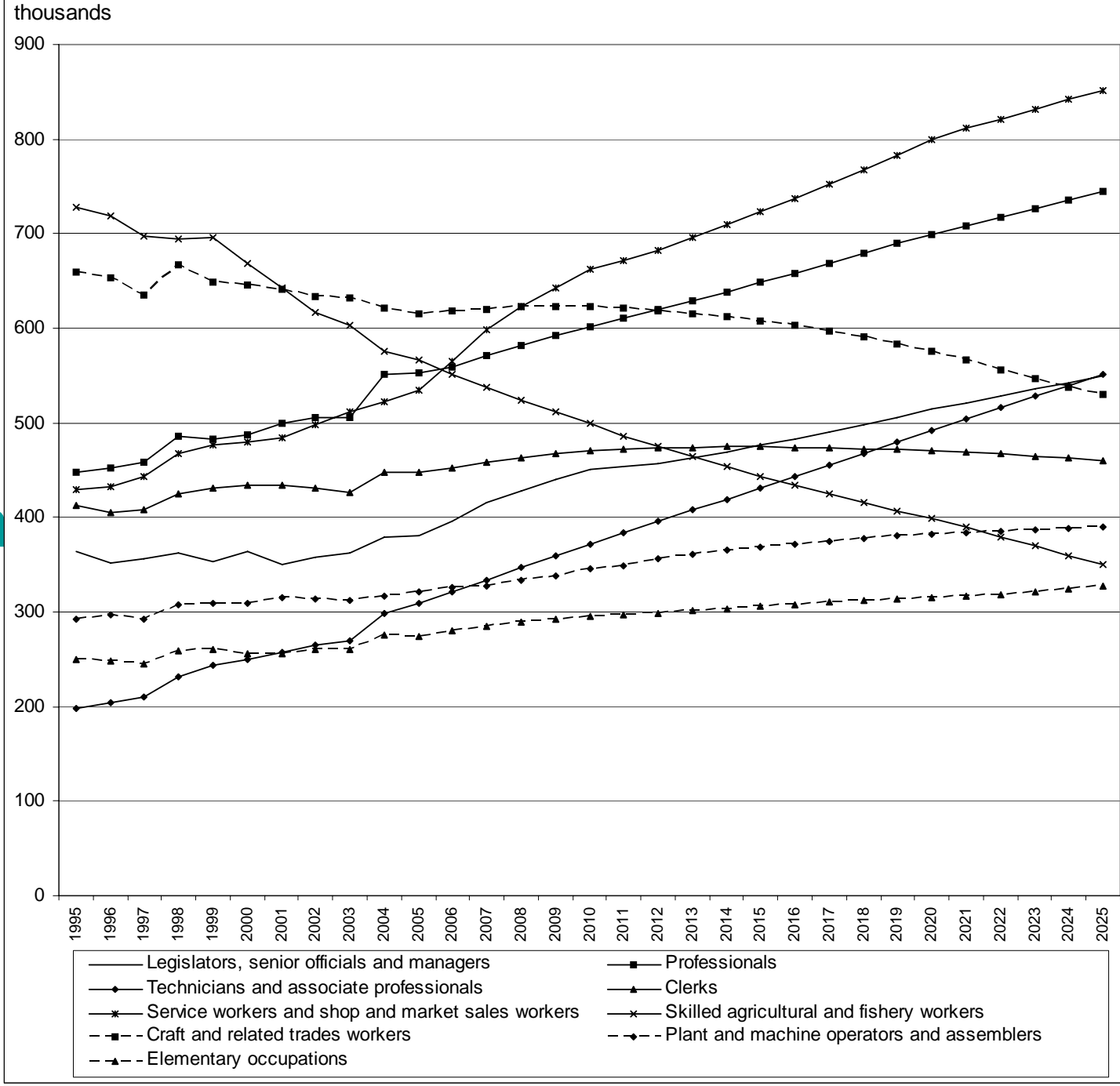
Future Trends: Pan European results

- **by sector (41 industries)**
- **by occupation (27 occupations)**
- **plus replacement demands**

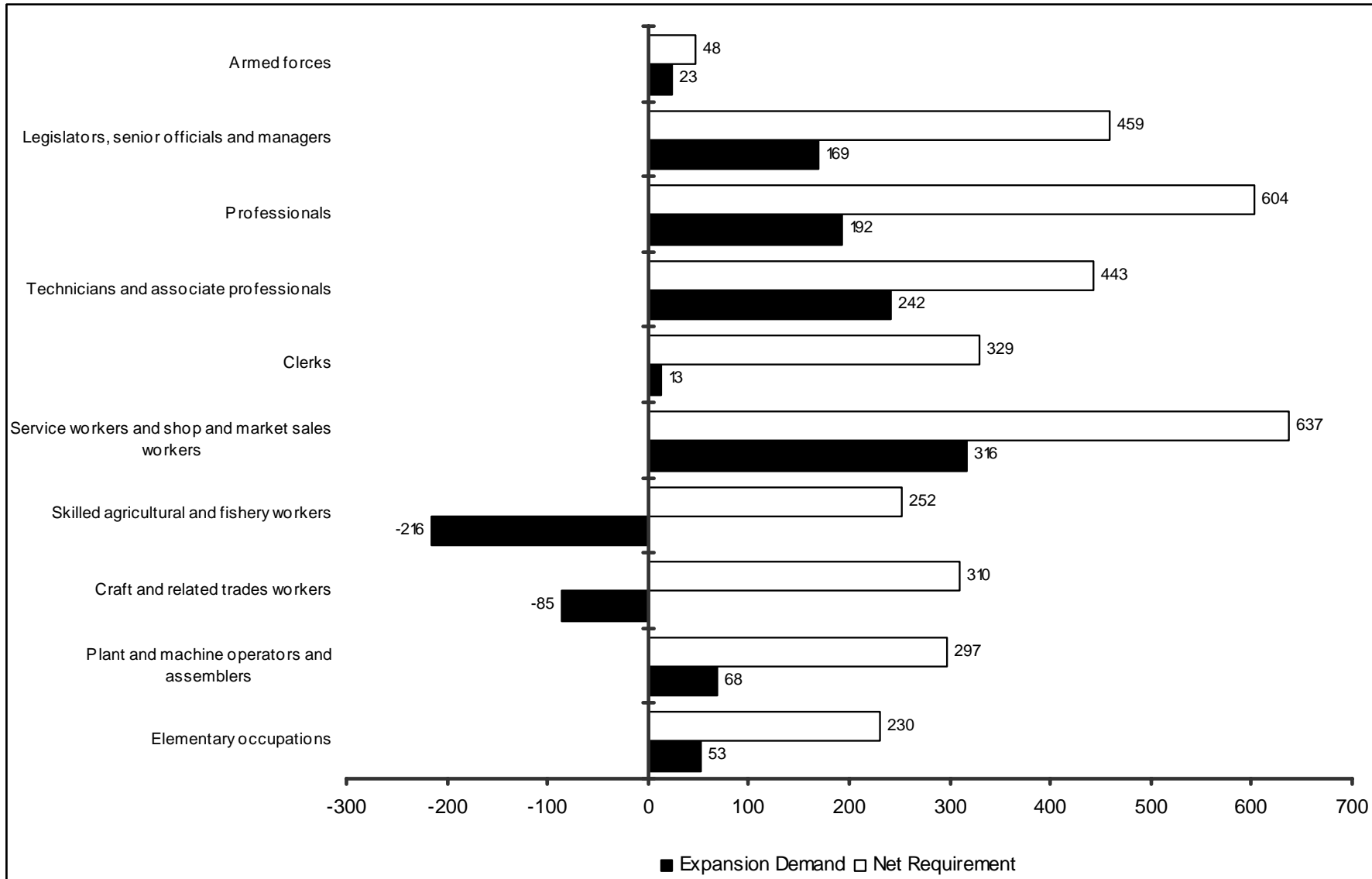
Past and Likely Future trends by Sector (Greece)



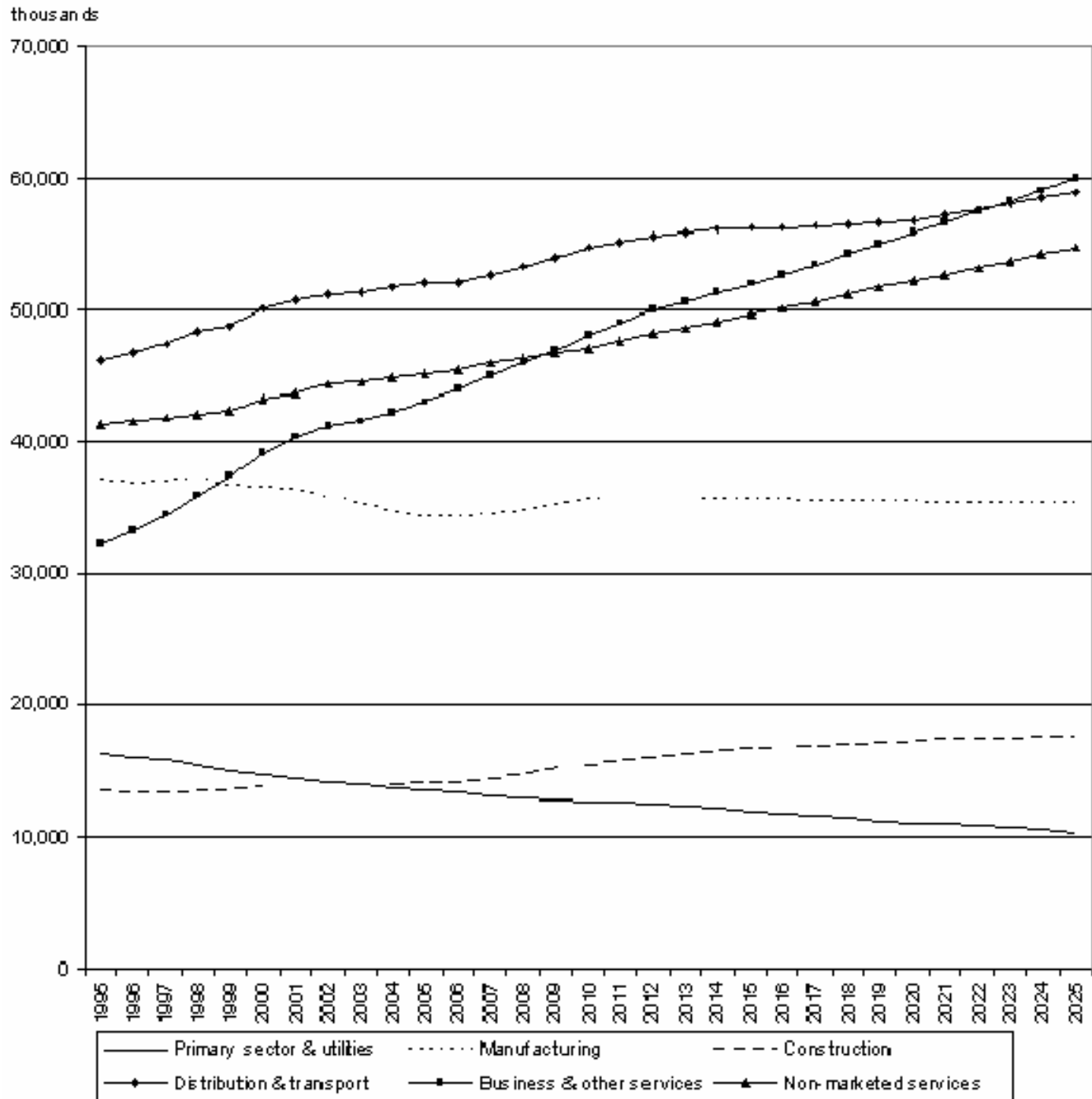
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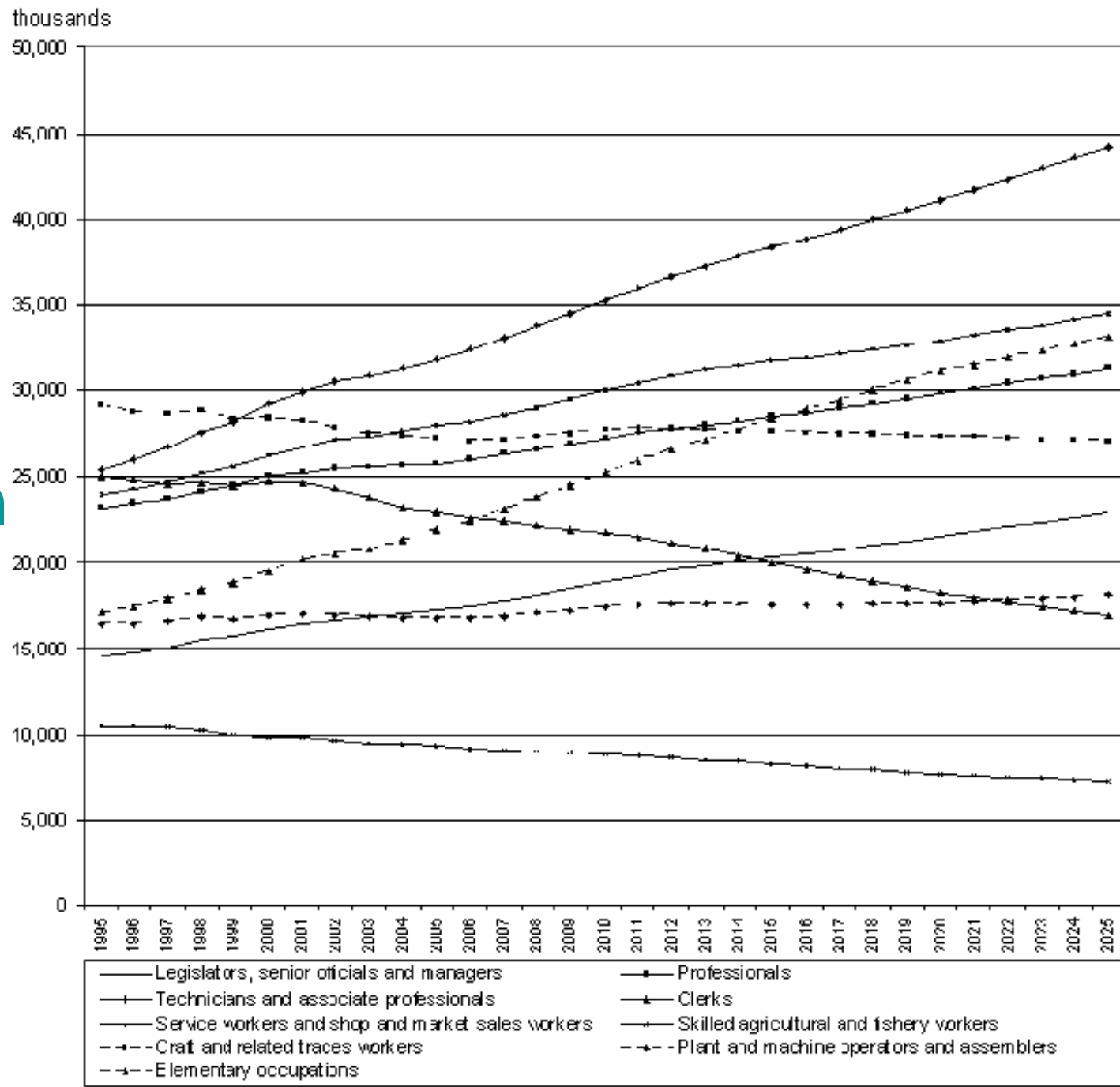
Replacement demands (Greece, 000s)



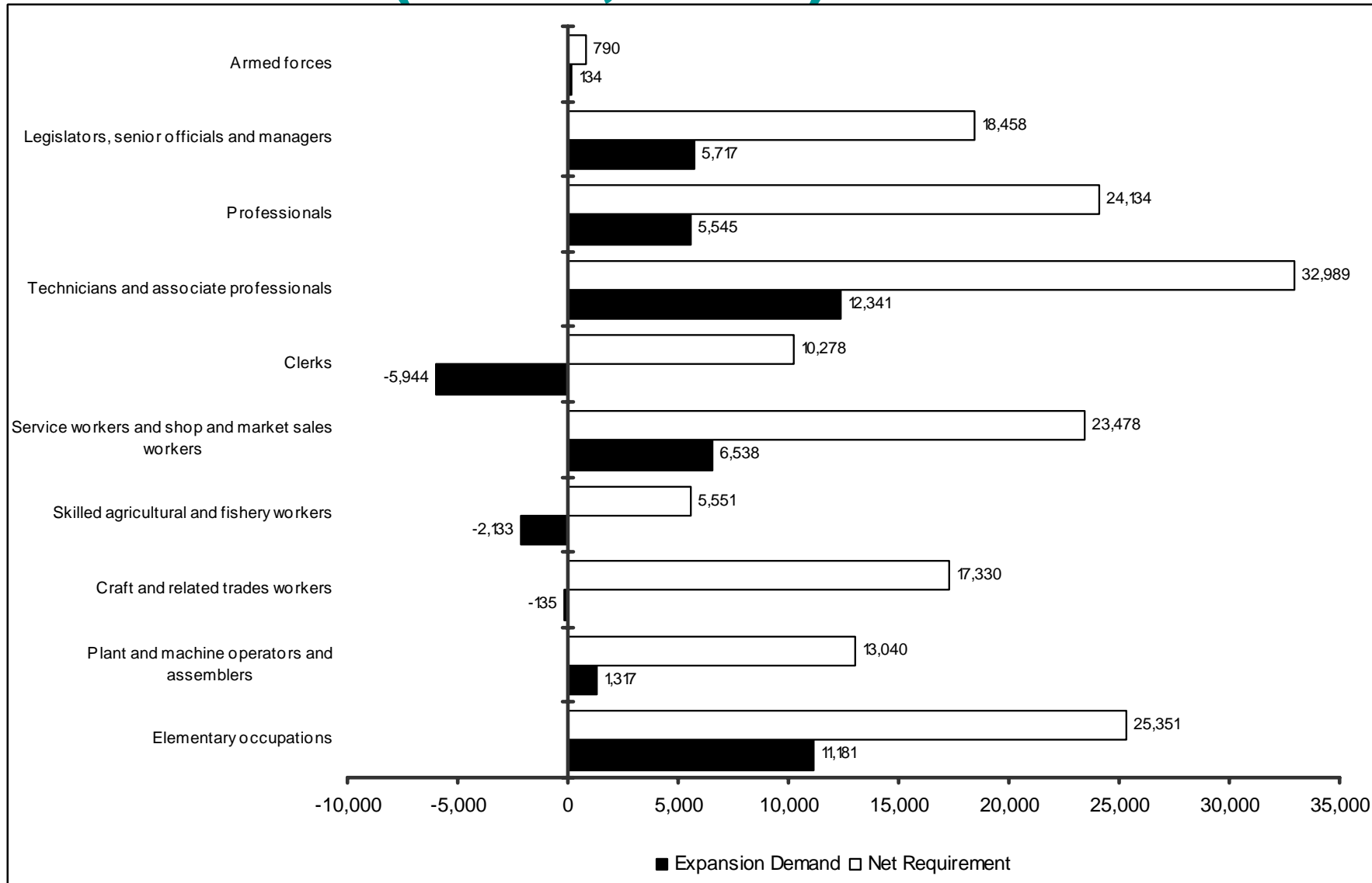
Past and Likely Future trends by Sector (EU25)



Past and likely future trends by occupation (EU25)



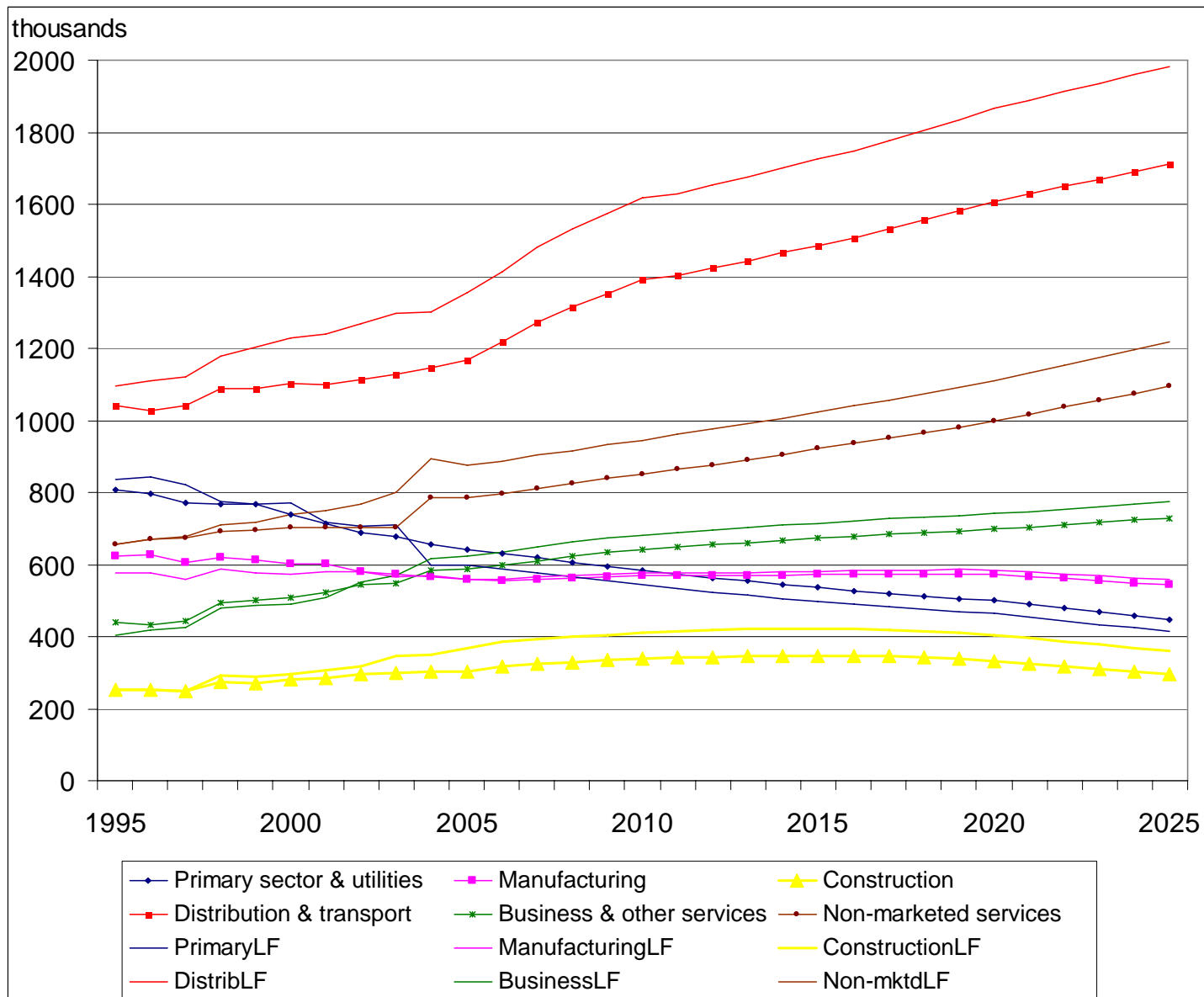
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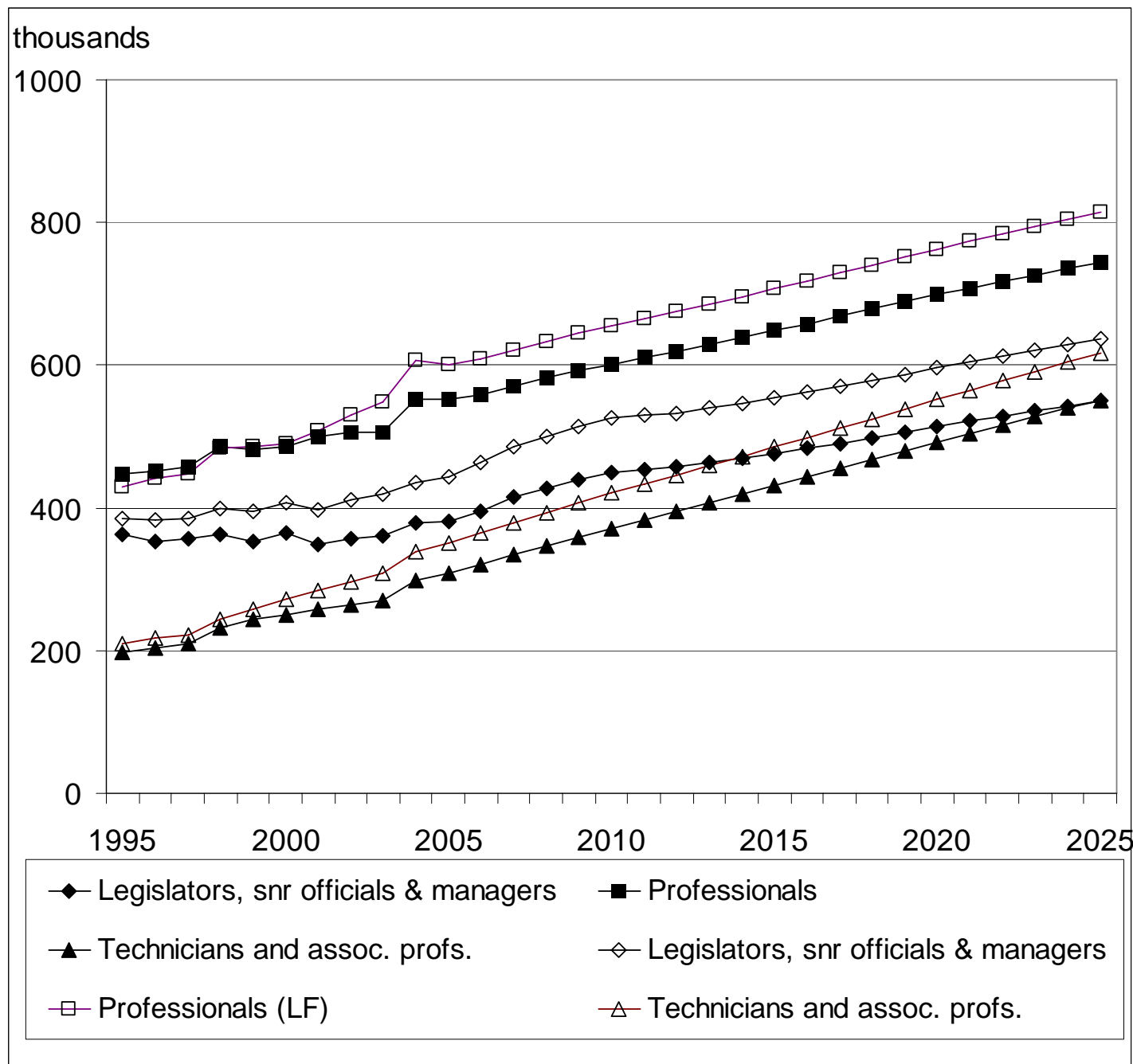
Key similarities and differences across countries

- **Many trends in common:**
 - Sectors
 - Occupations
 - Replacement needs
 - Qualifications
- **But some differences:**
 - Stage of economic development
 - Different industrial & occupational structures

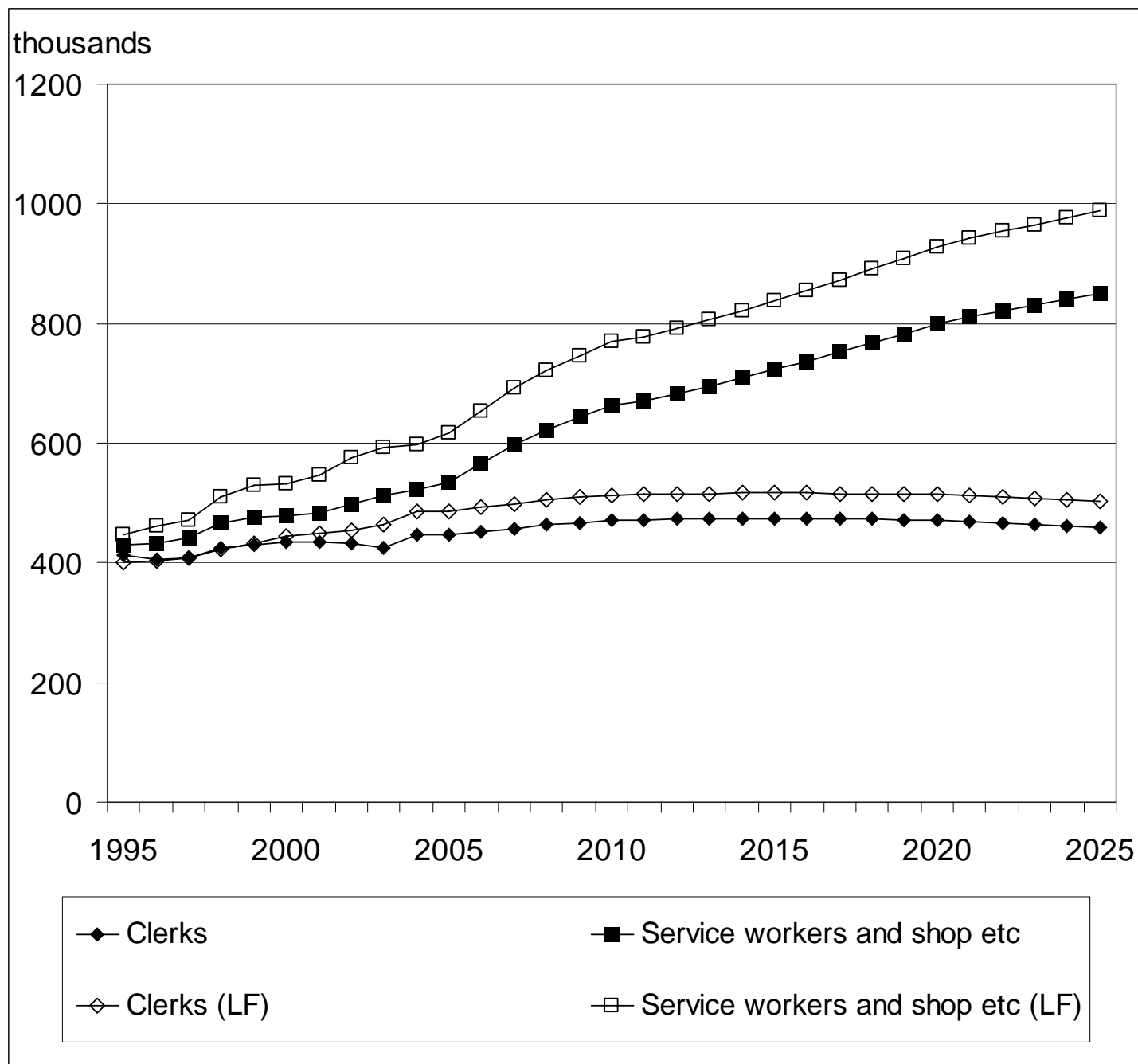
Past and Likely Future trends by Sector (Greece), LFS & NA basis compared



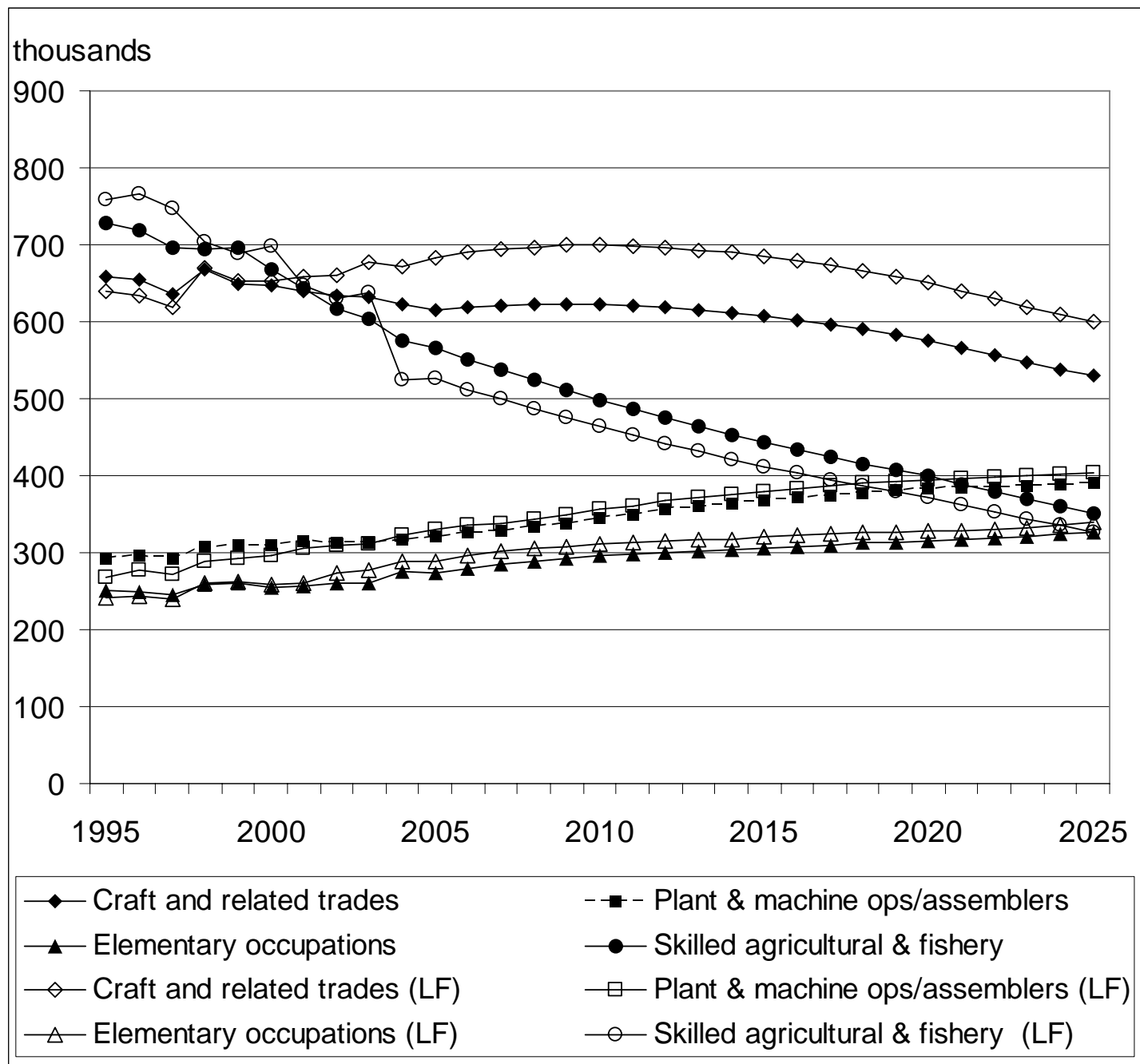
Past and likely future trends by occupation (Greece), LFS & NA compared (higher level occs.)



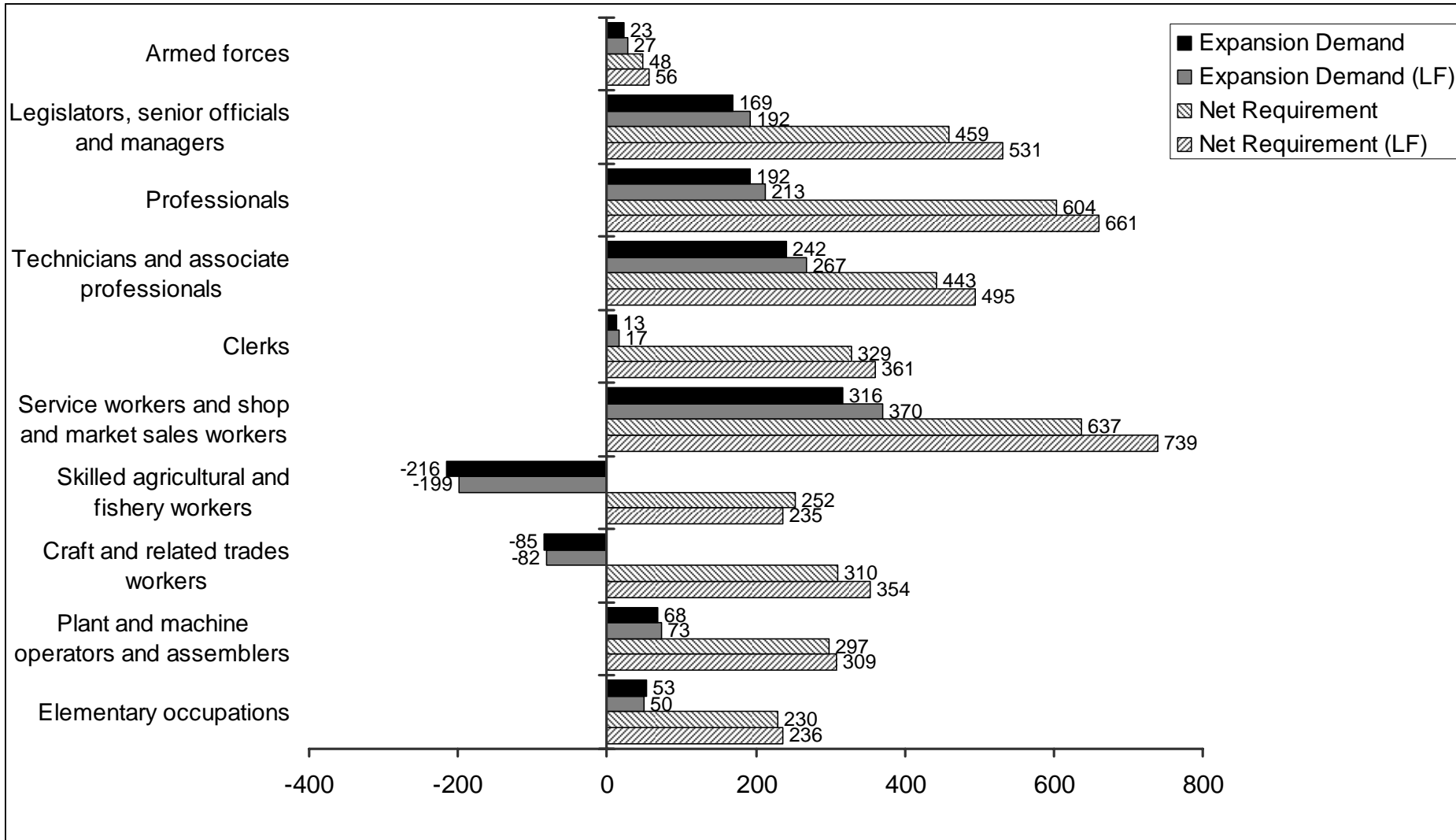
Past and likely future trends by occupation (Greece), LFS & NA compared (lower level non-manual occs.)



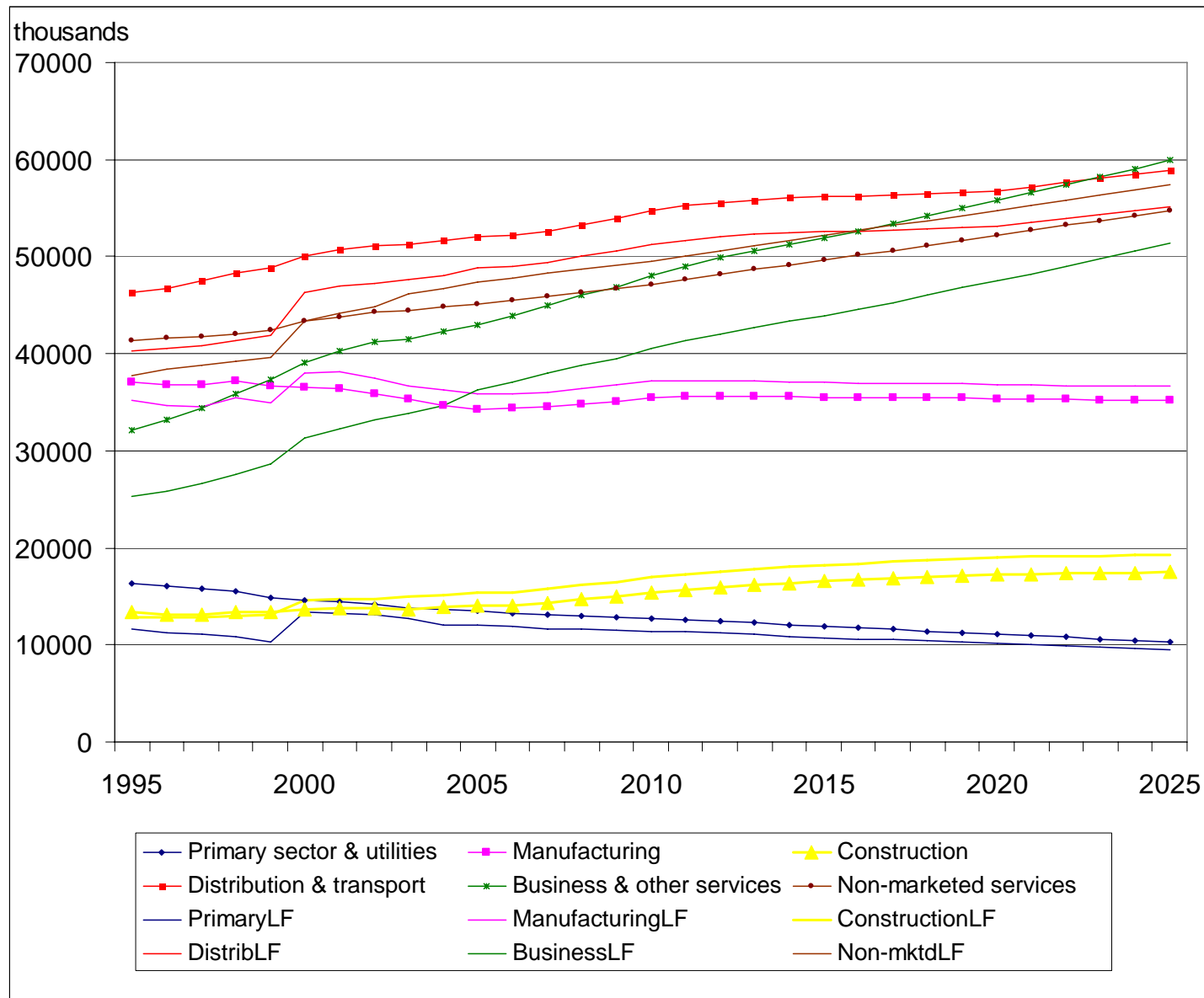
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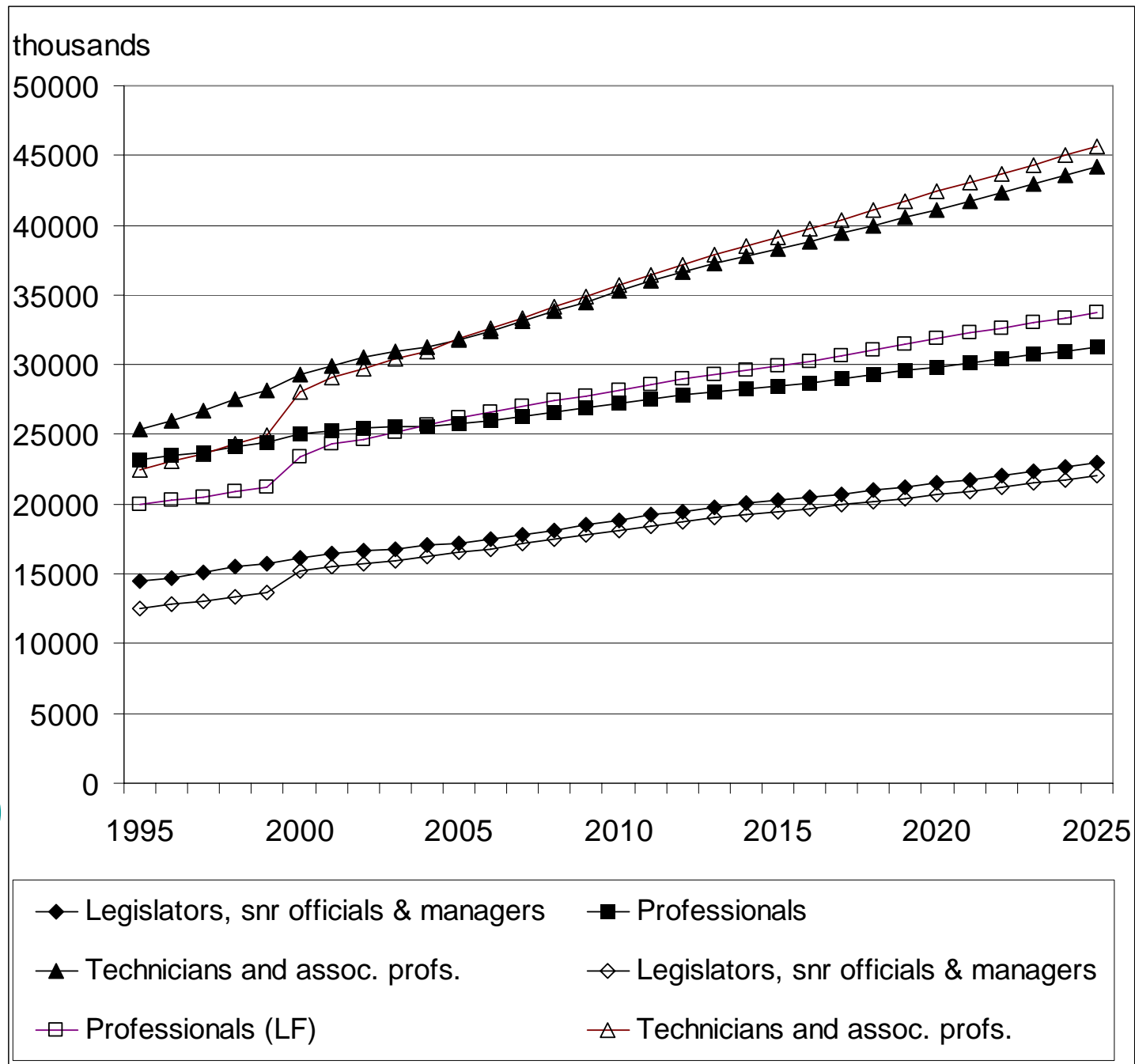
Replacement demands, LFS & NA basis compared (Greece, 000s)



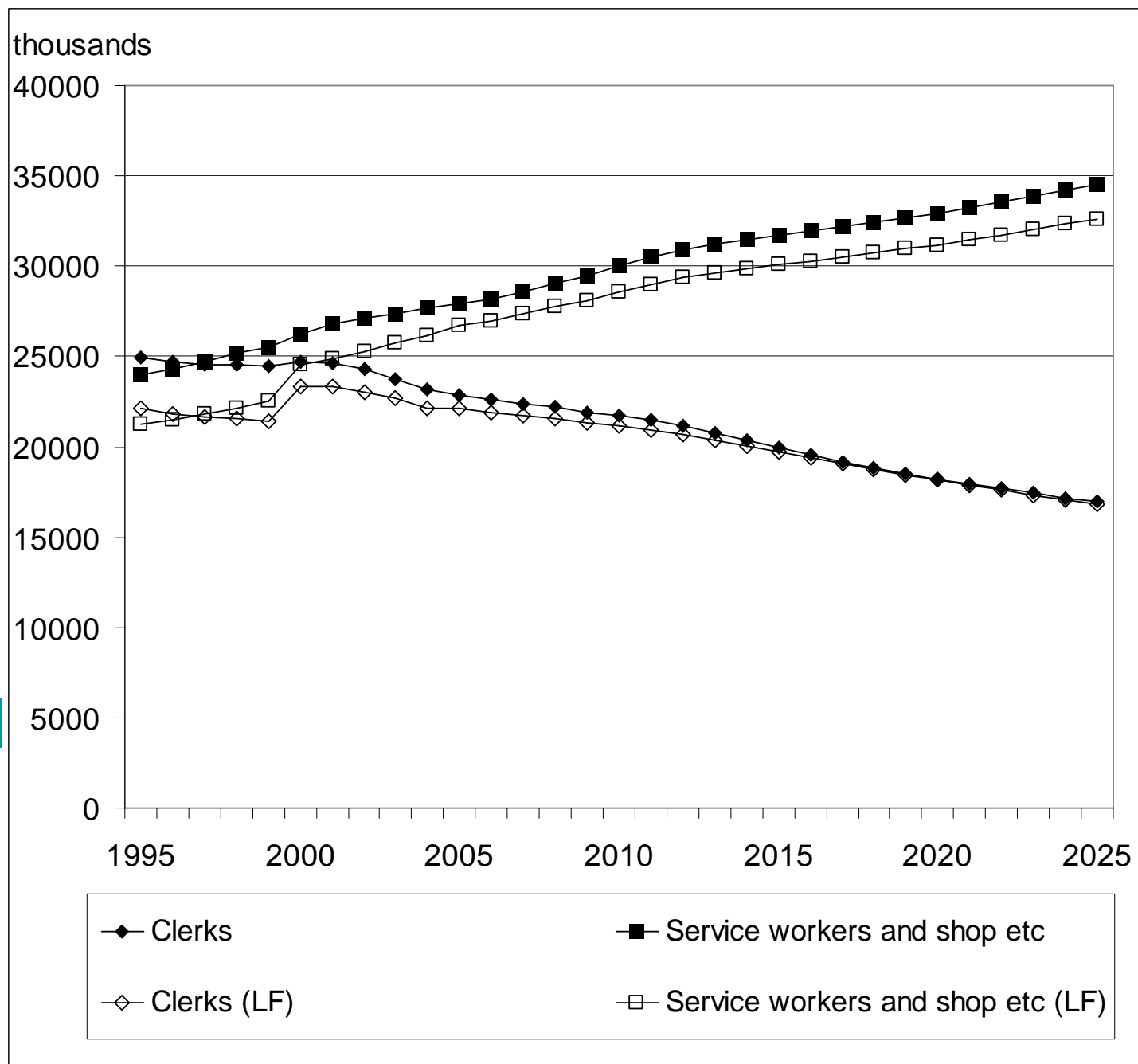
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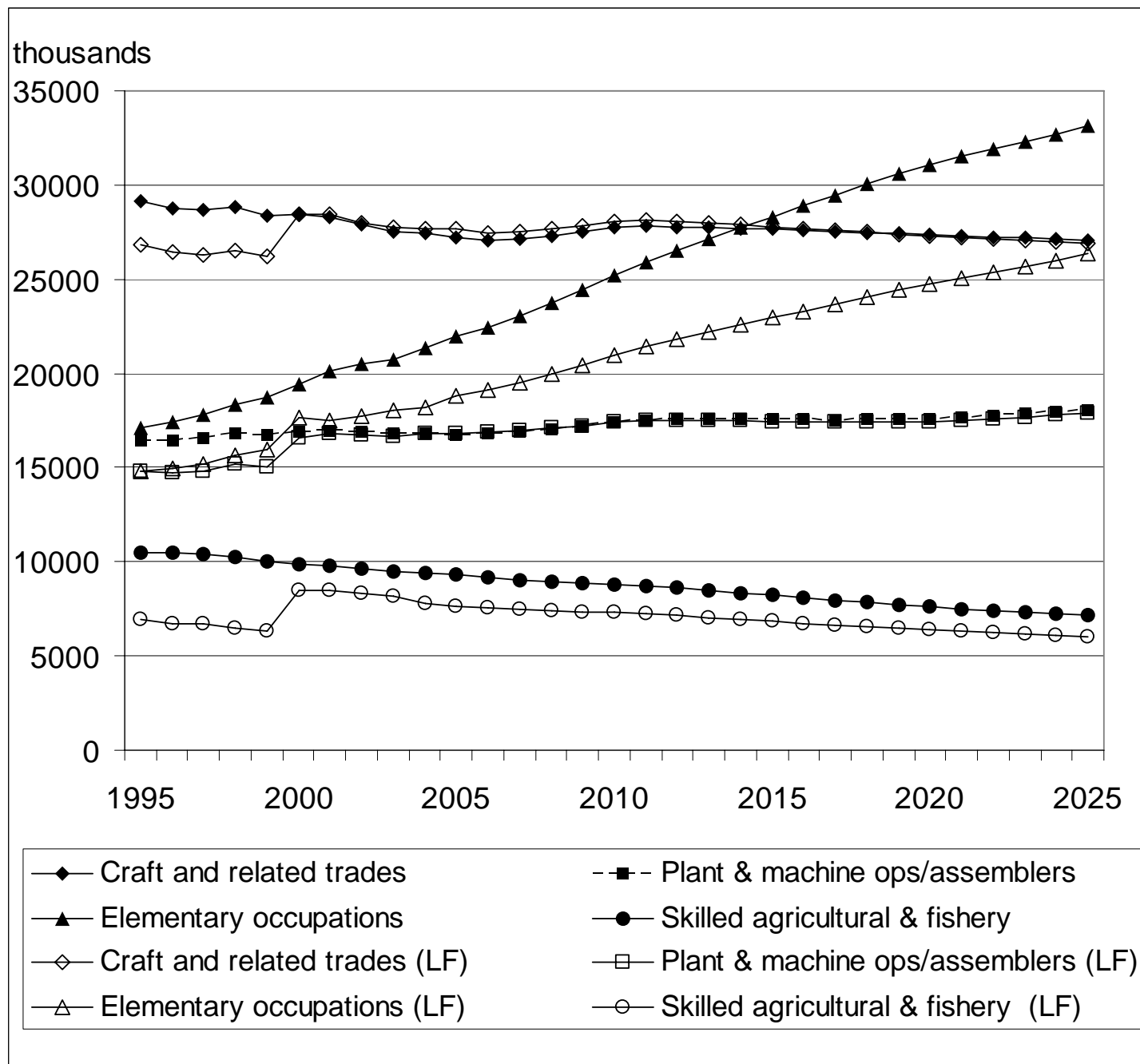
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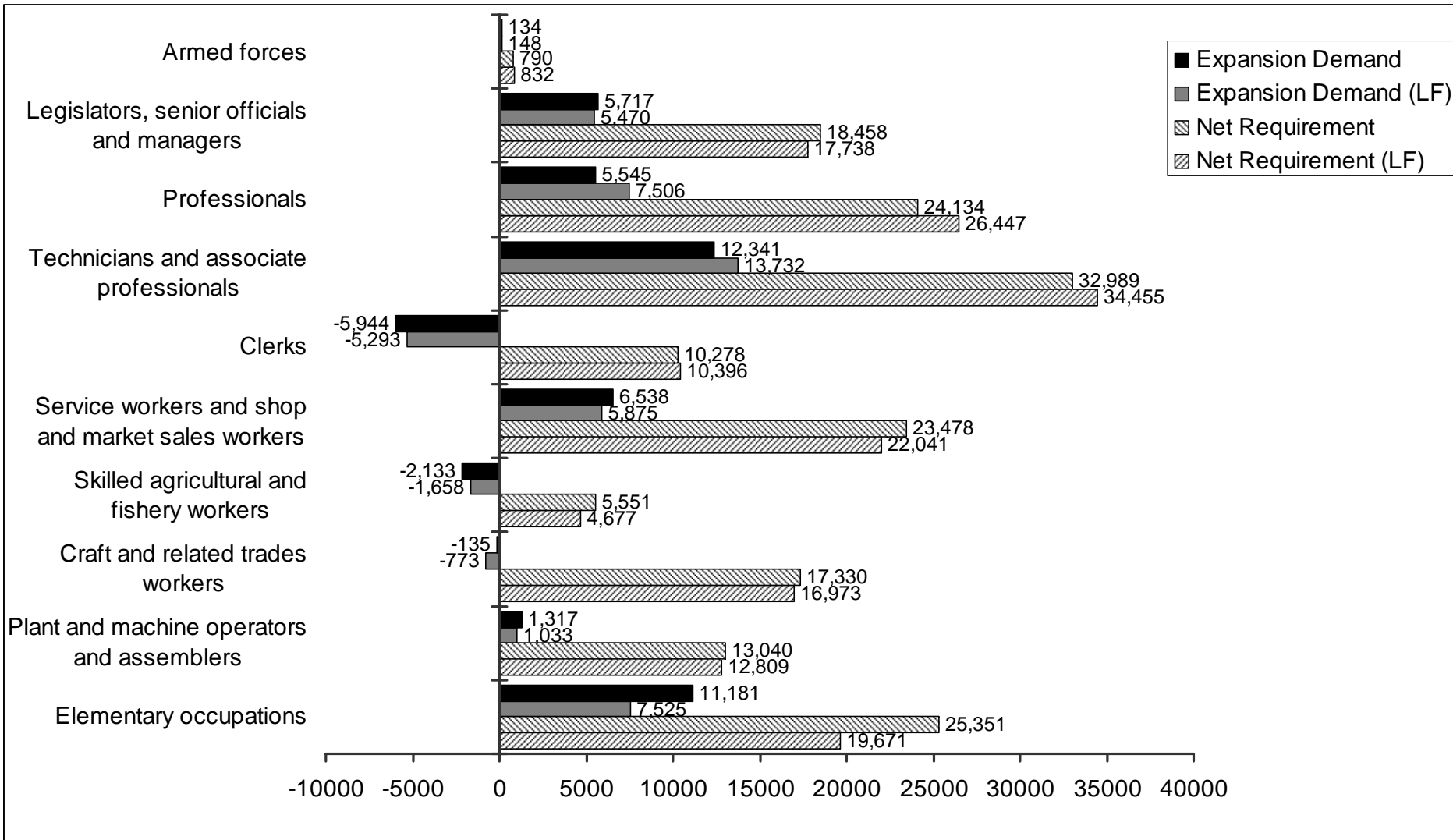
Past and likely future trends by occupation (EU25), LFS & NA compared (lower level non-manual occs.)



Past and likely future trends by occupation (EU25), LFS & NA compared (manual occs.)



Replacement demands, LFS & NA basis compared (EU25, 000s)



Next Steps

- **Outstanding data problems**
- **Continuing dialogue- importance of individual country expert input**
- **Scope for further refinement in modelling & scenarios**
- **Timetable for completion of the project**

Timetable for completion of the project

- **Following further dialogue reach a consensus about historical data.**
- **Finalise the macroeconomic and multisectoral scenarios.**
- **Complete econometric modelling work**
- **In combination these elements will produce a final set of projections.**
- **Draft report in the early autumn.**
- **Final results to be made public in 2008.**

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