



CEDEFOP

European Centre for the Development
of Vocational Training

Alphametrics (AM)



Alphametrics Ltd

ce *cambridge*
econometrics

connecting you to the future

Forecasting skill supply and demand in Europe: Developing a Stock-Flow model based on LFS data

**SKILLSNET TECHNICAL WORKSHOP
15-16 June 2010, Thessaloniki, Greece**

Rob Wilson

**Institute for Employment Research,
University of Warwick, United Kingdom**



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



Overview

- **The Cedefop approach to pan-European Forecasting of skill needs and supplies**
- **The current treatment of supply**
- **Building on some national level experience from the UK**
- **Key issues**
- **Next steps**

Current treatment

- **Focus on stocks and changing patterns by qualifications using Eurostat LFS data**
- **Separate treatment of flows using different data sets**
- **Little scope for integration**
- **Problems with implications for cohorts**
- **Is it possible to exploit the LFS further, focusing on pseudo cohorts?**

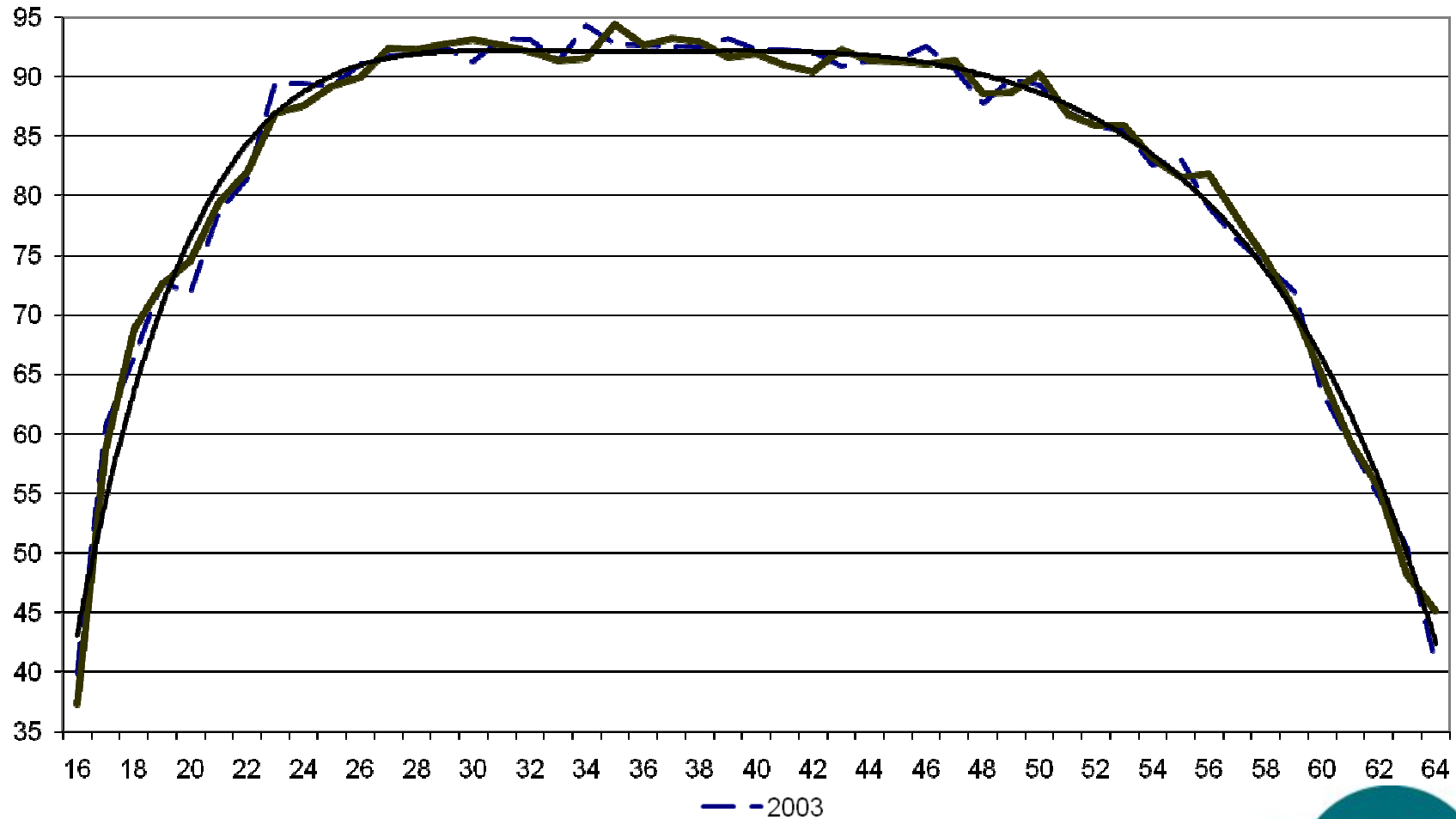
The UK National stock-flow model

- examines the shares in the population by age and gender that have acquired certain levels of (highest) qualifications using UK LFS data (no distinction is made between vocational & other quals.)
- future numbers produced by linking projected shares to demographic projections of population numbers by age and gender
- models qualification acquisition as individuals grow older (e.g. 16 -> 17 -> 18 ... ->28 years of age)
- trends in qualification levels are used to provide simple forecasts of qualification breakdown

Characteristics of the UK stock-flow model

- differentiates between economically active and inactive, but main focus is on the economically active
- activity rates by gender, age and level of qualification are forecast separately, based on past trends, separately
- treatment of migration is implicit

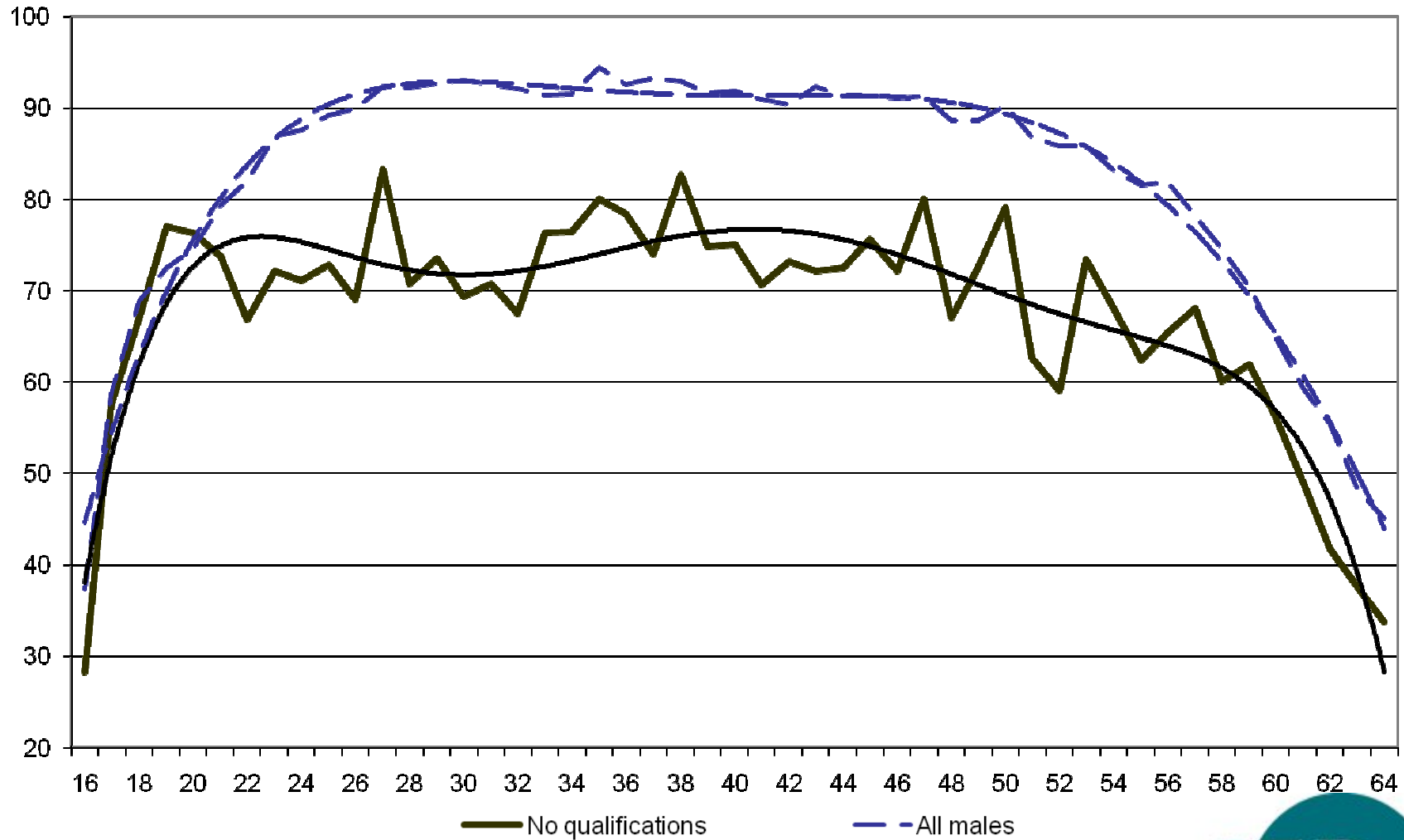
Activity rates males, by age, UK



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



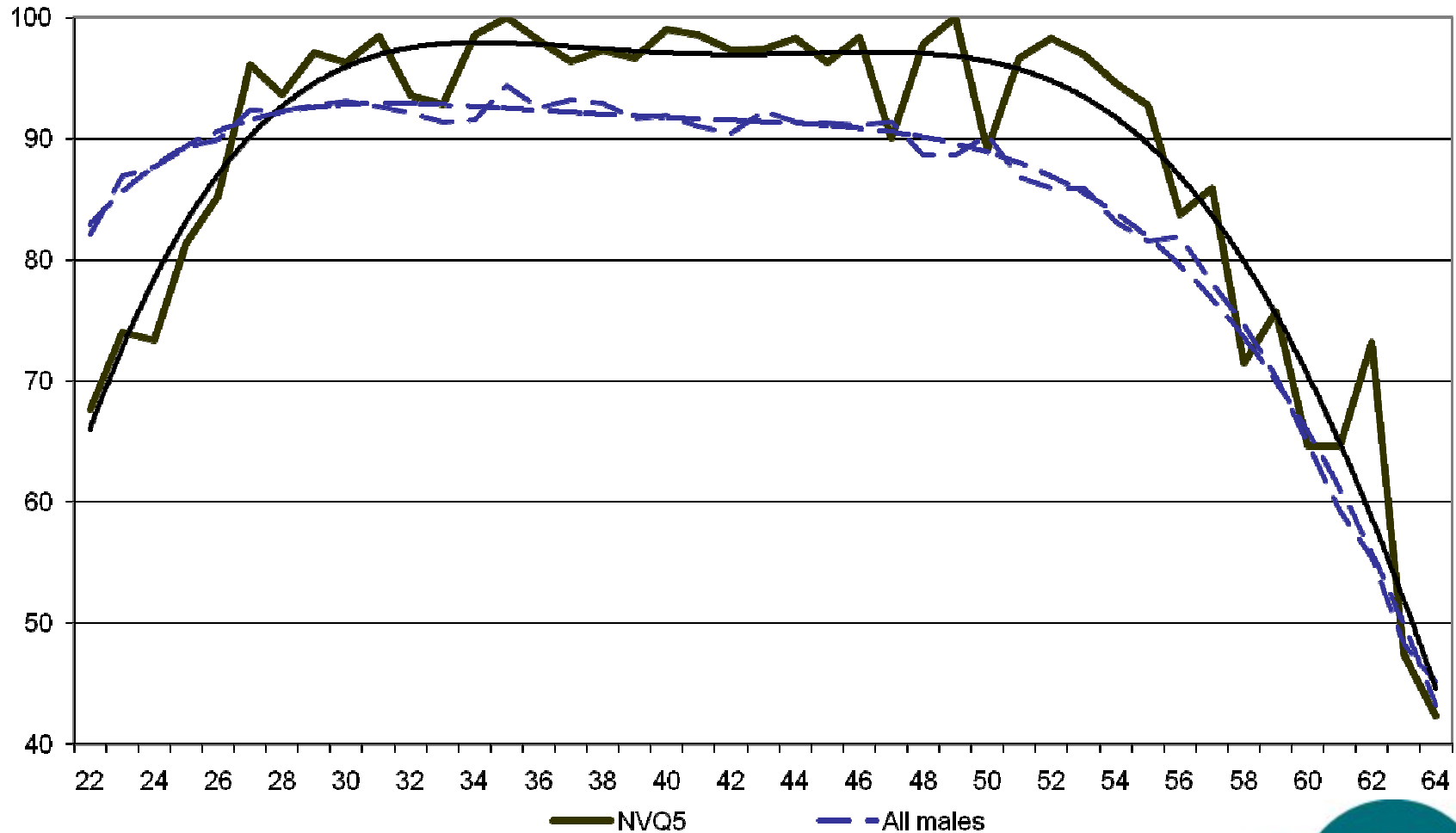
Activity rates, males, no qualifications



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



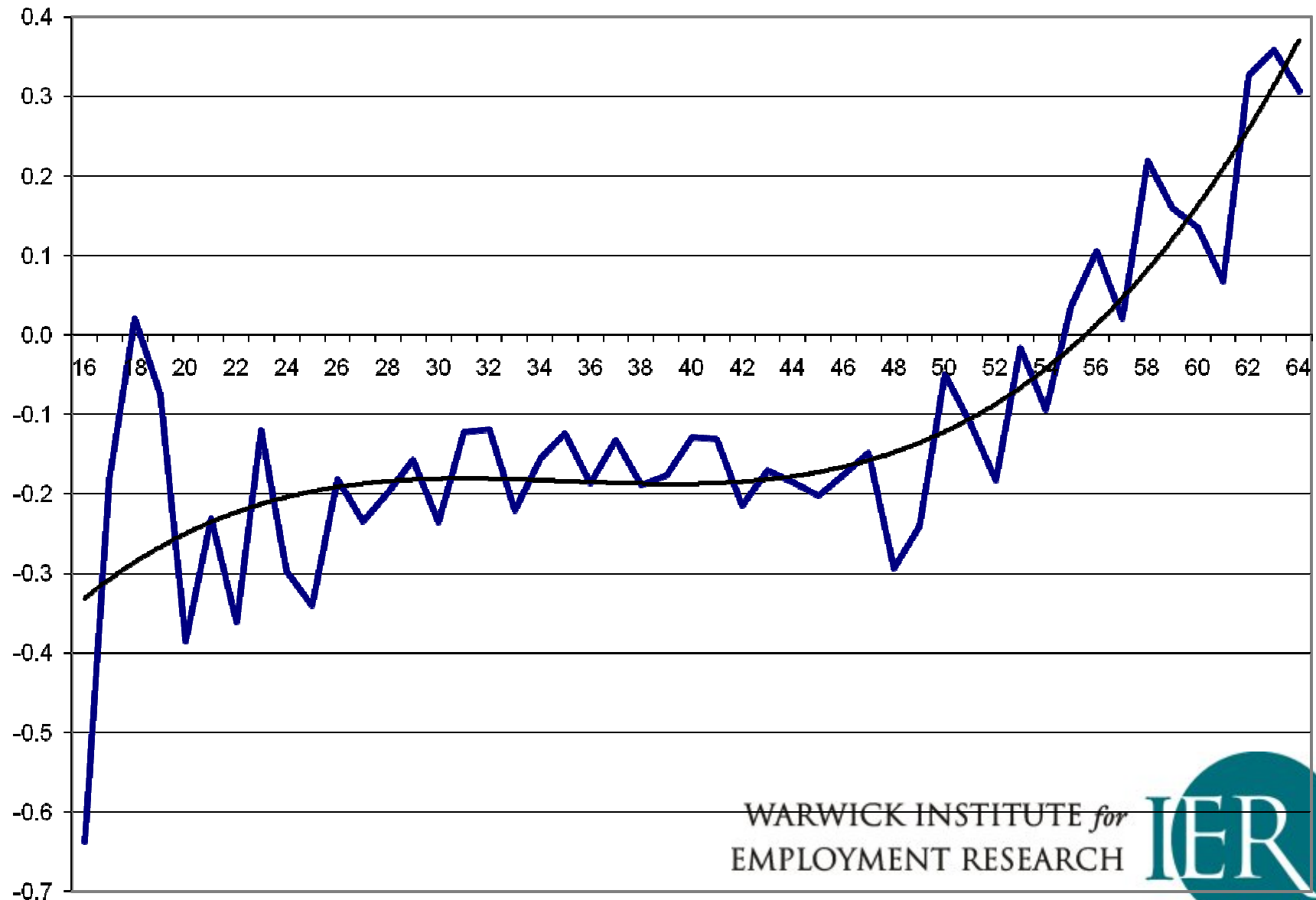
Activity rates, males, NQF 5



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



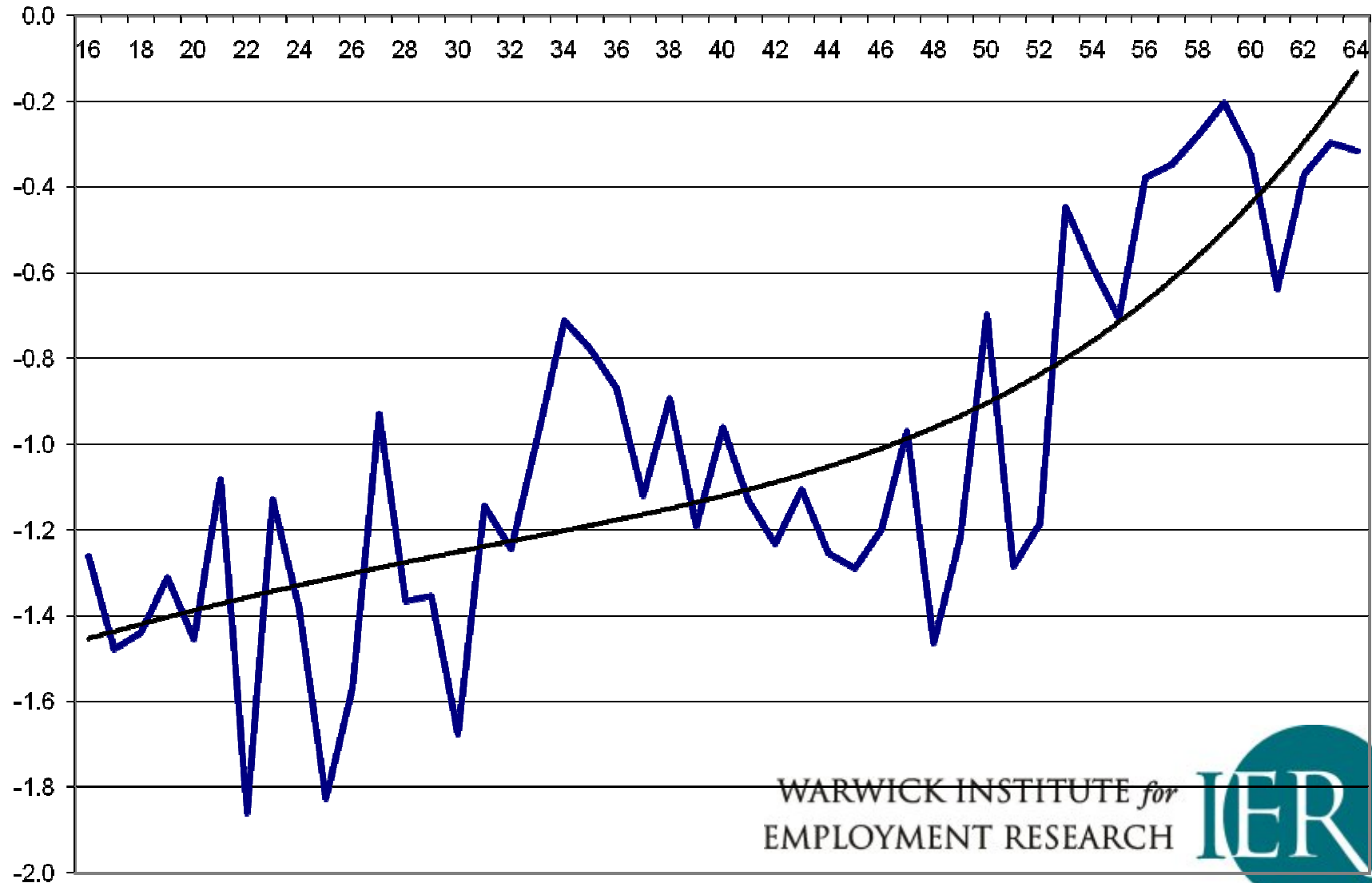
Annual % changes to male activity rates



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH

IER

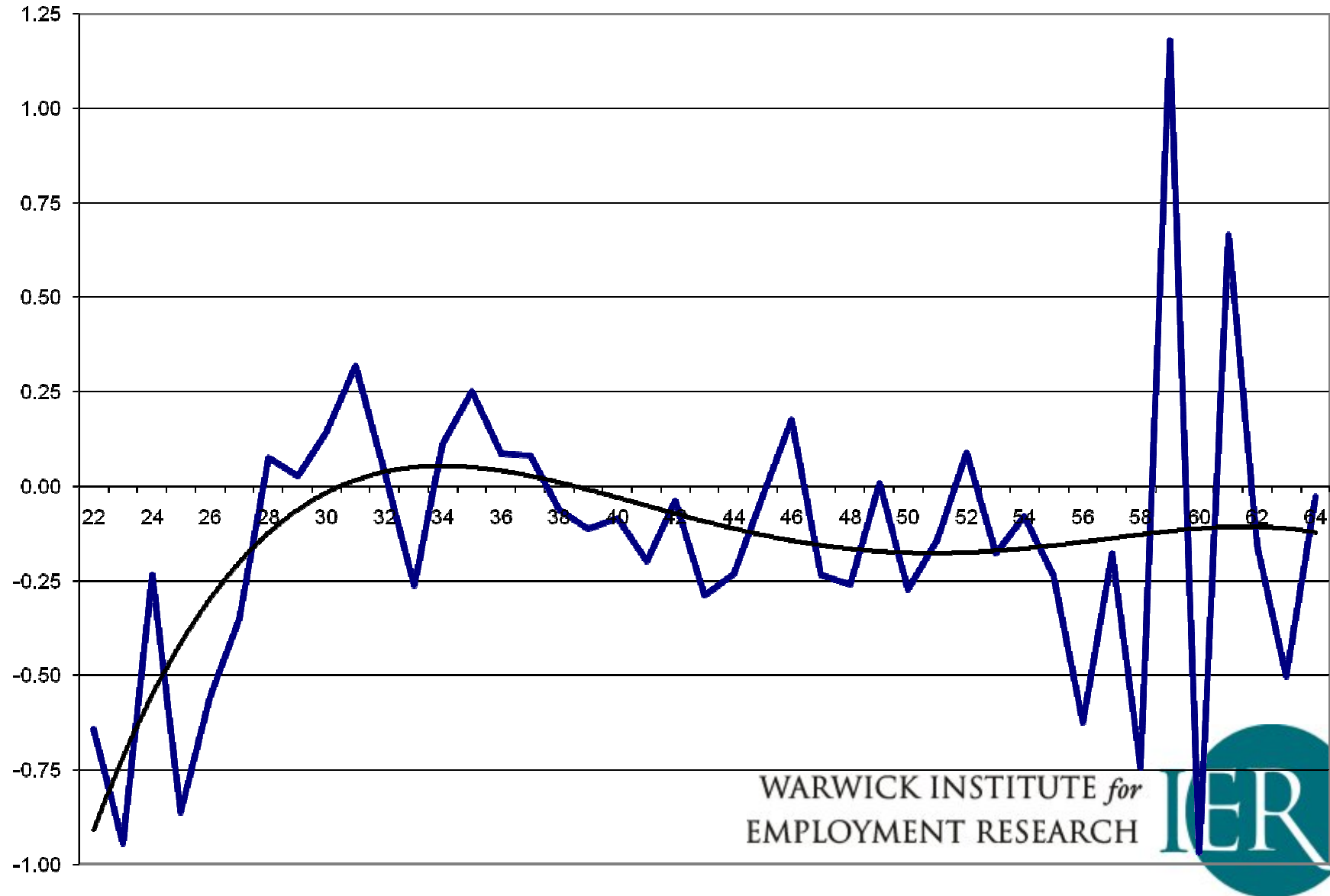
Annual % changes to male activity rates, no qualification



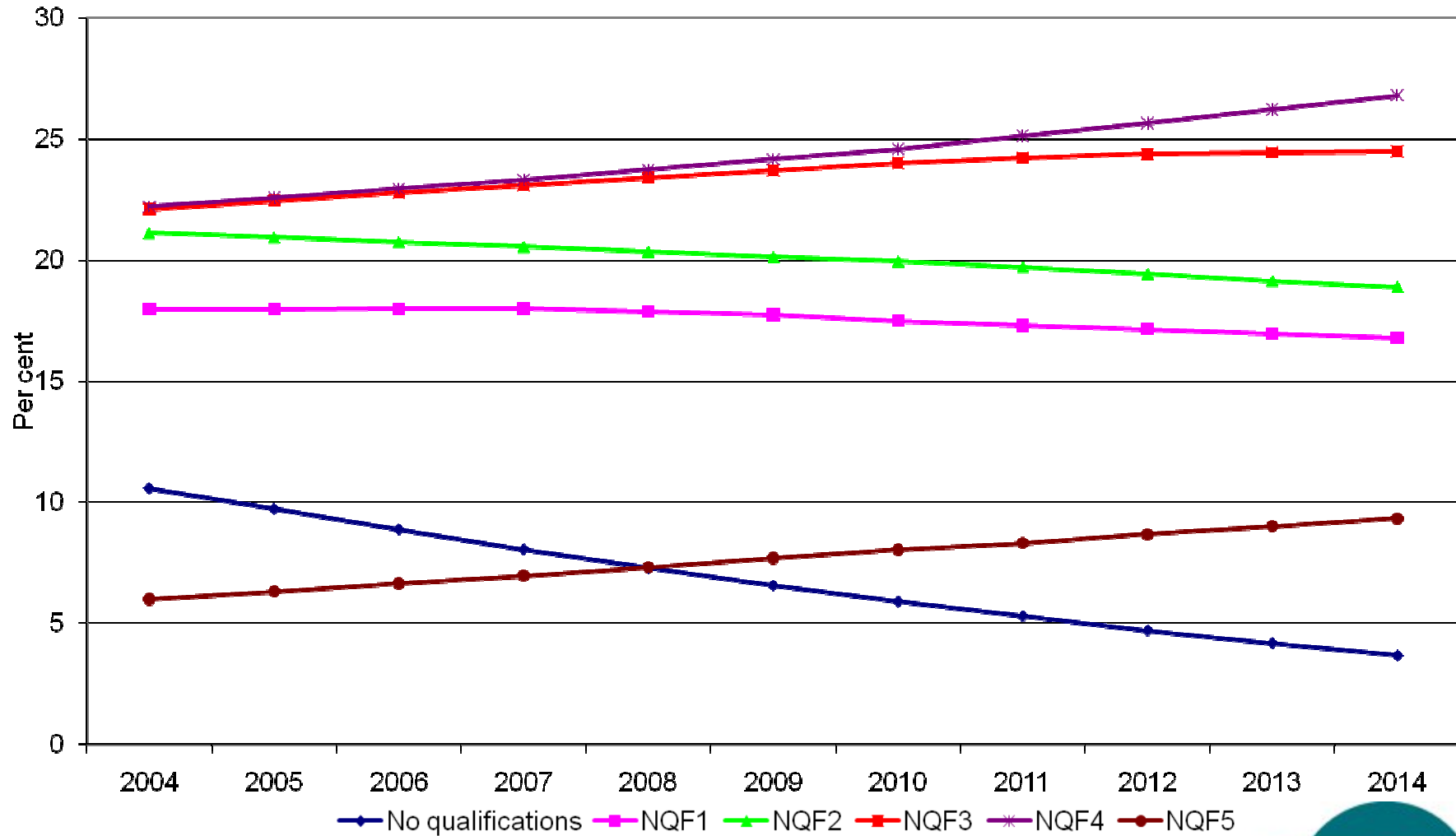
WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



Annual % changes, male activity rates, NQF5



Forecast for males



WARWICK INSTITUTE *for*
EMPLOYMENT RESEARCH



Implications for the Cedefop approach

- **Modular approach enables change to methods (can be different for different countries)**
- **But aim to retain common models and data**
- **By end of year establish feasibility of adopting this approach for UK and some other countries, using European LFS data**

Contact Details

Rob Wilson

Institute for Employment Research

University of Warwick

COVENTRY, CV4 7AL

r.a.wilson@warwick.ac.uk

Tel: +(44) 2476-523530