Session 3: Discussing future trends and possible scenarios

Presentation at *Skillsnet* expert seminar on methodology and new ideas

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Overview

- **Baseline projections**
    - generating the baseline projections
    - summary of results
    - key trends and drivers
- **Sensitivity analysis**
    - to investigate key uncertainties
- **Summary**

Using E3ME to generate the baseline projections
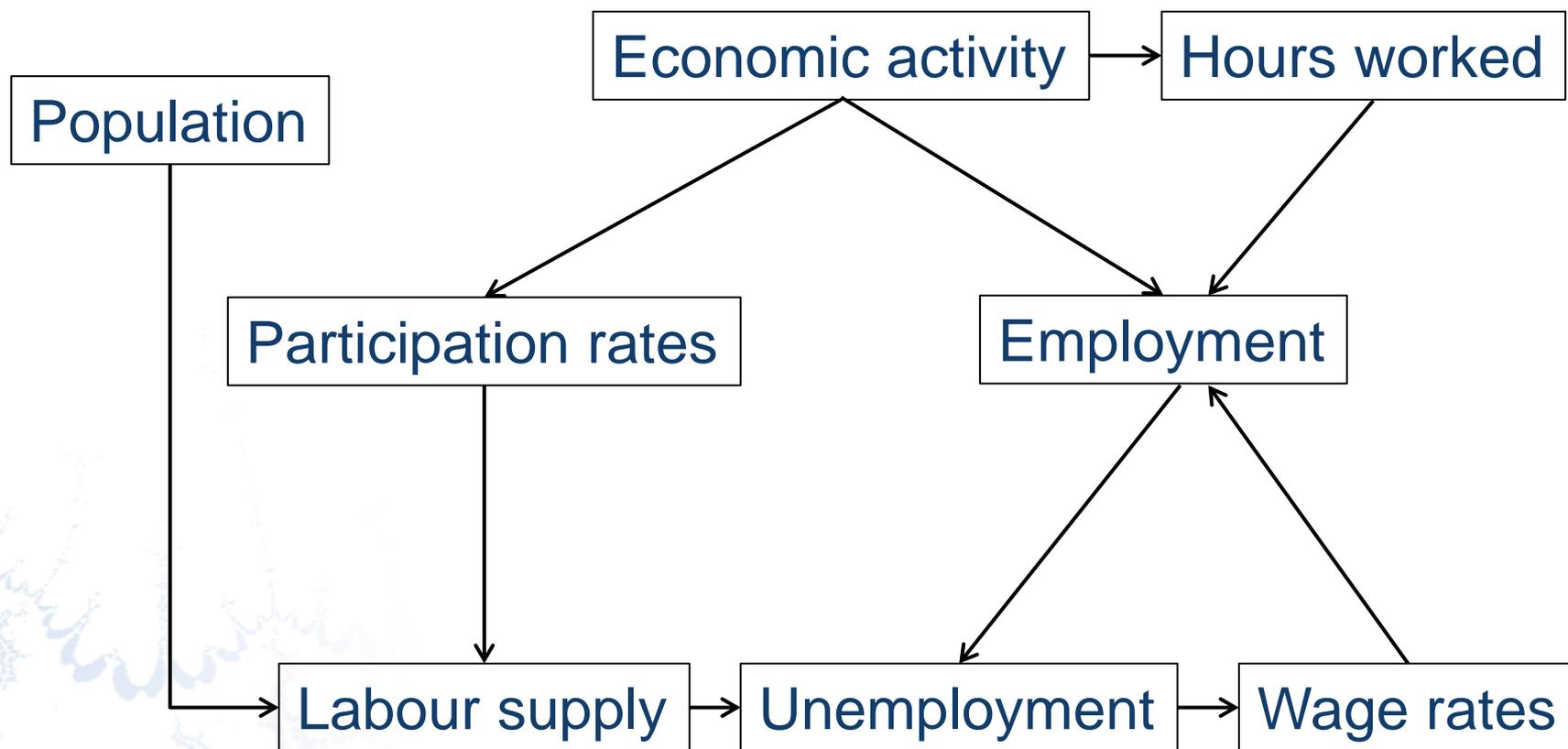
GDP growth is assumed to recover gradually

GDP growth, % pa, annual average 2013-2020
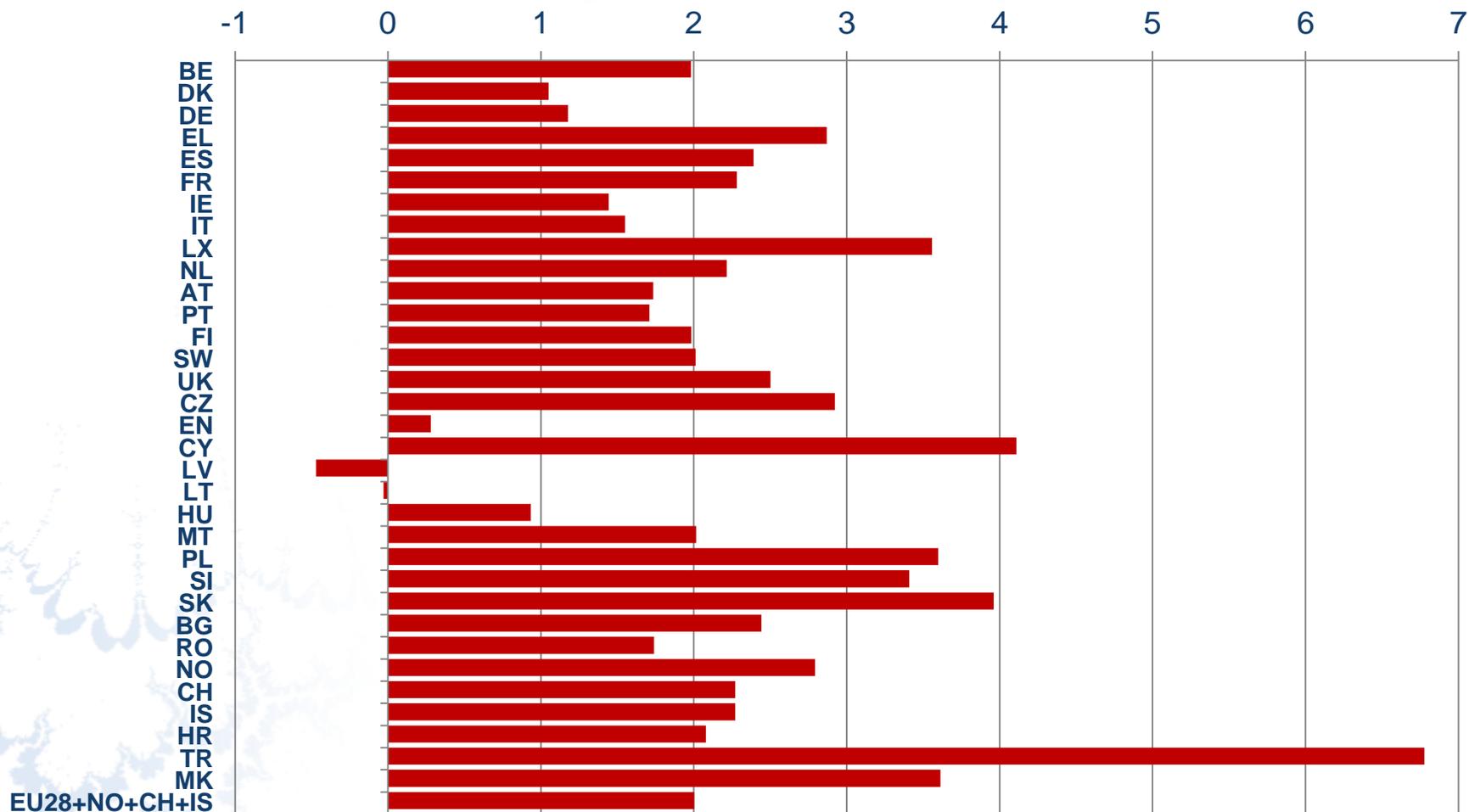
Only modest growth of employment is projected

employment growth, % pa, annual average 2013-2020
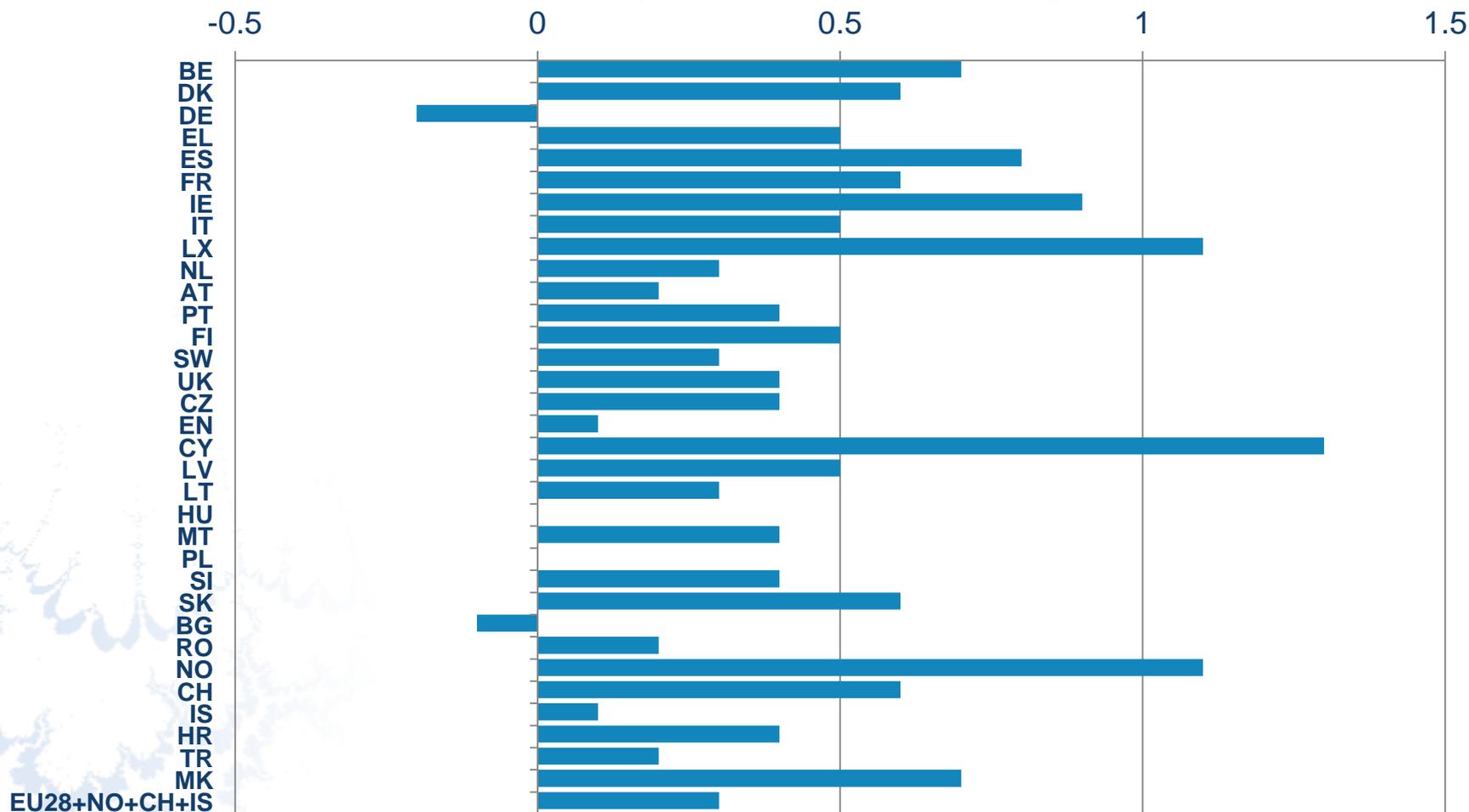
Service sectors will continue to support the fastest employment growth

employment growth, % pa, annual averages
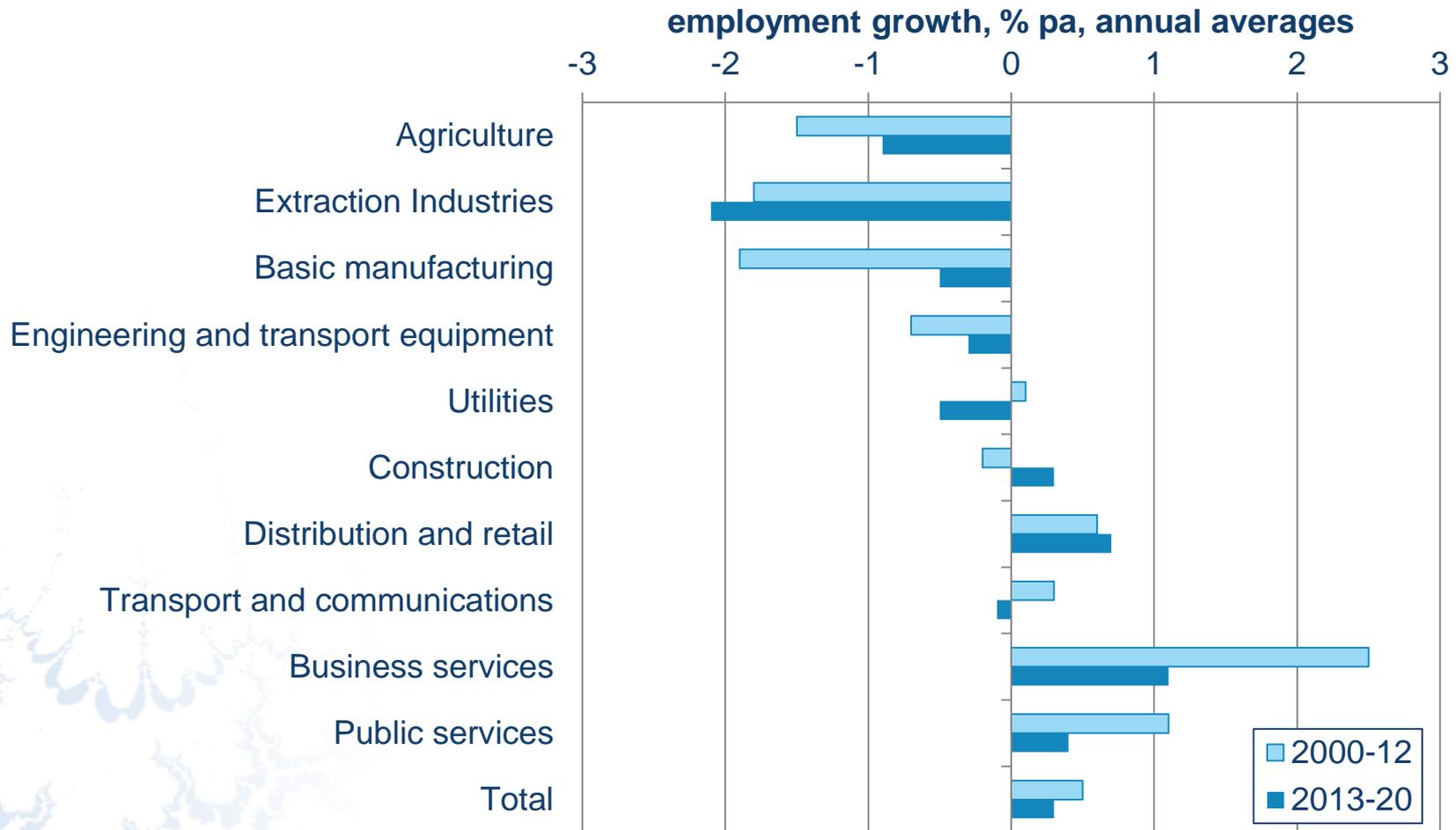
Note(s): For EU28 plus Norway, Switzerland and Iceland.

Modest growth of the labour force will be due to higher working-age population
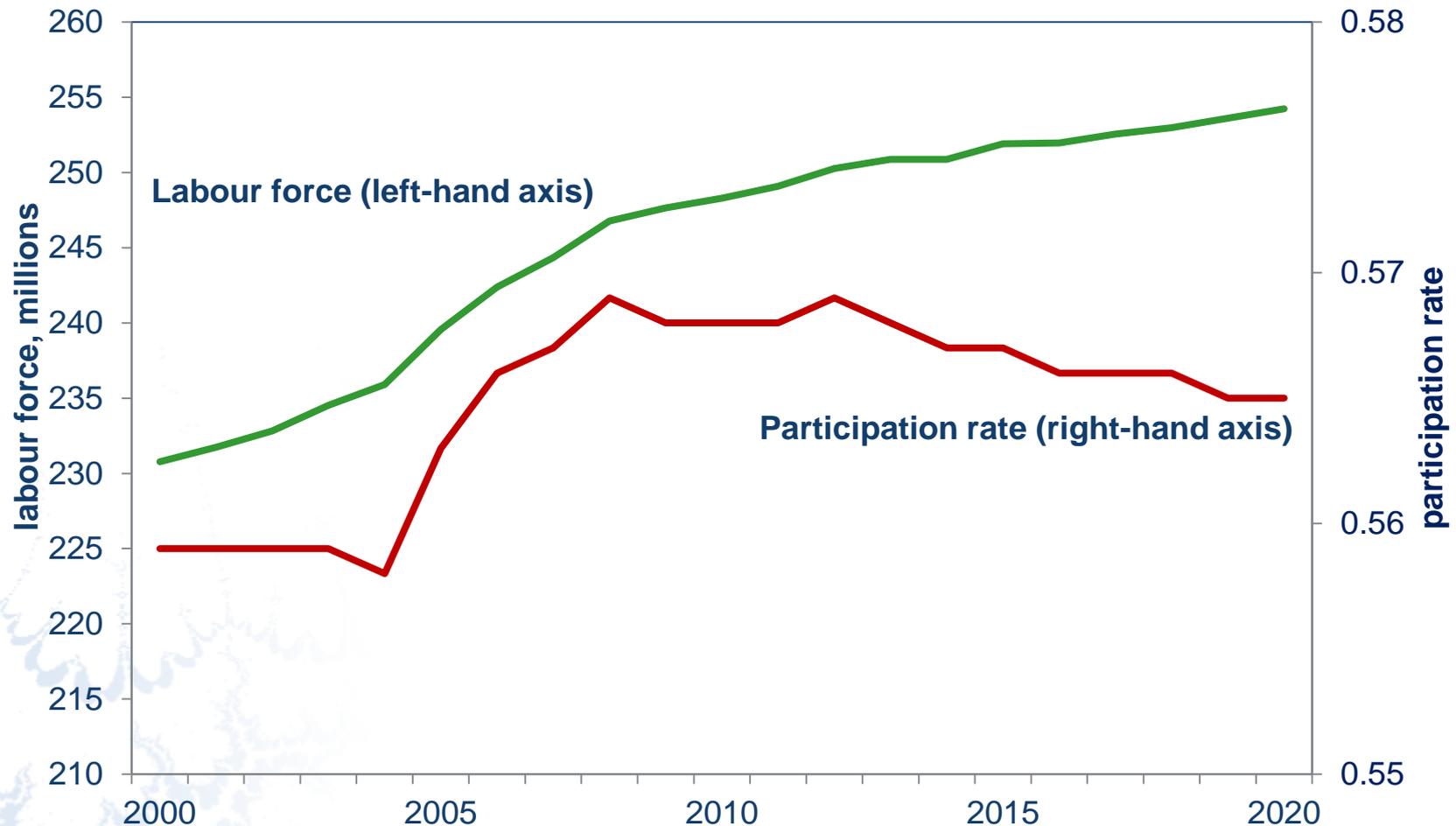
Note(s): For EU28 plus Norway, Switzerland and Iceland.

In many countries unemployment will remain higher than pre-recession rates
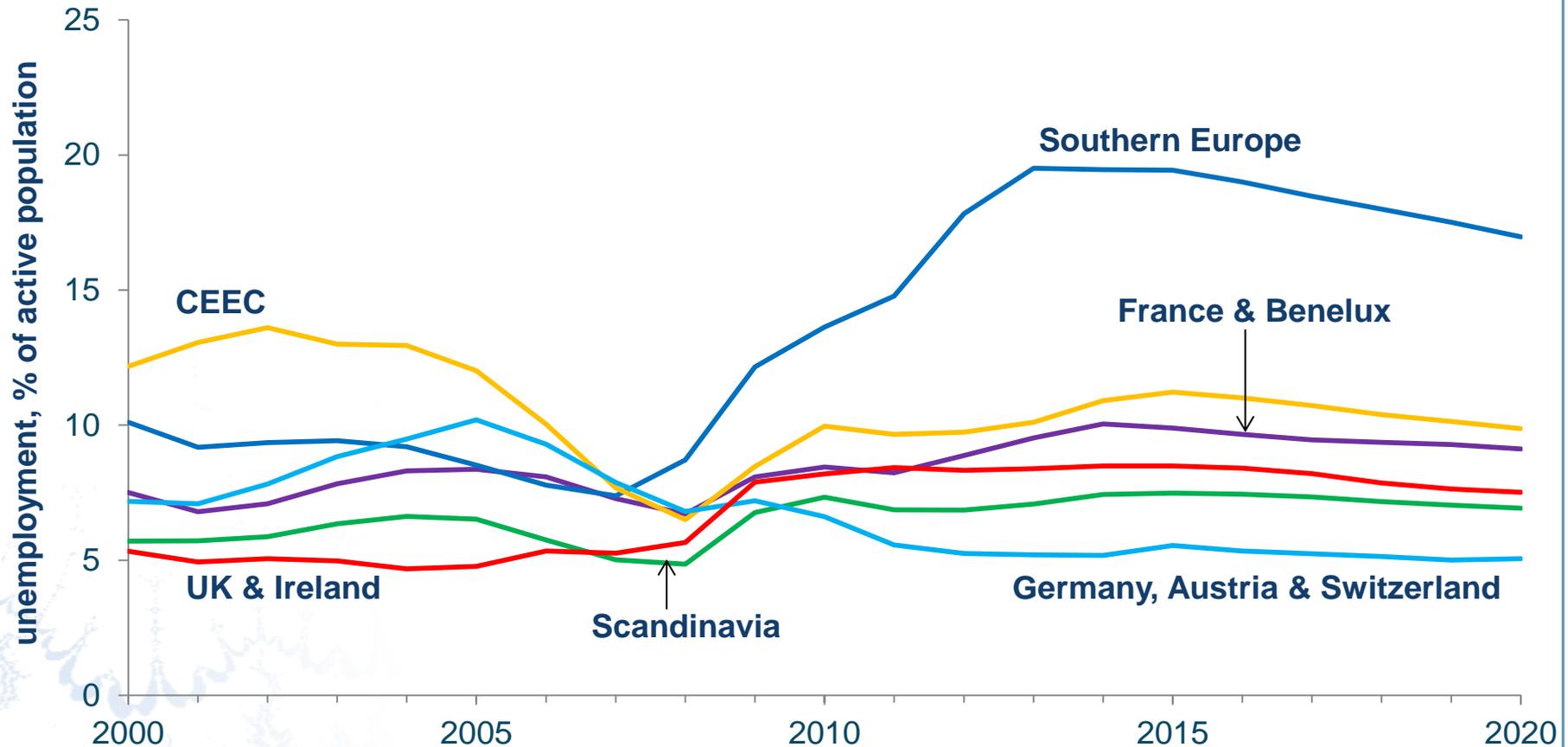
Note(s): Scandinavia is Denmark, Finland, Sweden and Norway; Benelux is Belgium, Luxembourg and the Netherlands; Southern Europe is Spain, Italy, Portugal, Greece, Malta and Cyprus; CEEC is Czech Republic, Slovakia, Poland, Hungary, Latvia, Lithuania, Estonia, Bulgaria, Romania and Slovenia.

Key issues and drivers

Driver	Demand: employment trends	Supply: labour force trends
Government spending	✔	
Access to credit	✔	
Competitiveness & trade	✔	
Technology & innovation	✔	
Ageing population	✔	✔
Higher statutory retirement age		✔
Migration		✔
Education policy		✔
Gender equality		✔

Sensitivity analysis to investigate uncertainties

Scenario/ Drivers	Access to credit	Consumer confidence	Global growth and commodity prices	Government response
	Household spending, investment	Household spending, investment	Global GDP growth, commodity prices	Government spending, tax and benefit rates, nominal interest rates
Baseline	**Moderate improvement**	**Moderate improvement**	**Moderate recovery**	**Budgets balanced such that tax and benefit rates and interest rates sustained**
Optimistic	**Higher**	**Higher**	**Higher**	**Lower interest rates and tax rates, higher spending and benefit rates**
Pessimistic	**Lower**	**Lower**	**Lower**	**Higher interest rates and tax rates, lower spending and benefit rates**

Implementing the sensitivity analysis and modelling the impacts
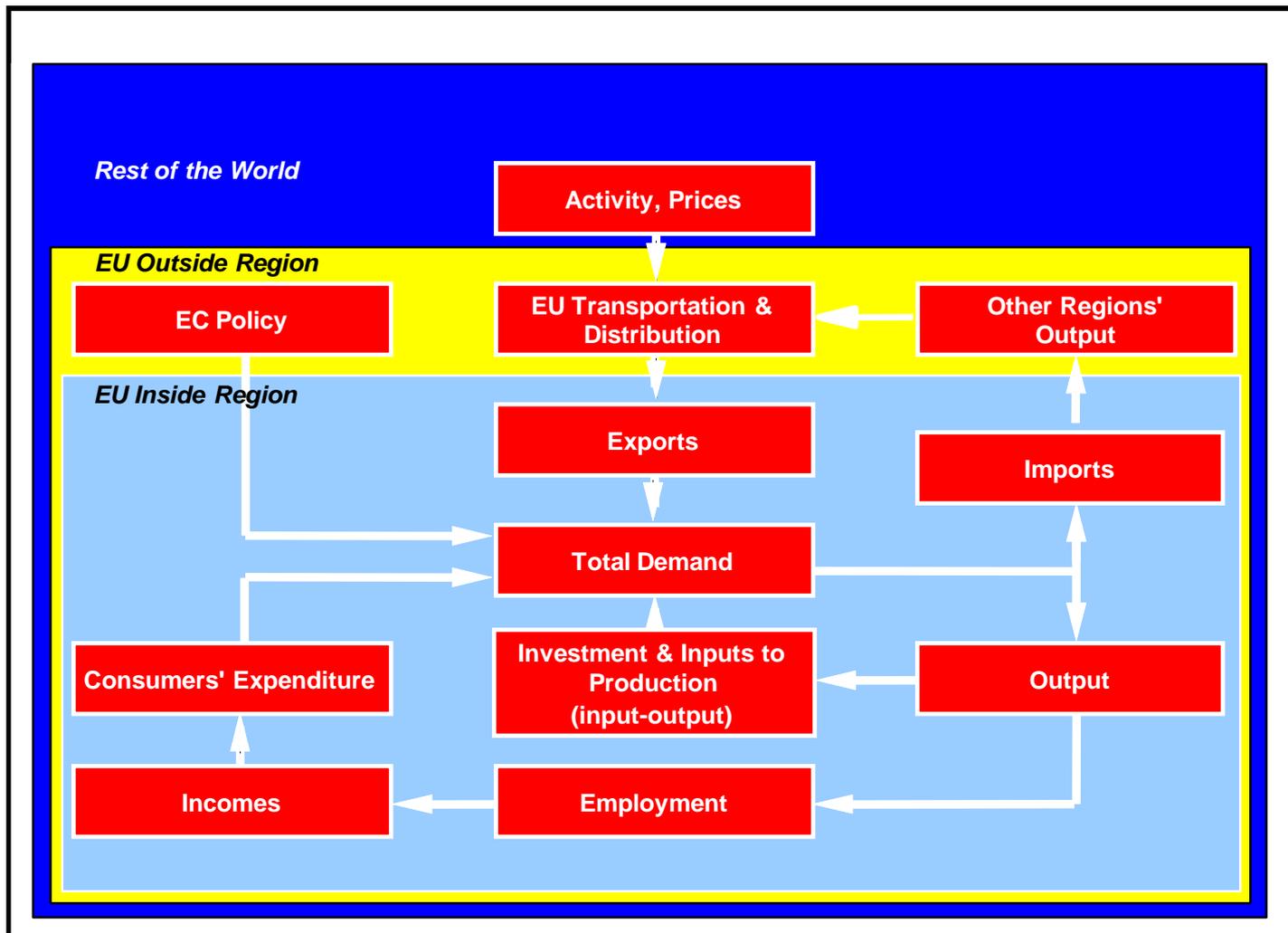
Results of sensitivity analysis: GDP growth
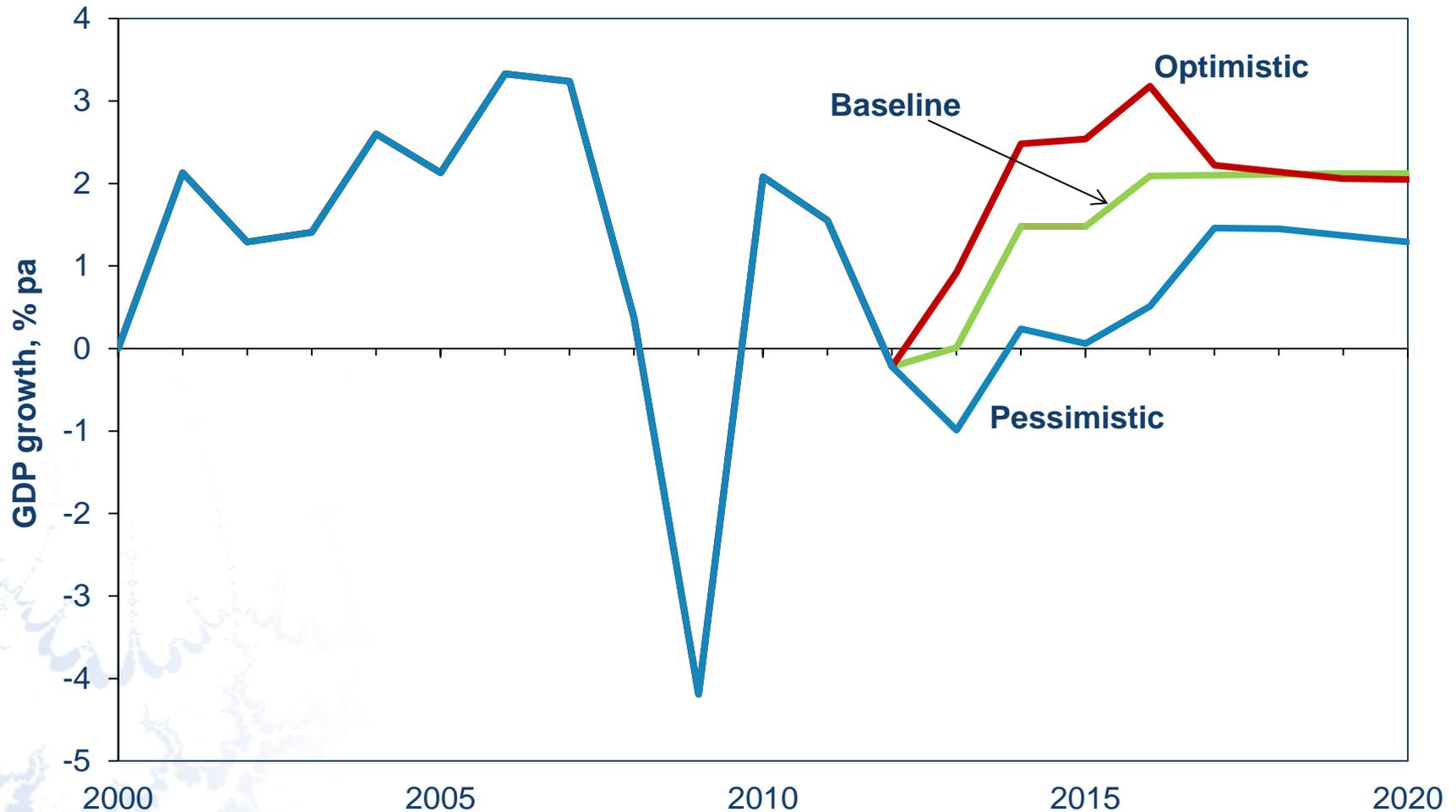
Note(s): For EU28 plus Norway, Switzerland and Iceland.

Results of sensitivity analysis: employment growth
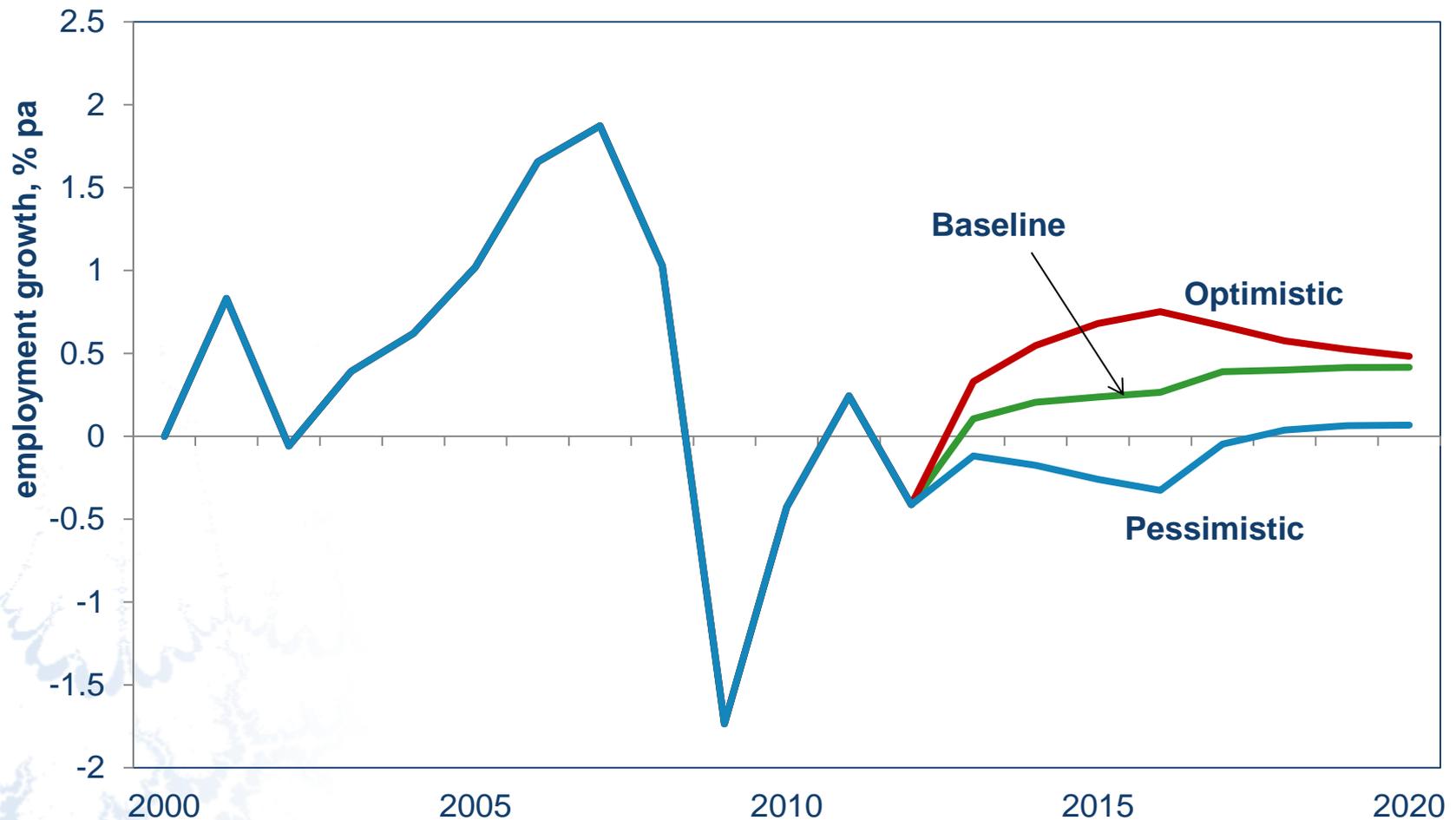
Note(s): For EU28 plus Norway, Switzerland and Iceland.

Summary

- Employment growth in the short-term will be subdued by the slow recovery and austerity measures

- In the longer-term
  - employment growth will become increasingly constricted by the available labour force
  - in many countries unemployment will remain higher than pre-recession rates

- Our analysis investigates the sensitivity of the results to uncertainty around the rate of recovery from recession

For more information

- Cedefop skills forecasting
  - Rachel Beaven, rb@camecon.com

- E3ME model
  - www.e3me.com

Modelling framework

Supply of skills

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

Module 6: Stocks & Flow numbers by ISCED category (STOCKFLOWMOD)

Numbers in the population by ISCED category

Numbers in the labour force by ISCED category

Module 1: Multi-sectoral macroeconomic model (E3ME)

Economic activity

Working age population by age and gender (exogenous)

Wage rates

Employment (labour demand)

Labour market participation rates

Active labour force by age and gender

Benefit rates

Unemployment

Demand for skills

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)

Job openings by Qualification (ISCED category)

Job openings by Occupation (ISCO 2 digit)

Module 7: Imbalances (Supply-Demand), 3 ISCED levels (BALMOD)

Module 8: Occupational Skills Profiles (OSPs)