Skills forecasting...
Why? and How?

Vladimir Kvetan

Thank you for your attention.

vladimir.kvetan@cedefop.europa.eu

CEDEFOP | European Centre for the Development of Vocational Training

40 years

Skills forecasting... Why? and How?

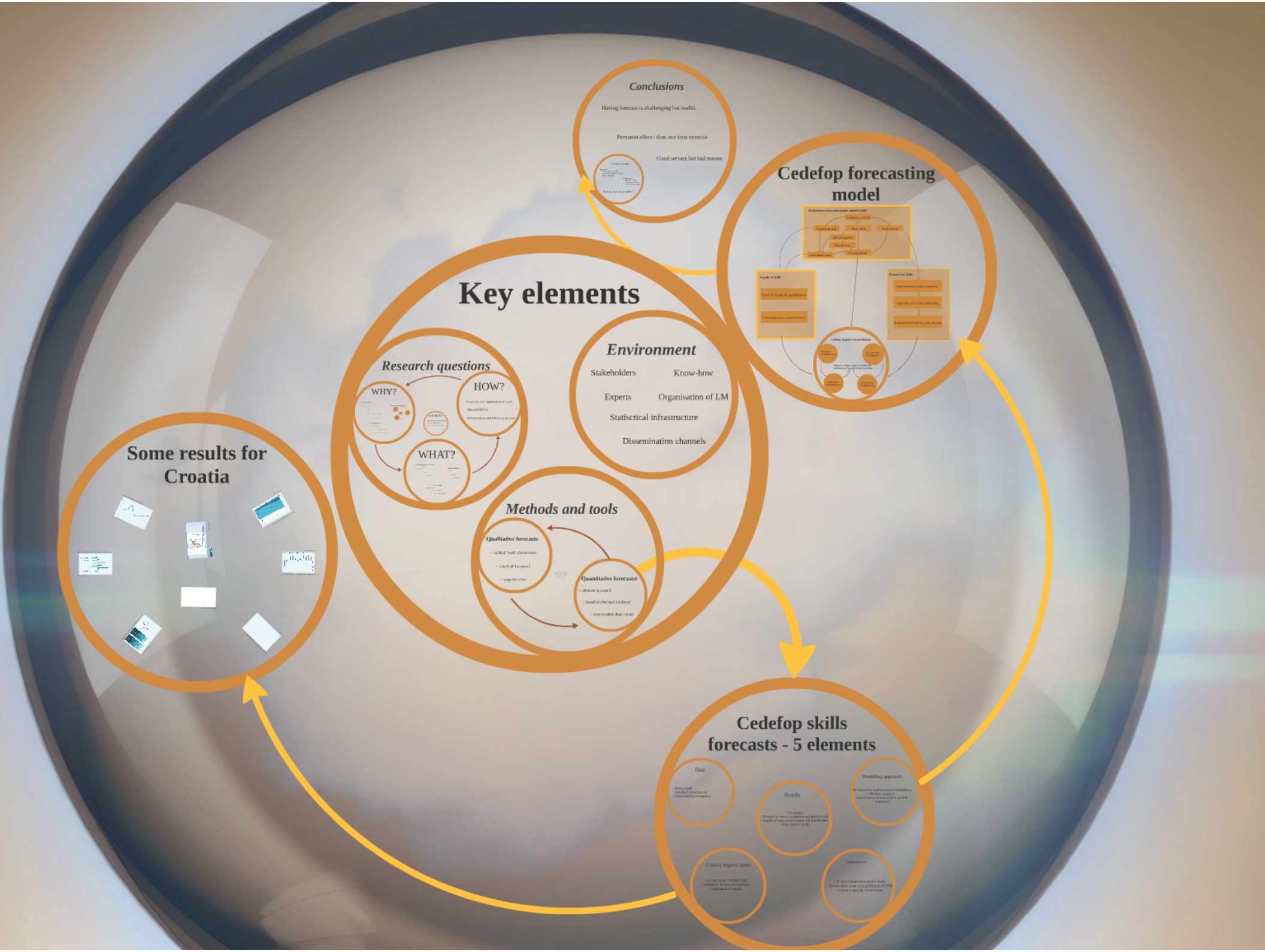
Vladimir Kvetan

Thank you for your attention.

vladimir.kvetan@cedefop.europa.eu

CEDEFOP | European Centre for the Development of Vocational Training

40 years


Conclusions
Having forecast is challenging but useful.
Permanet effort / than one time exercise
Good servant but bad master
Cedefop forecasting model
Key elements
Research questions
WHY?
HOW?
WHAT?
Environment
Stakeholders
Know-how
Experts
Organisation of LM
Statisctical infrastructure
Dissemination channels
Methods and tools
Qualitative forecasts
Quantitative forecastst
Some results for Croatia
Cedefop skills forecasts - 5 elements
Data
Modelling approach
Results
Country experts inputs

Key elements

Research questions

WHY?

HOW?

Expertise and organisation of work

Data availability

Dissemination and follow up process

WHAT?

Environment

Stakeholders

Know-how

Experts

Organisation of LM

Statisctical infrastructure

Dissemination channels

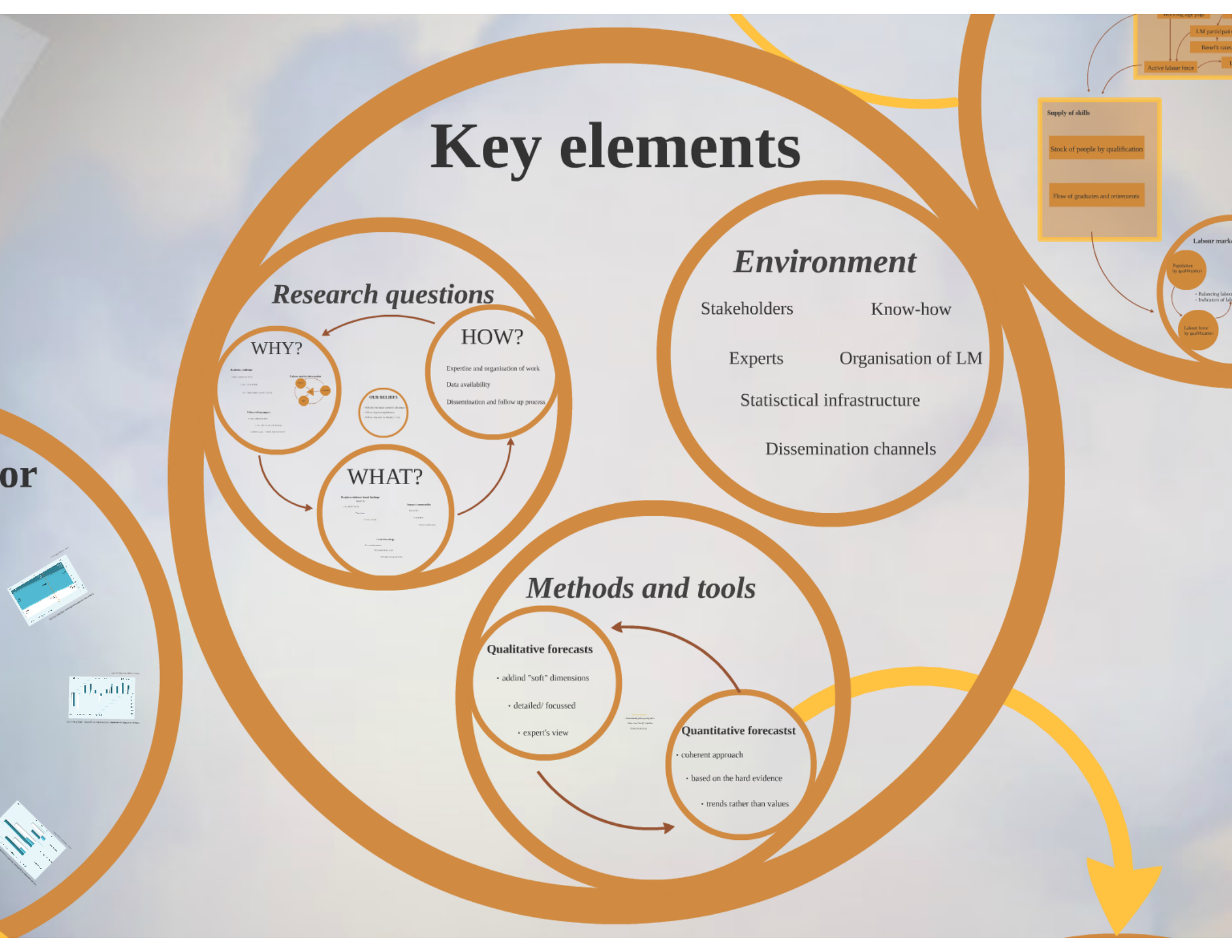
Methods and tools

Qualitative forecasts

- addind "soft" dimensions
- detailed/ focussed
- expert's view

Quantitative forecaststst

- coherent approach
- based on the hard evidence
- trends rather than values



Environment

Stakeholders

Know-how

Experts

Organisation of LM

Statisctical infrastructure

Dissemination channels

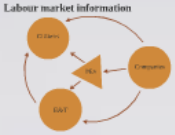
Research questions

WHY?

Academic challenge

- How the labour market works?
- Aim to test new methods
- Raise funds & achieve academic recognition

Labour market information



Policy-making support

- create overall social strategies
- prevent future labour market imbalances
- contribute to overall economic and social prosperity

OUR BELIEFS

- Skills have the impact on people's life chances
- Skills are key for competitiveness
- Skills are important for shaping policies

HOW?

Expertise and organisation of work

Data availability

Dissemination and follow up process

WHAT?

Produce evidence based findings

RESULTS

- Geographical entity
- Time Frame
- Level of details

Support communities

- Researchers
- Stakeholders
- Citizens and locations

Create knowledge

- Data and information
- New methods and tools
- Initiatives and programmes

Methods

OUR BELIEFS

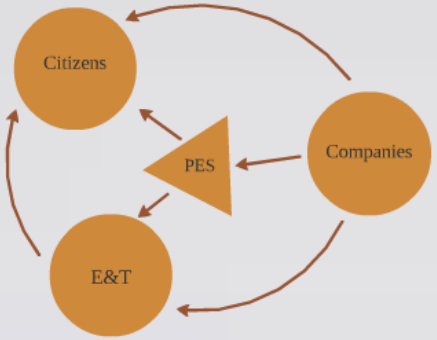
- Skills have the impact on people’s life chances
- Skills are key for competitiveness
- Skills are important for shaping policies

WHY?

Academic challenge

- How the labour market works?
- Area to test new methods
- Raise funds & achieve academic recognition

Labour market information



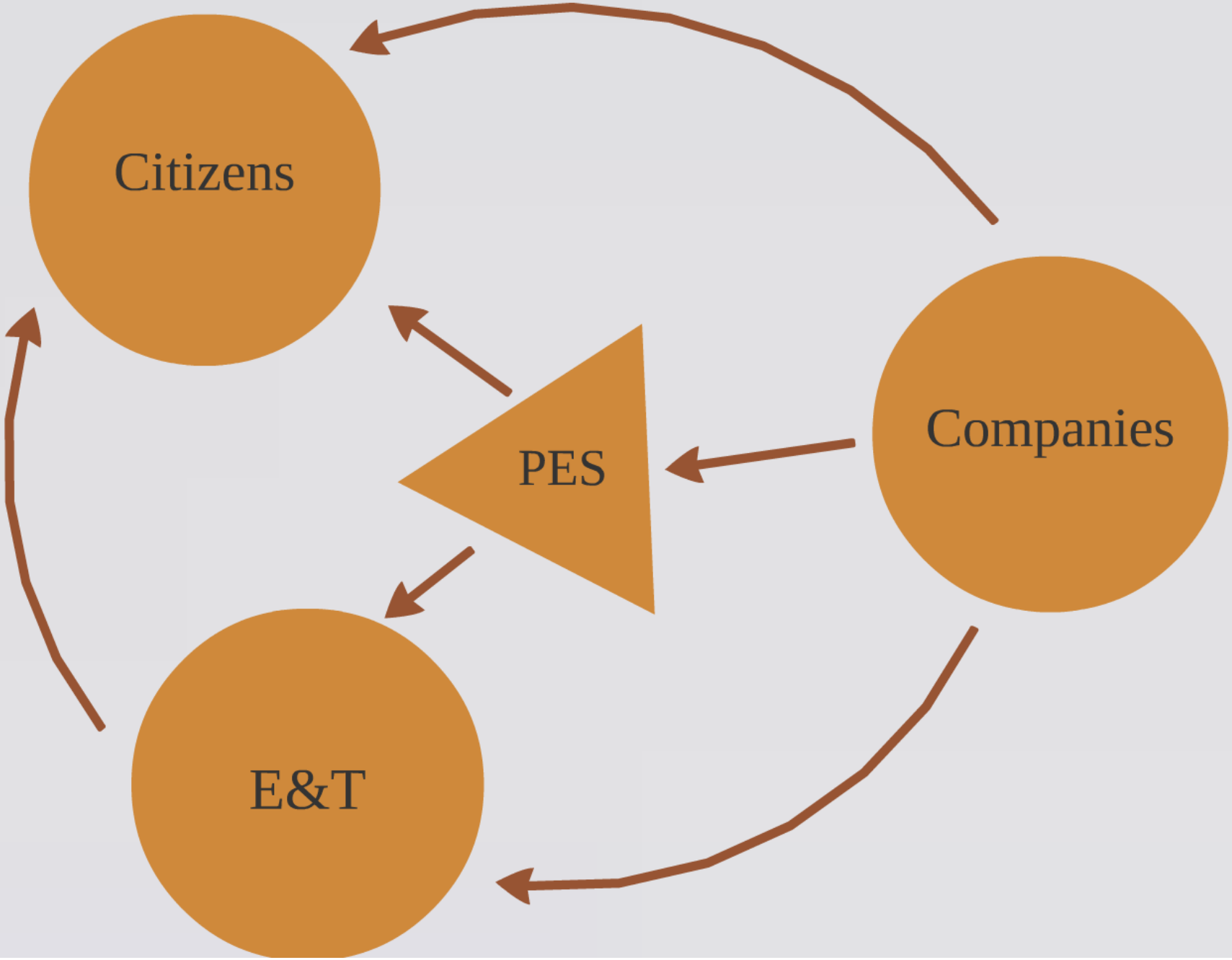
Policy-making support

- create coordinated strategies
- prevent future labour market imbalances
- contribute to overall economic and social prosperity

Academic challenge

- How the labour market works?
- Area to test new methods
- Raise funds & achieve academic recognition

Labour market information



Policy-making support

- create coordinated strategies
- prevent future labour market imbalances
- contribute to overall economic and social prosperity

WHAT?

Produce evidence based findings

RESULTS

- Geographical entity
- Time frame
- Level of details

Support communities

- Researchers
- Stakeholders
- Citizens and locations

Create knowledge

- Data and information
- New methods and tools
- Innitiatives and porgrammes

Produce evidence based findings

RESULTS

- Geographical entity
- Time frame
- Level of details

Create knowledge

- Data and information
- New methods and tools
- Innitiatives and porgrammes

Support communities

- Researchers
- Stakeholders
- Citizens and locations

HOW?

Expertise and organisation of work

Data availability

Dissemination and follow up process

HOW OFTEN???

HOW MUCH???

Methods and tools

Qualitative forecasts

- addind "soft" dimensions
- detailed/ focussed
- expert's view

Quantitative forecaststst

- coherent approach
- based on the hard evidence
- trends rather than values

Qualitative forecasts

- addind "soft" dimensions
- detailed/ focussed
- expert's view

Common elements

- Understanding past projecting fu
- There is no "wrong" projectio
- Devil is in the detail

non elements

g past projecting future

o "wrong" projection

s in the detail

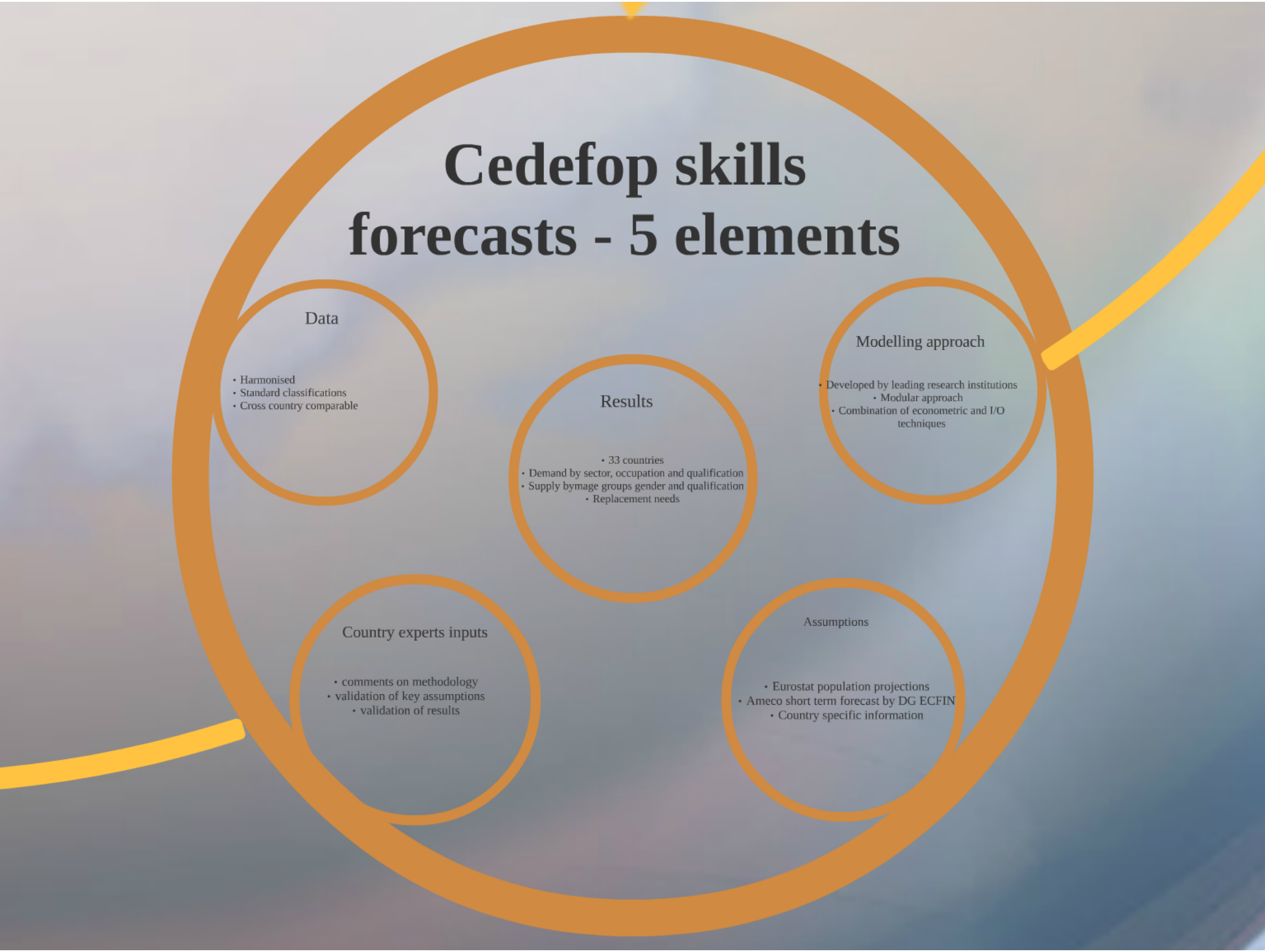
Quantitative forecastst

- coherent approach
- based on the hard evidence
- trends rather than values

Common elements

- Understanding past projecting future
- There is no "wrong" projection
- Devil is in the detail

Cedefop skills forecasts - 5 elements



Data

- Harmonised
- Standard classifications
- Cross country comparable

Modelling approach

- Developed by leading research institutions
- Modular approach
- Combination of econometric and I/O techniques

Assumptions

- Eurostat population projections
- Ameco short term forecast by DG ECFIN
- Country specific information

Country experts inputs

- comments on methodology
- validation of key assumptions
- validation of results

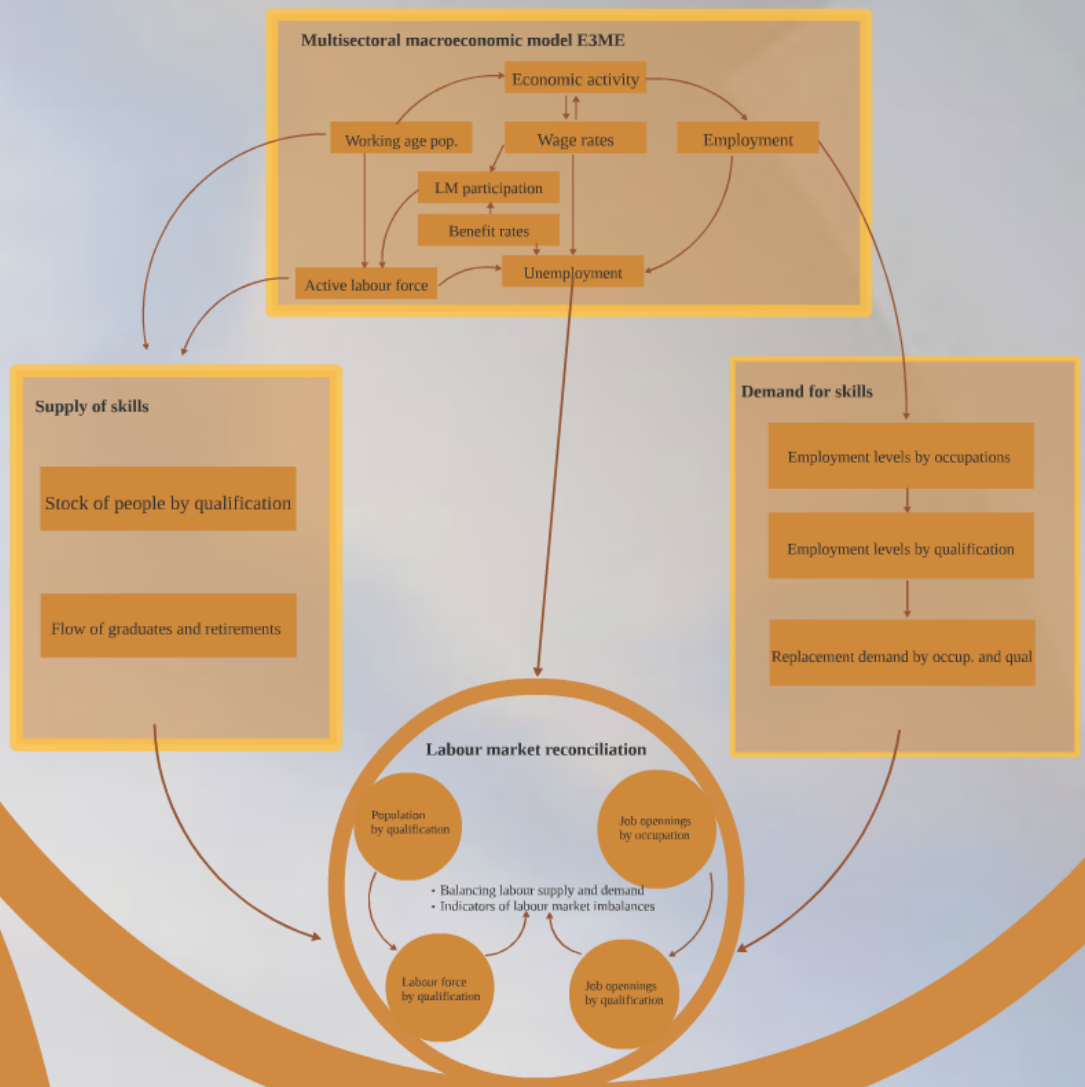
Results

- 33 countries
- Demand by sector, occupation and qualification
- Supply bymage groups gender and qualification
- Replacement needs

n one time exercise

od servant but bad master.

Cedefop forecasting model

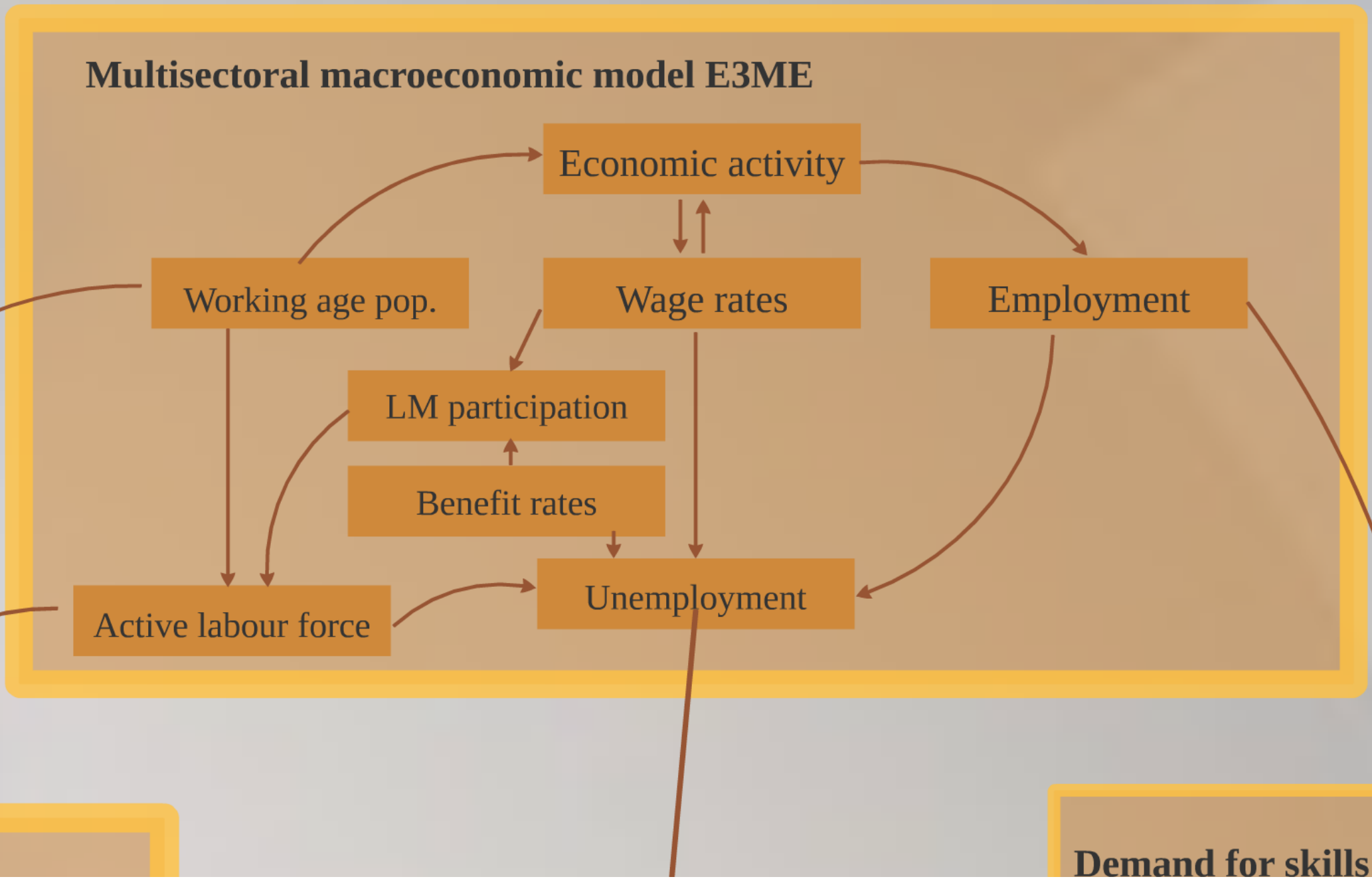


ment

Know-how

rganisation of LM

model


Multisectoral macroeconomic model E3ME
Economic activity
Working age pop.
Wage rates
Employment
LM participation
Benefit rates
Active labour force
Unemployment
Demand for skills

Demand for skills
Employment levels by occupations
Employment levels by qualification
Replacement demand by occup. and qual

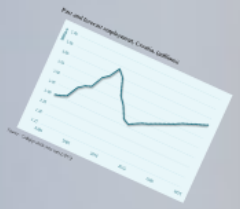
Supply of skills

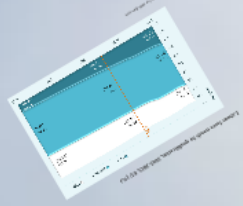
Stock of people by qualification

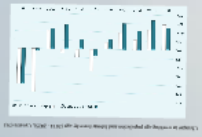
Flow of graduates and retirements

Labour market reconciliation
Population by qualification
Job openings by occupation
• Balancing labour supply and demand
• Indicators of labour market imbalances
Labour force by qualification
Job openings by qualification

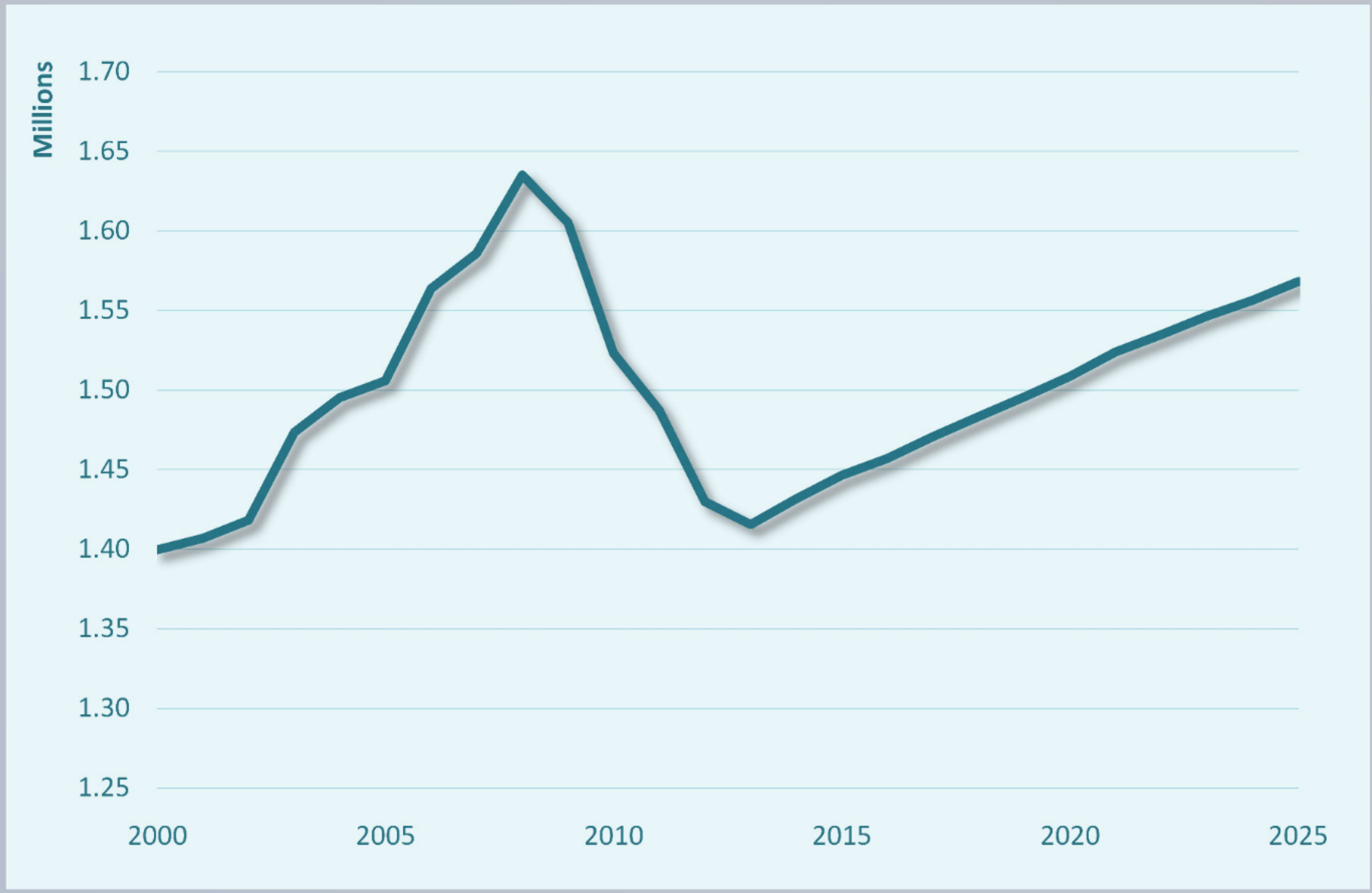
Some results for Croatia





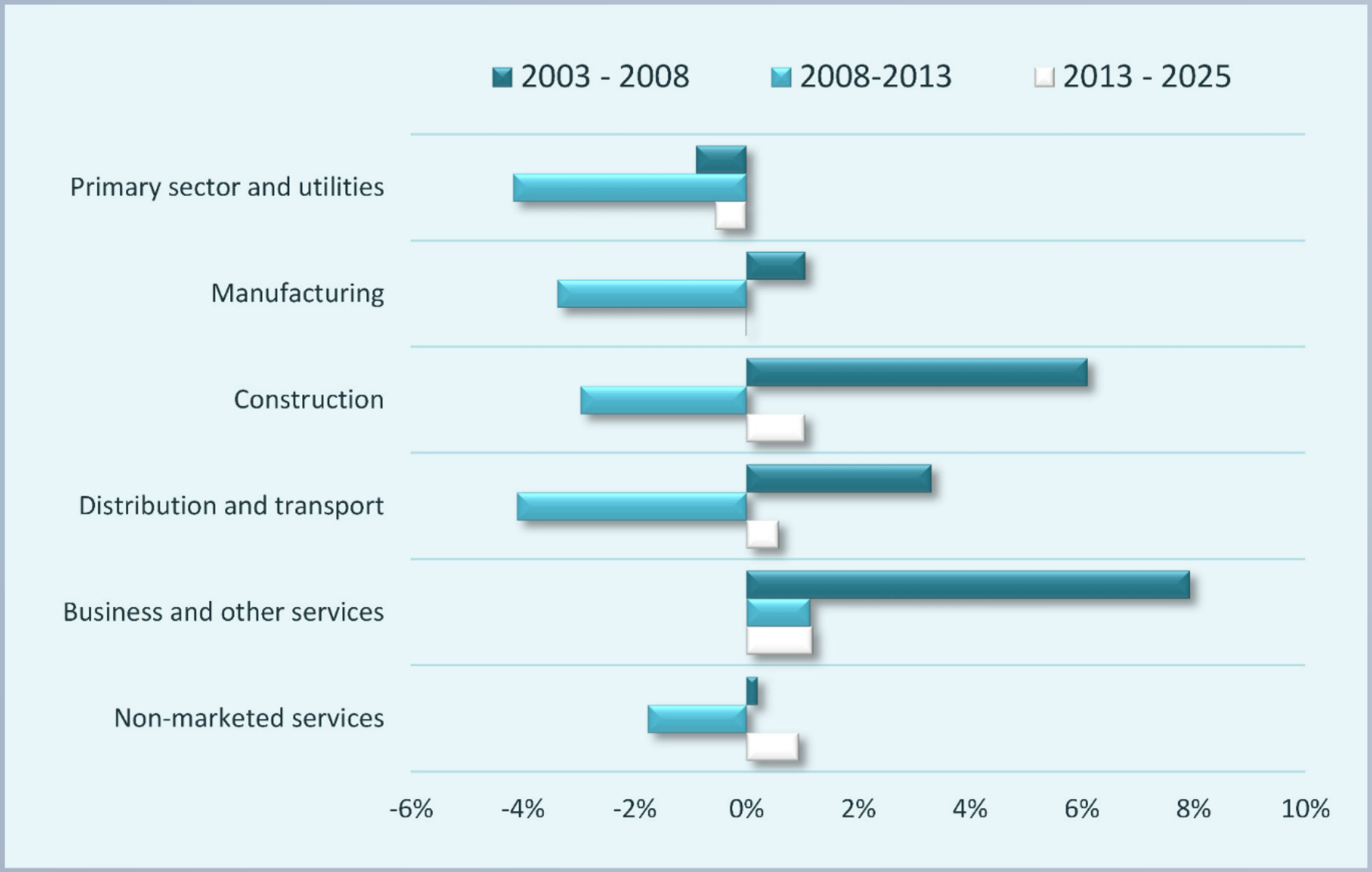


Past and forecast employment, Croatia, (millions)



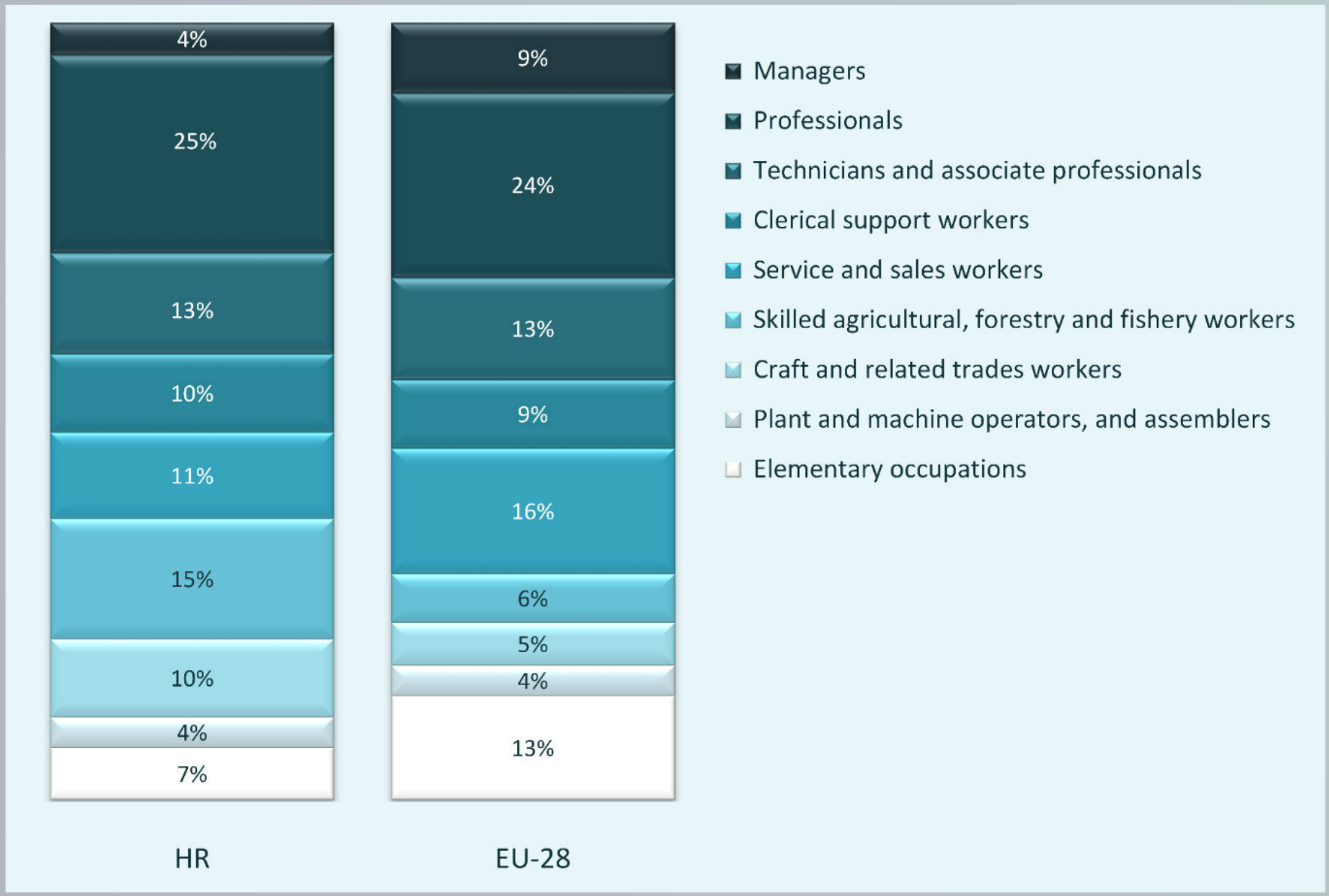
Source: Cedefop skills forecasts (2015)

Employment trends by sector, average annual growth rate, 2003-2025, Croatia (%)



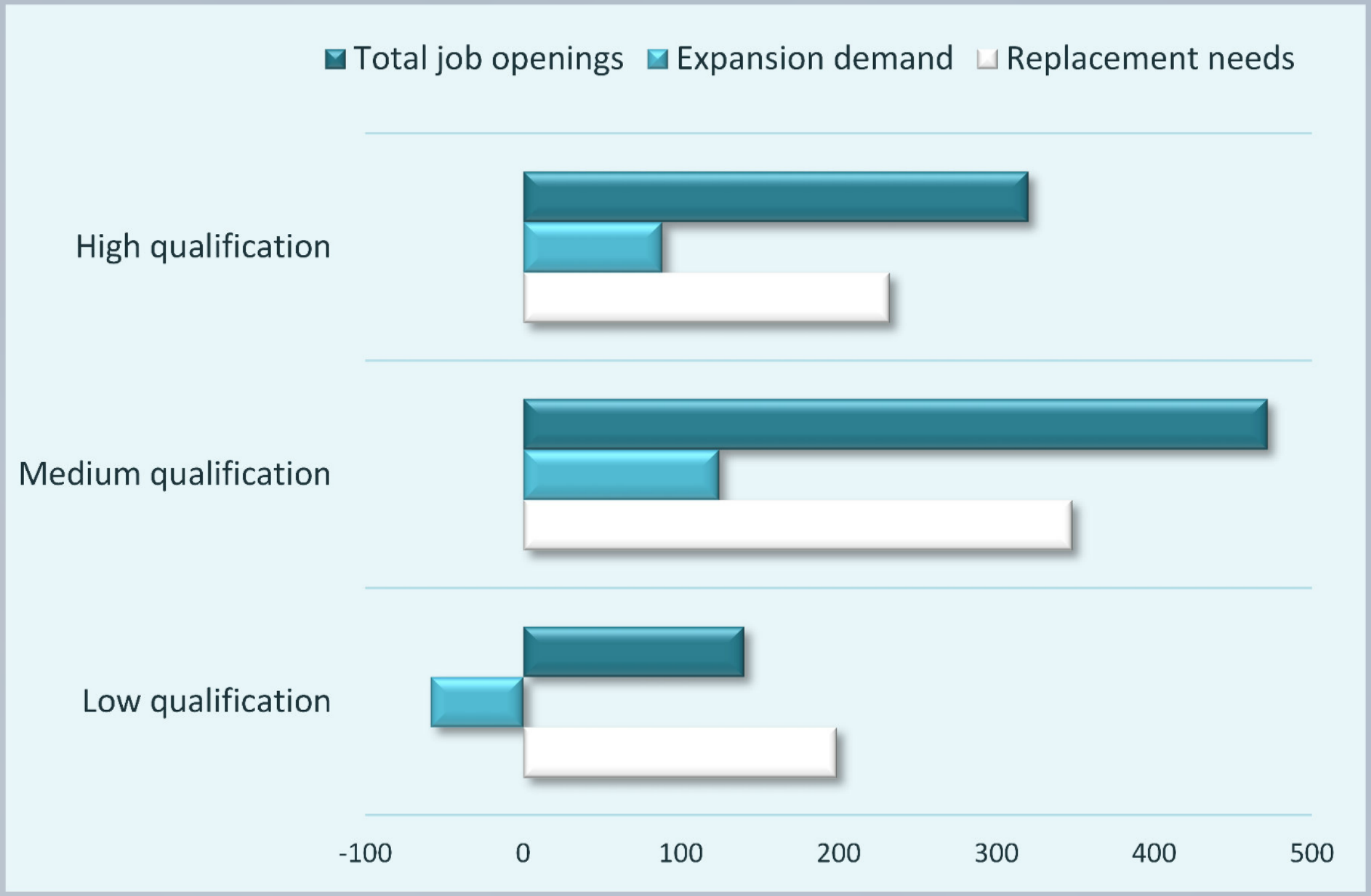
Source: Cedefop skills forecasts (2015)

Distribution of total job opportunities by occupations, 2013-2025, Croatia, EU (%)



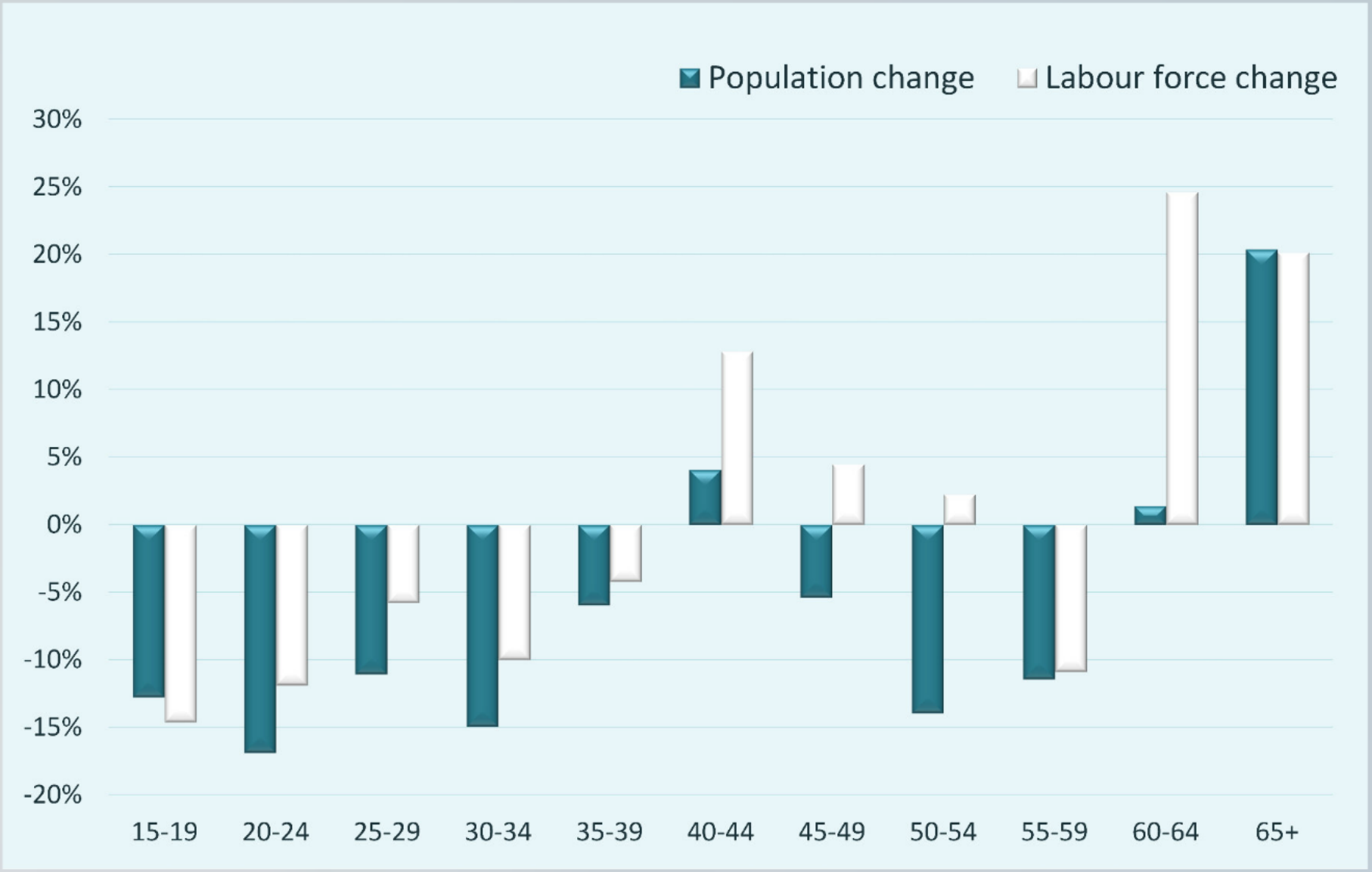
Source: Cedefop skills forecasts (2015)

Total job opportunities by qualification, 2013-2025, Croatia (thousands)



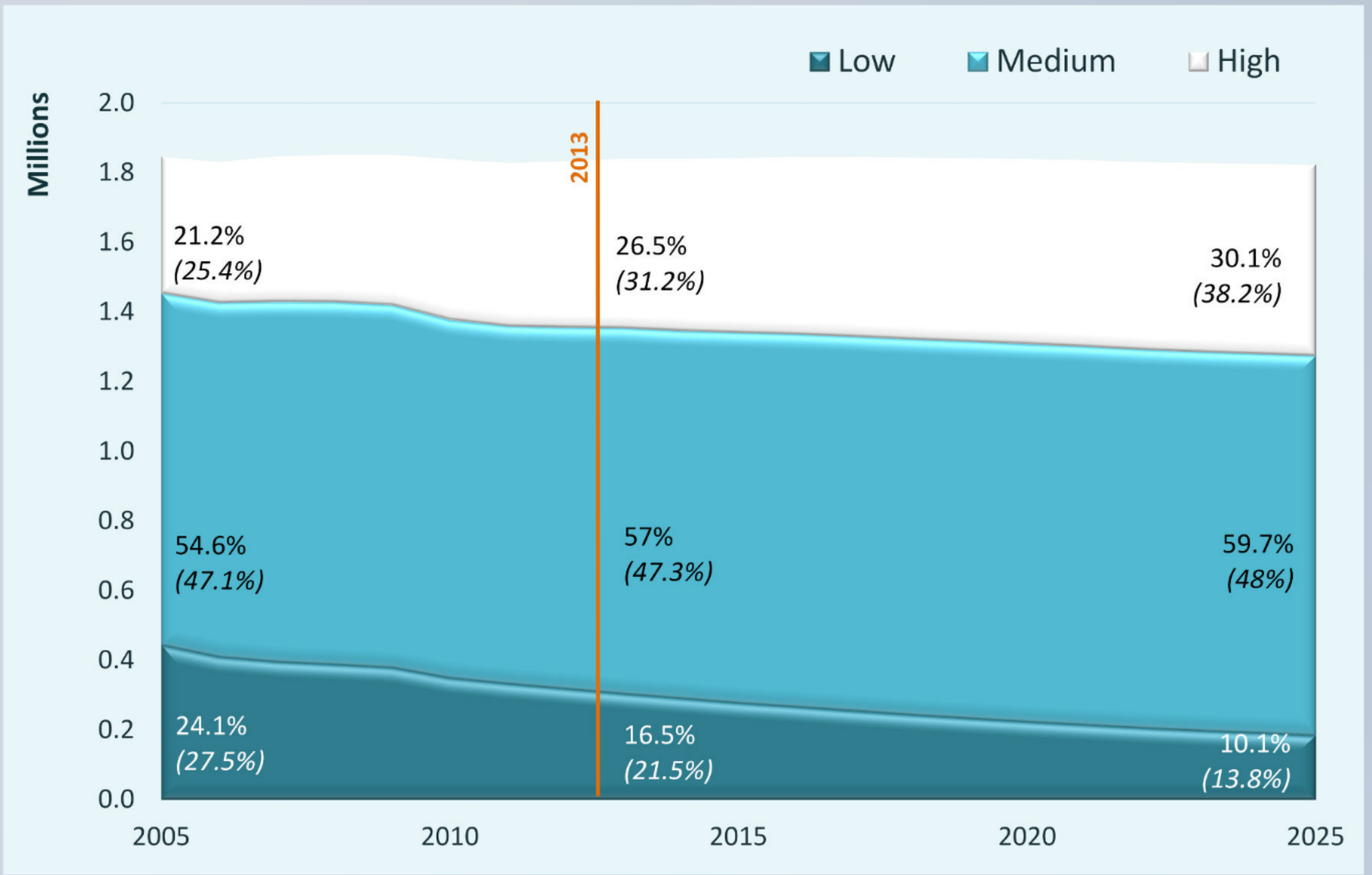
Source: Cedefop skills forecasts (2015)

Changes in working age population and labour force by age (2013 - 2025), Croatia (%)



Source: Cedefop skills forecasts 2015

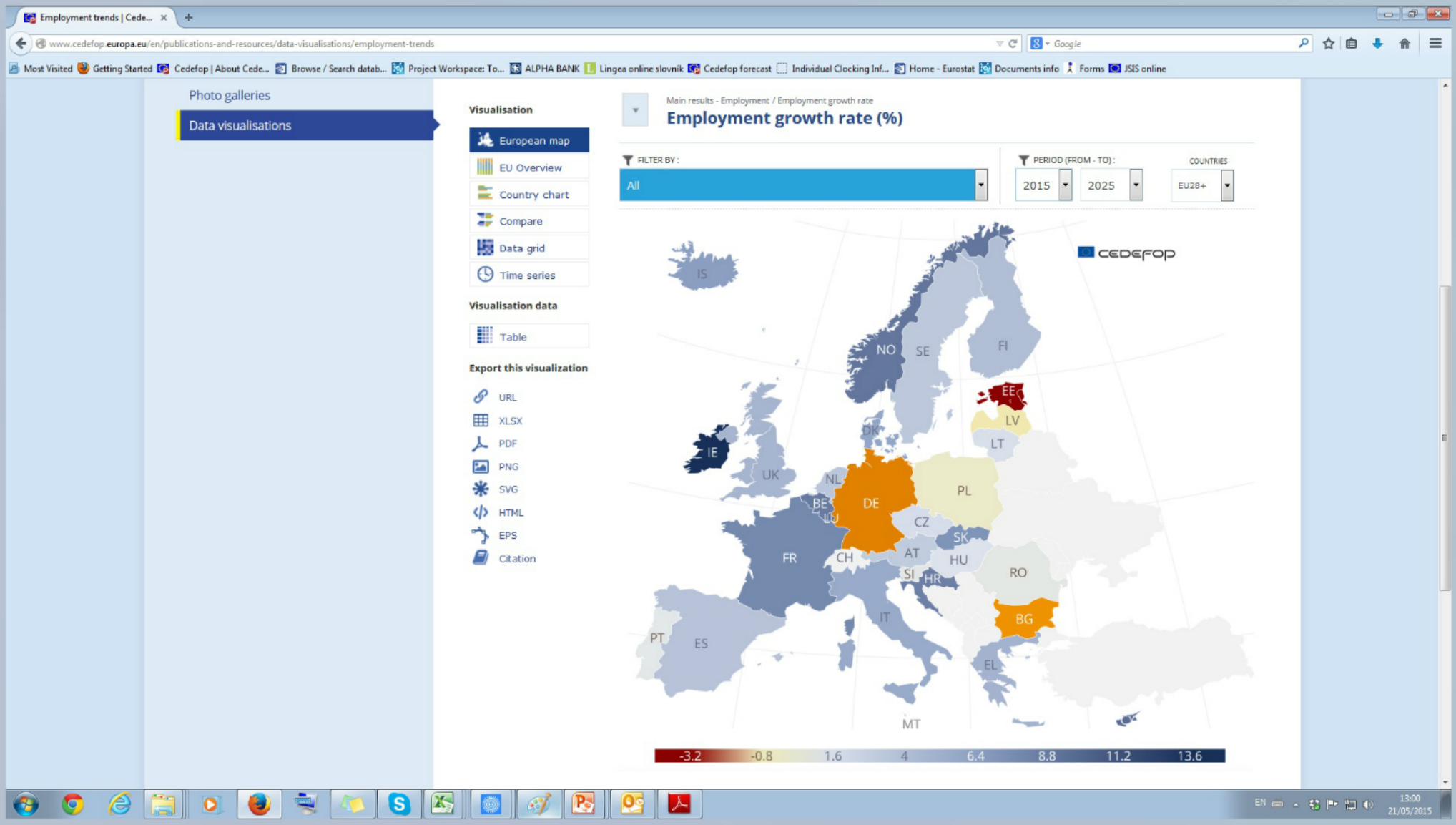
Labour force trends by qualification, 2005-2025, EU (%)



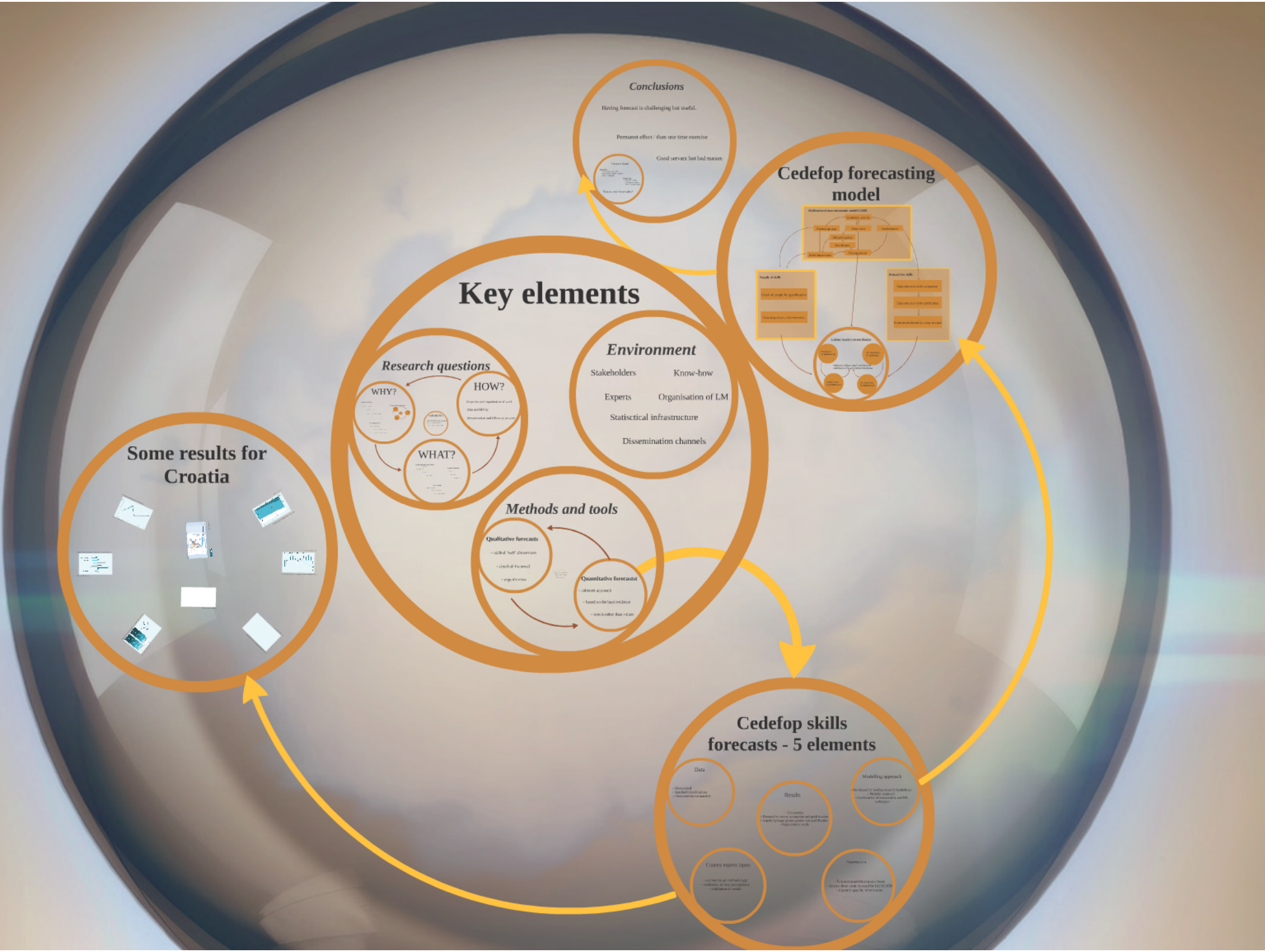
ource: Cefedefop skills forecasts

www.cedefop.europa eu

skillsforecasts
ONLINE DATA AND RESULTS



euskillspanorama.cedefop.europa.eu

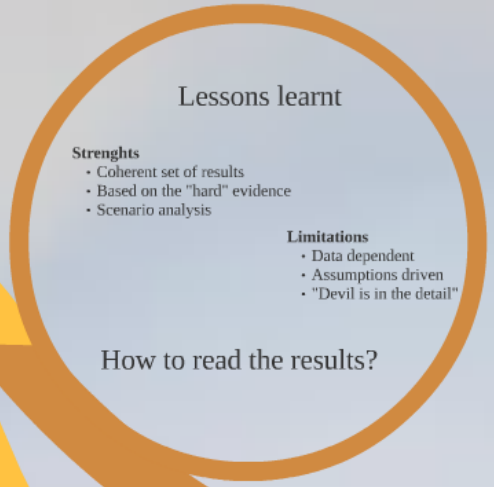

Conclusions
Having forecast is challenging but useful.
Permanet effort / than one time exercise
Good servant but bad master
Cedefop forecasting model
Key elements
Research questions
WHY?
HOW?
WHAT?
Environment
Stakeholders
Know-how
Experts
Organisation of LM
Statisctical infrastructure
Dissemination channels
Methods and tools
Qualitative forecasts
Quantitative forecastst
Some results for Croatia
Cedefop skills forecasts - 5 elements
Data
Modelling approach
Results
Country experts inputs

Conclusions

Having forecast is challenging but useful.

Permanet effort / than one time exercise

Good servant but bad master.



Lessons learnt

Strenghts

- Coherent set of results
- Based on the "hard" evidence
- Scenario analysis

Limitations

- Data dependent
- Assumptions driven
- "Devil is in the detail"

How to read the results?

Skills forecasting... Why? and How?

Vladimir Kvetan

Thank you for your attention.

vladimir.kvetan@cedefop.europa.eu

CEDEFOP | European Centre for the Development of Vocational Training

40 years