The BIBB-IAB Qualification and Occupational Field Projections (QuBe-Projekt.de)

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International Expert Workshop.
New Developments for French Occupational Outlook

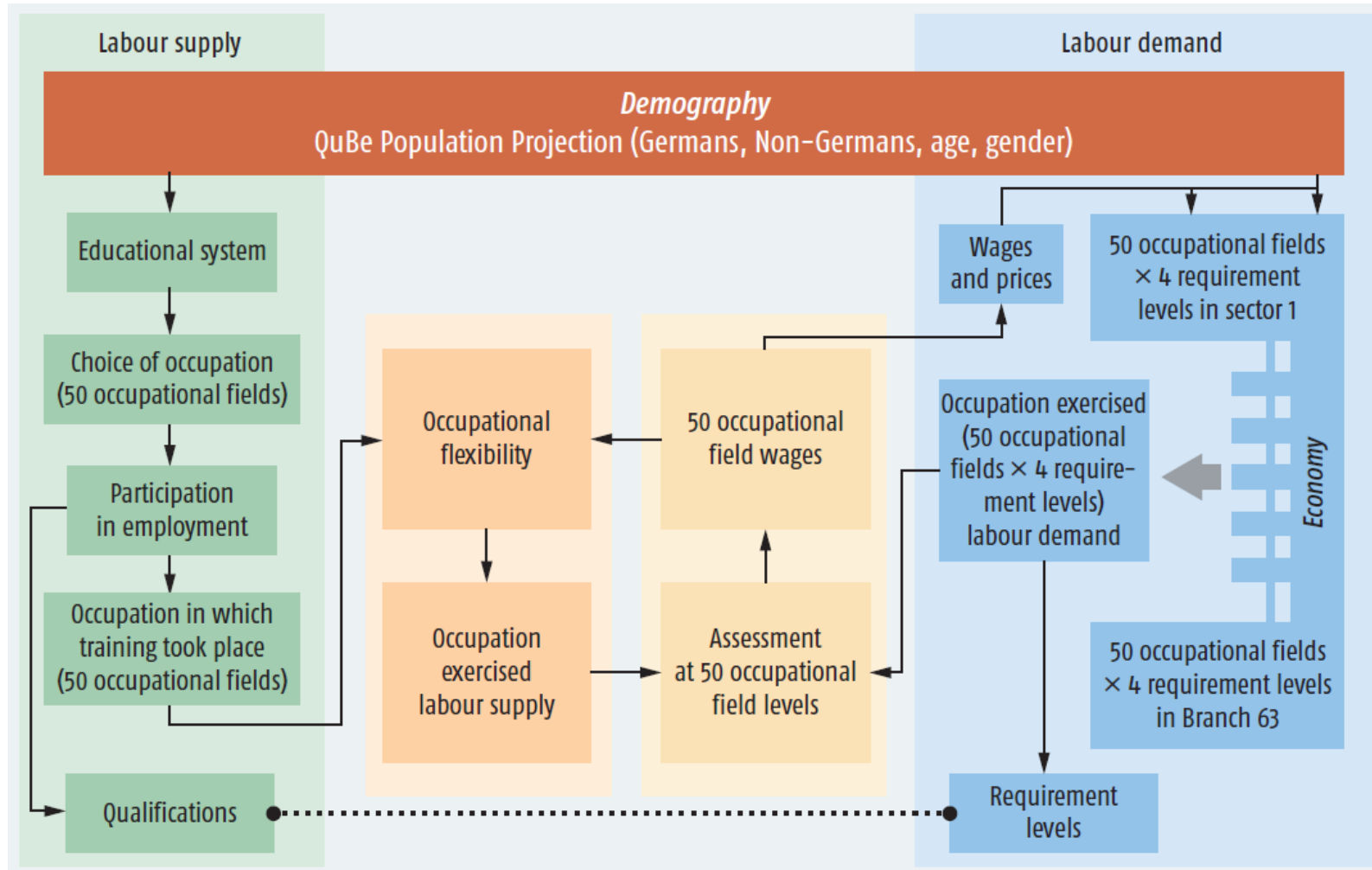France Strategié, Paris, March 28, 2017

Why monitoring skill developments?

➢ The BIBB is recognized as a centre for the progressive development of vocational education and training (VET) in Germany

  ➢ **Need to identify future challenges in VET to stimulate innovation in national and international vocational systems, and develop new, practice oriented solutions for both initial and continuing vocational education and training**

➢ Research goal:

  ➢ **Provide empirical evidence on current and possible future challenges in the labour market**

➢ Information strategy:

  ➢ **Inform stakeholders about those challenges**
  ➢ **Communicate methods and results with the scientific community to assure the validity of the results**

How do we monitor skill developments?

- Identification of skill imbalances over the long term by forecasting only empirically observable trends and interrelationships into the future (baseline projection)

  - BIBB-IAB-Qualification and Occupational Field Projections (www.QuBe-Projekt.de)

  - Balance supply and demand on skill level and on occupational level

  - Continuous update of the forecast (4th wave of the forecast, every 2 years since 2010)

- Contrast results with possible alternative developments (scenario-analysis)

- Additional in-depth research for certain sectors or occupations by various methods (e.g.):

  - Job advertisement analysis

  - BIBB/BAuA Employment survey

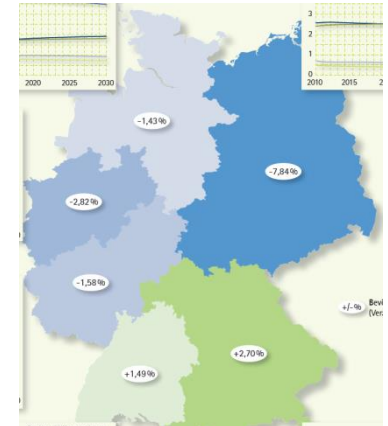 - Establishment survey(s)

Model structure of the QuBe-project

Data / Aggregation / Output (4th wave)

	Supply side	Matching	Demand side
Data base	• QuBe-Population forecast • German Microcensus • Educational statistics	• German Microcensus => National Accounts • IAB Employment History Data	• QuBe-Population forecast • German Microcensus • National Accounts • IAB Employment History Data
Level of aggregation	• 50 Occupational Fields (20 Major Occupational Fields) • 4+1 Qualification levels (ISCED 0-3a / 3b,4 / 5b / 5a,6 / + persons in education	• 50 Occupational Fields (20 Major Occupational Fields) • 4 (+ 1) qualification levels • 4 (+ 1) requirement levels	• 50 Occupational Fields (20 Major Occupational Fields) • 63 Sectors (NACE) • 4 requirement levels (un-, semi-skilled tasks / skilled tasks / complex tasks / highly complex tasks)
Output	• Economically active population and potential worktime volume by initial vocational qualification	• Realised demand per capita and hours compared to potential supply per capita (including occupational mobility) and hours	• Realised demand per capita and hours

Regional forecasts

- The results of the QuBe-Project are disaggregated by 6 regional areas
    - 25 branches
    - 20 major occupational fields
    - 4+1 qualification levels (supply side)
    - 4+1 requirement levels (demand side)

- Hybrid method:
    - Bottom up approach with top down elements
    - Regional population forecasts and regional demand by sectors
    - Each region has a different „starting position"
    - Growth rates according to federal state (e.g. participation rates)
    - Inclusion of commuting matrices

How do we handle uncertainties?

➢ It should not be asked, whether long-term labour market forecasts are „right". Instead it has to be asked, whether they are useful.

➢ To be useful, the method has to be transparent and the baseline projection needs to have a clear meaning

    ➢ Which parameters are the key drivers of the results?

➢ Contrasting a baseline-projection with alternative developments provides a better understanding of correlations and influencing factors

➢ Results should always be contrasted with information of additional research (quantitative and qualitative)

Further steps

➢ Break down results for more detailed occupations or regional levels

 ➢ In negotiation with the Federal Ministry for Labour and Social Affairs

 ➢ High demand for detailed data

 ➢ Matching processes are more complex

  ➢ Competing risks / opportunities: Change occupation or place of residence?

➢ Separate foreigners and Germans in the population forecast

 ➢ In the education system

 ➢ Migration (in and outflow by qualification / occupation)

➢ Integration of hidden reserve

Thank you very much for your attention!

qube-projekt.de is a cooperation project of:

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Results of the QuBe-Project can be accessed on:

www.qube-data.de

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Further information on the project can be found on

www.qube-projekt.de

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