MEASURING THE CONDITIONS OF SOCIAL CAPABILITIES IN GERMANY FOR THE NEXT FEW YEARS

An application of the TBI

Britta Stöver
Thomas Drosdowski & Marc Ingo Wolter

INFORUM 29th Aug. – 2nd Sept.
Osnabrück
Background

- Research project soeb 3: scientific network consisting of researchers from different disciplines

- Project objectives:
  - Report on various aspects of the ongoing changes in socioeconomic interrelations in Germany.
  - The extent and causes of the identified socioeconomic changes are measured and evaluated using quantitative and qualitative methods.
  - One concept that is used to evaluate the extent of the changes is “Teilhabe” (participation/capabilities), a measure for individual welfare in the research network.
Background

Idea: development of an indicator that

- illustrate the complex concept of “Teilhabe”
- emphasise the socioeconomic side of the economy
- operates on the macroeconomic level

The result is a composite indicator called TBI

The features of the TBI are

1. measure social capabilities (the conditions for “Teilhabe”) in Germany
2. to help identifying the main drivers of past changes and to
3. provide projections in order to get a feel for the future
1. The indicator TBI

Data
Modelling background (SOEM)
Choice of indicators and aggregation procedure
Modelling background – data base

- official data from the Federal Statistical Office
  - on macro and meso level
  - System of National Accounts
  - different socioeconomic household types (96)
  - economic activities (63)
  - consumption purposes (41)
  - regions (country level, Länder)

- official labour market data from the Federal Employment Agency
Modelling background – models

► INFORGE
  ⇒ macro-econometric interindustry input-output model for Germany

► DEMOS
  ⇒ socio-economic household information
  ⇒ income and consumption

► QuBe
  ⇒ labour demand and supply in terms of qualifications and occupations

► projections until 2030
Modelling background – the indicator

- More than 250 indicators
  - Single indicators
  - Field indicators for 8 thematic fields
  - Indicator set
  - Composite indicator

- TBI

- Reliable data base
- Projection by means of socioeconomic modelling
- Past and future conditions for “Teilhabe” (social capabilities)
- Explanation of changes and assessment of policies by impact and scenario analysis
Single indicators – examples

- Household income
  - Share of (monet.) social benefits in disp. income (-)

- Goods & services
  - Share of energy cons. in total cons. (-)

- Labour market
  - Real wage per hour (+)

- GDP
  - Real GDP per capita (+)

- Demography
  - Ratio of non-working to working population

- Government
  - Real expend. on education for young people up to 25 years (+)

- Region
  - Diff. btw. strongest and weakest region in terms of employment (-)

- Environment
  - Woodland and agricultural area

More than 250 indicators
The 8 thematic fields

- QuBe
- Labour market
- Goods & Services
- Households income
- Environment
- GDP
- Demography
- Government
- Region

In-depth information
Choice of indicators and aggregation procedure

- joint coordinated process of the research network
- selection of the essential indicators
- reference system
  - transformation of the selected indicators
  - upper and lower bounds
  - growth rates were converted into points (-50 - +50)
- aggregation by equal weighting
Choice of indicators and aggregation procedure

- **aggregation**
  - 7 field indicators are aggregated to the TBI
  - indicator field “Environment” as contrasting indicator
  - equal weighting
2. Application and first results

Development of the TBI 1992 – 2030

Major processes
Development of the TBI 1992 - 2030

The indicator represents changes

- above the zero line: improvement of the social capabilities
- below the zero line: decline of the social capabilities
- on the zero line: social capabilities remain unchanged

Teilhabe-Bedingungs-Indikator (TBI)

Points


-20 -15 -10 -5 0 5 10 15 20 25

21 -14 10 -7 7 0 0
## Major processes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demography</td>
<td>+++</td>
<td>–</td>
<td>----</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Income</td>
<td>++++</td>
<td>___</td>
<td>----</td>
<td>----</td>
<td>++++</td>
<td>++++</td>
<td>++++</td>
<td>++++</td>
</tr>
<tr>
<td>Goods and Services</td>
<td>++++</td>
<td>++++</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Labour market</td>
<td>++</td>
<td>_</td>
<td>---</td>
<td>–</td>
<td>++++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Government</td>
<td>_</td>
<td>+</td>
<td>+</td>
<td>----</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>GDP</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Region</td>
<td>++++</td>
<td>___</td>
<td>----</td>
<td>–</td>
<td>+</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Environment</td>
<td>----</td>
<td>++</td>
<td>++++</td>
<td>+</td>
<td>----</td>
<td>–</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

+++ values ≥ 20, ++ values ≥10 and <20, + values ≥ 0 and <10
---- values ≤ -20, --- values > -20 and ≤ -10, – values > -10 and <0

- Demographic change
- Globalisation and export orientation
- Structural change: growing service sector without deindustrialisation
- Urbanisation and digitalisation
- Labour market: higher labour participation of women and elderly people, less annual working hours
- Fiscal and social reforms
- Environment is opposed to the TBI
3. Conclusion
Conclusion

- Opportunity to connect quantitative economic projection methods with sociological concepts
- **Future** changes in conditions for “Teilhabe” (social capabilities) against the background of their historical development
- Identification of the **drivers** for the progress by field indicators
- Enhance the **understanding** of the interactions and mutual dependencies between different fields.

**Next steps:**
- linking the indicator results to the micro level
- application of other weighting schemes
Thank you for your attention.

Britta Stöver
T +49 (0) 40933 - 250
E stoever @ gws-os.com
Deputy head of division social and economic affairs