

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

An application of the TBI

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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

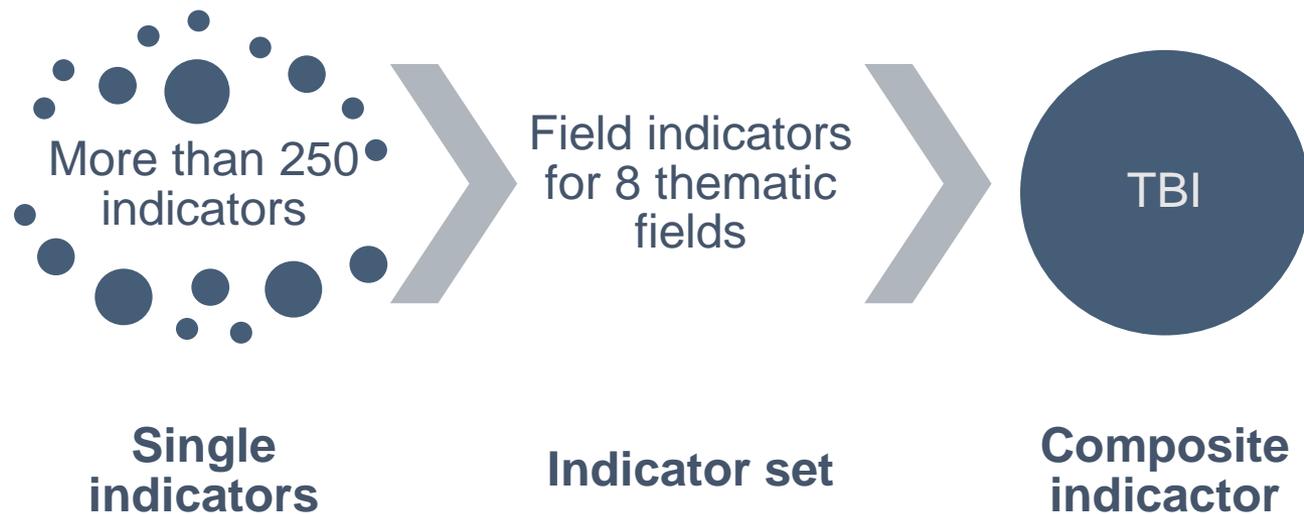
- ⇒ income and consumption

- ▶ **QuBe**

- ⇒ labour demand and supply in terms of qualifications and occupations

- ▶ **projections until 2030**

Modelling background – the indicator



- ▶ 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

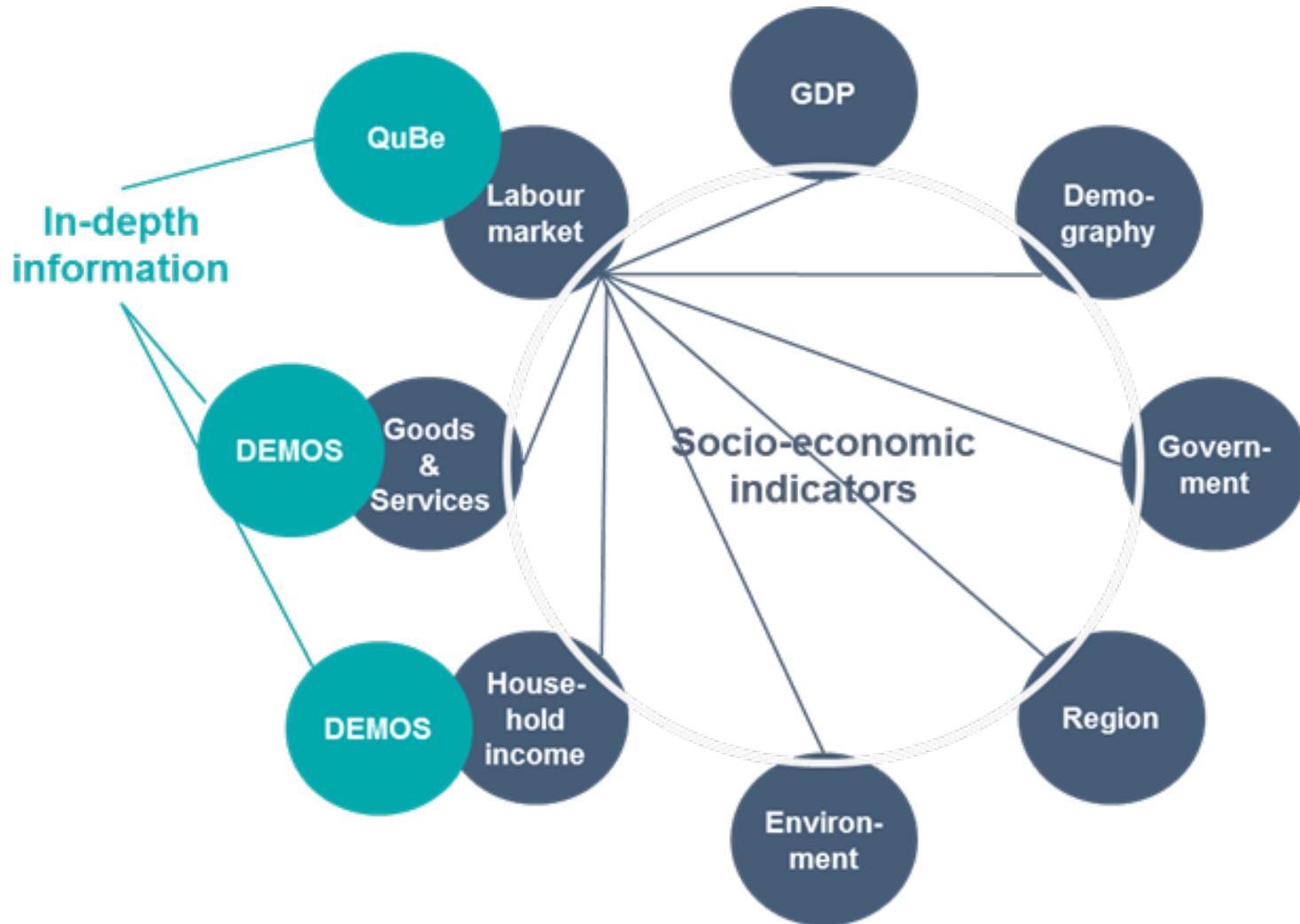
diff. btw. strongest and weakest region in terms of employment (-)

Environment

woodland and agricultural area

More than 250 indicators

The 8 thematic fields



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



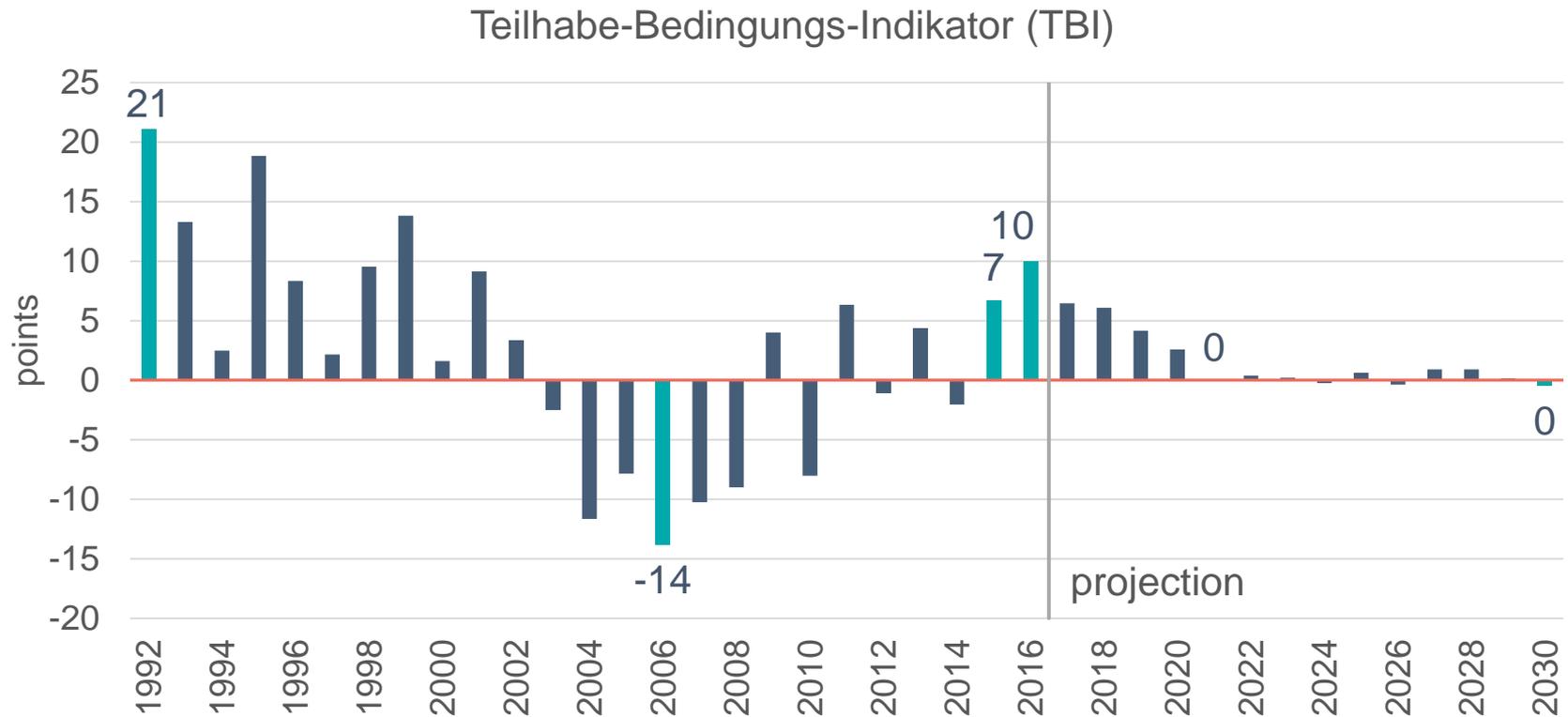
► aggregation

- ⇒ 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

Major processes

	1995	2000	2005	2010	2015	2020	2025	2030
Demography	++	-	---	-	-	---	---	---
Income	+++	--	---	---	+++	+++	+++	+++
Goods and Services	+++	+++	+	-	-	-	-	-
Labour market	++	-	--	-	+++	++	++	++
Government	-	+	+	---	++	++	++	+
GDP	++	++	++	+	---	--	--	--
Region	+++	--	---	-	+	-	-	-
Environment	---	++	+++	+	---	-	++	+

+++ 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.



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