

Agenda

- 1. Introduction
- 2. Modelling the Public Sector
- 3. Evaluation of Reform Strategies The Case of the Solidarity Surcharge
- 4. Conclusions

1. Introduction

- Background
- ► Analysis of Public Revenues

➤ Title of PhD thesis: "Modelling the Public Budget at the Level of Federal States"

□ Targets:

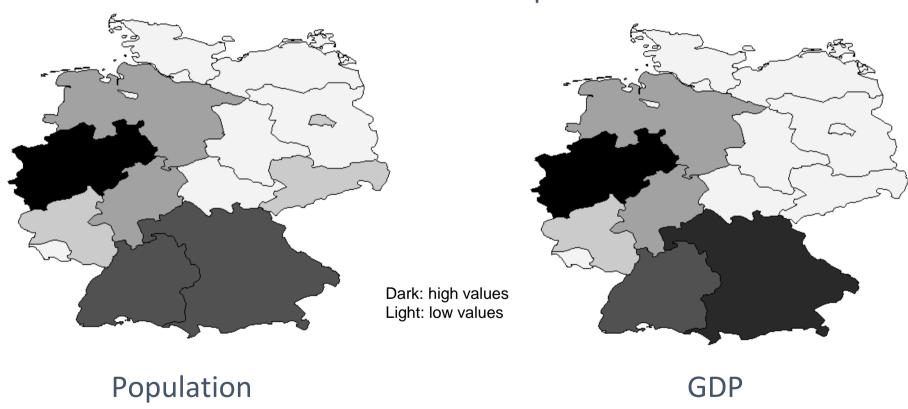
- Analysing the Federal Financial Equalisation System (FFES) in Germany
- Developing a public sector model for evaluation of reform strategies

⇔ Challenges:

- Analysing monetary flows within the public sector
- Developing a model that is capable of performing detailed scenario analysis of reform strategies
- Integration into the German model INFORGE

- Germany comprises of 16 federal states (FS)
- Local states (LS) belong to FS
- All governmental levels (GL) have their rights and obligations assigned to them under the constitution
- ► GL need adequate financial resources to fulfill their *functions*
 - ⇒ Federation: e. g. defense
 - ⇒ FS: e. g. education
 - ⇒ LS: e. g. culture
 - ⇒ Social Security System (SSS): social security (pensions, unemployment fees etc.)

- ► Financial distribution is specified in constitutional law §§106-107 and law on financial equalisation
- ► FS are heterogenous with respect to population and economic structure → influences expenditures and revenues



- Overall target for allotting the revenues of the FS: create and maintain equal living conditions troughout Germany
- Distributive rules are part of the FFES
 - ⇒ Law on Financial Equalisation (LFE) ends in December 2019
 - ⇒ Need for reform
 - High level of reallocation of tax revenues
 - Up to 4 FS support the remaining 12 FS
 - Negative incentives to increase the tax base
 - Solidarity surcharge
 - ⇒ Part of coalition agreement: commission of representatives from the federation, FS and LS should prepare a proposal for reform strategies

- Main part of public revenues is based on
 - ⇒ Social constributions and tax revenues (75 %, ~1.100 bln. €)
 - Other current transfers and capital transfers (18 %), in particular reallocation of tax revenues among and within federation, FS and LS
- Social contributions are entitled to SSS
- ► Federation, FS, LS receive total amount of tax revenues
 - □ Constitution regulates tax distribution and guarantees appropriate funding for all governmental levels
 - ⇒ 4 step approach according to LFE

► I. Step:

- ⇒ Federation: e. g. energy taxes, solidarity surcharge (~ 100 bln. €)
- ⇒ FS: e. g. beer tax, inheritance tax (~ 16 bln. €)
- ⇒ LS: e. g. trade and property tax (~ 57 bln. €)

► II. Step:

⇒ Distribution of joint taxes (~443 bln. €) to governmental levels, ...

	Income Tax	Cooperation Tax	VAT
Federation	42.5 %	50 %	~53 %
FS	42.5 %	50 %	~45 %
LS	15 %	0	~2 %

⇒ ...and 16 FS

- Basically by territory (principle of local revenue) but corrected by special regulations (valid for income and cooperation tax)
- At least 75 % of VAT are allocated according to the number of inhabitants (~76 bln. €); At max. 25 % of VAT goes as supplementary portion to fiscally weak FS (~ 11 bln. €)

► III. Step:

- ⇒ Fiscally strong FS support weaker FS
- ⇒ Revenue and demand indicator of each FS are compared
- ⇒ Result: each FS is classified either as donoring or receiving country
- ⇒ Certain share (44 % to 73 %) of difference is compensated applying a linear-progressive tariff
- ⇒ Equalisation grants are equal to the amount of compensation

► III. Step (cont.):

- ⇒ Exact amount of adjustment payments depends on the differences of the *average* revenues indicator p. c. compared to the *individually* revenue indicator p. c.
- ⇒ 2013 ~8 bln. €

► IV. Step:

⇒ Supplementary grants (~ 11 bln. €) from the federation to still financially weak FS or FS with special needs (e. g. high unemployment, poor infrastructure)

2. Modelling the Public Sector

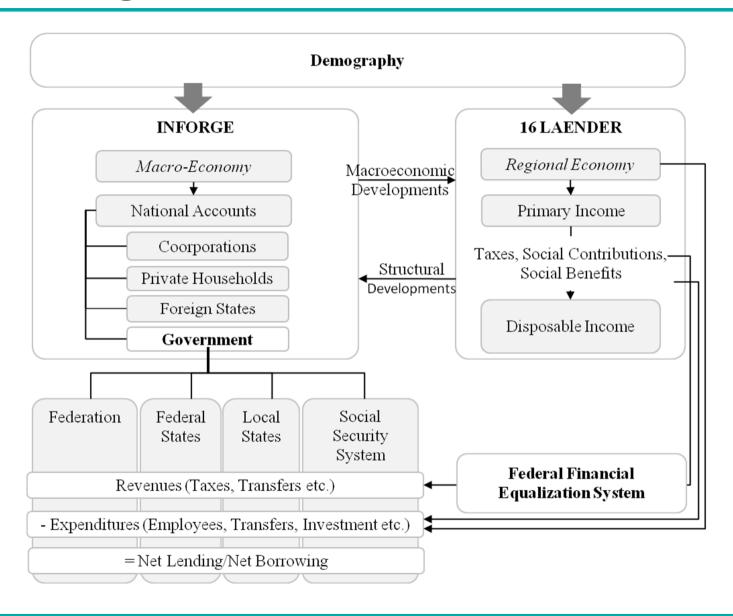
- ▶ Requirements
- **▶** Implementation

Modelling the Public Sector

- Requirements derived from comparison of other public sector models
 - ⇒ Depicting all governmental levels (federation, FS, LS, SSS)
 - ⇒ Showing structure of revenues and expenditures

 - □ Integration of public sector into a macro-econometric model including regions
- Public sector is part of INFORGE but
 - ⇒ Only distinguishing between the SSS and rest of public sector
 - ⇒ FFES is not included
 - ⇒ Some regional aspects need to be improved, e. g. regional disposable income

Modelling the Public Sector



3. Evaluation of Reform Strategies

► The Case of the Solidarity Surcharge

Evaluation of Reform Strategies

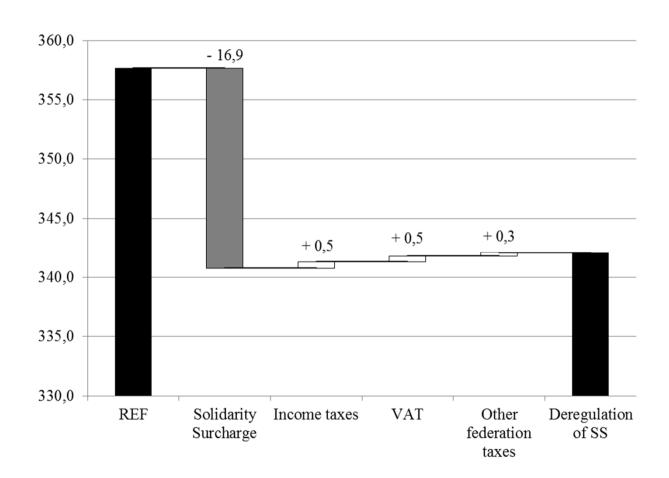
- Solidarity surcharge Background
 - ⇒ 1990 reunification: new FS have less financial power compared to old FS → immediate integration into the FFES not possible
 - □ Loss of revenue for old FS and federation would be too high due to clearing mechanism
 - ⇒ Interim solution (1990-1994): ,Reunification Fund' was introduced and new FS got money from there
 - ⇒ New solution (1995-2004): ,Solidarity Agreement I'
 - Economic and financial adaptation process of the new FS was not successful
 - New FS were integrated into the FFES and federal financial relations have to be adopted (a. o. federation disclaimed of 7 % of VAT revenues)
 - ⇒ Solidarity surcharge was introduced already in 1991 (1991-92 to finance amongst others the 2. Gulf War, from 1995 onwards to compensate lower revenues of the federation)

Evaluation of Reform Strategies

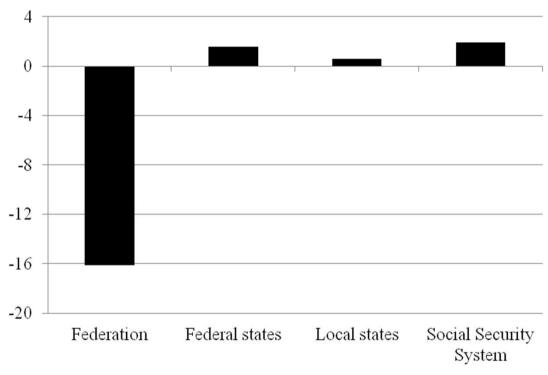
- Solidarity surcharge: Pros and Cons
 - ⇒ Con: Tax weakens economic growth
 - → Scenario 1: Deregulation
 - ⇒ Pro: Public revenues should be strengthened
 - Long-term financial capacity will become worse due to demographic processes without any counteractive measures
 - Debt limit for federation (2016 onwards) and FS (2020 onwards)
 - → Scenario 2: Integration

- Impulse: 2014-2020 tax rate 0 %
- Results:
 - ⇒ Tax payers are relieved by -17 bln. € until 2020
 - ⇒ Disposable income increases → higher consumer spending
 - ⇒ Positive GDP (+ 0.24 %; + 6 bn. €) and employment effects (+ 0.16 %; + 60.000 employees)
 - Positive feedback effects on excise duties, VAT (+ 1 bln. €) and income taxes (+ 0.5 bln. €)
 - Excise duties are federation taxes (except beer tax)
 - VAT is divided by federation (~53 %), FS (45 %), LS (2 %)
 - Income taxes: federation and FS each of them gets 42.5 %, LS 15 %
 - ⇒ Negative effect on solidarity surcharge revenues -17 bln. €

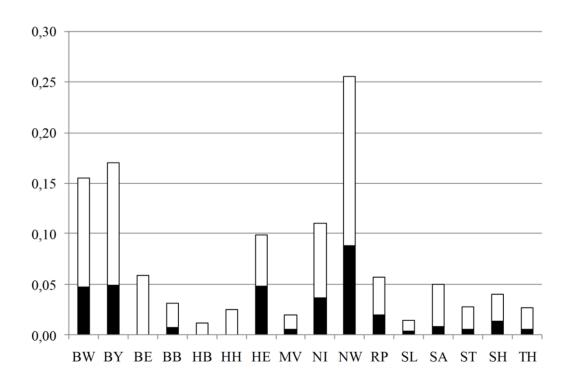
- ► Results (cont.):
 - ⇒ Differences in tax revenues for federation in bln. € (2020)



- ► Results (cont.):
 - ⇒ Positive effects on social contributions due to higher employment (+ 1.3 bln. €)
 - ⇒ FS, LS and SSS profit from deregulation of SS compared to REF Differences in net lending/borrowing in bln. €

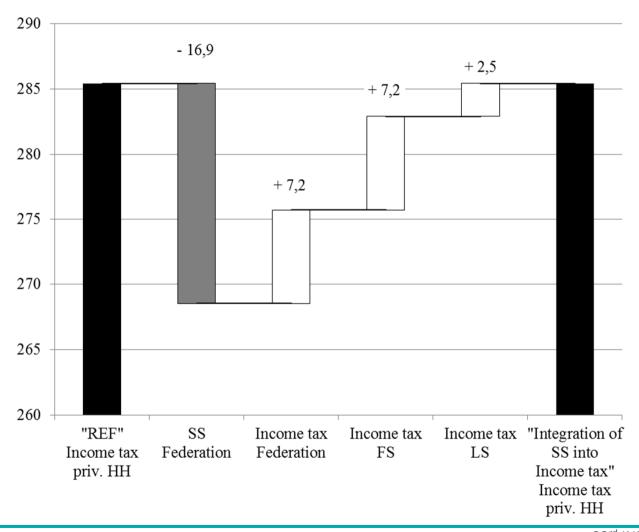


- ► Results (cont.):
 - ⇒ Different regional effects: income tax payers are not equally distributed amongst Germany
 - ⇒ All FS can profit compared to REF
 Differences in net lending/borrowing in bln. € (black LS, white FS)



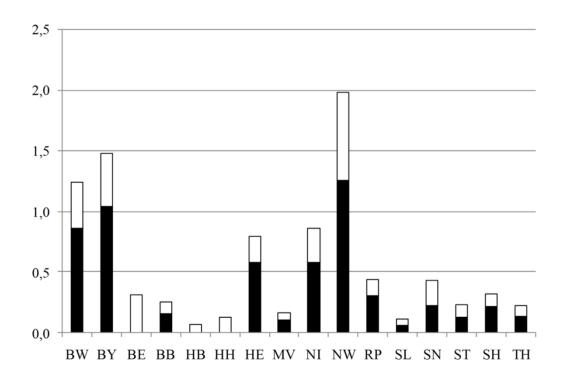
- "Integration of solidarity surcharge into the income taxes"
 - - Federation losses SS revenue
 - Federation and FS: each 42.5 %
 - Local states: 15 %
 - - Tax payers are not affected more than in the reference scenario
 - Tax revenues are redistributed amongst federation, FS and LS

Results (cont.): redistribution of taxes in bln. €

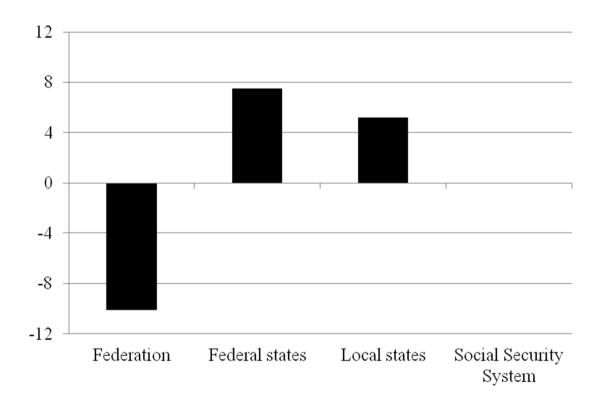


- FS and LS can profit from higher additional income taxes esp. economically strong regions
- Inequality in tax revenues is increasing before tax redistribution amongst FS
- At 2. step in FFES some FS losses their VAT revenues compared to reference
 - VAT revenues are at the same level
 - VAT supplementary portion for poorer FS increases
 - VAT distributed per capita decreases
- Balancing volume in 3. step in FFES is higher +350 mln. €
 - BW, BY, HE pay compensation to remaining countries

- ⇒ Results (cont.):
 - Differences in net lending/borrowing in bln. € (black LS, white FS) compared to REF



⇒ Results (cont.):Differences in net lending/borrowing in bln. € compared to REF



4. Conclusions

Conclusions

- Deregulation of solidarity surcharge
 - ⇒ Relieves tax payers
 - ⇒ Higher purchasing power has positive impacts on economic growth and employment
 - ⇒ Additional taxes and social contributions
 - ⇒ Federation is loser if no countermeasures are taken into account (debt limit)
- Integration of solidarity surcharge into the income taxes
 - ⇒ Losses in federation tax revenues are smaller
 - ⇒ Additional tax revenues for FS and LS are higher
 - ⇒ Social security system cannot profit from the SS integration

Conclusions

- ► Actual discussion : SS will probably not be deregulated:
 - ⇒ Expenditures will further increase (a. o. demographic change)
 - ⇒ Debt limit for federation (2016 onwards) and FS (2020 onwards)

Thank you for your attention.

Gesellschaft für Wirtschaftliche Strukturforschung mbH

Heinrichstr. 30

49080 Osnabrück

Tel + 49 (0) 541 40933-180

Fax + 49 (0) 541 40933-110

grossmann @ gws-os.com