Dimensions of „smart“ fiscal policies of cities

Johann Bröthaler, Michael Getzner

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Our presentation

1. General concept of **fiscal sustainability**
   Sustainability of public debt
   → case-study of 2,400 Austrian municipalities

2. Fiscal policies in terms of the **effectiveness of expenditure**
   (past, present, future-oriented expenditure)

3. Processes for planning fiscal policies and institutions to account for **citizens’ participation** in budgetary policies

4. **Smart fiscal federalism** in terms of responsibility of decision makers, financing electorate, and beneficiaries

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J. Bröthaler, M. Getzner 2013 [2]
1. General concepts on fiscal sustainability: Sustainability of public debt

- "Long-term sustainability of fiscal policies in terms of municipal debt"

Municipal debt
- Expenditure - revenue
- Fiscal decentralization
- Fiscal autonomy
- Expenditure and revenue sharing system

Fiscal "leeway" of spatial planning
- Municipal policies
- Infrastructure investments

1. Spatial components, settlement structures
2. Ecology, social justice
Regulations on municipal debt in Austria

- **Legal Framework**
  - Municipal budgetary law (Federal/state regulations)
  - Different regulations in federal provinces

- **Local Borrowing**
  - Restricted to financing of extraordinary expenditure
  - Requires approval by supervising authority (federal state gov.)
  - No explicit limitation of debt
Public Debt in Austria

Public debt in Austria by subsector as a percentage of GDP, 1995–2010

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria, % of GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central government</td>
<td>58,2</td>
<td>60,8</td>
<td>58,5</td>
<td>62,6</td>
</tr>
<tr>
<td>State government</td>
<td>3,1</td>
<td>2,3</td>
<td>3,0</td>
<td>5,7</td>
</tr>
<tr>
<td>Local government</td>
<td>6,6</td>
<td>2,7</td>
<td>2,0</td>
<td>2,8</td>
</tr>
<tr>
<td>Social security funds</td>
<td>0,3</td>
<td>0,4</td>
<td>0,7</td>
<td>0,7</td>
</tr>
<tr>
<td>General government</td>
<td>68,2</td>
<td>66,2</td>
<td>64,2</td>
<td>71,8</td>
</tr>
<tr>
<td>Mio. Euro (curr. prices)</td>
<td>119,208</td>
<td>137,995</td>
<td>157,429</td>
<td>205,576</td>
</tr>
</tbody>
</table>
Debt of local governments in Austria

Public debt of local government level (ESA95) and total debt of municipalities in Austria, 1992–2010, Mio. Euro (2005 prices)
Debt of local governments in Austria

Total debt of local governments (excl. Vienna) in Austria by grouped by population size, 1992–2010, Euro per capita (2005 prices)

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J. Bröthaler, M. Getzner 2013 [7]
# Debt of local governments: Econometric results

<table>
<thead>
<tr>
<th>Dependent variable: Primary surplus of municipality i at time t</th>
<th>Explanatory variables</th>
<th>Coefficient</th>
<th>(t-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-46.975 (<strong>-6.196</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$D_{it-1}$ Debt of municipality $i$ at time $t$;</td>
<td>$0.028 (<strong>9.844</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005 prices (EUR/capita; natural log)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pop_{it}$ Number of residents of municipality $i$ at time $t$</td>
<td>$1.615 (<strong>1.983</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(natural log)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$Pop_{it}^2$</td>
<td>$-0.090 (<strong>1.703</strong>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$UR_{it}$ Unemployment rate of municipality $i$ at time $t$</td>
<td>$-2.297 (<strong>5.295</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the labor market district in which municipality $i$ is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>located (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$GDP_{it}$ Regional GDP of municipality $i$ at time $t$</td>
<td>$9.649 (<strong>6.877</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at 2005 prices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for the NUTS3-region of municipality (EUR/capita; natural log)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$GDP_{it}^2$</td>
<td>$-0.523 (<strong>7.451</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$IR_{it}$ Real interest rate level on federal public debt (%)</td>
<td>$0.074 (<strong>19.141</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$APP_{it}$ Share of votes for the Austrian People’s Party</td>
<td>$0.658 (<strong>15.205</strong>*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the municipal elections of municipality $i$ at time $t$ (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR(1)</td>
<td>$0.202 (<strong>43.483</strong>*)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional statistics:
- Adj. R²: 0.421
- S.E. of regression: 2.360
- F-stat.: 13.303***
- DW stat.: 1.929
- n: 40,052
- Period: 1992-2010
- Cross-sections: 2,356
Sustainability of fiscal policy: future-oriented expenditure

- **WNA-concept**
  - Evaluation of aims/functions of expenditure
  - Differentiation between expenditure that is either oriented to growth or sustainability ("oriented to the future")
  - In contrast to expenditure financing commitments of the past (e.g. payments for pension funds; interest payments)
  - Classification of expenditure from an economic-functional perspective

- **Expenditure “oriented towards the future”**
  - Share of future-oriented expenditure relative to total municipal expenditure
  - All Austrian municipalities vs. differentiation acc. to the size and location of the municipality

- **Restrictions**
  - Inputs – not outputs/effects; qualitative assessment
  - Efficiency, effectiveness, quality missing
WNA – Future-oriented expenditure

- **Orientation to the future**
  - Economic sustainability (growth/development)
    e.g. Education, R & D, labor-market instruments
  - Social sustainability
    e.g. Public health, family policies
  - Ecological sustainability
    e.g. Environmental/nature conservation, renewable energy

- **Infrastructure investments**
  - Growth orientation (and input/precondition for economic development)
    e.g. Transport, communication, water provision, electricity networks

- **Orientation to the present**
  - Other expenditure (e.g. administration, welfare payments, culture)

- **Orientation to the past**
  - Pension payments, debt service
WNA – Future-oriented expenditure

Expenditure of Austrian municipalities / Vienna 2011

<table>
<thead>
<tr>
<th></th>
<th>Municipalities exc. Vienna</th>
<th>Vienna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future (Growth)</td>
<td>38</td>
<td>46</td>
</tr>
<tr>
<td>Future (Infrastructure)</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Present time</td>
<td>39</td>
<td>29</td>
</tr>
<tr>
<td>Past</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
WNA – Future-oriented Expenditure

Expenditure by size of municipalities 2011, in Euro per capita

- <= 10,000 inh.
- 10,001-20,000 inh.
- 20,001-50,000 inh.
- > 50,000 inh.
WNA – Future-oriented Expenditure

Expenditure by size of municipalities (excl. Vienna) 2002-2011, share of total expenditure in %

Municipalities < 10,000 inh.

municipalities > 10,000 inh.

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J. Bröthaler, M. Getzner 2013 [13]
WNA – Future-oriented Expenditure

Expenditure by location of municipalities relating to urban regions 2011, in Euro per capita

- Central cities
- Agglomeration area
- Outer zone of urban regions
- Other (rural) regions

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J. Bröthaler, M. Getzner 2013 [14]
Citizens’ participation in budgetary policies

- Participatory planning
  - International studies (e.g., Switzerland) show that citizens' involvement (such as referendums on municipal fiscal policies) leads to
    - more effective provision of public goods and services,
    - a slightly smaller public sector (eventually mirroring citizens' preferences more closely),
    - a lower level of public debt.

- “Smart“ = new institutions for citizens' involvement and participation
  - Public hearings, information on fiscal policies
  - Referenda with information on costs and benefits
„Smart“ fiscal federalism

- Principles of Fiscal Equivalence, Connexity, Congruence

Dimensions of „smart“ fiscal policies of cities

J. Bröthaler, M. Getzner 2013 [16]
Conclusions

→ (At least) 4 elements of “smart” fiscal policies for cities:

1. Sustainability of municipal debt
2. Expenditure oriented to the future
   Ecology – economy – social policies
3. Institutional reforms to allow for citizens’ participation in fiscal policies
4. Efficient and effective revenue/tax sharing system / fiscal federalism
   Fiscal equivalence – congruence – connexity

→ Focus on spatial dimension of fiscal policies
   Interdependencies with / responsibility of spatial planning

→ Improvement of budgetary processes
   Build-up and strengthening of the capacity of municipal decision makers,
   instruments of financial planning and fiscal impact analysis

→ Extension of fiscal autonomy potentially useful
   Increase of own revenues (and self-reliance)

→ Urgent need to evaluate off-budget units
   Total debt level & efficiency of off-budget units
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