### Regional and Spatial Information in SOEP

#### Introduction

There is growing interest among social and behavioral scientists in geographical information as an explanatory factor for social inequalities or behavior, and for the interactions between human beings and their environments. This poster gives an overview of geographical data currently available for use with the SOEP. However, pursuant to German data protection regulations, it is more difficult for users to obtain access to the more detailed regional information.

The SOEP contains a great deal of geographically referenced indicators and regional information:

1. **The SOEP collects information directly from the respondent** on the local environment in which she/he lives. Naturally these indicators do not refer to geographical entities delineated by German administrative bodies, but simply to whichever area the respondents consider their own “residential area,” “neighborhood,” or “place of residence.”

2. **Code for the community type and classification of community size.** The SOEP contains variables that indicate the area in which survey respondents live at the time of the (household) interview. The values of these variables refer to official geographical units used. On the basis of these unique identifiers it is possible, in principle, to match SOEP data with official, scientific or commercial meso-data (spatial data) at these levels.

3. **The SOEP contains external indicators about the “neighborhood” at street section or block level.** The provision of these indicators is the result of cooperation with micron (Micromarketing Systems and Consult GmbH) to match SOEP with data at the level of street sections.

4. **The SOEP now also includes the geographical coordinates of each household at the block level since 2000.**

5. **Mean number of SOEP households per block.**

#### Administrative boundaries

<table>
<thead>
<tr>
<th>Federal States (Länder)</th>
<th>Spatial Planning Regions (Raumordnungsregionen)</th>
<th>Counties (Landkreise und kreisfreie Städte)</th>
<th>Communities (Gemeinden)</th>
<th>Zip-Codes, delivery area (Postleitzahlen, Zustellbezirke)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corresponding NUTS level</td>
<td>NUTS1</td>
<td>NUTS2</td>
<td>NUTS3</td>
<td>NUTS4</td>
</tr>
<tr>
<td>Number of regions (2000)</td>
<td>NUTS1</td>
<td>16</td>
<td>97</td>
<td>439</td>
</tr>
<tr>
<td>Number of regions with SOEP respondents (2008)</td>
<td>NUTS2</td>
<td>16 (100%)</td>
<td>97 (100%)</td>
<td>439 (100%)</td>
</tr>
<tr>
<td>Mean number of SOEP households (residents) per region in 2008</td>
<td>NUTS3</td>
<td>844,9</td>
<td>112,9</td>
<td>205,6</td>
</tr>
<tr>
<td>Access policy</td>
<td>Standard-DVD</td>
<td>Extra CD and password (Geocodes)</td>
<td>SOEPremote or at DIW Berlin</td>
<td>Only at DIW Berlin</td>
</tr>
</tbody>
</table>

#### Street section level

- Matching with exact address at street section level
- Microm data normally used for direct marketing
- Selected Indicators available for SOEP:
  - Number of private households
  - Socio-economic status
  - Family structure
  - Mean age of household head
  - Share of foreigners
  - Building typology
  - Street typology
  - Number and make of cars
  - Residential mobility
- Available since SOEP wave 2000 with ongoing updates
- Mean number of SOEP households per (observed) Street section: ~5
- Mean number of SOEP households per (observed) Micro-cell: ~1
- Available for all researchers, but only on computers within DIW Berlin (guest working stations)

#### Geo-Coordinates

- Since 2000, the geographical coordinates for all (gross and net sample) households are available at the block level.
- New possibilities to study, for example, mobility or segregation.
- Currently a pilot study is taking place with the aim of testing the integration and possibilities of spatial information on the earth’s surface with social scientific questions (poster “Synergies in Socioeconomic and Remote Sensing Data”).
- Data access for external guest researchers and internal researchers possible through a special server environment at DIW Berlin only (see SOEPgeo, poster “SOEP Data Access”)

#### Outlook

The department SOEP plans to establish a “SOEP FDZ” (Research Data Centre) that will provide standardized access to regional and spatial data within SOEP. The “SOEP FDZ” will make it easy to access to the top-sensitive data.