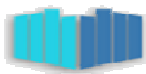


Indicators for territorial policies: Closing “gaps of understanding” in territorial comparisons

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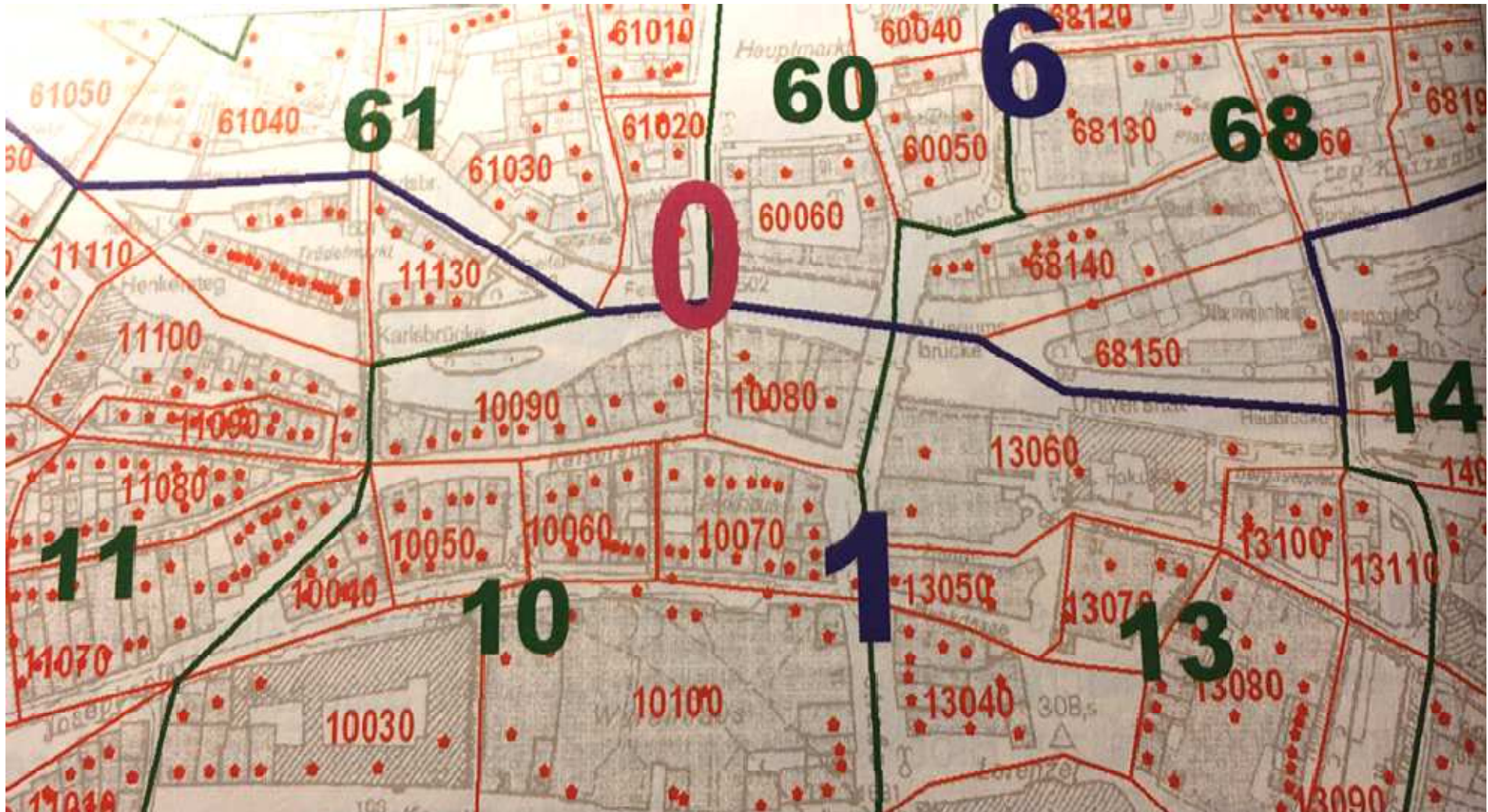
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Structure

- Introduction
- German collections of municipal sub-city data as examples
 - Urban Audit
 - IRB collection to monitor inner-city spatial development
 - KOSTAT
- The relative size of the spatial units as a criterion for their comparability
- Effects of the population size on the visibility of territorial particularities
- Conclusions and recommendations

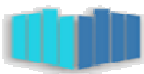
The hierarchical system of sub-city division in Germany





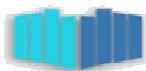
Introduction

- The standardised sub-city division of the German municipalities
- Grouping addresses by their topographical neighbourhood and hierarchy: Sides of building blocks and hierarchical aggregates
- Composing any territorial division by grouping elements from different levels of the hierarchy > territorial references
- Originally: Topographical identity more important than comparability
- Electoral districts had to be comparable in size
- Flexible aggregation and the problem of confidentiality
- Analyses for urban planning require comparability
- Internal homogeneity external heterogeneity
- Typology by location: IRB
- MAUP



Size matters

- Structural comparisons of sub-city units are most frequently based on the **share of population groups** (like migrants or senior citizens) in the total population.
- Depending on the question, proportions of sub-totals are only comparable if the **basic totals are the same size**.
- In comparisons of sub-city data, the **number of inhabitants is the most important basic total** and should therefore be of the same size.
- Equal population size is an important **standard** for collections of sub-city data.

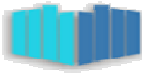


Population size of the German collections of sub-city data: Urban Audit – IRB – KOSTAT

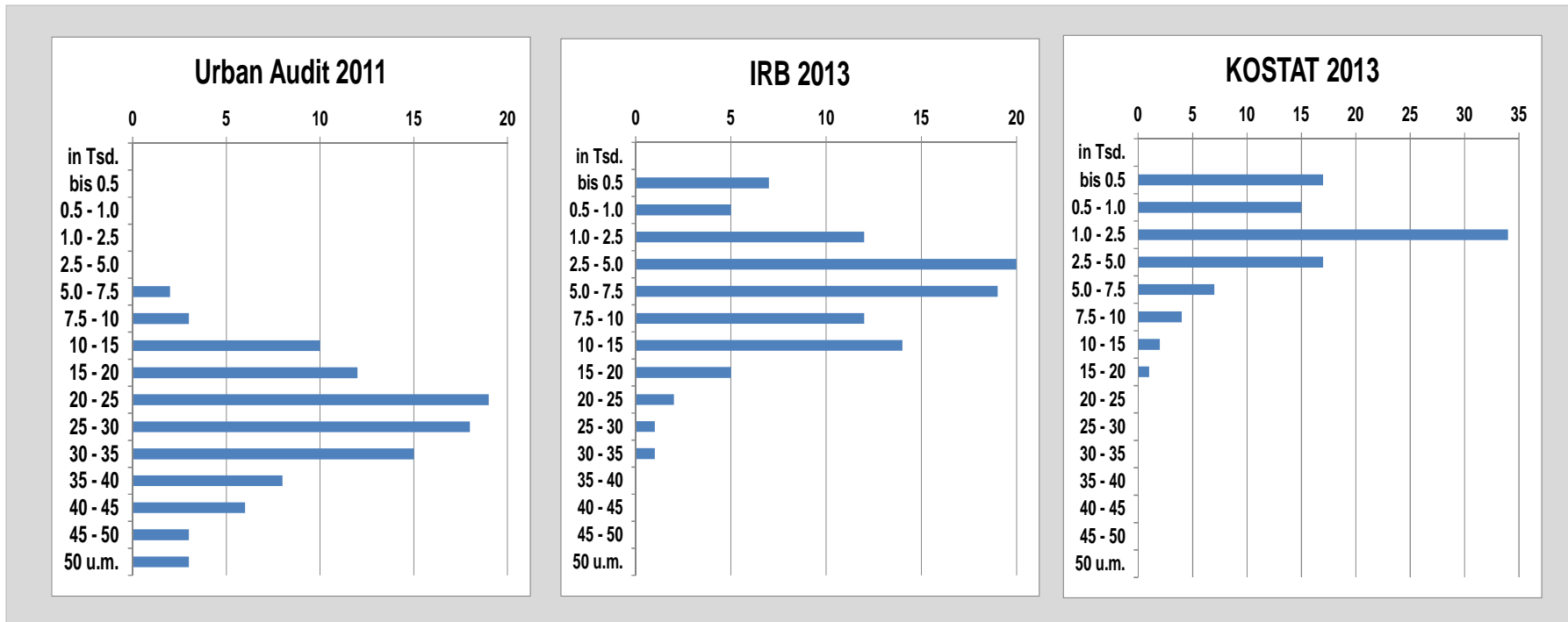
- Sub-city Districts in Urban Audit of the EU
- Monitoring of sub-city districts of BBSR (IRB)
- Territorial units of the KOSTAT collection

All these collections refer to the hierarchical municipal sub-divisions based on a recommended standard by the Association of German Municipalities.

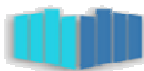
Data collection	Number of small-scale units with data	Total population	Population of the average unit	Population of the central unit (median)	Population of the smallest unit (minimum)	Population of the largest unit (maximum)
Urban Audit	724	19,048,589	26,310	25,842	4,787	84,783
IRB	2,918	21,126,712	7,240	5,682	0	87,783
KOSTAT	9,145	26,554,999	2,900	1,579	0	87,783



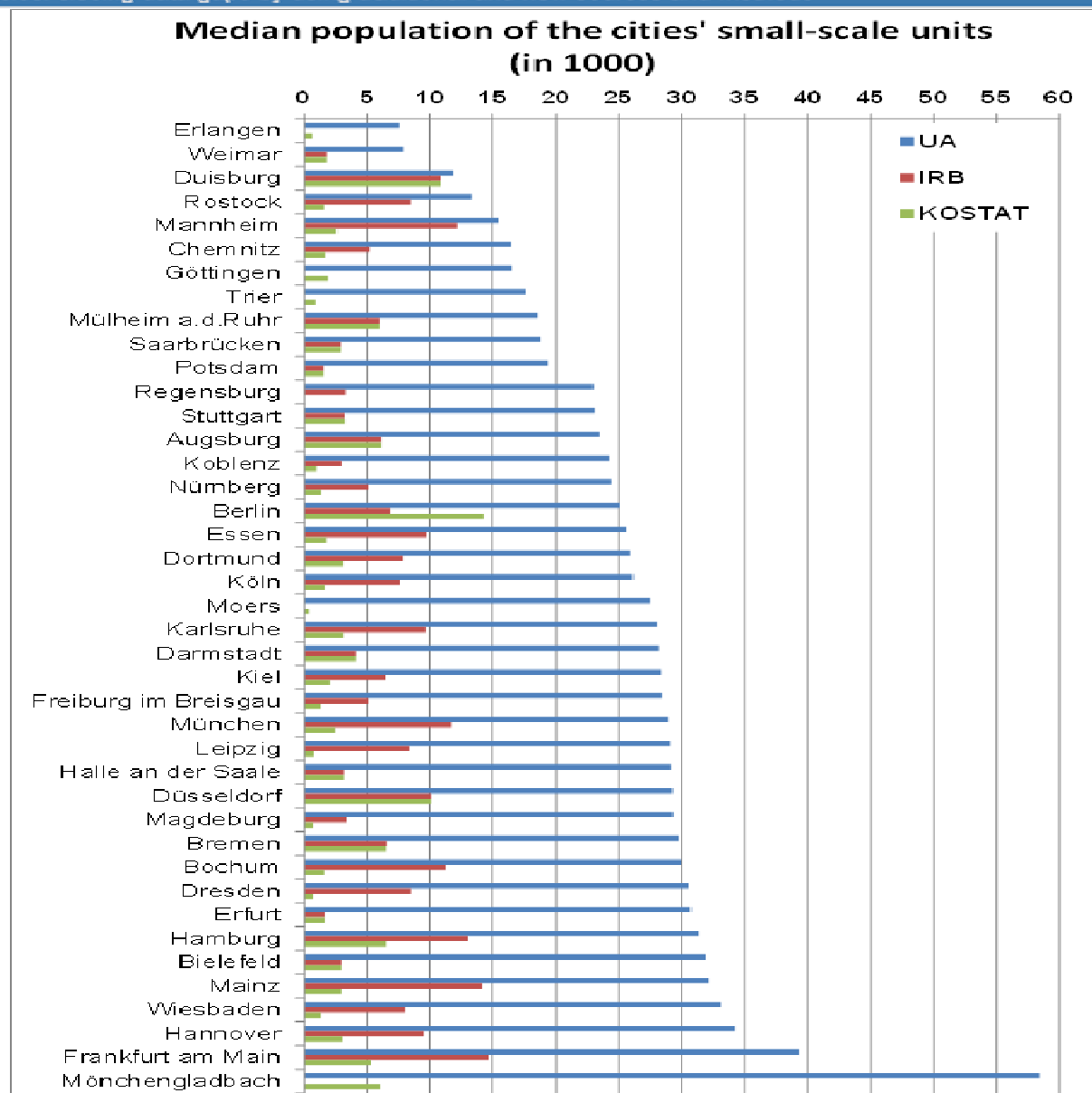
Population size of the small-scale units of Urban Audit, IRB, KOSTAT in %



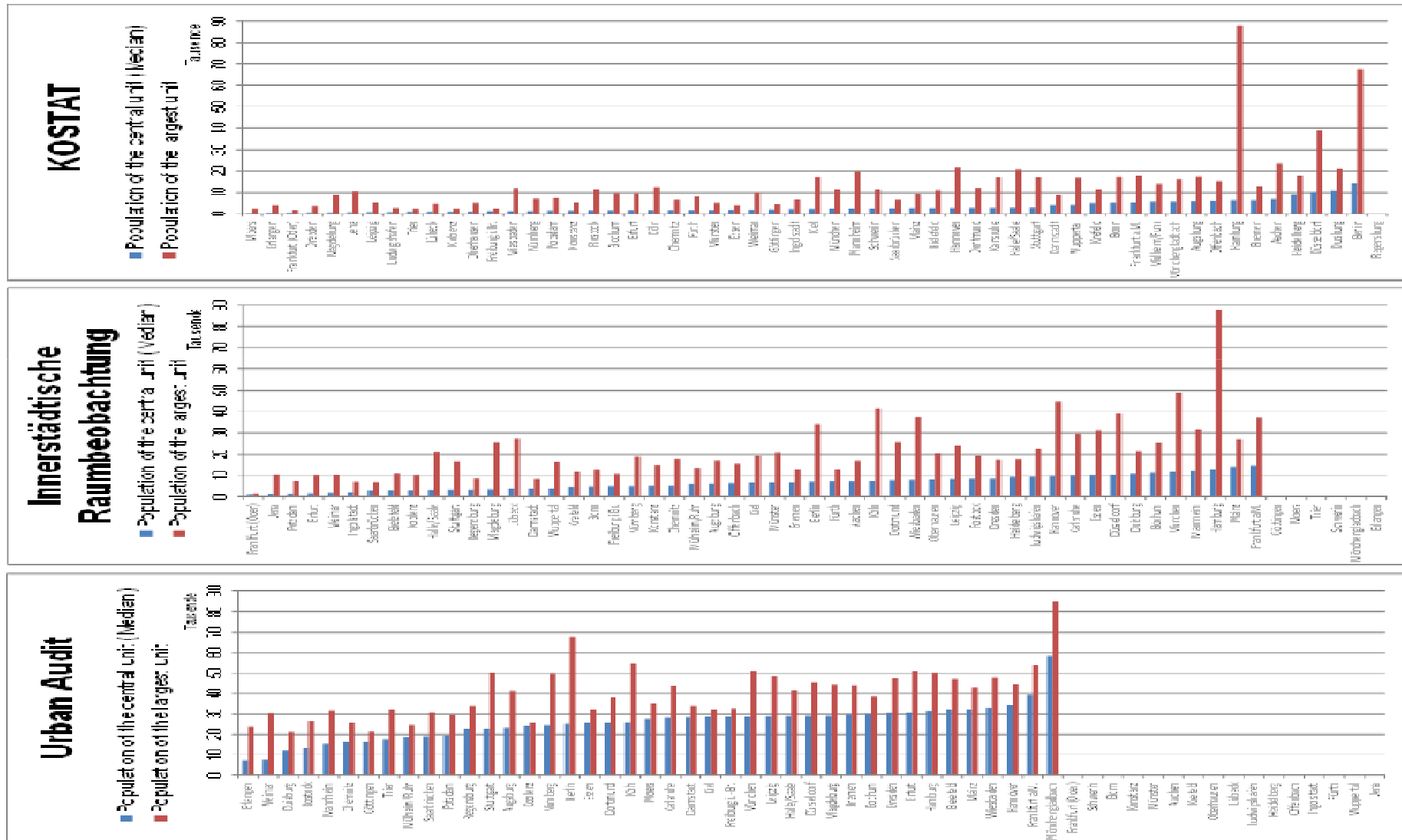
Small units will show particularities of sub-groups better than large units where small-scale differences will balance out.

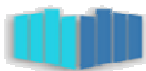


Indicators for territorial policies: closing data gaps by using traditional and new sources and methods



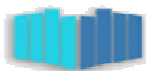
Population of the **central unit** and of the **largest unit** in the collections of UA, IRB and KOSTAT





Effects of population size on the visibility of territorial particularities

- Relevant aspects, like housing conditions, unemployment, migration background, precarious income situations or persons at retirement age, are not distributed evenly over the city nor within sub-city districts.
- They form local clusters.
- The less evenly they are distributed, the more size and delimitation of the spatial units compared determine if local clusters can be recognised.
- In larger areas they are balanced out and thus become invisible in the statistical indicators calculated for them.
- The effects of the different size levels of the existing data collections can be demonstrated by taking as examples
 - the proportion of senior citizens and
 - unemployment rates.

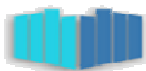


Population size affecting visibility of concentrations of seniors

- The proportion of senior citizens in different parts of the city is an important criterion for the need of **social infrastructure**, like public transport, as well as for the **housing market**.
- The same cities show quite different distributions of the proportion of senior citizens in the total population of their sub-city districts (with > 1000 inhabitants):

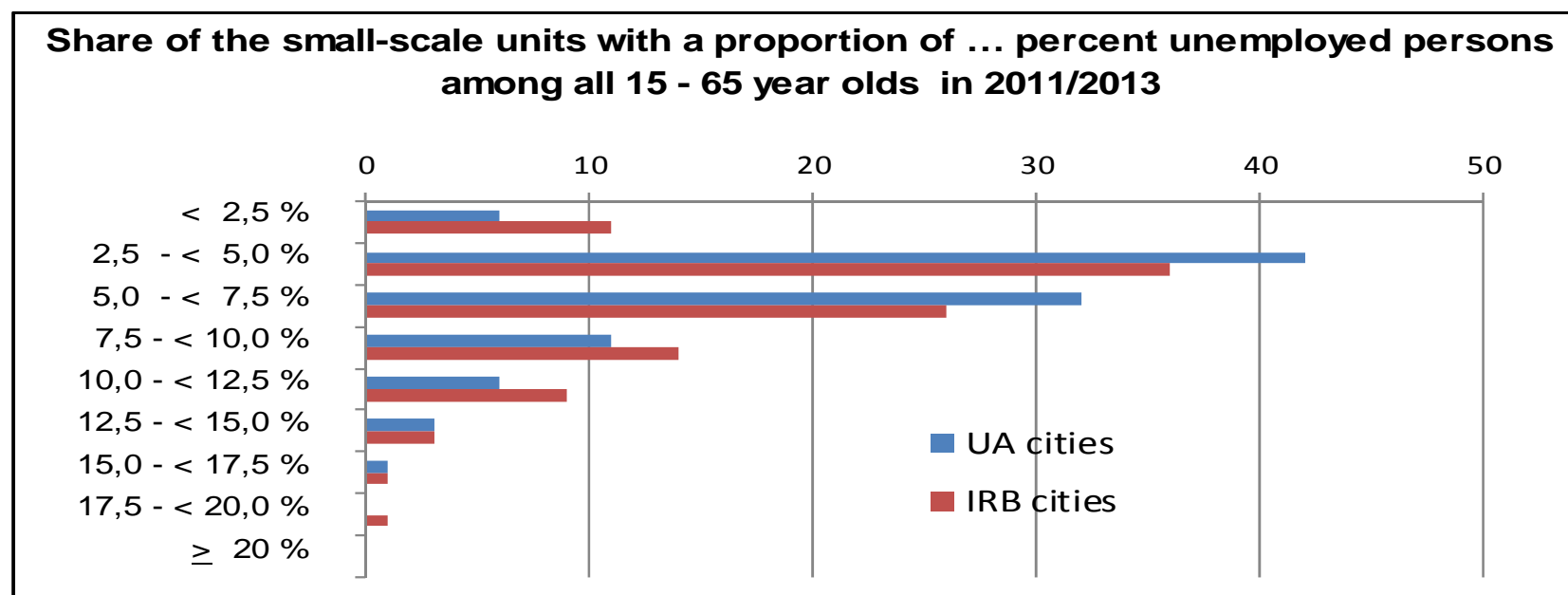
Proportion of seniors 65+ in the sub-city units	UA	IRB	KOSTAT
	2011	2013	2014
< 30 %	97,1	94,9	93
30 – < 45 %	2,9	4,9	6,4
≥ 45 %	0	0,2	0,6

- A proportion of **> 30 percent seniors** was reached
 - in UA by 14 out of 486 SCD: av. pop. of SCD: 26,000
 - in IRB by 81 out of 1,578 SCD: av. pop. of SCD: 7,000
 - in KOSTAT by 235 out of 3,348 SCD: av. pop. of SCD: 3,000.



Effect of SCD-population size: The example of unemployment

- ❑ Unemployment varies in its regional concentration, by residential location and social planning area.
(Unemployment rate here = unemployed persons / 15 – 65 year olds)
- ❑ Among sub-city districts of Urban Audit and IRB, for which data is available,
 - in UA: none of the SCD has an unemployment rate of 17.5 % or more;
 - in IRB: 12 districts exceed this threshold.

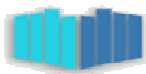




The eligibility of cities for political support to fight inner-city unemployment decreases with the population size of their sub-city districts.

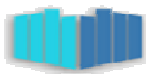
Urban Audit cities with ≥ 15 % unemployed in ... SCD ≥1000 inhabitants*):			
Kiel	1	out of	9
Chemnitz	1	out of	14
Dresden	1	out of	17
IRB cities with ≥ 15 % unemployed in ... IRB districts ≥1000 inhabitants*):			
Kiel	2	out of	9
Bremen	2	out of	18
Essen	4	out of	22
Köln	2	out of	86
Bielefeld	1	out of	74
Dortmund	5	out of	60
Saarbrücken	6	out of	51
Potsdam	1	out of	50
Dresden	2	out of	61
Leipzig	1	out of	63
Halle (Saale)	2	out of	33
Erfurt	1	out of	52

*) only cities with data for UA & IRB and districts > 1,000 population

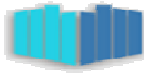


Conclusions and recommendations

- ❑ Territorial comparisons are based on aggregates. The sum, average or other indicator describes the territorial unit as a whole, no matter whether composed of **homogeneous** or very different individuals or if the target group is **spread evenly** or clustered.
- ❑ Target groups tend to **disappear in the average** of a large territorial unit. Small units tend to be more homogeneous and therefore more selective making local concentrations better visible. ► **Smaller units with internal homogeneity support territorial comparisons.**
- ❑ **Data protection** and the risk of local **stigmatisation** must be taken into account.
- ❑ In view of the existing internal municipal sub-divisions, an **average size of 5,000 inhabitants** per unit might come close to the requirements discussed here.



- ❑ From a **monographic perspective**, comparability is less relevant. – Comparability comes into play, when a **judgement** is expected on the **relative magnitude** of the figures provided.
- ❑ When territorial units contain very different numbers of inhabitants, relative **proportions** of population-related quantities (like unemployed or one-person households) **don't give a true picture of the territorial distribution of these quantities**.
- ❑ **Three strategies** might help to avoid this problem:
 - Delimit areas of equal population-size
 - Take as indicator the absolute size of the population-related quantity
 - Measure local clustering of population-related quantities by more direct methods based on neighbourhood relations (e.g. like Amsterdam).Above all: Be quite clear about what you really want to measure.
- ❑ These **findings are not new but deserve more attention** in territorial comparisons and when it comes to **standards** for comparative data collections and also when applying territorial indicators to **funding policies**. With administrative units of different size, it is important to **look at the absolute numbers** behind them.



Thank you for listening!

Any questions?