

Background

- In Russia 1.1 million people were affected by spatial reorganization during the last intercensal period including 9% in Moscow region.
- Municipal division has only appeared in the mid-2000th and has been constantly changing since that.
- Since 2002 Census the region where military services are located has been considering as usual residence for military personnel.

Challenges

- There is no published 2002 Census data at municipal level and boundary-consistent census population time series at detailed administrative level.
- The spatial reorganization prevents from correct assessment of rural-urban population dynamics using census data.
- Considering “institutional population” as usual resident population of the region where military service are located affects a denominator for demographic rates and population age-sex structure.

The question is: How do spatial reorganization and allocation of “institutional population” by geographical areas affect population dynamics in the rural and urban municipalities?

Analysis

Fig 1: Administrative (Level 1-3) and municipal (Level A-B) divisions in Russia

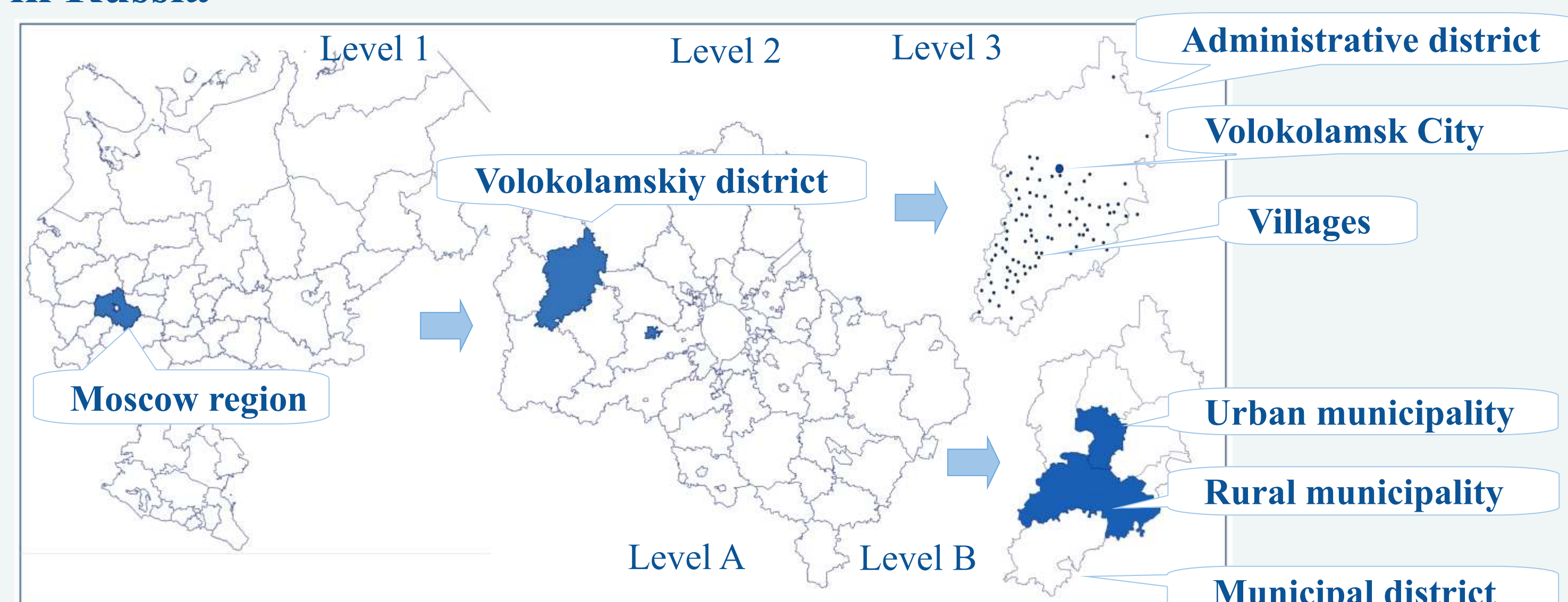


Table 1: Distribution the number of population affected by spatial reorganization during 2002-2010, (Moscow region), ths ppl

Changing settlement's type		Merging settlements with different types			
Rural to urban	Urban to rural	Rural with urban	Urban with rural	Rural with rural	Urban with urban
87,2	29,8	42,6	0,0	23,6	104,4

Spatial reorganization influences on:

- the number of smallest administrative units
- rural and urban population at different spatial levels
- and their population

Assumption 1: administrative division in the 2002 Census was the same as in the 2010 Census.

Table 2: Population growth over the last intercensal period without (A) taken into consideration spatial reorganization and with it (B)

	Without		With	
	ths ppl	%	ths ppl	%
Moscow region	476.6	7.2	476.6	7,2
Urban population	435.2	8.3	335.4	6,3
Rural population	41.4	3.0	141.2	11,1

Fig 2 Influence of spatial reorganization on rural population growth

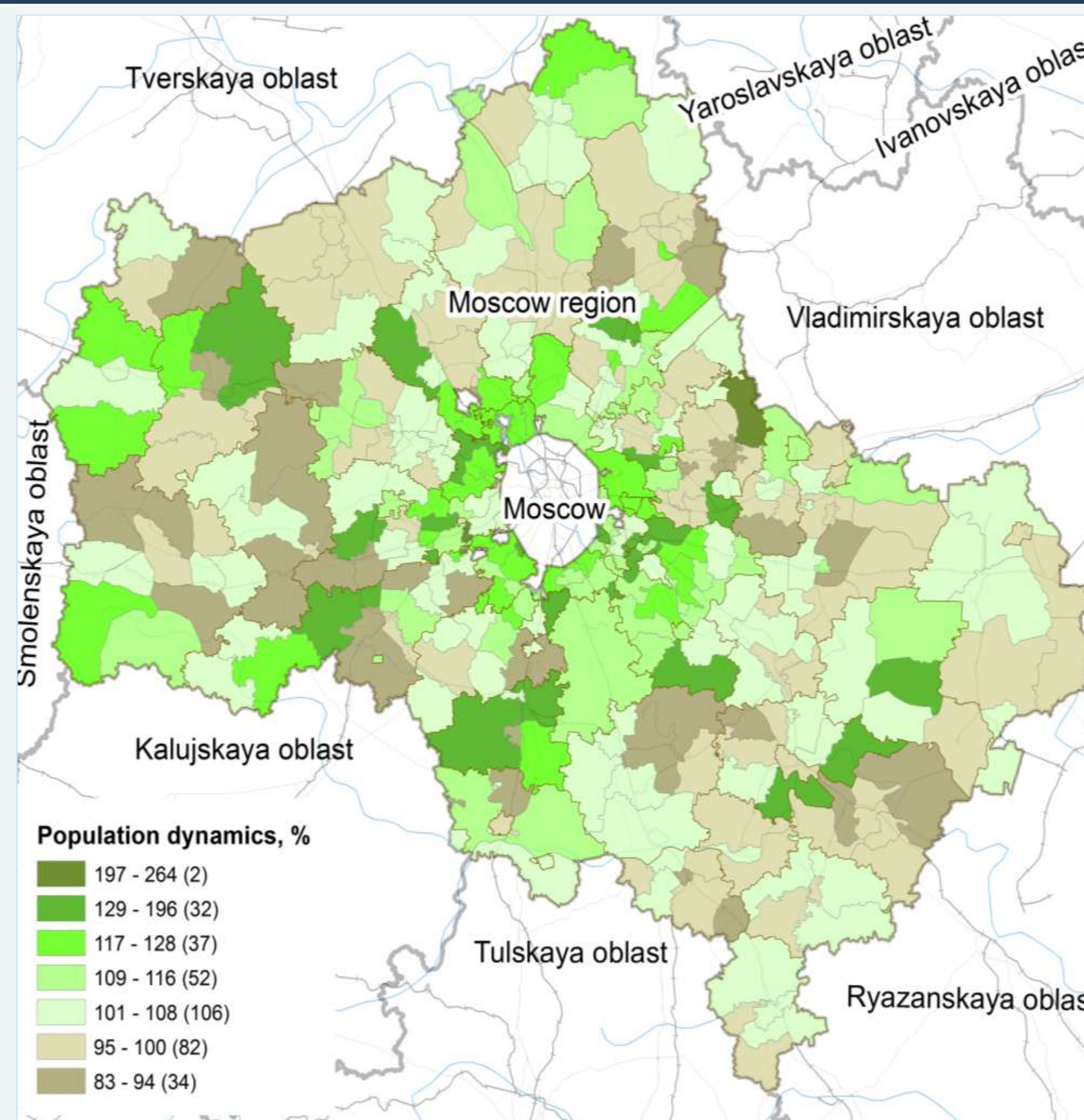
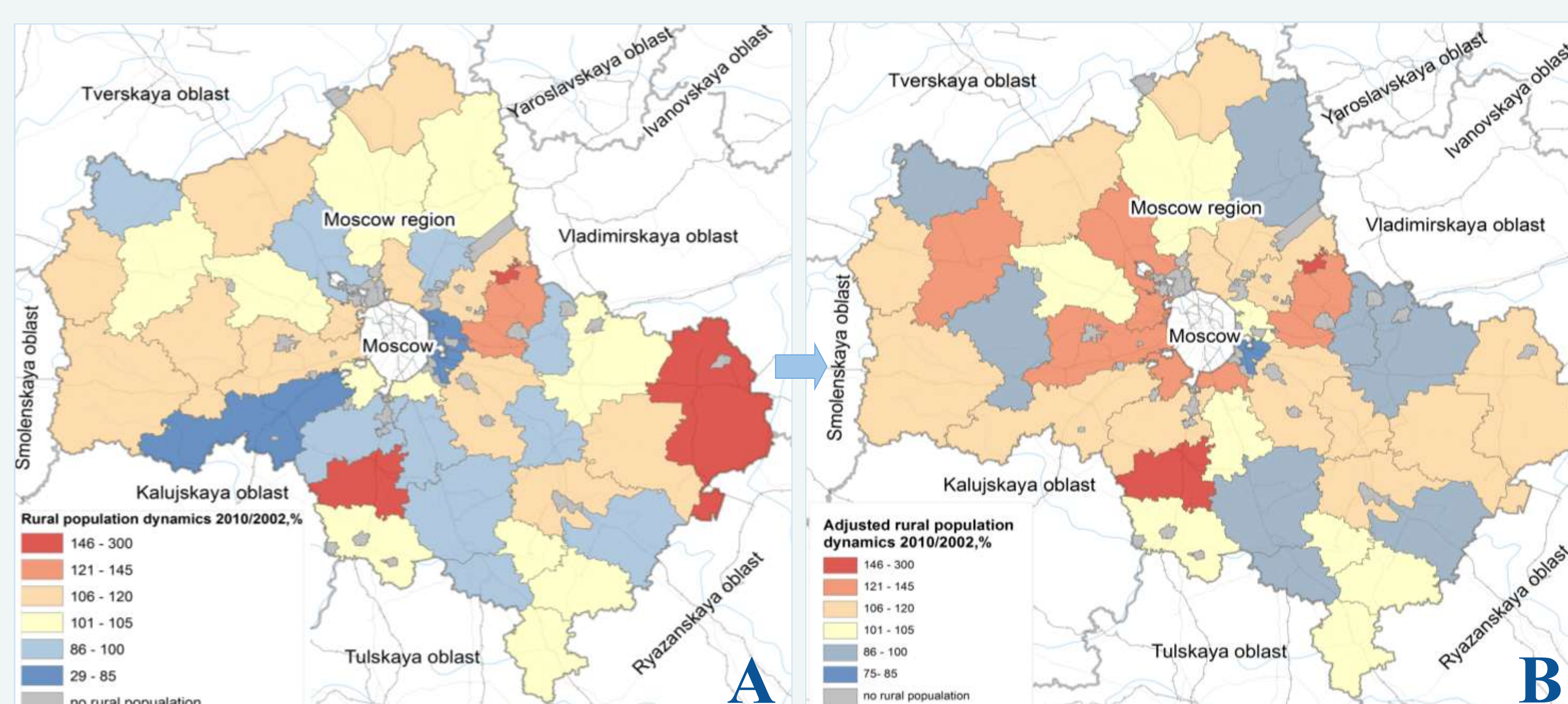


Fig 3: Intercensal population dynamics by municipalities with taking into consideration spatial reorganization, %

Rural population has increased up to 30-50% in some municipalities, while changes in the same areas of the urban population were fairly minor or even negative over the intercensal period

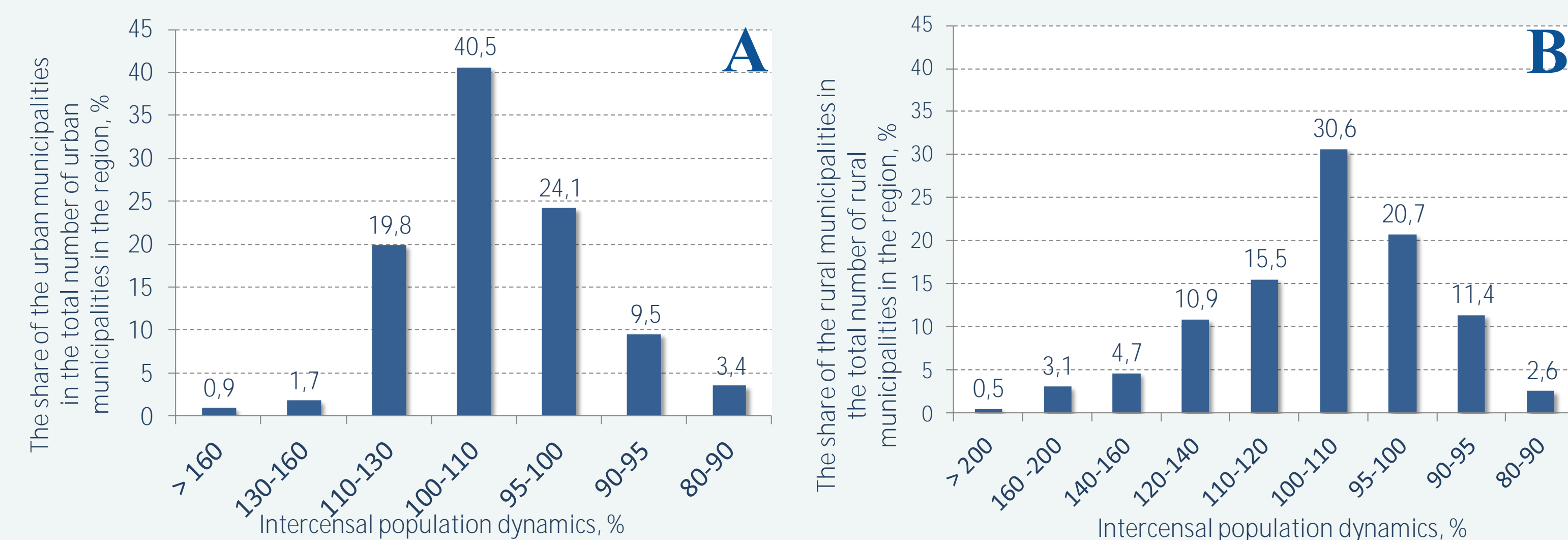


Fig 4: Distribution of the urban (A) and rural (B) municipalities by inter-censal population dynamics in Moscow region

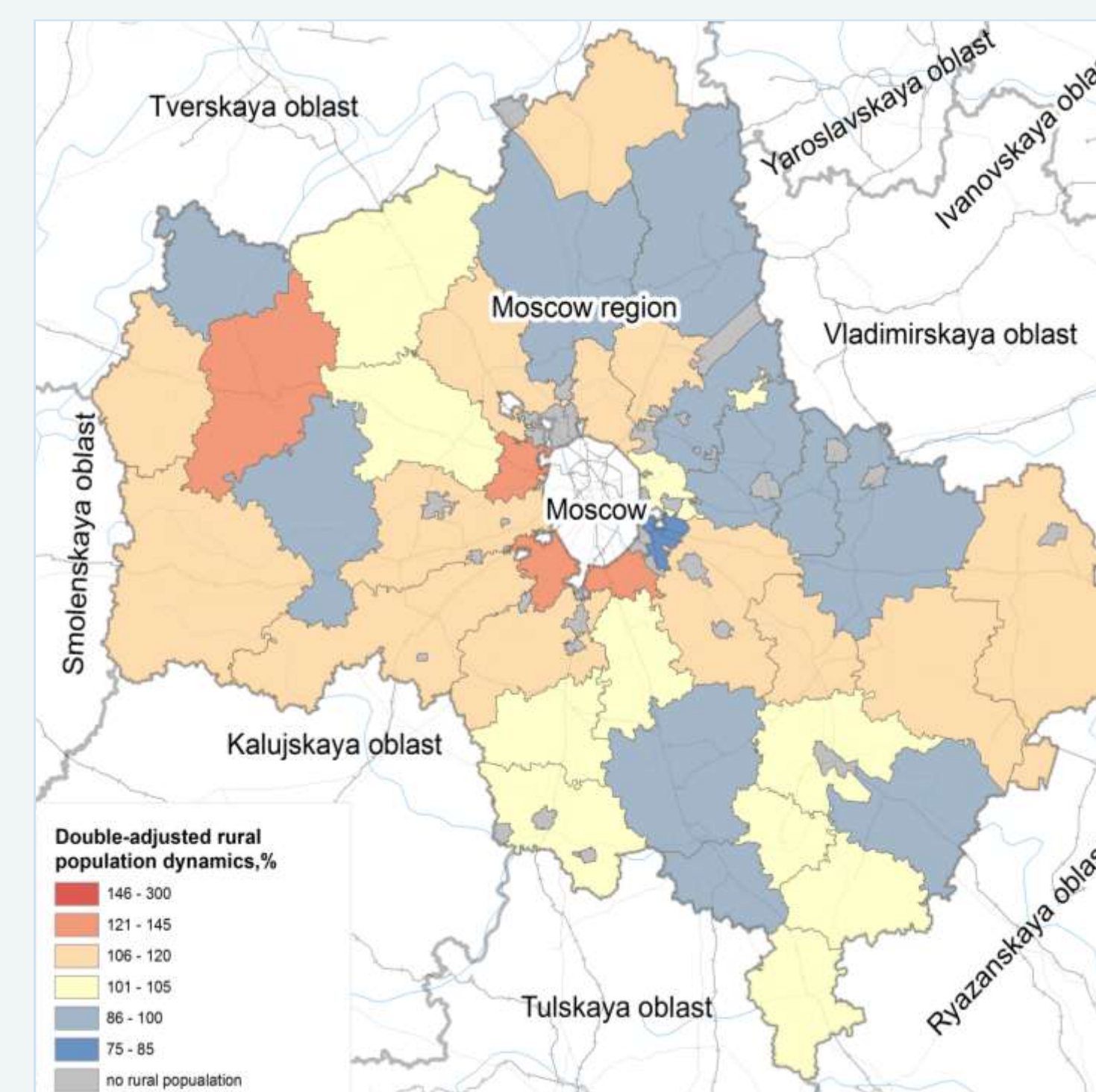
Hypothesis: significant population increase in rural municipalities can be partially explained by differences in the interpretation the place of usual residence for “institutional population” within region between 2002 and 2010 Censuses .

Assumption 2: “Institutional population” was counted in 2010 Census as in 2002 Census.

Results

Population growth in Moscow region has changed after the second adjustment as follows: urban population increased by 7.5%, while rural - by 6.2%. Up to 40% rural population growth refers to change in the definition of the place of usual residence for “institutional population” in Moscow region.

Fig 5: Intercensal rural population dynamics (with taken into account spatial reorganization and “institutional population”), %



Conclusion

“Non-demographic” factors (spatial reorganization and defining the place of usual residence for some types of “institutional population”) have a great impact on rural and urban population dynamics within a region. They lead to:

A.inconsistent census data on rural and urban population at different spatial levels;

B.distortion of allocation budget funds depending on the population in the municipality;

C.Limitation of spatial demography development in Russia.