



# Internal migration patterns in the EU and the future population development of large cities in Germany

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# Internal migration flows

## Interregional

**push-pull-model/regression model:  
wage differentials, rate of unemployment**

## Intraregional

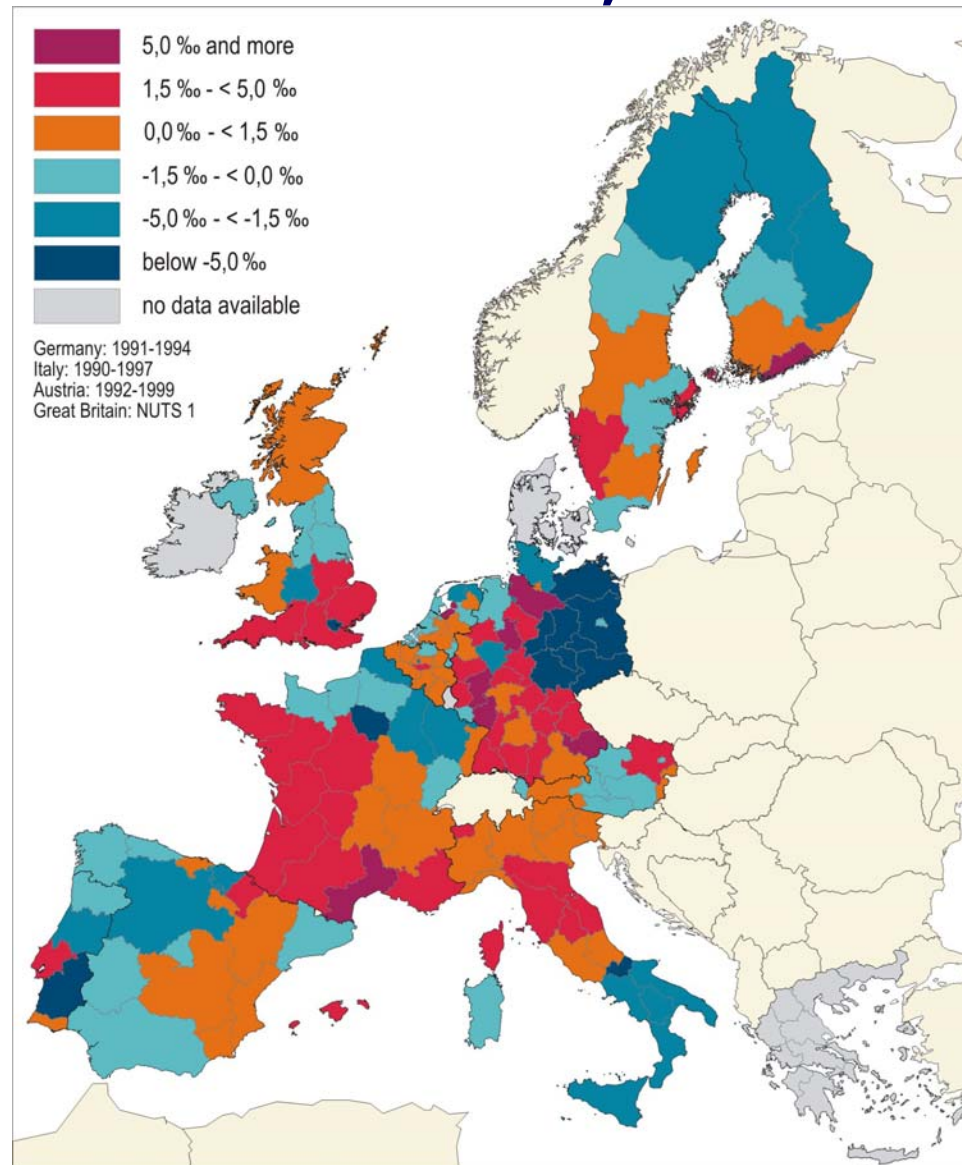
**concept of life cycle:  
changing housing demands corresponding  
to the composition of a household**

# Contents



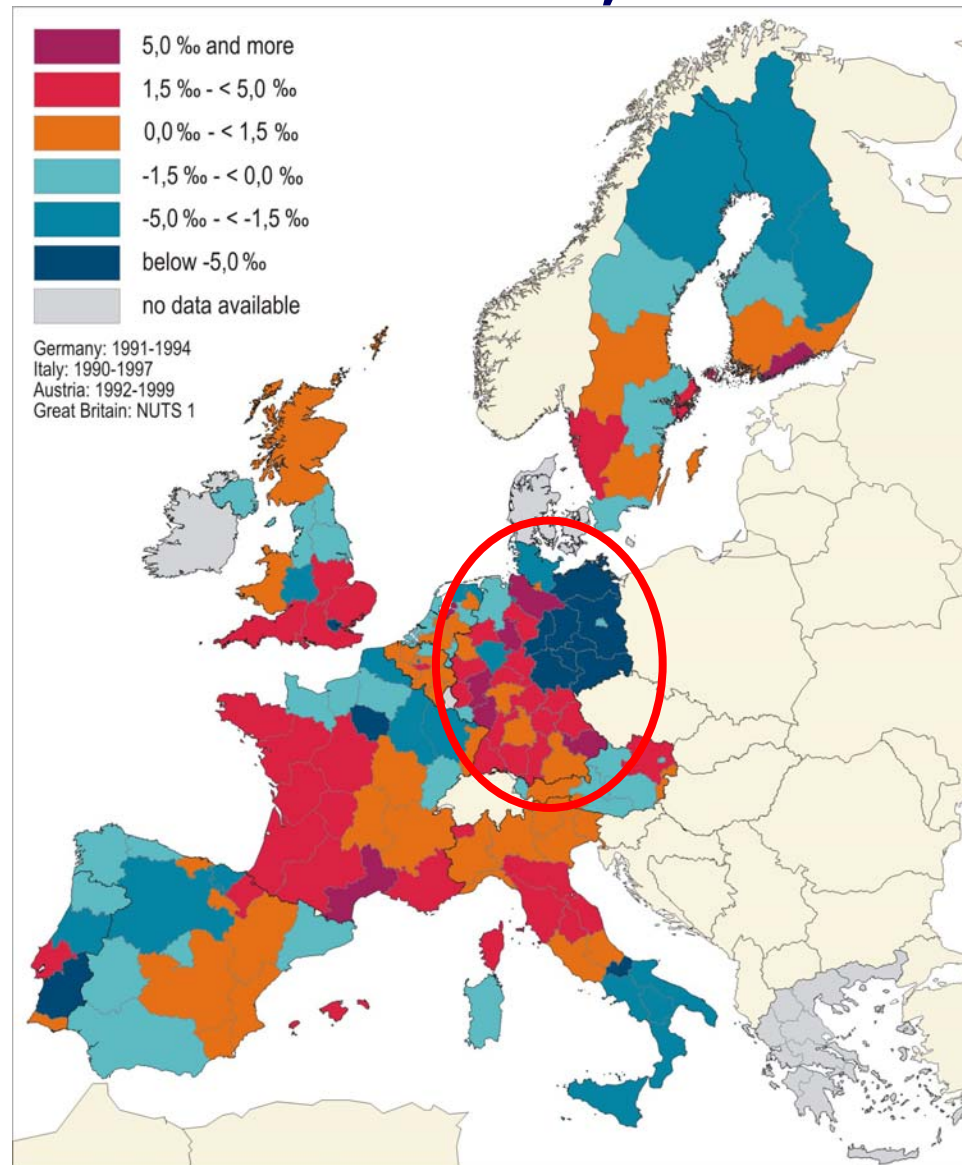
- 1. Spatial patterns of internal migration in the EU-15;**
- 2. Dynamic of internal migration in France, 1968 – 1999;**
- 3. Future demographic development of large cities in Germany, 2002 - 2020**

# Interregional migration balances of the EU-15 member states, 1990 - 1999



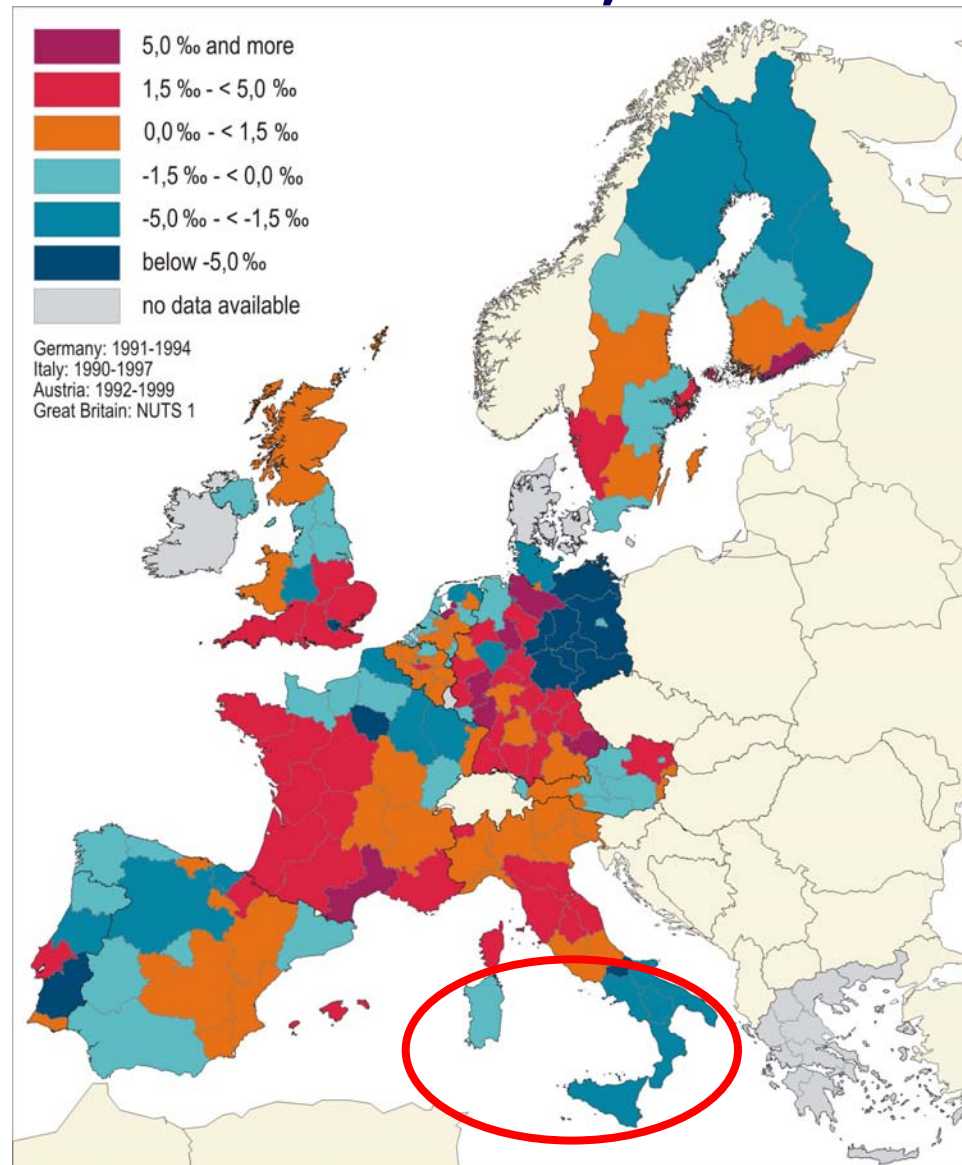
Source: EUROSTAT  
Regio

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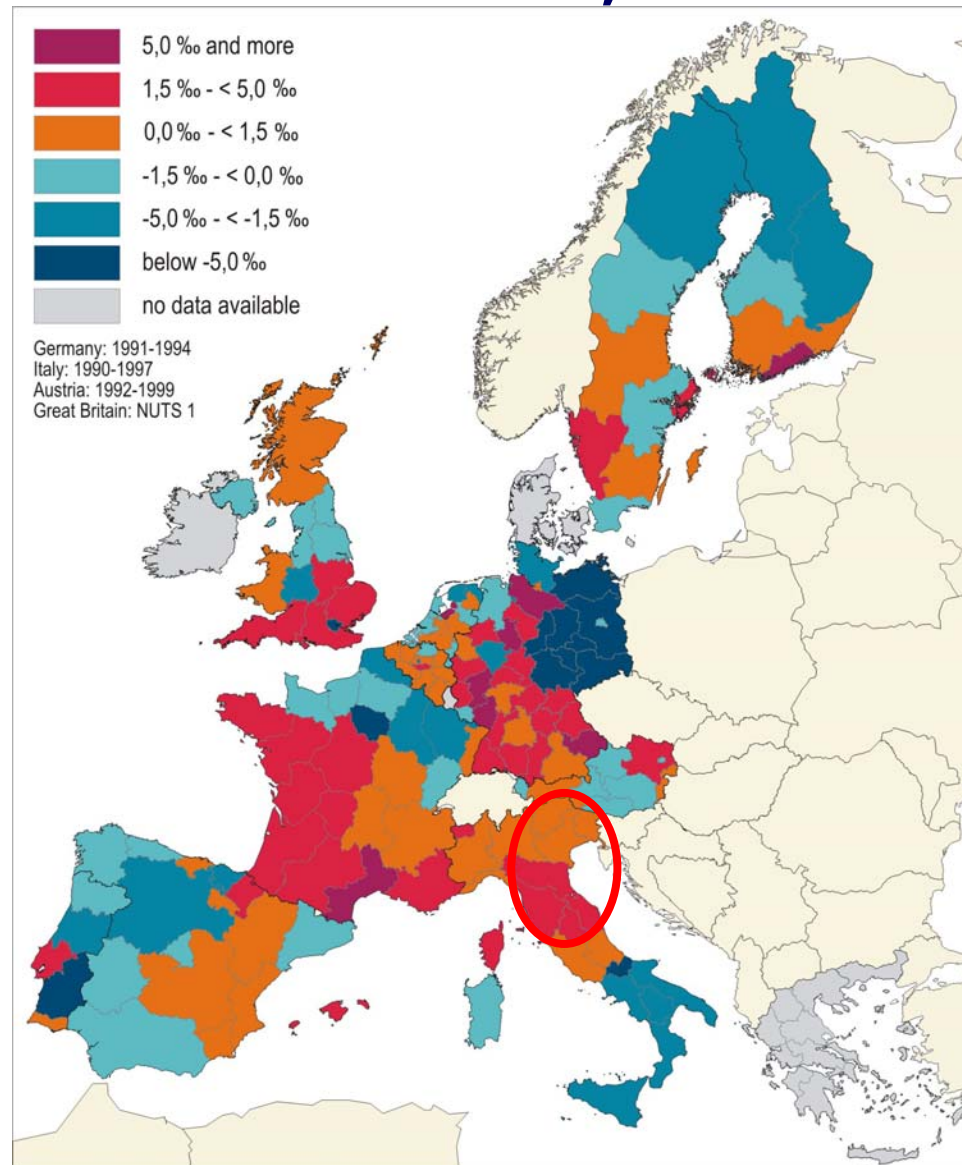
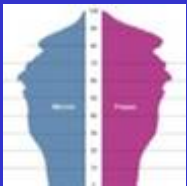
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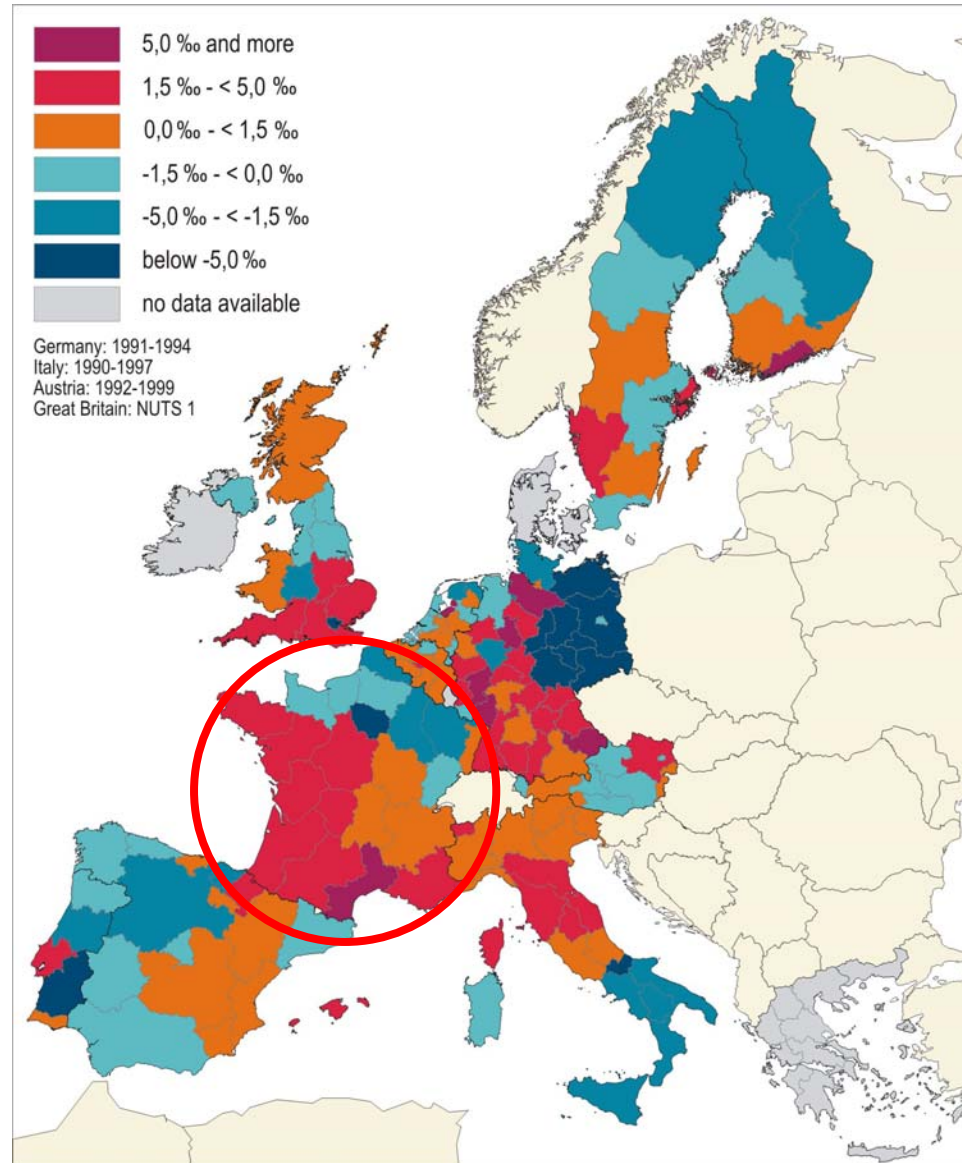
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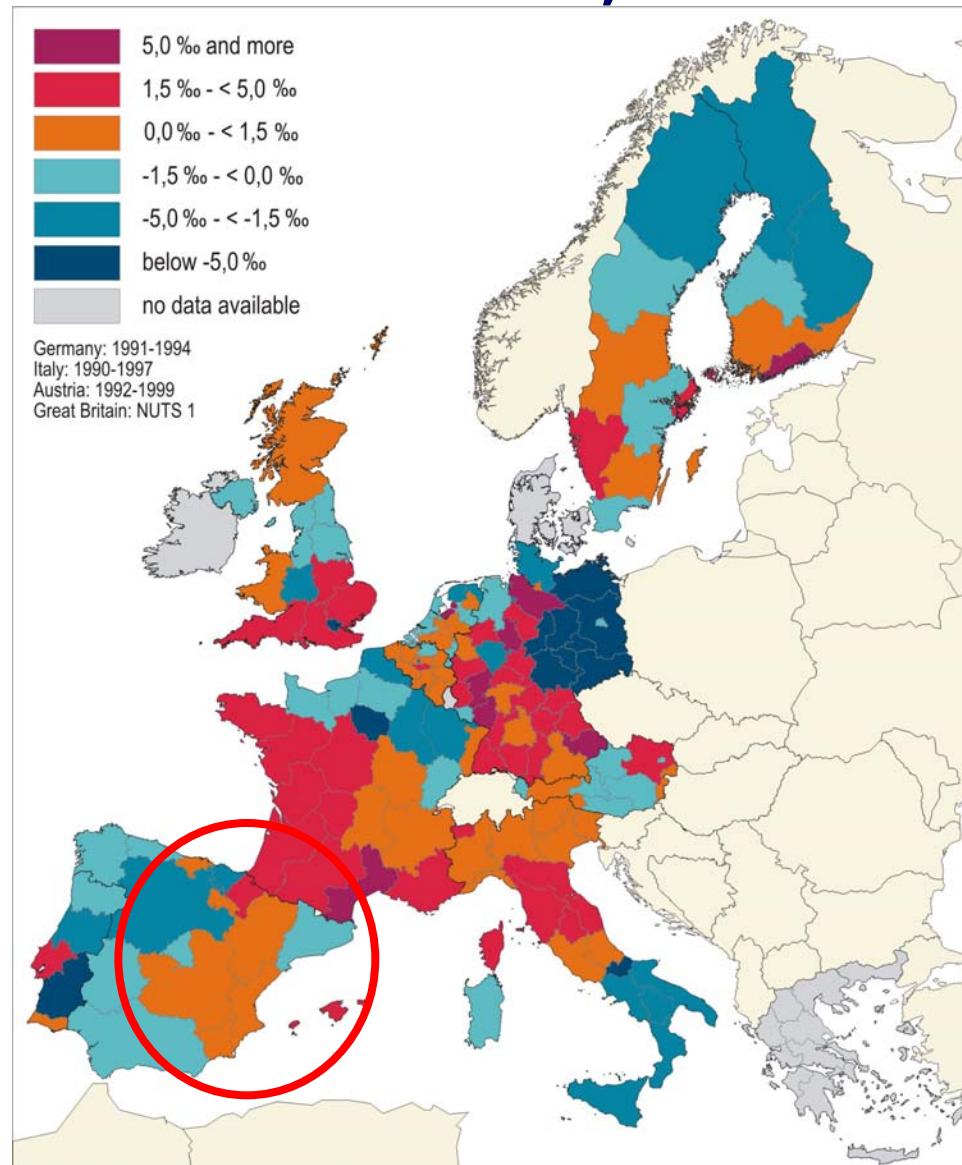
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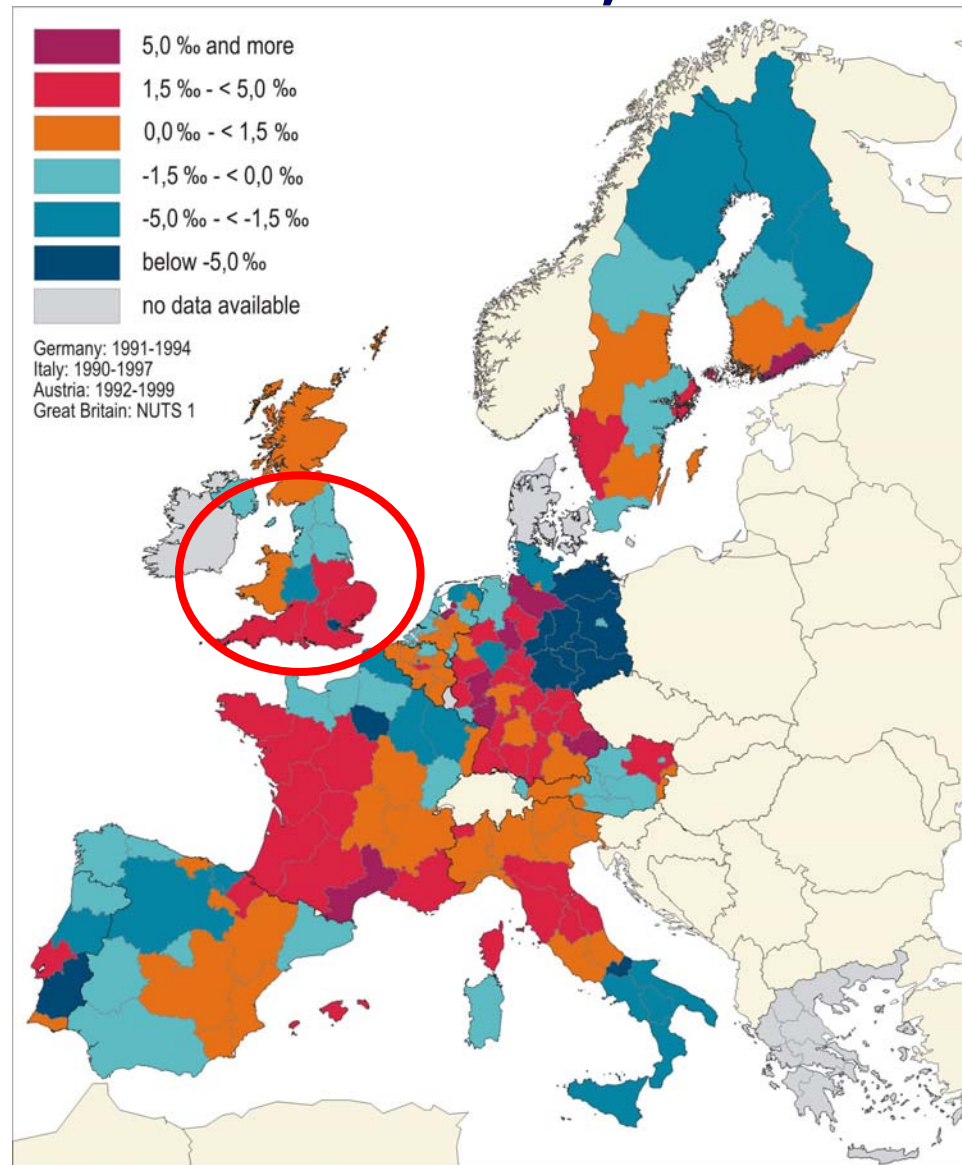


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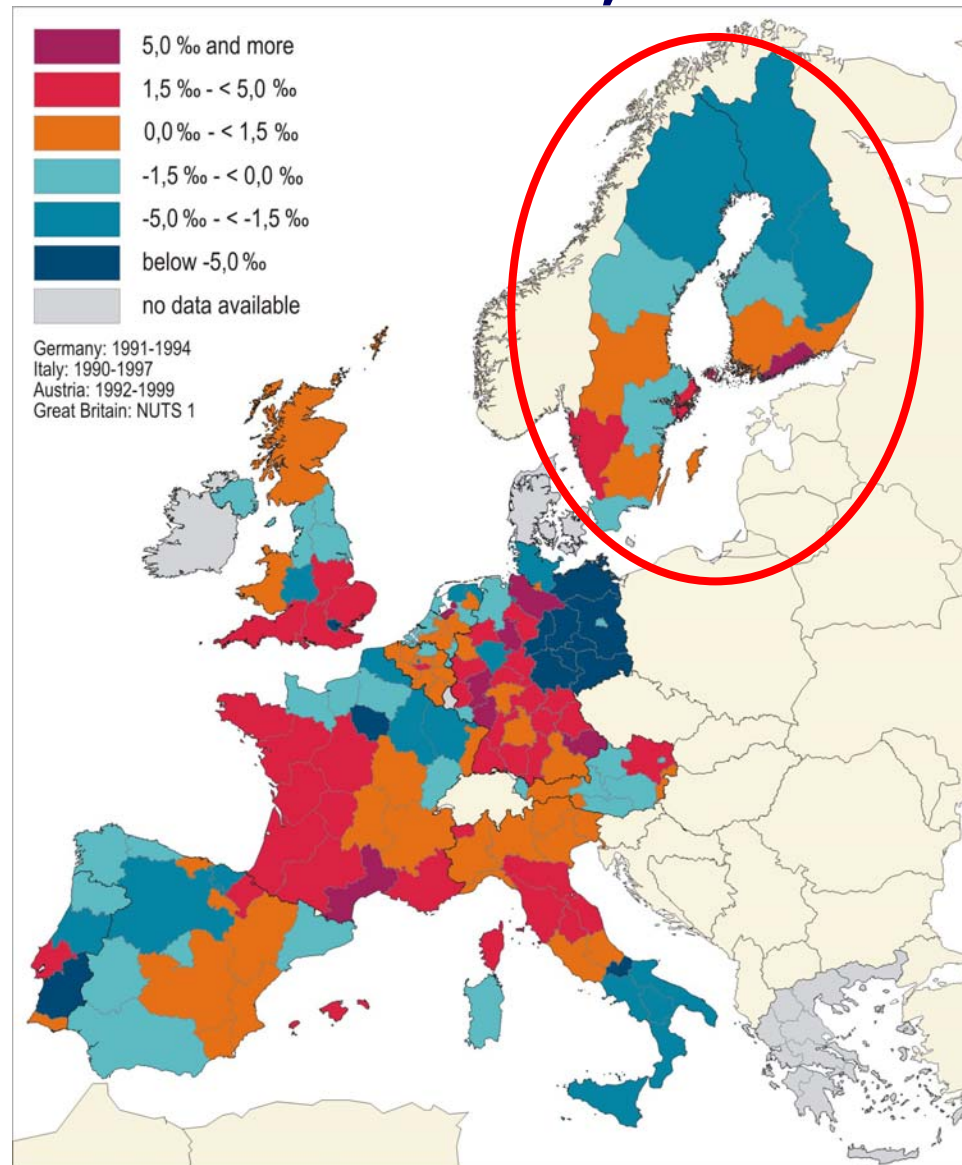
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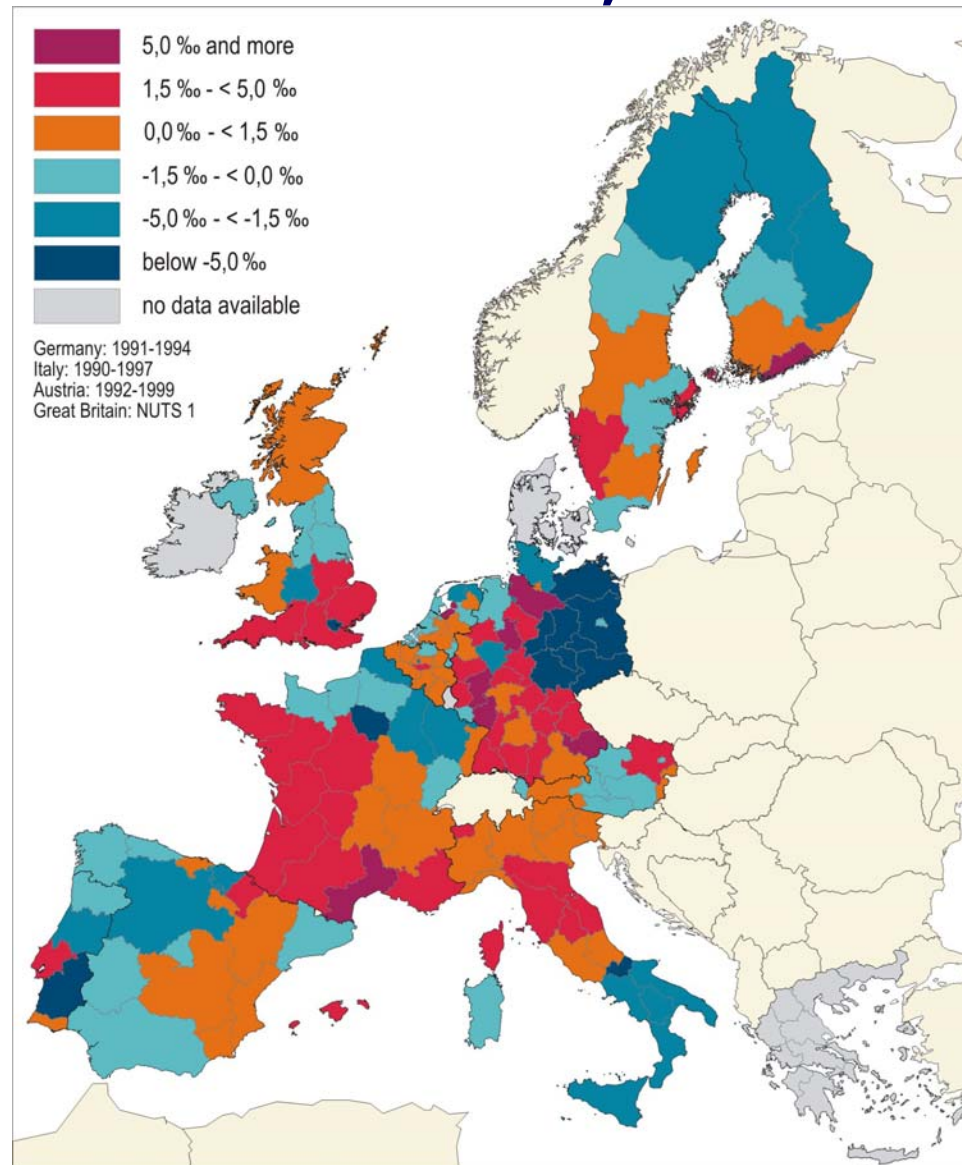
Source: EUROSTAT  
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Source: EUROSTAT  
Regio



1968-1975



1975-1982



1982-1990



1990-1999



- |                      |                               |
|----------------------|-------------------------------|
| 1 Île de France      | 12 Pays de la Loire           |
| 2 Champagne-Ardenne  | 13 Bretagne                   |
| 3 Picardie           | 14 Poitou-Charentes           |
| 4 Haute-Normandie    | 15 Aquitaine                  |
| 5 Centre             | 16 Midi-Pyrénées              |
| 6 Basse-Normandie    | 17 Limousin                   |
| 7 Bourgogne          | 18 Rhône-Alpes                |
| 8 Nord-Pas-de Calais | 19 Auvergne                   |
| 9 Lorraine           | 20 Languedoc-Roussillon       |
| 10 Alsace            | 21 Provence-Alpes-Côte d'Azur |
| 11 Franche-Comté     | 22 Corse                      |



# Interregional migration balances in France, 1968 - 1999

Source: Bacchini 2001; own design



1968-1975



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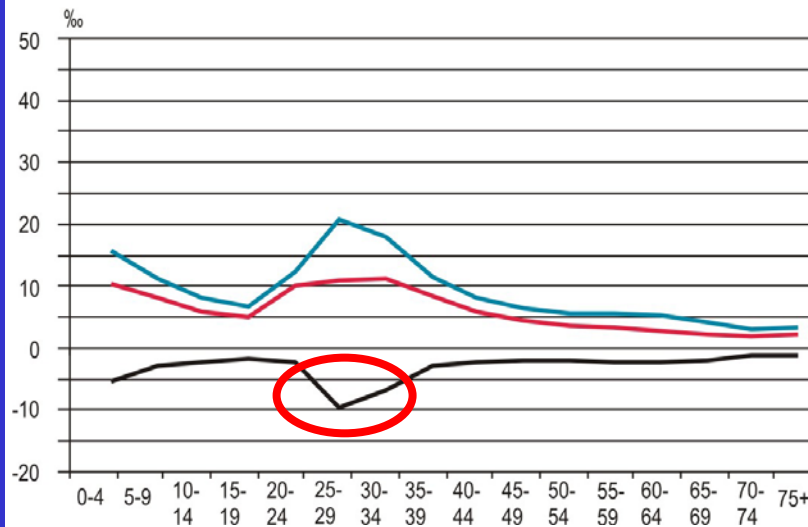
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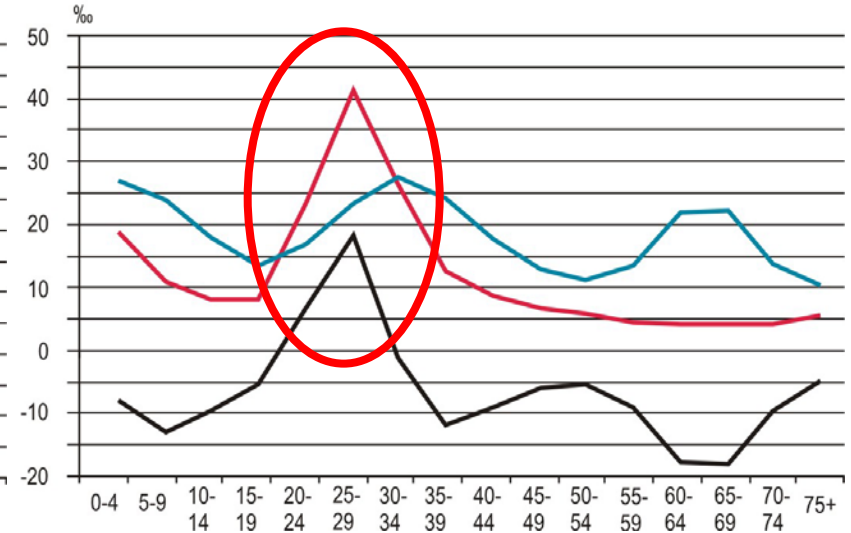
# Interregional migration balances of selected regions in France, 1990 - 1999



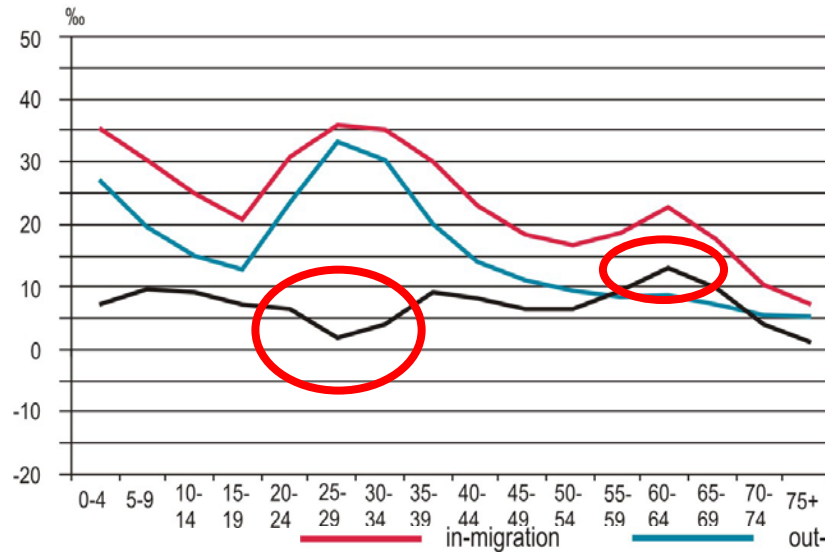
Nord-Pas-de-Calais



Île de France



Languedoc-Roussillon



in-migration

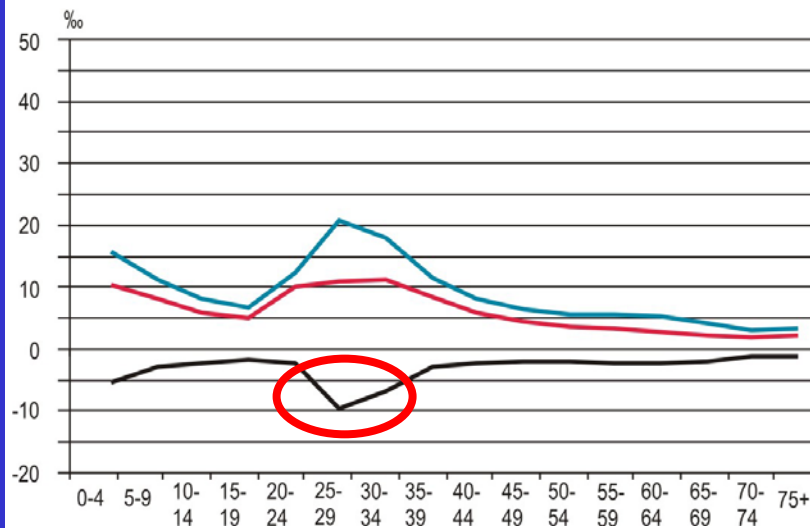
out-migration

internal migration balance

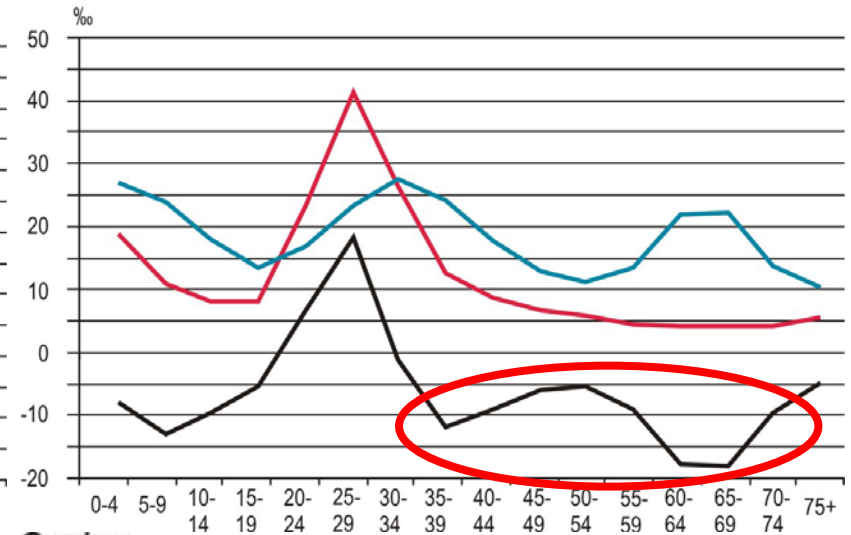
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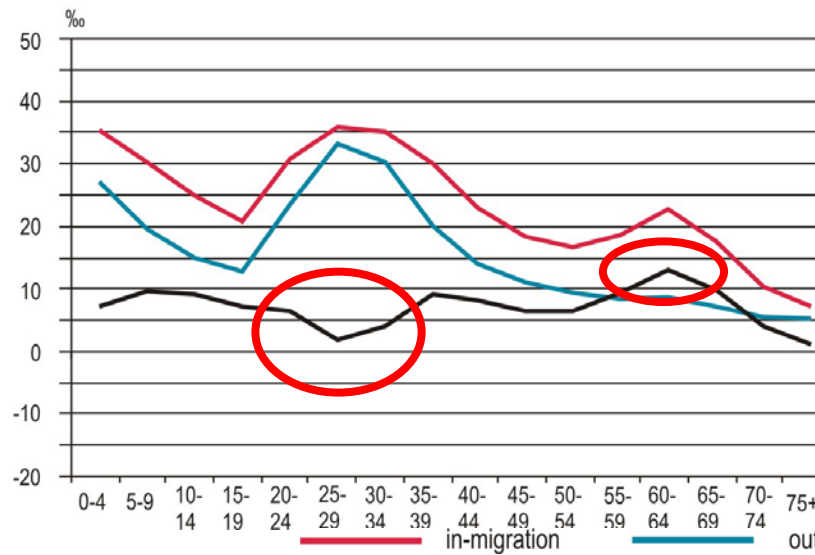
Nord-Pas-de-Calais



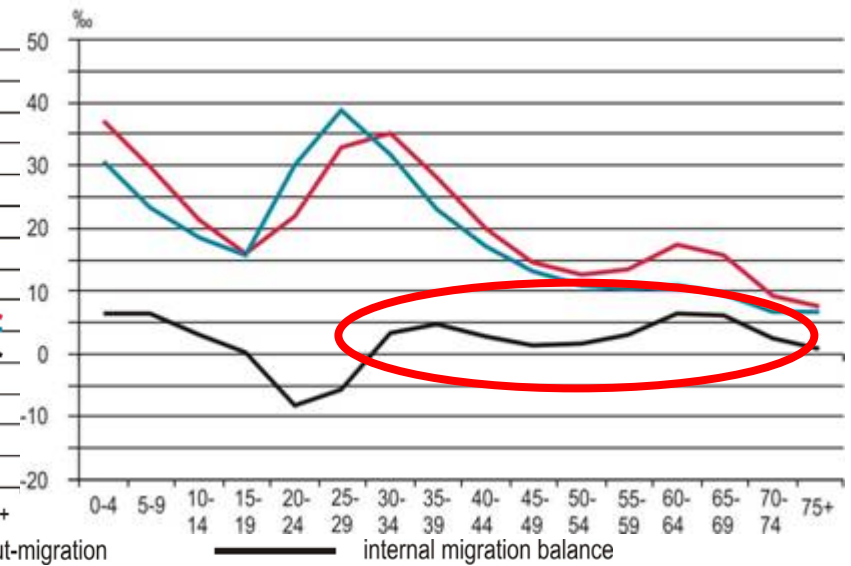
Île de France



Languedoc-Roussillon



Centre



in-migration out-migration internal migration balance





# Natural and migration balances (in ‰) with regard to the settlement structure in France, 1962-1999

Period of time	Agglomeration				Rural areas	
	Core city		Suburbanized areas		natural	migration
	natural	migration	natural	migration		
<b>1962-1968</b>	<b>8,4</b>	<b>10,3</b>	<b>5,7</b>	<b>-0,1</b>	<b>3,2</b>	<b>-4,9</b>
<b>1968-1975</b>	<b>8,3</b>	<b>3,0</b>	<b>3,4</b>	<b>12,2</b>	<b>0,8</b>	<b>-4,0</b>
<b>1975-1982</b>	<b>6,4</b>	<b>-4,3</b>	<b>2,6</b>	<b>21,0</b>	<b>-1,4</b>	<b>2,3</b>
<b>1982-1990</b>	<b>6,2</b>	<b>-2,5</b>	<b>3,9</b>	<b>13,4</b>	<b>-1,1</b>	<b>2,2</b>
<b>1990-1999</b>	<b>5,5</b>	<b>-2,8</b>	<b>3,8</b>	<b>6,0</b>	<b>-1,3</b>	<b>3,4</b>

Quelle: Bessy–Pietri u. a. 2000; own calculations



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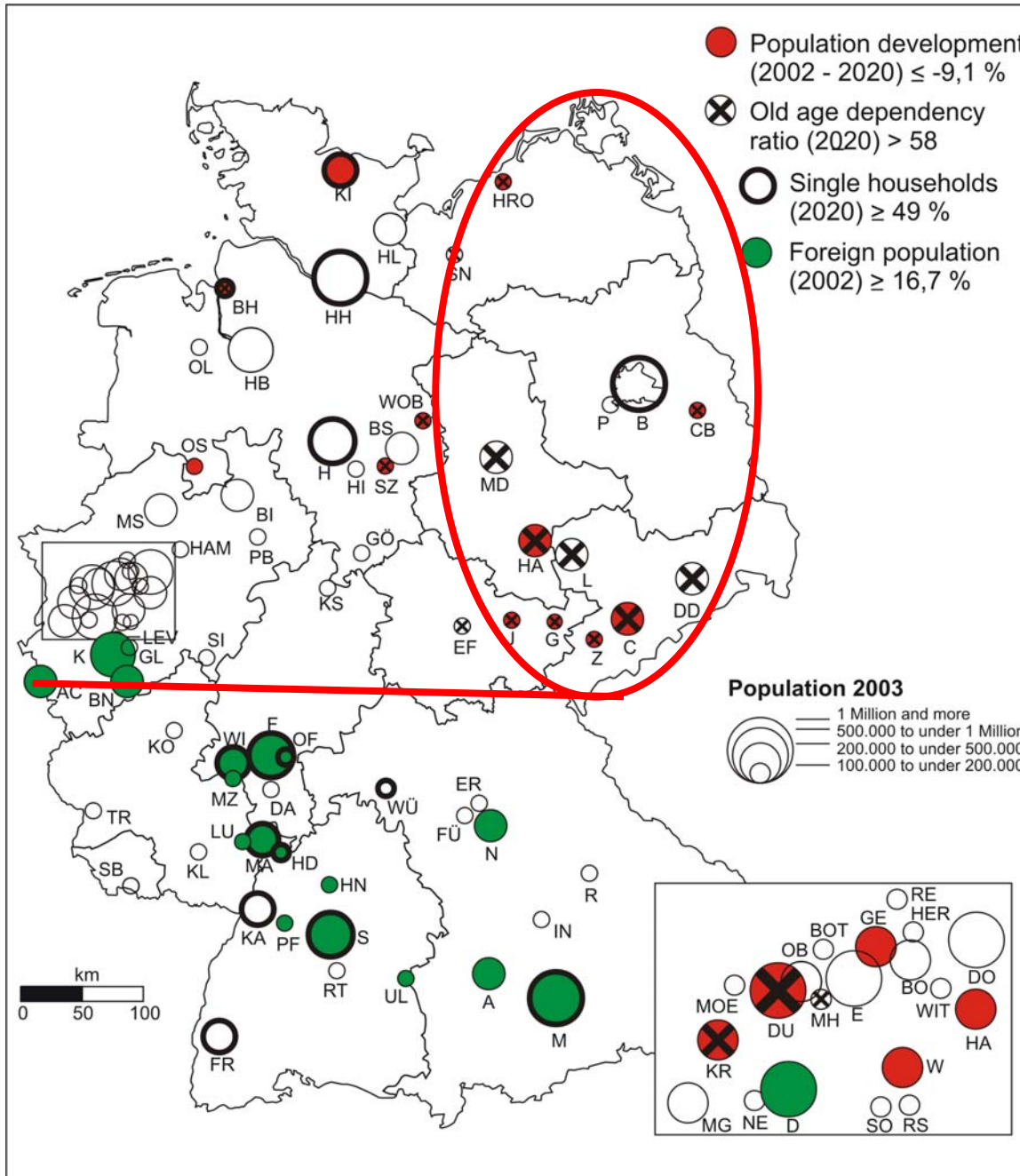
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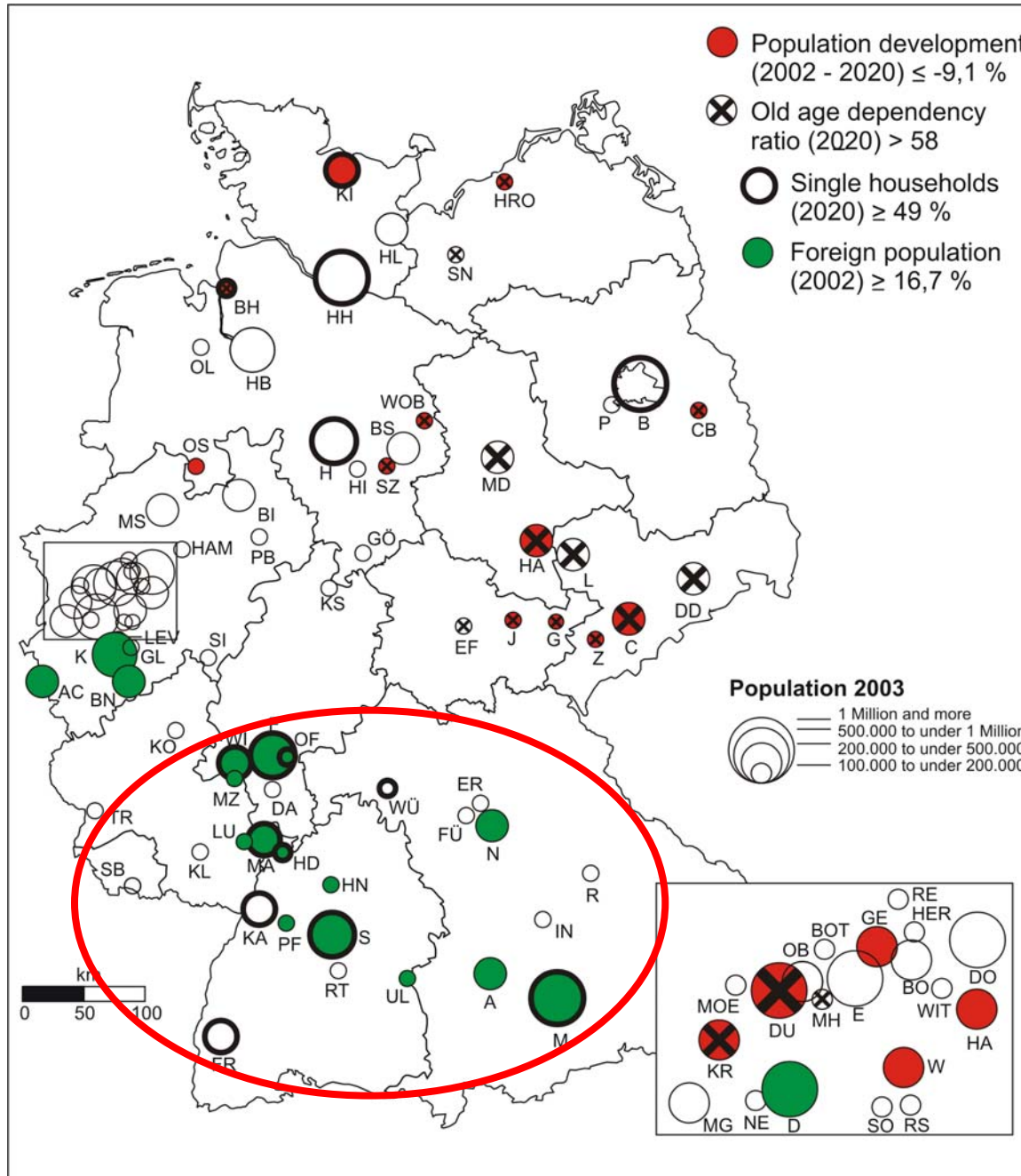
# Four components of future population development

- „less“;
- „greying“;
- „singularized“;
- „more heterogenous“.

Source: Federal Office for Building and Regional Planning; calculations by the author



# Challenges of the future population development to the large cities in Germany, 2002 - 2020



# Challenges of the future population development for the large cities in Germany, 2002 - 2020

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# Billeter Index for selected large cities, 2002 – 2020

**Proportion of foreigners  
≥ 16,7 % in 2002**

**Proportion of foreigners  
≤ 9,3 % in 2002**

	<b>Billeter Index</b>			<b>Billeter Index</b>	
	<b>2002</b>	<b>2020</b>		<b>2002</b>	<b>2020</b>
<b>Maximum</b>	<b>-5</b>	<b>-6</b>	<b>Maximum</b>	<b>-5</b>	<b>-15</b>
<b>Q<sub>3</sub></b>	<b>-7</b>	<b>-14</b>	<b>Q<sub>3</sub></b>	<b>-11</b>	<b>-22</b>
<b>Median</b>	<b>-9</b>	<b>-17</b>	<b>Median</b>	<b>-15</b>	<b>-34</b>
<b>Q<sub>1</sub></b>	<b>-11</b>	<b>-20</b>	<b>Q<sub>1</sub></b>	<b>-19</b>	<b>-44</b>
<b>Minimum</b>	<b>-15</b>	<b>-23</b>	<b>Minimum</b>	<b>-26</b>	<b>-63</b>

Source: Federal Office for Building and Regional Planning; calculations by the author



# Billeter Index for selected large cities, 2002 – 2020

Proportion of foreigners  
 $\geq 16,7\%$  ( $Q_3$ ) in 2002

Proportion of foreigners  
 $\leq 9,3\%$  ( $Q_1$ ) in 2002

	Billeter Index			Billeter Index	
	2002	2020		2002	2020
Maximum	-5	-6	Maximum	-5	-15
$Q_3$	-7	-14	$Q_3$	-11	-22
Median	-9	-17	Median	-15	-34
$Q_1$	-11	-20	$Q_1$	-19	-44
Minimum	-15	-23	Minimum	-26	-63

Source: Federal Office for Building and Regional Planning; calculations by the author





# Future population development of selected regional types, 2002-2020

Indicator		Agglomeration		Rural Areas	Tot.
		Core Cities	Suburb. areas		
Population development (2002 – 2020; in %)	West	-1,5	+4,5	+3,4	+2,2
	East	-7,4	-0,6	-14,1	-10,6
Natural balance (2003-2020; in ‰)	West	-2,7	-2,7	-3,2	-2,6
	East	-4,0	-5,2	-5,4	-5,4
Balance of internal migration (2003-2020; en ‰)	West	-3,0	+2,3	+2,8	+0.4
	East	-3,5	+4,0	-3,3	-1,5
Balance of international migration (2003-2020; en ‰)	West	+5,0	+2,5	+2,0	+3,2
	East	+3,3	+1,4	+1,7	+3,2
<b>West Germany: Balance of the internal migrations</b>					
below 18 years old		--	++	+	
18 – 25 years old		+++	---	-	
25 – 30 years old		+	+	+/-	
30 – 50 years old		---	+++	+	
at least 50 years old		--	+	+++	



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**Thank you very much.**