# Commuting and Migration in the Largest Agglomerations of the Czech Republic after 1989 with Emphasis on the Brno Agglomeration

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#### Geographical aspects of spatial mobility of population:

- Commuting and migration

- **Space:** - Demarking regions (hinterland)

- Identifying main streams of mobility

Motivation: - Emphasis on labour migrations in agglomerations and their hinterland

- <u>Time:</u> - Significant changes after 1989 (transition)

- Changing the residental system

#### Geographical aspects of spatial mobility of population:

#### **Hinterland of agglomerations - commuting:**

- 1. Expands.
- 2. Is getting more capable of saturating labour function and residental function as well.
- 3. The intensity (gross rate) of commuting hinterland-core increases (due to to weakening of labour function of micro regional centres in the distance of 20 50 km from the centre of agglomeration).

**Tab. 1: Commuting hinterland of Brno in 2001** 

Zones (municipalities, in which % of outcommuters from employed is)	Sum of munici- palities	Sum of out- commuting to Brno	Employed	Average share of out-commuters to Brno from employed (%)
Zone 1 (50,0 and more)	43	11 883	20 573	57,8
Zone 2 (33,4 – 49,9)	68	15 055	35 631	42,3
Zone 3 (20,0 – 33,3)	92	11 261	43 513	25,9
Zone 4 (10,0 – 19,9)	136	7 134	54 928	13,0
In total	339	45 333	154 645	29,3

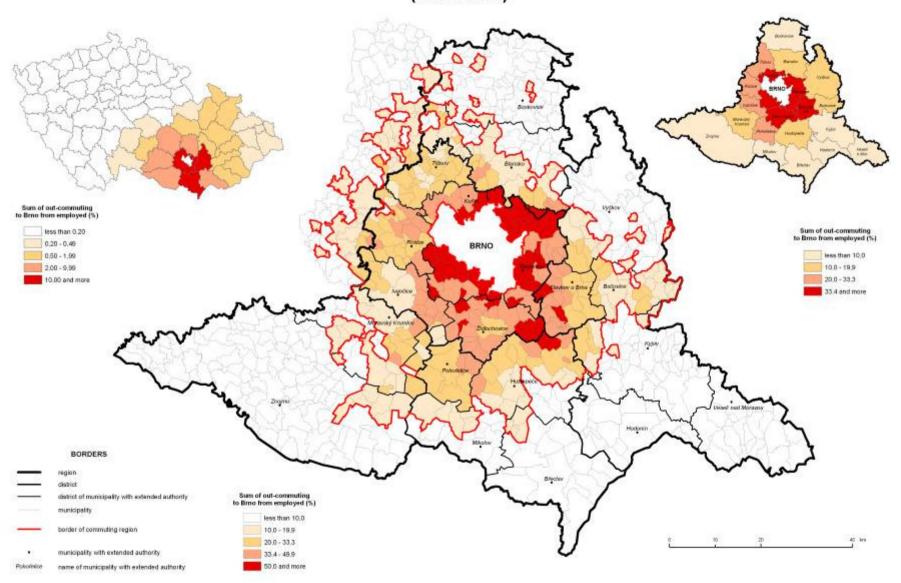
Source: Sčítání lidu, domů a bytů k 1.3.2001. Dojížďka do zaměstnání a škol – South Moravian region. ČSÚ Prague, 2004.

Tab. 2: Changes in commuting to Brno in period of 1991 – 2001 in commuting zones of year 2001

Zones (municipalities, in which % of out-commuters from employed is)	Sum of out- commuting to Brno in year 1991	Share of zones on in- commuters to Brno in year 1991 (%)	Sum of out- commuting to Brno in year 2001	Share of zones on in- commuters to Brno in year 2001 (%)	Index 2001/1991
Zone 1 (50,0 and more)	13 538	22,8	11 883	18,2	87,8
Zone 2 (33,4 – 49,9)	16 197	27,2	15 055	23,1	92,9
Zone 3 (20,0 – 33,3)	11 101	18,7	11 261	17,3	101,4
Zone 4 (10,0 – 19,9)	5 588	9,4	7 134	11,0	127,7
In total	46 424	78,1	45 333	69,6	97,6

Source: Sčítání lidu, domů a bytů k 3.3.1991. Vyjížďka a dojížďka do zaměstnání, škol a učení – Brno-město. KSS ČSÚ Brno, 1993; Sčítání lidu, domů a bytů k 1.3.2001. Dojížďka do zaměstnání a škol – South Moravia region. ČSÚ Praha, 2004.

## Labour commuting to Brno (1.3.2001)



#### **Migration**

- Since 1996, the core cities are losing population due to migration;
- Differences between the three cities;
- Increase of intensity of migration in suburban areas.

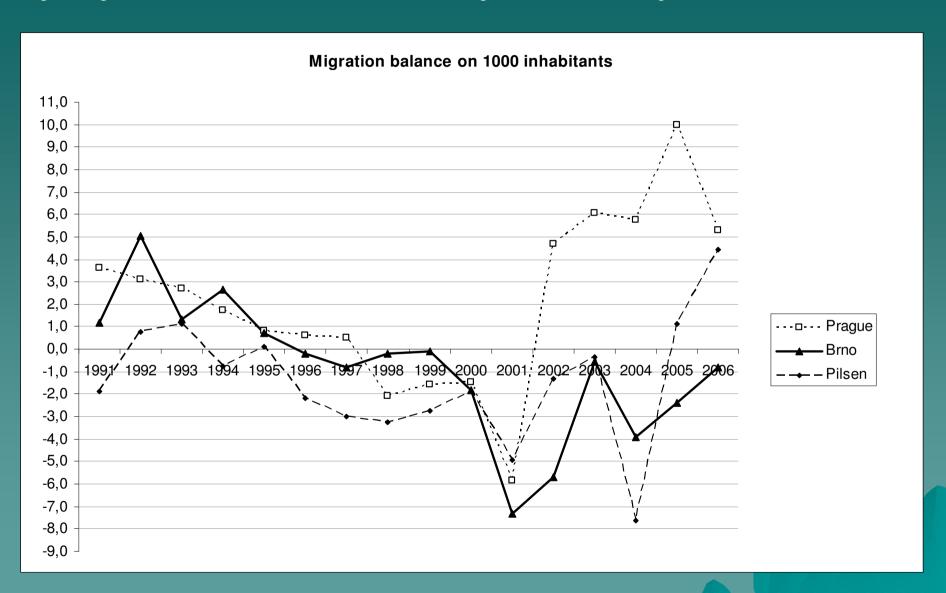
#### **Suburbanization**

- less developed real estates market;
- prefabricated housing (block of flats) stopped at 1993;

#### "Poor" and "Rich" form of suburban migration

- "poor" migrate to well accessible suburban municipalities
- "rich" migrate to new housing, changing the "look" of target municipality – "Satellites"

Fig. 1: Migration balance on 1000 inhabitants in cities of Prague, Brno and Pilsen in period 1991–2006



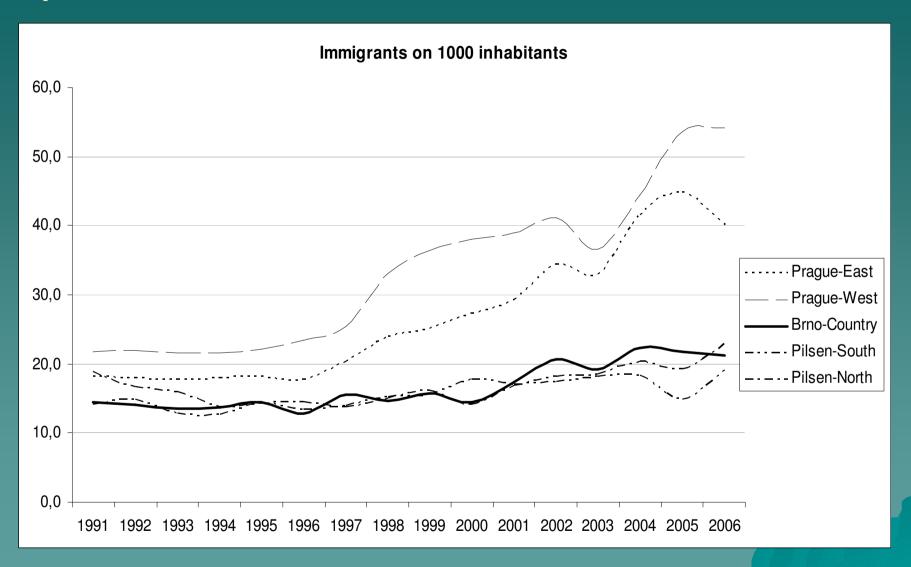
#### Suburbanization in suburban districts:

- •Significant increase in intensity of migration in the closest districts (municipalities);
- Increase in residental function of hinterland;

Tab. 3: Migration to / from the city of Brno in period 1991 – 2005 (year means of period)

	In-migrants from core  Share on immigration		1996–2000		2001–2005	
			In–migrants Share from core on immigration		In–migrants from core	Share on immigration
Prague East	962	57.5%	1 435	67.6%	2 479	67.4%
Prague West	1 070	64.3%	1 822	75.1%	2 737	71.7%
Brno country	1 166	53.4%	1 399	60.7%	2 148	64.5%
Pilsen South	405	43.8%	464	45.4%	560	47.8%
Pilsen North	508	44.1%	579	54.2%	793	58.0%

Fig. 2: In-migration on 1000 inhabitants in districts in hinterland of cities of Prague, Brno and Pilsen in period 1991–2006



Tab. 4: Migration to / from the city of Brno in period 1991 – 2005 (year means of period)

Years	In-migrants	Out-migrants	Migration balance	Migration turnover
1991 – 1995	5 093	4 241	852	9 334
1996 – 2000	3 727	3 965	-238	7 693
2001 – 2005	5 678	7 152	-1475	12 830
1991 – 2005	4 833	5 120	-287	9 952

Source: ČSÚ, self calculation

Tab. 5: Migration turnover with Brno on 1 000 inhabitants (annual means)

	1991 – 1995	1996 – 2000	2001 – 2005
Zone 1	20,3	21,9	29,6
Zone 2	12,9	12,9	16,4
Zone 3	8,6	7,9	8,5
Zone 4	5,3	5,1	5,4

Source: ČSÚ, self calculation

**Tab. 6 Migration turnover and balance of municipalities in 1. zone of Brno hinterland (annual means)** 

Years	Migration turnover	Migration balance	Migration turnover with Brno	Migration balance with Brno	Share of Brno on migration turnover (%)
1991 – 1995	1 839	19	890	57	48,4
1996 – 2000	1 862	313	961	348	51,6
2001 – 2004	2 505	711	1 299	682	51,9

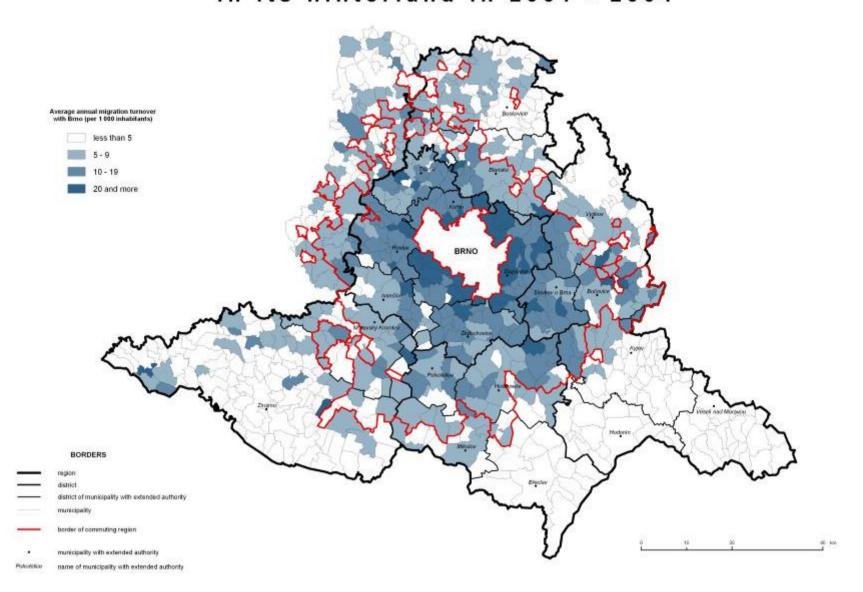
Source: ČSÚ, self calculation.

Tab. 7 Migration turnover and balance of municipalities in 2. zone of Brno hinterland (annual means)

Years	Migration turnover	Migration balance	Migration turnover with Brno	Migration balance with Brno	Share of Brno on migration turnover (%)
1991 – 1995	3 316	91	998	79	30,1
1996 – 2000	2 982	249	999	255	33,5
2001 – 2004	3 582	519	1 263	524	35,3

Source: ČSÚ, self calculation

## Total of imigrants and emigrants with Brno in its hinterland in 2001 - 2004



### **Data sources**

#### Commuting

- a) Census 1991 a 2001;
- D) Questionnaire research, realized by Centre for regional development of Masaryk university in the beginning of year 2004;
- c) Questionnaire research, May 2006.

#### **Migration**

- a) Anonymized database of migrants 1991 2004;
- b) Demographic yearbooks 2005, 2006.

# Thank You for Your attention!