

Inequalities in Healthy Life Expectancy in Eastern Europe

Yuka Minagawa
(Waseda University)

May 28, 2013

Background

- ❑ Large health disparities across Europe
 - Mortality rates
 - Chronic disease
 - Subjective assessment of health

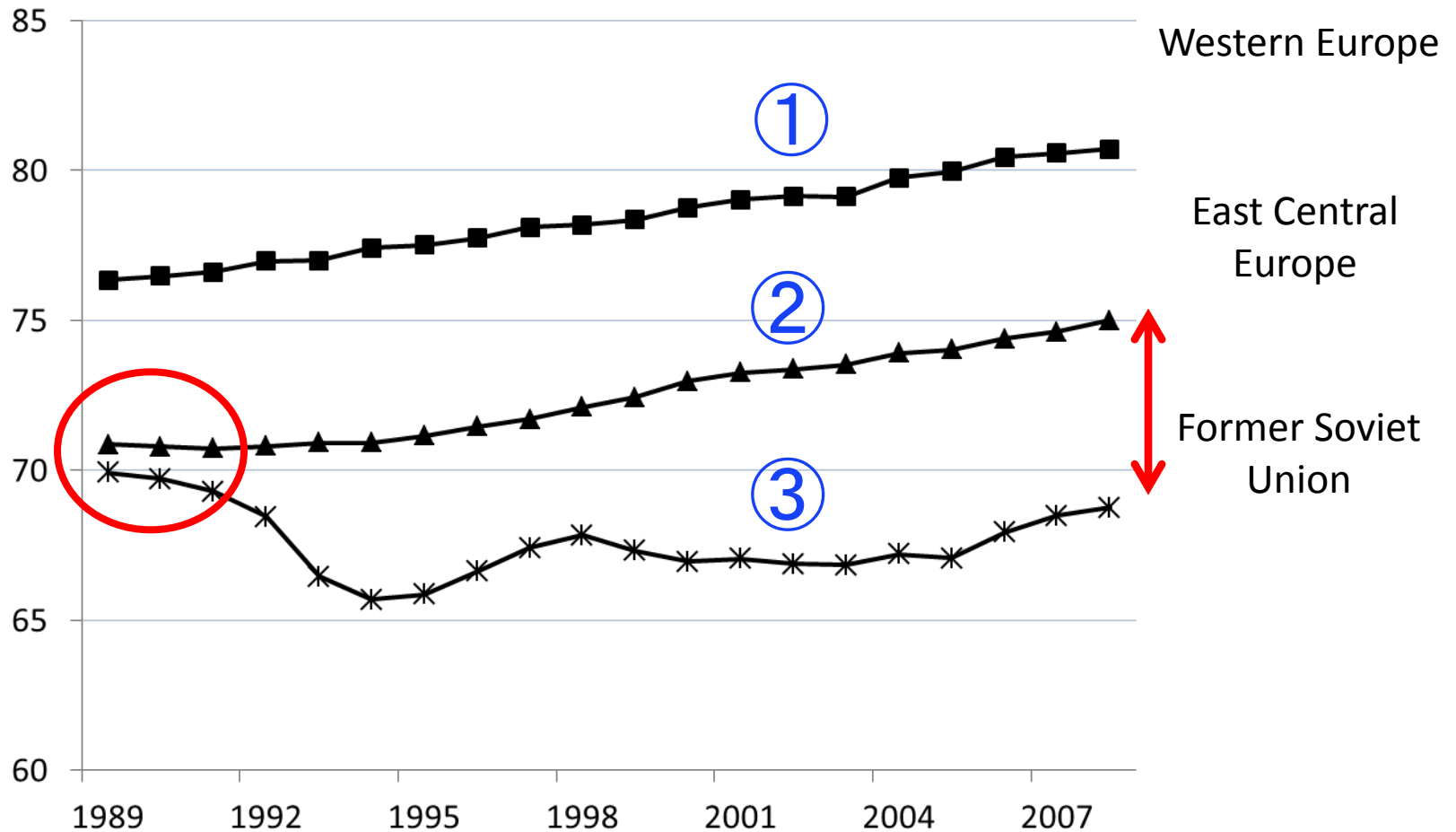
“East-West health divide”

(Bobak and Marmot 1995; Mesle et al. 2001)

- Recent evidence suggests another health divide on the European continent

Life Expectancy at Birth, 1989-2008

“Trisection approach” (Luy et al. 2011)



Conceptual Framework

- Recent research pays attention to differences in “health-related quality of life”
 - Andreev et al. (2003): healthy life expectancy (HLE)
 - Jagger et al. (2008): healthy life years (HLY)

❑ Little attention has been directed toward differentials within Eastern Europe

- Jagger et al. (2008): only Baltic states
- Andreev et al. (2003): only Russia

❑ Present study:

Investigate differentials in health expectancy (i.e., healthy life expectancy) across Eastern Europe

Data and Sample

- ❑ Life tables: Human Mortality Database (HMD), or the World Health Organization (WHO)
- ❑ Self-rated health: the European Values Study (EVS) 2008
- ❑ Men and women aged between 20 and 74

East Central Europe (n=13)

Albania

Bosnia and Herzegovina

Bulgaria

Croatia

Czech Republic

Hungary

Macedonia

Montenegro

Poland

Romania

Serbia

Slovakia

Slovenia

***Former Soviet Union
(n=10)***

Armenia

Azerbaijan

Belarus

Estonia

Georgia

Latvia

Lithuania

Moldova

Russia

Ukraine



Measures

❑ Self-rated health from the EVS

Q: “All in all, how would you describe your state of health these days?”

A: “very poor,” “poor,” “fair,”

“good,” and “very good”

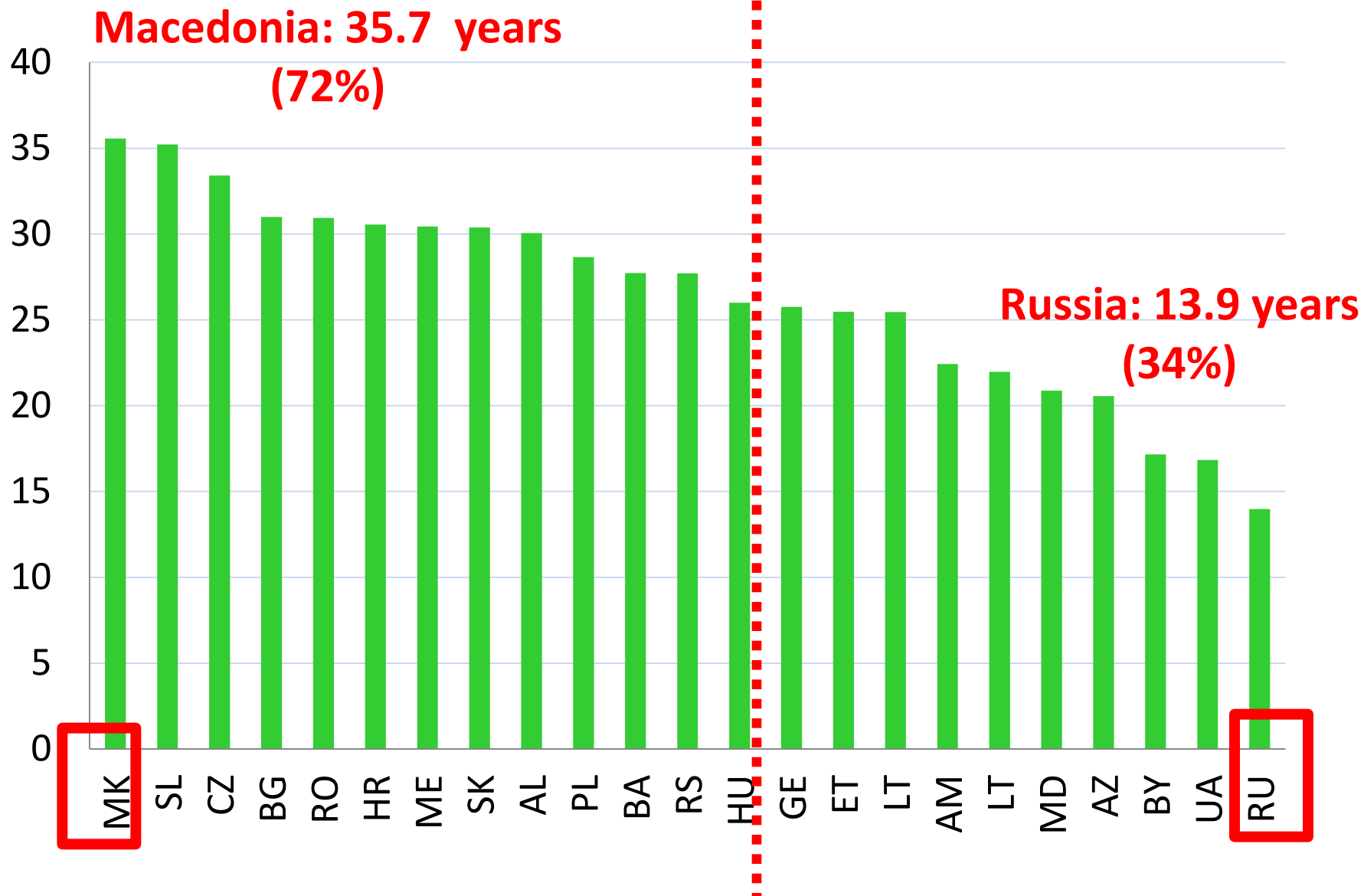
the duration of life spent in good health =
healthy life expectancy (HLE)

Results

- ❑ Large regional differentials exist in partial HLE for both genders

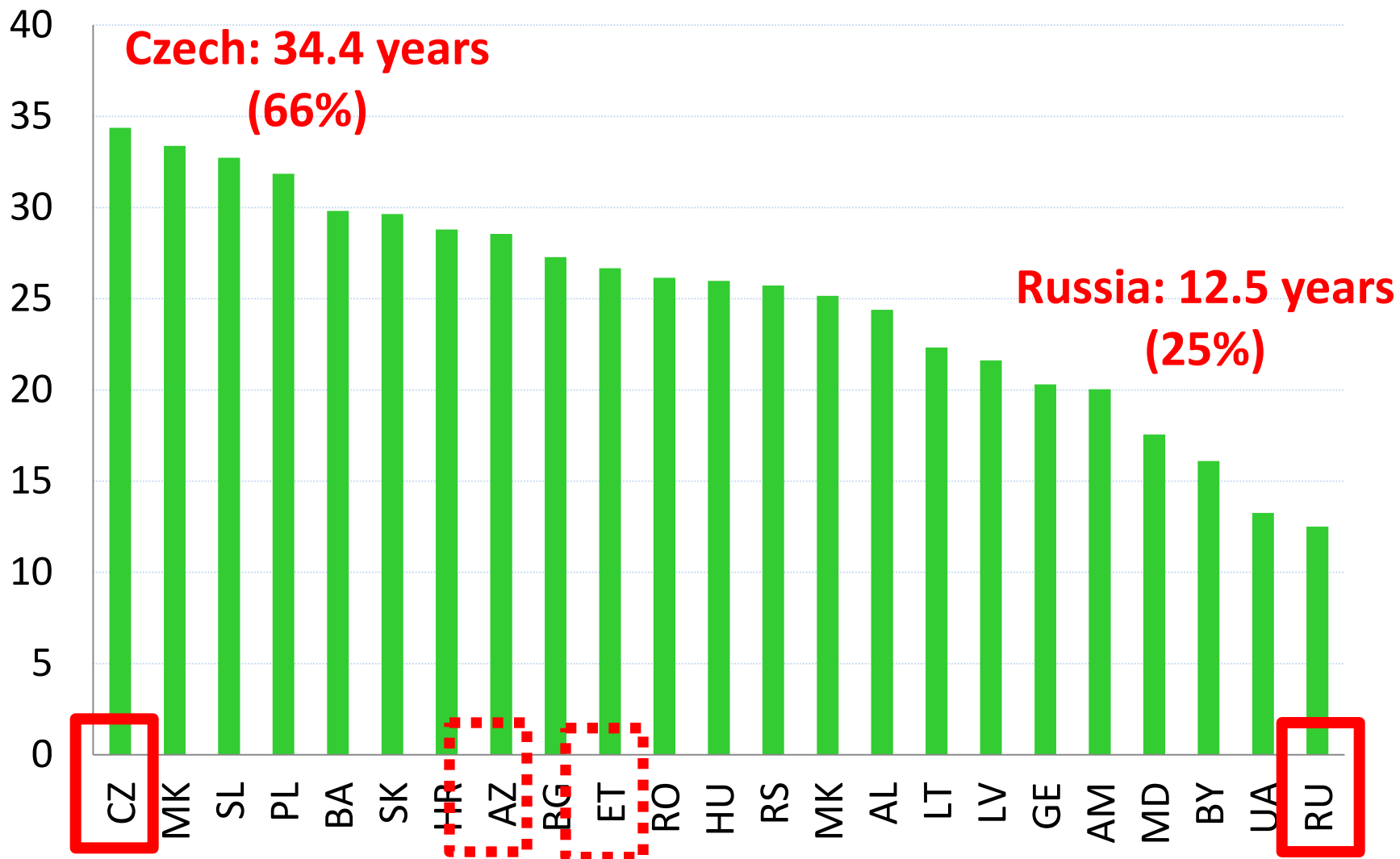
Male partial HLE (20-74) in 2008

Difference: 21.8 years



Female partial HLE (20-74) in 2008

Difference: 21.9 years



Comparison of mean values (HLE)

	Male	Female
East Central Europe (n=13)	30.6	28.9
Former Soviet Union (n=10)	21.1	19.9
<i>p</i> - value	<i>p</i> <.001	<i>p</i> <.001

- ✓ Significant differences in partial HLE

Discussion

- ❑ It is important to focus on a broader aspect of health

- ❑ Limitations:
 - Subjective nature of the health measure
 - Institutionalized individuals are excluded

□ Next steps:

- Differentials in health expectancy across three country groups
- Investigate factors related to differentials in HLE

THANK YOU

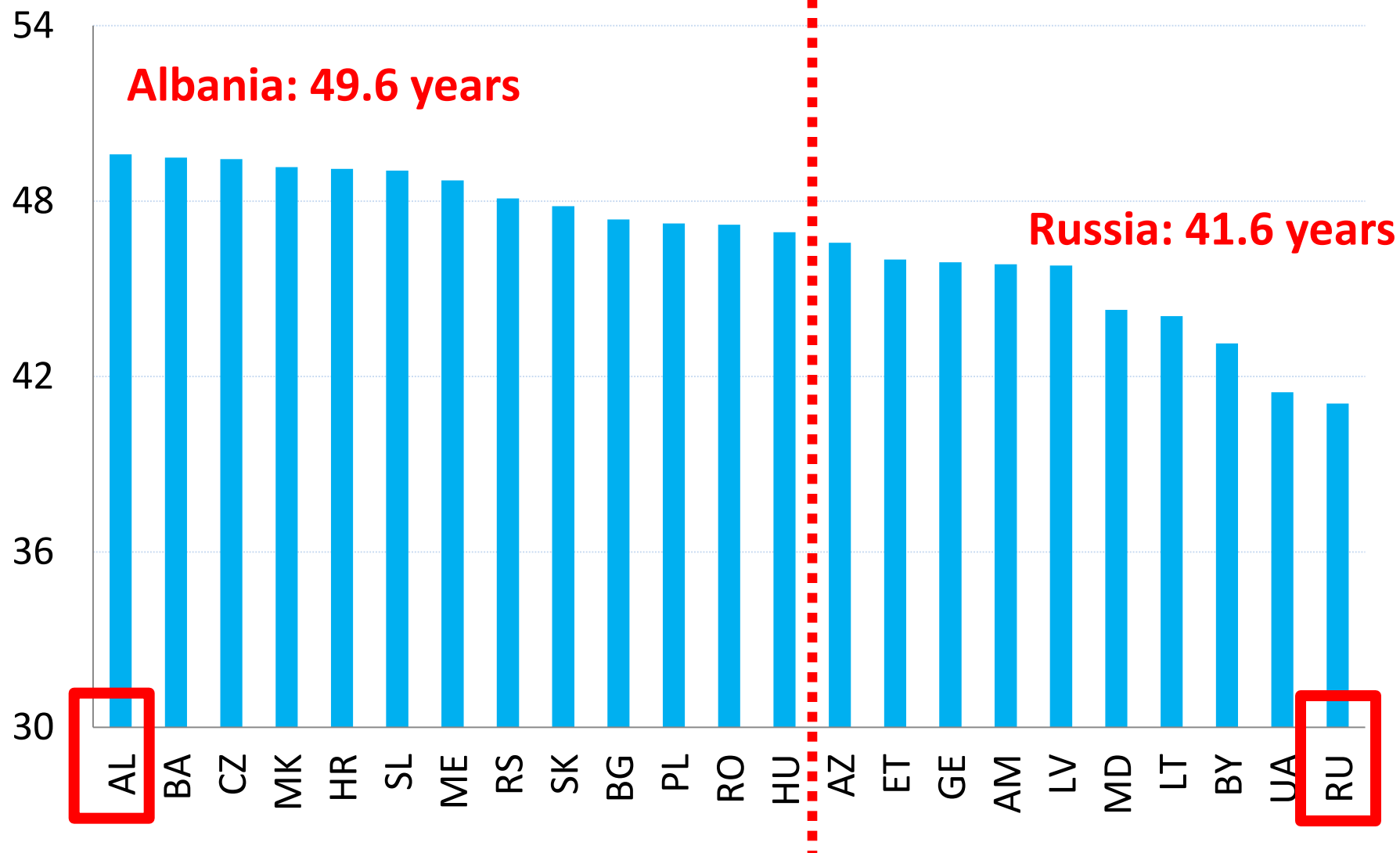
	Male			Female		
	PLE20-74	HLE20-74	Proportion	PLE20-74	HLE20-74	Proportion
<i>East Central Europe:</i>						
Albania	49.60	27.73 (25.82-29.64)	0.56	51.25	24.40 (22.42-26.38)	0.48
Bosnia	49.49	30.05 (29.21-32.80)	0.61	52.20	29.81 (27.92-31.70)	0.57
Bulgaria	47.37	30.99 (29.34-32.64)	0.65	51.51	27.29 (25.63-28.95)	0.53
Croatia	49.10	30.56 (28.62-32.55)	0.62	52.45	28.80 (27.06-30.53)	0.55
Czech	49.44	33.41 (31.86-34.97)	0.68	52.36	34.37 (32.88-35.87)	0.66
Hungary	46.94	26.00 (24.33-27.67)	0.55	51.27	25.98 (24.31-27.65)	0.51
Macedonia	49.16	35.57 (34.08-37.05)	0.72	51.61	33.38 (33.58-37.17)	0.65
Montenegro	48.71	30.44 (28.60-32.27)	0.62	51.53	25.16 (23.51-26.82)	0.49
Poland	47.24	28.66 (27.04-30.28)	0.61	52.03	31.86 (30.26-33.46)	0.61
Romania	47.19	30.94 (29.19-32.68)	0.66	51.42	26.15 (24.43-27.87)	0.51
Serbia	48.09	27.71 (25.95-29.48)	0.58	51.28	25.72 (23.97-27.46)	0.50
Slovakia	47.83	30.39 (28.51-32.27)	0.64	52.03	29.65 (28.01-31.29)	0.57
Slovenia	49.04	35.23 (33.55-36.91)	0.72	52.85	32.73 (30.91-34.54)	0.62
<i>Former Soviet Union:</i>						
Armenia	45.84	22.43 (20.62-24.24)	0.49	50.60	20.04 (18.38-21.69)	0.40
Azerbaijan	46.58	20.56 (18.29-22.84)	0.44	49.65	28.56 (26.38-30.74)	0.58
Belarus	43.13	17.17 (15.50-18.85)	0.40	50.62	16.11 (14.55-17.66)	0.32
Estonia	46.00	25.47 (23.51-27.42)	0.55	51.77	26.67 (25.12-28.22)	0.52
Georgia	45.91	25.76 (23.86-27.65)	0.56	50.60	20.31 (18.91-21.72)	0.40
Latvia	45.80	21.97 (20.22-23.72)	0.48	51.23	21.63 (20.06-23.20)	0.42
Lithuania	44.07	25.46 (24.00-26.91)	0.58	50.91	22.33 (20.74-23.92)	0.44
Moldova	44.28	20.87 (19.28-22.45)	0.47	49.63	17.56 (15.95-19.18)	0.35
Russia	41.08	13.98 (12.29-15.68)	0.34	49.50	12.51 (11.16-13.85)	0.25
Ukraine	41.46	16.84 (15.12-18.55)	0.41	49.50	13.26 (11.82-14.71)	0.27

Distribution of Self-Rated Good Health

	Male	Female
East Central Europe	.63	.56
Former Soviet Union	.47	.39
<i>p</i> -value	<.001	<.001

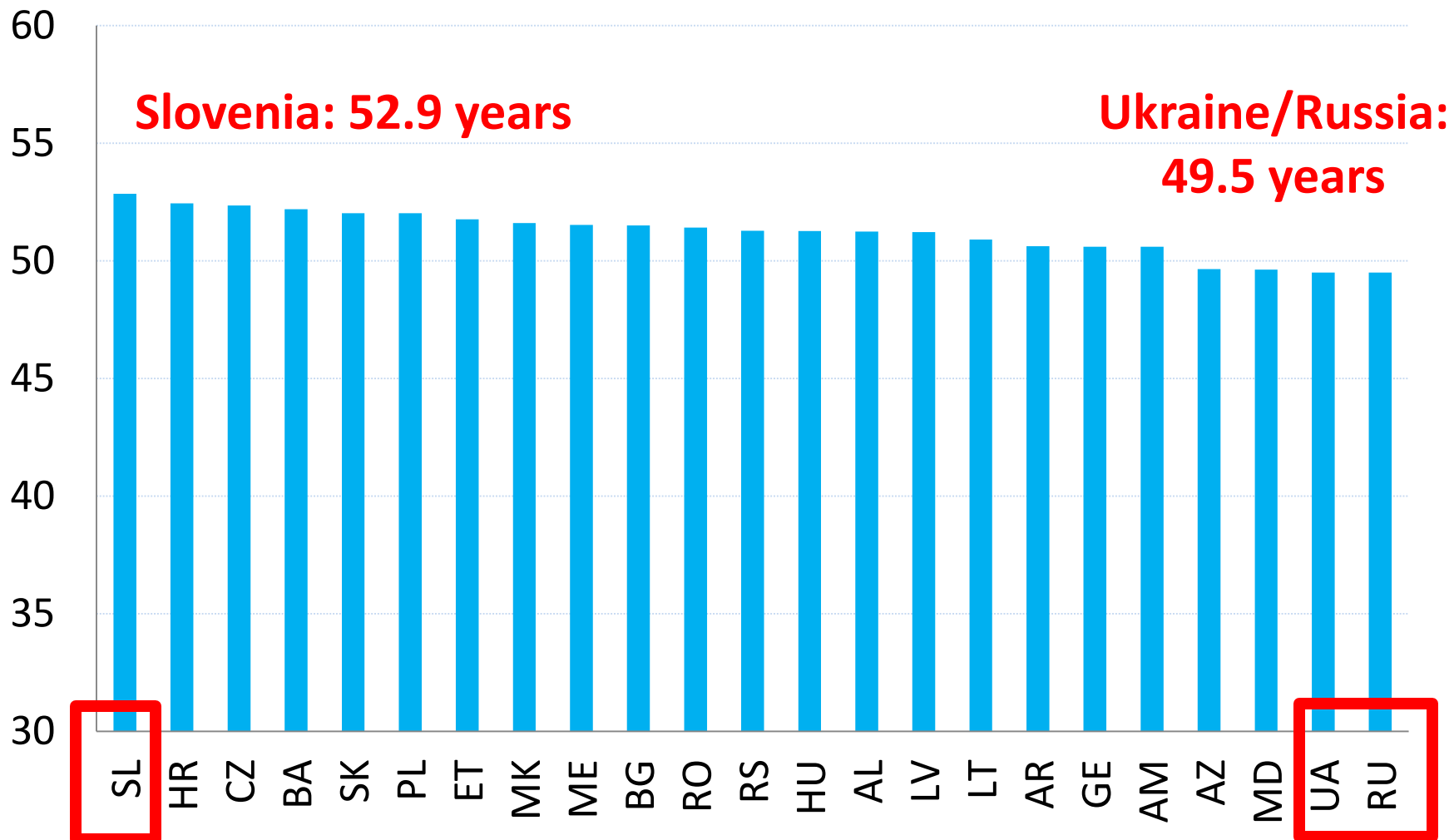
Male partial LE (20-74) in 2008

Difference: 8.0 years

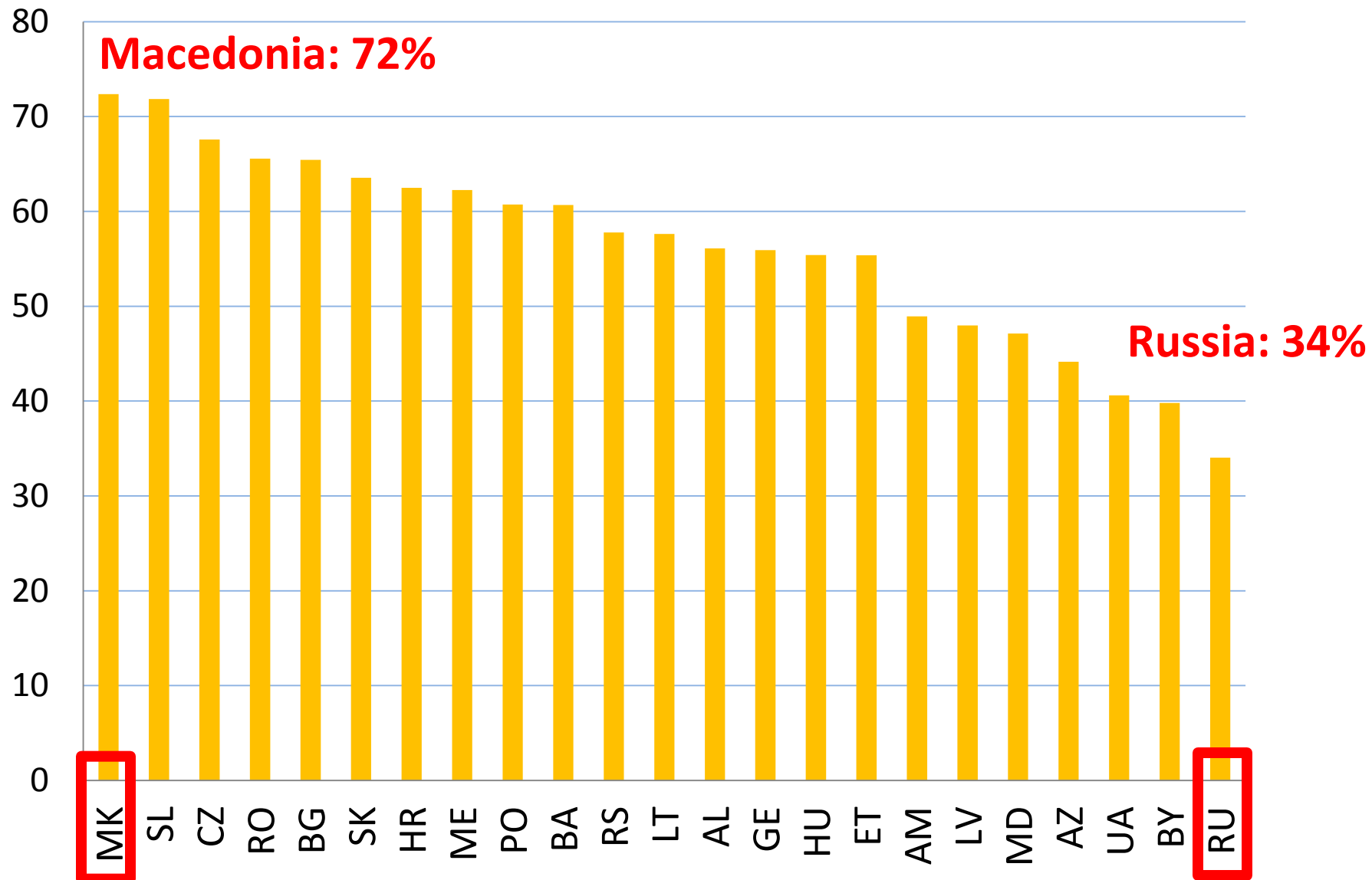


Female partial LE (20-74) in 2008

Difference: 3.4 years



Proportions of life spent in good health (male)



Proportions of life spent in good health (female)

