

Comparison of changes in reproductive behaviour in five European countries using the framework of the Second Demographic Transition

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The aim of this work is to analyze the changes in reproductive behaviour in five countries of Europe using the framework of the second demographic transition. In selected countries (Czech Republic, Estonia, the Netherlands, Finland and Portugal) was first studied development of reproductive behavior with regard to standard time sequences of changes suggested in the framework of the theory of second demographic transition. According to this model, were determined for each country moments of course of transformation in reproductive behavior. These results are used to summarize the differences between types of the second demographic transition in Europe. From this analysis is clear that the main general features of the second demographic transition took place in all the countries studied, but the level of transformed indicators were different and the course of change as well. Majority changes in post-communist countries took place in a narrow interval in the early nineties and have reached unprecedented values of selected indicators.

In the next part of this work were researched attitude to marriage, unmarried cohabitation, parenthood or a single motherhood and their differentiation by age, education, size category of place of residence of the respondent and to marital status. It was found out, that changes in value orientation in the post-communistic countries couldn't had been the only determinant of changes in reproductive behaviour. Moreover, the value change has been still taking place even in the countries where the second demographic transition started three or four decades ago. In most countries were found out trends of liberalization and individualization attitudes, but it is possible to find exceptions. For example, in Finland can be observed over time to return to some traditional values, such as attitude to single motherhood (here in table 1), where the Finnish respondents took a conservative posture and an attitude towards the institution of marriage.

In view of the fact, that the part of the theory of second demographic transition is a shift towards postmaterialism, the attention was focused on this aspect. Over time in post-communist countries the incidence of this type respondents increased, but still it can be concluded that the occurrence of these respondents rather small and in those countries change in reproductive behavior did not proceed with the participation of the respondents to this value orientation. These results may attend to an indicator of the importance of the economic transformation in changing reproductive behavior. In northern and western Europe is possible to record in recent years decline in the proportion of postmaterialists. Practically throughout Europe respondent can identify with postmaterialistic orientation as a younger, single, living in a big city and higher education.

Next analysis focused on quantifying the differences between studied categories of respondents in selected countries, using the binary logistic regression. Here was confirmed by age and marital status as significant predictors examined attitudes across Europe. Interesting finding of this analysis is that in Estonia, the Netherlands and Finland have showed that respondents with lower education have a higher chance to evaluate the institution of marriage as outdated in comparison with the reference category consisting of respondents with university education.

Additional analyzes found out that the Czech Republic can be attributed to the liberal values of single younger respondents and respondents were more educated and living in larger cities. The European-wide mechanism of the differentiation in value orientations has been identified. In some ways exceed Estonia, where there is no differentiation of liberal values by education and municipal size category so clear. Thus, the analysis suggested post-communist countries have been approaching, the North-western European countries. Important finding is

also that the Czech Republic is further during the second demographic transition in comparison with Estonia. In conclusion, the causes of the different paths in the countries under study are probably of cultural, social, historical, religious and economic character.

Tab. 1: Consent of the respondents in selected European countries with the statement „If a woman wants to have a child as a single parent, but she doesn't want to have a stable relationship with a man, do you approve or disapprove “ by age in 1990, 1999, 2008 (in %)

	The Czech Republic			Estonia			Finland		
	1990	1999	2008	1990	1999	2008	1990	1999	2008
18 – 29 let	30,0	47,3	60,1	32,9	33	58,3	61,1	57,8	40
30 – 44 let	35,6	40,7	59,6	36,0	33,6	58,7	59,4	56	48,6
45 – 59 let	27,8	40,4	51,4	28	26,5	46,7	58,9	53,1	39,5
60+ let	19,6	28,7	37,7	29,5	21,2	40,3	32,9	47,5	36,9
Total	29,1	39,2	51,9	32,3	28,6	50,7	56	53,6	41,1
Significance	sig.	sig.	sig.	sig.	sig.	sig.	sig.	insig.	sig.
Contingency coefficient	0,2	0,175	0,212	0,150	0,171	0,165	0,195	0,086	0,121

	The Netherlands			Portugal		
	1990	1999	2008	1990	1999	2008
18 – 29 let	48,8	56,7	46	50,5	50,2	50,4
30 – 44 let	48,5	56,7	64,4	46	43,3	46,5
45 – 59 let	36,3	54,2	67,7	30,9	29,7	36,7
60+ let	15,0	29,3	49,4	23	23,9	28,9
Total	38,4	49,7	58,3	39,7	36,7	43,7
Significance	sig.	sig.	sig.	sig.	sig.	sig.
Contingency coefficient	0,323	0,237	0,189	0,280	0,217	0,140

Source of data: European Values Study

Tab. 2: Development of the share of respondents with postmaterialistic, materialist and mixed orientation in selected European countries in 1990, 1999, 2008 (in %)

	The Czech Republic			Estonia			Finland		
	1990	1999	2008	1990	1999	2008	1990	1999	2008
Materialist	32,1	25,3	29,4	32,1	41,2	29,7	7,7	26,0	22,4
Mixed orientation	62,2	64,9	59,7	61,9	56,2	64,2	33,1	63,3	55,5
Postmaterialist	5,8	9,8	10,8	6,4	2,6	6,1	39,9	10,7	22,1

	The Netherlands			Portugal		
	1990	1999	2008	1990	1999	2008
Materialist	11,0	11,8	14,3	33,9	35,6	38,8
Mixed orientation	55,9	66,2	63,3	53,9	51,8	56,8
Postmaterialist	33,1	22,0	22,4	12,2	9,5	4,4

Source of data: European Values Study

Tab. 3: Odds ratios for statements: „It is a duty towards society to have children“, „It is alright for two people to live together without getting married“, „Do you agree or disagree with the following statement: Marriage is an outdated institution?“ in Finland, 2008

	„It is a duty towards society to have children“			„It is alright for two people to live together without getting married“			„Do you agree or disagree with the following statement: Marriage is an outdated institution?“		
	Exp(B)	95 % confidence interval		Exp(B)	95 % confidence interval		Exp(B)	95 % confidence interval	
		Lower	Upper		Lower	Upper		Lower	Upper
Size of town									
1	1,992	0,705	5,630	0,369	0,105	1,301	0,235	0,072	0,766
2	1,386	0,559	3,438	0,486	0,157	1,505	1,540	0,784	3,024
3	1,173	0,481	2,865	0,557	0,184	1,692	0,919	0,472	1,787
4	0,913	0,348	2,393	0,342	0,112	1,047	1,282	0,651	2,524
5	1	1	1	1	1	1	1	1	1
Education									
- 15 years	1,344	0,489	3,691	0,771	0,264	2,253	2,417	0,968	6,034
16 – 19	1,029	0,566	1,872	1,050	0,528	2,088	1,533	0,958	2,455
20 – 23	0,636	0,337	1,201	0,625	0,344	1,136	0,604	0,348	1,050
24+	1	1	1	1	1	1	1	1	1
Marital status									
Married	3,450	1,569	7,585	0,322	0,136	0,763	0,238	0,144	0,392
Divorced	1,652	0,546	5,003	0,515	0,168	1,574	0,514	0,263	1,004
Widowed	0,887	0,098	8,004	0,714	0,128	3,988	0,876	0,275	2,794
Never married	1	1	1	1	1	1	1	1	1
Age category									
18 – 29	0,966	0,357	2,611	1,456	0,502	4,223	1,768	0,754	4,149
30 – 44	0,482	0,234	0,991	2,859	1,365	5,988	2,770	1,359	5,650
45 – 59	0,751	0,404	1,395	1,932	1,025	3,642	2,529	1,298	4,928
60 +	1	1	1	1	1	1	1	1	1

Notes: Binary logistic regression, modeling was the agreement with the statement.

Size of town: 1 = under 4 999 population, 2 = 5 000-19 999 population, 3 = 20 000 – 99 999 population, 4 = 100 000 – 499 999 population, 5 = 500 000 and more.

Education: number of years of education

Source of data: European Values Study

References:

- FIALOVÁ, L.; KUČERA, M. 1997. The Main Features of Population Development in the Czech Republic during the Transformation of Society. *Czech Sociological Review*. 1997, vol. 5, no. 1, pp. 93–111.
- FREJKA, T. 2008. Determinants of family formation and childbearing during the societal transition in Central and Eastern Europe. *Demographic Research*. 2008, vol. 19, article 7, s. 139–170.
- INGLEHART, R. 1971. The Silent Revolution in Europe: Intergenerational Change in Post-Industrial Societies. *The American Political Science Review*. 1971, vol. 65, no. 2, pp. 991–1017. ISSN: 0003-0554.
- INGLEHART, R. 1977. *The Silent Revolution: Changing Values and Political Styles Among Western Publics*. Princeton: Princeton University Press, 1977. 482 s.
- INGLEHART, R. 2008. Changing Values among Western Publics from 1970 to 2006. *West European Politics*. 2008, vol. 31, no. 1–2, pp. 130–146.
- KALMIJN, M. 2007. Explaining Cross-National Differences in Marriage, Cohabitation, and Divorce in Europe, 1990 – 2000. *Population Studies*. 2007, vol. 61, no. 3, pp. 243–263.
- KIERNAN, K. 2004. Unmarried cohabitation and parenthood in Britain and Europe. *Law and Policy*. 2004, vol. 26, no. 1, pp. 33–55.
- LESTHAEGHE, R.; SURKYN, J. 1988. Cultural Dynamics and Economic Theories of Fertility Change. *Population and Development Review*. 1988, vol. 14, no. 1, pp. 1–45.
- LESTHAEGHE, R. 1991-1992. *The Second Demographic Transition in Western Countries: An Interpretation*. IPD-Working Paper 1991-1992, Vrije Universiteit, Brussel.
- LESTHAEGHE, R.; NEELS, K. 2002. From the First to the Second Demographic Transition – An interpretation of the Spatial Continuity of Demographic Innovation in France, Belgium and Switzerland. *European Journal of Population*. 2002, vol. 18, no. 4, pp. 225–260.
- LESTHAEGHE, R.; SURKYN, J. 2002. New forms of household formation in Central and Eastern Europe: are they related to newly emerging value orientations. In *Economic Survey of Europe 2002/1*. New York and Geneva: United Nations, Economic Commission for Europe, pp. 197–216.
- LESTHAEGHE, R.; SURKYN, J. 2004a. Value Orientations and the Second Demographic Transition (SDT) in Northern, Western and Southern Europe: An Update. *Demographic Research*. 2004a, Special Collection 3, Article 3, pp. 45–86.
- LESTHAEGHE, R.; SURKYN, J. 2004b. *When History moves on: The Foundations and Diffusion of a Second Demographic Transition*. Vrije Universiteit, Brussels, Conference draft.
- LESTHAEGHE, R. 2010. The Unfolding Story of the Second Demographic Transition. *Population and Development Review*. 2010, vol. 36, no. 2, pp. 211–251.
- RABUŠIC, L. 1997. Polemicky k současným změnám charakteru reprodukce v ČR (sociologická perspektiva v demografii). *Demografie*. 1997, roč. 39, č. 2, pp. 114–119.
- RABUŠIC, L. 2000. Je česká společnost „postmaterialistická“? *Sociologický časopis/Czech Sociological Review*. 2000, vol. 36, no. 1, pp. 3 – 22.
- RYCHTAŘÍKOVÁ, J. 1997 - 1998. Česká republika a druhý demografický přechod? *Geografické rozhledy*. 1997 - 1998, č. 2, pp. 39–42.
- RYCHTAŘÍKOVÁ, J. 1999. Is Eastern Europe experiencing a second demographic transition? *Acta Universitatis Carolinae – Geographica*. 1999, no. 1, pp. 19–44.
- SOBOTKA, T.; ZEMAN, K.; KANTOROVÁ, V. 2001. *Second demographic transition in the Czech Republic: Stages, specific features and underlying factors*. Paper presented on the EURESICO Conference „The second demographic transition in Europe“, Bad Herrenalb, Germany, June 2001.

- SOBOTKA, T. 2003. Změny v časování mateřství a pokles plodnosti v České republice v 90. letech. *Demografie*. 2003, roč. 45, č. 2, pp. 77–87.
- SOBOTKA, T.; ZEMAN, K.; KANTOROVÁ, V. 2003. Demographic Shifts in the Czech Republic after 1989: A Second Demographic Transition View. *European Journal of Population*. 2003, vol. 19, no. 3, pp. 249–277.
- SOBOTKA, T. 2004. *Postponement of childbearing and low fertility in Europe*. Amsterdam: Dutch University Press, 2004, 298 s.
- SOBOTKA, T. 2008. The diverse faces of the Second Demographic Transition in Europe. *Demographic Research*. 2008, vol. 19, article 8, pp. 171–224.
- SOBOTKA, T.; ŠŤASTNÁ, A.; ZEMAN, K.; HAMPLOVÁ, D.; KANTOROVÁ, V. 2008. Czech Republic: A rapid transformation of fertility and family behaviour after the collapse of state socialism. *Demographic Research*. 2008, vol. 19, article 14, pp. 403–454.
- SOBOTKA, T. 2011. Fertility in Central and Eastern Europe after 1989: Collapse and Gradual Recovery. *Historical Social Research/Historische Sozialforschung*. 2011, vol. 36, no. 2, pp. 246–296.
- VAN DE KAA, D., J.; LESTHAEGHE, R. 1986. Twee demografische transitities?. *Mens en Maatschappij (special issues Groei en Krimp)*. 1986, pp. 9–24.
- VAN DE KAA, D. J. 1987. Europe's Second Demographic Transition. *Population Bulletin*. 1987, vol. 42, no. 2.
- VAN DE KAA, D. J. 1994. The second demographic transition revisited: Theories and expectations. In BEETS G. Et al. *Population and family in the Low Countries 1993: Late fertility and other current issues*. NIDI/CBGS Publications 1994, no. 30, Swets and Zeitlinger: Berwyn, Pennsylvania/Amsterdam, pp. 81–126.
- VAN DE KAA, D. J. 1997. Options and Sequences: Europe's Demographic Patterns. *Journal of the Australian Population Association*. 1997, vol. 14, no. 1, pp. 1–30.
- VAN DE KAA, D. J. 1998. *Postmodern fertility preferences: From changing value orientation to new behaviour*. Paper prepared for the Conference on The Global Fertility Transition, Bellagio, Italy, 18–22 May 1998.
- VAN DE KAA, D. J. 2002. *The Idea of Second Demographic Transition in Industrialized Countries*. Paper presented at the Sixth Welfare Policy Seminar, National Institute of Population and Social Security, Tokyo, 29 January 2002.
- VAN DE KAA, D., J. 2004. Is the Second Demographic Transition a useful concept, Questions and answers. *Vienna Yearbook of Population Research*. 2004, vol. 2, pp. 4–10.