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SOCIOECONOMIC AND RELIGIOUS DIFFERENTIALS IN MARITAL FERTILITY DURING THE FERTILITY TRANSITION: A MICRO-LEVEL STUDY FROM WESTERN HUNGARY, 1850–1939¹

Levente Pakot – Péter Őri

ABSTRACT

The analysis of fertility decline and its socioeconomic and cultural determinants during the demographic transition is a topic that is rarely researched in Hungary. So far, the question has been examined only at country and regional levels, with the help of aggregate data. Much like the international research on historical demography, little attention has been paid to non-aggregate data and to the micro level. Previous family reconstitution studies, which can be regarded as the most feasible and prevalent method for micro-level analysis in Hungary, focused only on the analysis of pre-transitional fertility. We know, however, that on the one hand, in many communities irreversible fertility decline did not start before World War I, and on the other hand, the analysis of the transitional period offers more opportunities to better understand the background of changing fertility behaviour.

The aim of the present paper is to investigate the socioeconomic and denominational differentials in marital fertility in a rapidly industrializing Western Transdanubian community, which was heterogeneous in these respects. The analysis covers the pre-transitional period and the fertility transition, mainly from the second part of the 19th century up to World War II. This period of the Hungarian demographic transition has never been examined at micro level. According to the results, the upper groups of the local society had higher

¹ This study has been supported by the National Scientific Research Fund of Hungary (OTKA K-113100). L. Pakot has been supported by the János Bolyai Research Scholarship of the Hungarian Academy of Sciences.

fertility compared to others prior to the transition, but the socioeconomic patterns of childbearing changed during the 1870s–1880s. First, local elite groups began to decrease their family size. They were followed later by local craftsmen and skilled workers, then by smallholders, and finally by semi-skilled and unskilled workers. The fertility of Lutherans was slightly lower than that of Roman Catholics, but this can be explained by the different demographic and socioeconomic composition of these denominational groups. Fertility transition on the spot meant not only parity-specific birth control, but also increasing birth intervals, which was particularly significant in the period of the Great Depression (1929–1933).

Keywords: Hungary, fertility transition, fertility differences, event history analysis

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INTRODUCTION

While the history of fertility transition is a thoroughly investigated topic, the details and specific mechanisms have still remained more or less unknown. Theories explaining the decrease of fertility emphasize the growing level of education, the employment of women outside the family, decreasing infant and child mortality rates, the appearance of new values, norms, and attitudes, as well as secularization, as important determinants.² Empirical evidence, however, seldom verifies or proves false these hypotheses, and sufficient statistical methods have rarely been used to differentiate between these factors by hierarchizing them in this respect. The use of high-level aggregate data with little information on socioeconomic differences, particularly for longer periods, is a fundamental problem. By contrast, almost no attention has been paid to data at the individual and the micro level, where it is possible that the most information on the socioeconomic and cultural positions of individuals can be collected (Guinnane, 2011; Dribe, Oris and Pozzi, 2014). Micro-analyses and the

² Individual records of Census 1857: National Archives of Hungary MNL OL X B 1762 microfilm.

use of individual-level data were necessarily linked to the statistical tools of the given period (e.g. family reconstitution), and to the results gained from, and questions posed by former macro-level studies. The time limits of observation also proved too narrow in many cases to reveal the whole process of fertility decline. Much attention was paid to pre-modern fertility variances and to the timing of deliberate birth control, while the process of fertility transition remained a poorly analysed phenomenon. In most of the cases where societal differences could not be observed, small rural communities were the ones that had been studied.

As a consequence of demographic transition theory (Notestein, 1945; Davis, 1945), a clear difference between pre-modern and modern reproductive behaviour was supposed. Deliberate birth control was identified by the spread of stopping behaviour – that is to say, by the end of childbearing after having a certain number of children. Pre-modern societies were characterised by the lack of this kind of behaviour ('natural fertility,' as it was called by Louis Henry), and it has changed only as a consequence of an adjustment to the modernizing economic and social circumstances. According to this hypothesis, changing economic conditions (industrialization), the changing occupational structure of the population, urbanization, increasing literacy, the rising expenses of child rearing, the diminishing demand for children in the labour force, and the changing role of women are responsible for this change in behaviour. The change was caused first and foremost, however, by declining infant and child mortality, that resulted in the spread of a new type of fertility behaviour.

The adjustment theory in its pure version was challenged later in the 1960s and 1970s by a large-scale macro-level research project (Princeton European Fertility Project). In the framework of the project European fertility decline was studied at the regional level (Coale and Watkins, 1986).³ The dominant elements of transition theory (related to fertility decline, such as the role of economic development, the changing occupational structure, or the education level of the population, as well as the decrease in infant and child mortality as a driving force of fertility transition), were all questioned. Instead of these factors, the changes in values and norms were stressed. Birth control was regarded as a new form of behaviour, the spread of which was made possible by the acceptance of new values and attitudes towards reproduction. As Ansley Coale (1973) later

³ For the results concerning Hungary see: Demeny (1972) and Dányi (1991a; 1991b).

formulated, willingness (the motivation) to engage in this new kind of behaviour, as well as technical knowledge (ability) were present prior to fertility transition, however readiness (norms which at least permit or accept it) came with the modern era. In this approach cultural changes (e.g. secularization) (Lesthaeghe, 1983; Lesthaeghe and Surkyn, 1988) or the role of cultural channels (ethnic, linguistic or denominational communities or borders), as factors in the diffusion of new norms, were emphasized.

Later on, newer analyses based on individual and longitudinal data questioned almost all the findings of the Princeton Project. The empirical view of fertility transition as a more or less simultaneous process, the methods and indicators used by the project, the rejection of the role of economic factors or declining mortality, have all been strongly criticised. Similarly, one of the cornerstones of both the Classical Transition Theory and the Princeton Project has also been refuted, namely the assumption that before the transition conscious birth control did not exist. On the contrary, the fact of spacing behaviour and its connection with socioeconomic status and changing economic circumstances have been pointed out several times (Brown and Guinnane, 2007; Bengtsson and Dribe, 2006; 2014, p.496; van Poppel and Derosas, 2006, pp.4-7.).

In order to understand fertility decline in a richer context by using a wider circle of the possible determinants, the opportunities provided by individual data and micro-level analysis should be much better utilized. At the same time, individual data used in the analysis must be longitudinal in order to reveal changes over time. Moreover, the multivariate analysis of life-course data might help us to comprehend the changes in individual decision-making, as well as to explain the mechanisms of long-term demographic development. This sort of data enables us to reconstruct the models of individual or family level decisions concerning reproduction for the entire period of fertility transition. Data on wealth, income, or occupational status may complete these models of individual behaviour. As it has recently been stressed, research aiming at better understanding the mechanisms and determinants of fertility transition should focus more and more on how socioeconomic status affected fertility during the transition and how differences in individual conditions and/or household position modified other effects on birth control and family size (Dribe, Oris and Pozzi, 2014, pp.163-164).

Scholars mostly agree that the positive association between socioeconomic status and fertility reversed during the transition, and those with a higher social status began to decrease their family size (Livi-Bacci, 1986; Skirbekk, 2008;

Cummins, 2012; Bengtsson and Dribe, 2014; for more recent results see: Breschi, Fornasin and Manfredin, 2014; Breschi, et al., 2014; Maloney, Hanson and Smith, 2014; Vézina, Gauvreau and Gagnon, 2014; Reher and Sanz-Gimeno, 2007).

The present paper attempts to investigate the socioeconomic and denominational fertility differentials in a rapidly industrializing Western Transdanubian community, which was heterogeneous in these respects. The analysis covers the pre-transitional period and the fertility transition, mainly from the second part of the 19th century up to the Second World War. This period of the Hungarian demographic transition has never been examined using individual level longitudinal data. We extended the analysis well into the key period of the transition (the mid-war era). We also investigate the possibility of the cultural and social diffusion of new reproductive behaviour when analysing the socio-occupational differences and timing of fertility decrease.

The structure of the paper is as follows: first we summarize the results of Hungarian research. Then we present the characteristics of the studied community. In the next section we describe the data and methods used to examine fertility and socioeconomic status in detail. Then we show the patterns of fertility in different socioeconomic and religious groups. The final part presents the results of multivariate analysis and the evolution of socioeconomic fertility differentials. The paper finishes with conclusions and suggestions for further research.

SOCIOECONOMIC STATUS, RELIGION AND FERTILITY DECLINE: RESULTS OF FORMER HUNGARIAN RESEARCH

Fertility decline during the demographic transition is a topic that has not been well researched in Hungary. On the basis of aggregate data, prior research has examined fertility transition only at country or regional level. Hungarian researchers, similarly to their colleagues abroad, have paid little attention to non-aggregate data and to the micro level. Fertility transition was studied first in the interwar period, with tight relation to the debate on the “single child system” (Bodó, 2001; Vásáry, 1989) as well as to the fact that census data appropriate to the examination of the question became available in this period. The decrease of fertility, however, had been going on for quite sometime, as the average number of children, apart from those working in the agricultural sector, did not already reach the simple reproduction level in the 1930s (Andorka, 1987, p.276). Fertility decline was a relatively long and gradual process in the course of the 19th century.

It started very early in some micro-regions in entirely rural environment, while in other districts fertility did not begin to decline until the Great War (Andorka, 1998). At the same time the differences among denominational groups, towns, and villages also appear to have been important (Őri, 2007, 2009). However, it has not been clarified thus far whether locality (through differing social and economic conditions) or denominational composition (through existing religious norms) or the combination of those factors influenced the level and changes of fertility in the 19th century. The considerable decrease in fertility took place under the conditions of high and unchanged level of nuptiality and unfavourable mortality (Katus, 1980). The decisive and final turning point was World War I (WWI). After that, declining fertility was a common experience in all communities in Hungary. Regarding the whole period between 1880 and 1960, the decrease of fertility was very strong and rapid in international comparison (Hablicsek, 1991; Kamarás, 1991; Tomka, 2000, pp.20-21).

In trying to explain the main causes of fertility decline, one part of the research carried out in the interwar period focused mainly on the differences in fertility levels among the major denominational groups, especially Calvinists and Roman Catholics. According to this approach, the beginning and diffusion of birth control had been linked to differences among denominational groups in terms of religious dogmas, attitudes towards life and death, the value of children and family, or every-day habits and practices. One part of the observers, therefore, tried to demonstrate that early birth control emerged in the Hungarian Calvinist population and that it resulted from Calvinism, which was also the main factor in the spread of fertility decrease (Kovács, 1923; 1936). The entire debate about the “single child system” and the explanation based on cultural (denominational) differences were initiated and created by writers and politicians who did not take into consideration certain very important facts. For instance, although the fertility of Protestants proved to be lower than that of Roman Catholics according to most of the examinations, decreasing fertility or low fertility could not be connected exclusively to the Hungarian Calvinist population. Early birth control and low child number as a norm emerged in several different communities, independently of ethnicity, denomination or geographic situation. Others examined the socioeconomic – mainly occupational – factors of fertility decline, and showed their significance and priority over cultural/religious ones. They argued that the priority of socioeconomic factors in determining childbearing behaviour could be explained by the divergent living conditions and goals of particular social groups (Szél, 1930; Thirring 1936, 1941, 1959). The authors debating this question were professional statisticians who

were aware of the increasing impact of socioeconomic factors on demographic behaviour in the course of the 20th century. This type of reasoning was present throughout the interwar period and became dominant in the works of Rudolf Andorka, who carried out family reconstitution studies related to several Hungarian villages (for instance Andorka, 1998), and who provided an overall picture of the Hungarian fertility transition (Andorka, 1987, pp.259–299).

The first analysis of the fertility data of Census 1930 by mother tongue, religion and occupational group revealed the priority of socioeconomic factors over cultural ones (Thirring, 1941). The average number of children born differed considerably by socioeconomic group; the group of workers (agricultural workers, farm servants and day labourers etc.) had the highest fertility, while the group of clerks had the lowest one. According to this argument, fertility decline progressed more in groups of higher occupational status, to whom maintaining the living standard and social mobility was of the greatest importance. On the contrary, the decrease of fertility was less significant in lower occupational groups, where selling young children's labour was a source of subsistence. The re-examination of fertility based on census data from 1930 for rural Hungary verified this result by proving the existence of the aforementioned socioeconomic differences in fertility decline (Dányi, 1994, p.156). Regarding fertility level, the agrarian proletarians were characterized by high fertility and the local elite (village clerks and freeholders above 50 acres) were characterized by low fertility, and represented two opposite poles. Rural industrial workers, small and medium landholders, and village traders and artisans were located between the two extremes. Studies on subsequent periods demonstrate the social convergence of fertility behaviour. In 1949, the number of children in independent, worker and clerk groups also differed, however the most significant decrease was observed among workers, more precisely in the group of agricultural workers (Thirring, 1959).

Settlement-level family reconstitution can be considered an adequate method in Hungary for the micro-examination of fertility differences by denominational and social group. This kind of demographic analysis started in Hungary at the end of the 1960s (for a review see Benda, 2006). In the 1970s, these studies were incited to a large extent by Rudolf Andorka, who studied the question of low fertility and the “single-child system” in Hungary (Andorka 1975; 1981; 1991a; 1991b). On the basis of the family reconstitution of 13 parishes of different denominations, Andorka claimed that in certain parts of the country – namely in some rural districts in the Southern Transdanubian

region – birth control began spreading at the end of the 18th and the beginning of the 19th century. Moreover, he argued that differences in marital fertility and other demographical indicators could not be related to denominations. According to his hypothesis, family limitation among the land-owning peasantry – first of all he thought of landholding serfs – might have been a logical response to the danger of poverty. By using these means, they succeeded in avoiding the fragmentation of properties and pauperization under the special circumstances of the equal partition of inheritance among male heirs, and the custom of early and general marriage. According to Andorka, the frequently cited difference between Protestants and Roman Catholics regarding birth control might have been caused by another factor. “Calvinists were ‘overrepresented’ among landholders in all or almost all regions of Hungary” (Andorka 1991b, p.39.). This is the formulation of the well-known “Characteristics Hypothesis”, according to which the fertility differentials of denominational subgroups merely reflects their prevailing socioeconomic features (Goldscheider 1971, pp.272-273; van Poppel and Derosas, 2006).⁴

Former Hungarian family reconstitution studies regarded denomination and ethnicity as the main explanatory determinants of fertility decrease, and this assumption played the most important role when selecting the settlements for analysis. Marital fertility and other demographical indicators are not detailed by socioeconomic group in these analyses. These studies focused primarily on pre-transitional fertility and, in general, did not proceed beyond 1895, when birth certificates issued by the state became compulsory; thus they did not include the mid-war period, which was of great importance with respect to fertility decline. While the role of socioeconomic differences in fertility decrease – landholders versus landless agricultural workers – was phrased, this hypothesis has not been tested thus far. It is high time to analyse fertility differences by denominational and social group, by focusing on the period prior to and during the fertility decline in Hungary.

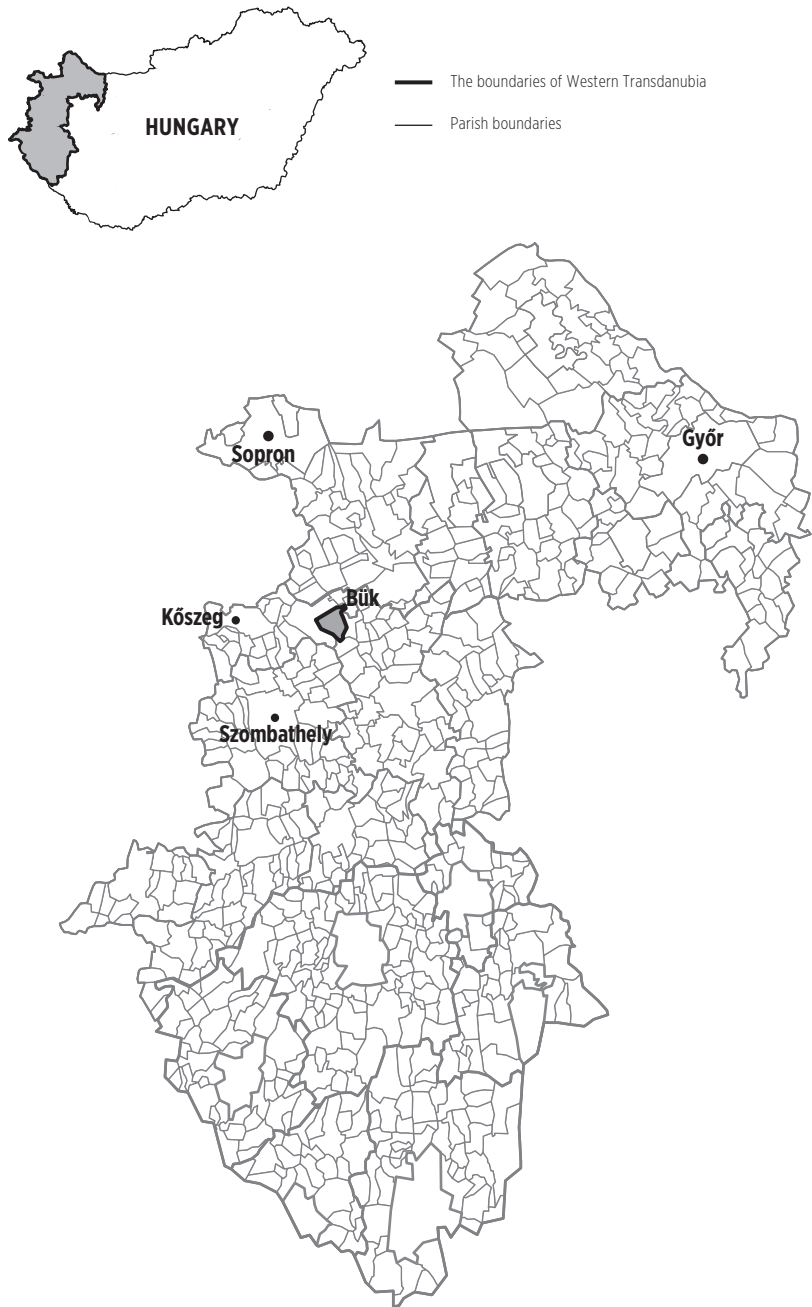
⁴ Similar socially understood denominational differences in fertility (and mortality) have been found in Kiskunhalas by Melegh (2000).

THE AREA UNDER STUDY

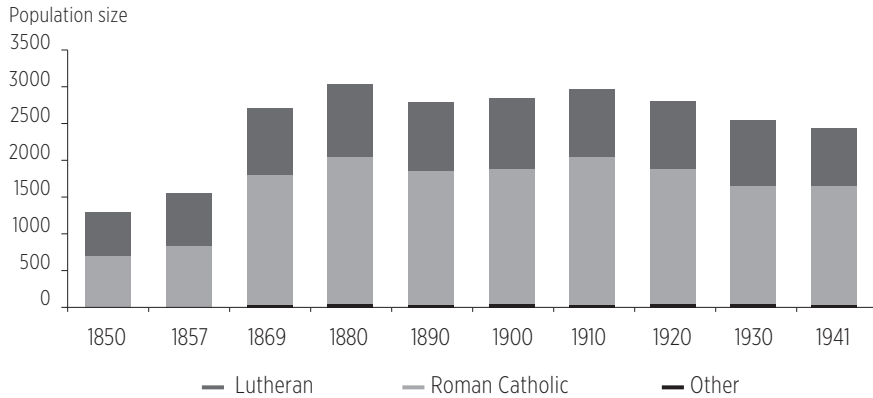
The studied community is Bük, located in Western Hungary (see *Map 1*). It is a settlement inhabited by Roman Catholics and Lutherans (Gyurácz, 2000; Németh, 2014; Szabó, 1985). During the 19th century, Bük consisted of three separate villages (Lower, Upper and Middle Bük), which were united in 1902. In 1850, the total population of the three Büks was 1,294; this figure grew to 2,447 by 1941. The population growth was mainly due to agricultural modernization, namely, the construction of a railroad by 1865, and the establishment of a modern sugar factory in 1867–1869, which resulted in a robust immigration into the settlements. The sugar factory leased the lands of local landowners and purchased the smaller lands owned by local freeholders. The sugar factory provided work for the poor living in Bük and the surrounding villages. They could work in the factory as “factory day labourers” or agricultural servants. At the same time, the factory owners built up modern facilities for the servants and the workers. The economic development reached its peak in the first decade of the 20th century. In 1910 the sugar factory employed 706 people (Gyurácz, 2000, p.82). In addition, a brick factory was established and other workshops of local artisans were opened in order to meet the increasing demands resulting from the constructions and the rapidly growing population size. The Great War put an end to this development, and unfortunately, the sugar factory burned down, in 1917. Between 1925 and 1930, the management gradually dissolved the factory, and its lands were purchased in part by local freeholders and in part by a big landowning family. A portion of the workers left the village, whereas others found jobs at the manorial farm of the estate formed after the fall of the sugar factory. The brick factories established around the turn of the century ceased to exist mainly due to the Great Depression (Németh, 2014). In the interwar period the population of the village continually decreased.

The immigration of the 1860s fundamentally transformed the denominational composition of Bük (*Figure 1*). While the number of Lutherans per 100 Roman Catholics was 82 before the agricultural modernization, this rate gradually changed, and Roman Catholics constituted the overwhelming majority (the two thirds of the entire population) by 1941 (49 Lutherans per 100 Roman Catholics).

Map 1: Map of the area under study



Map: Lajos Bálint, Hungarian Demographic Research Institute

Figure 1: Population size and distribution by religion in Bük, 1850–1941

Source: Censuses (own calculations).

The village was gradually transformed and its social stratification became more complex in the course of the 19th century. According to the census of 1857, 51% of the working age men (above the age of 25) were classified as day-labourers, whereas smallholders constituted 40%, tradesmen and artisans 6.5% and intellectuals 3%.⁵ The occupational data of censuses 1910, 1920 and 1930 show that more than 20% of the breadwinners were industrial workers from the local handicraft industry and the sugar factory (*Table 1*).

Table 1: The distribution of breadwinners by broad occupational groups in Bük, 1900–1930 (%)

	1900	1910	1920	1930
Agriculture	58.05	52.45	63.19	64.04
Mining	0.00	0.00	0.00	0.00
Industry	24.88	28.48	16.11	15.88
Commerce	2.76	1.72	1.56	2.72
Transport	3.09	2.25	2.80	3.86
Civil service and lib. prof.	1.79	1.32	1.87	2.54
Soldiers	0.16	0.20	0.78	0.26
Day-labourers	0.49	2.98	4.12	1.23
Domestics	6.02	3.97	5.14	3.60
Others and unknown	2.76	6.62	4.44	5.88
N	1230	1510	1285	1140

Source: Unpublished working tables on occupational distributions. Censuses 1900, 1910, 1920, 1930. National Archives of Hungary.

⁵ Individual records of Census 1857: National Archives of Hungary MNL OL X B 1762 microfilm.

Regarding the population living on agriculture, the proportion of landowners was around 40%. More than 60% of the agricultural employees were servants and agricultural workers (*Table 2*). The majority of peasant landholders farmed personally on the land that provided a living for the family. In the interwar period, the ratio of smallholders with 1–10 acres rose by 4–5% as compared to the earlier period, which can be explained by the division of lands and/or the land acquisitions of agricultural workers. Farm hands and wage labourers also had a considerable role in the agricultural production, most of them living and working on the estate owned by the sugar factory (prior to the 1920s).

Table 2: Distribution of bread-winners in agriculture in Bük, 1910–1930, (%)

	1910	1920	1930
Landowners, >1000 acres (575.5 ha)	0.00	0.13	0.00
Landowners, 200–1000 acres (115.1–575.5 ha)	0.00	0.13	0.00
Landowners, 100–200 acres (57.55–115.1 ha)	0.13	0.00	0.00
Landowners, 50–100 acres (28.78–57.55 ha)	0.13	0.13	0.35
Smallholders, 10–50 acres (5.76–28.78 ha)	14.56	15.66	10.97
Smallholders–day labourers, 1–10 acres (0.58–5.76 ha)	22.86	28.20	26.37
Smallholders–day labourers, <1 acre (0.58 ha)	0.89	1.13	0.53
Office holders	0.26	0.38	0.35
Farm hands	14.43	13.78	19.29
Labourers	46.74	40.48	42.12
N	1230	1510	1140

Source: Censuses (own calculations).

Individual census data showing the denominational and socio-occupational distribution of the population are available only for 1857 (Census 1857). According to the census data, Lutherans were overrepresented among landholders (62%). By contrast, this proportion was exactly the opposite among the landless, who were characterised by a slight Roman Catholic majority (55%). Historical reconstructions of the later periods constantly highlight the physical and social separation of the two denominational groups (Szabó, 1985). Starting from the 1870s Lutherans constituted only one third of the total population, however they owned two thirds of the lands around the village. Smallholders and servants represented a significant majority among Roman Catholics. Social and denominational separation was manifested by the elementary schools of the two churches working independently of one another throughout the entire period and similarly by the fact that Lutheran landholders established their own “Saving Granary” (Szabó, 1975).

DATA AND METHODS

A database for the analysis was compiled by gathering the records of the parish registers of Bük from the 19th century and the civil registers from the period between 1895 and 1980. A longitudinal database has been created from parish register data by applying the method of family reconstitution (Henry and Blum, 1988; Gutmann and Alter, 1993). Furthermore, the family reconstitution database has been linked to the annual lists of voters (a minority group of population who had political rights at the time) for the period between 1861 and 1948, to the individual data from the census held in 1857, and the list of Roman Catholics living in Bük in 1850. As a result, we have a database containing the data of women who gave birth to children in their first marriage in Bük between 1850 and 1939. Each married woman has been followed from the time of her marriage or the birth of her first child, taking place in the parish until their death or out-migration. The date of the last observation in the census or in the list of voters has been used as censoring information. In total, the database contains 4,720 legitimate births from the period between 1850 and 1939, which constitutes 56% of all legitimate births from first and higher order marriages registered in Bük. Despite the effort to connect the data from different sources, one may assume that the highly mobile lower classes, namely, the farm servants, agricultural workers, and sometimes also skilled workers, still remain underrepresented in the database.

The beginning of the observation for every woman is the date of her first observed childbirth in the database. The end of the observation is as follows: 1) 31 12 1939, if the marriage still existed and the wife was under the age of 50; 2) The 50th birthday of the wife, if the marriage still existed and the wife reached her 50th birthday before 31 12 1939; 3) The date of dissolution of the marriage if it happened before 31 12 1939 or the 50th birthday of the wife; 4) The last date of record from the list of voters/census, which proves that the woman or her spouse was present in the village.

Descriptive statistics show the general characteristics of fertility in the first part of the analysis; here the emphasis is on the reconstruction of general marital fertility rates, age-specific marital fertility rates, SES-specific fertility rates, denominational group-specific fertility rates and birth intervals for the period between 1850 and 1939. Multivariate analysis in the second part seeks to analyse the development of marital fertility over time by socioeconomic and denominational differences, while controlling for a basic set of covariates (Gutmann and Alter, 1993). Here only the intervals among higher order births

have been taken into account.⁶ We used piecewise constant exponential hazard models with a shared frailty at the individual (woman) level in order to account for repeated events for the same woman (in the analysis of higher order births). The frailty factor has been assumed to follow a Gaussian distribution. The duration variable was the time elapsed since last birth. We used six-month time periods for the baseline hazard. All higher order birth intervals have been analysed simultaneously.⁷

In the course of multivariate analysis a basic model has been estimated, which includes the socioeconomic status and denominational status of the head of family, the life status of the previously born child, time period, the woman's age, and the parish of residence, as explanatory variables. Three denominational groups, namely, Roman Catholic, Lutheran, and Jewish, have been included on the basis of the denominational status of the father. The case number of Jews, however, is so low that it does not permit us to come to a valid conclusion. The period of analysis is divided into seven distinct sections: 1850–1869, 1870–1884, 1885–1899, 1900–1914, 1915–1918, 1919–1929 and 1930–1939. In order to estimate the socioeconomic patterns of fertility decrease, another model has been constructed which includes interactions between socioeconomic status and time period, where the net effects of period (changes over time) by socioeconomic status can be examined.

For defining socioeconomic status, the information on occupation was used as it was recorded in the parish registers, census lists and the lists of voters. All occupations have been coded on the basis of the HISCO coding scheme (van Leeuwen, Maas and Miles, 2002), and after coding, the categories have been further contracted into four broad groups, more or less following the HISCLASS scheme (van Leeuwen and Maas, 2011). The classification formed here was a little simpler than the original one. Due to the small number of cases in some HISCLASS categories, it was not possible to use the classical range of HISCLASS in the analysis. *Table 3* displays the final classification.

⁶ Throughout the analysis the method applied by Tommy Bengtsson and Martin Dribe has been followed (2014).

⁷ During the statistical analysis we used Stata version 11 (StataCorp. 2009), and we applied *stpice* command for regression analysis.

Table 3: Classification of social classes by HISCLASS categories

HISCLASS	Socioeconomic status	Examples
1-6	1 – Middle class	Higher managers, higher professionals, lower managers, lower professionals, clerical and sales, lower clerical and sales, foremen, etc.
8	2 – Smallholder	–
7-9	3 – Skilled worker	Craftsmen, blacksmiths, crofters, carpenters etc.
10-12	4 – Labourer	Day labourers, workers, farm servants, farm workers etc.

Table 4 shows the distribution of the sample population by religion and social status in particular time periods. All in all, the stability of social groups is evident. The proportion of labourers gradually increased until World War I, then it started to decrease. The proportion of the middle class increased from 4% to 5–6% during the period under study. The proportion of smallholders constantly decreased until World War I, then it increased slightly again. The share of skilled workers remained around 11% until the end of World War I; however, it rose to 15% in the interwar period.

The changing distribution of the sample population by social group reveals the gradual transformation of the local occupational structure. The first increasing and then decreasing proportion of labourers might be explained by the altering phases of modernization in agriculture. It was due to the establishment of the sugar factory, as previously noted, as well as to its gradual liquidation after World War I. Changes appear rather dynamic when the occupational groups are broken down by religion. The initial hegemony of Lutherans among smallholders markedly decreased and their denominational distribution became more balanced during the interwar period. The overwhelming majority of Roman Catholics among skilled workers, that was originally noted, declined during the interwar period, when the number of Lutherans gradually rose to one third.

Table 4: Distribution of the sample population by socioeconomic and denominational status of the family heads, Bük, 1850–1939 (%)

Religion	Socioeconomic status	1850–1869	1870–1884	1885–1899	1900–1918	1919–1929	1930–1939	Total
Roman Catholic	Middle class	2.2	2.7	1.9	2.8	3.7	3.1	2.7
	Skilled worker	9.8	9.0	9.4	8.5	9.8	10.3	9.3
	Smallholder	19.7	18.7	20.9	20.8	23.6	23.5	21.0
	Labourer	23.8	25.3	23.6	27.5	24.6	21.5	24.8
Lutheran	Middle class	1.9	1.9	1.3	1.8	3.3	2.6	2.0
	Skilled worker	1.9	2.8	2.8	3.0	3.5	5.2	3.1
	Smallholder	30.1	27.6	30.4	26.8	23.0	23.1	27.2
	Labourer	10.5	11.9	9.7	8.8	8.5	10.8	10.0
All	Middle class	4.1	4.6	3.2	4.6	7.0	5.6	4.7
	Skilled worker	11.8	11.8	12.2	11.5	13.3	15.5	12.4
	Smallholder	49.8	46.3	51.3	47.6	46.7	46.5	48.1
	Labourer	34.4	37.3	33.3	36.3	33.1	32.3	34.8
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time at risk		3659	3742	3827	5728	2947	2621	22524

Source: Family reconstitution database of Bük (Hungary).

Note: Without the Jewish denominational group.

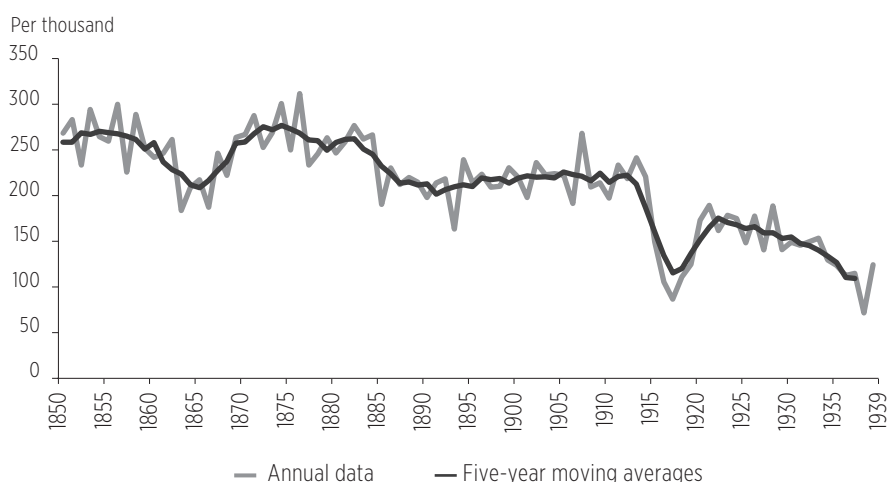
THE FERTILITY TRANSITION IN BÜK

Descriptive statistics

Figure 2 shows the changes in the general marital fertility rate (birth to married women divided by the person years at risk for married women 15–49 years) in Bük between 1850 and 1939. Prior to the turn of the century the trend of marital fertility appears to be wavering and the background and causes of the changes can only be assumed. The 1850s were characterized by a slow rise in marital fertility, which was followed by a significant fall in the mid-1860s. From the end of the 1860s, in conjunction with the modernization of agriculture and the

moving in of a young immigrant population (basically the workers in the sugar factory and the railways), marital fertility was rising slightly until the beginning of the 1880s, when it suddenly fell and then stabilized at a lower level. A drastic change occurred during World War I, when marital fertility declined to almost half of its former level. After the war, marital fertility rose slightly again as reproduction was necessarily postponed (due of the absence of husbands or the lack of proper bridegrooms) or it was, however, followed by a perpetual and decisive decline until the end of the 1930s.

Figure 2: General marital fertility rates, Bük, 1850–1939 (annually and five-year moving averages)

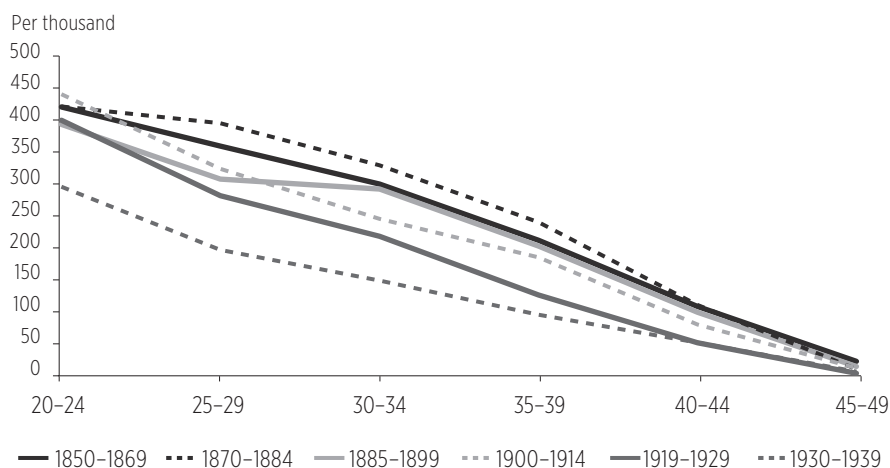


Source: Family reconstitution database of Bük (Hungary).

On the basis of *Figure 3* one can follow the development of age-specific marital fertility by subsequent time periods, except during the years of World War I. The marital fertility of those aged 25 or older almost halved during the period examined. The total marital fertility rate in the broad age group 20–49 gradually decreased from 7.2 to 3.9, while this figure was reduced from 5.0 to 2.5 in the age group 25–49. The average age of females at first marriage rose from 22 to 23 years of age, therefore we may suppose that the average number of births by a married woman between age 22 and 49 was around 6–7 before the transition, falling to 3 during the transition. This considerable decline in child number might have been due to parity-specific birth control, that is to say that fertility in higher age groups steadily decreased within a given period,

and over time as well, especially after the turn of the century. It is also worth mentioning that the level of fertility in the highest age group (above 45) did not decrease considerably, whereas in the youngest age group no significant decline came prior to the 1930s. This probably means that just after marriage, fertility was rather high and did not change until 1930, although the probability of childbirth decreased markedly with the age of wives, and this fall continued decade by decade. The decade and a half between 1870 and 1884 has to be excluded in this respect, since the level of fertility between the ages of 25 and 40 was markedly higher than formerly and later on. A significant fall of marital fertility rates appeared only above the age of 40. The 1930s and the period of World War I (not included here) also have to be considered exceptions, when the marital fertility of the youngest age groups also shrank to a large extent.

Figure 3: Age-specific marital fertility rates by period, Bük, 1850–1939

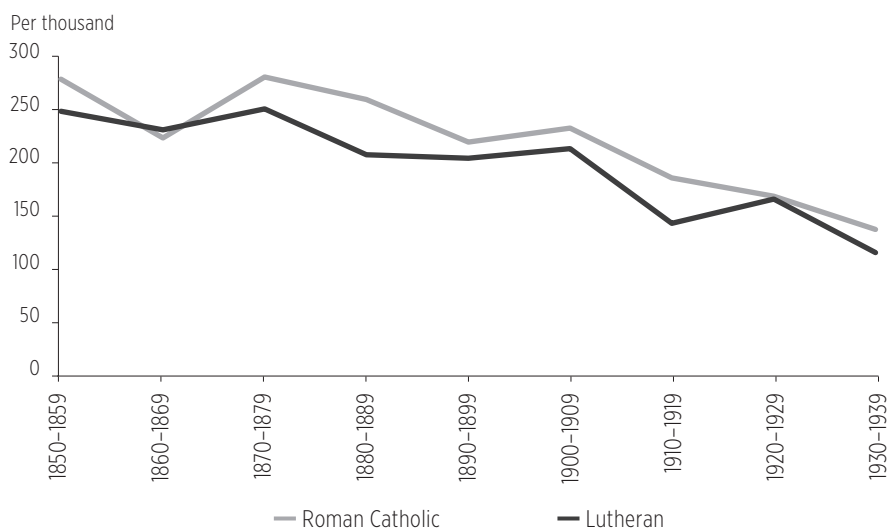


Source: Family reconstitution database of Bük (Hungary).

Figure 4 displays the general marital fertility rate by the denominational group of the father and by time period. The fertility of Lutherans was apparently lower than that of Roman Catholics during the entire period examined here. Something else worth noting is that the curves of the two denominational groups moved together, and only the rate of decline or rise in some periods differed by denomination, thus the decline in the 1860s was much stronger among Roman Catholics in the period of in-migration and high population growth, which was

followed by a more pronounced rise in the 1870s, when young in-migrants successfully settled in the village. By contrast, from 1900 onwards the altering periods of decline and recuperation seem to have been more notable in the case of Lutherans.

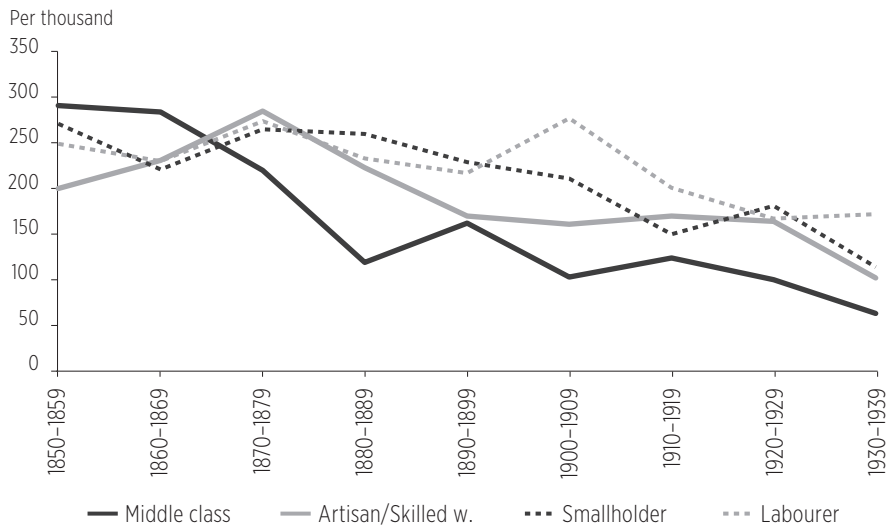
Figure 4: General marital fertility rate by denomination in Bük, 1850–1939



Source: Family reconstitution database of Bük (Hungary).

Figure 5 shows the changes over time in the general marital fertility rate by the father's socioeconomic group. Prior to the beginning of this transition, fertility of the middle class was the highest, while that of the skilled workers was the lowest, with smallholders and labourers standing in the middle. From the 1870s onwards, middle-class fertility suddenly dropped. This can be considered the beginning of fertility transition in the village. In the subsequent decades, the same happened among skilled workers, then among smallholders, and finally, in the lower classes. In conjunction with economic modernization, socioeconomic differences in fertility became more and more visible. Fertility rates in the lower classes began to decline only in the interwar period, although socioeconomic differences were still significant at the end of the period studied.

Figure 5: General marital fertility rate by socioeconomic status in Bük, 1850–1939



Source: Family reconstitution database of Bük (Hungary).

Table 5 includes the mean birth intervals (in years) by denominational group, socioeconomic status, and time period. There was no significant difference between the two main denominational groups; at the same time birth intervals were increasing over time in every socioeconomic group, although to a different extent.

Table 5: Mean previous birth interval (years) by period, denomination and SES, Bük, 1850–1939

A. Religion									
	1850–1869	1870–1884	1885–1899	1900–1914	1915–1918	1919–1929	1930–1939	1850–1939	N
Lutheran	2.85	2.64	2.52	2.40	3.29	2.79	2.94	2.66	1526
Roman Catholic	2.63	2.37	2.57	2.36	3.52	2.77	3.04	2.59	2350
Jewish	---	---	3.21	2.85	4.25	2.48	2.87	3.13	18
Total	2.72	2.48	2.56	2.38	2.46	2.77	3.00	2.62	
N	751	845	716	791	152	360	279	3894	

B. Socioeconomic status

	1850– 1869	1870– 1884	1885– 1899	1900– 1914	1915– 1918	1919– 1929	1930– 1939	1850– 1939	N
Middle class	2.75	2.16	3.35	2.53	2.95	2.67	3.69	2.73	140
Skilled worker	2.39	2.42	2.76	2.44	3.35	3.25	3.49	2.66	457
Smallholder	2.81	2.47	2.43	2.42	3.94	2.61	2.91	2.60	1854
Labourer	2.73	2.54	2.62	2.30	3.17	2.83	2.92	2.62	1443
Total	2.72	2.48	2.56	2.38	2.46	2.77	3.00	2.62	
N	751	845	716	791	152	360	279	3894	

Source: Family reconstitution database of Bük (Hungary).

Note: Closed birth intervals. Higher order births.

Event-history analysis of birth intervals

Compositional effects might influence denominational and socioeconomic differentials. In order to identify and explain such differences more effectively, a multivariate analysis of the birth intervals has been applied in the next section of the paper. *Table 6* reports the distribution of covariates used in the analysis, and demonstrates the results of the regression analysis. In the course of the analysis, two models have been created for examining the denominational and socioeconomic differentials in fertility. On the one hand, the basic model expresses the differences in fertility by socioeconomic status, denomination, period, the mothers' ages, and the life status of previously born children. Relative risks refer in all cases to the entire period studied, or all the socioeconomic groups. On the other hand, the interaction model is expected to display the differences in pre-transitional and declining fertility by socioeconomic group.⁸

⁸ In the interaction model of *Table 6* relative risks by socioeconomic status refer to the period 1850–1869, those by period refer only to labourers. The relative risks belonging to interactions express the probability of a next birth in a given socioeconomic group as compared to its value in the reference period (1850–1869). The variables and models used in the analysis follow those used by Bengtsson and Dribe (2014, pp.515–517).

Table 6: Distribution of the covariates and the relative risk of births, a piecewise constant exponential model, higher order births, Bük, 1850–1939

	Percent	Basic model		Interaction model	
		Relative risks	p	Relative risks	p
Socioeconomic status					
Labourer	34.33	1	ref.	1	ref.
Middle class	5.42	0.64	0.000	1.36	0.213
Skilled worker	12.51	0.89	0.151	1.18	0.311
Smallholder	47.74	1.00	0.949	1.10	0.379
Religion					
Roman Catholic	57.34	1	ref.	1	ref.
Lutheran	41.62	0.92	0.117	0.92	0.119
Jewish	1.04	0.67	0.184	0.84	0.583
Period					
1850–1869	15.94	1.00	ref.	1	ref.
1870–1884	16.57	1.17	0.013	1.24	0.042
1885–1899	17.05	0.98	0.755	1.01	0.902
1900–1914	19.14	0.95	0.474	1.14	0.247
1915–1918	6.47	0.46	0.000	0.54	0.000
1919–1929	12.95	0.69	0.000	0.81	0.131
1930–1939	11.89	0.50	0.000	0.70	0.014
Age of woman					
15–24	9.27	1.00	ref.	1	ref.
25–29	18.96	0.69	0.000	0.69	0.000
30–34	20.99	0.54	0.000	0.54	0.000
35–39	19.25	0.39	0.000	0.39	0.000
40–49	31.53	0.14	0.000	0.14	0.000

	Percent	Basic model		Interaction model	
		Relative risks	p	Relative risks	p
Life status of previously born child					
Alive	93.48	1	ref.	1	ref.
Dead	6.52	3.33	0.000	3.35	0.000
Interactions					
Middle class*1870–1884				0.55	0.056
Middle class*1885–1899				0.40	0.017
Middle class*1900–1914				0.30	0.001
Middle class*1915–1918				0.99	0.984
Middle class *1919–1929				0.29	0.002
Middle class *1930–1939				0.22	0.002
Skilled worker*1870–1884				0.93	0.739
Skilled worker *1885–1899				0.77	0.255
Skilled worker *1900–1914				0.66	0.072
Skilled worker *1915–1918				0.70	0.273
Skilled worker *1919–1929				0.69	0.152
Skilled worker *1930–1939				0.44	0.004
Smallholder*1870–1884				0.95	0.738
Smallholder*1885–1899				1.06	0.705
Smallholder*1900–1914				0.84	0.238
Smallholder*1915–1918				0.77	0.251
Smallholder*1919–1929				0.90	0.552
Smallholder*1930–1939				0.68	0.042
Frailty		0.28	0.000	0.27	0.000
Number of birth intervals		5131		5131	
Number of events	3842	3842		3842	
Time at risk	21279.5	21279.5		21279.5	
Chi ²		5213.1	0.000	5227.7	0.000

Source: Family reconstitution database of Bük (Hungary).

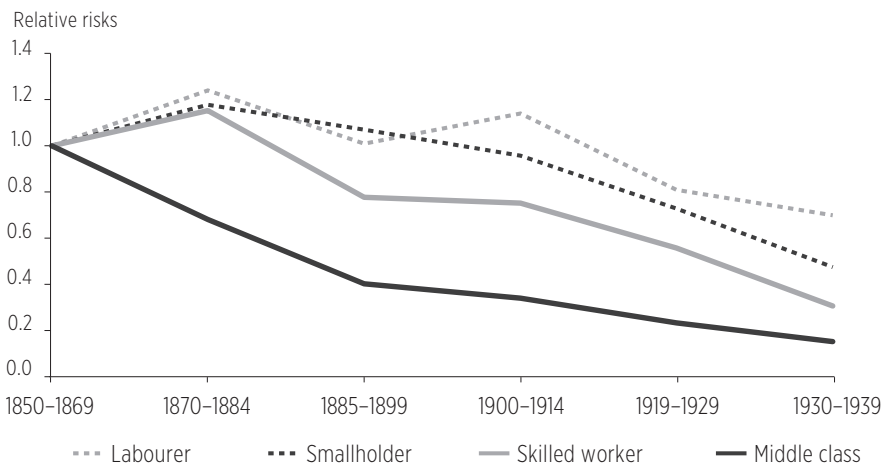
As a first step in interpreting the results presented by *Table 6*, let us examine the relative risks in the basic model. Middle class and skilled workers had lower risk (longer birth intervals) than the reference category of labourers, while the birth intervals of smallholders were not different from the lower classes. The Lutheran denomination had a decreasing effect to the risk of another birth, however the difference of 8% is not statistically significant. It becomes quite clear that denominational differences demonstrated in the descriptive part of the paper were due first and foremost to compositional effects and not to specific norms or values characteristic of the local congregations that were studied. Regarding the effects of historical periods, a significant increase of the risk of another birth can be observed in the period of economic modernization between 1870 and 1884. This is probably due to the in-migration and settling down of a great number of young labour force, as previously mentioned, which also caused a considerable increase in population and the entire transformation of the local society in terms of societal and denominational distribution. Fertility increase was followed by stagnation until WWI, and then a sudden drop in childbearing can be observed. In this respect Bük was in all probability very similar to any other community in the country. After the war a modest recuperation came, but the probability of births never reached the level of its pre-war numbers. Compared to that, the drop was 25% in the 1920s. This was followed a newer 20% decrease during the 1930s, which altogether meant a decrease of 50% since the turn of the century.

The age of women at childbirth naturally mattered a lot. Compared to the age group 15–24 the probability of a subsequent birth fell to almost 50% above the age of 30, and decreased by more than 60% in the age group of 35–39. As we have seen earlier, the risk of birth above the age of 40 was minimal during the entire period studied. At the same time, the death of the previously born child increased the risk of childbirth by 300%. This clearly illustrates that the decreasing infant and child mortality rate might have played an important role in the decline of marital fertility. The greatly increased risk of a subsequent birth refers to a well-articulated substitution effect; parents tried to substitute the dead child with a new-born baby. At the same time, a child's death could shorten the length of time until another birth, when birth control was not practised. The decreasing frequency of infant and child deaths could therefore affect the number of births in two different ways: through the decreasing necessity of substitution and the non-disturbed intervals between two births. Births risks strongly decreasing with the age of mother may show the probability of parity-specific birth control in the studied community; that is to say families might have had a more or less clear view on the ideal number of children and of family size, and in older age groups it considerably decreased the

probability of births, unless the still common death of infants and children modified these plans.

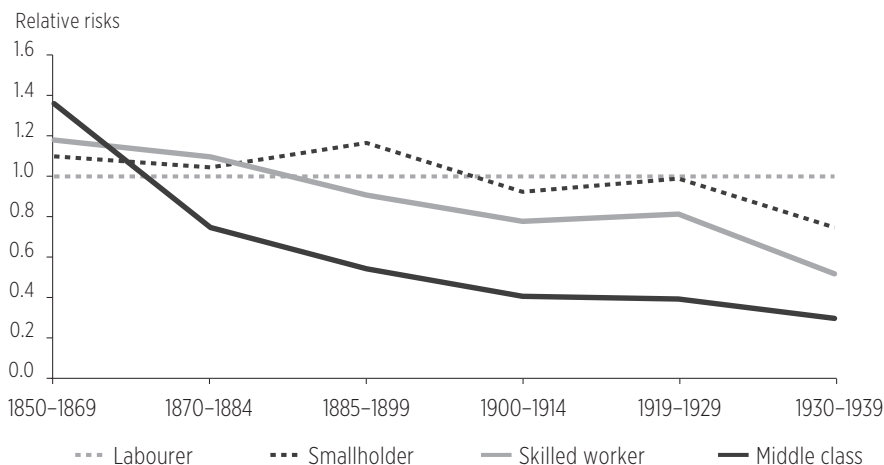
The socioeconomic pattern of fertility decline can be reconstructed on the basis of the results in the interaction model. Based on these values, *Figure 6* shows the net effects of period by socioeconomic status. Here the pre-transitional period (1850–1869) has been considered the reference category for all comparisons. Regarding the class of labourers, relative risks express the main effects of the period in the regression. By contrast, the relative risks of other groups show the net effects of the period and the interaction between the period and socioeconomic status. The local middle class first controlled its fertility after 1870, and from the middle of the 1880s they were followed by skilled workers and smallholders, although to a smaller degree. The unambiguous fertility decline among labourers did not emerge until after 1900. From this time onwards, fertility rates fell continuously and steadily in all socioeconomic groups. In contrast to the other groups, the highest rate of decrease can be observed for the period prior to 1900. After examining these results, it seems probable that smaller family size became more widespread in the local middle class in the period between 1870 and 1884. The spread of this new pattern in other socioeconomic groups is also highly visible, among skilled workers and smallholders around the turn of the century, and among lower skilled workers in the interwar period.

Figure 6: Net effects of period on fertility by socioeconomic status



Note: Calculations based on *Table 6*, p-values for main effects and interaction effects in *Table 6*.

Figure 7: Net effects of period on fertility by socioeconomic status



Note: Calculations based on Table 6, p-values for main effects and interaction effects in Table 6.

Figure 7 shows another aspect of the question, namely the development of socioeconomic differentials (their net effects on fertility) by historical period. The calculation was also based on the results of the interaction model. In contrast to Figure 6, in Figure 7 the reference group is the lower class in all periods, and the relative risks and p-values related to the first period (1850-1869) show the base effects of socioeconomic status in the regression, while those related to the other periods display the net effects of socioeconomic status and the interaction between socioeconomic status and period.

In the pre-transitional period, the middle class had the highest fertility rate, while the labourers had the lowest one, and skilled workers and smallholders stood in between. The socioeconomic pattern of fertility fundamentally changed during the transition. At the beginning of the 20th century the middle class and skilled workers had about by 50% and 20% lower risk of childbirth respectively than the lower class, but the fertility of smallholders did not differ significantly from that of the lower class. In the 1930s, the socioeconomic patterns constantly diverged; the relative risk of childbirth was by 70% lower in the middle class, 48% lower among skilled workers, and 25% lower among smallholders than it was in the lower class. Prior to the demographic transition, therefore, the birth intervals were the longest among the labourers and were the shortest in the local middle class, but these results are not statistically significant. More precisely, there is no

strong evidence that the latter group was the most likely to reproduce itself in the demographic sense (Cummins, 2012). In conjunction with the development of transition, birth intervals in the upper social groups were gradually prolonged and short birth intervals become characteristic of labourers.⁹

CONCLUSION

The present paper has studied the denominational and socioeconomic patterns of fertility decline in a Western Transdanubian village inhabited by Lutherans and Roman Catholics for the period between 1850 and 1939. Instead of the former, first of all macro-level approaches, this analysis was based on individual data collected from parish registers and different sorts of enumerations. On the basis of this data collection, a longitudinal family reconstitution database has been created. In the course of the examination the micro-data have been analysed by the help of multivariate statistical methods.

According to the results of the analysis, in the community studied, fertility transition was started by the local middle class in the 1870s. This meant not only parity-specific birth control, the signs of which can be observed, but also the lengthening of birth intervals and the decreasing probability of a subsequent birth; referring to the existence of the so-called spacing behaviour. The youngest female age groups took part in birth control not earlier than in the interwar period. The relative risk of another birth among Lutherans was slightly lower than among Roman Catholics. This difference, however, was mainly due to the different demographic and socioeconomic composition of the two denominational groups. The so-called “Characteristics Hypothesis” seems to be confirmed.

The timing of fertility transition also differed by socioeconomic group. During the demographic transition, a shift to small family size was initiated by the local middle class. A few decades later they were followed first by the industrial/artisan group of the local society, then by smallholders, and finally by the groups of lower-skilled workers.¹⁰ In the first decades of the 20th century fertility had divergent trends by socioeconomic group, and signs of convergence were not visible even at the end of the observed period. At the micro level (on the basis of individual data and concerning a local community) that socioeconomic status

⁹ Quite similarly to the results of Bengtsson and Dribe (2014, p.519).

¹⁰ The process of fertility transition by socioeconomic group in this Western Hungarian community was very similar to that of Southern Sweden (Bengtsson and Dribe, 2014, p.521).

strongly influenced both the timing and pace of fertility decline during the demographic transition as well as the level of pre-transitional fertility. The role of denominational affiliation has not been refuted in this respect; it might have affected fertility level and the spread of birth control to some extent but this analysis has also called attention to the differing socioeconomic composition of the denominational groups with differing demographic behaviour. According to our interpretation, the different elements of a given locality, namely denominational affiliation resulting in locally followed norms or societal and professional distribution, together with local geographic conditions, inextricably affected demographic behaviour. This view at the same time questions all attempts at finding a single explanation regarding demographic transition,. It also emphasizes the significance of individual level analyses and multivariate statistical methods with respect to better understanding demographic development in the past¹¹.

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¹¹ See for instance Kok, 2014.

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WORK-TO-FAMILY SPILLOVER: GENDER DIFFERENCES IN HUNGARY¹

Márta Radó – Beáta Nagy – Gábor Király

ABSTRACT

It is crucial to understand the role that labor market positions might play in creating gender differences in work-life balance. One theoretical approach to understanding this relationship is the spillover theory. The spillover theory argues that an individual's life domains are integrated; meaning that well-being can be transmitted between life domains. Based on data collected in Hungary in 2014, this paper shows that work-to-family spillover does not affect both genders the same way. The effect of work on family life tends to be more negative for women than for men. Two explanations have been formulated in order to understand this gender inequality. According to the findings of the analysis, gender is conditionally independent of spillover if financial status and flexibility of work are also incorporated into the analysis. This means that the relative disadvantage for women in terms of spillover can be attributed to their lower financial status and their relatively low access to flexible jobs. In other words, the gender inequalities in work-to-family spillover are deeply affected by individual labor market positions. The observation of the labor market's effect on work-life balance is especially important in Hungary since Hungary has one

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of the least flexible labor arrangements in Europe. A marginal log-linear model, which is a method for categorical multivariate analysis, has been applied in this analysis.

Keywords: work-life balance, spillover, flexibility, well-being, gender, Hungary

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INTRODUCTION

The increasing feminization of the labor market has called attention to the issue of work-life balance in both academic and policy-related investigations. In the early years of research the emerging clashes between work and private life were emphasized, while later publications also found positive relationships between the two (Powell and Greenhaus, 2010). This paper investigates the effects of paid work on family life and the issue of how various work-related characteristics influence family life. We first introduce the key theoretical concepts concerning work-family balance, as well as the spillover phenomenon. In the second section of the paper, we discuss some of the recent research findings on spillover, gender and flexibility. We then introduce the most important characteristics of these factors as they occur in the Hungarian context. Drawing on this empirical and contextual background, the authors attempt to analyze spillover effects in the Hungarian context, based on a nationally representative dataset from a survey conducted in May 2014.

BASIC CONCEPTS OF WORK-LIFE INTERFACE

For a long time most of the empirical findings focusing on the relationship between work and private life was interpreted in the framework of *conflict* and *segmentation theories*. These accounts highlighted the differing and conflicting characteristics of these spheres (Greenhaus and Beutell, 1985). Moving away from the simple conflict approach, Roehling and her colleagues (2003) constructed three different models to describe the relationship between working and non-working life spheres. These frameworks were the *compensation*, *segmentation* and *spillover* models. *Compensation theory* states that dissatisfaction or failure in one area might be compensated for by satisfaction and success in another area; the *segmentation theory* focuses on keeping the emotions and stress factors of these two spheres independent from one another. These models also assume that there is no overlap or connection between work life and the private life. Contrary to this, *spillover theory* claims that experiences in one sphere influence the other sphere, and some authors, like Roehling et al. (2003), certainly reference the positive relationship between the two spheres.

For the last few decades the research focus has shifted considerably towards the quality of interactions, very often to the question of positive effects in the work-to-family relationship. The new theories, utilizing various concepts

like positive spillover, modified the perspective of the issue. Researchers have argued that work life and family life interact with each other, i.e. both positive and negative spillover can be present in people's lives, and they interact in both directions (work-to-family and family-to-work), and that the two fields are more often allies than enemies, with the effects reinforcing one another instead of competing with one another (Roehling et al., 2003; Greenhaus and Powell, 2006). Depending on the character of research questions and concepts, different theories are applicable in the research setting (Dén-Nagy, 2013). The next section will discuss the spillover theory in detail.

SPILOVER THEORIES

Spillover theories can be identified by their holistic character, covering various interactions between work and family life (Tammelin, 2009 offers a detailed summary). The authors of this paper share the basic insights of this approach, namely, that emotions, values, attitudes, behaviors and skills are the basic components 'travelling' between the spheres (Ilies et al. 2009; Tammelin, 2009; Powell and Greenhaus, 2010). Spillover, however, means much more than a simple cause-and-effect influence from one sphere to the other, but rather the phenomenon that "activities in one role can benefit an individual's activity in another role" (Grzywacz et al. 2007, p.561). As illustrated in the following paragraphs, different theoretical approaches are similar with regards to presupposing a 'polarity' for spillover effects (either negative or positive), and different in terms of paying attention to different elements 'travelling' between spheres. Below, we briefly summarize the main approaches examining these effects.

Edwards and Rothbard (2000) noted that due to the spillover process, strong connections between work and family life are observable, and similarities are generated. If negative moods and emotions, like fatigue, are simply brought by a person from one domain to the other, it can be labelled as work-family conflict signaling incompatibility, but if they generate similarities between these two life domains, we can call them negative work-to-family spillover (Rantanen, 2008, p.15).

Edwards and Rothbard (2000) provided more hints regarding the content of these similarities in the two fields, which also served as a basis for their analysis: "These similarities usually are described in terms of work and family affect (i.e., mood and satisfaction), values (i.e., the importance ascribed to work and family pursuits), skills, and overt behaviors" (Edwards and Rothbard,

2000, p.180). Based on these categories, the articles usually distinguish *affective* and *instrumental work-family spillover* (Greenhaus and Powell, 2006).

Affective work-family spillover means that people bring home work-related moods or attitudes. Both moods and attitudes belong to affective spillover; but mood is more diffuse, whereas attitude is more stable and long lasting (Ilies et al. 2009). In addition to the affective work-family spillover, researchers' theories also refer to the transfer of skills from one domain to another, often called *instrumental spillover*. (For a short summary see *Table 1* in the *Appendix*.)

Recently, Powell and Greenhaus (2010) also applied this dual approach (affective and instrumental spillover) while referring to Hanson et al. (2006), who gave the following examples for providing a better understanding of spillover: "Individuals experience affective positive spillover when they transfer positive affect (e.g., positive mood or happiness) from one domain to the other domain. Individuals experience instrumental spillover when they transfer values (e.g., embracing diversity), skills (e.g., using Excel spreadsheets), and behaviors (e.g., acting ethically) acquired or nurtured in one domain to the other domain" (quoted by Powell and Greenhaus, 2010, p.518).

Theoretical considerations described above demonstrate that there are widely shared ideas about the spillover concept. All theories reviewed underline the growing importance of a spillover approach in empirical investigations. These features will be further discussed in the next section focusing on recent empirical research findings.

EMPIRICAL INVESTIGATIONS ON WORK-FAMILY SPILLOVER²

As illustrated above, spillover theory has different facets according to the different areas of its application, as well as to the various disciplines in which the concept is utilized. This is also mirrored in the richness and diversity of the empirical literature related to the construct. In this section we focus on two interrelated issues in connection with the analysis of this paper. First, we discuss job flexibility in general, then we will review the relationship between gender and flexibility in particular.

² This short empirical review section only discusses papers directly analyzing those factors which are also utilised in this paper. Detailed and systematic empirical reviews on spillover effects can be found at the papers of Greenhaus and Powell (2006) and Király et al. (2015).

Among the articles collected from the literature search, the issue of flexibility was particularly strong. While job and organizational flexibility can considerably help workers in reconciling their job and home responsibilities, it can also impede workers in establishing and managing boundaries between their life spheres. Keeping this dual aspect of the phenomenon in mind, findings will be presented according to whether they positively affected or were ambivalent/critical about flexibility.

Numerous papers argue that workplace flexibility can have a positive effect on employees' lives by decreasing negative spillover and contributing to the perception of a higher level of work-life balance. For example, Jung Jang and colleagues (2012) found that having flexible schedules decreased employee stress in general. Nevertheless, they also emphasized that specific groups such as women, single parents, and those who are heavily burdened by family responsibilities can benefit more from organizational flexibility measures (Jung Jang et al. 2012). In line with these results, Lourel and colleagues (2009) highlight that work-life balance policies can lead to a higher level of organizational commitment among employees. Based on 18 semi-structured interviews, the Pedersen and Jeppesen (2012) also pointed to the fact that flexible scheduling can contribute to work-life enrichment by assisting employees in their attempts to manage their boundaries between life-spheres.

Nevertheless, a significant number of research articles emphasize the ambivalence and/or negative aspects related to flexible working arrangements. Fursman and Zodgekar (2009), for instance, highlighted the point that choosing flexible working conditions can hinder the career prospects of employees (Fursman and Zodgekar, 2009, p.53). Moreover, Joyce and colleagues showed that flexibility policies representing organizational interests (i.e. fixed term contracts, involuntary part time employment) could be detrimental to employee health (Joyce et al. 2010).

Powell and Greenhaus (2010) wrote one of the most comprehensive papers as far as gender and spillover effects are concerned. Investigating full-time managers and professionals in the American population, they explicitly distinguished sex and gender in their analysis. According to their results, people who scored higher in femininity (personality traits such as interpersonal and communal orientation) also experienced higher levels of positive spillover. Moreover, those who were higher on family role salience (importance of the individual's role in the family) showed lower levels of conflict between work and family (Powell and Greenhaus, 2010, pp.525-529).

Offer (2014) investigated gender differences in parents' mental labor (planning, organization and management of everyday activities) and the amount

of emotional stress involved. The author emphasizes in one of the key findings that both mothers and fathers are equally likely to think about family matters, however, these mental activities only generate stress in the case of mothers, harming their emotional well-being and not the father's (Offer, 2014, pp.932-933). Furthermore, Keene and Reynolds (2005) examined married Americans who were employed in order to reveal how family and workplace factors influenced gender differences in negative family-to-work spillover. The results showed that women were twice as likely to have the experience that family demands are detrimental to their workplace performance (family-to-work spillover) (Keene and Reynolds, 2005, pp.293-294).

Primecz and colleagues (2014) conducted an extensive qualitative research project using both focus groups and interviews to examine employees at so called employee-friendly organizations in Hungary. Investigating representatives of key roles (such as HR managers) and members at various levels of the organizational hierarchy, they could point to inequalities tied to both gender and organizational positions. While flexible work schedules are primarily offered to employees with small children, these are primarily aimed at mothers. These women experienced considerable time pressure when working part time in theory only, since they regularly 'checked in' from home after their kids went to sleep (at night) or before they got up (in the morning). Fathers with children are rarely even considered employees needing any help to reconcile work and family responsibilities. Moreover, researchers emphasize that even if fathers contributed to the caring responsibilities, often they are responsible for regular and plannable activities (such as children's sport's training sessions), while mothers are the ones who have to deal with unexpected and 'emergency' situations (Primecz et al. 2014, p.11).

Primecz and her colleagues also emphasize, however, that mothers with young children cannot be considered a homogenous group since women in executive positions could control their work schedule, the commuting time, and the location of their work – even to the point of affecting the direction in which the company should move – to a much greater extent than the rest of their employees. This meant that they could benefit more from their company's employee friendliness while other women faced more of the negative aspects of being a working woman. This particular research shed light on the delicately interwoven nature of gender and organizational inequalities (Primecz et al. 2014, p.12).

The next part of the paper further elaborates on the previously discussed middle-range work-life balance theories, and explores the factors influencing the spillover of employees in the present Hungarian context.

THE HUNGARIAN CONTEXT

During the state-socialist era women and men were treated equally in political rhetoric, however, in reality, the gender wage gap was similar to that in western countries, and the patterns of occupational segregation were even more pronounced (Csillag, 2007). After the transition to capitalism, both men's and women's employment opportunities dropped dramatically in Hungary, and stabilized at a very low level. Between 2001 and the recession in 2008, employment rates started increasing across Europe, however, the pace of growth was much more intense in the old member states than in the new ones, thanks to the employment policy in place at the time. The economic recession further increased the gap between the old and new member states' employment rates, particularly for men, and then austerity measures hit women's employment opportunities severely (Fodor and Nagy, 2014). Currently women's employment rates are 55.9 percent in Hungary, compared to the European Union (EU) average of 59.7% (Eurostat, 2015a).

In our analysis, we utilize two types of variables concerning flexible jobs: flextime (understood as a flexible work schedule) and flexiplace for working remotely. The access to flexible working arrangements is also substantially lower in the Central and Eastern European (CEE) countries than in the old EU member countries. Medgyesi (2001) argues that the reason Hungary lags behind in flexible work arrangements is two-fold. Firstly, the employment and social policies were less concerned with motivating employers to create flexible work arrangements. This attitude is clearly apparent in the regulation of parental leave, during which one of the parents (usually the mother) is encouraged to leave the labor market completely instead of working part-time. Second, Hungarians have rather instrumental attitudes as far as work as a social activity is concerned. More specifically, having a secure and/or well-paying job is considered much more important than having a flexible one. It means that the most important thing for Hungarians is security (62%) and salary (56%), whereas flexible working hours are important only for 23% of employed individuals (Róbert, 2008, cited by TÁRKI, 2010, p.5).

The flexibility of work schedules can be measured in the proportion of part time jobs, overwork, flexible working hours, and the length of working time. Part time employment was very low, 5% in Hungary, while it was 17.5% for the EU28 countries in 2015. This index is higher for females (7.3%) than for males (4.1%) in Hungary. However, gender differences are much more pronounced in the EU28, where this index is 8.8% for males and 32.2% for females (Eurostat, 2015b). It is noteworthy that most part-time work is comprised of low paying jobs of poor quality and of jobs requiring a high level of qualification (Medgyesi, 2001).

Another way to understand flexible work schedules is to observe the length of working time. In the old member states the individualized working hours' arrangement is widespread, whereas in the new member states the traditional 40-hour working week is still the dominant pattern. Hungary, even among CEE countries, has an exceedingly high proportion of people working 40 hours a week. More than 80% of employed people belong to this group (Plantenga and Remery, 2009). It is important to reiterate that flexibility in working time is related to financial status since these working arrangements are more likely to characterize the situation of the lowest and the highest earners (TÁRKI, 2010). Thus, it is important to note that the concept of flexibility is ambiguous, as it might contain both constraints and opportunities. Our analysis will refer to the latter one.

In the investigation on which this paper is based, the other observed indicator of flexibility of work is the availability of flexiplace. This is usually measured by the incidence of telecommuting or working from home. Similarly to what was found to be true of part time jobs, Hungary drops behind when compared to Western European countries in terms of this indicator as well, however, the gap between the old and new member states is not as wide as was the case concerning the flexibility of working time (for example, telecommuting is widespread in the Czech Republic). Based on the fourth European Working Conditions Survey (2007), 8.3% of the respondents in the EU27 countries said that their job involved telecommuting at least for a quarter of their time, whereas this index was only 3.6% in Hungary. Flexibility of the location of work differs from flexibility of working time in two other respects. First, men tend to have more flexibility in terms of choosing the location of their work activities than females. Secondly, usually people of higher social status (more well-educated, white collar workers etc.) might have jobs that do not require a constant presence at the place of work (contrary to a factory worker, for example) hence their work can be done from home (Hárs and Neumann, 2008).

Another dimension that needs to be reviewed is the problem of unpaid jobs, since gender differences are more articulated in unpaid than in paid work. In Hungary, women still overwhelmingly take the burden of household chores compared to men. Moreover, women of poorer families tend to do even more housework than well-off families. As a result, women are more likely to feel the time pressure, which indicates work-family conflicts. TÁRKI (2010) identifies long working hours as one of the main reasons why women generally have more work-family conflict. This paper also pointed out that working part-time could decrease this conflict.

EMPIRICAL ANALYSIS

The following empirical analysis is based on a sociological investigation carried out by TÁRKI as part of its monthly Omnibus survey in May 2014. The questionnaire was designed by the research group of the Centre for Gender and Culture at the Corvinus University of Budapest. The sample is representative of the Hungarian adult population by gender, age, type of settlement, and educational level, and consists of 1007 people. The working sample contains those who were employed or self-employed at the time of the survey, therefore 514 persons worked, and the rest of the respondents were inactive or unemployed. Six respondents have not answered for one of the key variables, therefore, 508 responses are analyzed in the following section.

Description of variables

This present analysis focuses exclusively on the work-to-family interactions at the micro level, since, according to the literature, spillover research focuses the most on this level. Because we would like to relate our findings to these results, we also concentrated on these types of interactions. There might be different ways to measure spillover with both quantitative and qualitative approaches, so an index was calculated comprising both the quantitative and qualitative aspects of spillover. This index was based on items that measure both negative and positive spillover effects. Since spillover in general cannot be captured by one question, certain domains of spillover were measured and these results were aggregated. We should also emphasize that the groups are clearly subjective indicators, which are partly determined by each individual's subjective evaluation, not merely by the objective effect of one life domain on the other. The following questions (see *Table 1*) are used to calculate this work-to-family spillover index.

First, we created an index containing these items. By multiplying by -1 the results of items measuring negative influence between spheres auxiliary variables were created. A spillover index was then calculated by getting the standardized sum of positive items and auxiliary variables. This index takes on a higher value if work has a larger effect on family. The Cronbach's alpha is 0.7, which validates the reliability of the index.

Table 1: Items measuring negative and positive work-to-family spillovers

Negative spillover items	1	How often do you think about work-related problems when you are not working?
	2	How often are you too stressed out at home to enjoy family life due to work-related problems?
	3	How often do you feel that you cannot see your family or partner enough due to work?
Positive spillover items	4	How often do you feel you get on better at home due to work related success?
	5	How often can you utilize the skills acquired at your workplace?
	6	How often is the atmosphere of your family life positively affected by having a good mood at work?

Finally, this spillover variable was recoded as a categorical variable taking on three values (henceforth indicated as spillover). This variable takes on a value of 1 when someone falls below the bottom 33% of the population, a value of 2 when the given person falls below the second third, and a value of 3 when the given person falls under the top 33% of the spillover index. In other words, the spillover index takes on value of 1 when someone has a negative spillover compared to the average, takes on a value of 2 when someone has an average level of spillover, and finally takes on a value of 3 when the given person has a positive level of spillover. In this study, spillover is the dependent variable.

For the analysis, financial status, gender and flexibility of work were chosen as independent variables. *Table 2* in the Appendix shows the distribution of the independent variables in the working population. Financial status was measured by the subjective evaluation of the income level of the household. It is important to mention that wealth was not measured as individual financial situation but as the subjective financial situation of the respondent's household. Although, we are well aware that there is a limitation in extrapolating these data at the individual level, we still utilize this as a proxy variable, keeping the limitations of this method in mind. First, this is because gaining objective data through questionnaires about wages is highly problematic due to the potentially high frequency of non-response, so using subjective data might be more fruitful in this situation. Secondly, because of the wage gap, if a woman lives in a low-income household, it is much more likely that she also belongs to

the poorly paid section of the working population than the other way around. As a result, subjective well-being was measured by the following sentence:

“How would you rate your own financial well-being?”

- 1 I am in financial need.
- 2 I have financial difficulties from month to month.
- 3 My monthly salary is just enough for living.
- 4 By planning ahead I get along well.
- 5 I do not have any financial problems.

Based on this question, two categories were distinguished: (1) those who have financial problems or whose salary is just enough to live on, and (2) those who cope well. *Table 3* in the Appendix shows the distribution of financial well-being by gender.

The analysis also takes into account the flexibility of the work, because most of the previous research findings emphasized its crucial role concerning work-life balance. We can distinguish two kinds of flexibility, as described above. We work with the type of flexibility that captures the more positive aspects. This variable takes on a value of 2 when the given person had neither flexible working times nor a flexible workplace, and it takes on a value of 1 when either the working time or the workplace is flexible. Flexibility of the workplace was measured by the following question: “My work can be done anywhere. How much is this statement valid for your work?” The flexibility of work time was measured by the following question: “Flexible work time. How much is it valid for your work?”. *Table 4* in the Appendix presents the distribution of flexibility of work by gender and financial status. The variable of gender takes on a value of 1 if the respondent is male and 2 if this person is female.

The age variable takes on a value of 1 if the respondent is between 18 and 25 years of age, a value of 2 if this person is between 26 and 35 years old, a value of 3 if this person is between 36 and 49 years old, and a value of 4 if this person is 50 years old or older.

Methodology

We have applied marginal log-linear models in this paper, and they have enabled us to conduct a multivariate analysis with categorical data. This permits not only a two-dimensional analysis, but also takes into account certain confounding variables. The application of a categorical data analysis was also beneficial due

to the low sample size that would not allow complex multivariate analysis with many of the variables and several categories. The aim of this paper, therefore, is to capture a simple structure between certain variables. This methodology is also in line with our exploratory type of research questions, which were not designed to explore a linear relationship, but rather aimed at observing how different predictors influence the risk categories of spillover.³ We only briefly introduce the statistical background of the marginal log-linear models.

The general log-linear representation of a 2x2 contingency table is an additive parameterization of logarithm of cell frequencies,

$$\ln \mu_{ij} = \lambda_0^{AB} + \lambda_i^A + \lambda_j^B + \lambda_{ij}^{AB} \quad (1)$$

where the λ_0^{AB} is called as overall effect, λ_i^A is the effect of category i of A , λ_j^B is the effect of category j of B and λ_{ij}^{AB} is the interaction effect of category i of A and category j of B . In the same way more dimensional parameters can be included to the model. In case of general log-linear parameters (λ_L^V) the superscript of the parameter (V) shows all the observed variables, whereas the subscript (L) includes a subset of the complete set of variables. λ_L^V parameter represents the effect of the variables which are in the downer index (L) controlled for the variables which are included in the upper index, but not included in the lower index ($V-L$).

General log-linear parameters always include a complete set of variables in the analysis. In certain cases the researcher does not want to use all the observed variables in the analysis. For example, in case of a longitudinal analysis the researcher may not want to explain a dependent variable which was measured in the second wave by a variable from the third wave. In this case one might use marginal log-linear parameters (λ_L^M), in which the upper index (M) is the subset of the complete set of variables (V). So in contrast to the general log-linear models, marginal log-linear models make it possible to control for only certain variables ($M-L$) and not for all variables ($V-L$).

Marginal log-linear models assume that certain effects are not that important and set those parameters equal to 0, which means that one might omit them from the model. Therefore we gain a model that highlights the important associations. We validate statements concerning conditional independence.

³ More about this topic can be found in Rudas and Bergsma (2004); Németh (2009); Rudas et al. (2006); Rudas et al. (2010), and Bergsma et al. (2009). This introduction is mostly based on Németh 2009. If we do not indicate otherwise then this is the source.

A and B are conditionally independent from each other given C can be stated by the following formula:

$$\lambda_{ABC}^{ABC} = \lambda_{AB}^{ABC} = 0 \quad (2)$$

The goodness of fit of each model restriction can be tested by a likelihood ratio test (G^2). If the model is true then these test statistics have an asymptotic Chi-square distribution. The degree of freedom in this case is equal the number of parameters which were set to 0. If the P-value is smaller or equals 0.05 then the postulated model is rejected. Also we can test whether a model fits better than an alternative model. Let us assume that we have two nested models: M1 with df_1 degrees of freedom and an alternative model M2 with df_2 degrees of freedom which contains model M1 as a special case ($M1 \subset M2$). The conditional test statistic is then defined as

$$G^2 (M1|M2) = G (M1) - G^2 (M2) \quad (3)$$

and has an asymptotic Chi-square distribution with $df = df_1 - df_2$ if M1 is true (Bergsma et al. 2009).

The model that is used in this paper is directed acyclic graphs (DAG). One type of DAG is the path model. Path models assume that all hierarchical marginal log-linear parameters not associated with an arrow are zero (Rudas et al. 2006), so categorical path models can be obtained by setting higher than first-order effects to zero. This is a highly interpretable graph since arrows represent effects in these graphs.⁴

Finally, the analysis presented in this paper was conducted by the *cmm* package (Bergsma, 1997; Bergsma et al. 2009) of the R software (Németh, 2010).

RESULTS

A model was built in order to gain a more precise understanding of the relationship between gender and spillover. In order to do so, the following variables were included in this model:

- Spillover (S)
- Gender (G)
- Flexibility of work (F)
- Financial well-being (W)
- Age (A)

⁴ For more on graphical models see Németh's (2009) PhD dissertation.

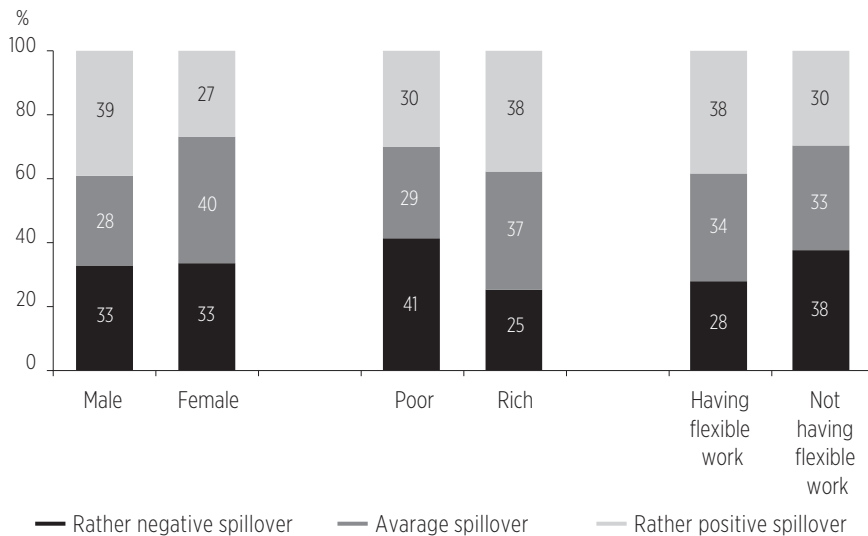
In log-linear models the independence in a 3×2 contingency table can be tested by the observation of the model in which the interactional effect equals zero. If the P value is bigger than 0.05 than we accept that the two variables are independent of each other. As *Table 2* shows, gender, financial well-being and flexibility of work have a significant effect on spillover. The literature also deals with the age effect on spillover; however, in this study age was found to be independent from spillover. Because of this, age was excluded from our analysis.

Table 2: Testing independence of spillover and given independent variables

Observed cross tables	Log likelihood ratio	df	P-value
Spillover × Gender	6.065	2	0.048
Spillover × Flexibility of work	6.679	2	0.035
Spillover × Financial well-being	14.998	2	0.001
Spillover × Age	4.867	6	0.561

Figure 1 shows how spillover differs by gender, financial well-being and flexibility of work: males, richer people and those whose job is more flexible reported more positive spillover.

Figure 1: Spillover by gender, financial well-being and flexibility of work



Afterwards we tested to determine if gender is independent from spillover, controlling for flexibility of work and financial well-being. In other words, the following model (Model 1) has been tested:

$$G \perp S | WF \tag{4}$$

Table 3 shows that this model is appropriate since the P-value of the likelihood ratio test is 0.152, which is higher than 0.05. Subsequently, the path model (Model 2) was tested to determine whether of not higher than first-order effects can be omitted. As Table 3 shows this model was also kept since the P-value of the likelihood ratio test is 0.165. Finally, we also verified that the path model (Model 2) fits better than the model with higher interactions (Model 1). According to this test (more about this test in the methodology section) the path model can be kept since a significantly better model can be gained by omitting higher interactions.

Table 3: Selection of the best fitting model by testing a nested model

Model 1			Model 2			Model 2 Model 1		
G^2	df	P-value	G^2	df	P-value	ΔG^2	Δdf	P-value
11.966	8	0.152	15.374	11	0.165	3.408	3	0.333

Table 4 shows the good parametrization of the path model.⁵ In the first row of the table there are the marginals, the second row shows the parameters, which were set at 0, and in the last row one can see the free parameters. The value of the free parameters will be predicted in the following section.

Table 4: Good parametrization of the path model

Marginal	G	NW	GWf	GWFS
Parameters which were set to 0	–	–	GWf	GM, GFS, GWM, WFS, GWFS
Free parameters	zero, G	R, GW	W, GF, WF	S, FS, WS,

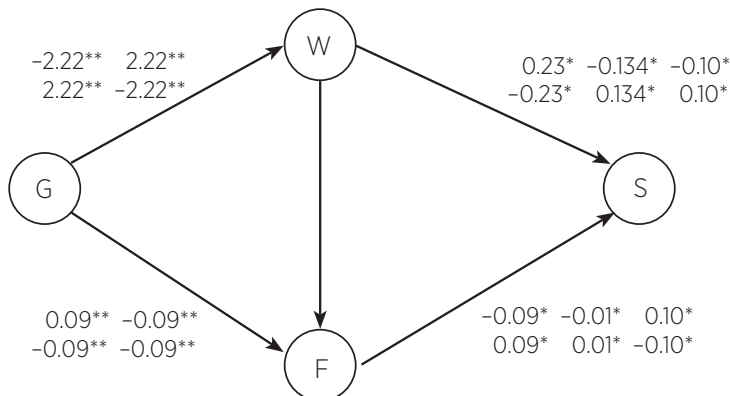
⁵ For further reading about good parametrization: Rudas et al. (2006).

Figure 2 shows the best fitting model by a graphical interpretation. This interpretation of the path model is straightforward. The vertexes represent variables (in Figure 2 G is gender, F is flexibility of work, W is financial well-being and S is spillover). The absence of an arrow indicates conditional independence. An arrow between two vertices indicates a significant effect between two variables. This model demonstrates that spillover is conditionally independent of gender given financial situation and flexibility of work.

The graphical illustration of a path model also shows the predicted parameters on the arrow. Let's assume that a hypothetical graph has two vertices: A and B . If A and B were binary variables then only the non-redundant parameters pertaining to the smaller values would be presented. While if A or B had three categories then each parameter would be given. A parameter estimate in the i^{th} row and j^{th} column of a matrix of the arrow AB pertain to the i^{th} level of A and the j^{th} level of B . The asterisks *, **, and *** indicate significance at the $p < 0.05$, $p < 0.01$, and $p < 0.001$ levels, respectively.

For a better understanding of the predicted parameters on Figure 2 the categories of the variables need to be recalled. The variable for gender takes on a value of 1 if the respondent is male and 2 if the respondent is female. The variable for financial well-being takes on a value of 1 if the respondent is poor and 2 if the respondent is rich. The variable for flexibility of work takes on a value of 1 if the respondent has flexible work and a 2 if the person has no flexible work. Finally the spillover variable takes on a value of 1 if work has a negative effect on private life, a value of 2 if there is an average effect, and a 3 if there is a positive effect.

Figure 2: Parameter estimates for the path model



Notes: G – gender, F – flexibility of work, W – financial well-being, S – spillover; the asterisks *, ** and *** indicate significance at the $p < 0.05$, $p < 0.01$ and $p < 0.001$ levels, respectively.

First, the relationship between gender (G) and financial well-being (W) has been observed. *Figure 2* shows that $\lambda_{GW}^{GW}(\text{Male, Poor})=-2.22$, which means that males have a lower chance of being poor than females. After the analysis of gender and financial well-being, flexibility of work (F) can be seen in *Figure 2* to show that $\lambda_{GF}^{GWF}(\text{Male, HavingFlexibleWork})=0.09$, meaning that males have more flexible work even after controlling for financial well-being. Since $\lambda_{WF}^{GWF}(\text{Poor, HavingFlexibleWork})=-0.21$ one can conclude that poor people have a lower chance of having a flexible job than rich people even after controlling for gender.

After analyzing the relationship between gender, financial well-being and flexibility of work, the spillover variable with the parameter $\lambda_{WS}^{GWFS}(\text{Poor, NegativeSpillover})=0.23$ shows that those who fall under the first category of well-being have a higher chance of falling under the first category of the spillover variable even after controlling for gender and flexibility of work. To put it differently, poor people have a higher chance of having negative spillover than rich people. This statement seems to be true even if we take into account that poor people tend to be female and have less chance of having flexible jobs, and at the same time being female or not having a flexible job increases the chance of negative spillover.

The relationship between flexibility of work and spillover was also examined. The parameter $\lambda_{FS}^{GWFS}(\text{HavingFlexibleWork, NegativeSpillover})=0.09$ shows that those who have a flexible job also tend to have a higher chance of having positive spillover after controlling for gender and financial well-being. This finding is in line with Jung Jang and colleagues' (2012) and Pedersen and Jeppesen's (2012) argument, and does not support those who found an inverse relationship between flexibility and spillover (e.g. Fursman and Zodgekar, 2009; Joyce et al. 2010).

To sum up, on average women have a significantly lower probability of having a job that has a positive effect on their family life than an average man. This study has shown, however, that gender is conditionally independent of spillover given the financial status and flexibility of work. This is because women have a lower chance of reporting better financial well-being and having a flexible job while this analysis demonstrates that being rich and working in a flexible job increase the chance of having positive spillover. The authors argue, therefore, that the relative disadvantages females face in terms of spillover can be primarily attributed to their reported financial status and their relatively low access to more flexible jobs.

DISCUSSION

In this paper we have analyzed the data in order to trace a new dimension of gender inequality, namely inequality in work-to-family spillover. The data has been analyzed in an exploratory manner by utilizing marginal log linear models. To sum up the most important findings, the results show that spillover effects are present among the economically active members of the Hungarian society. This would indicate that the spillover theory also has validity in a CEE context. This finding is in line with former research results (Grzywacz et al. 2007; Powell and Greenhaus, 2010) showing the dominance of spillover 'strategy'.

This paper also investigated the factors of the inequality described above. It has been pointed out that gender differences in spillover can be explained by perceived financial well-being and the (voluntary) flexibility of work. So, one can argue that the spillover phenomenon projected to a positive-negative continuum can represent a new dimension of gender inequalities alongside these 'traditional' forms of disparities. Our analysis has made it clear that gender inequality is driven and maintained by various social inequalities, such as access to flexibility at work or financial well-being. To begin with, the findings have supported that men have better subjective financial well-being. Also, it can be determined from the analysis that, by controlling for the variable of subjective financial well-being, men are more likely to experience (voluntary) flexibility in their work, meaning they feel that they have greater control over their working conditions. In the model both financial well-being and flexibility of the job have an effect, so both are essential in understanding and explaining gender differences. This is an important result because, among others results, Pedersen and Jeppesen (2012) underlined that flexibility enhances employees' success in finding work-life balance and managing borders between private and working life.

Two other issues are worth mentioning in relation to our results. First, it is noteworthy that financial well-being has such a significant effect in mediating the role of spillover in one's life. Tentatively, it can be said that this might be due to the importance of financial and material issues in people's well-being in Hungary in particular and in post-socialist countries in general (Fodor and Nagy, 2014). Prior studies have written about the high frequency of material deprivation in the CEE countries, and that poverty increased considerably in this region due to the 2008 recession. Although the crisis was a 'man-cession', women's poverty has become more widespread both during the crisis as well as

during the austerity period (Fodor and Nagy, 2014). This gives special emphasis to the main result of this paper, namely, that the differences relating to the experience of spillover effects in one's life are not individual phenomena but are embedded in the broader social context of inequalities.

Secondly, in line with the literature on the relationship of flexibility and the spillover effect, it can be argued that it is not enough to examine flexible working conditions in themselves since there are more than one type of 'flexibilities', e.g. unsocial working hours, forced or badly paid part-time work, overwork, thus there is an urgent need for the critical analysis of flexibility. In this respect one must clearly explore whose flexibility, i.e. employees' or organizations' flexibility is the most challenging in the labor market. The results of this paper demonstrate the fact that those groups can benefit greatly from flexible working conditions whose initial social situation (i.e. financial well-being) is also better (which most probably also represents higher positions in organizational hierarchies). These findings point to the fact that differences in the social situation of the respondents, in turn, reinforce gender inequalities (i.e. men tend to have better financial well-being) related to how men and women experience spillover effects in their lives.

The issue of gender differences has always been an important aspect in the analyses of work-life balance in general, and spillover investigations in particular (Keene and Reynolds, 2005; Offer, 2014; Powell and Greenhaus, 2010). The present findings, however, might offer new contributions to the academic discussion on the topic, as they clearly point to structural biases of the labor market. The less favorable work-to-family spillover status of women can be explained by their restricted access to (advantageous or voluntary) flexible jobs, and also by their underrepresentation in more well-paying jobs. These results, while being consistent with earlier findings, subtly affect our understanding of work-life spillover, as far as gender differences involved in spillover effects are concerned. It is important to mention that these quantitative results are also in line with the qualitative findings of Primecz and colleagues (2014), pointing to the fact that differences of gender and organizational positions might affect and reinforce each other.

These findings raise interesting questions for future research initiatives. First of all, in the CEE context, it is very likely that different factors play key roles in mediating spillover effects than those identified in the predominantly Anglo-Saxon literature. For example, financial well-being plays a critical role in Hungary, while previous analyses tended to pay less attention to this factor (Jung Jang

et al. 2012; Lourel et al. 2009; Powell and Greenhaus, 2010). In addition to these findings, here are also signs that the accustomed dichotomy of inflexible working conditions for males vs. more flexible working conditions limited to females alone might not be so straightforward in the post-socialist context. Our results show that men actually have a higher chance of obtaining flexible working conditions, good or voluntary, after controlling for the financial situation. In contrast flexible work arrangements in general are more widespread among women in Western European countries, as mentioned in the Hungarian context section. In Hungary, instead of flexibility, these labor markets are characterized more by 'rigidity'. It means that the positive effect of flexibility is experienced by a chosen few – in other words, the privileged parts of the working population. It is important to mention that the analysis in this paper is based on schedule and job location flexibility. A future research aspiration that it would be important to examine is the other side of the flexibility phenomenon – involving involuntary part-time employment, fixed term contracts and the relationship to gender and spillover effects.

These possible explanations could be investigated in an international research project including the factors used in this particular study, as well as those habitually analyzed in studies on spillover effects. Our research focused only on the work-to-family direction of spillover effects. Since these results suggest that factors such as flexibility play a different role in a post-socialist context than they did in the old member states (see Hungarian context section), it is worth examining the other direction – the family-to-work effect – as well. This dataset also made it possible for us to investigate the affective part of spillover (feelings, stress or intrusion of work-related ideas), whereas the instrumental aspects could not be explored sufficiently. Finally, the analysis demonstrates the need to focus on the possible relationship of crossover and spillover effects among parents and their children.

APPENDIX

Table 1: Components of spillover (both positive and negative)

Affective	Mood (happiness)
	Attitudes
Instrumental	Values (e.g. diversity)
	Skills (e.g. Excel)
	Behaviour (e.g. ethical acting)

Based on: Greenhaus and Powell, 2006; Powell and Greenhaus, 2010, pp.518-519.

Table 2: Distribution of the independent variables in the working population (% and number of cases)

Variables	Categories	% (n)
Gender	Male	55.6 (286)
	Female	44.4 (228)
Financial well-being	Those who have financial problems or whose salary is just enough to survive	48.0 (246)
	Those who get on well by planning ahead or even without that	52.0 (266)
Flexibility of work (working time or working place)	Having a flexible job	46.1 (236)
	Not having a flexible job	53.9 (276)

Table 3: Distribution of financial well-being by gender (% and number of cases)

	Those who have financial problems or whose salary is just enough to survive	Those who get on well by planning ahead or even without that
Male	46.5 (113)	53.5 (153)
Female	50.0 (113)	50.0 (113)

Table 4: Distribution of flexible job by gender and financial well-being (% and number of cases)

		Having a flexible job	Not having a flexible job
Gender	Male	50.9 (145)	49.1 (140)
	Female	40.1 (91)	59.9 (136)
Financial well-being	Those who have financial problems or whose salary is just enough to survive	35.8 (88)	64.2 (158)
	Those who get on well by planning ahead or even without that	56.2 (149)	43.8 (116)

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CONTRACEPTIVE USE IN HUNGARY: PAST TRENDS AND ACTUAL BEHAVIOUR

Zsuzsanna Makay

ABSTRACT

In the present study I look first at findings of earlier surveys on women's birth control behavior since 1958 in Hungary. I then turn to the detailed analysis of the birth control practices of Hungarian women based on data from the *Generations and Gender Survey* (2008–2009). First I examine the influences on whether partnered women of reproductive age employ any birth control methods or not, and then I explore the methods that are chosen. What emerges from this examination is that modern contraception has spread widely in Hungary since the 1960s, but in 2009 a quarter of Hungarian women were still not using any method of birth control, or else they were merely using a traditional low-efficiency types. The profile of such abstainers is clear: they are reaching the end of their reproductive period, have a low level of education, are married, have financial difficulties, are generally childless, and do not plan to have a child in the short-term. The results of a multinomial logistic model show that there are also several demographic and social factors behind choosing a method of contraception. In 2009 the most common of these was the condom, followed by birth control pills ("the Pill") and intra-uterine devices (IUDs, "the coil"). Finally, the study compares birth control in five European countries and its changes since the 1990s. The use of the Pill declined in all the countries in the 1990s, and only in Bulgaria and Hungary have condom users outnumbered pill-takers.

Keywords: contraception, birth control, Hungary, Europe, Generations and Gender Survey

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INTRODUCTION

Regular inquiries into family planning and the use of contraception in Hungary, known as *Fertility, family planning surveys*, were taken three times between 1958 and 1974. Women of reproductive age were asked about their family planning and use of contraceptives. At that time scholars were primarily interested in the extent to which newlywed couples used intentional family planning: Were young people planning the number of children they wanted to have? Did they reflect on the size of their future family? Scholars also wanted to know what the main methods of birth control were, if any (Klinger, 1975).

After the collapse of socialism at the end of the 1980s, new data became available thanks to the international *Family and fertility survey*, conducted in Hungary from 1992–1993. Since that time, however, very few studies have treated the issue, and no comprehensive survey has centered on reproductive and sexual behavior, family planning or contraception in Hungary. Still, the subject has major social and health implications. Modern contraceptive methods provide almost total protection from conception: their use is crucial in conscious family planning, preventing unwanted pregnancy, and reducing the incidence of abortion.

There are several other important factors to consider. The average age of childbearing is rising. The mean age at first birth was 28.3 in 2014, although it was only 23 years twenty years earlier (KSH, 2015). Nowadays first birth is preceded by a lengthy period of about a decade, in which men and women have sexual relations while avoiding pregnancy. Among young people birth control has a major role in postponing birth of the first child. Knowledge of the potentials of birth control and the methods actually used in that period have an importance that extends beyond family planning such as avoiding abortion, and including the quality of young people's sexual lives and relationships. Birth control methods allow the timing of the first birth and the spacing of subsequent children to be matters of conscious decision-making.¹ After the desired number of children have been born, it is possible to avoid further pregnancies and limit the ultimate number of offspring. Because of this, family planning continues to

¹ Provided, of course, there is no medical problem that impedes pregnancy.

be a factor in peoples' lives through most of their reproductive years, and it only ceases when the couple decides to bear a child.

This study seeks to examine the family-planning practices of partnered women, based on survey data from 2009. It applies socio-demographic background variables to identify factors behind contraception use and the choice of the primary method. This knowledge helps us understand the family-planning practices of women and single out the possibilities to further reduce the number of abortions.

The next section of the paper looks briefly at the appearance and the spread of modern family-planning methods in European countries. Turning to Hungary, the following part presents the family-planning practices in the second half of the 20th century up to 1993 through earlier findings. Then I describe the survey and the sample of the 2009 data, followed by the descriptive and multivariate findings regarding who controls unwanted pregnancy and who does not, including which methods are most commonly used. What emerges from this examination is that surprising changes occurred between 1993 and 2009 in the relative popularity of methods. This result requires separate explanation. The final empirical section analyzes the same changes on a European level in four other countries: how family-planning methods have changed over the last decade and a half, and which countries Hungary most resembles in this respect. In the conclusion, attention is drawn to the most revealing relationships and suggestions for further research.

THE SOCIAL ROLE AND THE SPREAD OF CONTRACEPTION IN EUROPE

Defined as those providing full protection against conception if used correctly, modern methods of family planning appeared in developed countries in the mid-20th century,² although contraception practices had existed before then. There have been reasons to avoid unwanted pregnancy since ancient times: avoiding the disgrace of bearing an illegitimate child, securing income from prostitution, or in the case of married women, limiting the number of children for reasons of health or personal appearance (van de Walle, 2005). Apart from many folk remedies (carrying a vial of some substance, coughing or jumping about after intercourse, etc.), the most common methods were abstinence or interruption

² Such "modern" methods are sterilization (surgical intervention), condoms, various intra-uterine devices (coil), and various types of hormonal treatment (tablets, injection, implant) (Frejka, 2008).

of coitus before ejaculation, although the latter leads to pregnancy in a quarter of cases (Moreau, 2011; Paládi-Kovács, 1988–2011). The methods used up to the end of the 19th century were far from reliable. For a long time it was thought, for instance, that women were most fertile in the days right after menstruation, and there pregnancy could be avoided by abstinence in that period. It was believed that a period of sterility ensued, when the chance of conception was minimal (van de Walle, 2005). In fact the opposite was the case and such tactics actually maximized the chance of conception.

Apart from such imperfect methods, the other earlier means of birth control was induced abortion. Prevalent religious norms in most countries meant such intervention was illegal. Although there are no data available, it can be assumed that there were a large number of midwives or quacks prepared to administer substances (poisons) by mouth or by insertion into the womb, or in worse cases, to physically remove the fetus. Such intervention often had serious complications that could cost the woman her life.

In spite of the unreliability of earlier contraception methods, they were effective enough cumulatively to cause an appreciable decline in fertility in developed countries. Certain members of the population succeeded, indeed, in considerably limiting their fertility by ineffective traditional methods, periodic sexual abstention, and non-medical abortion. Over a few decades around the turn of the 19th and 20th centuries, the total fertility rate in Europe fell from about 4.5 to 2.5–3.0 (Monnier, 2006), although the gain in reliability began only close to the end of that period.

Only in the 20th century, however, did the innovations allow reliable and deliberate planning and spacing of births. By mid-century, medical science had reached a standard whereby the physiological process of conception and methods of preventing it were understood sufficiently, and technical developments were at a stage where devices of requisite reliability and price were generally available. It became possible to produce synthetic hormones, which allowed the tablet form of contraception (“the Pill”) to advance. (Previously, animal hormones had been used in making the Pill.) The production of modern condoms was enabled by the development of liquid latex. Flexible plastic, then a novelty, led to long-life intra-uterine contraceptive devices (such as the coil) that could be inserted for as many as ten years (Quarini, 2005).

The new methods faced religious and ethical resistance in mostly Catholic countries. The church condoned only natural methods such as periodical abstinence in family planning; termination of pregnancy and contraceptive devices were banned in most European countries. Finally, in the 1960s, most

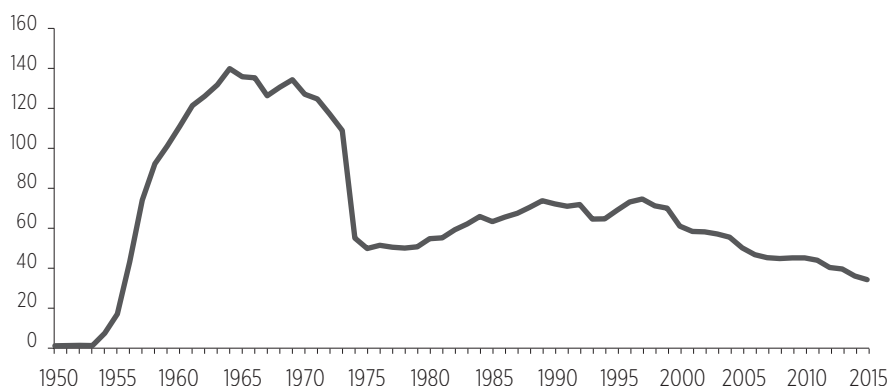
Western countries began to lift their bans on contraception methods and permit abortion under certain conditions (Cahen, 2007).

There is a major difference in the regulatory courses taken in East and in West European countries. The former legalized abortion even before modern contraception methods had spread, primarily in the 1950s, making this the primary method of birth control. Western countries looked instead to wider use of contraceptives, and did not liberalize their abortion regulations until some years later. Because of this, abortion remained a secondary form of birth control, used most often when contraception had failed for some reason (Blayo, 1991; Monnier, 2006).

HUNGARY'S BIRTH CONTROL PRACTICE BEFORE AND AFTER THE CHANGE OF SYSTEM IN 1989

Hungary liberalized induced abortion in 1956. A few years later, there was one termination occurring for every live birth (*Figure 1*). A record number of terminations ensued in the mid-1960s: 140 induced abortions per 100 live births. We will show that almost 70% of women practicing birth control were using a natural method, mainly coitus interruptus, also known as the withdrawal method, as well as periodic abstinence, and that there was no ethical barrier to abortion, which was socially accepted at that time.

Figure 1: Number of induced abortions for 100 live births in Hungary, 1950–2015



Source: Database of the Hungarian Central Statistical Office.

The first oral contraceptive made in Hungary was a pill with a high hormone content named *Infecundin*, introduced in 1967 (Acsádi et al., 1970). The regulations at the time did not make it easy to obtain it, as it could only be prescribed by a specialist, but the initial controls were relaxed in stages and tablet variants with lower hormone content became available. The number of users increased steadily. The 1973 order on demographic policy allowed almost all doctors to prescribe this pill free under health insurance (Surányi, 1975). The same order that made contraceptives more readily available restricted the possibility of induced abortion. The combined effect was that the use of modern contraception methods rose by 71% in the first three quarters of 1974 and that of induced abortions fell by 40% (Vukovich, 1991). Still, the Pill was not uniformly welcomed by women, mainly due to fear of its side effects (Klinger, 1975).

Another modern method appeared at the beginning of the 1970s: the intra-uterine device (IUD) or coil. This could be fitted only at an inpatient facility, so that strong geographical inequalities developed, as not all regions had one (Surányi, 1975).

Comparison of data shows well how the use of contraceptive methods changed between 1958 and 1993. First, the proportion of those of childbearing age protecting themselves from unwanted pregnancy rose from 58% to 94% (*Table 1*). Second, there was a large shift in the primary methods used. In 1958 half of women used the withdrawal method; by 1993 there were only 9% doing so. The importance of the Pill and the coil rose; by 1993 more than half of women took the Pill and a quarter used the IUD. The use of the male condom fluctuated; 21% used it in 1958 – a high proportion (which may be overestimated), compared to the novelty of this method at the time –, and only 9% in 1974 and 11% in 1993 did so. So the so-called “contraceptive revolution”, with modern methods replacing traditional ones, took little more than three decades in Hungary (Frejka, 2008). Indeed in the first stage, in 1966–1974, the proportion of women using traditional methods (mainly coitus interruptus and periodical abstinence) fell from 70% to 43%, and over a third of the women were taking the hitherto unknown Pill. This became yet more marked by the early 1990s, with half of women taking the Pill. Between 1974 and 1993 the use of oral contraception had reached the European level, in an era when Hungary’s abortion incidence was still very high: over 70 terminations per 100 live births early in the 1990s.

Table 1: Change in the contraception practices of women between 1958 and 1993 (%)

	Married women aged under 35			Women aged 18–41 in cohabiting partnership ^a
	1958	1966	1974	1992–1993
The use of birth control				
Employing some form of birth control	58.0	68.0	75.0	93.9
Not employing any form of birth control	42.0	32.0	25.0	6.1
Total	100.0	100.0	100.0	100.0
Distribution of methods				
Coitus interruptus	52.0	62.0	35.0	8.7
Periodical abstinence and other natural methods	15.0	8.0	8.0	4.3
Condom	21.0	17.0	9.0	10.7
Pessary	5.0	6.0	2.0	–
IUD	–	–	7.0	24.0
Oral (pill)	–	0.0	36.0	52.0
Other or unknown	7.0	7.0	3.0	0.3
Total	100.0	100.0	100.0	100.0
Number of cases	4797	4370	3283	2001

Source: Klinger, 1975, p.234 and 244; United Nations Economic Commission for Europe, 1999.

Notes: The table shows the main methods of contraception employed at the time of the surveys. Surveys: 1958 and 1966: Fertility and Family Planning Survey; 1974: Fertility and Family Planning Survey, general (household) part; 1992–1993: Family and Fertility Survey.

^a We do not know if respondents intended to become pregnant and raise a child at the time of the survey.

Sterilization, either of women or men, is a very uncommon and rare method of birth control in Hungary. Less than 1% of women were sterilized for contraceptive reasons in 1993, and even less before that (Klinger, 1975). This method of birth control has not spread since the 1990s, although legislation makes it possible for both sexes to ask for sterilization as a form of contraception (even if there have been several changes in the last decades concerning the age at which this may be asked and the number of children being born at the moment of the demand).

We now turn to the most recent data of 2009 in order to review the latest developments in contraceptive use in Hungary.

BIRTH CONTROL PRACTICES IN HUNGARY IN 2009

Data and sample

The study uses data from the survey *Turning Points of the Life Course (the Hungarian Generations and Gender Survey)*, conducted by the Hungarian Demographic Research Institute. This longitudinal survey began in 2001 with the participation of 16,000 men and women aged 18–75. Four waves had taken place by 2013. Here I analyze data from the third wave, taken at the turn of 2008–2009 with the original respondents and 1000 additional respondents aged 20–25.

The questionnaire of the third wave includes a section that asks about family planning and contraceptive practices. Unlike the rest of the questionnaire, the questions were not asked by the interviewer, but were self-administered by the respondents and attached to the questionnaire in a sealed envelope. It seemed wise to trust the responses in this part to the respondent alone, in view of the sensitive nature of the topic. This presumably increased the willingness to respond and the reliability of the data.

The response sheet had two pages and was divided according to whether or not the respondents (or their partners) were expecting a child at the time of the survey. The questions about birth control were presented to those who (themselves or their partners) were not pregnant at the time of the survey and were not trying to conceive. The first question to this group was “Are you or your partner using or doing anything to prevent pregnancy?” (yes/no). The next question was, “If yes, mark the method or methods you use”. They could choose one or more of the ten methods listed³.

The special feature of the survey was that the questions on birth control could be analyzed in conjunction with the respondents’ answers in the traditional questionnaire, where there was information, for example, on age, partnership status, educational attainment, and living standard, so that profiles could be compiled of those who did and did not employ birth control and what factors affected their choice of method. The self-administered questions were not seen or checked in any way by the interviewer, yet they were filled in with exemplary precision – the decisive majority of respondents answered all applicable questions consistently.

³ The proposed answers were: 1) condom, 2) pill, 3) IUD, 4) diaphragm/ cervical cap, 5) foam/cream/ jelly/suppository, 6) injectables, 7) implants, 8) emergency contraception afterwards, 9) withdrawal, 10) safe period method (rhythm). There was no possibility to say that sterilization prevents pregnancy.

Below we analyze the responses of all women of reproductive age (aged 20–49). The sub-sample includes those who were probably the most affected by birth control issues, i.e. women who had a partner (either cohabiting or not), who were not pregnant and who were not trying to conceive at the time of the interview.

So the data are drawn from the responses of 1824 women. The questionnaire contains no questions on sexual life. We have to assume that partnered women had sexual relations and therefore had to face the question of becoming pregnant or not.

Factors behind the choice of certain contraception methods

First I analyzed the distribution of women by the use of birth control. Asked whether or not they practiced birth control: 87.6% of women said yes and 12.4% answered no (*Table 2*), i.e. every tenth woman in Hungary failed to practice birth control in 2009 despite living in a stable partnership and not planning to become pregnant. The uptake was higher in 1993, when 93.9% of women stated that they employed some birth control method (see *Table 1*). The difference between the two tables, however, needs to be considered; the earlier one took a younger sample: women cohabiting with their partner and under the age of 42. In the second table the age limit was 49 and those in a living-apart-together (LAT) relationship were also included. If the 2009 figures are adjusted to the criteria of the 1993 sample, 91% were using some birth control method; the proportion had barely changed over one decade and a half.

Table 2: The distribution of women by the use of birth control in 2008–2009 in Hungary

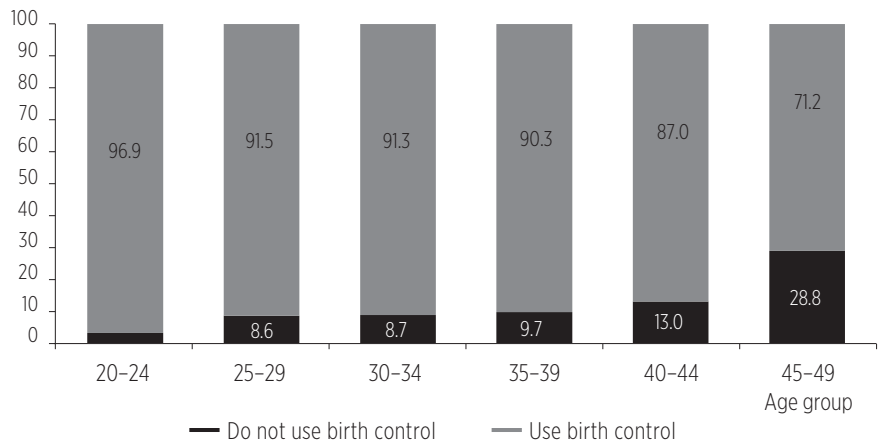
	%	Number of cases
Do not use birth control	12.4	216
Use birth control	87.6	1608
Total	100.0	1824

Sources: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI). Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

Further differences between non-users and users also need to be considered, such as social and demographic background, partnership status, age, educational attainment, and living standards.

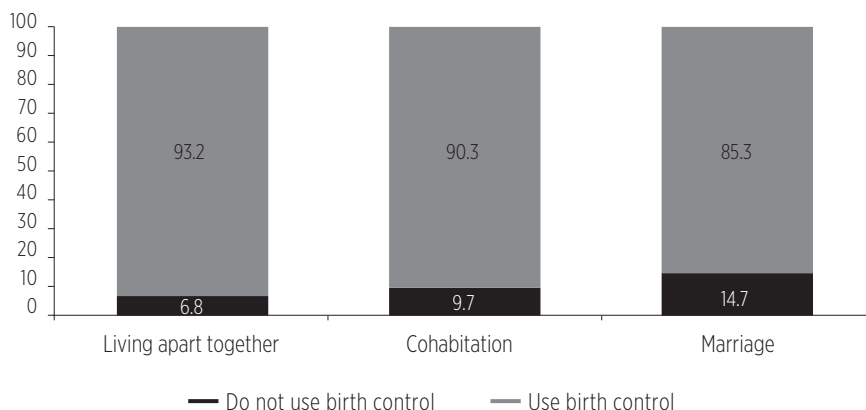
An age breakdown shows that the younger the respondents, the fewer fail to practice birth control; fewer than 5% of 20–24 year olds are non-users (*Figure 2*). The non-user proportion rises with age, with over a quarter of 45–49 year olds failing to protect against unwanted pregnancy. Some of the latter cohort is presumably undergoing menopause, which could justify abandoning birth control, although the figures clearly show that the proportion of non-users is somewhat above average even among the next cohort down, the 40–45 year olds.

Figure 2: The use of birth control by age group (%), in 2008–2009 in Hungary



Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).
Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.
Number of cases: 1824.

In terms of partnership status, the more secure the relationship, the lower the proportion of users (*Figure 3*). Over four-fifths of married women protect against unwanted pregnancy, but the proportion is far higher (93%) in LAT relationships. Since marriage can be considered a more stable status (legally at least), these couples may worry less concerning unwanted pregnancy than those not married to their partners or not cohabiting with them. In those cases, women seem to take more care to avoid pregnancy. Of course other factors also apply, such as age. Because of this, a multivariate model is needed to check the effects of individual factors on birth control use.

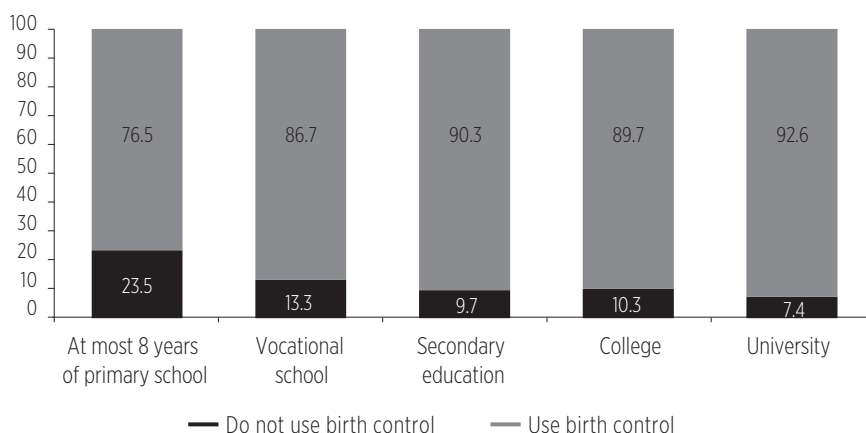
Figure 3: The use of birth control by partnership status (%) in 2008–2009 in Hungary

Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

Number of cases: 1824.

Analysis by education shows that the higher the education attainment is, the more common it is to protect against unwanted pregnancy (*Figure 4*). Of women with up to eight grades of schooling, almost a quarter is non-users, while among university graduates it is just over 7%. Those with college degree resemble most closely those with general secondary education: the proportion of users is around 90% in both groups.

Figure 4: The use of birth control by educational attainment (%) in 2008–2009 in Hungary

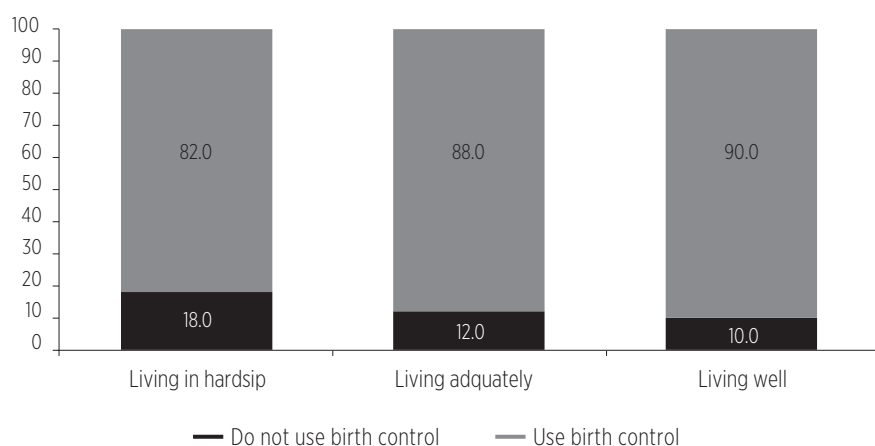
Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

Number of cases: 1824.

The survey contained several questions on respondents' income and living standards. Here a "subjective" variable was analyzed, which does not specify the income as an absolute value, but rather expresses the scope of the income and degree of satisfaction with it. There were five categories of answers: 1) have to go without, 2) financial problems from month to month, 3) can just make ends meet by budgeting carefully, 4) live acceptably, and 5) live without financial problems. The first two and the last two categories were combined, resulting in three categories: i) living in hardship, ii) living adequately, and iii) living well. Comparing the responses with contraception habits, it was clear that the higher the living standard, the higher the proportion of birth control users (*Figure 5*). Of those living in hardship, 18% were non-users, as were 12% of those living adequately, and 10% of those living well.

Figure 5: The use of birth control by subjective living conditions (%) in 2008–2009 in Hungary



Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

Number of cases: 1824.

The descriptive findings suggest that the presented socio-demographic factors are linked to the willingness or unwillingness of respondents to protect against unwanted pregnancy. The next section examines whether these relationships hold in a multivariate model.

Multivariate analysis of the use or non-use of contraception

Here we apply a logistic regression analysis to estimate the probability of using contraception. The variables covered in the descriptive section appear in the model as explanatory variables: age group, partnership status, educational attainment, and subjective living conditions. The question remains whether these factors still affect the use of contraception, while controlling for other variables. We also considered whether or not two further variables might play a part: the number of children, and whether respondents want to have children within three years.

Regarding the number of children, it is assumed that childless couples are more likely to practice some form of birth control than parents. The birth of a first child is typically planned more carefully, as the change entailed is greater than with the addition of a second or third child. The question of whether or not they “want to have a child during the next three years” illuminates future child-bearing plans. If they do not want children within three years and clearly have no plans to have any in the near future, it is assumed that they are more likely to be using birth control. Conversely, the use of birth control can be less frequent if the couple will find it acceptable for planned children to be born earlier than envisaged.

The findings from the multivariate model confirm the earlier conclusions about age, partnership status, educational attainment and subjective living conditions (*Table 3*). The 20–24 year-olds are significantly more likely and women aged over 34 are less likely than the 30–34 year-olds to use birth control. The regression model fails to confirm the descriptive finding that women in a LAT partnership are more likely to use a birth control method than cohabiting or married women. Married couples, however, are less likely to be users than unmarried ones. Educational attainment is a significant factor among the least and the most educated; fewer of the former use birth control than those with secondary education and women with tertiary education are more likely to use it. As the descriptive findings have shown, the use of birth control depends also on living conditions; those in situations of hardship are less likely to be users than those with an adequate living standard. The number of children shows a significant influence only among the childless: they are less likely to use birth control than parents, irrespective of other variables. This somewhat surprising result suggests that the childless are least concerned with the prospect of unwanted pregnancy. However, it also gains support from other sources that more than a third of the women undergoing an abortion in 2011 were childless (KSH, 2012).

The use of birth control is strongly influenced by a desire to give birth in the near future. Those who say they would “definitely” or “probably” want to have a child within three years are significantly less likely to practice birth control. We cannot tell whether this is a matter of irresponsibility or those planning to have children later mind less if a child arrives earlier than expected.

Table 3: Probability of using or not using birth control (logistic regression model) in 2008–2009 in Hungary

		Coefficient (β)	Significance (p)	Number of cases
Age group	20–24	1.42	***	224
	25–29	–	n. s.	261
	30–34	0	ref.	359
	35–39	–0.55	*	334
	40–44	–0.99	***	329
	45–49	–1.97	***	317
Partnership status	LAT	–	n. s.	281
	Cohabitation	0	ref.	328
	Marriage	–0.46	*	1215
Educational attainment	At most 8 years of primary school	–0.88	***	234
	Vocational school	–	n. s.	354
	Secondary education	0	ref.	756
	College degree	–	n. s.	330
	University degree	0.65	*	150
Subjective living conditions	Living in hardship	–0.52	**	311
	Living adequately	0	ref.	844
	Living well	–	n. s.	669
Number of children	0	–1.27	***	401
	1	–	n. s.	382
	2	0	ref.	702
	3 or more	–	n. s.	339
Want to have a child during the next three years	Definitely yes	–1.26	***	113
	Probably yes	–1.12	***	203
	Probably no	0	ref.	359
	Definitely no	–	n. s.	1149

Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

Number of cases: 1824.

Notes: Other control variable: region in which the respondent completed the questionnaire. n. s. = not significant; ref. = reference category. Significance levels: * $p < 0.01$, ** $p < 0.05$, *** $p < 0.001$.

The most common methods of birth control

This section analyzes what method of birth control is employed by those who protect against unwanted pregnancy. Those who use no birth control are not included in the analysis. Respondents could mark more than one of the ten methods of birth control listed in the questionnaire, but the number of respondents choosing more than one method was minimal, although using a combination of methods or various methods successively are not impossible. Still, the results show that users could easily name one method that they presumably used regularly.

The study refrains from describing each method in detail or analyzing its efficiency, as the latter in almost every case depends on the correct use of the method. The differences are more between those that offer 100% safety if used correctly (the Pill and the coil) and those where the efficiency is very low even when used with care, such as coitus interruptus. There are cost differences among the methods as well, and some, such as the Pill and the coil require regular visits to the doctor. Hungary, incidentally, does not subsidize any method through social insurance, so price can be an important factor as well.

In 2009, the largest number of women practicing contraception were using condom. This was followed by the Pill, then coil (*Table 4*). So the order of popularity among the methods had changed completely since 1993; the proportion using the Pill had fallen by more than 20 percentage points, from 52% to 31%. Condom (37%) has taken over the Pill as the most popular method, although hardly more than 10% were using it in 1993. In 1993 coil was more popular than condom, but in 2009 coil was only the third most popular method (18%). In the same year,

Table 4: Birth control by contraception methods

	%	Number of women
Condom	36.8	584
Pill	30.5	489
Coil, IUD	18.0	300
Other hormonal methods	1.3	17
Natural methods	13.4	218
Total	100.0	1608

Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant, not trying to conceive and use birth control.

Notes: Other hormonal methods include injection, implant, and emergency contraceptive pill (ECP). Natural methods are interrupted coitus, calendar method, local remedies, and vaginal pessary.

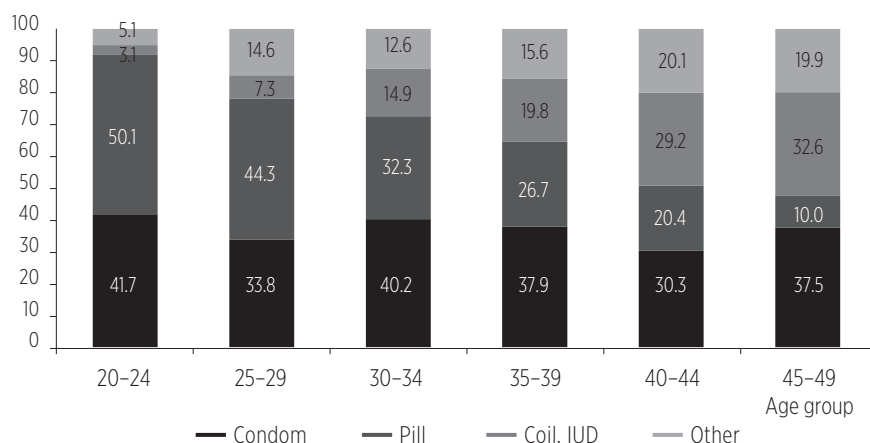
13% still used natural methods of protection – most commonly interrupted coitus (8%), then the calendar method, also referred to as the rhythm method (2%). The changes between 1993 and 2009 feature again later, but first it is time to look at what factors influence the choice of each method.

In the next section, respondents choosing other hormonal methods (only 1.3%) are grouped together with those using a natural method in the “other methods” category, in which the decisive majority uses a natural method. In the descriptive analysis and then in the multivariate analysis, the aim is to know what factors affect the choice of contraception method.

Factors behind the choice among the methods

Contraception choice according by age group shows that methods diversify with increasing age (*Figure 6*). While 90% of 20–24s use condoms or the Pill (and only 10% use other methods), less than half of the 45–49s do so. This is explained primarily by fact that as age rises, women abandon the Pill and rely primarily on the coil and other (mostly natural) methods. 15% of women aged 30–34 use the coil; the proportion rises to a third for the 45–49s. Condom use varies and it is the most common method above the age of 30.

Figure 6: Distribution of contraception methods by age group (%) in 2008–2009 in Hungary

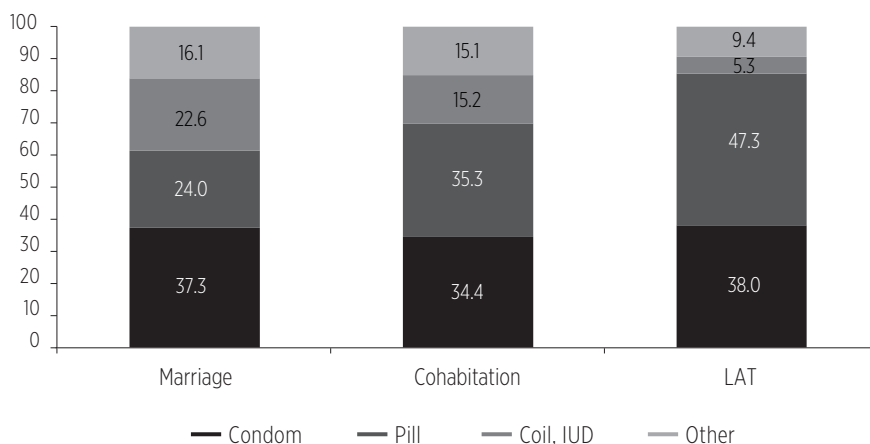


Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HdRI).

Sample: partnered women aged 20–49 who are not pregnant, not trying to conceive and use birth control. Number of cases: 1608.

Regarding partnership status, the proportion of condom users is remarkably stable; over a sixth of women protect from unwanted pregnancy this way (Figure 7). However, the Pill is more common in LAT relationships, while the coil and natural methods are used mostly by married couples. The intermediate category here consists of women in cohabiting relationships.

Figure 7: Distribution of contraception methods by partnership status (%) in 2008–2009 in Hungary

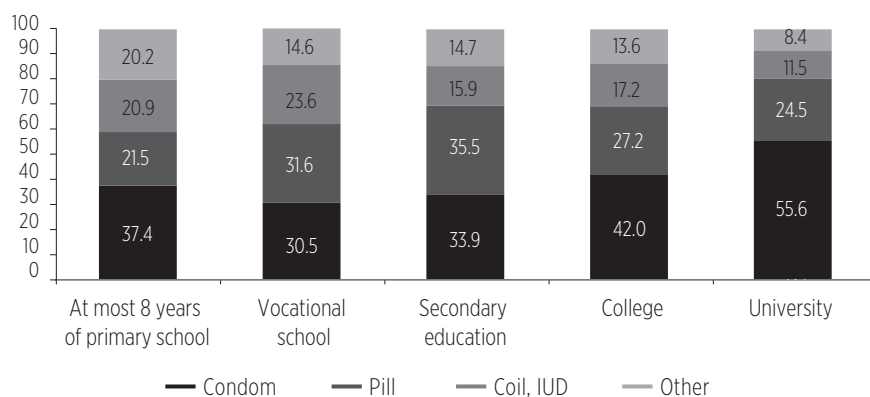


Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant, not trying to conceive and use birth control.
Number of cases: 1608.

Regarding educational attainment, a far higher proportion of women use other, mainly natural methods in the lowest educational category (one in five women) than among university graduates (fewer than one in ten women) (Figure 8). 14–15% of women with vocational, secondary or college education use other methods. Educational attainment seems to matter more in the case of condom use than the other factors: the proportion of condom user is much higher than the average (56%) among university graduates, while it is less than a third among those with vocational education. Pill use is the same for the highest and lowest educational categories (under a quarter) but slightly higher for those with vocational or secondary schooling. The most common choice for those with vocational or primary education is the coil, which is used far more rarely by university graduates.

Figure 8: Distribution of contraception methods by educational attainment (%) in 2008–2009 in Hungary



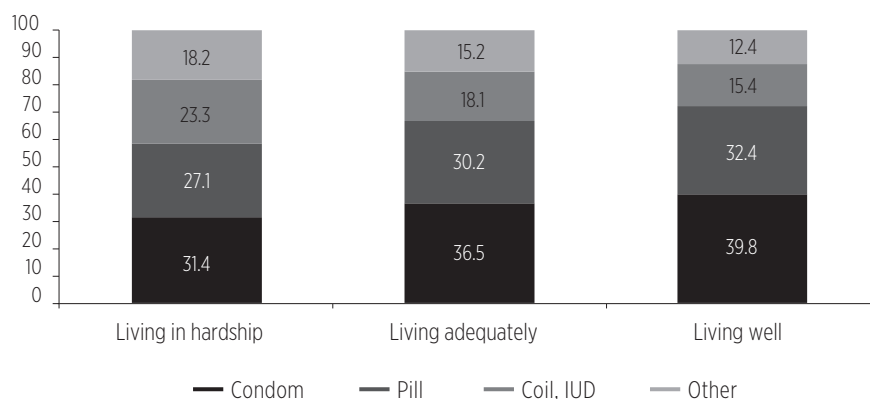
Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant, not trying to conceive and use birth control.

Number of cases: 1608.

As far as subjective living conditions is concerned, those with higher subjective income use condom and the Pill more often than those living in hardship, who tend to use coil or natural methods (Figure 9). Still, the methods used by the three groups are remarkably similar and multivariate analysis will offer further insights.

Figure 9: Distribution of birth control methods by method and subjective living conditions (%) in 2008–2009 in Hungary



Source: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant, not trying to conceive and use birth control.

Number of cases: 1608.

Multivariate analysis of factors affecting the use of the various methods

To show how mutually dependent socio-demographic factors affect individually the choice of contraceptive method, I compiled a multinomial logit model using the variables employed in the descriptive analysis, joined by the number of children and childbearing intentions for the next three years. Four methods of contraception are compared. The most commonly used one, condoms, acts as the reference category. The model examines what factors influence respondents to use the Pill, the coil or another method instead of condoms.

The results show that the choice between the Pill and condom is affected by age only in the oldest age group: the 45–49s are significantly less likely to be taking hormone pills than their younger counterparts. Presumably there are health reasons for this, as the Pill is less recommended for women as they get older. Surprisingly, there is no similarly significant result for women aged 40–44 in this respect. Partnership status also has an effect on the employed method. The married are less likely to choose the Pill over condom than women living in cohabiting or LAT unions. It may be that those in a more stable, longer-term relationship are better able to cope with the unreliability of condoms than the unmarried. Partnership duration may itself be an explanatory factor, assuming that on average non-marital cohabitations are shorter than marriages. The married may think that they have used hormonal contraception for long enough and would like to switch to a method that burdens their hormonal system less. Women with higher education are even more likely to prefer condoms to the Pill than those with secondary education. With their broader awareness, they may be the most responsive to anti-pharmaceutical campaigns and strive to pay attention to their health in accordance with their knowledge and the expectations of the age.

The choice between coil and condom is also influenced by age group; older women clearly prefer the former method. Unlike condoms, the coil offers permanent protection (or at least a long-term one, lasting over several years), which is particularly recommended for women not planning to have further children. This observation is further supported by the preference of childless and one-child couples for condom over coil. No clear relationship can be seen with education: condoms are preferred over coil by those with the lowest and the highest levels of educational attainment. It can be

assumed that there are different explanations for this in each case. Coil is fitted in a specialist facility after medical examination. Women in the lowest educational attainment group presumably lack information about this method. Regarding the group with the highest educational attainment, condom may be chosen consciously, and any unpleasantness of using it is offset by the absence of side effects. However, it is surprising to find women in conditions of hardship using coil more often than condom, considering that it requires a sizeable initial expenditure, as does the Pill, even if it is cheaper in the end.

The other, primarily natural methods are used more often than condoms by older age groups and less often by younger ones. The young, as has been seen, do not practice birth control in all cases, and when they do, they mainly use modern methods. Those with the highest educational attainment rely more rarely on natural methods and give preference to condom more frequently than those with secondary education. If children are planned in the near future, however, the use of other methods is more common. This finding is not self-explanatory, as couples planning children prefer natural methods over condoms, not over the hormonal pill, which many people stop using several months before they aspire to conceive a child. A choice between the Pill and condom would have been an easier finding to interpret. In summary, the factors that have the strongest effect on the choice of method are age and educational attainment. These factors influence whether women choose condoms or other methods. Additional examined factors affect the choice at most in individual cases.

Having analyzed the Hungarian data from 2009, let us now return to the question of how the popularity of different methods changed between 1993 and 2009 and whether the fall in the proportion of pill users in Hungary also applies to other countries.

Table 5: Factors influencing the employed method of contraception (multinomial logit model)

		Pill versus Condom	Coil versus Condom	Other method versus Condom
Age group	20–24	n. s.	n. s.	–0.97 **
	25–29	n. s.	n. s.	n. s.
	30–34	0 ref.	0 ref.	0 ref.
	35–39	n. s.	n. s.	n. s.
	40–44	n. s.	0.54 **	0.75 **
	45–49	–1.15 ***	0.56 **	0.58 *
Partnership status	LAT	n. s.	n. s.	n. s.
	Cohabitation	0 ref.	0 ref.	0 ref.
	Marriage	–0.43 *	n. s.	n. s.
Educational attainment	At most 8 years of primary school	n. s.	–0.45 *	n. s.
	Vocational school	n. s.	n. s.	n. s.
	Secondary education	0 ref.	0 ref.	0 ref.
	College degree	–0.42 **	n. s.	n. s.
	University degree	–0.84 ***	–0.79 **	–1.27 ***
Subjective living conditions	Living in hardship	n. s.	0.48 **	n. s.
	Living adequately	0 ref.	0 ref.	0 ref.
	Living well	n. s.	n. s.	n. s.
Number of children	0	n. s.	–2.73 ***	n. s.
	1	n. s.	–0.70 **	n. s.
	2	0 ref.	0 ref.	0 ref.
	3 or more	n. s.	n. s.	n. s.
Want to have a child during the next three years	Definitely yes	n. s.	n. s.	0.75 *
	Probably yes	n. s.	n. s.	0.83 **
	Probably no	0 ref.	0 ref.	0 ref.
	Definitely no	n. s.	n. s.	n. s.

Sources: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–49 who are not pregnant and not trying to conceive.

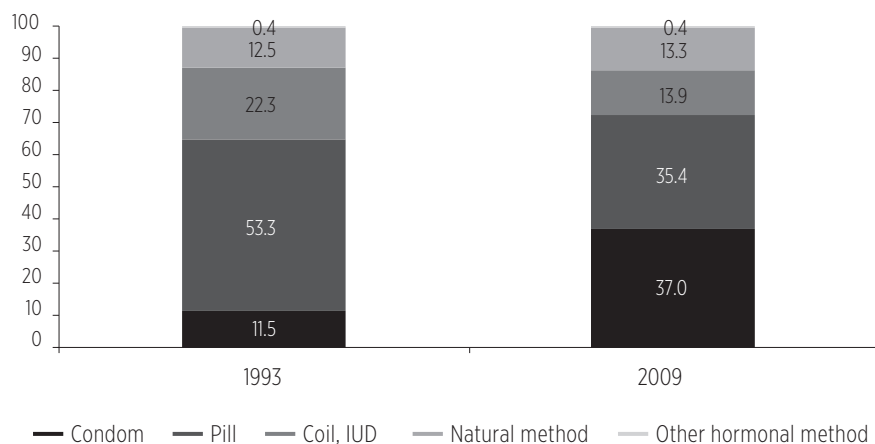
Number of cases: 1608.

Notes: Other control variable: region in which the respondent completed the questionnaire. n. s. = not significant; ref. = reference category. Significance levels: * $p < 0.01$, ** $p < 0.05$, *** $p < 0.001$.

CHANGES IN THE USE OF METHODS BETWEEN 1993 AND 2009

Substantial changes had taken place between 1993 and 2009 in the use of different contraceptive methods. Over one decade and a half, the proportion of pill users fell sharply while that of condom users increased (*Figure 10*). If exactly the same sub-sample is taken, the difference is still more obvious: the proportion of pill users decreased by 18 percentage points among 20–41-year-old partnered women, while that of condom users rose by 25 percentage points. Use of coil declined, but the proportion using traditional methods hardly changed. One can only speculate on what caused this change. The only difference between the wording of the question in the analyzed two surveys was that the 1993 survey inquired about the last four weeks, while the 2009 one made no time restriction, simply asking about present practice. It is not likely that this would cause such a change, but rather a combination of campaigns related to the spread of AIDS in the 1990s and increasing aversion to pharmaceutical interventions in the early 2000s⁴ may have contributed to a preference to condoms over the Pill.

Figure 10: Distribution of contraception methods by partnership status (%) in 2008–2009 in Hungary



Sources: 1993: UNECE Fertility and Family Surveys, Hungary; 2009: Hungarian Generations and Gender Survey, Wave 3, 2008–2009 (HDRI).

Sample: partnered women aged 20–41 who are not pregnant, not trying to conceive and use birth control.

Number of cases: 2073 in 1993; 1207 in 2009.

Notes: Natural methods include interrupted coitus and the calendar method. Other methods are sterilization, local remedies, vaginal pessary, etc.

⁴ In Hungarian public opinion 40% of the respondents are openly against medicines was a headline on 18 August 2009, quoting fresh findings by GfK Hungary (https://www.antsz.hu/data/cms30078/nsz_20090918.pdf).

CHANGES IN EUROPE IN THE 1990S AND 2000S

The question here is whether a similar change occurred in other countries that might corroborate, if not explain, the data from Hungary. Results presented here converge with findings from other countries, namely Bulgaria and France (Koytcheva and Philipov, 2008; Bajos et al. 2012).

Indeed comparing the data of the Family and Fertility Survey (FFS) from the 1990s with data of the Generations and Gender Survey (GGS) from the 2000s for Hungary, Bulgaria, Austria, Germany and France shows that the major changes were not confined to Hungary (*Table 6*). The other countries also show the Pill losing ground since the 1990s, the proportion using it decreased by 20 percentage points, the least in France (by 3.5 percentage points). Yet the three Western countries differ from Hungary in that Pill users are still forming the majority. The fall in Pill usage coincided with a rise in condom use in all countries, 7.2 percentage points in Austria, 5.3 in Germany, 3.3 in France, and 25.4 in Hungary. This became the prime method of birth control in Hungary. Meanwhile the use of the coil and other IUDs increased markedly in the two German-speaking countries, while it decreased in Hungary.

The international comparison also demonstrates that the proportion of women not using contraception hardly changed in Bulgaria and Hungary, but is at a much higher level in Bulgaria (20%) than in Hungary (under 10%). (In the other countries it is not possible to draw such a clear conclusion – see the notes to *Table 6*.)

Bulgaria differs from the other four countries in many ways. First, the proportions of non-users and users of natural methods are high, the latter one (45%) being the largest group among those using some method of birth control. Secondly, only 10% use the Pill. The commonest method is condom (30%) but the proportion of IUD users is also high (18%), i.e. higher than in Germany or Hungary. Hungary takes an intermediate position here, between the Western countries and Bulgaria. The proportion using a natural method is relatively high, the proportion preferring condom in the 2000s is similar to Bulgaria, but more than a third of women using contraceptives favor the Pill, while in Bulgaria that applies to only one in ten.

Table 6: Distribution of partnered women aged 20–41 by contraception method, in Hungary and four other European countries in the 1990s and the 2000s (%)

	AUSTRIA ^b		GERMANY ^b		FRANCE		BULGARIA		HUNGARY	
Survey	FFS	GGs	FFS	GGs	FFS	GGs	FFS	GGs	FFS	GGs
Year ^a	1996	2008	1992	2005	1994	2005	1997	2004	1993	2009
The use of birth control										
Non-users	19.6	–	13.6	–	3.7	14.2 ^c	18.9	22.0	5.3	8.3
Users	80.4	–	86.4	–	96.3	85.8	81.1	78.0	94.7	91.7
Total	100.0	–	100.0	–	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases	1793	–	3273	–	1256	1178	661	1610	2112	1312
Distribution of methods among women who use contraception										
Natural methods	4.7	2.1	1.0	5.1	4.10	1.8	35.8	40.4	11.4	13.4
Condoms	14.8	22.0	4.6	9.9	7.1	10.4	27.5	28.6	11.6	37.0
Pill	66.6	39.1	83.5	56.6	63.2	59.7	16.2	9.4	52.9	35.4
IUD	10.6	22.6	6.9	12.3	21.6	22.3	17.3	17.5	22.2	13.9
Sterilization	1.3	6.7	2.5	13.0	2.7	3.0	–	3.4	0.9	–
Other	2.0	7.5	1.5	3.1	1.3	2.8	3.2	0.7	1.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases	1442	947	2829	625	1209	1011	536	1256	2001	1207

Sample: partnered women aged 20–41 who are not pregnant, not trying to conceive... and unaware of any medical problem that would impede conception

Notes: ^a The year in which most interviews occur (in several cases interviews spread over two years).

^b The harmonized database in Austria and Germany does not contain data on how many use no method, although the questionnaire included a question on this.

Presumably those using no method appear among the missing data, which would account for the low number of cases for the two countries.

^c The French data did not distinguish between respondents who wanted a child in the future and those who did not. This is why the proportion of non-users is high

CONCLUSIONS

The present study has dealt with an issue on which only incomplete information have been available. The aim was to provide a detailed picture of the birth control practices of Hungarian women and the factors that affect them in 2009. A requisite birth control method is of prime importance for avoiding unwanted births and abortions. The latter have tended to decline in the previous ten years, but it still stood at almost 36 abortions for every 100 live births in 2014.

The analyzed data show that about 12% of partnered women of reproductive age and not planning to have a child still use no birth control and 13% rely on low-

efficiency traditional methods. The two groups together amount to a quarter of Hungarian women who are still at risk for unwanted pregnancy. The analysis sheds light on the demographic and social factors that increase the likelihood of not using contraception: higher age, non-marital cohabiting relationship, very low educational attainment, low standard of living, childlessness, and possible plans for having children in the near future (but not at the time of the survey). Women with such characteristics are more exposed than the average to unwanted pregnancy.

It is more difficult to apply these factors to explaining the choice of contraceptive methods, although clear relationships apply here as well: more women with the highest educational attainment choose condoms over any other method of birth control. In higher age groups, the use of the Pill clearly declines in favor of other methods. The use of the coil is more common among women with a secondary education who are childless and of higher age. A lower standard of living also makes the use of the coil more likely, compared to condoms.

The use of natural methods is less frequent among those with higher educational attainment, while it becomes more common at higher ages or if there are plans to have children. It would be worth examining the characteristics of women using natural methods in more detail, as the abortion figures show that over three quarters of woman who undergo abortion used natural methods (KSH, 2012). This study sought a relationship between religious observance and the use of natural methods, on the assumption that Catholics would be using them more frequently, in line with the teachings of their church. No support for this hypothesis, however, could be found.

It would be revealing to devote further research to the role men play in deciding on the method of contraception. Several research articles have shown that men and women often give different responses about the contraception methods employed and that in some cases men might not even know what method their partner is using (Badurashrili et al. 2013). It is important to avoid unwanted pregnancy for both partners and the chances of success are presumably greater if both understand the importance of birth control.

It would also be worth analyzing the degree to which partners control their fertility. Modern contraception methods, in principle, allow unwanted pregnancy to be avoided entirely, but the use of them is presumably not perfect in all cases, and some women do not use them at all. So to what degree are pregnancies conscious planned and to what extent do couples accept unexpected or badly timed pregnancies and babies? Answering these questions is essential to better understand the motivations behind women's birth control decision-making.

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DEPOPULATING SEMI-PERIPHERY? LONGER TERM DYNAMICS OF MIGRATION AND SOCIOECONOMIC DEVELOPMENT IN ROMANIA

István Horváth – Tamás Kiss

ABSTRACT

Romania is among Eastern European societies facing a massive depopulation in the last two and a half decades. Large-scale emigration has occurred under the circumstances of massive fertility decline and population ageing following 1989. Immigration has been insignificant until now, in spite of the negative natural growth and the presence of large Romanian-speaking populations next to the Eastern borders of the country. Our paper investigates long-term migratory trends and their relation to general macro-economic and macro-social processes. We place the Romanian historical experience concerning developmental aspects of changes in migratory flows and stocks. Existing macro-historical narratives diverge first in their expectations concerning socioeconomic development. On the one hand, models of “migration transition” and “migration cycles” share an optimistic view of developmental prospects of peripheral and semi-peripheral societies. For instance, Skeldon considered the Eastern European region as an “emerging or potential core”. As a consequence, he expected that these societies would become new destinations of global migratory flows. On the other hand, researchers relying on world-system theory emphasize that global structural inequalities are likely to persist, thus Eastern European societies are likely to remain enclosed in their semi-peripheral condition. Under such circumstances massive emigration could continue and could lead to large-scale depopulation of certain regions. Our paper argues that the long-term evolution of macro-structural indicators and migratory flows in Romania do not substantiate developmental optimism. World-system theories could provide useful frame to interpret existing data.

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INTRODUCTION

Our case study provides an outline of the historical trends of international migration and macro-level societal change in Romania in the time period between 1950 and 2011.¹ Comparative studies seeking to identify converging elements of the long-term migratory processes in the South-Eastern European region revealed some regional transnational convergence, but also found major divergences of the migratory trends (Melegh, 2012; Fassmann et al., 2014).

The Romanian case study could be useful in highlighting the historical interrelation between socioeconomic change (development) and transnational migration. Our paper not only describes these processes and tries to show the relationship between them, but also aims to place the Romanian experience into relevant theoretical frameworks concerning long-term trends of migration and development. It argues that world-system theory is particularly insightful in interpreting this case.

Our paper will be organized into four parts. The first part reviews the theoretical considerations regarding developmental and demographic drivers of migration. As mentioned already, we will rely primarily on world-system and dependency theories. We will shortly outline models of migratory transition too. Developmental optimism and the expectation that all European countries will become countries of immigration are quite widespread. In fact, we will formulate our arguments against these expectations. That was why we considered it important to sketch some of the major presumptions of the model of migratory transition. The next two parts are primarily descriptive. They present the

¹ The case study is a revised version of a country report elaborated in the framework of the SEEMIG project (Horváth and Kiss, 2013). Similar long-term historical analyses were carried out for other countries of the North-Western part of the South-East European region, namely Austria, Bulgaria, Hungary, Italy, Serbia, Slovenia and Slovakia.

evolution of major economic and social processes, and the trends of transnational migration. The final chapter not only summarizes our main conclusions, but also refers back to the theoretical part and interprets the Romanian case in the framework of the world-system theory.

DEVELOPMENT AND MIGRATION – THEORETICAL PARADIGMS

Scholars engaged in revealing regularities in long-term trends of migration often emphasize the scarcity of general theoretical models. However, they also admit that such generalizations exist and profoundly shape expectations and policies concerning migration (de Haas, 2010; Melegh, 2012). It is also worth mentioning that generalizations concerning long-term migratory processes are deeply rooted in presumptions (or ideologies) concerning societal change, or “development” (de Haas 2010; 2012).

Two major lines of theorizing relation between migration and development can be identified: the first set of theories comprise migration within a universal, more or less linear course of economic development, the second line of thought sees migration as result of the enduring structured inequalities of the global economy.

On the one hand, the universalistic developmental paradigm sees long-term migratory dynamic as a result of universally expanding development. As neo-classical theory of migration postulates (Todaro, 1969; Todaro and Maruszko, 1987; Borjas, 1989), migration is engendered by existing wage differentials. As a counteraction to workers’ mobility to high income countries, capital tend to relocate to societies with lower cost of labor, eventually instituting a functional equilibrium (de Haas 2010, p.5), leading to more optimal allocation of labor force and thus to price equalization and the convergence of wages (and more generally developmental trajectories). Models of mobility or migration transition (Zelinsky, 1971; Skeldon, 1997; 2012) are deeply embedded in the evolutionist theories of modernization, like Rostow’s (1960) theory of economic growth, or Notestein’s idea of demographic transition (Notestein, 1945; see also Melegh, 2006, pp.71-76). Consequently, they predict for different areas of the world a convergence of the dynamically changing migratory patterns, the only difference being the historical period when different phases of particular migratory courses occur. Zelinsky (1971, p.222) stated this aspect explicitly in relation with its spatial mobility transition model: “there are definite, patterned regularities in growth of personal mobility [...], and these regularities comprise an essential component of modernization processes”. The model of “migration cycles” is also a variant of migration transition

theories, combined with the neo-classical expectations concerning migrants' behavior. The model refers to European core, to potential core countries, and it is "based on the assumption that all European nations states develop from emigration into immigration countries" (Fassmann and Reeger, 2012, p.5). Similarly to Zelinsky's model, the importance of demographic evolution is emphasized. European countries experience continuously low rates of fertility, negative natural growth and population ageing. As a consequence, there is an acute shortage of labor force, first of all (but not exclusively) in the secondary sector of the labor market. Under such circumstances, neither economic growth nor the welfare system could be sustained without a significant influx of migrants. Fassmann's and Reeger's innovation was that they emphasized the central role of migration policy regimes. They argued that advanced societies should go through certain phases of adaptation and should develop mechanisms to face the consequences of the aforementioned demographic evolution. This adaptation leads first to legal and institutional changes. European countries redefine their migration policies, citizenship policies represent a more inclusive and seldom reformulated immigration policy, a public opinion accepting immigration and of course high levels of inflows. We should note that from this perspective East European societies (labeled as "potential core" by Skeldon), facing the same demographic challenges, are "not-yet-immigration countries" (Fassmann, Musil and Gruber, 2013, p.25).

On the other hand, world-system and dependency theories differ sharply in their assumptions concerning the possibilities of peripheral and semi-peripheral societies to grow in a manner to reduce the development gap. From this perspective, power asymmetries and economic inequalities between different regions are enduring and likely to persist. According to this paradigm the outflow of capital from the core regions and the diffusion of economic activities toward peripheries is undoubtedly an ongoing process, but in parallel a constant spatial "concertation in control, ownership and profit appropriation" takes place (Sassen, 2005, p.33). Under these circumstances, the global economic growth barely results in the reduction of economic gaps, but is merely conducting to increasing returns for the core regions.

Subsequently migration is not just a consequence of these structural inequalities, but works as a mechanism through which the core reproduces the asymmetric relations with peripheries. As Portes and Böröcz (1989, p.608) argued, prior contacts between sending and receiving societies in generating migratory flows are very important factors. Migration is most likely to emerge between former colonies and colonizers. When such prior connections are lacking, active state involvement stimulates the engendering of migratory

flows, as was the case of West German “*Gastarbeiter*” flow (Portes and Böröcz, 1989, p.609). They emphasize that in any case migratory flows are preceded by various forms of penetration of the institutional structures of the stronger states into those of the weaker societies, states.

Portes and Böröcz (1989, p.607) highlighted that parallel to institutional penetration a cultural penetration occurs too. They emphasized that patterns of consumption of the advanced center are diffused throughout the sending society. In this sense Fehérváry’s (2002) paper is illustrative. She drew our attention to that as far as consumer aspirations are concerned, in Hungary the reference group was the middle class of Western countries in the 1990s. This also means (and is connected to the fact) that strategies of social mobility and reproduction are no more enclosed within national societies but are increasingly organized on a global hierarchical social space – called “East-West slope” by Melegh (2006). The increasing awareness of developmental hierarchies could also be perceived as a consequence of cultural penetration. The notion of developmental idealism elaborated by Thornton (2005) could also be used in a world-system framework. The acceptance of developmental hierarchies, putting Western societies at the pinnacle of the developmental process is in fact a key element of developmental idealism. Melegh (2012) also highlighted that – next to “Western” consumption aspirations – stringer belief in developmental idealism and “awareness” of developmental hierarchies could be also direct drivers conducting to higher rates of out-migration. This is not necessarily a contrary but rather a complementary argument to neo-classical assumption of wage-maximizing migrants.

According to Böröcz (2015), world-system theory is particularly relevant when analyzing the former Soviet Bloc countries. He sees socialism as an attempt to isolate Eastern European societies from the structure of global economy and core-periphery logic (Böröcz, 2015, pp.6-7). Socialist states not only controlled economies, but attempted to regulate various demographic processes too, including internal and transnational flows of migration.² The collapse of these regimes could be perceived as the abolition of state control over these processes, thus starting with the 1990s these societies and populations returned “to that part of global productive assets of humankind that is valorized by global capital without the interference of the socialist state” (Böröcz, 2015, p.21). However, this historical restoration was barely triumphant. The incumbent structural

² Leading Romanian social scientists of that time also emphasized the importance of state control over demographic development (Trebici, 1978) and flows of internal migration (Sandu, 1984).

adjustments resulted in a severe economic decline, restating the semi-peripheral, peripheral positions, specific to these states before World War II.

In what follows we describe first relevant macro-economic trends in Romania in the period between 1950 and 2011. We will focus primarily on the evolution of Romania's relative economic position. The evolution of GDP per capita compared to world average and to Western European core countries is indicative in this sense. The structure of the Romanian economy is also informative. The loss of previous industries, the presence or the re-occurrence of larger agrarian populations could also be important in larger scale emigration (Melegh, 2011). The survival of a large agrarian economic sector and the importance of low-value added industrial sectors also confirm Böröcz's (2015) thesis that the country has been reintegrated in a (semi-)peripheral position in the global economy. Second, we distinguish several waves of out-migration focusing on changing regimes of international migration. Third, we analyze the trend of out-migration, emphasizing Romania's incapability to attract immigrants, in spite of existing labor-force demand in certain domains and the presence of large Romanian speaking groups next to the country's Eastern borders.

MACRO-ECONOMIC AND SOCIAL TRENDS

Major macro-economic trends

Regarding the major macro-economic trends of the period between 1950 and 2011, in addition to the collapse of the state socialism 1989, the late 1970s represent a major turning point of Romania's economic development. Till the 1980s, the Romanian economy grew dynamically, while the relative (global) economic position of the country was considerably improving. In the late 1970s, however, a two-decade-long economic stagnation and downturn began, eventually resulting in the fall of the communist regime.

Before World War II, Romania had a peripheral³ position in the global capitalist economy (Stan and Erne, 2013, p.26). After the Communist Party seized power in 1945 and stabilized its rule (in 1947), it initiated a large-scale process of economic restructuration. First of all, it changed the regime of property, following large scale expropriations, imposed public ownership on the means of production,

³ Chirot (1976) argued that Romania was incorporated into the emerging global capitalism in a peripheral position during the 19th century. According to Berend and Ránki (1982) "Central European" societies (Hungary, Slovakia, Poland, and Czech Republic) had a semi-peripheral position. Romania's lower position on this centrum-periphery relationship has severe consequences on migratory flows too.

and then imposed a centrally coordinated (planned) system of macro-economic management. By 1950, the nationalization in industry was nearly accomplished, and the restructuring of agricultural production (collectivization) commenced too (Kligman and Verdery, 2012). From the 1950s until the second half of the 1970s high level of investments in industry and the redirection of labor force from agriculture toward industrial production were the main drivers of economic growth.

Thus between 1950 and 1955, 24.3% of the GDP was used for investments, growing to 36% in the period 1976–1980 (Murgescu, 2010, p.337). In this period of economic restructuring the allocations for industrial investments was the priority. Within the industrial sector particular attention was paid to developing heavy industry (metallurgy, manufacturing of industrial machinery) and chemical industry (particularly oil processing), while the industries with a more consumer oriented production received far less investment.⁴ This also implies that the financing of education or the health care system remained relatively low (compared to other Eastern European states). Though the focus on industrial investments was a general characteristic of Eastern European development strategies, yet such prevailing support for heavy industry as opposed to the branches producing consumer goods was a Romanian idiosyncrasy (Ronnas, 1984; Hunya et al., 1990; Murgescu, 2010).

The second main driving force of economic growth was the redirection of agricultural working force towards industrial production and the large scale inclusion of female workers. As *Table 1* shows, the share of active work force employed in agriculture fell from 73.8% in 1950 to 27.9% in 1989. The table also highlights that this rapid transformation considerably slowed down during the 1980s.

Table 1: The total number of employees and distribution by sector in Romania (1950–1989)

	Total number of employees (million)	Agriculture (%)	Industry (%)	Services (%)
1950	8.4	73.8	14.3	11.9
1960	9.5	65.3	20.0	14.7
1970	9.9	49.5	30.3	20.2
1980	10.4	30.8	43.3	26.0
1989	10.9	27.9	45.1	27.0

Sources: Statistical Yearbook 1990, pp.102–110; Murgescu, 2010, p.340.

⁴ 80% of industrial investments were received by production oriented industries (Murgescu, 2010, p.338).

The importance of the late 1970s is evident if we look at data concerning economic growth. Whereas between 1950 and 1979 one can witness a dynamic economic growth, in 1980 a two-decade-long economic stagnation and downturn started.

Table 2: Economic growth rate in Romania between 1950 and 2010 (%)

Period	Economic growth (annual average)	Period	Economic growth (annual average)
1950–1954	6.1	1985–1989	-1.1
1955–1959	3.6	1990–1994	-5.2
1960–1964	4.8	1995–1999	0.1
1965–1969	4.6	2000–2004	5.6
1970–1974	5.3	2005–2008	6.6
1975–1979	2.7	2009–2010	-3.9
1980–1984	0.8		

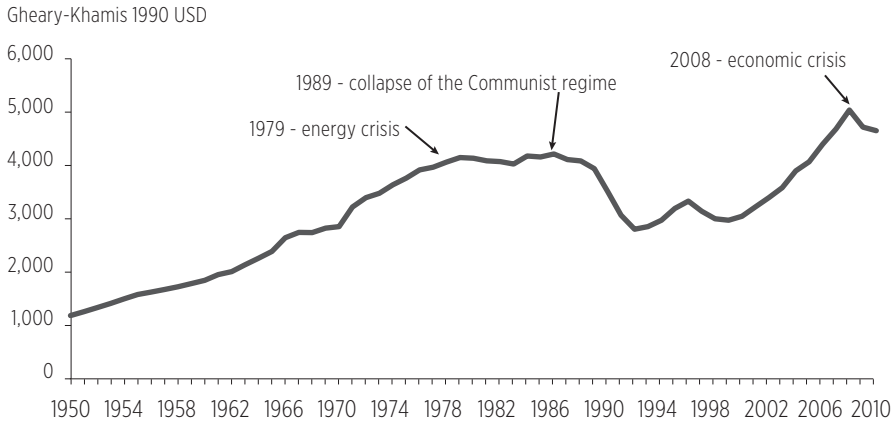
Source: Updated version of Maddison GDP/capita database:
http://www.ggdc.net/maddison/maddison-project/data/mpd_2013-01.xlsx

The main cause of the emerging crisis of the Romanian economy was clearly the general energy crisis of the 1970s. The Romanian industry in development was characterized by rather low indicators of energy efficiency, unproblematic when energy prices are relatively low. Following the oil crisis in 1973 Romania partially counterbalanced the negative economic impact by increasing domestic oil extraction. Between 1975 and 1977 almost 80% of the total oil consumption was secured from internal sources. After 1977, due to the depletion of sources, the internal oil production began to decline and the second oil crisis of 1979 had a rather detrimental impact on Romanian economy⁵ (Părean, 2012). In addition Romania started repaying international loans taken before and this led to further loss of resources.

In due circumstances, the 1980s were marked by stagnation of economic growth, dropping investments, significant parts of the hardships incumbent to the crisis being transferred to the population.

⁵ The second oil crisis was caused by the reduction of oil extraction in Iran after the Islamic Revolution. And Iran was the main external crude oil supplier of the Romanian economy.

Figure 1: GDP per capita in Romania between 1950 and 2010



Source: Updated version of Maddison GDP/capita database:
http://www.ggdc.net/maddison/maddison-project/data/mpd_2013-01.xlsx

The economic dynamics of the country after 1989 can be divided into four distinct periods: (1) developments between 1990 and 1996, (2) between 1996 and 2000, (3) between 2001 and 2008, and (4) after 2009.

(1) The 1990s were characterized by a deep economic crisis, and not only because of the sharp decrease of GDP per capita. In the first part of the 1990s (until the electoral defeat of the post-Communist FDSN (Frontul Democratic al Salvării Naționale - Democratic Front of National Salvation), led by Ion Iliescu) cautious and slow structural reforms and the rejection of neo-liberal principles characterized the Romanian economic policies. This led to a structure labeled as “managerial capitalism” or “post-socialist managerialism” (Eyal, Szelényi and Townsley, 1997; King and Szelényi, 2005). This type of capitalism meant slow privatization (and preference for internal actors), maintaining diffuse structures of propriety, and extensive role of the state in economy. Under these circumstances, the confidence of foreign investors, and consequently the levels of FDI as related to GDP were rather low compared to Central-East European states applying neo-liberal principles (Hungary, Poland, Czech Republic). Despite the gradual nature of the reforms the industrial production of the country practically collapsed and a slow recovery began only in 1993. Stan and Erne (2013, p.27) also highlight that the orientation of the Romanian economy changed considerably in this period. Following the dissolution of COMECON (Council for Mutual Economic Assistance) and the loss of Middle

East and African market, the main trade partner of the country has become the European Union.

(2) In 1996 the center-right CDR (Convenția Democratică Română - Romanian Democratic Convention) won the parliamentary and presidential elections, marking the beginning of a neo-liberal turn in economic policies. Many state owned enterprises were closed and a rapid process of privatization with foreign actors began. However, this led to a new recession and a drop of the country's industrial production. The FDI remained at rather low levels during the period between 1996 and 2000.

The major consequence of this enduring crisis was that the number of people employed in the industrial sector fell from 4.169 million in 1989 to 2.004 million in 2000 (Murgescu, 2010, p.469). These processes are reflected in the changing structure of the Romanian economy too. If, in 1990, the value added to GDP by the industrial sector was 50% and 43.5% of the labor force was employed in industry, in 2000, the value added by the industry to the Romanian GDP was only 36% and only 26.2% of the total labor force was employed in this sector. For the same indicators, in 2010, the values are 40% and 28.7%, respectively.

Table 3: The % of the value added to GDP by each economic sector and the % of employees in each sector in Romania (1990–2010)

		1990	1995	2000	2005	2010
Agriculture	% value added to GDP	24	21	13	10	7
	% employed in agriculture	29	40	42	32	30
Industry	% value added to GDP	50	43	36	35	40
	% employed in industry	43	31	26	30	28
Services	% value added to GDP	26	36	51	55	53
	% employed in services	27	28	31	37	41

Sources: National Institute of Statistics, World Bank.

(3) The next period, the one between 2000 and 2008, was characterized by an intensive growth of the Romanian economy. Following 2000, both left- and right-wing governments were committed to the creation of a neo-liberal environment and to an export-oriented model of development. The context of the reforms was represented by the set of EU requirements. First, the governments introduced a strict fiscal policy to conform to the EU criteria. Second, the process of privatization was accelerated and became more open to foreign actors.

The participation of foreign capital substantially grew in the Romanian bank system, the energetic system and in telecommunications (Murgescu, 2010, p.473). The amount of FDI also increased considerably. An industrial restructuration also began during this period and the structure of the Romanian export changed considerably (Haar, 2010). Next to labor-intensive and low value added sectors, growth of car, electrical, and metallurgical industries noticeably contributed to Romania's economic growth. With such improvements in industrial production Romania's economic structure started to come close to that of other economies of East Central Europe like Poland or Hungary, considered in the world-system paradigm as semi-peripheral countries (Berend and Ránki, 1982; Melegh, 2012). This could be considered as a sign of inclusion of the Romanian economy in the Eastern European semi-periphery. Still, many features characteristic for peripheral economies persisted. This is first of all the presence of a large sector of subsistence agriculture, but the share of labor-intensive and low value added sectors, such as clothing or leather industry has remained rather high too (Haar, 2010; Stan and Erne, 2013).

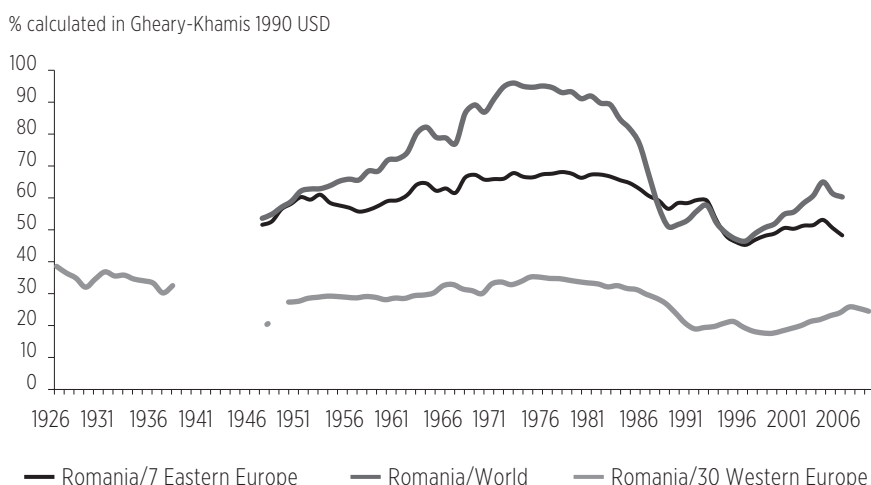
(4) The rapid economic growth was interrupted by the global financial crisis in 2008 and 2009, when the economy decreased by 6.4 percentage points.

It is also important to look at relative indicators of economic position. Böröcz (2009) and Melegh (2012) argued that the relevant indicators are GDP per capita relative to world average, or the sending country's relative GDP per capita compared to the relative GDP per capita of receiving countries. *Figure 2* shows Romania's economic position based on these relative indicators.

Based on the indicators we used for the analyzed period, the decline of Romania's relative global economic position is very clear. The Romanian GDP per capita was 96% of the world average in 1976, and 79% in 1989. This value fell to 52% in 2000 and reached only 68% in 2008. So, the global position of the Romanian economy is much more unfavorable now than it was in the 1970s or 1980s. This is even more evident if we compare the Romanian GDP per capita to the average of Western European countries, the main receivers of Romanian emigrants. Second, these results show that the Romanian experience of economic development could be interpreted more properly in the framework of the world-system theory. According to Chirot (1976) the country was integrated into the global system of the capitalist economy during the nineteenth century as a peripheral society. Many Romanian historiographers interpret the last one and a half century of the Romanian history as a sequence of renewed attempts of catch-up via modernization (Boia, 1998; Murgescu, 2010). Relative indicators clearly show that disparities relative to European core countries have not

diminished, however, and Romania has remained enclosed in its peripheral (or semi-peripheral) position.

Figure 2: GDP per capita in Romania compared to the world average and to the GDP per capita of seven Eastern European and thirty Western European** countries (1926–2010)*



Source: Updated version of Maddison GDP/capita database: http://www.ggd.net/maddison/maddison-project/data/mpd_2013-01.xlsx

Notes: * Albania, Bulgaria, (former) Czechoslovakia (later Czech Republic and Slovakia), Hungary, Yugoslavia (later the successor countries), Poland and Romania.

** Andorra, Austria, Belgium, Channel Island, Cyprus, Denmark, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Iceland, Isle of Man, Ireland, Italy, Luxemburg, Liechtenstein, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland and United Kingdom.

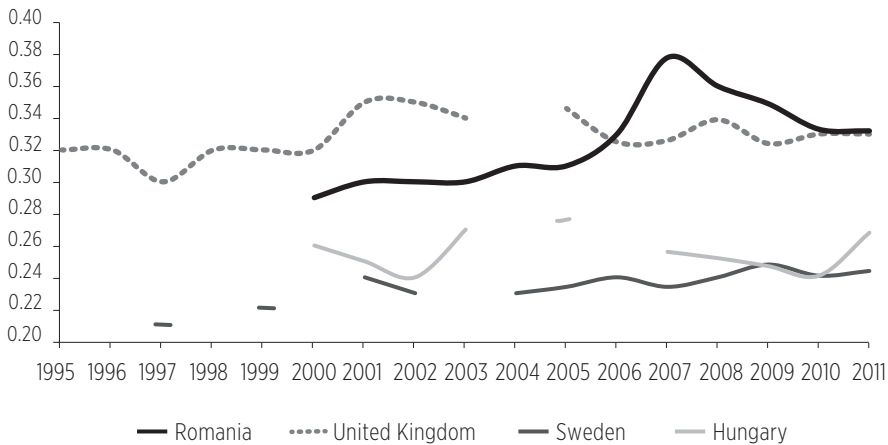
Increasing inequalities

Another important impact of the social and economic development of the last decades has been the sharp increase of social inequalities. First, we will present some of the conventional macro-indicators of social inequalities and welfare-protection. Second, we will identify several “truly disadvantaged” strata of the Romanian society and will shortly outline historical processes conducive to their situation. These strata play an important role in the history of the Romanian migration too.

Macro-level indicators, such as the Gini index, clearly show that Romania is among the most unequal societies of the EU. Prior to 1989, the Eastern European countries were characterized by rather low levels of income inequalities. After

the collapse of state socialist regimes, income inequalities have considerably increased in all Eastern European societies. One can distinguish, however, countries with relatively low and relatively high levels of income inequalities. Hungary, Slovakia, the Czech Republic and above all Slovenia are among the countries where income inequalities are relatively low. At the opposing end of the scale, some former Soviet Republics are characterized by extreme income differences. Romania is somewhere between these two opposite ends, around the middle of the continuum. Inside the European Union, however, Romania is certainly one of the most unequal societies. It is also important that the rapid economic growth registered between 2000 and 2008 led to a sharp increase of inequalities in income.

Figure 3: The value of the Gini index in Romania, United Kingdom, Sweden and Hungary (1995–2011)



Source: Eurostat.

Without entering into details, we have to highlight that Romania is one of the EU countries that spends relatively little on social policies. In 2007, when Romania joined the EU, the member states spent 26% of their GDP on average on social protection. At the same time, in Romania, the expenditures on social protection reached only 14% of the GDP. After the financial crisis, the expenditure on social protection increased; however, it still remained at a very low level compared to other EU members.

Table 4: Expenditure on social protection in % of GDP in Romania and the EU (1990–2010)

	1990	1995	2000	2000	2000	2000	2000	2000	2000	2000	2010
EU (27 countries)	24	21	13	13	13	13	13	13	13	13	7
Romania	27	28	31	31	31	31	31	31	31	31	41

Source: Eurostat.

Next to rather abstract macro-level indicators the most obvious form of social inequalities should be mentioned, namely spatial inequalities.

First, the precarious situation of small towns should be mentioned. The industrialization of small towns began in the 1970s, following the administrative re-organization of the country.⁶ Many of them received the status of town in this period. In spite of the relatively significant amount of industrial investment, these settlements were clearly disadvantaged in terms of investment in urban infrastructure and housing. As industrial investments had been usually quite unilateral, small towns had the most chances to become dependent on a sole industry, or as Ioniță (2007) labeled their situation to become “mono-industrial ghettos”. In such mono-industrial settlements the whole economic and social life tended to gravitate around the single workplace (the factory or the mine). As a consequence, the deindustrialization hit them particularly hard. Bănică, Istrate and Tudora (2013, p.288) argued that in mono-industrial small towns the consequence of the industrial collapse was a kind of “de-economization”, meaning the reduction of a wide range of services and employment opportunities. Another consequence has been re-ruralization, meaning the retreat of the former industrial workers into subsistence agricultural activity and the giving up of certain “urban facilities” such as central heating.

Another group hit particularly hard by deindustrialization was commuters (*navetiști* in Romanian). Szélényi (1996) noted that the Eastern European state-socialist social structure, compared to other parts of the world, was characterized by severe under-urbanization. This meant that the demand for labor force of urban/industrial workplaces exceeded by far the number of those moving from rural to urban areas. In the 1970s and 1980s, the phenomenon of commuting was widespread in Romania, and a significant part of the rural population was employed in urban units of production. *Table 1* above shows that

⁶ The present administrative structure of the country based on counties, towns, communes and municipalities was established in 1968. This led also to a territorial reorganization of the investments (see Ronnäs, 1984).

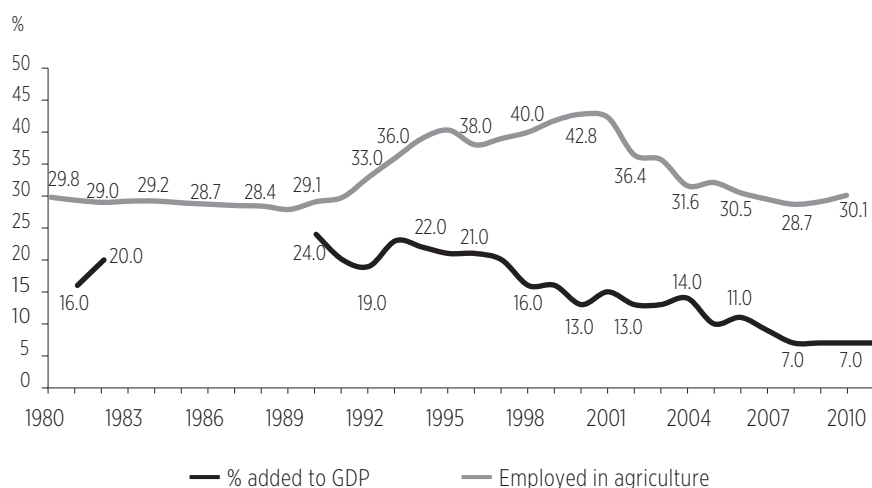
in 1989 “only” 28% of the total labor force was employed in agriculture, though the proportion of the rural population was 45%. After 1990, the first victims of deindustrialization were precisely the commuters. Their number decreased sharply following the change of the regime. Former commuters also tended to be engaged in subsistence farming.

A remarkable change occurred concerning the patterns of Romanian internal migration. From the 1950s until the 1990s, the prevailing direction of migration was from the rural to the urban. From 1992, the direction changed. The number of those moving from rural areas to urban settlements started to decrease, conversely, the mobility in the opposite direction (from urban to rural) increased. In 1997 the migrants from urban to rural outnumbered those moving from rural to urban centers. This change in pattern of internal migration is also considered to be determined by the process of deindustrialization. One of the first reactions of the population to the shrinking labor market was to return to the villages. They were primarily those persons (or their children) who moved to urban areas (and first of all to small mono-industrial towns) in the previous decades. The bulk of those returning also became active in agriculture and was mostly engaged in subsistence farming (Ghețău, 2007, pp.36-37; Ronnås, 1995).

During the 1990s, employment in agriculture grew not only in relative but in absolute terms as well. In 1990, 3 million people were employed in agriculture, and this number grew to 3.5 million until 2000 (Murgescu 2010, p.470). After the turn of the millennium, the number of employees in agriculture began to fall. This process was determined by two factors: the economic recovery, which led to an increasing demand of labor force primarily in construction and certain service sectors, and the intensification of emigration. *Figure 4* shows that the value added to the Romanian GDP by agriculture has been declining continuously in spite of the growing share of those working in agriculture. In 1990, the value added by agriculture was 24%, but only 7% in 2010. Those who were forced by the structural changes of Romanian economy to withdraw to subsistence farming feed rural poverty and enduring marginalization. The sharp decline of the productivity of Romanian agriculture was caused primarily by the agrarian policies. The collective farms were abolished shortly after the change of the regime. In 1990, the restitution of land properties began too. This resulted in hundreds of thousands of farms well below the optimal size. The restitution of land properties was actually used by the Romanian political class as a substitute to social policies. The existence of a large group of subsistence farmers, along with the collapse of the industry, can be considered the main push factor in the emigration of Romanians. Due to the possibility of emigration and the high

prevalence of subsistence farming, the unemployment rate did not reach very high levels in spite of the massive deindustrialization.

Figure 4: The value added to GDP by agriculture and the proportion of those employed in agriculture in Romania (1980–2011, %)



Sources: National Institute of Statistics, World Bank.

MAIN INTERNATIONAL MIGRATION TRENDS AND THE MAIN CHARACTERISTICS OF MIGRANTS

During the period between 1950 and 2011, Romania was primarily an emigration country. We will first describe the changing process of emigration and then will turn to shortly describe inflows. As for immigration, we will pay attention to migration from Moldova, a Romanian-speaking country next to Romania's border. We will show that in spite of Romanian efforts to promote cross-border ties, Romania has not been receiving the majority of Moldovan emigrants.

The term of migration regime could be useful to define periods of Romanian emigration. According to Hováth and Anghel (2009, p.19) international migration regime is the constellation of exit, entrance and incorporation policies that citizens of a given sending country are subjected to, that shapes to a great extent individual migrants' careers and biographies. It includes first of all the possibilities to leave the sending country, namely access to passport, filters

used to select potential emigrants by sending authorities and even the cost and risks of travelling abroad. Second, it also includes the possibility of entering the receiving country: visa regime, border control etc. Legal and social aspects of immigrant incorporation are also part of the migration regime (chances to obtain the status of legal emigrant, refugee status, long-term residence, citizenship etc.).

The migration regimes have altered considerably during the period investigated. First, one can distinguish between a Cold War and a post-Cold War regime of migration. The Cold-War regime of migration in Romania was characterized by limited chances of exit (passports were retained by authorities and issued biannually strictly for the period of the journey abroad) and high risks of crossing the border illegally. As a consequence, it was very difficult to reach the most desired (Western) countries of destination. However, Romanian migrants had no difficulty in gaining admission to Western countries. Furthermore, if they were successful in entering, they easily gained legal (refugee and immigrant) status. The channels of migrant integration were also predictable. The Cold-War migratory regime changed gradually to another type in the 1980s and early 1990s. The ability of the Romanian state to control outflows declined considerably already during the late 1980s. Refugees and illegal emigrants started to cross the Romanian-Hungarian border in considerable numbers in 1986. At the beginning, they were trying to reach Austria in order to seek asylum; however, in the circumstances of the vacillating attitude of the Austrian authorities an increasing number of Romanian citizens remained illegally in Hungary. Hungary first tolerated the increasing illegal stock, thereafter adopted the necessary legislation to offer the asylum (Szőke, 1992, p.308).

The restrictions to leave Romania were abolished immediately after the collapse of the communist regime. In due circumstances the number of asylum requests submitted by Romanian citizens was high, but as a counteraction to the outflow, during the early 1990s most Western European states declared Romania a safe country and introduced further restrictions for the entry of Romanian citizens. Some of the analysts used the metaphor of “fortress Europe” to describe the change (Fassmann and Münz, 1994) or talked about the fear of “refugees of hunger” (Diminescu, 2009). The restrictions have been gradually abolished following the turn of the Millennium. In 2002, the requirement to gain visa into EU countries was lifted. Following the 2007 EU accession, Romanian citizens could stay in EU countries without restrictions and the labor market of EU countries has been also gradually opened.

The general trend and periods of migration during state socialism

As previously mentioned, despite the closed borders, the history of the Romanian state-socialist regime is by far not one of a complete stoppage of emigration. Between 1948 and 1989, a relatively high net migration loss (783,578 persons) was officially registered (Muntele, 2003, p.36). The bulk of emigrants for this period belonged to various minorities: Jews (Bines, 1998; Ioanid, 2005), Germans (Fassmann and Münz, 1994; Münz and Ohliger, 2001) and Hungarians (Horváth, 2005). Emigration, however, was not exclusively reduced to ethnic minorities; some other channels were still accessible for other categories of citizens too. Such channels were represented by family reunification and asylum.

The state socialist period was characterized by a significant oscillation in terms of emigration opportunities. In this respect, the following five distinct periods can be identified (based on Muntele, 2003, pp.36-37):

(1) The period between 1945 and 1953 was characterized by relatively large number of emigrants, many of them belonging to the economic and intellectual elites of the interwar regime. Furthermore, the first wave of mass-migration of the Jewish community from Romania took place in this period, and about 116,000 Jewish people left the country.

(2) The period between 1953 and 1956 was characterized by limited outflows and considerable inflows/remigration of Romanian citizens. Remigration included many persons formerly deported to the USSR, who were released after Stalin's death.

(3) Between 1957 and 1965, there was a significant increase in emigration. This consisted primarily of the second wave of Jewish mass-migration.

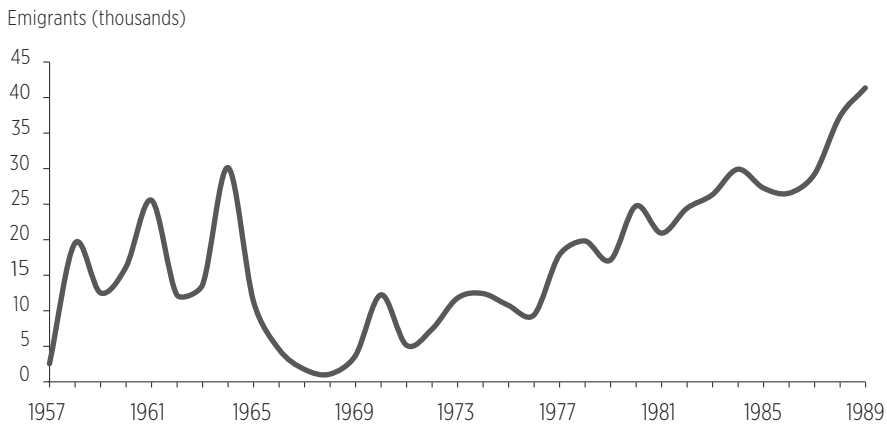
(4) Between 1966 and 1978, the emigration rate fluctuated considerably. After Ceaușescu's rise to power, according to the new lines in population policies, the control of out-migration was readily observable. From the early 1970s, however, the out-migration of ethnic minorities (primarily Jews) was permitted again, and by the end of the period ethnic Germans started to migrate too. Moreover, at the beginning of this period, there were more liberal policies with regard to migration for study purpose, thus the international mobility of the Romanian academia and that of highly skilled labor force was also allowed.

(5) Between 1978 and 1989, the number of officially registered emigrants sharply increased. This was due, first of all, to the mass migration of ethnic Germans to Germany. According to the 1977 census data, 358,373 persons

declared themselves as belonging to the German minority. According to an agreement between Romania and Western Germany, in the time period between 1978 and 1989 12,000 Germans could leave the country annually.

During state socialism, temporary labor migration was exclusively state-managed, and not very significant in terms of its volume. A large majority of Romanian workers headed to the Middle East, particularly to the Persian Gulf area, where their labor activities were tightly regulated and family reunification was forbidden (Salt, 1989). The inflow of foreign immigrants was rather limited during state socialism. However, foreign students (especially from the Middle East and African countries) were well represented at Romanian universities from the 1970s onwards. At its peak, the annual stock of foreign students rose to 16,900, representing 7–8% of all students registered at Romanian universities in 1981 (OECD, 1994).

Figure 5: Number of officially registered emigrants in Romania between 1957 and 1989



Sources: OECD, 1994. „Trends in International Migration. Continuous Reporting System on Migration Annual Report 1993.” Organization for Economic Cooperation and Development, Paris. (based on reports of the Romanian Ministry of Internal Affairs).

Two remarks should be made concerning outflows during the state-socialist period. First, statistics concerning emigration were relatively reliable. Until the late 1980s, the Romanian state had the ability to control outflows. Nevertheless, the number of real emigrants was higher than the officially registered outflows. Tompea and Năstuța (2009, p.221) compared the official Romanian figures concerning the number of emigrants to Germany and the German figures concerning the immigrants from Romania and found that the figure

registered by German authorities was higher by 15% compared to the figure registered by Romanian authorities. The number of irregular emigrants grew drastically in the late 1980s. Hungarian authorities registered 47,771 immigrants from Romania between 1986 and 1989 and – as already mentioned – for a great number of illegal migrants Hungary represented only a transit country (Szőke, 1992).

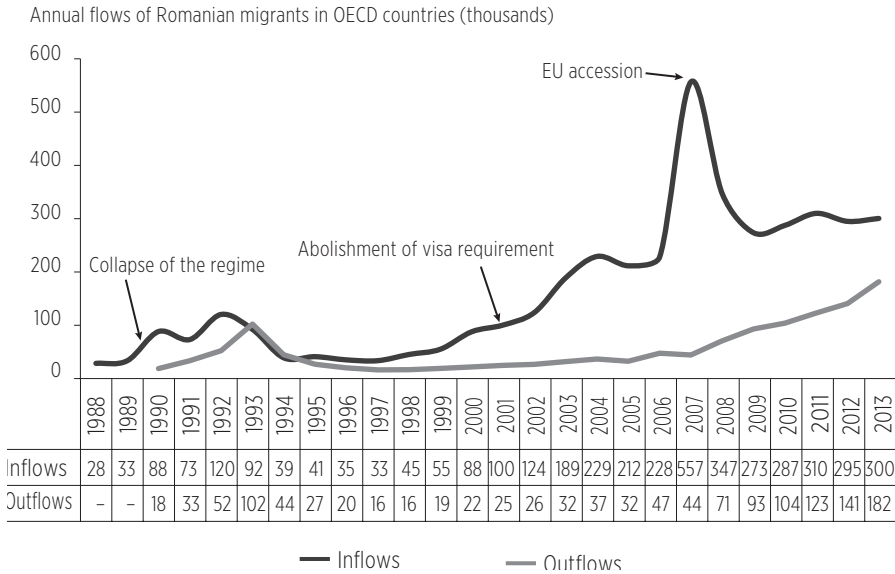
Second, ethnic preferences of the Romanian state were clear. The Romanian state allowed Jews and Germans to migrate, while the transnational mobility of other categories of Romanian citizens was drastically restricted. We can assume that this process was motivated by nationalism, demographic engineering and a form of ethnic un-mixing related to the ethnic selectivity and proactivity of German and Israeli immigration policies (Brubaker, 1998).

General trends and periods of emigration after 1989

The change of the migratory regime following the fall of the regime had an additional consequence. The Romanian statistical system practically collapsed. As a consequence, one cannot rely on official Romanian statistics concerning emigration when analyzing outflows (Kiss, 2015). Mirror statistics could be considered more reliable. As for migration flows, we used the OECD International Migration Database (2016), which covers the most important receiving countries of Romanian immigrants.

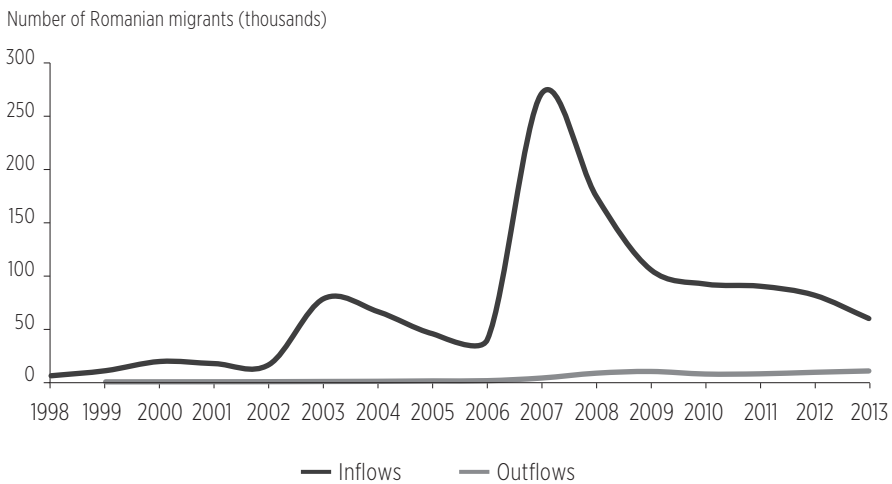
Three major changes of the migratory regime could be identified. The first was in 1989, when the state socialist regime collapsed, the second in 2002, when Romanians were exempted from visa requirements in EU countries, and the third in 2007, when Romania joined the EU. Data show that all these major changes of migratory regime led to considerable increase in inflows of Romanian immigrants in OECD countries. The most important increase was in 2007, when more than 500.000 Romanians entered officially OECD countries. The highest numbers were registered in Italy and Spain. The increase in outflows following the liberalization of the migratory regime shows that a cumulated migratory potential existed previously. Nevertheless, the EU accession in 2007 was also an opportunity for many illegal migrants to legalize their status.

Figure 6: Annual inflows of Romanian immigrants in OECD countries (1988–2013)



Source: OECD International Migration Database.

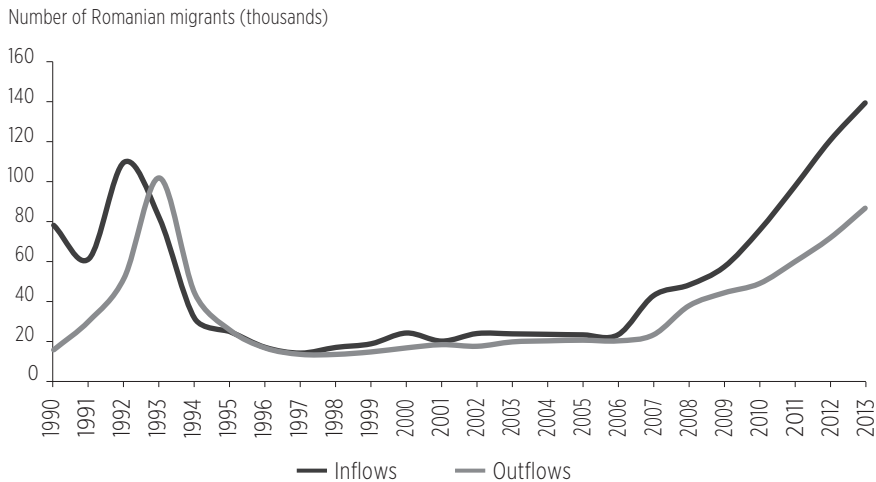
Figure 7: Annual inflows of Romanian immigrants in Italy (1998–2013)



Source: OECD International Migration Database.

Outflows have also varied considerably. The first massive wave of repatriation of Romanian migrants was in 1992–1993. Immediately after 1990, a massive flux of Romanian asylum seekers entered different Western European states (the bulk of them Germany). In order to curb the flow of Romanian asylum seekers, many western European states, most importantly Germany (starting from 1992), amended the law on asylum and reconsidered in the status of Romania, qualifying it as a “safe country of origin”. Furthermore, a bilateral agreement between Germany and Romania stipulated the repatriation of Romanian citizens failing to obtain the refugee status (Reermann, 1997, p.127). As a result of these policy measures, the number of Romanian asylum seekers abruptly decreased, this strategy of emigration was adopted by a decreasing number of Romanian citizens.

Figure 8: Annual inflows of Romanian immigrants in Germany (1990–2013)

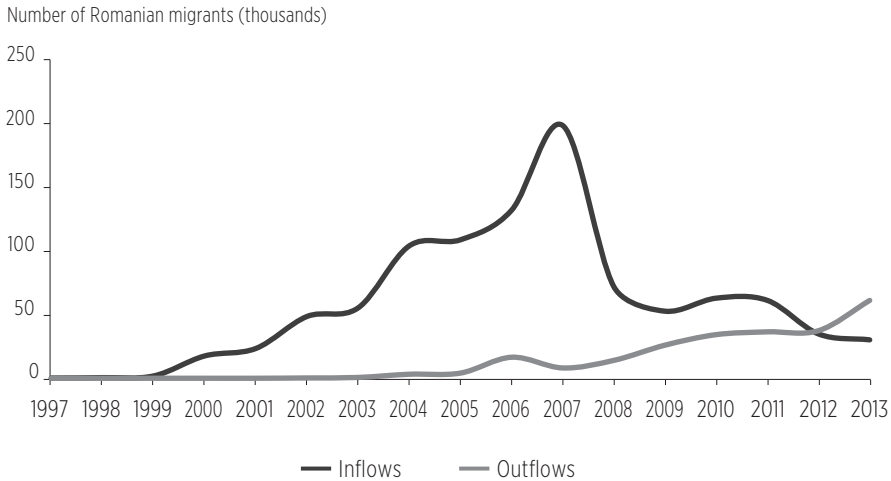


Source: OECD International Migration Database.

A second increase in outflows occurred following the country’s EU accession. The causes of this increase could be multiple. First, it is largely acknowledged that more permissive migratory regimes lead to increased frequency of circulation. In contrary cases (e.g. under restrictive regimes), migrants tend to prolong their staying at the “safe side” of the border. Second, Spanish authorities reintroduced restrictions concerning the entrance of Romanian (and Bulgarian) labor force in 2013 (Moreh, 2014). As a consequence, the number of

Romanians entering Spain was lower than those leaving the country. And third, Germany has become the most important receiving country. In Germany the circular character of the migratory flows seems to be more accentuated than in the case of Spain and Italy.

Figure 9: Annual inflows of Romanian immigrants in Spain (1997–2013)



Source: OECD International Migration Database.

As for emigrant stock, the World Bank's bilateral migration matrix can be used.⁷ This data source also indicates the changing significance of different destination countries. In 1990 a huge amount of Romanian immigrants resided in Germany. Their number was reduced considerably (most probably due both to naturalization and return) until 2010. During the period between 2010 and 2013, the number of Romanian immigrants in Germany rose again. It is also obvious that the relative significance of countries such as Israel and Hungary has somewhat declined. The drop of the Romanian immigrants in Spain following 2010 is confirmed by this data source too.

⁷ We should note that different data sources concerning Romanian emigrant stock (Eurostat, OECD International Migration Database) are inconsistent (see Horváth and Kiss, 2013).

Table 5: The stock of Romanian immigrants in main receiving countries (1990–2013)

	1990	2000	2010	2013
Italy	15 725	123 957	813 037	1 008 169
Spain	765	47 854	810 471	800 400
Germany	1 144 848	324 085	134 911	438 000
Hungary	139 690	133 077	189 055	232 793
US	101 256	140 085	171 253	188 638
Israel	151 154	139 278	182 099	105 488
United Kingdom	4 031	21 684	53 081	103 421
Canada	29 887	59 644	96 209	95 499
Austria	28 723	24 647	56 932	73 900
France	15 725	123 957	54 305	57 689
Belgium	168	2 487	21 634	52 700
Greece	4 762	21 132	45 289	38 597
Turkey	9 324	20 853	23 232	30 706
Portugal	76	3 008	3 954	23 513
Sweden	7 991	11 646	16 184	23 299
Australia	10 932	12 700	17 449	18 130
Ireland	423	5 264	12 682	17 800
Switzerland	29 152	3 146	7 914	14 624
Denmark	952	2 017	4 186	13 615
Netherland	2 361	4 822	8 716	13 606
Czech Republic	852	12 066	12 083	12 800
Norway	290	1 105	2 045	10 278
Slovak Republic	147	3 178	2 751	5 300
Poland	4 986	3 623	3 632	2 659
Total (countries above)	1 704 220	1 245 315	2 743 103	3 381 624
Total (worldwide)	1 761 648	1307 973	2 769 053	3 430 476

Source: World Bank Bilateral Migration Database.

One can identify several distinct phases of the Romanian emigration following 1989 (Baldwin-Edwards, 2005; Diminescu, 2009; Horváth and Anghel, 2009; Lăzăroiu, 2004; Sandu, 2006; 2010; Moreh, 2014).

Table 6: Synthetic table of the main characteristics of Romanian emigration since 1990

Period	Time horizon for migration	Major countries of destination	Main characteristic	Overrepresented groups
1990-1993	Definitive settlement	Germany, Hungary, France	Ethnic migration; Asylum seekers; Legal emigrants	Ethnic and religious minorities, highly skilled urban professionals
1994-1996	Short-term	Israel, Hungary, Turkey	Short-term labor migration, frequently irregular and circular	Hungarians, urban population, men
1997-2001	Short-term and some prospects for long-term residence	Italy, Spain, Hungary	Labor migration, mostly irregular; Prolonged residence in the destination countries; Regularization programs in Spain and Italy	Men, inhabitants of small towns and more developed rural settlements, former industrial workers
2002-2006	Prospects for long-term legal residence.	Italy, Spain	Continuing processes of regularization involving a large number of Romanians	People coming from rural areas, small towns, younger age groups
2007-2010	Long-term residence	Spain, Italy	Large Romanian communities in Spain and Italy; legal residence and formal employment; labor migration continues, though at lower levels; limited return migration	People coming from rural areas, small towns
2010-	Short-term and long-term	Germany, Italy, growing significance of UK	Short-term and circular migration to Germany	People of Roma origin

Note: Modified version of the typology developed by Horváth and Anghel (2009, p.390).

(1) The first phase lasted roughly from 1990 to 1993, and it was characterized by the migration of ethnic minorities and asylum seekers. As a consequence of the liberalization of the regime of international travels, hundreds of thousands of Romanian citizens traveled abroad, many of them looking for opportunities westwards from Romania. Only a few categories were successful in finding regular emigration options: those having relatives abroad and persons belonging to the German and Hungarian minority communities. Germany actively supported,

Hungary welcomed and offered some assistance for their ethnic kins willing to settle down (Brubaker, 1998; Horváth, 2005). Apart from these categories, many used the asylum system as a way to achieve a legalized stay at least during the application process. In the first half of the 1990s, about 350,000 Romanian citizens applied for asylum in various Western European countries. The most important country of destination was Germany (with about 75% of asylum applications), other important destinations being Austria, France and Belgium. During this period, Romanians were (right after the citizens of the former Yugoslavia) the second largest group applying for asylum in Europe (UNCHR, 2001, pp.78-82). Among the Romanian asylum seekers the Romanian Roma were represented in high numbers (Bade 2003, p.311; Diminescu, 2009). However, this status was granted only in a few cases and many of the asylum seekers were repatriated to Romania.

(2) Between 1993 and 1996, EU countries introduced a restrictive visa regime for Romanian citizens; consequently, in the mid-1990s, westward migration remained at relatively low levels. Hungary, Turkey and Israel became the most important target countries of shorter or longer term labor migration. Israeli firms set up even labor recruitment companies in Romania. Romania's ethnic Hungarians were able to enter the Hungarian (informal) labor market (Fox, 2003; Horváth, 2005; Sik, 2006). In spite of the difficulties to penetrate the borders of the EU states, migration (primarily to Germany and France) continued, mostly in a circular way: relatively short episodes of working abroad (frequently involving irregular employment) were followed by shorter or longer episodes of staying at home (Diminescu 2003; Sandu, 2000a).

(3) Between 1997 and 2001, the importance of emigration towards non EU-countries decreased while emigration to EU countries considerably increased. The importance of Germany and France as countries of destination declined, and new target countries for Romanian labor migration started to emerge. These targets were Italy and Spain. The outflows towards Canada and the United States increased too. Official emigration, family reunification, application to different schemes for obtaining visa (Visa Lottery⁸, student work-and-travel programs etc.) made emigration possible mostly for highly qualified professionals. In terms of the volume of the outflows, the overseas destinations were far less important than the EU countries. Specific for this period is a change of the patterns of Romanian labor migration. In the mid-1990s, labor migration was

⁸ In the United States, about 50,000 visas are made available yearly through the Diversity Visa Lottery Program. "According to Section 203(c) of the Immigration and Nationality Act (INA) mandated by the U.S. Congress, such Visas are made available to persons from countries that have historically low rates of immigration to the United States. A random and computer-generated drawing determines who can enter through the program." (www.visalottery.com)

mostly irregular, short-term and circular, and destination countries were not necessarily regarded as countries of possible settlement (Sandu, 2000b). In this period an increasing number of persons developed strategies for a prolonged (though still mostly irregular) staying and considerably large immigrant stocks of Romanian origin started to emerge (especially in Italy). In parallel with this process, as Romanian citizens still needed visa to enter the EU countries, human smuggling and trafficking became rather widespread, raising serious domestic and international concern (Kane, 2005; Lăzăroiu, 2000). From 1999, attempts to regularize the flows have been undertaken and officially endorsed recruitment policies were commenced (firstly by Spain and Germany).

(4) One of the most important moments in the history of Romanian migration was 2002, when Romanian citizens were exempted from visa requirements in the majority of the EU countries. The costs and risks of emigration were reduced and, as a consequence, significantly more people engaged in migration. In parallel, various destination countries initiated programs for regularizing irregular immigration (Italy in 2002, Spain in 2005), and prospects of long-term legal residence became achievable for a considerable number of Romanian migrants.

(5) In 2007, Romania became an EU member. As a result of the new legal status of Romanian citizens within the EU there was both an increase in the volume and the legal opportunities of Romanian emigration. The highest inflows were registered in Italy and Spain.

(6) We can also confirm that a geographic relocation of the main destination countries of Romanian migrants from the Mediterranean Area to (North)-Western Europe occurred between 2010 and 2013. In Spain the Romanian emigrant stock decreased, while the number of those entering the country has considerably dropped. In contrary, in countries such as Germany, the United Kingdom or Belgium the numbers increased dynamically.

It is important to note that emigration and circular migration gradually increased in Romania. Before the change of the regime, the majority of emigrants were members of ethnic minorities. Elites of the interwar area and highly skilled urban professionals were also highly overrepresented among Romanian emigrants (Muntele, 2003). In the 1990s emigrants were originating mostly from urban areas and from the western (more developed) regions of Romania. After 2002, the eastern (less developed) part of the country became the major region of origin for Romanian emigration, and the population originating from rural areas became increasingly connected with various streams of emigration (Sandu, 2006, p.19, p.24). Analysts highlighted that deindustrialization and “ruralization”

directly affected emigration from Romanian villages and small towns (Sandu, 2006; Horváth, 2009). Villagers (former industrial workers and commuters) started to emigrate after 2000. Another interesting question is Roma migration. As previously mentioned, Roma were present in high numbers among the asylum seekers of the early 1990s (Bade, 2003; Diminescu, 2009). They were most probably underrepresented, however, among circular migrants of the 2000s. Sandu (2000a) underscored the role of pioneer-migrants in establishing stable migratory corridors⁹ and emphasized that, in an early stage, circular migration could be perceived as a form of social innovation. In a later stage, information concerning possibilities and experiments were diffused through existing networks, and communal models of migratory practices took shape. Social networks in Romanian villages and small towns, however, are usually ethnically divided. Because of this segregation, Roma and non-Roma living in the same settlement use regularly different migratory networks and corridors. Furthermore, according to a field research conducted in twelve Transylvanian villages and small towns in 2014, the migratory networks used by the Roma were established later than that ones used by the non-Roma. In these settlements, Roma migration has intensified especially following 2010 (Kiss, 2015). Nevertheless, the Roma have been overrepresented among this later stream of migrants.

We should also highlight that Romanian social scientists (Ghețău, 2007; Sandu, 2006; 2010) and the political elite presupposed until recently that the overwhelming majority of emigrants would return sooner or later to Romania. This assumption, however, has proved to be unrealistic. The economic crisis hit the Mediterranean countries (Spain and Italy) particularly hard, and these were the most important destination countries of Romanian emigrants. Contrary to expectations, however, the crisis did not generate significant waves of return migration. Investigations conducted among Romanian residents in Italy (Metro Media Transilvania, 2007; Mara, 2012) and Spain (Metro Media Transilvania, 2008; Moreh, 2014) showed that immigrants of Romanian origin were rather differentiated in terms of preferences concerning return. The majority of Romanian migrants did not have well defined migration plans. The majority of those who claimed to have such plans, however, expressed a preference for permanent migration, whereas short-term migration proved to be the less popular option. The recent relocation of the destination countries shows that the intensive out-migration of Romanians will most probably continue even under circumstances of population drop and ageing.

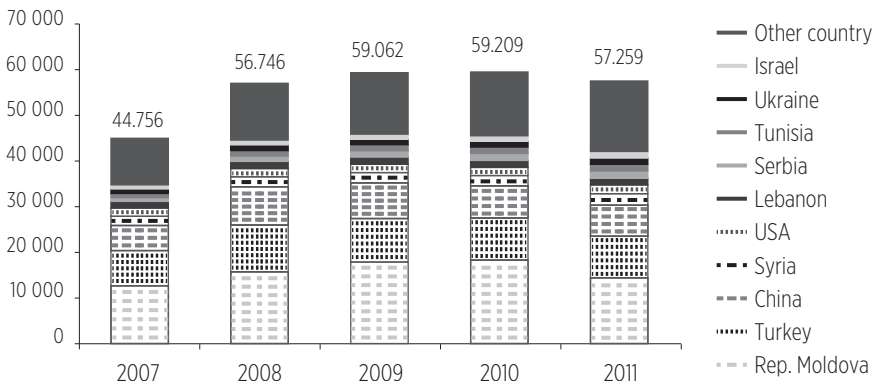
⁹ See also Bakewell, de Haas and Kubal (2011).

Trends of immigration

The number of registered immigrants is extremely low in Romania compared to other European countries. In 2006, one year before Romania's accession to the EU, the total number of foreign residents in Romania was 53,606, the majority of them from Moldova, Turkey, China, Italy and Germany. Less than one third of the foreign residents were from the EU area. Only 10% of the foreign residents possessed a permanent residence permit (Autoritatea pentru Străini, 2006, p.37). Out of the 48,177 residents with temporary residence permits, 29% were staying for studies, 18% were family members of Romanian citizens, 17% were entrepreneurs, and only 12% were labor migrants.

After 2007, intra-community mobility increased. According to data published by the Ministry of Internal Affairs, the stock of EU citizens residing in Romania increased from 15,817 in 2007 to 38,971 in 2010 (Alexe and Păunescu, 2011, p.25).

Figure 10: The stock of third country foreign nationals with a valid residence permit in Romania at the end of the year, by country of origin, between 2007 and 2011



Source: The General Inspectorate for Immigration.

The stock of third country nationals (in which EU and EEA nationals are not included since 2007) also increased. In 2011, there were 57,259 legal residents, 49,282 of them having temporary residence permits. Most of these residents (50.5%) were family members of Romanian citizens or family members of other immigrants. 25.5% of the third country nationals were students, and only 17.5% of the registered foreigners were here for labor-related (employment

or commercial) activities (Alexe and Păunescu, 2011, p.26). The bulk of the immigrants are concentrated in the capital city or its metropolitan area. Moldova, Turkey and China are the foremost countries of origin (accounting for more than 60% of the legally residing third country nationals).

The low number of immigrants is surprising if we take into consideration Romania's "special relations" with Romanian-speaking communities next to the country's Eastern borders. Today, an approximate number of 400.000 Romanian speakers live in Ukraine, while Romanian speakers make the majority in the Republic of Moldova. They are mostly descendants of former Romanian citizens living on the territory of the interwar Greater Romania. Romania was the first Eastern European country to grant extra-territorial citizenship for most of its ethnic kin (Waterbury, 2014). The 1991 Law introduced the possibility of restituting citizenship to former Romanian citizens and it was applied to former Romanian citizens living in prewar Bessarabia and Northern Bukovina. An approximate number of 500.000 Romanian speakers from Republic of Moldova and Ukraine were naturalized between 1991 and 2014.¹⁰

In spite of the quick modification of the citizenship legislation, Romania has never been a major receiving country for Moldovan emigrants. According to the 2011 Romanian census only 37.370 persons born in Moldova and 8099 persons born in Ukraine resided in the country. A significant part of them were persons born before 1944. The World Bank's bilateral migration database shows quite similar data concerning Moldovan-born residents in Romania. The most massive Moldovan emigrant stocks were in Russia, Ukraine and (more recently) in Italy.

It is important, however, that the migration of Moldovans to Western European destinations has intensified recently. In this process Romanian citizenship policy plays an important role, as the majority of these Moldovan migrants most probably hold Romanian passport. We should also note that the Republic of Moldova is one of the world's most remittance-dependent societies (Böröcz, 2015). The most important remittance-sending countries, however, are the Russian Federation and Ukraine. Recently, the importance of Western destinations (Italy, Germany, United States) has also increased. However, remittances from Romania are far less important.

Table 7: The stock of Moldovan immigrants in main receiving countries (2010 and 2013)

¹⁰ See Panainte (2013).

	2010	2013
Russian Federation	284 330	285 023
Ukraine	168 370	157 826
Italy	89 188	151 313
Romania	39 091	49 785
United States	25 280	42 471
Germany	17 425	25 805
Portugal	4 287	20 377
Uzbekistan	–	18 850
Spain	17 551	16 517
Israel	21 265	11 102
Other countries	103 744	80 331
World	770 528	859 400

Source: World Bank Bilateral Migration Database.

We should note that there was a widespread expectation (connected to the model of migration transition) among Romanian scholars that Romania (as an emerging core) will become a country of immigration.¹¹ This was connected not only to “developmental optimism” but also to labor-market processes. The economic dynamics of the 2000s conjoined with the amplified emigration of the Romanians (after 2002 and 2007) lead to a workforce shortage in some economic sectors, especially in constructions (both in infrastructure and housing). Under these circumstances, immigrant labor seemed to be a mid-term solution for addressing the problem. The predictions made in 2008 assuming a considerable increase in labor-motivated immigration up to a stock of 200–300,000 persons (1.1–1.4% of the population) until 2013–2015 (Cervinski, 2011, p.46), however, proved to be unsubstantiated. The global economic crisis curbed the ascending curve of immigration to Romania.

Nevertheless, the short period of increase provided some important lessons, as it is revealed by a comprehensive study on Chinese labor migrants (Xiao, 2010). According to this analysis, neither the authorities nor the hiring entrepreneurs were prepared to manage the influx of Chinese workers. The slow procedures and the direct and indirect administrative costs hindered the access of the Chinese people willing to work in Romania. If they eventually started to work, they received considerably lower salaries than had been

¹¹ See Horváth and Anghel (2009); Încălțaru (2011).

contractually promised, the accommodation conditions and other related aspects were often improper and, in general, the employers (except for the work performed) paid little or no attention to assist immigrants in their integration into society, or to meet their specific cultural needs. In some cases tensions escalated and the entrepreneurs unilaterally abrogated the contracts, leading to the repatriation of the workers.

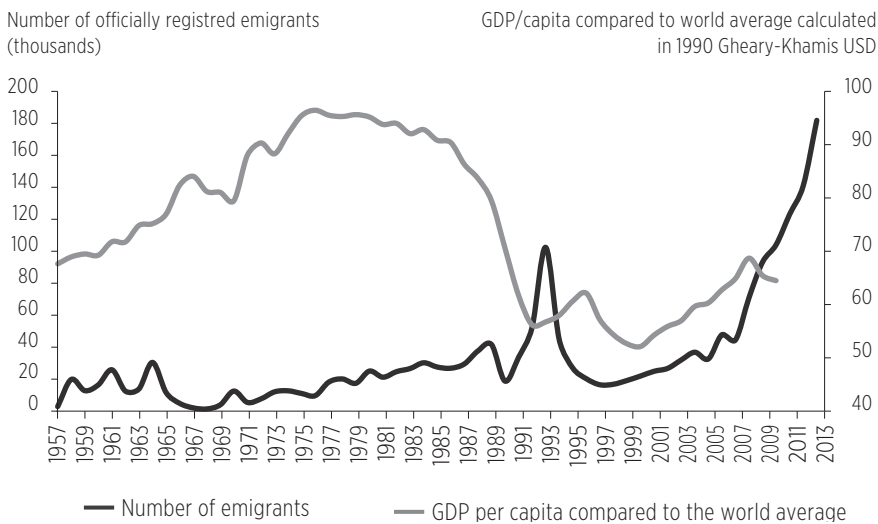
CONCLUSIONS AND FEEDBACK TO THEORETICAL ARGUMENTS

Our study tried to provide an overview of migratory processes in Romania since the 1950s. In our concluding remarks we would like to highlight the relevance of the historical-structural explanations and especially of the world-system theory in analyzing these long-term migratory processes. Scholars using this framework emphasize the stability and durability of migratory linkages. According to their arguments, migration is deeply embedded in a more general relationship between economic core and periphery. In fact, migration is one particular form of flows or exchanges between regions/societies characterized by asymmetric power-relations. As such, it is parallel with and inseparable from flows of capital (foreign direct investment) and forms of cultural penetration (e.g. Sassen, 1988). In this sense, Romania seems to be incorporated durably into the system of East-West type exchanges. According to Chirot (1976), the country has been integrated in the global system of capitalist production as a peripheral society. An emerging discursive order was also part of this asymmetric relationship (Wolff, 1994). As Melegh (2006) highlighted, the so called East-West slope is a historically constructed and culturally well embedded civilizational discourse, stating that there is gradual decline of civilization or development inside Europe, as one moves from West or North-West, toward East or South-East. The durable desire for catch-up type modernization and for ascending the slope of the Eastern European elites could be interpreted in this economic and discursive framework.

It is an exciting question how to interpret the state-socialist experiment, regarding the period following state socialism. State socialism was first of all a model of social modernization competing with West-centered global capitalism. It could also be interpreted as an attempt to escape structures of economic dependency and to transform relations between core and periphery. This attempt took place at different levels. First, Eastern Bloc countries led by the Soviet Union tried to establish an alternative transnational economic system. In 1962

Khrushchev proposed the establishment of a supra-national planning authority and the synchronizing of economic investments in Eastern Bloc countries. In the proposed supranational division of labor Romania would have had a role of providing raw materials and agricultural products while industrial production (and especially heavy industry) would have been concentrated in the Soviet Union and in the more developed Eastern Bloc countries like Czechoslovakia or the German Democratic Republic. Romanian party leaders vehemently rejected the plan and in a kind of “declaration of independence”¹² called for (intra-Bloc) national sovereignty and economic autarchy (Kemp, 1999, pp.149-150).

Figure 11: The number of officially registered emigrants and the Romanian GDP per capita compared to the world average during state socialism



Sources: Emigration: 1957-1989 official Romanian registration for emigrants; 1990-2013 officially registered immigrants in OECD countries. GDP/capita: Updated version of Maddison GDP/capita database: http://www.ggd.net/maddison/maddison-project/data/mpd_2013-01.xlsx

National level economic and social planning could be perceived as a second attempt to escape centrum-periphery type dependency. In the Romanian case not only asymmetric East-West exchanges were rejected, but also the structure proposed by the Soviet Union. Parallel to the attempt to achieve economic autarchy the regime also tried to control population processes. In 1966 strong pro-natalist measures, among them the notorious anti-abortion legislation, were

¹² Verdery (1991, p.105) used this phrasing.

introduced (Kligman, 1996). In the case of internal and external migration state level control also played a crucial role (Sandu, 1984).

It is important to note, however, that state socialist regime was only partially and temporarily successful in transcending the asymmetric power relations inherent in the global capitalist world order. First, the economic crisis of the 1970s showed that the Romanian economy is not independent from global processes. In a period of higher oil prices the newly created Romanian industrial structure based on heavy and chemical industry proved to be unsustainable. Second, neither the state control of demographic processes was unequivocally successful. Fertility rates fell in the 1970s and 1980s, while the rural-urban migration considerably slowed down. Following the late 1960s and the early 1970s the number of emigrants also grew, while beginning with the mid-1980s the state was less and less capable to control outflows. One should also highlight that East-West migration targeting primarily Germany and Hungary did not stop during state socialism.

Even if state socialism was only partially successful in attenuating the consequences of asymmetric economic and power relations, Eastern European societies developed in a relatively protected environment before 1989. Sobotka (2002) used the notion of “socialist greenhouse” to describe an artificial environment regulating nearly all aspects of the human life-course (from professional career to reproductive behavior and family formation). Population policies and the control of migratory flows were intimately linked to this socialist greenhouse environment.

The change of the regime led to a radical shift in this institutional environment. As Böröcz (2015) highlighted, this was due to a reintegration of the Eastern European societies into the global system of capitalist production without the interference of the socialist state. In this new situation intensive and previously unexpected ideological, cultural and economic penetration also occurred. The most important form of ideological penetration was the rapid spread of neoliberalism and particularly of neoliberal system of governing (see Anghel, 2015). The most severe consequence of this ideological penetration has been that national level attempts to control population and societal processes have become not only less effective but also discredited.

At the level of ordinary people, the spread of Western patterns raised first of all consumption aspirations. Consumption patterns of the Western middle classes were widely seen as attainable and became a reference for people all across Eastern Europe (Fehérváry, 2002). These increased aspirations clashed not only with old economic realities but also with a dramatic economic decline (Thornton and Philipov, 2009). Under these circumstances, neither individual strategies of social mobility nor reproduction are enclosed within national

society but are increasingly organized within a global hierarchical social space. Large-scale migrations from Romania are (at least partially) motivated by the ascent on the “slope”, and not (only) within the social hierarchy of own society.

We also could use the concept of developmental idealism, elaborated by Thornton (2005), in a world-system theory framework. From this perspective, developmental idealism is also a form of cultural and ideological penetration. Developmental idealism, as defined by Thornton, is a set of values and beliefs connected to the evolutionist paradigm. It is based on the idea that all societies across the globe follow essentially the same developmental pathway.¹³ As a consequence, countries or societies could be ranked and hierarchized according their level of development (civilization, advancement etc.). People attached to developmental idealism generally claim that it is a universal model and it certainly grounds an emerging global culture (Thornton, Dorius and Swindle, 2015, p.284). However, it obviously has a strong Eurocentric and West-centric flavor, as characteristics of developed/advanced societies are equated with the characteristics of Western societies. The acceptance of developmental hierarchies, putting Western societies at the pinnacle of the developmental process is in fact a key element of developmental idealism. Another key element is the (often unfounded¹⁴) belief in causal mechanisms between different dimensions of development. Thornton’s initial aim was to identify ideational factors conducting to the change of patterns of family formation and reproductive behavior. He emphasized that the belief that modern (e.g. Western) patterns of family formation (late marriage, low fertility, gender equality, or even more controversial elements of family formation such as acceptance of same-sex marriage, or high rates of divorciability) lead to (or at least tend to go together with) economic prosperity is an important driver of the change of reproductive behavior. Later research extended the model. Thornton, Dorius and Swindle (2015) argued that the persistent belief that free market or democracy is automatically conducive to economic wellbeing is also connected to the cultural model of developmental idealism. Thornton (2013) and Melegh (2012) also highlighted that – next to “Western” consumption aspirations – stringer belief in developmental idealism could be also a direct factor leading to higher rates of out-migration. This is not necessarily a contrary but a complementary argument to approaches stressing wage differentials.

It is also important that Romania’s peripheral position inside Europe was

¹³ Obviously, the models of mobility transition and migration cycles are connected to the same evolutionary paradigm.

¹⁴ We should note that Thornton emphasized repeatedly his “agnosticism”, meaning that he does not intend to defy or to defend developmental idealism. His intention is rather to understand the circumstances and consequences of its spread (see Thornton, 2005, p.135; Thornton, Dorius and Swindle, 2015, p.279).

reinserted. Massive deindustrialization led to re-ruralization and to a growing sector of subsistence farming. New industrial structure characterized with the predominance of low value added branches could also be considered an indicator of a less favorable economic position. These economic processes were – next to rising consumption aspirations – direct drivers of out-migration.

As for countries of destination, historically established relations also matter. The relatively old-standing relation between Romania and Germany should be underscored. Ethnic Germans left Romania for Germany *en masse* during state socialism, however, migration toward Germany has not ceased following the departure of ethnic Germans. A long-standing relation exists with Hungary too. The neighboring country is continuously attractive primarily for Transylvania's ethnic Hungarians. Next to these already existing linkages, new systems of migration have also emerged. Italy and Spain were previously countries of emigration and did not have robust social or economic linkages with Romania. Due to this, the emergence of new migratory systems could be investigated through these cases.¹⁵

Historically constructed linkages should be considered in the case of immigration too. In this sense, the most exciting question is why Romania was unable to attract migrants to replace its declining population. The Romanian speaking Republic of Moldova would be an obvious location to recruit future immigrants. One should highlight that in the East European region many regional systems of ethnic migration exist. As mentioned already, Hungary is a target for ethnic Hungarians in neighboring countries, but Turkey, or Serbia is also attractive for ethnic kin living in the Balkans. Romania has a relatively active kin-state policy toward Romanian speakers of Moldova and Ukraine and extra-territorial citizenship is also offered for Romanians living in these countries. The wage- and living standard-gap between Romania and its Eastern neighbors is also considerable. If so, why is Romania unable to attract migrants from these countries? First, possibly the demand for labor force in Romania is too low. And second, the historical links to the ex-Soviet territories proved to be very resilient and, as Molodikova (2012) highlighted, there is a split between Eastern and Western systems of migration. While Central- and South-Eastern Europeans tend to migrate toward West, the primal target of CIS (Commonwealth of Independent States) country migrants is the Russian Federation. Moldova is in the intersection of these migratory systems, however, the attraction of well-established Russian linkage tends to be dominant.

¹⁵ See in this sense Sandu (2000a, 2000b, 2006); Moreh (2014).

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