

## Realizing birth intentions in European comparison - understanding post-communist fertility transition

### Abstract

The paper strives to broaden the understanding of fertility transition in post-communist countries, starting in the early 90s. A combination of selected theoretical approaches and a new kind of empirical analysis leads us to new conclusions. The use of longitudinal panel studies in comparing fertility intention and realization in four European countries enables us to demonstrate a very low level of realizing fertility intentions in post-communist countries and to highlight the importance of societal factors in explaining the gap between fertility intentions and their realization. A well established theory of social action, and related approaches concerning the intention-behavior link helps us to elaborate the conceptual framework of a varying tempo in structural and cultural change, that mismatch may explain the gap. The contrast between macro level postponement and individual action allow us to highlight a specific causation during the post communist fertility transition: macro level postponement of fertility seems to be partly a result of failures in realizing childbearing intentions.

### ***1. Introduction<sup>1</sup>***

Our paper combines two research fields. One is the research on fertility transition in post communist countries, while the other focuses on understanding the realization of fertility intentions. Fertility transition in post communist countries has been in the focus of research since the quick political changes in 1989/90. As widely discussed the relatively stable fertility pattern in the state socialist period was followed by a period characterized by postponement, low fertility, increase of extra-marital birth.<sup>2</sup> These changes naturally remind us of developments in many Western countries in the last third of the twentieth century. Explanations applied with regard to post communist countries are deliberately extensions and adaptations of theories developed for Western countries, although new hypotheses have also

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<sup>2</sup> For a most recent comprehensive review about the new developments and the relevant interpretations see Frejka and Sobotka 2009, Sobotka 2009.

emerged. Certainly this state of research cannot be considered as final as the concerned process itself has not ended yet. Our study focuses on an unexplored phenomenon of the fertility transition, namely the realization of fertility intentions being a research problem linking individual intentions and behavior to macro level characteristics of fertility development. In post communist countries the gap between fertility intentions and fertility behavior is far bigger than in other West-European countries at least in the period of transition. Beyond that, as we will extensively argue, macro-level fertility development is in some extent the outcome of “failure” and/or “modification” of individual fertility intentions.

Concerning the research on intentions the key concern has been the identification of factors and mechanisms contributing to a greater correspondence between intention and behavior in fertility decisions (Westoff and Ryder 1977, Monier 1989, Schoen et al. 1999, Heaton et al. 1999, Quesnel-Vallée and Morgan 2003, Testa and Toulemon 2006, Philipov 2009, Liefbroer 2009, Spéder and Kapitány 2009). In our empirical analysis we focus on one type of fertility intentions, namely the temporarily well-defined intentions, which approach provide a sufficiently specific and well operationalizable starting point (Miller and Pasta 1994). The novelty of our research resides in the comparative approach focusing on the above mentioned East/West difference in realizing fertility intentions. In an earlier analysis of ours (Kapitány and Spéder 2010), we identified what group specific social and demographic factors determine the fulfillment of short term intentions *within a country*. In the present study we analyze why *country differences* exist, why people in Eastern Europe have lower chances to fulfill their original intentions as compared to Western Europe? The answer lies in the difference in social conditions in general and in particular social conditions contextualizing individual behavior.

We compare the fertility behavior of fecund individuals in four European countries. The selection of countries had practical reasons: we wanted to compare and analyze those longitudinal panel surveys that include information about time related fertility intentions, relevant fertility outcomes, and could be object of harmonization. Even though we do not cover all types of welfare regimes of Europe, Switzerland, the Netherlands, Hungary and Bulgaria differ significantly. However, during the investigation clear distinction between the two post-communist and two western countries turned out.

Considering fertility behavior, we will focus exclusively on time-related intention (having a child within two years), and the related behavioral outcomes (having a birth within three years) in this study. This limitation enables a quite proper evaluation of the intention and behavior link, especially in a time when we observe the process of ageing in fertility behavior.

We will begin our study with a selective review of literature. On the one hand we outline a general theory of social action being also applicable in understanding fertility behavior. On the other hand, we review the literature concerning the strength of the intention-behavior link. The theory of social action by Robert Merton will be utilized, since it could help us to understand why the rate of realization is so low in the former communist countries amidst profound societal changes took place. The review on the intention and behavior link is necessary and extensive, since this is the key empirical question of the study.

Concerning cross country differences we describe first compositional differences, and then, using Mertonian insights, we discuss possible mechanisms of post-communist fertility decline. Finally, our analysis reveals some hidden factors in the overall East European fertility transition. Of course, relevant information about the four studied countries and the utilized data sets will be provided.

## ***2. Review of the relevant literature***

### ***2.1. Robert Merton's theory of social action***

In order to understand cross country differences in realizing intentions, it is useful to broaden our perspective utilizing some sociological insights into social action, namely *Merton's theory of social action* (cf. Philipov et al. 2006: 293, Spéder and Kamarás 2008: 655ff.). Merton's theory of social action is able to handle the different societal contexts of social action. In addition it is close to some social-psychological approaches that play an important role in understanding the link between fertility intention and behavior. It postulates an independent role to the cultural system, and includes socially acknowledged aims, purposes, which closely correspond to intentions.<sup>3</sup>

The theory describes social life from the perspective of a duality of *cultural system and social structure*. Individuals pursue goals embedded into a system of cultural values and norms. The norms of this system prescribe not only the legitimate goals of life, but also suggest legitimate means for attaining these goals within the relevant social structure. In other words social structure could be seen as a factor enabling and/or hindering purposeful social action since the opportunity structure and the distribution of resources strongly define what specific types of social actions are approvable.

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<sup>3</sup> Of course the correspondence is far from perfect, and we should devote more time to analyze compatibility of the sociological and social-psychological approaches in the future.

The prevalence of different kinds of social action, such as conformity, innovation ritualism, retreatism, and rebellion is highly dependent on the interdependence of the cultural system and social structure. Conformity is prevailing overwhelmingly during times of well functioning of society, in times of “social peace”, whereas anomic actions (retreatism, ritualism, innovation and rebellion) are characteristic during periods in “turbulent times and places”, when the cultural system and/or the institutional configurations change radically and transformations are comprehensive. Anomie is fundamentally characterized by the mismatch of values, prescriptions, and the ways of values can be achieved, i.e. “institutionalized means” (Merton, 1938, 1968). During the period of “turbulent times” non-conformist behavior is wide spread, since the majority of people have not accepted and found the new “modus vivendi” yet.

The distribution of specific non-conformist behavior, and which of them will be mostly spread depends on whether the life goals or the legitimate means of the goals (or both) are refused on the one side and on the opportunity structures and resources necessary to reach the life goals, that are defined by the social structure on the other side.

## ***2.2. The intention–behavior link in the case of fertility decision***

In the extensive literature on the intention-behavior link in general, and also on fertility intentions and realization in particular two social-psychological theories deserve special attention: Ajzen’s (1988) theory of planned behavior (abbreviated as TPB), and sequential decision making model developed by Miller and Pasta (1994). Although there are clear differences between the two theories, they have a similar understanding the intention-behavior link. Both argue that the socio-economic status, demographic positions, and personality traits are external factors shaping the explicit antecedents<sup>4</sup> of intentions. Nonetheless some scholars have pointed out the neglect of some problems in intention–behavior link (Schoen et al. 1999). Having a closer look at the original theory, we can find some references to factors which “can disrupt the intention–behavior relation”. These are: emotions, changing opportunity structures, dependence on others, unforeseen life-course events (Ajzen 1988:132.ff). But all these factors work through the modification of intentions. If considering the literature on the intention and behavior link, most of the disruptive forces identified by

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<sup>4</sup> In the case of the TPB these are: a) attitudes towards the given behavior, b) subjective norm, and c) perceived behavioral control. In the case of sequential decision making the different kinds of desires are the antecedents of intentions.

social psychologist could be grouped into measurement error effects and biological factors, while population studies point out structural and contextual factors.

a) Measurement errors and problems in operationalization. There are diverging research results and varying assessments of the role of intentions due to the inappropriate measurement of intentions and behavioral outcomes (cf. Miller and Pasta 1995:531. Not only intentions could be measured in several ways (cf. Spéder and Kapitány 2009), but also behavior. Miller for example differentiates among several kinds of proceptive behavior being all relevant for childbearing (Miller 1986)

Studies stressing the certainty of intentions, the time frame and life course events are also relevant. Most of these studies statistically prove that the *certainty of intentions* increases the chances of realizing childbearing intentions (Westoff and Ryder 1977, Rindfuss et al. 1988, Shoen et al. 1999, Testa and Toulemon 2006, Philipov 2009). From our perspective this means that we should have more accurate measurements of the strengths of intentions.

There is also consensus on the realization of intentions according to different time frames. Intentions using a narrow time frame are more feasible. A narrower time scale; indeed, decrease the chance of changing intentions (Davidson and Jaccard 1979, Shoen et al, 1999).

Several studies assume that (unexpected) *life course events* have effect on the previously intended actions. Miller and Pasta emphasize events connected to reproduction (e.g. separation, divorce). Rindfuss et al. claims that these events alter the context of action, which highly determines the success of action (Rindfuss et al. 1988). Liefbroer introduces an effect mechanism, in which life course events modify the intended family size (Liefbroer 2009). Time has an important role also in this respect: the more time passes since the measurement of intentions, the higher the probability of a modification in the intentions, and therefore the originally intended action does not occur. This highlights, that life course events modify intentions, and therefore the inconsistency of intention and behavior is perhaps due to the time differences between measured intentions and subsequent behavior. And the larger the elapsed time between observed intention and measured behavioral outcomes, the larger the probability of such life course events which can modify the original intention.

b) Biological factors Biological or physiological factors although often ignored in empirical studies seem to be taken into account. Fecundity has an explicit role in the model of Miller and Pasta (Miller and Pasta 1995:534), and Ajzen also refers to it as the most important

barrier in realizing intentions (Ajzen 1988:129). Demographic studies also highlight this factor (Rindfuss et al. 1988).

c) Group-specific behavior: social status and demographic position. The integration of socio-economic status and demographic position significantly improves models explaining intended childbearing behavior (Westoff and Ryder, 1977, Heaton et al, 1999, Schoen et al, 1999, Berrington, 2004, Spéder and Kapitány 2009). Age, parity, the time since the birth of the last child, partnership status etc. have significant effect on the level of realization and the probability of having a birth. We assume that some selected demographic positions (e.g. Parity1) or social status (having a job) could positively influence the realization of intentions (Kapitány and Spéder 2010). This could have an effect on cross country differences, if social structure and/or distribution of demographic positions vary among countries.

Several researchers for example assume that women, particularly when they are young, have an overly optimistic view of their fecundity, and therefore do not realize effectively their intentions (Nauk and Østby 2002, Westoff and Ryder, 1977). This idea can be linked to the concept of “unrealistic optimism” as constructed by Weinstein (Weinstein 1980). Results, showing that younger people realize their time-dependent intention with higher chance (Kapitány and Spéder 2010), do not discredit necessarily the earlier claim as different concepts of intentions have been utilized.

It is worth noting, that the role of the partner’s intention could be also discussed among the above measurement issues, nonetheless we would like to stress the local societal context of the individual decision making. All research including the intention of the partners concludes that the coincidence of partner’s intention strength the link between fertility intention and subsequent behavioral outcome (childbirth) (Thomson 1997, Miller and Pasta 1995, Philipov and Testa, 2007, Iacovou and Traves 2010).

d) Macro-social context. No decisive empirical evidence has been presented yet on the effect of *macro-social factors* concerning the relationship between intention and behavior. There are only a few useful conceptual reflections in this respect. Rindfuss et al. noticed the varying rate of realizing negative and positive fertility intentions in time, , and assume that this fluctuation is caused by specific periodical context(„strong delaying effects of period factors” Rindfuss et al. 1988:198). In a similar way, Davidson and Beach hypothesize that economic recession – primarily through the modification of intentions – can possibly decrease the probability of realizing positive intentions (Davidson and Beach, 1981).

Two studies stress the importance of prevailing “majority rules/normative structures” in societies. Westoff and Ryder relate *inconsistency to non-conformity*, and assume that if people plan behavior in opposition to dominant patterns of behavior in the given social context, or in other words if their intentions are non-conforming, then the behavior will tend to the more conform. Namely, there is a higher likelihood that non-conform intentions will be given up (Westoff and Ryder 1977:443-445). Testa and Toulemon view “low fertility context” as such a factor, which promote postponement (failure of positive intentions) as opposed to the birth of “non-desired” children (failure of negative intention), (Testa and Toulemon 2006:45). In general terms prevailing norms may restrain non-normative behavior and this can be a crucial factor in our field of research.

In addition Davidson and Beach introduce “inertia-effect” which may play a role in the higher probability of failure in realizing positive childbearing intentions (Davidson and Beach 1981). According to their assumption, if there are two behavioral options to choose from, and one of them is the maintenance of an already existing form of behavior, then the selection of the new alternative is realized with a higher failure. Concerning childbearing in modern societies the claim that “I have to think over twice whether I give birth to a child” (therefore “I use contraceptives”) can be considered to a behavioral pattern maintaining the status quo. Hence the negative intention (“I do not want to have a child”) is realized with higher probability, than the positive one (“I do want to have a child”). Rindfus et al., added, that attitudes (and intentions) and behaviors may have different thresholds in change: a specific factor perhaps can change the attitudes and contribute to forming intentions; however it cannot “cause” behavior (Rindfuss et al. 1988).

Since the central aim of this study is to compare the link between intention and behavior in different countries, we assume, that biological conditions do not differ significantly among the different countries, and measurement errors are excluded by proper operationalization and data harmonization at the same extent. In this way we can focus on country-specific contextual factors and distributional differences in the investigated countries.

### ***3. Countries and data***

#### ***3.1. Two Western and two Post-Communist countries***

The selection of the compared countries was determined by the availability of suitable longitudinal data-sets. Namely, only those longitudinal data-sets were considered, that included time-dependent fertility intention questions, and where questions could be

harmonized. In this way the following countries have been chosen: The Netherlands, Switzerland, Hungary and Bulgaria

Even though there are significant differences among *all* these countries, the most spectacular differences exist between the two post-communist and the two Western European countries, with regard to developments of fertility, social change and, economic progress.

#### The fertility development in the four selected populations

Fertility started declining in the Netherlands and in Switzerland in the beginning of the 1970s. In 1970 The TFR was 2.57 in the Netherlands and 2.10 in Switzerland, while a decade later in 1980 it was 1.60 and 1.55, respectively. The nadir occurred around 1985 in the Netherlands (1.51), whereas in Switzerland it was around 2000. The degree of decline was therefore somewhat faster and greater in the Dutch society. In the investigated period (in 2005) TFR was 1.77 in the Netherlands and 1.42 in Switzerland. In the early years of the new millennium one can observe a gradual increase of fertility. Recuperation appears in both countries, though the Netherlands can be considered the classical example in this respect (Lesthaeghe, 2000). Switzerland experiences high childlessness in a European comparison: 27.9% of women born in 1963 remained childless, whereas in Bulgaria the proportion of childless woman of the same cohort was 4.8% (Dorbritz and Rusckdeschl, 2005:64).

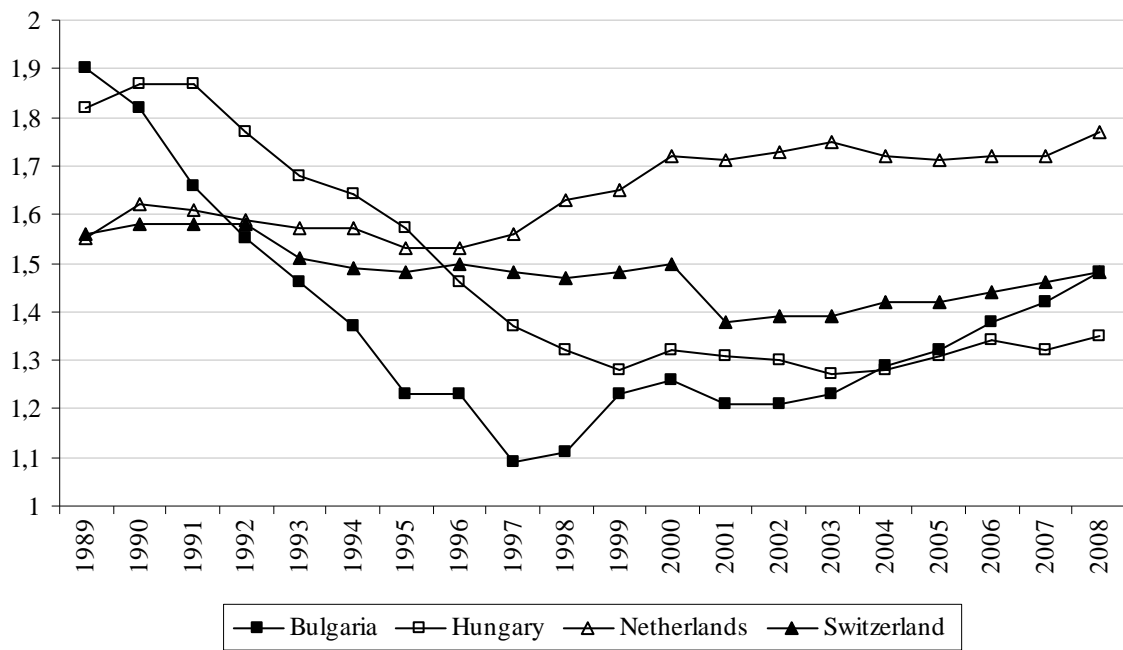
In state socialist Hungary and Bulgaria– as an effect of massive and continuous population policy interventions (Andorka, 1978: 353ff, Frejka 1980) – TFR was above 2 in the 1970s and 1980s. Its radical decrease started after the regime change in 1989/90 and this decline was faster in Bulgaria. In eight years it decreased from 1.9 to 1.1 and at this point it reached its nadir. It was then followed by a very slow increase. In the mean time, Hungary experienced constant stagnation between 1999 and 2005 (Figure 1).

The increasing mean age of mothers at first birth is an all the European phenomenon. It appeared in the two western European countries since the end of the sixties, and also in the Eastern European countries since the end of the nineties gaining momentum after the millennium, exactly in the investigated period between 2001 to 2005 (See figure 2). It should be noted, that some increase of mean age of mothers at first birth could be observed during this time also in Switzerland.



Figure 1.

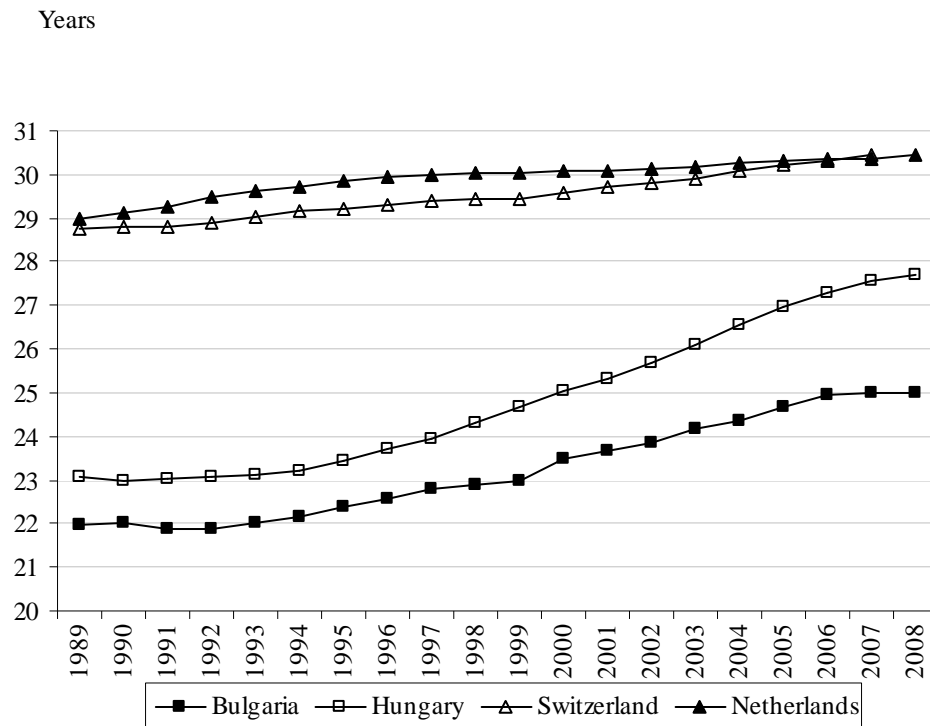
Total fertility rate in the Netherlands, Switzerland, Hungary and Bulgaria, 1989-2008



Source: vital statistic, EUROSTAT

Figure 2.

Mean age of mothers at first birth in the Netherlands, Switzerland, Hungary and Bulgaria, 1989-2008



Source: vital statistic, EUROSTAT

### Type of regime change and societal changes

Comparing the two post-communist countries to two western countries it is clear that the latter are stable democracies, and they have not experienced dramatic social change (cf. Zapf 1996). The political system of Switzerland, of its federative character significantly and distinguishes it from those Western countries, including the Netherlands, where the central government controls redistribution mainly. Consequently, family allowances in Switzerland are of narrow extended, and are far behind of the Dutch. On the other hand the Netherlands is not a pronatalist country either (Fokema et al. 2008).

Hungary and Bulgaria share many commonalities: everyday life has been shaped by very similar – albeit not identical – social forces since 1945: the populations lived in a strong redistributive system that profoundly affected and constantly restructured everyday life. From 1989/90 onwards both countries oriented themselves to a Western European model – restructuring the entire political system, developing the conditions of a market economy and privatising state property – developments that led to the accession of ten (8+2) countries to the European Union after the turn of the millennium (Adamski *et al.* 2001).

However some differences also remained and some emerged. According to the investigation of King and Szelényi Hungary and Bulgaria selected and experienced different paths of (re)introduction of capitalism, thus gave rise to different structures (King and Szelényi 2005)<sup>5</sup>. According to the assessment of Koytcheva and Philipov the societal transformation in Bulgaria, the “catching up the West” movement is “lagging behind” as compared to other former state socialist countries (Koytcheva and Philipov, 2008: 397)

Concerning the relevant social policy framework it is not so easy to compare the family related public programs. If considering Bulgaria and Hungary, we can state, that in both countries there were quite generous social support systems prior to 1990. Thereafter, the real value of family allowances and the financial compensation during maternal and parental leave decreased. If compared, the real value remained higher in Hungary. However slightly different mechanisms are in force since the change of the regime: while in Bulgaria the flat-rate compensation for parental leave is the most important form of support, in Hungary a wage-related compensation<sup>6</sup> is predominant.

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<sup>5</sup> While Hungary opted for “capitalism from below”, Bulgaria selected “capitalism from above”(King and Szelényi 2005

<sup>6</sup> During the time of the 24 months parental leave around 70% of the wage before getting the child is assured to new parent.

### Economic circumstances, standard of living:

The disparity between western and eastern countries is rather high if one looks at the basic achievement of the economy. The per capita GDP controlled for purchasing power parity is close in the Netherlands and Switzerland, and it is high in a European comparison. It was double of the Hungarian and almost four times of the Bulgarian rates in 2004. It also indicates that there is significant difference in the standard of living (almost double) between the two post communist countries. Regarding the comparison of labour market the employment rate is much higher in the two Western European countries, especially concerning the employment of women. However it could ascribed to the fact, that in the investigated Western countries, – even compared to EU-15 countries - the rate of female part-time employment is among the highest (43,9% and 31,7%, respectively).

### Norms, family related attitudes

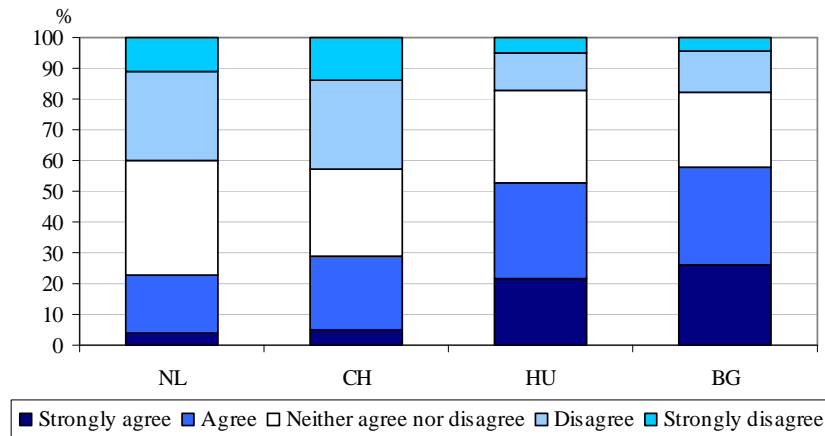
Signs of basic differences could be revealed between the two western and two Eastern (post-communist) if considering general value orientations and attitudes towards family issues using the 2002 round of the International Social Survey Program (ISSP). We could not go into a detailed analyze, however the selected attitudes represent clearly the difference between the countries regarding orientations: people in the post-communist countries had in 2002 more traditional attitudes toward family and gender roles.<sup>7</sup> Basic similarities between the two post-communist countries are unambiguous, but that characterize the two western countries, that show usually high tolerance towards various lifestyles (Fux 2008).

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<sup>7</sup> There was only one exception: people in the post communist countries adhered more the double earner family.

Figure 3a.

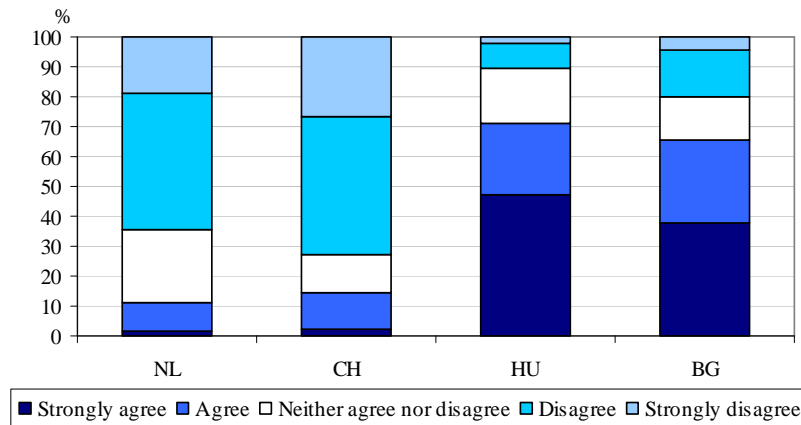
Married people are generally happier than unmarried people



Source: ISSP 2002 codebook

Figure 3b.

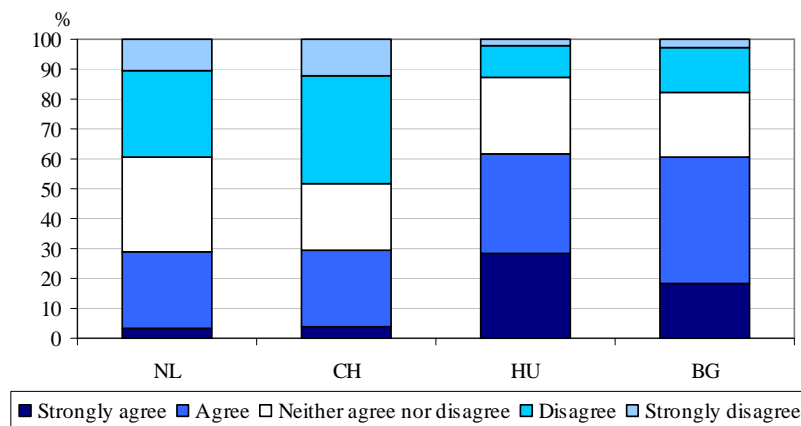
People who have never had children lead empty lives



Source: ISSP 2002 codebook

Figure 3c.

A job is all right, but what most women really want is a home and children



Source: ISSP 2002 codebook

### ***3.2. Data and harmonization***

#### Data

We use four quite different, but nationally representative large scale longitudinal panel surveys. The Hungarian and the Dutch surveys resemble each other: they focus on changes in demographic behaviour.<sup>8</sup> We use the first two waves of the Netherlands Kinship Panel Survey (Dykstra et al. 2007), and that of the Hungarian Turning Points of the Life Course survey (Kapitány et al. 2003). The time frame of the follow up was three years in both cases. In the case of Switzerland, the Swiss Household Panel survey's follow up was carried out annually; therefore we used the 6<sup>th</sup> and the 9<sup>th</sup> waves for our analysis (Voorpostel, et al. 2009). In the Bulgarian Social Capital survey more than ten thousand women and men aged 18–35 years were interviewed between 2002 and 2005<sup>9</sup>. Selected features of the surveys are described in the appendix, Table A1. The first investigated waves of the surveys were between 2002 and 2004, and the subsequent investigated waves took place between 2005 and 2007. We limited our investigation to women between the age of 18 and 35 years, and male age between 18 and 50 years.

#### Harmonization

We devote our attention to time dependent fertility intentions. Since we utilize four independent surveys, it is not surprising that during the harmonization we faced many problems. Although the questionnaires of the four surveys were rather different: the fertility intention questions are suitable for comparison. Though in a different manner all the four surveys contained questions on time-related fertility intentions, and provided an accurate account of births between the waves. In this way we could construct an intention-behaviour variable suitable for comparison. Obviously, we had to make some compromises: The two years time frame of the Swiss and Bulgarian questions is the reason why we opted for a two year time period in this comparative study.<sup>10</sup>

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<sup>8</sup> Both surveys will be incorporated in the Generations and Gender Surveys (GGS) after harmonization.

<sup>9</sup> The Bulgarian survey was carried out in the project „The Impact of Social Capital and Coping Strategies on Reproductive and Marital Behavior” organized by the MPDIR Rostock and the Bulgarian Academy of Science. (See Bühler and Philipov, 2005).

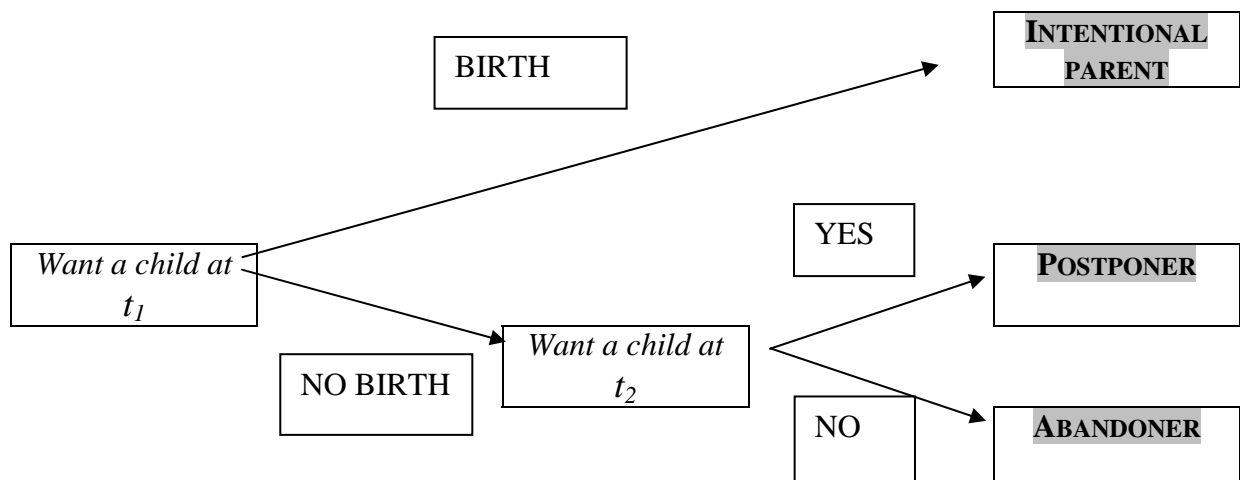
<sup>10</sup> Furthermore, pregnant women at the time of the interview were handled differently in the three countries. We solved this problem via adding second wave pregnant women to the group of intentional parents (The exact wordings of the questions are presented in the appendix, Table A2.)

#### 4. Basic cross-country differences

Our investigation concentrates on time-dependent intentions, and considers also whether failed intentions are maintained or abandoned. We investigate whether the positive fertility intention, the intention to have a(nother) child within two years, will succeed or not within three years.<sup>11</sup> Those who intended to have a child within three years and successfully realized this intention were called “*intentional parents*” (see Figure 3). We were also interested how “stable” are those intentions which could not be realized. We divided the people who intended to have a child within two years but failed for some reason, into two groups: one group for those who maintained their intention to have children at the subsequent wave whom we called “*postponers*”, and another group who abandoned their plans, called “*abandoners*.” These distinctions provide us with an opportunity to understand the reasons for unsuccessful realization and allow us a glimpse into the mechanism of postponement.

Figure 4:

Basic types of positive fertility intention-behavioral outcome links



<sup>11</sup> As mentioned earlier, the fact that the length of intention and the time period for realization do not match is due to the limitations of the different surveys.

The basic distribution of our dependent variable, the fertility intention-outcome variable, reveals basic differences among the countries (Table 1). The rate of successful realization is quite high in the Netherlands: four out of five people could realize their within-two-year intention within three years. The ratio of realization surpasses only slightly the 50 percent level in Switzerland. While in Hungary and Bulgaria around two fifth of the time-dependent fertility intentions could be realized. This ratio of successful intentional parents is very low in Hungary and in Bulgaria.

Considering failures, one fifth of the persons intending to have another child abandoned their fertility plans in Switzerland, Hungary and Bulgaria. That is almost two times higher than in the Netherlands. The ratios of postponers are also clearly different: in Hungary and in Bulgaria the ratio of postponers surpasses slightly that of intentional parents. The corresponding figure in Switzerland is also quite high, but between the Dutch and the Hungarian-Bulgarian level.

*Table 1*

The distribution of intention-behavioral outcomes

Fertility outcomes	Countries			
	Netherlands	Switzerland	Hungary	Bulgaria
Intentional parents	75	55	40	38
Postponers	15	(27)	42	44
Abandoners	11	(18)	18	18

*Source:* own calculations using the data described in Table A1.

### ***5. Explaining cross-country differences in realizing positive fertility intentions***

What factors could cause the variation? Although measurement problems could play a role, especially in the case of harmonization ex-post (as in our case), but we assume the revealed differences identify real national differences in childbearing behavior. As an explanation, firstly we should look at the social composition of those who intend to have a child within two years (compositional effects). After controlling for compositional effect significant country differences still prevail, other kinds of social differences and/or mechanism should be considered. It is important to note that we avoid to discuss the issue of rationality of social action as such. Although we can not exclude that in some countries social actions are more planned than in the other, but this is beyond the scope of this study.

#### ***5.1 Compositional effects***



The failure and the type of failure in realizing positive fertility intentions strongly depend on the demographic characteristics of the social groups. We identified three factors –age, parity, partnership– that clearly influenced the realization of fertility intentions in the four mentioned countries (Kapitány and Spéder, 2010). If in one or another country the share of any of sub-population that have higher failure is overrepresented among those intending to have a(nother) child, than the country-differences in the rate of successful realization could be ascribed to such kind of variations.. A systematic cross-country comparison according the mentioned three factors will highlight the role of the compositional effects.

The unequal distribution of *partnership form* is one of the striking differences among western and eastern countries regarding the sample of those intending to have a child within two years. The ratio of people living alone and intending to have a child within three years is clearly higher in Hungary and Bulgaria than in Switzerland and in The Netherlands (c.f. Table A3 in Appendix). Although, many of these lonely people have stable partner-relation, they have, according to the mentioned analyse, significantly lower chance to realize their fertility intention. Perhaps this is the most important reason for cross-country differences in intention realization. A comparison of people living in cohabitation should answer this assumption.

Although the distribution changes somewhat, and the share of postponers shrunk in all of the studied countries, if comparing the cohabiting people, the basic feature of intention-behavior outcomes and features of country-specific differences remained unchanged (Table 2). We can conclude, that also among stable cohabiting people the share of intentional parents is less than 50 percent in Hungary and Bulgaria. In Switzerland 3/5 of the cohabiting people planning to have a child within two years three years could realize their intentions within three years (Table 2). The highest rate, close to 4/5 of the people, could be found in the Netherlands.<sup>12</sup>

*Table 2*

The distribution of different fertility intention-behavioral outcome among people living in cohabiting partnership (marriage and cohabitation together)

Fertility outcomes	Countries			
	Netherlands	Switzerland	Hungary	Bulgaria
Intentional parents	77,2	61,5	46,2	45,0
Postponers	9,8	24,8	33,5	31,5
Abandoners	12,9	14,8	20,5	23,5

*Source:* own calculations using the data described in Table A1.

<sup>12</sup> A full account of the three different partnership forms could be found at the Appendix, table A4.

Regarding *age*, we found that younger people are relatively more successful (Kapitány, Spéder 2010). Since people intending to have a child in short run in post-communist countries are younger than in the western countries, this factor as compositional effect could not be responsible for a lower rate of successfully realized fertility intentions.

Lastly, if we disaggregate the distribution according parity, being the third significant identified factor of intention realization, we find the same cross-country differences concerning all parity levels (cf. appendix, Table A5).<sup>13</sup>

According to these results we can state that compositional effects are partly responsible for country-differences. Higher prevalence of not cohabiting people intending to have a child within two years in the post-communist countries increases the rate of failure in these countries. However cross-country-differences remain also after controlling for compositional differences, so it is necessary to look for other kinds of explanations.

## ***5.2. Societies as contextual factors for fertility behavior***

As mentioned in the introduction Merton's theory of social action is a fruitful framework for understanding failures concerning positive fertility intentions. In this perspective group-specific social action, in our case having a birth, is embedded into a dual system of culture and structure. If intended action is not carried out, than its societal conditions should be more thoroughly investigated. We should consider changes of beliefs, attitudes on the one hand and social structure on the other hand. Moreover, this culture-structure relationship is of great importance.

Let us first look at *social structure*. Ongoing social change is inherent in modern societies, since institutes of competitive democracies, the dynamic economic system, permanent innovations of economic actors, the welfare state institutions facilitate and require permanent adjustment in this societies (Zapf, 1996) The investigated Eastern European societies moved from one social system (centralized redistributive societies) to another system (democracy and market economy). This produced a profound and unprecedented shift: privatisation not only in the economic system, but also in the housing sector, a transformation the institutional setting, the restructuring of the welfare institutions which dramatic changes occurred in a short time period, and led to intensive status and income mobility (Machtwig and Habich 1996, Müller and Frick 1996, Habich and Spéder 2000). The *pace (tempo) of the*

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<sup>13</sup> There is also a striking difference according gender. In the Netherlands there are unequal more female in the sample. We checked, if the more success of the Netherlander could come from this feature of people intend to have a child. However, there are no significant difference of intention realization according to gender in the Netherlands.

*change* was and is significantly higher than the change experienced by modern democracies and market economies in „ordinary times” (Zapf 1996, Habich and Spéder 2000). The emerging new economies not only had to re-integrate the countries economic activities, but at the same time had to be integrated into European market, moreover should be integrated into an intense globalising economy (Mills and Blossfeld 2005). This *double standard of pace* [“*die zwei Geschwindigkeiten*”] was conceptualised by Zapf, a theorist of modernity (Zapf, 1995).

The new system brought not only negative changes (unemployment, inflation) and new tensions (more stressful working-conditions, fear from unemployment, and loss of social benefits) but built up new opportunities of social mobility, carrier, and business success, chances of longer term education, consumer opportunities. Indeed, the new structure produced new tensions and competitions in all social spheres.

As a consequence two aspects of social structure and its change should be highlighted: unprecedentedly high speed of change regarding the circumstances of social action, and new opportunities creating competitions and tensions for any given purposeful social action.

A short and very sketchy account of changes in the *cultural system* is even more precarious, since the relevant theories and assumptions are contradictory, and we do not have enough empirical evidences about value changes and modification of social norms during the societal transition.

On the one hand, several scholars assume that *westernization of the values* get a momentum with the fall of the iron country, and with the start of political transformation in 1989-1990 (Rabusic 2001). Those who support the idea of Second Demographic Transition in understanding fertility change in the former communist countries (eg. Lesthaeghe and Surkyn 2004) could be also included into this group. A Hungarian empirical study focusing on the life goals of the young generations before and after the transformation also supports the above assumption since it shows clear value changes among them (H. Sas 2003).

On the other hand, several studies suggest a less profound modification in value orientations. Large scale value studies showed a clear western orientation of the Hungarian society far before the transformation (Hankiss et al. 1982), and value studies using the Rokech-test could not detect a profound new-orientation in the value structure (Füstös 2004). Moreover, investigations focusing on gender role showed a “re-traditionalization” of gender roles shortly after the change of the regime (Blaskó, 2005). It is worth to consider the results of this study closer, since it demonstrates a quite strong *stability (and/or inertia) of family related attitudes*. The well-known battery of family attitudes was repeated three times in the

“Family” module of the International Social Survey Program (ISSP), and enables us to compare attitude changes towards family and children in a 14 year time window, starting in 1988, just before the societal and political upheaval. The direction of the change after the political transition, between 1988 and 1994, could be understood as “re-traditionalization” of the gender roles. And this is relevant for both gender (c.f. *Table 3*). This is not very surprising if we keep in mind, the forced character of the female employment expansion during the real existing socialism and the collapse of the labor market afterwards. Thereafter, by 2002, attitudes and orientations towards the family returned to the point characteristic before the transition. The concept, for example of a the housewife, a women looking after the household and the children to be about as popular as it had been in the late eighties (Blaskó 2005).

*Table 3*

*Should women work? Changes in the Hungarian population’s opinions related to gender roles, 1988, 1994, 2002*

<i>Statements</i>	Gender of the respondent	<i>Year of the fieldwork</i>		
		<i>1988</i>	<i>1994</i>	<i>2002</i>
A working mother can establish just as warm and secure relationship with her children as a mother who does not work.	Males	3.00	3.44	3.88
	Females	3.47	3.52	3.81
A pre-school child is likely to suffer if his or her mother works.	Males	3.89	4.10	3.74
	Females	3.72	4.05	3.81
All in all, family life suffers when the woman has full-time job.	Males	3.67	3.71	3.36
	Females	3.51	3.86	3.53
A job is all right, but what most women really want is home and children.	Males	3.95	4.04	3.67
	Females	3.85	4.09	3.83
Married people are generally happier than unmarried people.	Males	3.62	3.80	3.62
	Females	3.35	3.61	3.44
Watching children grow up is life’s greatest joy.	Males	4.38	4.72	4.57
	Females	4.42	4.81	4.77
People who have never had children lead empty lives.	Males	4.08	4.25	3.89
	Females	4.13	4.37	4.22

\* Means of answers related to the indicated statement (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

*Source:* Blaskó 2005:159–186.

Although we can not deny that some kind of value changes took part, at least in some segments of the society and in regards different domains, there are clear signs of stability and/or “inertia” especially regarding family related attitudes and values.

Studying the cultural feature of post-communist transformation Sztompka described the situation as “cultural disorganization and disorientation” (Sztompka, 2000a), while we used the term “anomie” (Philipov, 2003, Philipov et al. 2006) and “value vacuum” (Spéder and Kamarás, 2008) to identify the specificity of the normative system closely after the start of the societal transition. Although the three strains of thinking seem to be mutually exclusive, if having a closer look, all allows the parallel occurrence of different goal-systems, usually linked to different social groups. Indeed in such a situation different kinds of non-conformist social action (such as innovation, rebellion, retreatism, ritualism) are more widespread. How can all this help us to understand the higher failure of fertility intention realization in the two post-communist countries?

a) The profound, continuous and high speed structural changes as compared to the slowness of the cultural changes, apparently, render more difficult the proper assessment of the circumstances (easing and hindering factors) of social action. Actors can be unrealistically optimistic (Neugarten 1980.) not only in their intentions, but also in their control over their circumstances, or can underestimate the role of external conditions concerning their plans. They can have misleading perceptions of the real housing market for instance, or of their situation on the labour market, and once they wanted to realise their intentions, they recognised that their conditions did not reflect their prior expectations. And such kind of mis-judgement is more probable in the time, when *the circumstances change with a higher tempo*. Also we can notice the occurrence of the (unexpected) life events (eg. not only the dynamics of partnership forms, but also the insecurity of jobs are here to mention), or the non-occurrence of certain expected life events (failure of moving together and starting cohabitation) that clearly motivate individuals to postpone, revise their intentions.

b) We know from earlier studies that competing life goals hinder the realization of intentions (Barber, 2001, Philipov, 2009). We argued earlier, that societal transformation profoundly rebuilds the opportunity structures of the given societies. New, prestigious social positions emerged: namely there is an increased chance to become entrepreneur and to focus on, career development; to get a degree in higher education and to have a job in a foreign country, etc. At the same time societal tensions also increased. We observe growing inequalities, the constant fluctuation of employment which factors not only enable upward mobility, but also downward mobility. These changes can also make people change their intention.

We are aware of the fact that in highly developed societies, - such as the Netherlands and Switzerland-, alternative and competing life goals could also hinder the realization of plans. What in this respect we stress, not only the availability and presence of such kind of options, but the novelty and the multitude of tensions. Putting all these together a postponement or modification of the intention is more probable in the two Eastern European countries.

c) Changes in the cultural system, as pointed out earlier, enable the coexistence of old and new kind of behaviour (social action). During the socialist time early marriage and early start of childbearing was common practice. Therefore, these ideas and norms about the “right time of parenting” (in someone’s early twenties) are strongly internalised by the population. We also highlighted that the “inertia of beliefs and expectations” was characteristic, and normative for some segments of the society. We agree with the approach highlight, that beliefs and expectations (were and will not) change as rapidly as institutions. Therefore, we assume that there are social groups, which by adhering to these very principles wish to be loyal to earlier norms. However, adhering to the old norms within new and continuously changing circumstances can produce higher failure.

d) Just in a time when the cultural system is in change, when the earlier prevailing normative system is under severe stress, and when the new one is far from being dominant, the acting individuals receive less normative support and reinforcement. We should note that perceived norms are one of three antecedents of intentions in the Theory of Planned Behaviour as developed by Ajzen. Disregarding other aspects this contextual feature alone can lower the strength of the intention and increase the contingent character of the intentions.

We assume the above mentioned four mechanisms are not exclusive, but they supplement each other and are responsible for the lower realization of fertility intention in the post-communist Hungary and Bulgaria.

## ***6. Discussion: looking into the postponement “black box” of the post-communist fertility transition***

Now we would like to turn our attention to a general feature of the post-communist fertility transition: what kind of understanding can be drawn if considering the distribution of the key variable of this study.

Postponement as a macro-level phenomenon characterizes the time of the surveys in the two post-communist countries, since the mean age of first birth increased more than two years during the three years of our observations (see figure x, and figure y). Here we do not have the place to discuss the concept of postponement, however should be noted, that *macro level* and *cohort specific* understanding should necessarily be mentioned (for an overview of the concept of postponement see Sobotka, 2004, 2008, Lesthaeghe, 2000, Lesthaeghe and Moors 2000, Billari et al. 2006, Frejka, 2008, Sobotka, 2008). Moreover, texts *implicitly* assume that *individual behavior* can be characterized by the practice of postponement. Namely: people of present-day cohorts in propogative ages want to have (consciously, voluntarily) children later as cohorts born earlier. But research neglected this later aspect of postponement; studies were not interested in the phenomenon, whether the postponement is a result of *voluntary or involuntary* social action.

Considering the post communist countries we could detect a coexistence of individual behavior and societal development. We could find a coincidence between a high level postponement on the macro level, and a high ratio of failed intention realization, especially that of involuntary postponement of fertility intention of individuals. We can pose the question what kind of relationship could exist among them? Indeed, we could assume that “in the time of postponement” macro level as a contextual factor facilitates individual level postponement. Assuming this feature of the relationship, we also assume that postponement practiced by the individuals is close to conscious: people would like to have children later in their life voluntarily, and get later their children. We like, however, prefer an adverse causation.

We investigated the realization of within two year fertility intention, and arrived to the conclusion that in post-communist countries more than a half of the people could not realize their intention, but the majority of them maintained the intention to have a(nother) child at later time in the life-course. If this is the case for a quite important share of the people, macro-level postponement of births is caused by involuntary behavioral practices at a micro level, such as revisions of the birth timing. Involuntary character in the sense, that the births are originally foreseen in an earlier time-point in the life course. This reveals a unobserved new characteristic of the postponement in the post-communist fertility transition: failure in realization of childbearing intentions cause intention postponement, and probably, if it happens, a later realization of birth intention. Consequently, in the post-communist transition,

macro level postponement is in some extent the consequence of involuntary postponement at individual level.<sup>14</sup>

*Figure 4:*

The coincidence of changes in mean age of first birth (macro level postponement) and involuntary micro level postponement

Countries	Time window of the surveys	Ratio of postponers (%)	Yearly average change in mean age of first birth	Character of the postponement on macro level
The Netherlands	2003-2006	15	0.05	slight
Switzerland	2004-2007	27	0.13	moderate
Hungary	2001-2004	42	0.40	large
Bulgaria	2002-2005	44	0.27	large

*Source:* own calculations using the data described in Table A1.

All this do not mean that intended late birth is not a strong causal factor of the macro-level postponement. Although, with or survey we could not measure this relation. We have not considered several other factors, too. In order to have a more accurate account of micro level behavior and macro level postponement we should, of course, have more information about advanced and unintended births. Nevertheless, involuntary postponement of childbearing should be included into the understanding of reproductive decision making if discussing the post-communist fertility transition.

### **7. Concluding remarks**

We investigated the realization of short term fertility intentions in two western and two former communist countries in Europe. The success of realization was quite different in the four countries, and especially low in the former communist countries. This motivated us to consider country level/societal context as being responsible for the different strength of intention-behavior link. We could capture two types of explanations: firstly we showed that the stronger prevalence of people living alone and intending a child within a short time period increase the country level failure of intention realization in the two post-communist society. However this explained differences only partly. Other societal mechanism that could be ascribed to the profound and high tempo of societal transformation after collapse of the communism could play a greater role in the looser relationship between intention and behavior in these countries. Our results also point toward the need to reconsider individual childbearing behavior and macro level fertility postponement in the post-communist fertility

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<sup>14</sup> This causation could be an element of the “behavioral understanding of postponement” in the sense as Ni Bhrolcháin and Toulemon 2003 advocated it.



transition. Reviewing the relevant literature we found that the literature implicitly assumed that many people intended to have a birth, for whatever the reason, later in their life during the time of postponement. That is the general mechanism producing macro level postponement. Our results revealed a different causation during the fertility transition after collapse of the communism: macro level postponement of fertility seems to be partly *a result of failure in realization of childbearing intentions*. We also hypothesized, that it is perhaps a consequence and feature of behavioral change during unexpected social change in the former communist countries.

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Table A1. The main characteristics of the four surveys used

	Netherlands	Switzerland	Hungary	Bulgaria
Name of the survey	'Netherlands Kinship Panel Survey' (Netherlands GGS survey)	Schweitzer Household-Panel (SHPSI.-SHPSII.)	'Turning Points of the Life Course' (Hungarian GGS survey)	Social Capital Survey
Fieldwork first wave	2003/4 (1st wave)	2004 (6th wave)	2001/2 (1st wave)	2002
Fieldwork second wave	2006/7 (2nd wave)	2007 (9th wave)	2004/5 (2 <sup>nd</sup> wave)	2005
Non-adjusted panel attrition (inclusive deaths, emigration etc.) between the two waves	N/A	N/A	17%	25%
Longitudinal sample size (Unweighted N)	6326	N/A	13540	7481
The number of people intending to have a(nother) child within two years (subsample, unweighted - N)	458	385	1056	2196
Weighting variables	Bweight0	WP07L1S	S2_suly	No
Weighted subsample	493	409	1069	No
Description of data, methods, field-work	Dykstra at al. 2007	Voorpostel at al. 2007	Kapitány ed. 2003 (in Hungarian)	
Home page of the surveys	<a href="http://www.nkps.nl">www.nkps.nl</a>	<a href="http://www.swisspanel.ch">www.swisspanel.ch</a>	<a href="http://www.demografia.hu">www.demografia.hu</a>	--

Table A2.

The formulation of the fertility intention questions in the different questionnaire programs

NKPS (Netherlands)	SHPS (Switzerland)	HGGS (Hungary)	SCS (Bulgaria)
<p>Q.: <i>Do you think you'll have {more} children in the future?</i>  A.: Yes/no/don't know</p> <p>IF YES  Q.: <i>Within how many years' time would you like to have your {first/next} child?</i>  <u>Int.</u> If pregnant / partner pregnant= 0</p>	<p>Q.: <i>Do you intend to have a child in the next 24 months?</i>  A.: Yes/no</p> <p><u>Interviewer:</u> Pregnant women: not counting the child you are currently pregnant with = another child in addition to the one you are expecting?</p>	<p>Q.: <i>Would like to have additional child(ren)?</i>  A.: Yes /pregnant-partner pregnant /no, does not want/cannot have more children /don't know  I  F YES  Q.: <i>At what age would you like to have your next child?</i></p>	<p>Q.: <i>Do you intend to have (another) child during the next two years?</i>  A.: Definitely yes/ Probably yes/ Probably No/definitely no</p> <p><u>Interviewer:</u> if the respondent/partner is pregnant add: <i>besides the one you are expecting?</i></p>

*Table A3.*  
Means and Standard Deviations of Independent Variables

	Netherlands		Switzerland		Hungary		Bulgaria	
	Means	Std. Dev.	Means	Std. Dev.	Means	Std. Dev.	Means	Std. Dev.
Age	31,4	4,6	33,0	5,3	29,2	4,9	27,4	5,6
Sex (0-male; 1 female)	0,67	0,47	0,48	0,50	0,49	0,5	0,48	0,5
Parity1	0,41	0,49	0,37	0,48	0,30	0,46	0,33	0,47
Parity2+	0,14	0,34	0,18	0,39	0,17	0,38	0,25	0,43
Cohabiting at w1	0,31	0,46	0,19	0,39	0,19	0,40	0,13	0,34
Alone at w1	0,07	0,26	0,13	0,34	0,27	0,44	0,26	0,48
Separated from partner	0,02	0,14	0,02	0,15	0,04	0,19	0,03	0,17
Job	0,85	0,36	0,85	0,35	0,76	0,43	0,79	0,41
Education (continuous, classes)	14,6	2,1	13,2	2,7	11,7	2,5	11,6	2,85
Calvinist	0,18	0,38	0,34	0,47	0,15	0,35	-	-
Other religious denomination	0,06	0,23	0,08	0,27	0,11	0,31	0,14	0,35
Non-religious	0,57	0,50	0,13	0,34	0,21	0,40	0,09	0,28

Table A4

The distribution of different fertility intention-behavioral outcome among people living in different partnership-form at wave 1

Partnership forms/ Fertility outcomes	Countries			
	Netherlands	Switzerland	Hungary	Bulgaria
<b>Married (N=)</b>	278	278	578	1176
Intentional parents	78	61	47	42
Postponers	8	23	31	31
Abandoners	14	15	22	27
<b>Non-marital cohabitation (N=)</b>	142	77	207	363
Intentional parents	73	(60)	45	55
Postponers	15	(29)	41	33
Abandoners	13	(12)	14	12
<b>Living alone (N=)</b>	38	54	285	657
Intentional parents	((53))	(15)	21	21
Postponers	((24))	(46)	67	72
Abandoners	((24))	(39)	12	7
<b>All (N=)</b>	458	408	1069	2196
Intentional parents	74	55	40	38
Postponers	11	27	42	43
Abandoners	15	18	18	18

*Table A5*  
The distribution of different fertility intention-behavioral outcome according parities  
at wave 1

Parity / Fertility outcomes	Countries			
	Netherlands	Switzerland	Hungary	Bulgaria
<b><i>Parity0 (N=)</i></b>	<i>210</i>	<i>185</i>	<i>555</i>	<i>923</i>
Intentional parents	73	39	38	38
Postponers	18	40	56	57
Abandoners	9	21	6	5
<b><i>Parity1 (N=)</i></b>	<i>186</i>	<i>150</i>	<i>324</i>	<i>724</i>
Intentional parents	78	74	45	39
Postponers	6	14	33	35
Abandoners	16	12	23	26
<b><i>Parity2+(N=)</i></b>	<i>62</i>	<i>74</i>	<i>190</i>	<i>549</i>
Intentional parents	(65)	(55)	35	31
Postponers	(6)	(23)	18	9
Abandoners	(29)	(22)	47	60
<b><i>All (N=)</i></b>	<i>458</i>	<i>408</i>	<i>1069</i>	<i>2196</i>
Intentional parents	74	55	40	38
Postponers	11	27	42	44
Abandoners	15	18	18	18