

Balázs Kapitány, Zsolt Spéder:

Realization of birth intentions. An analysis focusing on gender related labor market effects

Abstract

In modern societies where the means of planning and controlling childbearing behaviors are available, the understanding of childbearing decisions became more and more important as a tool understanding fertility changes. In our investigation we will focus on the intention → childbearing relation, on the realization of childbearing intentions. Our investigations start at the point, when childbearing intentions are present, and we are interested which kind of factors helps on the one side, and which factors hampers the realization of childbearing intentions. This process is investigated by using two waves of the Hungarian Generation and Gender Survey: short term intentions (intending a(nother) birth within three years) and possible explaining factors are measured at the first wave of the survey, dependent variable (having or not a child within 3 years) is measured using the data of the two waves. We will use logistic regression to analyze associations. Among the determining factors we will focus on labor market effects, and on influences emerging from the monetary transfers of maternity. These are institutions of the national welfare regimes, and could be influenced if there is any intention to shape stimulating circumstances of childbearing. In our models we will show, that females' status related to labor market has significant effect on the risks getting the child if intention is prevalent.

I. Alternatives of Measuring Birth Intentions

In the Hungarian GGS, named “*Turning Points of the Life-Course*,” we have approached individual goals and intentions in general and childbirth intentions in particular from many perspectives. Variables measuring the structure of birth intention were constructed using the following questions:

- Would you like to have (additional) children?
- How many (more) children would you like to have?
- Can you imagine a circumstance or change in your life that would make you decide (after all) to have a(nother) child?
- At what age would you like to have your next child?

Based on the answers to the above questions, we have created four birth intention variables:

(General and timed birth intentions)

The first variable examines birth intention *in general*, without any further specification; that is to say, it looks at whether the respondents would like to have any more children (at all). Half of all the respondents (49.4%) – women below 45 and men below 50 years of age – planned a child at the first interview in 2001 (Table 2.1.). As a matter of course, birth intentions significantly differ according to parity (how many children the respondent has), age group, as well as the status and duration of partnership.

The adequacy or “predictive power” of a particular intention variable is by shown by to what extent it can predict future childbirth. With the aid of data of the second wave, this appropriateness can be examined, since we have information on the question of to what extent different intentions “resulted in” childbirth during a certain period of time¹. The first table shows the distribution of answers given to the initial intention question (“Would you like to have (additional) children?”) and the rate of those within each of the categories who had child during the period between the two waves.

Table 1.:
Birth Intention and the Rate of Realization, 2001-2005

Birth intention first wave (2001/2002) (Would you like to have (additional) children?)	Distribution of respondents	Rate of realization (had children until the second wave)
Intention	49,4	18,8
No intention	42,7	3,7
Cannot have more children	3,7	2,8
Don't know	4,2	5,7
Sum	100	

Less than one-fifth (18.8%) of those who ever planned children had children until the second wave of the survey, namely within three years. The rate of “success” is low; however, we shall be aware of the fact that students with no partner are also included among those who planned children, whose chance of childbirth within three years is rather low, whereas their chance of later childbirth is high. On the other hand, it is surprising that children were born in those groups, even though in quite low number, that claimed in 2001 that they could have no children any more.

When creating the second variable, we also took into consideration that at what age respondents intend to have their next children. In other terms: *within how many years* from the time of interview they would like to have the next child. During making decision regarding time intervals, we took into account that we planned interviews to take place with

¹ A child is conceived / born following the intention if the childbirth happened in July 2002 or later or the female respondent declared being pregnant at the second interview.

three-year intervals and the second interview was carried out three years after the first one, thus the success of intentions will be well investigated. One-fifth of respondents intended to have children within three years, one-tenth of them within 4-6 years, and another one-fifth even later (Table 2.). At this step, we did not decompose the group of those who did not want children (42.7%).

Table 2.:
Birth Intention, Timing and the Rate of Realization, 2001-2005

Birth intention and timing first wave (2001/2002) (Would you like to have (additional) children? / At what age would you like to have your next child?)	Distribution of Respondents	Rate of realization (had children until the second wave)
Yes, within three years	20,1	31,7
Yes, within 4-6 years	10,9	10,5
Yes, later	18,4	9,5
No	42,7	3,7
Cannot have more children	3,7	2,8
Don't know	4,2	5,7
Sum	100	

The childbirth rates of people belonging to each of the categories of this intention variable, which also takes the timing of the next child into consideration, meet our expectations. It is obvious that childbirth is more likely if they planned children within three years. However, the rate of 31.7% indicates that less than one-third of current, short-term childbirth intentions was realized. (In the subsequent chapters, we return to the questions of who was successful or unsuccessful in realizing their intentions and how one may explain it.)

Here, we direct attention to the fact that one-tenth of those who had planned childbirth for a later time also had children; that is to say, there were people who *brought forward* their birth intention, they realized it earlier than they had planned to. Therefore, in such a social climate that is generally characterized by delaying, the number of those realizing their birth intention in advance is not negligible.

Our third variable decomposes the group of those who do not plan children according to whether they *show willingness to modify their negative birth intention*. 16.3% of this group would easily modify their birth intention if “particular” circumstances changed, and one-tenth of them (10.2%) do not exclude the possibility of childbirth (“perhaps would modify his/her intention”). That is to say, we may not consider this group homogeneous either.

Table 3.:

Birth Intention, Timing, Possibility of Modifying the Negative Intention and the Rate of Realization, 2001-2005

Birth intention first wave (2001/2002)	Distribution of Respondents	Rate of realization (had children until the second wave)
Yes, within three years	20,1	31,7
Yes, within 4-6 years	10,9	10,5
Yes, later	18,4	9,5
No, but yes if circumstances changed	7,0	7,0
No, but maybe if circumstances changed	4,4	6,5
No, nevermore	31,2	2,6
Cannot have more children	3,7	3,5
Don't know	4,3	5,7
Sum	100	

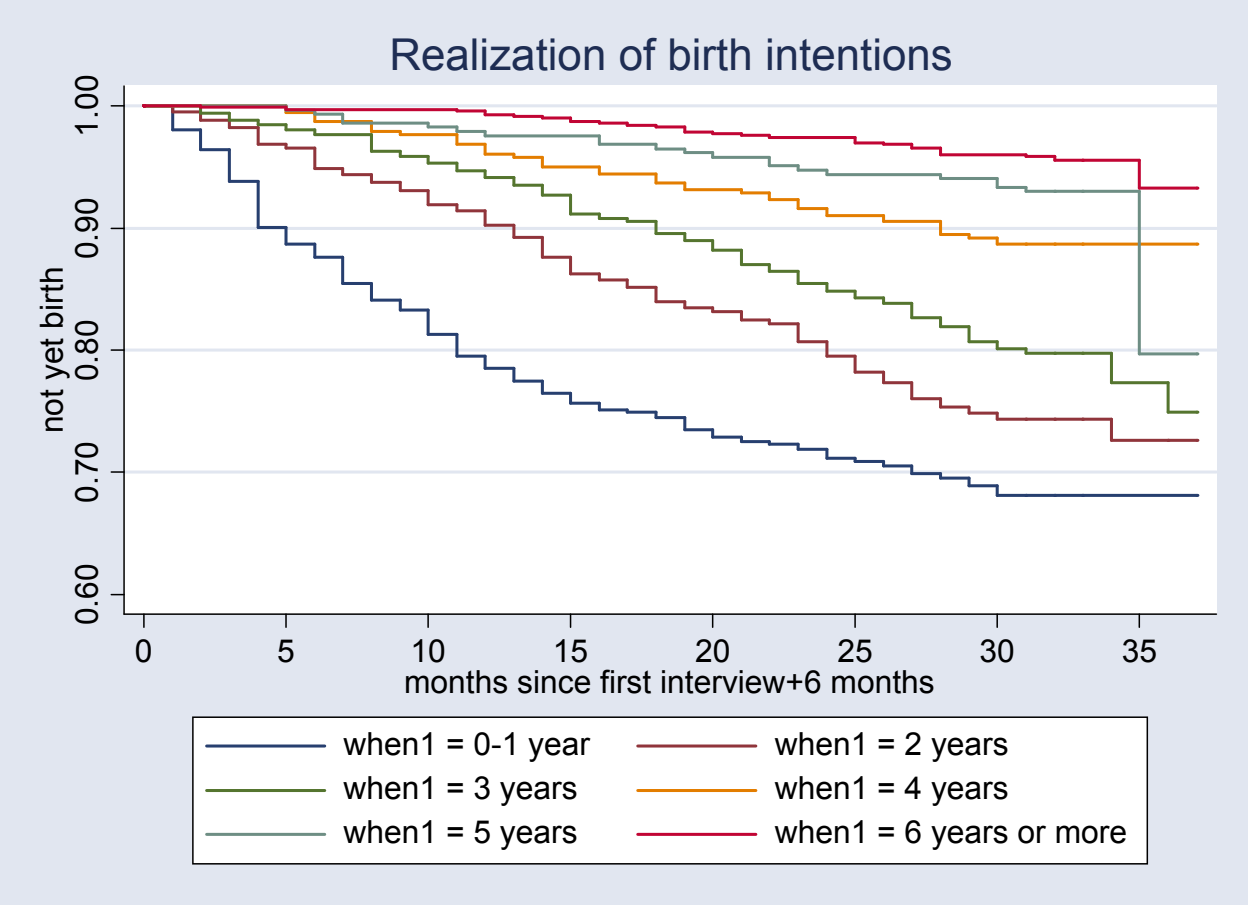
Our table indicates that the “block” of respondents who do not intend to have children is not homogeneous regarding the chances of childbirth: the “success indicator” of those who would modify their plans if circumstances changed hardly lags behind that of those who projected their birth intention to the far future, and exceeds respondent who “do not know”. The successful childbirth of those intending to have children may be explained by two interpretations: as we have already mentioned, children are born even when they are not intended to, and childbirth plans may presumably change when circumstances change (e.g. (new) partnership).

The variable including childbirth timing clearly proves that actual, short-term intentions are more likely to be realized than childbirth intentions for the far future. The relation between the planned time of childbirth and the realization of childbirth intentions may be investigated in detail. In the following figure, using the Kaplan-Mayer function, we demonstrate the chance of childbirth in time as a function of time span between the planned childbirth and the time of interview (years). More precisely, we separated those who want to have the next child within 1, 2, 3, 4, and 5 years, or within six years or even later. The survival functions for each of the above categories indicate the proportion of respondents who have no children yet (y axis) with a certain time after interview (x axis)².

² More precisely: we started to examine time six months after the interview, since we consider new-borns as the realization of birth intentions from the seventh month after the interview. (Those who were known to be pregnant at the time of the first wave are excluded from the analysis.)

The more a function decreases, the more it is likely that who belongs to the category had child. While 6.2% of all who intended to have children had a baby within 10 months, 18.7% of those who planned to have children within one year realized their intentions, 8.8% of respondents with childbirth plans for 2 years were successful, and 4.7% of those planning children within three years had children. Considering a 35-months time interval, however, there are hardly any differences between the three groups: 31.8% of those planning children within one year, 27.4% of those planning children within two years and 22.7% of those planning children within three years had children. These data unambiguously imply that it is inevitable to consider the time horizon of intentions and that the closer the time of childbirth to the interview is, the more resolute an intention seems.

Figure 1.:



(Planned completed number of children)

Our last intention variable significantly differs from the previous ones: it shows the number of *total planned children* (or the planned completed number of children). This number is calculated by summing the number of already born children and the number of planned children. In 2001, the average was 2.07 among respondents at fertility age, and it was 2.03 three years later. The social average of the number of total planned children is relatively stable in time and by social groups. The average was 2.05 in the family survey of 1992 (Kamarás, 1996), and it was around 2.1 both in PPA2 of 2000 and EUROBAROMETER of 2002 (Spéder, 2006). One significant component of this stability is the fact that its element is the current number of children, which may change only to a specific direction (it may increase) at individual level, and it changes relatively little on the average. However, one shall not forget that we could not specify this figure in the case of 12% of the respondents in 2004/5: 7.1% could not answer the question that how many more children s/he wants, and 4.9% did not give a figure. In the following chapter, we demonstrate that the planned completed number of children changes at individual level as well, but these changes are not at all or just minimally present at macro data.

The following table demonstrates the distribution of the number of total planned children and its group average by gender and age group. There are almost no significant differences: the completed number of children is below average only among a young age group, between the ages of 20-24. Of course, this may be the sign of a future decrease as well as the sign of the fact that the members of this age group are “far” from having children and their answers may be partly incidental.

Table 4.:
Distribution and Mean of All Intended Children by Gender and Age Groups. 2004-2005

	Planned completed number of children				mean
	0	1	2	3+	
<i>Gender</i>					
Male	7,9	16,2	54,5	21,4	1,98
Female	4,2	18,2	53,2	24,4	2,08
<i>Age group</i>					
20-24	13,1	12,6	57,8	14,6	1,82
25-29	6,7	13,4	54,7	25,1	2,04
30-34	5,2	15,2	53,9	25,8	2,06
35-39	5,2	14,6	50,6	29,7	2,17
40-44	4,9	19,9	48,0	27,2	2,11
45-50 (only male)	9,7	20,1	47,7	22,2	1,94
All:	7,6	15,4	49,6	24,1	2,03

Based on the above, we can conclude that birth intention may be “measured” by using various types of variables. It became obvious that behind the yes/no answer categories that seem to be unambiguous; there is a differentiated intention structure, which presumably changes in time. If we want a variable that incorporates the *resoluteness of intentions* and we consider the realization of intentions as the most significant criteria of this resoluteness, then we have to take the *time horizon of intentions* into account during the exploration of intentions. Finally, we cannot consider the answers “I do not want” as definite, since, as we have seen it, the practice of child intention of particular groups hardly differs from the short-term childbirth practice of those planning children in the far future.

II. *The Realization of Child Birth Intentions by Demographic and Social Criteria*

As we have seen, a considerable proportion of those involved could not realise their birth intentions. The lack of realization may have various reasons: we cannot exclude the possibility that the intentions themselves (may have) changed meanwhile or such circumstances took place (e.g. divorce) that impeded the realization of plans. Finally, we cannot exclude that social and demographic criteria may increase or decrease the chances of the realization of intentions. Hereinafter, we examine by social and demographic criteria if there is a difference between those with short-term (within 3 years) birth intention and those with general birth intention in 2001 in the success of realization of their intentions.

We premise that we did not suppose that the realization of intentions equally depended upon the criteria as their conception. That is to say, the fact whether someone wants to have a child or not does not (necessarily) depend on the same factors as whether someone could realize his/her intentions. Since, when examining realization, we look at that who intended to have children to what extent they could realize their plans. (Warning: the definition of factors that influence childbirth is related to both question, however, it is a third research problem).

Demographic criteria play a role in the realization of intentions as well. There is, however not significant, but tangible *gender* difference in the realization of intentions: more women tend to realize their intentions. We cannot decide whether its reason is that females are more dominant in childbirth decisions or they may control the process of childbirth more “efficiently”. At the same time, the minimal differences among those realizing their plans within three years refer to the fact that childbirth is a common issue of both men and women.

How may age influence the realization of intentions? To answer this question is especially important among those with determinate intention. According to our data, the

success of the realization of birth intentions unambiguously decreases as one gets older. The decrease is especially notable among respondents in their thirties, since more than the quarter (27.6%) of people in their early thirties could realize their intention, whereas only one-fifth (19.4%) of them in their late thirties could do the same. It will be very important to investigate this relationship with multivariate analysis, since if this relationship is significant even after controlling for other variables, then our assumption that the final number of children will presumably decrease at social level due to postponement will be justified. That is to say, the change-over to late childbirth model will be accompanied by lower number of children.

Regarding *parity* (the number of children already born), the most successful at realizing their intentions are those with one child (33.2%). In other terms: the second planned children are most likely to be born. We have no real explanation to the question of why those who have two children lag behind those having one child in the realization of their intentions; this may be due to the coincidence of other factors, what can be clarified only with a multivariate analysis.

Unambiguously, *partnership status* plays a crucial role among both who ever intended to have children and who plan children within 3 years. The chances of singles to realize their intentions, despite they plan to have children in the near future and the thought that “they potentially have partners” is presumably included in their plans, is one-third of the chance of those having partners. However, it is surprising that there is no difference in the realization of their intentions between married people and those who have a co resident partner (34.9% and 33.5%). If this relationship continue to be present in our multivariable models as well, we shall reconsider the relationship that we have phrased numerous times, namely that the spread of co resident partnerships has a negative influence on fertility.

The *duration of the actual relationship*, at least regarding one-variable effects, definitely plays a role in the realization of birth intentions. Originally, we did not suppose that the duration of relationship is related to the realization of determined birth intentions (within 3 years). However, our data unambiguously implies it, since the longer the actual relationship is, the less chance there is to have children. The decrease of chances is especially significant after the sixth year spent in the relationship.

The last demographic criterion, *time elapsed from last childbirth*, is also in connection with the success of realizing intentions. We receive the trivial relationship that there is more chance for the birth of next child when the intention is decided on right after the birth of the earlier child. In other terms, if the parents intend to have more children, it is realized with more chance when the least time elapsed between the childbirths.

Among social criteria, we investigate education level, and whether the respondent has already moved from his/her parents.

Regarding *education level*, we may see that birth intention is higher among those having college/university degree; however, it is surely in relationship with parity. Those with higher education degree also excel in the realization of their intentions: while only quarter (24.7%) of those having secondary school qualification could realize their intentions within three years, the corresponding figure was 33.9% among those having college/university degree.

Due to the uniquely rudimentary nature of the Hungarian rented flat market in European comparison (only 3-4% of the total number of flats is rented flat), numerous couples live in their parents' household during the first years of their common life. In various cases, due to the lack of rented flats, many couples are unable to live in their own household before their marriage or the birth of the first child, simply because they do not have their own flat.

During the interpretation of the Hungarian data, one shall take the above into consideration: Around one-third of those intending to have children within three years lived together with their parents. The quarter of those living together with parent/s, however, lived together with his/her spouse/co resident partner as well in a complex household that is mainly temporary. The birth of planned children of those living with parents was significantly lower (22% vs. 30%). Nevertheless, this is not caused by the "presence" of parents; it is rather due to lower rate of those living together with a partner. When we decompose the groups that still live together with parents and that have already moved, based on whether they have co-habitant partner or not, we may experience the followings: the 'success' of those living with their parents and without partner and those living without parents and with partner are rather low: 16% and 14%. However, those living with their parents and with partner tend to be more successful (40%) than those living together without partners (33%). Therefore, the impeding effect of living together with parents is seeming – it is rather the effect of relationship.

Table 5.:
Rate of Realization by Short-term and General Birth Intentions

	Rate of realization % (had children until the second wave)	
	General birth intention in 2001/02	Short-term (within 3 years) birth intention in 2001/02
<i>Gender</i>		
Male	13,3	25,5
Female	20,4	30,1
<i>Age group</i>		
20-24	13,0	35,4
25-29	23,0	32,7
30-34	20,7	27,6
35-39	13,9	19,4
40-44	3,3	4,6
45-49 (male)	(4,5)	–
<i>Parity</i>		
0	13,3	26,7
1	27,0	33,2
2	17,8	21,1
3+	(18,9)	(25,9)
<i>Type of partnership</i>		
No partner	5,7	10,4
LAT	12,1	25,0
Cohabiting	28,5	34,9
Married	28,8	33,5
<i>Duration of the actual partnership (month)</i>		
1-35	38,8	45,5
36-71	38,5	43,3
72-119	24,9	29,1
120-179	12,7	15,6
180-	5,4	8,5
<i>Time elapsed from last childbirth (month)</i>		
1-35	38,3	44,5
36-71	20,5	25,6
72-119	16,8	20,1
120-	3,9	(6,6)
<i>Level of education</i>		
Max. primary	15,4	25,8
Lower secondary	17,3	27,8
Upper secondary	13,1	24,7
Higher	24,0	33,9
<i>Housing condition</i>		
With parent(s)	10,2	22,4
Without parent(s)	24,1	30,6
<i>Living together with parent(s), and...</i>		
Without partner	7,3	16,4
With partner	34,4	40,4
<i>Living without parent(s), and...</i>		
Without partner	9,0	14,4
With partner	27,7	32,9
All (%)	16,3	27,7
(N= 100%)	(3832)	(1561)

III. The Effect of Labour Market on Realization of Short-term Birth Intention

When a planned child is not born during a given period, it may have various reasons from biological grounds and the deterioration of the relationship to the unfavorable change of macro-level circumstances (e.g. political instability in the given country).

Hereinafter, from these reasons, we examine labour market position in detail: we look at the relationship between labour market status and the realization of birth intentions with the help of simple crosstabs and then with logistic regression models.

Why do we consider this field relevant, which has not really been investigated so far? Due to childbirth intentions, 71% of women calculate with the deterioration of her workplace prospects and 61% of men suppose that the job situation of his partner will become worse. These are very high figures, and at present, respondents suppose the strongest negative change to take place here, besides the worsening of general financial situation. Examining labour market is important, since it is such a field of life that may impede the realization of intentions, regarding which state regulation may have a real effect so that its citizens really have their intended children. If there is a field in pronatalist population policy where state intervention is really justified and hurts no one, then it is the elimination of labour market factors that impede the realization of birth intention. Therefore, we consider the investigation of this issue particularly relevant from a policy perspective.

Generally, the issue of the effect of labour market on childbirth behavior has been long examined and well known in follow-up studies. For instance, Schmidt (2004³) describes how job insecurity decreases the chances of birth intention of German men. In the case of German women, Kreyenfeld (2005⁴) demonstrated that effects might differ by qualification level. According to his data, insecurity has negative effect on childbirth chances in the case of highly qualified women, whereas it increases the chances among women with low education level. These investigations, however, do not concern the question whether this effect works through intentions, and they investigate birth intention in general, not birth intention of those planning children, therefore the usefulness of their results for our analysis is restricted.

Our analysis is encumbered not only by the lack of similar studies, but also by the fact that even in the case of a similar research, we can reasonably suppose that effects vary from country to country, partly due to the differences between particular state labour markets and primarily owing to the different child-care allowances.

³ Schmidt, Christian 2004.: Kinderlose Männer in Deutschland. DIW-Materien 34. Berlin.

⁴ Kreyenfeld, Manuela 2005: Economic uncertainty and fertility postponement. MPIDR Working Papers. 2005/34. Rostock.

Hereinafter, we consider the rational financial calculation of respondents when estimating the effect of labour market factors; that is to say, they try to minimise the income decrease connected to having children. However, we did not forcedly extend rational calculation to all fields of decision⁵ but to calculations concerning household income of near future and concerning career chances. We suppose (and our data regarding the change of intentions confirm this) that people think of just several years of postponement⁶ when they do not have the planned children at the planned time due to labour market reasons (e.g. until the husband finds a new job or the wife gets entitlement for child care fee etc.).

When examining the relationship between labour market status and the realization of intentions, the horizon of our investigation shall be partially extended from individual to household level. Households constitute economic units; therefore, when they modify their intentions, respondents probably calculate what effect the decisions may have on the economic situation of the household as a whole.

On the other hand, we have to separate men and women at the beginning of the analysis, since childbirth has completely different perceived (see Fishbein-Ajzen questions) and real effects on the labour market status of the two genders. Here, we shall take the actual regulations of maternity allowances into consideration for the expected effects.

Variables regarding labour market status always refer to the time of the first wave, and we do not take those changes into account that happened between the first wave and the conception of the child. The reason for it is that only limited data is available concerning the three years between the two waves.

(Supposed Mechanism and effects)

In the subsequent chapters, we present the supposed effects, and then we examine the results within the framework of two-variable and then multivariable analysis.

(H1) In the case of women who are not on maternity leave (in other words, who are employed, self-employed, unemployed or other inactive), we suppose that the intentions of inactive or low-waged women are more likely to be realized, since the financial ‘bar’ favours postponement, because women have to ‘give up’ less with maternity. For inactive (unemployed or other inactive) women, the subjective right to child-care fee (GYES) means a stable social insurance coverage, an accepted social status and not negligible monetary

⁵ We do not suppose that people carry out a cost-benefit analysis for the entire life span, with discount rates, and adding the value of household work and others.

⁶ Certainly, we know from empirical data that in many cases postponement will mean not having children at all.

allowances for three years after the birth of the child. Income-dependent child-care fee (GYED) compensates the income loss of women with a low income who are active at the labour market in a considerably high ratio (almost 80%, without family allowance) for two years after the birth of the child. In case of middle-sized or higher (exceeding twice the sum of the minimal wage) labour income, the replacement ratio is decreasing steadily due to the upper limit of child-care fee, so the material losses related to child birth and the financial bar to the realization of birth intentions are also growing in parallel with the additional growth of income.

It is important to see that the whole system of maternity payments turns the expected effect completely ‘upside down’, because the burden of the relative material costs of the child would rise in parallel with the decrease of income, without maternity payments. (In reality, we will assume that the effect goes this direction among men.)

(H2) In the case of employed women – according to our hypothesis –, their job security may also effect the realization of birth intentions. Paradoxically, we may expect that the likelihood of the birth of a planned child is higher in the case of a legal but insecure job, since the duration of maternity leave – three years in Hungary, which is quite long in international comparison – may mean a relatively stable status for those who have an insecure job. In the case of an insecure job, the quick realization of birth intentions is also supported by the argument that if the mother loses her job, she would receive only significantly smaller amounts of maternity payments.

Here we hypothesize a ‘reverse effect’ again: ‘Normally’, without maternity payments, an insecure job would increase the risk that the parents will not be able to cover the cost of child-rearing, and thus it would decrease the likelihood of realizing their plans. Rational choice theory (e.g. Petersen-Lübcke 2006⁷) assumes an effect that goes in this direction, and we also will presume such an effect in the case of men.

(H3) In the case of mothers on maternity leave, we may expect that the likelihood of the realization of birth intentions is ‘U’-shaped, according to the status of the mother, supposing rational calculation.

In the case of women with low educational level who were inactive or had very low income preceding the first/last childbirth, the financially rational decision is to give birth to another child within three years following the birth of the first/last one. The chances of this group to return to the labour market are weak, and the birth of another child means three more

⁷ Thieß Petersen – Britta Lübcke: Elternschaft als ökonomisches Entscheidungsproblem. In.: Zeitschrift für Bevölkerungswissenschaft. 2006(2), 187- 230.

years (if it's the third child, eight years, due to child-care support /GYET/) when the mother is 'legally' away from the labour market, and in addition, she receives some allowance. (Its extent is equal to the minimal old-age pension.)

When examining middle-status women, the birth of another child without returning to work is financially not profitable, since they would only receive child-care allowance in this case, instead of the higher sum of child-care fee.

Also for those mothers who had high-salary jobs when they gave birth to their last child, the logical decision is to have another child within 30 month, because the child-care fee that they receive for the second child reaches the highest possible amount.

(H4) We can suppose that a 'partner-bonus' exists among women, according to which if the respondent has a co-resident partner who is active on the labour market in the traditional sense of the word, then the chances of realizing their intentions is significantly higher – since if there is a partner with a gainful employment, the income loss connected to child birth is considerably smaller.

(H5) As a matter of course, beside the evaluation of material aspects, the loss of job of women has to be taken into consideration from another point of view as well – the birth of a child and the withdrawal from job that accompanies it signify a breaking point in the process of career building. Leaving the world of paid work may mean the loss of one of the 'meanings' of life for many women. Consequently, we may suppose that to decide to give birth to the planned child is more difficult for those for whom career building and work are more important.

(H6) We assume that a greater proportion of those women who believe in traditional gender roles (breadwinner man, woman brings up children) than those who possess 'modern' role-expectations are able to realize their plans. However, the hypothesis is complex here, for the reason that following the traditional distribution of gender roles may also hinder the realization of intentions, if the partner is missing or thinks differently.

In the case of men, the supposed effects are much simpler than among of women:

(H7) Active men, especially with high income, have higher chances of realizing their intentions than inactive ones.

(H9) We believe that those men who accept that career may be more important for a woman than having children are more likely to postpone the realization of their birth intentions.

(H10) Finally, we suppose that a greater proportion of men who do not follow the traditional gender roles are inclined to delay the birth of a planned child, compared to men who believe in the traditional ‘working man’ – ‘housewife woman’ division of gender roles.

Bi-variate Results:

H1: In the case of women who are not on maternity leave, in fact, there is a significant relationship between income and success ratio, but at first sight, the direction of the relationship only partially coincides with our preliminary hypothesis.

Overall, the ‘rate of success’ is below the average among inactive women (we have also included some women in this category who worked only a few hours a day), contrary to our expectations. If we divide this group further, we can see that the primary reason for this is not the low success rate of the unemployed (but that of e.g. students, disability pensioners, other inactives), because the rate of 31% among unemployed women almost reaches the rate of the low-income group.

However, the relationship among the employed is similar to what we expected: the chances of giving birth to a planned child are higher among women with low wages and salaries (who are compensated to a larger extent through maternity payments) than among women whose income loss exceeds the double of minimal wage and is compensated to a smaller extent. In the case of the uppermost income quintile, this trend is unexpectedly broken again – the rate of success starts rising.

On the whole, we may conclude that employed women with average or a little higher income have the lowest chance of realizing their birth intentions. About four-fifth of women in this group did not give birth to their children at the time when they planned to. These data confute the alternative hypothesis that higher income would increase the chance of making life more purposeful concerning childbirth (as well). On the contrary, it seems that high own work-income makes it more difficult to realize such ‘alternative’ aims in life – which encumber entering employment – as giving birth to a planned child.

However, the situation is more complicated if we differentiate between women who have children and who do not. Despite of the low number of cases, it can be established that the ‘rate of success’ is significantly lower among women who have children and work (that is, who have returned from child-care leave to labour market) than in the case of childless women: it is only 13% in the three middle income categories! It implies that women who return to the world of work after the birth of their first children and after the end of child-care

leave – which is quite long in international comparison – and occupy an average position, have quite poor chance of realizing their intentions of the birth of another child in Hungary today. In case of mothers with relatively low or high income and who belong to the other inactive categories, the chance of executing their plans was considerably higher, about 30%.

Table 6.:

Income Situation and the Realization of the Short-term Birth Intention. (Female)

INCOME SITUATION (2001/2)	Rate of realization (%)	
	All female, who are not on maternity leave	All mothers, who are not on maternity leave
Other inactive	24,6	27,9
Very low income	34,0	30,0
Low income	35,1	11,5
Medium income	23,2	15,6
high income	17,7	11,1
very high income	26,9	25,0
All (%)	26,7	19,6
(N= 100%)	(621)	(214)

H2: Definitely, job security is not relevant for each working woman; its operationalisation is principally possible among employees. Hereinafter, we regarded the job of those employees insecure who:

- were very worried about the loss of their job or
- who had already been unemployed for more than three months or
- who were employed with contract (not permanent) employment.

Defined as above, almost 40% of employed women had an insecure job. However, our hypothesis was not verified – a secure job did not increase the chances of realizing birth intentions, and what is more, it rather decreased it (although not significantly). The question emerges that whether not favourable operationalisation lead to this result. Of course, we can never exclude this option with confidence, but we also tried to define job insecurity several different ways – with similar inefficiency.

Table 7.:

Job Security and the Realization of the Short-term Birth Intention (employed women).

	Rate of realization (%)
Secure job	29,8

Insecure job	24,9
All employed women with short-term birth intention (%)	27,5%
(N= 100%)	(432)

H3: Due to the small number of cases, the question of giving birth to another child of women on maternity leave can be examined in a quite complex way on the available database. That is, among the 541 women who were on child-care leave during the first wave of the survey, ‘merely’ 119 respondents were not pregnant at the time of the interview and planned to give birth to another child within three years. No data is available on their last employment income before the first wave.

Owing to the above-mentioned shortcomings, status was operationalised with education level. In order to raise the number of cases, based on the data concerning wives / cohabiting partners, we also took into consideration those male respondents who had children and whose partners were on child-care leave at the time of the first interview and who planned the birth of another child within three years. (The considerably low rate of splitting up among these relationships made this procedure possible.) Thus, useful case number rose to 245, which made hypothesis testing possible.

The result indicates strong significant relationships, which, however, only partially confirms the assumption: the chance of realizing intentions grows parallel to the education level of women – two-third of graduated women who are on maternity leave and plan another child are successful in realizing their plans. In case of lower levels of education, the rates are significantly lower, and this decreasing trend does not break either in the case of the lowest education level groups.

Table 8.:

The Realization of the Short-term Birth Intention by Education Level of Women on Maternity Leave or Man with Partner on Maternity Leave.

Level of education of the female partner	Rate of realization (%)
Max. primary	36,0
Lower secondary	40,4
Upper secondary	44,3
Higher	66,0
All (%)	46.1
(N= 100%)	(245)

Compared to employees, the difference between success rates is conspicuous: while only every fifth working woman with above-average earnings (and usually with college or university degree) realized her plans, two-third of graduated mothers who were on child-care leave actually gave birth to their planned additional children.

H4: When operationalising ‘partner bonus’, women with co-resident partners were grouped into two categories according to whether their husband / partner had a traditional work (as employee or entrepreneur) or not. The expected effect is well observable: the rate of success is considerably higher, not only compared to women without co-resident partner but also to women whose partners do not work. (Interestingly, if examined by parity, the relationship is considerably stronger among childless women – it seems that the role of stable employment of the male partner is stronger in the case of the birth of the first child.)

Table 9.:

‘Partner Bonus’ and the Realization of the Short-term Birth Intention. (women)

	Rate of realization (%)
No partner	19,9 %
Partner with ‘normal’ job	38,4 %
Partner without job or with ‘other’ job	30,1 %
All (%)	30,1 %
(N= 100%)	(740)

H5: The importance of work

When one postpones the decision concerning child birth, the importance of paid work and career building are such factors that provide an option not only for those who work at the moment, but also for every woman. After all, who is at home with her little child has to face this dilemma, too. The question was operationalised in several different ways again, and finally, we decided upon a simple, well tried variable that consists of a classical statement (Women with good profession and good job are right to consider work more important than having more children).

However, contrary to our expectations, no relationship was found between the importance of paid work, career and the birth of the planned child at two-variable level in the case of neither operationalisations. This result is especially remarkable because if we do not narrow down the analysis to those who have concrete intentions, a relationship can be observed between the work-centeredness of women and childbearing both in general, according to the literature, and in this particular database. Therefore, we may suppose that the

effect cannot be detected because the relationship is effective between the attitude towards work and the concrete intention, not between the latter one and its realization. In other words, already a smaller proportion of women with work-centered attitude plan childbirth – at least at a particular, close point of time. However, the proportion of those who plan a child, ‘despite’ of their work-centered attitude, and give up their plans is not above the average. Heaton et al. (1999⁸) arrived at a similar ‘resultlessness’ when they entered the subjective, respondent-evaluated importance of career and entertainment into their model. (The importance of entertainment proved to be a good indicator in the case of deliberate childlessness.)

H6: Traditional gender role attitude was also operationalised by a traditional statement that differentiates respondents well: “It is right if work is more important for the husband, and the home and children for the wife, even if they both work.” Neither type of relationships was found in general and also by parities.

The latter results imply that, as opposed to what was expected, no effect – nowise a strong effect – could be attributed to subjective variables when we examine the realization of intentions. It seems that the attainment of intentions is ‘beyond’ the scope of values and attitudes, and their effects can be demonstrated – in conformity with the results of literature – primarily during the formation of intentions.

In the case of men, the overview of results is a lot easier:

H7: The hypothesis concerning the connection between activity, income and childbirth proved true at two-variable level: the chance of inactive men to realize their plans was below the average, while that of men with high own income was somewhat above the average. Not only the pattern of the relationships differs from the ‘U’ shape that was observed among women, but also its strength – the relationships are much weaker here. In fact, only the two extreme groups differ from the average – the chances of low and middle income groups are not different. While smaller differences can be observed between men who have and who do not have children, on the whole, the above relationship seems true for both groups.

Table 10.:

Income Situation and the Realization of the Short-term Birth Intention. (Male)

⁸ Tim B. Heaton, Cardell K. Jacobson, Kimberlee Holland: Persistence and Change in Decisions to Remain Childless In: *Journal of Marriage and the Family*, Vol. 61, No. 2 (May, 1999), pp. 531-539.

INCOME SITUATION (2001/2)	Rate of realization (%) male
inactive	15,5
Very low	26,0
Low	26,2
medium	26,0
high	27,8
very high	30,5
All (%)	25,4
(N= 100%)	(822)

However, in the other three cases (H8-H10), there is no significant relationship among men even at two-variable level. These rather ‘anemic’ results confirm the traditional practice that emphasize the relationship between the labour market position of the mother and childbearing.

Multi-Variate results

As we can see from the previously demonstrated two- and three-variable relationships, the fulfillment of intentions is a complex social phenomenon, which is related to diverse, but mainly objective demographic and social background factors. The effect of individual background factors are naturally related to each other. The connections that we have so far revealed imply that, in certain cases, the nature of relationships differ (e.g. activity status or income) among women and men and in the case of different parities⁹.

These results would justify at least four logistic regression models: by age and whether the respondent already had a child or not. However, the size of the database does not make it possible. (N: 1561, and if divided into four parts, the number of cases would fall only between 330 and 463.)

So two decisions are possible: On the one hand, we build just two models by gender (men N: 822, women N: 739), and we include parity only as a variable in the model. This version is supported by the facts that (1) it basically follows ‘demographic’ logic, and (2) if we analyzed by parity, even the two-group decomposition would not be sufficient, because our data imply that the direction and strength of effects are assumed to be different in several cases among respondents with one and with two children. (Case number is quite low in the case of higher number of children.)

⁹ This is not surprising, literature also confirms it, and we also experienced something similar on the same database when we examined childbearing in general (aside from intentions).

The other option is that we examine the two genders in one model, and we build the models according to parity. The main argument for this is that many variables are related to parity and they can be built up differently by parities (e.g. time elapsed since the birth of the last child, length of partnership etc.).

As we can see from what follows, we decided upon building different models by gender. The main argument in favour of our choice is that we planned to examine the factors that impede the realization of intentions, laying special emphasis on the obstructive factors that are related to the labour market. In addition, the latter ones are quite strongly differ in the case of the two genders, since childbirth has a completely different impact on the labour market position of the mother and the father. Of course, our decision is a compromise, as our models are only fractionally able to indicate effects that have diverse directions in the case of different parities. Hence, we endeavored to attract attention to the effects that evidently differ by parities, even during the examination of the two-variable relationships.

Our model building follows a complex stepwise logic. At first, basic objective variables of demographic and life-cycle type were entered into the models (year of birth, number of children; birth of the previous child / if no children, time elapsed since the beginning of the partnership; type of partnership), then two important general social indicators were added (school qualification, housing condition). Then a so-called labour market model was build, which is – within certain limits – suitable for testing the previous hypotheses using multivariate control.

Finally, both the variables of the extended demographic and that of the labour market model were entered into the so-called complete model. The *Table 11.* summarizes the logic of modeling:

Table 11.:
Logical Steps of the Modeling Process.

	Basic model	Labour market model	Complete model
year of birth	X		X
parity	X		X
Type of partnership	X		X
'risk time'	X		X
Level of education	X		X
inhabitant density at home	X		X
Activity/ status		X	X
'partner bonus'		X	X
Workplace security		X	X

Female role attitude (work vs. family)		X	X
Gender-role attitude		X	X

The variables in the basic model that basically played a controlling role were operationalised as follows: We included the age of the respondent as a continuous variable, because an adequately accurate, significant linear two-variable relationship could be observed in the case of both genders, which does not justify the use of age groups.

According to the above, parity was treated as a categorical variable, differentiating between those who does not have any children, who have one children, who have two and who have three or more children. Concerning the type of partnership, we could separate four categories: beside those who have a cohabiting spouse and those who have a cohabiting partner, respondents who does not live with a partner were further decomposed into two groups in the basis of whether they reported a non-resident partner (LAT) or not. We also entered a variable named ‘risk time’ as a control variable, which includes the time elapsed since the birth of the previous child in the case of respondents with children, and the time elapsed since the beginning of the partnership in the case of childless respondents. (The reference group includes those who do have neither children nor a co-resident partner.) In addition, a country-specific education level variable with four categories and inhabitant density (square meters/person) as a continuous variable were included.

The following variables were entered into the labour market model:

The categorical variable of personal income status, combined with activity status (activity/status variable), is the combination of variables described in the previous chapter. This variable includes inactives – decomposing women on child-care leave according to their education level – and five groups of actives of approximately the same size, based on the size of their personal income.

Beside the unchanged categorical subjective variable, ‘partner bonus’ variable had to be altered to a certain extent in order to reduce autocorrelation with partnership type variable. The three-category variable was transformed into a two-category one, with value ‘1’ for all those who had reported a partner with secure job.

Results of the Models

In the case of women, the effects of control variables of the first model considerably weaken each other; however, all in all, all variables – except parity – had significant effects. It

is remarkable that after controlling for all other variables, the effect of partnership status seemingly went through a major change after entering the combined risk time variable: the advantage of respondents with co-resident partner dissolved, while the chance of non-resident couples seemed significantly higher! However, this is a seeming relationship, because ‘risk time’ variable does not differentiate between those who go out with someone and those who do not have a partner at all, so respondents with a co-resident partner or married respondents are not controlled for.

We entered only the effect of the labour market variables into the second model. Compared to two-variable effects, no significant changes can be observed (among women): the combined activity/status variable and, to a certain extent, ‘partner bonus’ have significant effects on the realization of plans, while job security and subjective variables continue to have no effect.

All the variables of the first and the second models were entered into the second, combined model. Obviously, effects partially smother each other: the effect of ‘partner bonus’ disappears, because the age and school qualification of the respondent – and of his/her partner – determine with fair change whether the partner has a secure job or not. The effect of the activity/status variable has somewhat weakened, but the relationships observed here has remained statistically significant. To this extent, we may conclude that the labour market position of women indeed takes a serious effect upon the success of realizing their birth intentions.

In the case of men, the picture is much simpler: age and partnership status are the dominating control variables, the rest of the variables plays only supplementary role. Indeed, there are no significant effects in the case of the labour market model: the explanatory power (Nagelkerke R^2) of the whole model is negligible, thus these variables cannot considerably contribute to the explanation of the question of in what groups the realization of birth intentions is low.

Table 12.: Odds Ratios of Logistical Regression Models Analyzing the Realization of Short-term Birth Intentions (Female)

FEMALE	Uncontrolled effects	Basic model	Labor market model	Complete model
	Exp. (B)	Exp. (B)	Exp. (B)	Exp. (B)
Year of birth	1,091 ***	1,095 ***		1,085 ***
Parity (ref: 0)	*			
1	1,186	,970		,765
2	,561 **	,643		,459 *
3+	1,155	2,049		1,447
TYPE OF PARTNERSHIP (ref: no partner)	***	**		**
LAT	2,276 ***	2,243 ***		2,325 **
Cohabiting	3,457 ***	1,789		1,303
Married	3,363 ***	2,574 *		1,766
'RISK TIME', month (ref: non applicable)	***	***		*
1-35	3,399 ***	2,835 *		3,137 **
36-71	1,997 **	1,717		2,331
72-119	,846	1,031		1,398
120-	,392 **	,782		1,113
LEVEL OF EDUCATION(ref: max. primary)	**	**		**
Lower secondary	,970	1,029		,876
Upper secondary	,624 *	,684		,557 *
Higher	1,037	1,303		1,127
INHABITANT DENSITY (m ² /person)	1,001	1,010		1,008 **
ACTIVITY/STATUS (ref: other inactive)	***		***	**
Very low	1,575		1,333	1,319
Low	1,644 *		1,370	1,259
medium	,913		,738	,958
high	,643		,498	,577
Very high	1,095		,831	,724
Maternity leave, primary	2,047		1,854	,891
Maternity leave, Lower secondary	2,193 *		1,888	1,266
Maternity leave, Upper secondary	2,267 **		2,028 *	2,533 **
Maternity leave, Higher	7,100 ***		5,283 ***	3,608 **
'PARTNER BONUS'(ref: no)	***		**	
Partner with secure job	2,025		1,850	1,273
WORKPLACE SECURITY (ref: inactive)				
Secure job	,836		1,374	1,267
Other job	,660 **		,974	1,049
FEMALE ROLE (ref: family oriented)				
Doubtful	,808		1,025	,991
Carrier oriented	,979		1,147	1,012
GENDER ROLE (ref: egalitarian)				
Doubtful	,555		,529 *	,538
Traditional	1,136		1,054	1,103
Nagelkerke R2		0,18	0,11	0,22

Table 13.: Odds Ratios of Logistical Regression Models Analyzing the Realization of Short-time Birth Intentions (male)

MALE	Uncontrolled effects	Basic model	Labour market model	complete model
	Exp. (B)	Exp. (B)	Exp. (B)	Exp. (B)
Year of birth	1,076 ***	1,092 ***		1,098 ***
Parity (ref: 0)	*			
1	1,557 **	1,272		1,105
2	,931	1,017		,890
3+	,775	1,729		1,456
TYPE OF PARTNERSHIP (ref: no partner)	***	***		***
LAT	3,468 ***	3,125 ***		3,143 ***
Cohabiting	6,244 ***	6,477 ***		7,874 ***
Married	5,678 ***	5,930 **		7,247 ***
'RISK TIME', month (ref: non applicable)	***	*		*
1-35	4,746 ***	1,301		1,267
36-71	3,321 ***	1,073		1,154
72-119	3,203 ***	1,404		1,590
120-	,292 **	,203 *		,236
LEVEL OF EDUCATION(ref: max. primary)				
Lower secondary	1,349	1,405		1,315
Upper secondary	1,351	1,240		1,120
Higher	1,900 **	1,769 *		1,526
INHABITANT DENSITY (m ² /person)	1,006	1,020 ***		1,019 ***
ACTIVITY/STATUS (ref: inactive)	*			
Very low	1,888 *		1,877 *	1,615
Low	1,910 **		1,952 *	1,877
medium	1,909 **		1,908 *	1,635
high	2,056 **		2,156 **	1,939 *
Very high	2,365 ***		2,493 **	2,314 **
'PARTNER BONUS' (ref: no)				*
Partner with secure job	1,259		1,172	,690
WORKPLACE SECURITY (ref: inactive)				
Secure job	1,226		,831	,740
Other job	1,424 *		1,025	,974
FEMALE ROLE (ref: family oriented)				
Doubtful	,680		,677	,709
Carrier oriented	,874		,892	,989
GENDER ROLE (ref: egalitarian)				
Doubtful	1,336		1,542	1,552
Traditional	,980		1,040	1,125
Nagelkerke R2		0,20	0,03	0,22

IV. Conclusion

All in all, we may conclude that although there are many ways to examine birth intentions, results definitely indicate that a remarkably high proportion of intended children are born when they are planned to. This low ‘success’ is not to be considered a favourable phenomenon, either on social or individual level, since it implies that a considerable proportion of people are not able to realize their plans, the efficacy of the planning of life courses is quite low. Out of the reasons of postponement / cancellation, in the present study we examined the reasons of labour market in detail, since state regulation may play a serious role in this area of life.

The difference between the successes of different activity groups cannot inevitably be anticipated, because, according to the prevailing theories, the differences had already played a role during the formulation of intentions as well, and now we exclusively examine respondents with “general” and with “determined” birth intention. From this perspective, it is undoubtedly surprising that labour market status plays quite an important role – among women – in the realization of intentions! That is, according to our results, while labour market situation has only a minimal role in the incidental postponement of planned child birth among men, such effects work in the case of women. However, among women, objective background factors were related to the realization of plans, the supposed subjective effects (e.g. the importance of work in the life of the respondent) could not be proven at all. As we had supposed, the hypotheses that the evolution of birth intention itself plays a more important role than the success of realization were verified in the case of subjective factors. However, according to our results, the realization of plans is affected by the labour market status, more precisely, by the question of for women with what status does child-care system make childbirth a ‘rational’ choice. It implies that the present family support system has selective effects, and it is worthwhile to pay attention to the fact that the present system makes the realization of birth intentions possible in certain social strata and family types to a larger extent than in others.

To put it simple, this selecting effect can be described as follows: the proportion of low-income (but not inactive) women who are able to realize their birth intentions is above the average – in all likelihood, child-care fee with good substitution value, which is favourable to them, must help them in this. However, the chance of mothers on child-care leave with relatively high status to have another child is higher – undoubtedly, also due to reasons related to labour market and family support. However, if the mother has returned to

the labour market, the chance of realizing her plans decrease significantly. These results imply that labour market and family support systems contribute to the tendency that the willingness of lower middle class women to have children has decreased rapidly from 1990 on, and today it is the lowest (one child is becoming more and more typical), while polarization tendencies can be observed in the upper social strata: the rates of women with no child and with more than one children increase, while that of women with only one child decreases. (E.g. from 28.3% to 23.8% between 1990 and 2005 among graduated women¹⁰)

We may claim that the present labour market impede the realization of birth intentions in several cases, and this bar is the strongest when women with average and somewhat below the average school qualification decide on the birth of their additional children.

Our results only partly coincide with the well-known relationships in the literature. According to the literature on economic rationality, the higher income of men motivates childbirth, while that of women hinders it. The explanation of this phenomenon is that the higher income of men (of the husband) can make a good living even after the birth of children, and the counter-motivations related to the income of women is based on the logic of “opportunity cost”: the higher the earnings of the woman is, the greater amounts of income she had to give up as a consequence of childbearing. At the same time, the relationships are surprising to the extent that they do not refer either to the development of motivations or to the formation of intentions but to the realization of intentions. That is, they refer to the fact that *the mode of action exerts its influence (also) “after” the formulation of intentions.*

¹⁰ See e.g. Mikrocenzus 2005. Termékenységi adatok. KSH. 2006. (Microcensus, Fertility Data)