Do economic, financial, and childcare factors matter in the decision-making process?

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Contemporary low levels of fertility in many developed countries have given rise to the question which factors affect childbearing behavior. Research indicates that fertility development is increasingly tied to employment opportunities, to the family's financial situation, and to care support (see, e.g.: Ahn and Mira 2002; Brewster and Rindfuss 2000; Engelhardt, Kögel and Prskawetz 2004; Kreyenfeld 2005; Kohler and Kohler 2002; Misra, Budig and Moller 2007; Misra, Budig and Boeckmann 2011). Evidence also exist that these factors exert different influence on women's and on men's childbearing, on those of childless persons and of parents of different parities (Neyer, Lappegård, and Vignoli 2011). Researchers generally conclude that these differences are due to different consequences of childbearing for women and men of different parities or due to different preferences (Matysiak and Vignoli 2010; Vitali et al 2009). Yet, as far as we know, there is hardly any knowledge to which extent these factors and the anticipated consequences of childbearing on these factors actually influence the decision-making process.

In this study we attempt to shed light on the influence of employment opportunities, of the family's financial situation, and of care options on the decision-making process by disentangling whether such factors are important for the intentions to have a child in the near future and whether the consequences which childbearing would have on these factors matter for the intention to have a child. We make use of the first wave of the Generations and Gender Survey (GGS) of eight European countries, Austria, France, Germany, Estonia, Hungary, Bulgaria, Romania, and Russia. The Generations and Gender Survey was specifically designed to study the impact of economic, social, and attitudinal factors on family formation from a gender perspective. In addition to collecting information from women and from men separately, the GGS also contains questions which enable us to examine decision-making processes.

These questions are based on the theory of planned behavior (Ajzen 1991). This theory focuses on the determinants and perceived consequences of an intended behavior. Among other aspects, this theory assumes that a person's evaluation of the potential (positive or negative) outcome of her or his behavior will affect her action. Since having a child affects a person's entire life, her/his future life course and that

[^0]of her/his partner and family, we assume that a person weighs her or his decision of having a child against the potential effects that a child might have on various aspects of her/his life, her/his partner's life, and her/his family. Moreover, different (groups) of people attribute different importance to specific aspects in their lives or their partner's and family's life, so that even a perceived negative consequence of an intended behavior on this life aspect might not hamper this behavior. We therefore examine to what extent the respondent's employment and employment opportunities, the partner's employment resp. employment opportunities, the financial situation, and care options actually matter in the decision making process and whether the anticipated consequences on these aspects affect the intention to have a child in the next three years.

Assuming that women and men, childless persons and parents value their own/their partner's employment opportunities, the financial situation of the family, and care options differently, we carry out separate analyses for each of these groups, distinguishing furthermore between parents of one child and those of two or more children. We analyze a person's intentions to have a child within the next three years. By limiting the question on intentions to an overseeable time period, the GGS offers a better measure of prediction of the actual behavior than a time-unrelated intentions question would do (Misra, Budig, and Moller 2007), and it thus allows us to better assess the impact of the determinants and the perceived consequences on the intended behavior. We use an ordered logit model (accounting for the answer categories "definitely yes, probably yes, probably no, definitely no" to the question of whether the respondent intends to have a child in the next three years). In all models we limit the sample to women aged 18 to 42 and to men aged 18 to 49, and we control for the respondent's age, educational attainment, marital status, the educational attainment of the partner, for the age of the youngest child and in the models with parents of more than one child, also for the number of children. We furthermore control for intra-class correlation on the country level.

## Results:

Summarizing the main results of our analysis (see Table 1 to 3 in the Appendix) we find that overall, women and men who expect that having a child will have negative consequences on their employment or the financial situation of their family are less inclined to have a child than those who do not expect negative consequences on their employment or financial situation. In general, we also find that those who state that their decision to have a child depends a lot on their employment opportunities and on the financial situation of their family are less inclined to consider a child in the next three years than those who do not emphasize the importance of work and financial aspects in their childbearing decisions. However, we also see that these results do not hold for women and for men as well as for all parities to the same extent. The importance that men attribute to their employment in the decision-making process does not seem to matter significantly for their childbearing intentions. This contrasts with the results for women. Moreover, the effect which having a child would have on their partner's employment opportunities matters for women's childbearing intentions. It also matters for the childbearing intentions of childless men, but not for the childbearing intentions of fathers. This corroborates research findings that having a child alters the gender relationships as regards his and her employment (Sanchez and Thomson 1997).

The results on the relationship between childbearing intentions and employment also show that it is important to analyze childbearing intentions from a couple perspective (see also: Matysiak and Vignoli 2008). Controlling for the partner's employment situation and the respondent's evaluation of the partner's employment situation from the perspective of having a(nother) child clearly affects the magnitude and sometimes even the direction of the results (see, e.g.: the results for one-child fathers in Table 1B). This suggests that dual-earnership has become a common pattern, and that her and his employment situation as well as the consequences of childbearing on her and his employment opportunities have become relevant factors in fertility decisions.

Turning to the importance of childcare options for childbearing intentions in the near future, we are surprised to find that the option to take parental leave does not seem to matter (significantly) for women's and men's childbearing intentions. It could well be that this is a consequence of the universal right to parental leave in Europe. By contrast, we find that those whose decision to want a child in the next three years depends heavily on the availability of childcare are less inclined to intend to have a child than those who put less weight on the availability of childcare. The availability of childcare seems to be crucial for women (but not so much for men, except for one-child fathers). This points to the fact that the childcare facilities are still not widely available in many European countries, but it also indicates that childcare facilities still reduce mothers' burdens of caring more than those of fathers.

## References:

Ahn, Namkee and Pedro Mira. 2002. A note on the changing relationship between fertility and female employment rates in developed countries. Journal of Population Economics 15: 667-682.

Ajzen, Icek. 1991. The theory of planned behavior. Organizational Behavior and Human Decision Processes 50(2): 179-211.

Brewster, Karin L. and Ronald R. Rindfuss. 2000. Fertility and women's employment in industrialized nations, Annual Review of Sociology 26: 271-96.

Engelhardt, Henriette, Tomas Kögel, and Alexia Prskawetz. 2004. Fertility and women's employment reconsidered: A macro-level time-series analysis for developed countries, 1960-2000. Population Studies 58: 109-120.

Kohler, Hans-Peter and Iliana Kohler. 2002. Fertility decline in Russia in the early and mid 1990s: The role of economic uncertainty and labor market crises. European Journal of Population 18: 233-262.

Kreyenfeld, Michaela. 2005. Economic uncertainty and fertility postponement. Evidence from German panel data. MPIDR Working Paper WP 2005-034.

Matysiak, Anna and Daniele Vignoli. 2008. Fertility and women's employment. A meta-analysis. European Journal of Population 24: 363-384.
___ 2010. Employment around first birth in two adverse institutional settings: Evidence from Italy and Poland. Journal of Family Research 3/2010: 331-346.

Misra, Joya; Michelle J. Budig, and Stephanie Moller. 2007. Reconciliation policies and the effects of motherhood on employment, earnings and poverty. Journal of Comparative Policy Analysis: Research and Practice 9: 135-155.

Misra, Joya, Michelle J. Budig, and Irene Boeckmann. 2011. Work-family policies and the effects of children on women's employment hours and wages. Community, Work \& Family 14(2): 139-157.

Neyer, Gerda; Trude Lappegård, and Daniele Vignoli. 2011. Gender equality and fertility: Which equality matters? Stockholm Research Report in Demography 2011:9.

Neyer, Gerda and Dorothea Rieck. 2008. Moving towards gender equality. In: United Nations (eds.): How Generations and Gender Shape Demographic Change: Towards Policies Based on Better Knowledge. Geneva: 140-154.

Sanchez, Laura and Elizabeth Thomson. 1997. Becoming mothers and fathers: Parenthood, gender, and the division of labor. Gender \& Society 11: 747-772.

Vitali, Agnesi, Billari, Francesco., Prskawetz, Alexia and Testa, Maria Rita. 2009. Preference Theory and low fertility: A comparative perspective. European Journal of Population, 25(4): 413-438

## Appendix:

Table 1A - Childbearing intentions and Employment. Childless women and men in couple.

| Variable | Categories | Childless women |  |  |  | Childless men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | OR | pvalue | OR | pvalue | RR | pvalue | OR | pvalue |
| Employment status of respontent | Not employed (ref.) | 1 |  | 1 |  | 1 |  | 1 |  |
|  | Active full-time | 1.47 | 0.004 | 1.46 | 0.002 | 1.70 | 0.027 | 1.65 | 0.084 |
|  | Active part-time | 1.05 | 0.865 | 1.07 | 0.795 | 1.34 | 0.157 | 1.34 | 0.196 |
| Effect of having a child on employment | Better | 2.49 | 0.001 | 1.92 | 0.002 | 3.07 | 0.000 | 2.39 | 0.001 |
|  | Neither/nor (ref.) | 1 |  | 1 |  | 1 |  | 1 |  |
|  | Worse | 0.60 | 0.000 | 0.63 | 0.000 | 0.59 | 0.003 | 0.61 | 0.002 |
| Dependence of decision to have a child on work | Not al all | 1.40 | 0.088 | 1.45 | 0.041 | 1.23 | 0.188 | 1.15 | 0.350 |
|  | A little | 1 |  | 1 |  | 1 |  | 1 |  |
|  | A lot | 0.59 | 0.000 | 0.57 | 0.000 | 0.75 | 0.036 | 0.82 | 0.110 |
| Employment status of part. | Not employed (ref.) |  |  | 1 |  |  |  | 1 |  |
|  | Active |  |  | 1.07 | 0.756 |  |  | 0.95 | 0.830 |
| Effect of having a child on par.'s employment | Better |  |  | 2.09 | 0.010 |  |  | 1.71 | 0.045 |
|  | Neither/nor (ref.) |  |  | 1 |  |  |  | 1 |  |
|  | Worse |  |  | 0.65 | 0.004 |  |  | 0.72 | 0.001 |
| Dependence of decision to have a child on part.'s work | Not al all |  |  | 0.93 | 0.450 |  |  | 1.06 | 0.646 |
|  | A little (ref.) |  |  | 1 |  |  |  | 1 |  |
|  | A lot |  |  | 1.06 | 0.590 |  |  | 0.85 | 0.384 |

Notes: Estimates are adjusted by country intra-group correlation. par = partner's. Models are controlled for respondent's age, educational attainment of respondent, educational attainment of partner, and marital status.

Table 1B - Childbearing intentions and Employment. One-child parents.


Notes: Estimates are adjusted by country intra-group correlation. par = partner's. Models are controlled for respondent's age, educational attainment of respondent, educational attainment of partner, marital status, and age of the youngest child.

Table 1C - Childbearing intentions and Employment. Two(or more)-child parents.

|  |  | Two-child women |  |  |  | Two-child men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Categories | OR | pvalue | OR | pvalue | RR | pvalue | OR | pvalue |
| Employment | Not employed (ref.) | 1 |  | 1 |  | 1 |  | 1 |  |
| status of | Active full-time | 0.73 | 0.009 | 0.80 | 0.052 | 1.04 | 0.819 | 1.06 | 0.746 |
| respontent | Active part-time | 0.61 | 0.000 | 0.66 | 0.000 | 0.71 | 0.001 | 0.77 | 0.010 |
| Effect of having | Better | 1.66 | 0.012 | 1.15 | 0.553 | 3.74 | 0.000 | 2.87 | 0.000 |
| a child on | Neither/nor (ref.) | 1 |  | 1 |  | 1 |  | 1 |  |
| employment | Worse | 0.50 | 0.000 | 0.55 | 0.000 | 0.39 | 0.000 | 0.42 | 0.000 |
| Dependence of | Not al all | 0.80 | 0.102 | 0.88 | 0.295 | 0.71 | 0.002 | 0.73 | 0.009 |
| decision to have | A little | 1 |  | 1 |  | 1 |  | 1 |  |
| a child on work | A lot | 0.71 | 0.030 | 0.67 | 0.007 | 0.81 | 0.021 | 0.92 | 0.335 |
| Employment | Not employed (ref.) |  |  | 1 |  |  |  | 1 |  |
| status of part. | Active |  |  | 1.02 | 0.909 |  |  | 0.79 | 0.000 |
| Effect of having | Better |  |  | 2.32 | 0.000 |  |  | 1.67 | 0.001 |
| a child on par.'s | Neither/nor (ref.) |  |  | 1 |  |  |  | 1 |  |
| employment | Worse |  |  | 0.54 | 0.000 |  |  | 0.77 | 0.047 |
| Dependence of | Not al all |  |  | 0.69 | 0.000 |  |  | 0.76 | 0.046 |
| decision to have | A little (ref.) |  |  | 1 |  |  |  | 1 |  |
| a child on part.'s work | A lot |  |  | 1.08 | 0.568 |  |  | 0.58 | 0.000 |

Notes: Estimates are adjusted by country intra-group correlation. par = partner's
Models are controlled for respondent's age, educational attainment of respondent, educational attainment of partner, marital status, age of the youngest child, and number of children.

Table 2 - Childbearing intentions and financial situation.

|  |  | Childless women |  | Childless men |  | One-child women |  | One-child men |  | Two-child women |  | Two-child men |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Categories | OR | pvalue | RR | pvalue | OR | pvalue | RR | pvalue | OR | pvalue | RR | pvalue |
| Making | No (ref.) | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  |
| ends meet | Yes | 1.10 | 0.427 | 1.06 | 0.761 | 0.91 | 0.525 | 1.01 | 0.951 | 1.02 | 0.180 | 1.25 | 0.268 |
| Effect of having | Better | 1.41 | 0.187 | 2.35 | 0.000 | 1.52 | 0.059 | 2.14 | 0.002 | 1.91 | 0.014 | 2.19 | 0.000 |
| a child on | Neither/nor (ref.) | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  |
| finantial situation | Worse | 0.52 | 0.000 | 0.53 | 0.000 | 0.47 | 0.000 | 0.50 | 0.000 | 0.38 | 0.000 | 0.40 | 0.000 |
| Dependence of decision to have | Not al all A little (ref.) | 0.98 1 | 0.911 | 0.98 1 | 0.846 | 0.62 | 0.002 | 0.63 | 0.000 | 0.58 | 0.000 | 0.48 | 0.000 |
| a child on finantial situation |  | 0.76 | 0.000 | 0.69 | 0.003 | 0.60 | 0.000 | 0.64 | 0.001 | 0.87 | 0.139 | 0.64 | 0.002 |

Note: Estimates are adjusted by country intra-group correlation.
Models are controlled for respondent's age, educational attainment of respondent, educational attainment of partner, employment status of respondent, employment status of partners, marital status; for parents: age of the youngest child, and number of children.

Table 3 - Childbearing intentions and care options.

|  |  | Childless women |  | Childless men |  | One-child women |  | One-child men |  | Two-child women |  | Two-child men |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Categories | OR | pvalue | RR | pvalue | OR | pvalue | RR | pvalue | OR | pvalue | RR | pvalue |
| Current mode | No help (ref.) |  |  |  |  | 1 |  | 1 |  | 1 |  | 1 |  |
| of childcare | Mostly institutional |  |  |  |  | 1.40 | 0.003 | 1.15 | 0.468 | 0.92 | 0.483 | 1.16 | 0.100 |
|  | Mostly family |  |  |  |  | 1.04 | 0.611 | 1.18 | 0.055 | 0.94 | 0.527 | 1.34 | 0.029 |
|  | Mixed forms |  |  |  |  | 1.34 | 0.016 | 1.54 | 0.030 | 0.95 | 0.683 | 1.16 | 0.389 |
| Dependence of decision to have | Not al all <br> A little (ref.) | $1.08$ | 0.633 | $0.93$ | 0.504 | $0.88$ | 0.376 | $0.99$ | 0.948 | $0.74$ | 0.305 | $0.82$ | 0.133 |
| a child on opportunity to go on leave | A lot | 1.10 | 0.356 | 1.07 | 0.746 | 0.92 | 0.545 | 0.90 | 0.188 | 0.87 | 0.095 | 0.77 | 0.001 |
| Dependence of | Not al all | 1.19 | 0.222 | 1.19 | 0.184 | 1.00 | 0.982 | 0.79 | 0.026 | 0.89 | 0.425 | 0.74 | 0.033 |
| decision to have | A little (ref.) | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  |
| a child on availability of childcare | A lot | 0.72 | 0.007 | 0.96 | 0.677 | 0.77 | 0.046 | 0.77 | 0.007 | 0.77 | 0.173 | 0.69 | 0.001 |

Note: Estimates are adjusted by country intra-group correlation.
Models are controlled for respondent's age, educational attainment of respondent, educational attainment of partner, employment status of respondent, employment status of partners, marital status; for parents: age of the youngest child, and number of children.


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