# The effect of custody arrangement on re-partnering after divorce

Evidence from a policy reform promoting joint physical custody

Jan Van Bavel (University of Leuven)

Christine Schnor (Vrije Universiteit Brussel)

Inge Pasteels
(Universiteit Antwerpen)

Lindsay Theunis (Vrije Universiteit Brussel)

#### **Abstract**

We investigate the effect of the physical child custody arrangement following divorce on repartnering. Previous studies showed that full-time custody lowers the chances of re-partnering for divorced parents. This paper uses a policy reform from 1995 promoting joint custody as an instrumental variable to identify the causal effect of the presence of children in the household on the transition to a new residential partnership after divorce. Data comes from the Divorce in Flanders (DiF) study and includes 1767 divorced parents. As methodological approach we use a recursive bivariate probit model that estimates the effect of a binary endogenous variable (full-time custody) on a binary outcome (post-marital household formation with new partner within five years after divorce). We find that the negative correlation between full-time custody and re-partnering is causal. Divorced parents with full-time custody have a 32 percent lower probability of re-partnering than parents in other custody arrangements. Failing to consider the endogeneity of the custody arrangement choice leads to underestimating the negative effect of full-time physical custody on the probability to move together with a new partner in the first five years after divorce.

#### Introduction

In the past decades, divorce rates have been increasing in many western countries. In Belgium, the divorce rate increased from 0.7 divorces per 1,000 habitants in 1970 to 2.5 divorces in 2011 (Pasteels et al. 2013: 13). This development implicates that a substantial proportion of the population experience marriage not as a lifelong institution but as a chapter in life often followed by post-marital partnership arrangements. Two out of three divorced couples have minor children (Corijn 2005). The children may mainly live with one parent or commute between the parents' households. The physical custody arrangement defines the main place of residence of children with divorced parents. Several recent studies have shown that dissolved parents who are the main child care providers have lower chances of re-partnering (defined as post-marital household formation with a new partner) than parents who share the physical custody with their former partner or who have non-residential children (Beaujouan 2012; Vanassche 2013). Custody arrangement seems even to be a more determinant factor of re-partnering than parenthood: divorced parents whose children are not living full-time in their household were not different from childless persons in their chance of re-partnering (Beaujouan 2010, 2012; Vanassche 2013: 89). There are three arguments in the research literature that explain this finding. Full-time parents may have less opportunities to meet a new partner, they may be less attractive on the partner market and they may have less need for a new residential partner (De Graaf & Kalmijn 2003; Vanassche 2013: 79). However, it is far from certain that the effect of child custody on re-partnering is truly or purely a causal effect. A substantive proportion of persons (21percent) stated to have started a new romantic partner before or at the time of marriage dissolution (see also Pasteels et al. 2012). People who were already engaged in a new romantic relationship towards the end of the dissolved marriage may be less inclined to strive strongly to obtain fulltime child custody. Or, still, people without a new relationship but who are "desperately" looking for it may, for that reasons, be less inclined to obtain fulltime custody. Or, maybe their likelihood of being granted child custody by the judge is affected by whether or not they are already in a new relationship In sum: the correlation found in earlier studies between child custody and re-partnering may just as well be driven by reverse causality, with the arrow going from (intended) re-partnering to custody.

In order to address the problem of reverse causality, this paper exploits an exogenous change in custody policy to estimate the causal effect of children's living arrangements on the re-partnering of divorced parents. In Belgium, there have recently been legal changes in the issue of joint custody that affect the likelihood that children live with both parents following separation. From 1995 onwards, parents were by default given shared legal custody after divorce, i.e., unless otherwise decided for exceptional reasons, both parents shared full parental authority jointly. As a practical consequence, the share of children living with both parents after separation increased. In 2006, a new law supported this tendency by encouraging joint physical custody. The situation in Flanders is special, because the region is small which restricts the commuting distance between the household of the mother and the father after separation. This encourages joint physical custody, or at least renders it more feasible, and makes Belgium a particularly suitable case to study the effect of household

arrangements on post-divorce re-partnering. In this paper, we try to determine whether the effect of the custody arrangement is causal by exploiting the described legal change as an instrumental variable: it clearly affected the choice of physical custody after separation, but only indirectly affects the chance to find a new residential partner. Accounting for this we hope to find a better estimate of the causal effect of children on repartnering.

#### Data & Methods

The 'Divorce in Flanders' data were collected in 2009-10 among first marriages of the 1971 to 2008 cohort that either dissolved or not in the meantime (Mortelmans et al. 2011). The sample was selected from the Population register proportional to the marriage year. Partners had to be of different sex, both in their first marriage, younger than 40 years at the time of the marriage, living in Flanders both at the time of the marriage and of the interview and have the Belgian nationality from birth on. Only people who divorced once were allowed in the sample. The total sample amounts to 6,365 persons. For this study we use data on male and female respondents who experienced the dissolution of their first marriage and who had minor children (below age 18) at the time of divorce. The dependent variable is the formation of a household with a new partner within the first five years after marital dissolution. Marital dissolution is defined as the dissolution of the marital household rather than legal divorce. In order to avoid potential announcement effects we disregard persons who divorced in the year 1995. We estimate the effect of a binary treatment (full-time physical custody) on a binary outcome (household formation with a new partner within first five years after divorce) in a recursive bivariate probit model. Full-time physical custody is assumed to be a binary endogenous explanatory variable (Wooldridge 2002: 477). A parent has full-time physical custody if their children spend 82 to 100 percent of their time in the household of the parent.<sup>2</sup> We include several indicators of the dissolved marriage, such as the divorce cohort (1981-1990, 1991-2000, 2001-2005), the age at marital disruption, the number of children and the age of the youngest child at the time of separation. We further consider the gender of the respondent and his or her educational background. As several persons had already a new partnership at the time of marital dissolution, we included a respective dummy variable. The policy reform in

-

<sup>&</sup>lt;sup>1</sup> 80 percent of the divorced persons who moved together with their new partner until the interview date did so within the first five years of divorce. The restriction of the observation period to this time frame allows a better comparison of re-partnering of older divorce cohorts and more recent divorce cohorts (which are earlier censored).

<sup>&</sup>lt;sup>2</sup> We decided for this definition for two reasons. First, this distinction was driven by the data: half of the male and female respondents had their children at home for 82 percent of their time or more. Second, we decided for this distinction because of theoretical considerations. The opportunity to meet a new partner is a main explanatory factor for repartnering differences. One can assume that full-time parents who spent less than 20 percent of their time without children had fewer opportunities to meet a potential partner than were parents with more child-free time.

5 percent of the persons divorced prior to 1995 had a 50-50 shared physical custody with the second parent, while the proportion was 14 percent among persons who divorced after 1995.

1995 may work as an instrumental variable for custody reform as the Smith-Blundell-test suggests.<sup>3</sup> We distinguish between marriages divorced prior to 1995 and marriages divorced after 1995.<sup>4</sup>

## **Preliminary findings**

First, we estimated a univariate probit model of re-partnering (see Table 1). Being a full-time parent is associated with a 10 percent lower re-partnering rate. If we assume that the error terms affecting custody arrangement and re-partnering are not correlated, these numbers identify the average treatment effect (ATE). We then investigated whether these effects are causal by allowing the error terms to be correlated using a recursive bivariate probit model with reform-based exclusion restriction. The effect of the instrumental variable (divorced after the policy reform of 1995) is significant (p<0.01) as the LR test result shows. The coefficient results of re-partnering show that the causal effect of being a full-time residential parent is negative and significant (p<0.05). This signals that there is no identification problem in the model: According to Monfardini and Radice (2008), the model may be poorly identified when the endogenous variable shows a significant estimate in the univariate probit model, while its coefficient and the correlation coefficient are insignificant in the recursive bivariate probit estimation. The average treatment effect on the treated (ATET) is 32 percent, the average treatment effect (ATE) is with 35 percent slightly higher; both effects are highly significant (p<0.01). Looking at information on the children, we find that having more than one child does neither influence custody arrangement nor re-partnering. The older the youngest child, the higher the probability that the parent has full-time residential custody. However, child's age also increases the probability of moving together with the new partner. Having already a partner at the time of marital dissolution negatively influences the probability to have full-time custody and positively affects the probability of post-marital household formation. Age at the time of divorce is found to negatively influence the probability of repartnering as well as being female. Having a high education lowers the probability of full-time custody. Accounting for the higher probability of mothers to obtain full-time custody adds to explain their lower chance of re-partnering compared to divorced fathers.

<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> The Smith-Blundell test tests for exogeneity of the custody arrangement in the probit model. With a p-value of <0.05, this null hypothesis can be rejected.

<sup>&</sup>lt;sup>4</sup> We expect that the physical custody arrangement is primarily defined in the year of divorce. Only 11 percent of the persons experienced changes in the arrangement.

Table 1 Coefficient results and marginal effects of re-partnering within five years after divorce, univariate probit model and recursice bivariate probit model

	Univariate p	robit model	Recursive bivariate probit model			
	Re-partnering within five years		Re-partnering within five years		Full-time physical custody	
	Coefficients	Standard errors	Coefficients	Standard errors	Coefficients	Standard errors
Full-time physical custody	27***	.08	-1.06**	.41		
Divorce after policy reform of 1995					32***	.12
Divorced 1981-1990	27**	.11	.16	.12	.10	.16
Divorced 200-2005	17**	.07	.11	.08		
Two or more children at time of divorce	06	.07	04	.07	.10	.07
Age (in years) of youngest child at time of divorce	.03**	.01	.03***	.01	.03**	.01
Already partnered at time of divorce	.99***	.09	.81***	.16	48***	.09
Age (in years) at time of divorce	07***	.01	07***	.01	.00	.01
Female	26***	.08	19	.26	1.52***	.07
Low educated	02	.08	01	.08	.03	.09
High educated	.08	.08	.03	.08	18**	.08
Missing information	.40	.57	.32	.86	-1.34*	.73
Constant	3.00***	.32	2.52***	.47	-2.30***	.34
<i>Q</i> (joint unobserved term)			.52	.33		
ATE	10***	.03	35***	.12		
ATET			32***	.09		
LR test for instrumental variable (divorce after policy reform of 1995)			LR test 7.02	p-value 0.008		
N	1767		1767		1767	

Significance levels: \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.1; the standard errors on ATE and ATET are calculated using the delta method.

### **Preliminary conclusion**

The negative correlation between full-time custody and re-partnering seems to be causal. Failing to consider the endogeneity of the custody arrangement choice leads to underestimate the negative effect of full-time physical custody on the probability to move together with a new partner in the first five years after divorce. Parents who obtain full-time physical custody after divorce are less likely to be already in a new romantic relationship at the time of divorce than are parents in other custody arrangements. Thus, in contrast to the latter, full-time parents first have to find a new romantic partner on the partner market with whom they then form a new household. Full-time parents may have lower probabilities of post-marital household formation because they have fewer opportunities to meet a new partner compared to parents who do not live most of

the time with their children. Potentially, full-time parents are also less attractive on the partner market, because the children are always around them, which impedes intimacy within a new partnership. It may also be the case that full-time parents find a new partner, but these romantic partnerships are less often transformed into residential unions, because the parent is anticipating difficulties in the step family arrangement. A recent study (Pasteels & Mortelmans 2013) indeed showed that women are more likely to stay in a non-residential relationship rather than starting a residential union, compared to men. Probably this has also to do with the fact that children live more often with their mother than with their father.

The empirical findings are still preliminary. As future steps, we will conduct further tests on the instrumental variable and do robustness checks. We will also run estimations separately by sex and have a closer look on the romantic partnership as a factor influencing the choice of child custody and household formation after divorce.

#### References

Beaujouan, É. (2010). Children at home, staying alone? Paths towards repartnering for men and women in France. Centre for Population Change Working Paper, 1-24.

Beaujouan, E. (2012). Repartnering in France: The role of gender, age and past fertility. *Advances in Life Course* Research, 17(2), 69-80.

Corijn, M. (2005), Echtscheidingen in België: met of zonder kinderen. CBGS-Sitemap, Uit het onderzoek, 17 oktober 2005.

De Graaf, P.M. & Kalmijn, M. (2003). Alternative routes in the remarriage market: competing-risk analyses of union formation after divorce. *Social Forces*, 81(4): 1459-1498.

Monfardini, C., & Radice, R. (2008). Testing exogeneity in the bivariate probit model: A monte carlo study. Oxford Bulletin of Economics and Statistics, 70(2), 271-282.

Mortelmans, D., Pasteels, I., Bracke, P., Matthijs, K., Van Bavel, J., & Van Peer, C. (2012). Divorce in Flanders. Codebooks and questionnaires. Retrieved from www.divorceinflanders.be.

Pasteels, I., Bracke, P., Mortelmans, D., Matthijs, K., Van Bavel, J., & Van Peer, C. (2013). Scheiden in meervoud: over partners, kinderen en grootouders. Leuven: Acco.

Pasteels, I., & Mortelmans, D. (2013). Gescheiden en dan? Herpartneren in Vlaanderen anno 2010. Relaties en Nieuwe Gezinnen, 3(3), 1-66.

Pasteels, I., Corijn, M., & Mortelmans, D. (2012). Een nieuwe partner na een echtscheiding? Opleidingsverschillen bij mannen en vrouwen in Vlaanderen. *Tijdschrift voor Sociologie*, 33(3-4), 331–352.

Vanassche, S. (2013). Stepfamily configurations and trajectories following parental divorce. A quantitative study on stepfamily situations, stepfamily relationships and the wellbeing of children. Dissertation, KU Leuven.

Wooldridge, J. M. (2002). Econometric analysis of cross section and panel data. The MIT press.