Women´s Partnership and Labour Trajectories and Transitions to First and Second Births in Spain. The Role of Stability Over the Life Course on the Recuperation of Births

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1   Motivation and theoretical focus

In recent decades, European countries have witnessed a significant shift in the timing of childbirth, with a notable trend towards postponement (Beaujouan, 2020; Sobotka & Beaujouan, 2018). Since a woman's biological capacity to conceive decreases with age (Leridon, 2017), the timing of the first child may have implications for the number of children she has throughout her life (Te Velde et al., 2012). However, this delay in childbearing has not been uniform across all segments of the population. Highly educated women, who often spend more time in formal education, tend to enter motherhood at later ages (Neels et al., 2017; Ní Bhrolcháin & Beaujouan, 2012). Traditionally, this delay has been associated with smaller family sizes. However, highly educated women have been found to be able to catch up births. Despite starting motherhood at later ages, they are able to have a larger family by reducing the spacing between their first and subsequent births (Klesment et al., 2014).

A substantial body of literature has examined the phenomenon of fertility catch-up among highly educated women. However, the underlying mechanisms behind this phenomenon are still not fully understood. This research aims to assess the role of women´s partnership stability and labour stability on the timing and quantum of the transitions to the first and the second child by women´s level of education.

Concerning partnership stability, previous research has found a positive educational gradient in union stability and fertility, considering marriages and divorces (Kalmijn, 2013; Perelli-Harris & Lyons-Amos, 2016; Schwartz & Han, 2014) and union entries and exits (Jalovaara & Andersson, 2023). Highly educated women tend to have more stable partnership trajectories, while the lower educated are more likely to experience

constraints leading to separation (Hogendoorn et al., 2022). Moreover, instable partnership trajectories and singlehood may lead to a delay in motherhood, since women may wait until finding the proper partner to have children with (Nishikido et al., 2022).

Regarding labour stability, highly educated women are expected to participate more in the labour market (Wood & Neels, 2017) and to achieve higher quality jobs, with potential higher labour stability (Adserà, 2018), which is positively associated with fertility (Kreyenfeld & Andersson, 2014). However, higher quality jobs and higher salaries imply higher opportunity costs when becoming mothers (Becker, 1993) and a greater desire for career advancement (Nitsche et al., 2018). Since these opportunity costs are higher at the beginning of their careers, women with this type of jobs may also prefer to delay motherhood (Liefbroer & Corijn, 1999) and reduce the time they spend out of the labour market by reducing the spacing between births (Klesment et al., 2014).

Therefore, it is anticipable that stable relationship and labour trajectories, more common among highly educated women, influence the transitions to the first and the second child and play an important role in the recuperation of births. This is especially important in a country such as Spain, which has experienced lowest-low and latest-late fertility for decades, and where the proportion of highly educated women is significantly increasing.

2   Data and methodology

The investigation is based on data from the 2018 Spanish Fertility Survey. It is a longitudinal retrospective survey that interviewed women aged between 18 and 55. The data from this survey allows researchers to reconstruct the labour, partnership, and family trajectories of the participants up to the time of the survey.

The analysis uses cure models, which are a multi-equation regression technique that is useful in situations where a group of individuals will not experience an event (Lambert, 2007), like the transition to the first or second child. It allows researchers to distinguish between the proportion of women who will not experience the event, i.e., cure fraction, and those who will. Among those who will experience the event, the technique provides the time it will take them to experience it. However, despite its applicability to fertility behaviours, this technique has not been widely used in f studies (Gray et al., 2010).

3   Preliminary findings

Table 1 displays the preliminary results of the mixture cure models for the transition to parity 1. The findings indicate that the time in co-residential relationships over the life course positively influences the probability of having a first child and accelerates the transition to motherhood. Regarding the transition to parity 2, the time in partnerships increases the probability of having a second child but also delays the transition.

The time in jobs does not significantly impact the probability of having a first child and a second child, but it affects the timing of the transitions. Women with more stable job trajectories tend to delay the transition to the first child.

An additional analysis (not shown) analyses separately the effect of partnership and labour trajectories on parity transitions by women´s level of education. This analysis suggests that the effect of stability in partnership trajectories and the effect of stability in labour trajectories are stronger for highly educated women, while it vanished for the lower educated. This reinforces the idea that women with high education are more likely to adapt their fertility to their contextual and personal circumstances. Therefore, they are more likely to delay motherhood until they find their desired scenario to become mothers and recuperate births afterwards.

Table 1. Results of the mixture cure models

	Parity 0-1				Parity 1-2			
	LPM		Scale		LPM		Scale	
	Estimate (Std. Error)	p-value	Estimate (Std. Error)	p-value	Estimate (Std. Error)	p-value	Estimate (Std. Error)	p-value
Variables								
Model 1								
Time in relationships	-0.011 (0.001)	0.000	-0.036 (0.001)	0.000	-0.017 (0.001)	0.000	0.017 (0.002)	0.000
_cons	0.270 (0.011)	0.000	3.682 (0.006)	0.000	0.428 (0.013)	0.000	1.194 (0.023)	0.000
Model 2								
Time in relationships	-0.013 (0.002)	0.000	-0.001 (0.001)	0.157	-0.017 (0.003)	0.000	0.006 (0.006)	0.316
Age at first co-resident partner	-0.012 (0.012)	0.316	0.074 (0.006)	0.000	-0.005 (0.002)	0.017	0.001 (0.005)	0.763
Number of co-resident partners	-0.011 (0.002)	0.000	0.036 (0.001)	0.000	-0.083 (0.020)	0.000	0.029 (0.049)	0.555
Late first birth					0.077 (0.013)	0.000	-0.253 (0.024)	0.000
_cons	0.558 (0.086)	0.000	2.367 (0.031)	0.000	0.619 (0.092)	0.000	1.362 (0.202)	0.000
Model 3								
Time in jobs	0.000 (0.001)	0.713	0.007 (0.001)	0.000	0.000 (0.001)	0.922	-0.001 (0.002)	0.522

_cons	0.242 (0.007)	0.000	3.325 (0.004)	0.000	0.273 (0.009)	0.000	1.376 (0.016)	0.000
Model 4								
Time in jobs	0.002 (0.001)	0.126	0.005 (0.001)	0.000	-0.001 (0.001)	0.394	0.001 (0.002)	0.683
Age at first job	0.002 (0.001)	0.001	0.001 (0.000)	0.012	0.001 (0.001)	0.165	-0.004 (0.001)	0.006
Number of jobs	-0.006 (0.006)	0.314	0.032 (0.003)	0.000	0.007 (0.007)	0.329	-0.013 (0.011)	0.249
Late first birth					0.129 (0.012)	0.000	-0.288 (0.021)	0.000
_cons	0.182 (0.021)	0.000	3.274 (0.013)	0.000	0.189 (0.025)	0.000	1.600 (0.046)	0.000

Source: 2018 SFS.

4   References

Adserà, A. (2018). The future fertility of highly educated women: The role of educational composition shifts and labor market barriers. *Vienna Yearbook of Population Research*, *1*, 19–25. https://doi.org/10.1553/POPULATIONYEARBOOK2017S019

Beaujouan, E. (2020). Latest-Late Fertility? Decline and Resurgence of Late Parenthood Across the Low-Fertility Countries. *Population and Development Review*, *46*(2), 219–247. https://doi.org/10.1111/padr.12334

Becker, G. S. (1993). *A treatrise on the family. Enlarged edition*. Harvard University Press.

Gray, E., Evans, A., Anderson, J., & Kippen, R. (2010). L'utilisation des modèles de population stratifiée pour examiner la probabilité d'agrandissement des familles et son calendrier. *European Journal of Population*, *26*(3), 275–295. https://doi.org/10.1007/s10680-009-9201-2

Hogendoorn, B., Kalmijn, M., & Leopold, T. (2022). Why Do Lower Educated People Separate More Often? Life Strains and the Gradient in Union Dissolution. *European Sociological Review*, *38*(1), 88–102. https://doi.org/10.1093/esr/jcab022

Jalovaara, M., & Andersson, L. (2023). A register-based account of period trends in union prevalence, entries, and exits by educational level for men and women in Finland. *Demographic Research*, *48*, 373–386. https://doi.org/10.4054/DemRes.2023.48.14

Kalmijn, M. (2013). The Educational Gradient in Marriage: A Comparison of 25 European Countries. *Demography*, *50*(4), 1499–1520. https://doi.org/10.1007/s13524-013-0229-x

Klesment, M., Puur, A., Rahnu, L., & Sakkeus, L. (2014). Varying association between education and second births in Europe: Comparative analysis based on the EU-SILC data. *Demographic Research*, *31*(1), 813–860. https://doi.org/10.4054/DemRes.2014.31.27

Kreyenfeld, M., & Andersson, G. (2014). Socioeconomic differences in the unemployment and fertility nexus: Evidence from Denmark and Germany. *Advances in Life Course Research*, *21*, 59–73. https://doi.org/10.1016/j.alcr.2014.01.007

Lambert, P. C. (2007). Modeling of the cure fraction in survival studies. *The Stata Journal*, *7*(3), 351–375.

Leridon, H. (2017). Effets biologiques du retard à la première maternité et du recours à l'aide médicale à la procréation sur la descendance finale. *Population*, *Vol. 72*(3), 463–490. https://doi.org/10.3917/popu.1703.0463

Liefbroer, A. C., & Corijn, M. (1999). Who, What, Where, and When? Specifying the Impact of Educational Attainment and Labour Force Participation on Family Formation. In *European Journal of Population* (Vol. 15).

Neels, K., Murphy, M., Ní Bhrolcháin, M., & Beaujouan, É. (2017). Rising Educational Participation and the Trend to Later Childbearing. *Population and Development Review*, *43*(4), 667–693. https://doi.org/10.1111/padr.12112

Ní Bhrolcháin, M., & Beaujouan, É. (2012). Fertility postponement is largely due to rising educational enrolment. *Population Studies*, *66*(3), 311–327. https://doi.org/10.1080/00324728.2012.697569

Nishikido, M., Cui, Q., & Esteve, A. (2022). Partnership dynamics and the fertility gap. *Genus*, *78*(26). https://doi.org/10.1186/s41118-022-00170-w

Nitsche, N., Matysiak, A., Van Bavel, J., & Vignoli, D. (2018). Partners' Educational Pairings and Fertility Across Europe. *Demography*, *55*(4), 1195–1232. https://doi.org/10.1007/s13524-018-0681-8

Perelli-Harris, B., & Lyons-Amos, M. (2016). Partnership patterns in the United States and across Europe: The role of education and country context. *Social Forces*, *95*(1), 251–282. https://doi.org/10.1093/sf/sow054

Schwartz, C. R., & Han, H. (2014). The reversal of the gender gap in education and trends in marital dissolution. *American Sociological Review*, *79*(4), 605–629. https://doi.org/10.1177/0003122414539682

Sobotka, T., & Beaujouan, É. (2018). Late Motherhood in Low-Fertility Countries: Reproductive Intentions, Trends and Consequences. In D. Stoop (Ed.), *Preventing Age Related Fertility Loss* (pp. 11–29). Springer International Publishing Switzerland 2018. https://doi.org/10.1007/978-3-319-14857-1_2

Te Velde, E., Habbema, D., Leridon, H., & Eijkemans, M. (2012). The effect of postponement of first motherhood on permanent involuntary childlessness and total fertility rate in six European countries since the 1970s. In *Human Reproduction* (Vol. 27, Issue 4, pp. 1179–1183). Oxford University Press. https://doi.org/10.1093/humrep/der455

Wood, J., & Neels, K. (2017). First a job, then a child? Subgroup variation in women's employment-fertility link. *Advances in Life Course Research*, *33*, 38–52. https://doi.org/10.1016/j.alcr.2016.09.003