

Individual Poverty Risk Around Union Dissolution in the Netherlands: Unpacking Differences by Gender, Union Type, and Parental Status

Flavia Mazzeo^{1,2}, Nicole Hiekel¹ and Agnese Vitali²

¹Max Planck Institute for Demographic Research, Research Group Gender Inequalities and Fertility

²University of Trento

Long abstract EPC26

Extensive research shows that, for different-sex couples, parenthood promotes a gendered and specialized division of labor (e.g., Artmann et al., 2022; Dotti Sani, 2015; Kleven et al., 2019; Musick et al., 2020). These divisions typically result in disproportionate changes in women's employment and income after childbirth, increasing their individual risk of poverty (Siegert, 2024, 2025). While these studies highlight the long-term economic risks of specialization for women, they rarely link these trajectories to union dissolution, when economic vulnerability may be most acute.

At the same time, research on the consequences of union dissolution tends to focus on short-term economic outcomes, often overlooking how earlier work-family arrangements influence individual vulnerability after separation. When longer periods post-dissolution are examined, research typically looks at dissolved marriages only, or studies married and cohabiting couples together (e.g., Hogendoorn et al., 2020 for the Netherlands). However, married and cohabiting couples, whether registered or not, differ significantly in terms of their selection into unions, the legal protections they receive during dissolution, and their income pooling strategies (Hiekel et al., 2014; Mazzeo et al., 2024). We argue that these differences can shape work-family trajectories during the union, especially in childbearing unions, which in turn affect the risk of being economically vulnerable after separation. Finally, studies on union dissolution usually focus on household poverty measures, which often underestimate the gender gap in economic resources by assuming complete income pooling among household members (Knittler & Heuberger, 2018).

To our knowledge, no study has systematically compared how different union types (marriage, cohabitation, registered cohabitation) condition individual economic risks both before and after separation. This study is the first to explicitly examine how legal protection and family specialization interact to shape individual poverty risks across diverse union forms from a life-course perspective.

This study uses a measure of individual poverty risk, which captures whether a person's individual net disposable income is sufficient to avoid poverty without relying on a partner or other household members, to track how employment and poverty risk evolve before and after separation. We compare women and men with and without children across three union types: cohabitation, marriage, and registered cohabitation.

The Dutch context offers an ideal setting for this study. Nonmarital childbearing accounts for over half of all births (OECD, 2021). Marriage rates have declined in recent decades, partially offset by the diffusion of registered cohabitations, which offer similar legal protections as marriage. Yet, most couples continue to cohabit without registering their partnership (CBS, 2018). Female labor force participation is high, but dominated by part-time work, largely concentrated among mothers (Artmann et al., 2022; Begall & Grunow, 2015; Zwier et al., 2024). These patterns, combined with the lack of institutional protection for unregistered cohabiting partners, make the Netherlands a unique setting to examine how union type and specialization interact to shape individual poverty trajectories around union dissolution.

Data and Methods

We draw on the administrative register data on the whole Dutch population (CBS), for which we have secured access to the microdata. We selected 105,330 individuals who ended a different-sex union between 2012 and 2017, and who formed their union from 2006 or later. The union selection is different for parents and childless individuals. For the former, we select an individual's first dissolved union where a child was born. For the latter, among those individuals who were childless at the end of the observation period (2022), we select the first dissolved union. The total sample comprises 1,118,696 person-year observations (724,597 for cohabiters, 357,274 for marriages, and 36,825 for registered cohabitations) from up to five years from dissolution to 10 years after dissolution, with no missing information on employment status, individual, and household disposable income.

Following previous studies (Siegert, 2024, 2025), we measure Individual Poverty Risk (IPR) as a binary indicator, equal to one if an individual's net disposable income falls below 60% of the median disposable income of a one-person household, adjusted for household composition and economies of scale (Knittler & Heuberger, 2018). We interpret IPR as an indicator of whether an individual can avoid poverty based on their own income, independent of a partner's or household's resources. Additionally, we measure the household poverty rate following the OECD measurement. Employment status is measured as a three-categories variable capturing whether an individual works full-time, part-time, or is not working. We further retrieve the following information: sex (women, men), age at dissolution, parental status (parent or childless), number of children, place of birth (in the Netherlands or abroad), union duration, education (low, middle, or high), net individual disposable income, and net household disposable income. All income measures are adjusted by the Netherlands' consumer price index of 2015 to make the income measures comparable across years.

As a first step, we run a set of random-effect panel logistic regressions by union type, where we predict the probability of being at Individual Poverty Risk (IPR) by interacting time from union dissolution, sex, and parental status. These models include the following controls: age at union dissolution (and its squared term), number of children, union duration in years before dissolution, and year. We do the same set of models to predict household poverty risk around dissolution.

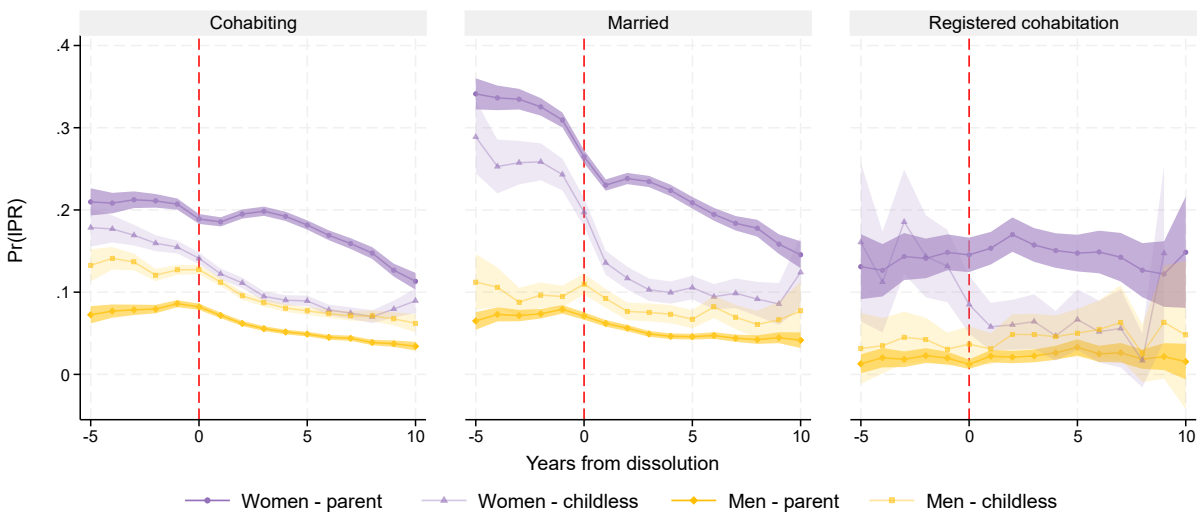
In a second step, we use multistate modeling to understand the intertwined trajectories of employment status and IPR around union dissolution for men and women with different parental status exiting the three union types considered. Our status variable is a 6-category variable combining employment status and IPR.

Preliminary results

Figure 1 shows the predicted probabilities of being at Individual Poverty Risk (IPR) around union dissolution, calculated from the models of the first part of the analysis. This figure comprises several patterns, here summarized in four main points.

(1) Gender and parental differences before dissolution: The gender gap in IPR is largest in the years before dissolution, especially among married parents.

Figure 1: Predicted probabilities of being at Individual Poverty Risk around union dissolution by union type, sex, and parental status



Note: Predicted probabilities calculated from panel logistic regression models predicting IPR by union type. Three-way interaction between years from dissolution (-5 to 10), sex (female, male), and parental status (parent, childless). Controls included in the models: age at dissolution, squared age at dissolution, number of children, union duration in years before dissolution, and year.

(2) *Post-dissolution short-term changes:* The year after separation, IPR declines sharply in dissolved marriages. We interpret this drop as evidence of the Dutch welfare state effectively compensating for income loss following separation. Supporting this interpretation, an alternative analysis based on IPR calculated on earnings from employment only (not shown) reveals that IPR would have otherwise increased.

(3) *Narrowing gender gaps:* Following dissolution, gender differences in IPR narrow, particularly among childless individuals. However, a post-dissolution gender gap in disposable income persists, likely due to women’s higher rates of part-time employment (descriptive statistics not shown here).

(4) *Variation by union type:* IPR trajectories vary substantially across union types, both in the shape of the trajectory (the difference between pre- and post-dissolution is the highest for women in marital unions), and in the general level of IPR (individuals in registered cohabitations have generally a lower probability of being at IPR). We interpret these differences as a reflection of the differences in selection into union, legal protection, and awareness of the risks that individuals in these three types of union might have. For example, the combination of a lack of legal protection, together with the higher probability of keeping income separate for cohabiters, makes women in a cohabitation particularly aware of their level of economic independence. This might thus lead them to be more attached to the labor market. Another interesting comparison is the IPR trajectories around the dissolution of marriage and registered cohabitations. Although the legal protection is the same among these two union types, the trajectories of IPR take very different shapes, with individuals in registered cohabitation showing overall the lowest probability of being at IPR. This is most likely the outcome of selection into union: descriptive statistics of the sample show how couples in a registered cohabitation have a generally higher level of education, and are more likely to be born in the Netherlands instead of abroad (90% of the registered cohabitation sample is born in the Netherlands, compared to the 64% of the married sample).

When we repeat the analysis using *household* poverty risk instead of *individual* poverty risk (IPR), the differences by sex and parental status largely disappear, and the overall poverty level lowers. This is because IPR captures an individual's ability to avoid poverty based on their own income, whereas household poverty risk also reflects coping strategies such as re-partnering or returning to the parental home.

We are currently conducting the second stage of the analysis, applying multistate models to examine how employment trajectories during and after the first union shape individual poverty risk following separation. This will allow us to assess the extent to which work-family strategies adopted during a union shape post-divorce IPR trajectories. We are absolutely confident that we can present the results of these analyses at the time EPC 2026 takes place.

References

- Artmann, E., Oosterbeek, H., & van der Klaauw, B. (2022). Household specialization and the child penalty in the Netherlands. *Labour Economics*, 78, 102221.
- Begall, K., & Grunow, D. (2015). Labour force transitions around first childbirth in the Netherlands. *European Sociological Review*, 31(6), 697-712.
- CBS. (2018). *Fewer young couples getting married* <https://www.cbs.nl/en-gb/news/2018/18/fewer-young-couples-getting-married>
- Dotti Sani, G. M. (2015). Within-couple inequality in earnings and the relative motherhood penalty. A cross-national study of European countries. *European Sociological Review*, 31(6), 667-682.
- Hiekel, N., Liefbroer, A. C., & Poortman, A.-R. (2014). Income pooling strategies among cohabiting and married couples
A comparative perspective. *Demographic Research*, 30, 1527-1560. <http://www.jstor.org/stable/26348246>
- Hogendoorn, B., Leopold, T., & Bol, T. (2020). Divorce and diverging poverty rates: a Risk-and-Vulnerability approach. *Journal of Marriage and Family*, 82(3), 1089-1109.
- Kleven, H., Landais, C., & Søgaaard, J. E. (2019). Children and gender inequality: Evidence from Denmark. *American Economic Journal: Applied Economics*, 11(4), 181-209.
- Knittler, K., & Heuberger, R. (2018). Armut und Erwerbsarbeit—ein neuer Indikator. *Statistische Nachrichten*, 3(2018), 226-241.
- Mazzeo, F., Hiekel, N., & Vitali, A. (2024). *Joint pot or separate purses? Unpacking the cohabitation-marriage gap in income pooling across Europe* (No. WP-2024-024). Max Planck Institute for Demographic Research, Rostock, Germany.
- Musick, K., Bea, M. D., & Gonalons-Pons, P. (2020). His and her earnings following parenthood in the United States, Germany, and the United Kingdom. *American sociological review*, 85(4), 639-674.
- OECD. (2021). *Family Database* <https://www.oecd.org/en/data/datasets/oecd-family-database.html>
- Siegert, C. (2024). Parenthood and poverty risk within couples: individual and household poverty risks by gender and education in four European countries. *European Sociological Review*, jcae040.
- Siegert, C. (2025). *The interplay of poverty and employment trajectories in couples around the transition to parenthood in Germany*.
- Zwier, D., Kalmijn, M., & Bol, T. (2024). Fatherhood and men's working hours in a part-time economy. *Social Forces*, 103(2), 681-702.