

Mothers' Earnings Trajectories after Divorce in Sweden and Germany

Sarah Schmauk, Anna-Karin Nylin, Michaela Kreyenfeld and Ann-Zofie Duvander

Submitted to Session: Poster (Gusta Wachter)

Short Abstract [250 words]: This study uses large scale register data from Germany and Sweden to examine mothers' earning trajectories after divorce. In particular it is investigated how pre-birth earnings and labour market behaviour determine earnings trajectories after divorce. We explore how patterns differ between East Germany, West Germany and Sweden and how they vary by pre-birth earning quantiles. Our preliminary investigations shows large differences in women's labour market attachment before and around childbirth in the three regions. As expected, West German women are the least likely to be working around childbirth. In all regions, divorced women expand their labour market participation after childbirth. This particularly pertains to West German women, who nevertheless remain far below their pre-birth income. However, there are large differences by pre-birth earnings quantiles. It seems that divorced women in the lowest earning quantile experienced rather flat earning trajectories compared to women in the other earning brackets. This finding is consistent across countries.

1 Prior research & contribution to the literature

A large body of literature has amassed that examined how divorce and separation affect subsequent income and economic wellbeing. It is well documented in the literature that women experience a drop in equalized household income after union dissolution (Andreß et al. 2006; Bayaz-Ozturk et al. 2018; Burkhauser et al. 1991; Hauser et al. 2016). There are also several studies that have examined the effect of divorce on women's employment rates for single countries and in cross-national comparison (Mueller 2005; Van Damme et al. 2009; Jenkins 2008). Some few studies have explored individual earning trajectories after divorce and separation for selected countries (Raz-Yurovich 2013; Tamborini et al. 2015). However, little cross-national research exists on the earning trajectories of mothers after divorce in a cross-national context. We seek to fill this research gap in the following way. Firstly, we compare patterns in Sweden and Germany, two welfare states that differ sharply in the integration of mothers into the labor market. Considering that earning trajectories are largely responsible for a decent standard of living and the future pension income, some mothers might face greater difficulties than others, depending on different institutional regulations that allow to cope with them. Second, we use high quality and large scale register data which allow us to generate robust estimates on long-term effects of divorce on women's earnings trajectories. Thirdly, the large sample size of the register data enable us to generate estimates for population subgroups.

2 Data and method

For Germany, we use data from the pension registers. We draw here on a newly generated data set that includes the full employment and earning histories as well as the dates of divorce (Keck et al. 2019). For Sweden data comes from the Swedish administrative registers. The analytical sample includes women who had a first child between 1992 and 2015. Earlier years cannot be considered, because we do not have information on the dates of divorce for the East German sample for earlier years. In a first step of the analysis, we display simple descriptive statistics that show the earning development prior and after first birth. In a second step, we compare the earning developments of women who experienced a divorce before the first child reached age 10 with the comparison group that never experienced a divorce. The analysis is conducted separately by earning quantiles. The final investigation (still to be completed) includes a fixed effects model with annual earnings as an outcome variable. The aim is to estimate how mothers predicted earning trajectories change across the subgroups of divorced mothers and mothers, who remain married within a time frame of ten years after the first child was born.

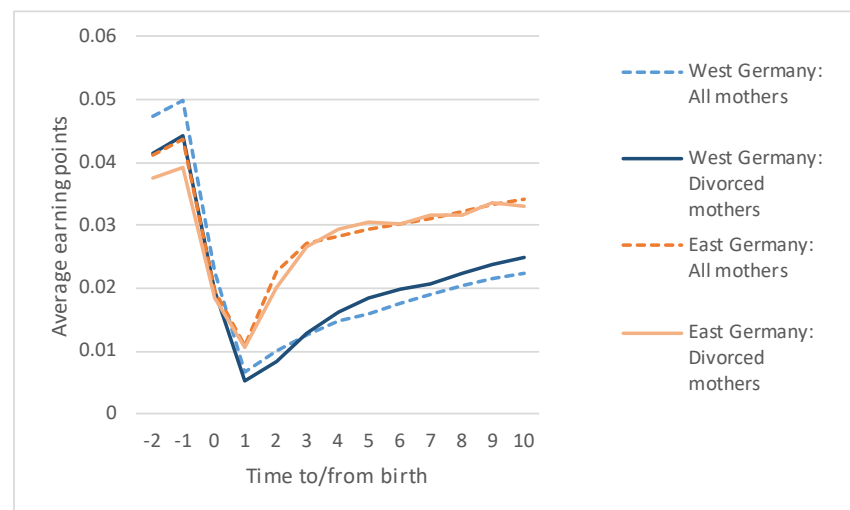
A major limitation of our investigation is that we have to focus on the consequences of marital disruption. The breakdown of a non-marital union cannot be investigated (due to limitations of the German data which includes divorce dates, but not the ending dates of non-marital unions). Another limitation is that we have only annual (and monthly) earnings at our disposal, but we do not have information on working hours.

3 First descriptive results

3.1 Germany

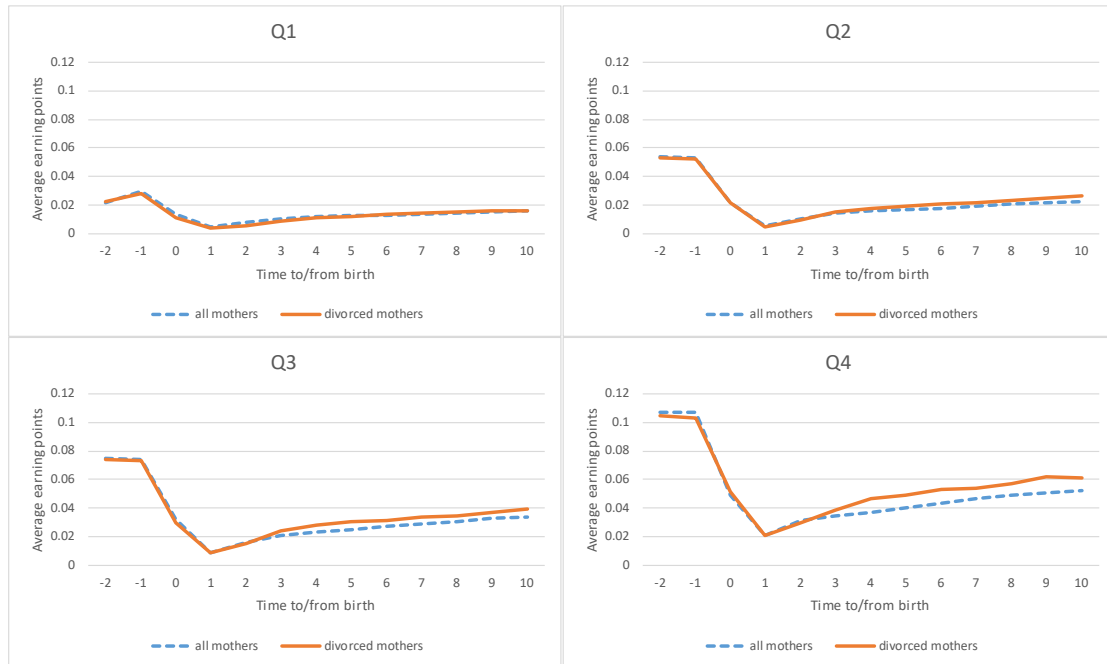
As can be seen in Figure 1 the birth of the first child reduces earnings significantly in both East and West Germany. This finding is much stronger for West German women than for East German women. Although both groups re-enter the labour market after birth, West German women remain far below their pre-birth income levels and also below the income levels of East German women. In comparison, divorced mothers increase their labour market participation after the birth of their first child stronger than other women with children. Figure 2 displays the earnings by four income quartiles. The figure shows that divorced mothers average earnings increase more strongly after the birth of their first child than the earnings of other mothers, regardless of their income quartile. However, the effect is stronger for the two top quartiles (Q3-Q4).

Figure 1: Average labour earnings by time to/from the first birth, women in Germany



Note: 1 earning points is equivalent to the average earnings.

Figure 2: Average labour earnings by time to/from the first birth, women in Germany (in quartiles)

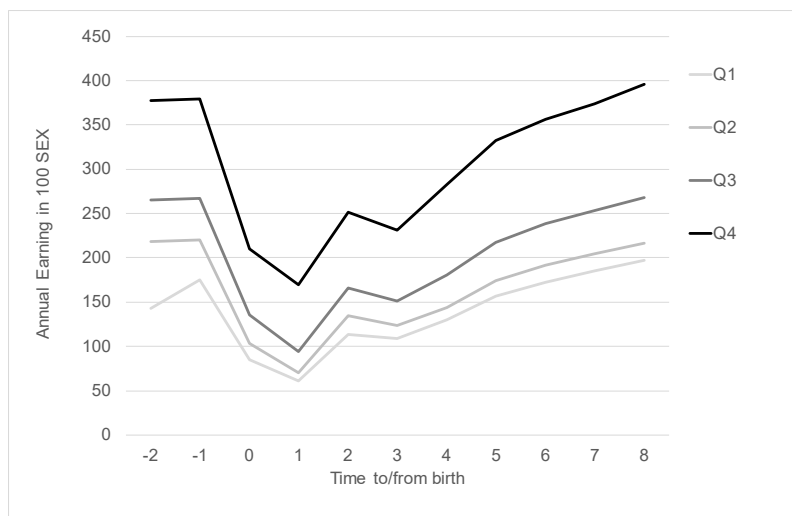


Note: Mothers without positive income two years before child birth were excluded. 1 earning points is equivalent to the average earnings.

3.2 Sweden

As in Germany, the birth of the first child affects the labour market participation of women in Sweden. Whereas at the end of the observation period, women in the two top income quartiles are again close to their pre-birth income levels, women in the lower income quartiles are more likely to experience rather flat earning trajectories and do not reach their pre-birth income.

Figure 3: Average labour earnings by time to/from the first birth, women in Sweden (in quartiles)



4 References

- Andreß, H. J., Borgloh, B., Bröckel, M., Giesselmann, M., Hummelsheim, D. (2006). The economic consequences of partnership dissolution: A comparative analysis of panel studies from Belgium, Germany, Great Britain, Italy, and Sweden. *European Sociological Review*, 22(5), 533–560.
- Bayaz-Ozturk, G., Burkhauser, R. V., Couch, K. A., Hauser, R. (2018). The effects of union dissolution on the economic resources of men and women: A comparative analysis of Germany and the United States, 1985–2013. *The ANNALS of the American Academy of Political and Social Science*, 680(1), 235–258.
- Burkhauser, R.V., Duncan, G.J., Hauser, R., Berntsen, R. (1991): Wife or Frau, women do worse: a comparison of men and women in the United States and Germany after marital dissolution *Demography* 28(3), 353–360.
- Hauser, R., Burkhauser, R. V, Couch, K. A., Bayaz-Ozturk, G. (2016). "Wife or Frau, Women Still Do Worse: A Comparison of Men and Women in the United States and Germany after Union Dissolutions in the 1990s and 2000s," Working papers 2016–39, University of Connecticut, Department of Economics.
- Jenkins, S. P. (2008). Marital splits and income changes over the longer term. Institute for Social and Economic Research, working paper 2008–07.
- Keck, W., Radenacker, A., Brüggmann, D., Kreyenfeld, M., Mika, T. (2019). Statutory Pension Insurance Accounts and Divorce: A new Scientific Use File. *Jahrbücher für Nationalökonomie und Statistik* (forthcoming).
- Mueller, R.E. (2005). The effect of marital dissolution on the labour supply of males and females: Evidence from Canada. *Journal of Socio-Economics* 34, 787–809.
- Raz-Yurovich, L. (2013). Divorce penalty or divorce premium? A longitudinal analysis of the consequences of divorce for men's and women's economic activity *European Sociological Review* 29(2), 373–385.
- Tamborini, C. R., Couch, K.A., Reznik, G.L. (2015). Long-term impact of divorce on women's earnings across multiple divorce windows: A life course perspective. *Advances in Life Course Research*, 26: 4459.
- Van Damme, M., Kalmijn, M., Uunk, W. (2009). The employment of separated women in Europe: Individual and institutional determinants. *European Sociological Review* 25(2), 183–197.