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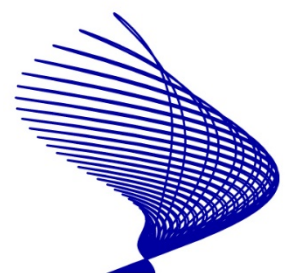


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Family Size and the Persistency of Poverty following Divorce: The United States in Comparative Perspective

*Zachary Van Winkle*¹, *Thomas Leopold*²

Abstract

Studies have documented the negative association between divorce and women's economic wellbeing in several countries. Less is known about whether the effects of divorce on women's economic wellbeing vary by family size and their persistency. However, larger families are likely more vulnerable to the economic consequences of divorce, and more children are exposed to these consequences in larger families. We present the first comprehensive assessment of how the short-term and medium-term economic consequences of divorce vary by family size. Using data from the US (PSID) and between-within random-effects models, we estimate changes in women's poverty risk up to six years following divorce, stratified by the number of children in the household in the year of divorce. We add a comparative perspective using a harmonized set of socio-economic panel surveys from Australia (HILDA), Germany (GSOEP), Switzerland (SHP), and the UK (BHPS). In the US, short-term negative effects of divorce on the risk of poverty increase with family size, but differences vanish in the medium term. Similar trends are found in all study countries, although family size differences are larger in Germany and the US than in Australia, Switzerland, and the UK. Our findings suggest that the presence and number of children increase women's poverty risk only temporarily. Although women with children are less likely to recuperate by means of remarriage, they are more likely to recuperate by reducing the needs of the household and increasing their labor market intensity.

Keywords: Divorce, Poverty, CNEF, Family Size, Comparative

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Introduction

Since the mid-20th century, divorce rates have increased across most countries in Europe, North America, and beyond (e.g., Cherlin 2010; Macura, Adams, and Holzer-Zelazewska 1990). Extensive research has been conducted on both the causes and consequences of marital separation (see Amato 2010 for a review pertaining to the United States). A ubiquitous finding across decades of research is that divorce is negatively associated with women's economic wellbeing (see Espenshade 1979; Furstenberg 1990 for reviews; Amato 2000; 2010). Specifically, divorce has been shown to decrease women's household incomes and increase their risk of poverty (Leopold 2018; Andreß and Hummelsheim 2009; Smock, Manning, and Gupta 1999; Sørensen 1994; Smock 1993).

Women's economic hardship following divorce and its deleterious consequences have always been closely associated with the presence of children (Poortman 2000; Holden and Smock 1991). The presence of children, who most commonly reside with their mothers after divorce, is a major obstacle to economic recovery, because children increase the economic needs of the household (Bianchi, Subaiya, and Kahn 1999), limit women's human capital investments and labor supply (Smock 1994), and involve direct costs of childrearing that are often not compensated by alimony and child maintenance (Bartfeld 2000). The presence of children also turns divorced women's economic hardship into a major social problem, as the experience of poverty is associated with numerous problems in children, ranging from deviance and health problems to reduced educational and occupational attainment (Amato 2000; 2010; Furstenberg 1990). In the US, growing up in neighborhoods with a high proportion of single parents is an important obstacle to social mobility (Chetty et al. 2018).

Although it is universally acknowledged that the economic and social consequences of divorce crucially depend on whether and how many children are involved, empirical knowledge about such differences remains scarce. Most notably, no studies have examined how the economic consequences of divorce vary with family size. With the current study, we present the first comprehensive assessment of how the short-term and medium-term economic consequences of divorce vary by family size. Family size not only determines women's economic needs and pathways to economic recovery after divorce, but also how many children are negatively affected by financial hardship. This means that the relevance of family size is twofold: Larger families are more vulnerable to the economic consequences of divorce and larger families include more children exposed to these consequences.

To study how the economic impact of divorce varies by family size, we use long-running data from the cross-national equivalent file (CNEF). We concentrate on the US Panel Study of Income Dynamics (PSID), but we add a comparative perspective from data of the British Household Panel Study (BHPS), the German Socio-Economic Panel Study (GSOEP), the Household, Income, and Labour Dynamics in Australia Survey (HILDA), and the Swiss Household Panel (SHP). Our comparative perspective substantially enhances the scope of our study in terms of population

coverage and allows us to gain initial insight into the role of institutional context (Andreß et al. 2006; Holden and Smock 1991). The surveys included in the CNEF comprise high-quality harmonized data on household income and risk of poverty. To study how the impact of divorce on these outcomes varies by family size, we use between-within random-effects models allowing us to estimate within-person changes following divorce as well as between-person differences before divorce. We also include a control sample of individuals who stay married to adjust our analyses for overall age trends and family size effects.

Theoretical Background

Divorce & Economic Wellbeing

Two classes of theories link divorce to negative economic outcomes: selection and causation (for a discussion, see Amato 2010). According to the selection perspective, socioeconomically disadvantaged men and women are more likely to divorce. Therefore, the negative association between divorce and economic wellbeing is spurious and attributable to individuals' prior earning capabilities. In contrast, the causation perspective maintains that marital breakdown generates negative outcomes over and above selection into divorce.

A second aspect of debate relates to whether the effects of divorce are temporary or persistent. According to the "crisis model", the effects of divorce are short lived. Individual resources, such as self-efficacy and social skills, and structural settings, such as community resources and government policies, determine how quickly individuals recover. According to this model, most individuals eventually return to their pre-divorce level of economic wellbeing. In contrast, the "chronic strain" model suggests that marital separation involves lasting negative effects on individuals' socioeconomic position that do not dissipate.

Amato (2000) integrates the crisis and chronic strain models into a divorce-stress-adjustment perspective to conceptualize how divorce negatively affects individuals both in the short term and in the long term. Stressors related to divorce induce short-term negative effects. One important stressor related to economic wellbeing is the loss of economies of scale: when family members live together, fixed costs such as housing are shared so that the per-capita cost of a given standard of living is less for a family with two adults compared to a single adult (Espenshade 1979). However, protective factors, such as individual and structural resources as well as household composition, may ameliorate short-term effects directly following divorce.

Early studies were limited to the use of cross-sectional data to compare divorced men and women with married men and women to estimate the relationship between marital separation and change in household income. As an example, Sørensen (1994) observed that the household incomes of single-mother households were 80 percent lower than those of two-parent households in Germany, 71 percent lower in the United States, and 63 percent lower in the Sweden. Although early cross-sectional studies expanded knowledge on the relationship between divorce and economic wellbeing, cross-sectional studies are unable to address whether the negative effects of

divorce reflect selection or causation. Further, these studies cannot untangle whether the negative relationship between divorce and economic wellbeing is transient or persistent.

Since longitudinal data have become readily available, more recent studies have been able to use panel data, which can more adequately indicate whether divorce is causally associated with change in economic status and whether those effects depreciate with time. Sociological and economic studies indicate that the effects of divorce on economic wellbeing are not completely attributable to selection (e.g., Amato 2010; Ananat and Michaels 2008). For example, Smock, Manning & Gupta (1999) used endogenous switching regression models with data from the US National Survey of Families and Households to demonstrate that divorced women's economic wellbeing would be substantially higher had they not divorced. Further, if married women were to divorce, their economic wellbeing would be about the same as divorced women's economic wellbeing.

There is mixed evidence as to whether the effects of divorce on household income and the risk of poverty represent a crisis or chronic strain. Findings suggest that the answer to this question depends on national context (e.g., Andreß et al. 2006; Leopold 2018). For example, de Vaus and colleagues (2017) demonstrate using CNEF data that divorce had substantial and negative effects on women's household income in the short term. In the medium term, there was no evidence of recovery in the US and South Korea, whereas women recovered very quickly in Switzerland. Using Danish register data, Hussain and Kangas (2005) showed that women's household incomes initially decreased by over 50 percent, but subsequently recovered between 8.5-13.5 percent per year up to eight years following divorce. Leopold's (2018) analyses using the German Socio-Economic Panel indicate that divorce represents a chronic strain for both women's household incomes and poverty risk.

The Economic Consequences of Divorce for Childless Women & Mothers

A number of studies have demonstrated that divorce decreases women's household incomes and increases their probability of falling into poverty to a much greater extent than for men (Leopold 2018; de Vaus et al. 2017; Andreß et al. 2006; Andreß 2003; Smock 1994; 1993; Avellar and Smock 2005). Bayaz-Ozturk and colleagues (2018) recently used fixed effects regressions and longitudinal data from the US (PSID) and Germany (GSOEP) to show that women's pre- and post-government household incomes decrease to a greater extent than men's. For example, between 2005 and 2013 there is no evidence that men's household incomes decreased following divorce. In contrast, women's equivalized post-government incomes dropped by over 20,500 USD, a decline of over 50 percent. Using the European Community Household Panel for Denmark, the Netherlands, Belgium, France, the UK, Ireland, Italy, Greece, Spain, Portugal, Austria, and Finland and a difference-in-difference propensity score matching estimation, Aassve and colleagues (2005) showed that women were considerably more likely to enter poverty following divorce than men.

Three accounts for the gendered consequences of divorce have been put forward (see Holden and Smock 1991): lost resource pooling, lost income sharing, and human capital depreciation. A common theme across all three accounts is that the economic consequences of divorce are greater for women because of the presence of children. First, women may be more affected by the loss of

income pooling following divorce than men, because women commonly retain custody of children. For childless men and women, the fixed costs of an independent household are no longer spread over two earners, and this loss of economies of scale is not gendered in obvious ways. However, needs and costs of households with children are greater than those of households without children. The former spouse with custody of the children, commonly the mother, has a greater burden to bear than the spouse living in a household without resident children. Indeed, Bayaz-Ozturk and colleagues (2018) showed that in both the US and Germany, the decrease in women's household incomes was intensified by family size.

Second, the loss of partner income is larger for women than for men, and this difference is again intensified by the presence of children. Following divorce, women's household incomes decrease disproportionately, reflecting men's higher average earnings. This disproportionate loss is partly compensated for by transfers from non-custodial fathers, other private transfers, or government assistance. Better enforcement of child maintenance payments and income from personal networks partially accounts for a decline in the economic consequences of divorce since the 1980s (Tach and Eads 2015). Repartnering is another pathway to economic recovery. Hussain and Kangas (2009) partially attribute the economic recovery of women following divorce to remarriage. However, Di Nallo (2019) recently demonstrated that mothers are less likely to re-partner than fathers as well as childless men and women. This means that mothers are less likely to recover from divorce by means of income sharing than their childless counterparts.

Finally, gender differences in the economic consequences of divorce emerge from women's lower human capital and earnings capacities. Again, these differences are intensified by the presence of children. A number of studies have concluded that higher labor market attachment and earnings reduce the association between divorce and women's economic wellbeing (e.g., Bayaz-Ozturk et al. 2018) and aids in women's recovery following divorce (e.g., Hussain and Kangas 2009). However, women with children have greater difficulties finding gainful employment following divorce than childless women (van Damme, Kalmijn, and Uunk 2009). Studies have attributed the narrowing gender gap in the economic consequences of divorce to the reversed gender gap in educational attainment and increased labor market attachment of women (Tach and Eads 2015; McKeever and Wolfinger 2001). Yet, motherhood still commonly involves losses in human capital. Tamborini, Couch, and Reznik (2015) demonstrate that the earnings trajectories of women with young children following divorce are lower than those of childless women. This could indicate that women with resident children after divorce have greater difficulty combining work and family commitments than childless women. Some analysts have argued that family obligations that increase with presence of children, especially children under the age of 6, still contrast with ideal worker norms (Mjoli, Dywili, and Dodd 2013).

In sum, these three accounts suggest that the economic consequences of divorce are greater for mothers than for childless women. This difference comprises larger losses directly following divorce and slower economic recovery in post-divorce years. We therefore hypothesize the following: *The short-term increase in poverty risk following divorce is larger for mothers than for childless women (H1a). Economic recovery in the medium term is slower for mothers than for childless women (H1b).*

The Economic Consequences for Mothers by Family Size

A number of studies that estimate the effects of divorce have adjusted their analyses for the number of children in the household (e.g., Smock 1993; 1994). However, family size is not just confounded with divorce and economic status, but it changes the association. The mechanisms that exacerbate the economic consequences of divorce for women – lost resource pooling, disproportionate income loss, and human capital depreciation – intensify with family size. First, the economic needs of households increase with the number of children (Bianchi, Subaiya, and Kahn 1999), although the marginal costs of children decrease with each additional child (Letablier et al. 2009). Second, the likelihood of re-partnering decreases with additional co-residential children (Ivanova, Kalmijn, and Uunk 2013; Manting and Bouman 2006). Di Nallo (2019) showed that compared to childless women, the odds of re-partnering are 36 percent lower for mothers with one child and 44 percent lower for mothers with two or more children in the household. Finally, income and human capital differences between former spouses increase with family size (Smock 1994). Women with larger families during marriage exit the labor market longer and more often, which depreciates their human capital to a greater degree (Angrist and Evans 1996; Cools, Markussen, and Strøm 2017). In line with this, Jansen, Mortelmans, and Snoeckx (2009) found that divorced women with many children profited less from increasing their work intensity than divorced women with few children.

To our knowledge, no study has examined family size – i.e., the number of resident children – as a moderator of the association between divorce and economic wellbeing. The most recent available study used data from the German Socio-Economic Panel focused only on differences between childless women and mothers as well as differences by the age of the youngest child (Leopold and Kalmijn 2016). Other studies have examined the how divorce effects on non-economic outcomes vary by family size. All of these studies found that larger family sizes exacerbated the negative consequences of divorce for mother outcomes such as depression (Williams and Dunne-Bryant 2006; Kalmijn and Monden 2006; Liu and Chen 2006), psychological distress (Mandemakers, Monden, and Kalmijn 2010; Strohschein et al. 2005), and self-rated health (Liu and Umberson 2008; Williams 2003).

We conceptualize (smaller) family size as a protective factor within Amato's (2000) divorce-stress-adjustment perspective. Just as the absence of children in the household likely shields childless women from the short-term and medium-term mechanisms that associate divorce with lower economic wellbeing, these mechanisms are reinforced by higher parities. We therefore hypothesize the following: *The short-term increase in poverty risk following divorce is intensified by family size (H2a). Economic recovery in the medium term is slowed down by family size (H2b).*

Family Size, Divorce, & Economic Wellbeing: The US in Comparative Perspective

The association between divorce and economic wellbeing varies considerably across countries (e.g., Sørensen 1994; Andreß 2003; Andreß and Hummelsheim 2009; Uunk 2004; de Vaus et al. 2017; Bayaz-Ozturk et al. 2018; Hiilamo 2009). In a recent study on the economic consequences

of divorce, de Vaus and colleagues (2017) used the CNEF to study the association between divorce and equivalized household income up to six years following divorce for men and women. This study showed that although spousal and child maintenance regulations matter, differences in women's earnings and re-partnering contributed most to cross-national differences. Another recent study used the CNEF to compare the economic consequences of divorce for men and women in the US and Germany up to 3 years before and 5 years after divorce (Bayaz-Ozturk et al., 2018). Findings showed that the medium-term consequences of divorce were more negative for German women compared to US women between 1985 and 1993, whereas US women were worse off between 2005-2013.

Using the 1994-2000 European Community Household Panel, Uunk (2004) showed that income-related rather than employment-related policies mitigated the short-term economic consequences of divorce for women within 14 European countries. Income-related welfare provisions, such as allowances for single parents and rules for child maintenance payments, directly compensate for mothers' disproportionate income losses following divorce. Further, these external payments increase with the number of children, thereby assisting mothers of many children to a greater degree than mothers of fewer children. Similarly, employment-related welfare provisions, such as labor market re-entry programs and public childcare arrangements, are targeted towards increasing mothers' human capital and earnings capabilities. Especially in the medium term, these policies reduce the barriers to gainful (re-)employment for mothers and their dependency on a second earner in the household to secure their economic well-being.

In light of these policy perspectives and related empirical findings, we added a comparative view to our study of the US context. Putting this context in comparative perspective not only enhanced our population coverage but also allowed us to gain initial insight into the role of institutional and cultural contexts in mitigating or reinforcing the short-term and medium-term associations between divorce, family size, and women's economic wellbeing.

Data & Methods

Study Samples

We used data from the US Panel Study of Income Dynamics (PSID 1970-2015) included in the Cross-National Equivalent File (CNEF) to analyze how women's household incomes and risk of poverty changed following divorce. PSID is a nationally representative household panel, which sampled approximately 18,000 individuals within 5,000 households in 1968 and continued to collect economic, sociological and demographic information annually until 1997. Since then information has been collected on a biennial basis. From the other CNEF countries, we added data from Germany (GSOEP 1984-2014), the UK (BHPS 1991-2008), Switzerland (SHP 1999-2015), and Australia (HILDA 2001-2015).

We generated a divorce and a control sample from the PSID. Our divorce sample was restricted to women who were observed transitioning from a marital union to divorce between ages 18 and

50. The year of divorce was defined as the year of legal divorce or the year of separation. We chose age 50 as the upper age bound to define a comparison group of childless women that was clearly interpretable. In the absence of this upper age bound, this group would have comprised women who never had children and women who lived without (adult) children who had already left their parental home. Although the CNEF does not include an indicator of parity, the upper age bound ensured that the vast majority of women labeled childless upon divorce were indeed childless and not in the empty nest stage.

The divorce sample included all observations, i.e. person-years, within marriage prior to divorce as well as all post-divorce observations regardless of women's marital status. This means that we retained observations even when women remarried or divorced a second time. Keeping these observations was consistent with our goal of estimating the association between divorce and economic wellbeing in the years following divorce for all women, allowing for recovery pathways such as repartnering. We excluded women who were divorced when first sampled to ensure that we could accurately identify divorce years and gauge women's pre-divorce levels of economic wellbeing. Our control sample consisted of all person-years of women within marriage who were not observed to transition to divorce. We restricted both our divorce and control samples to observations between ages 18 and 65.

Summary statistics for both the divorce and control samples are presented and discussed separately by family size in Table A1 of the manuscript appendix. Note that for two reasons the average number of observations per respondent in the control sample was smaller than in the divorce sample: First, women in the divorce sample needed to be observed for at least two years to enter the analyses, while women in the control sample could enter even if observed only once. Second, it was more likely to observe new respondents, e.g. refreshment samples, second- or third-generation households, or household additions, in the control sample, given that the divorce sample was conditioned on having observed the transition to divorce during the panel.

Measuring Economic Wellbeing

The focus of this study is how family size moderates the association between divorce and women's economic wellbeing. While economic wellbeing has been conceptualized in numerous ways, poverty is one of the oldest (Rowntree 1901) and most studied measures (Desmond and Western 2018; Brady forthcoming). An absolute poverty threshold has long been used in research and policy in the United States. This threshold is based on the costs needed to purchase the minimum amount of goods that are deemed necessary for survival (Sen 1994). It is set to approximately three times the cost of a minimum food diet for a household in 1963, adjusted for inflation to current prices. Absolute poverty thresholds have been criticized for underestimating poverty, ignoring the role of government transfers, and being too static for cross-temporal and cross-national comparisons (Brady 2003). Relative poverty takes an alternative approach to defining poverty thresholds. In this tradition, households are impoverished when they are at risk of social exclusion or do not have enough resources to participate in activities and achieve the standard of living customary in their society (Townsend 1979).

In both cases – absolute and relative poverty – household incomes are adjusted according to the needs and demands of households to construct an adequate measure of economic wellbeing. Equivalence scales that account for the additional costs of household members, especially children, have been developed for this purpose. One of the most common and simple methods to equalize household incomes is the square root scale, dividing incomes by the square root of the number of household members. This method accents the decreasing marginal cost of each additional household member. The OECD scale assigns constant weights to additional household members, but gives a higher additional weight to adults than to additional children (0.5 compared to 0.3). The choice of poverty measure and equivalence scale is not trivial for our purposes, because the number of children is both an independent variable and an essential component of our outcome variable.

Outcome Variable

As a measure of economic wellbeing, we concentrated on relative poverty based on net household incomes equalized using the square root of the household size. This measure has several benefits. It captures economic wellbeing in terms of the household's capability to participate in society, it is comparable across countries, and it incorporates a conservative equalization where the marginal costs of additional household members decrease. In the online supplement we included analyses on various additional measures of economic wellbeing, which we also briefly discuss below. Relative poverty was measured in accordance with the EUROSTAT definition of at-risk of poverty or social exclusion. Individuals with net equalized household incomes under 60 percent of the annual median were considered to be in relative poverty. We estimated annual medians using the entire samples weighted to be nationally representative for the given year. Annual net household income was calculated as the sum income of all household members from labor earnings, asset flows, retirement income, private transfers, public transfers, and social security pensions minus taxes. Private transfers included alimony and child support payments, and public transfers included housing allowances, child benefits, subsistence assistance, and maternity benefits. Unfortunately, our data do not allow us to exclude expense offset transfers, such as housing allowances.

Sensitivity Analyses

To gauge the sensitivity of our models to the construction of our poverty thresholds, we estimated the association between divorce and numerous measures of economic wellbeing based on different definitions of poverty and different equivalence scales. As outcomes, we used a) the US Census Bureau absolute poverty thresholds based on gross household income that varies by household size, relative poverty using the OECD equivalence scale, and relative poverty without equalization. We additionally estimated our models using log net equalized household income rather than poverty. The results of these analyses are available from the authors upon request.

We found that the results of these models are consistent with the results presented below, with the exception of non-equalized relative poverty. Family size differences were somewhat larger for analyses based the OECD equalization scale and the US Census Bureau absolute poverty thresholds. When we defined poverty based on non-equalized net household incomes, we found

a contrasting pattern showing that childless women had a slightly *higher* probability of falling under the poverty threshold upon divorce than mothers, especially mothers of many children.

These counterintuitive result shows why it is important to equalize income when defining poverty thresholds: First, net incomes of households with children will be higher than those of childless households due to a wide range of government transfers, many of which are based on the number of dependent children in the household. For example, the maximum earned income tax credit is 3,526 USD for households with one dependent child, 5,828 USD for two children, and 6,557 USD for three children. Second, as we discussed above, poverty thresholds need to be adjusted for the needs of the household. A non-equalized absolute threshold will underestimate the amount of goods necessary for the household's survival and a non-equalized relative threshold will underestimate the economic resources needed for the household's members to participate fully in society. Finally, results on the non-equalized measure run counter to those obtained from the absolute poverty thresholds of the Census Bureau, which have a real meaning for US households. The eligibility of households for numerous US social assistance programs, such as Head Start, the Supplemental Nutrition Assistance Program (SNAP), and the Low-Income Home Energy Assistance Program, the National School Lunch Program, and the Children's Health Insurance Program, is based on these poverty guidelines.

Independent Variables

To examine both initial and medium-term changes following divorce, we included both a binary and a continuous indicator for divorce. Our binary indicator took the value of 1 when women were divorced and 0 when they were married. The continuous indicator counted the number of years following divorce and was zero during marriage and in the year of divorce. When these variables were simultaneously included in the regression models, the binary indicator captured the initial change following the transition to divorce and the continuous indicator captured changes after the year of divorce. We also tested non-parametric specifications using dummy variables for years after divorce. A quadratic specification of years after divorce was more parsimonious and fitted closely with non-parametric results.

Family size was measured as the number of children in the household in the year of divorce categorically as either no children, one child, two children, or three or more children. For individuals who did not divorce, family size was measured as the maximum number of children observed in the household. We chose a categorical measure for the number of children to better account for non-linearities in the association between family size and women's economic wellbeing following divorce. Results using a continuous measure of family size are presented in the online supplement. It is important to note that our family size variable did not capture the number of children ever born to a women (this information is not available in the CNEF), but the number of household members under the age of 18.

Analytical Approach

We used between-within random effects linear regression models (Sjölander et al. 2013), also known as hybrid random effects regression models (Allison 2009), with observation years nested

in individuals to estimate changes in the risk of relative poverty. Alternatively, one could use fixed effects models or variants of traditional hierarchical random effects modeling, e.g. growth curve models, however, between-within random effects models combine the advantages of fixed effects and random effects models. To accomplish this, all time-varying covariates are included twice: as time-constant individual means and as time-varying deviations from those individual means.

A between-within random effects model can be formulated as:

$$y_{it} = \beta_0 + \bar{X}_i \beta^{BE} + (X_{it} - \bar{X}_i) \beta^{FE} + u_i + e_{it}$$

where relative poverty, y , for an individual, i , at time point, t , is a function of time-constant predictors and their vector of between-individual coefficients, and time-varying predictors and their within-individual coefficients as well as an individual random intercept and idiosyncratic error term. In our case, the association between divorce and economic wellbeing is captured through four terms in the regression models: two derived from the binary divorce indicator and two from the continuous measure for years after divorce.

$$y_{it} = \beta_0 + \bar{D}_i \beta_{1a}^{BE} + (D_{it} - \bar{D}_i) \beta_{1b}^{FE} + \overline{Dur}_i \beta_{2a}^{BE} + (Dur_{it} - \overline{Dur}_i) \beta_{2b}^{FE} + \bar{X}_i \beta^{BE} + (X_{it} - \bar{X}_i) \beta^{FE} + u_i + e_{it}$$

where β_{1b} and β_{2b} are our within-effects of interest, i.e. the association between the transition from marriage to divorce and economic wellbeing, and its change as individuals progress from one year within divorce to the next, respectively. The between-effects are captured by β_{1a} and β_{2a} , which denote the difference between married and divorced individuals and how that difference varies between individuals with longer and shorter durations within divorce. Note that we include the continuous divorce indicator as a quadratic term to model non-linear changes in the association between divorce and economic wellbeing in the years that follow. We interact these terms with family size to estimate how the associations between our divorce indicators and economic wellbeing vary by the number of children in the household. We therefore need to include five additional terms:

$$y_{it} = \beta_0 + \bar{D}_i \beta_{1a}^{BE} + (D_{it} - \bar{D}_i) \beta_{1b}^{FE} + \overline{Dur}_i \beta_{2a}^{BE} + (Dur_{it} - \overline{Dur}_i) \beta_{2b}^{FE} + FAM_i \beta_3 + \bar{D}_i FAM_i \beta_{4a}^{BE} + (D_{it} - \bar{D}_i) FAM_i \beta_{4b}^{FE} + \overline{Dur}_i FAM_i \beta_{5a}^{BE} + (Dur_{it} - \overline{Dur}_i) FAM_i \beta_{5b}^{FE} + \bar{X}_i \beta^{BE} + (X_{it} - \bar{X}_i) \beta^{FE} + u_i + e_{it}$$

where the within-effects β_{4b} and β_{5b} represent how the initial impact of a transition into divorce on economic wellbeing and its change over time vary by family size. The between-effect of family size and economic wellbeing is captured by β_3 . All models include a sample indicator, i.e. whether an individual ever divorced or remained married during the observation window, quadratic between- and within-individual age terms, as well as respondents' average observation year. In additional analyses presented below, we adjusted our models for individual characteristics that

were confounded with family size and divorce as well as factors that might mediate the interactive effects of divorce and family size on economic wellbeing. Specifically, we estimated models separately that included educational attainment, the age of the youngest child in the household, the number of children in the household prior to and after divorce, the number of annual working hours, and an indicator for remarriage (see section 8 of the online supplement for more information).

Results

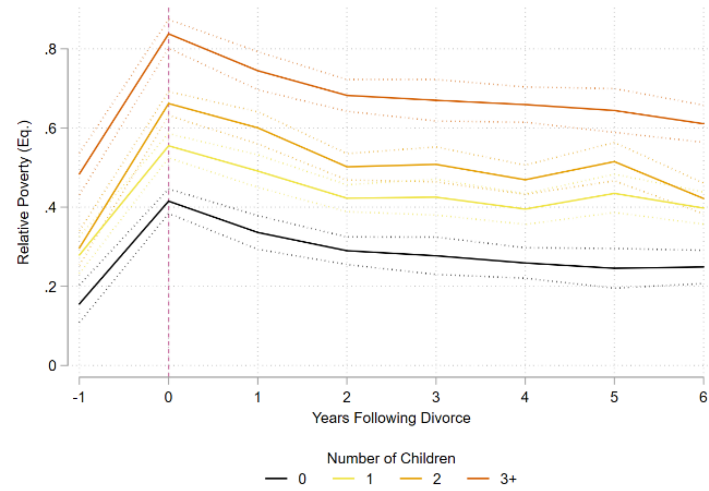
Descriptive Results

Figure 1 shows descriptive results on changes in relative poverty, the number of children in the household, the age of the youngest child in the household, marital status, and annual working hours one year prior to divorce and six years following divorce. Panel a of Figure 1 shows that the proportion of women that lived in relative poverty both prior to and following divorce was highly stratified by family size. These gaps increased upon divorce and decreased slightly in subsequent years, but did not return to pre-divorce levels.

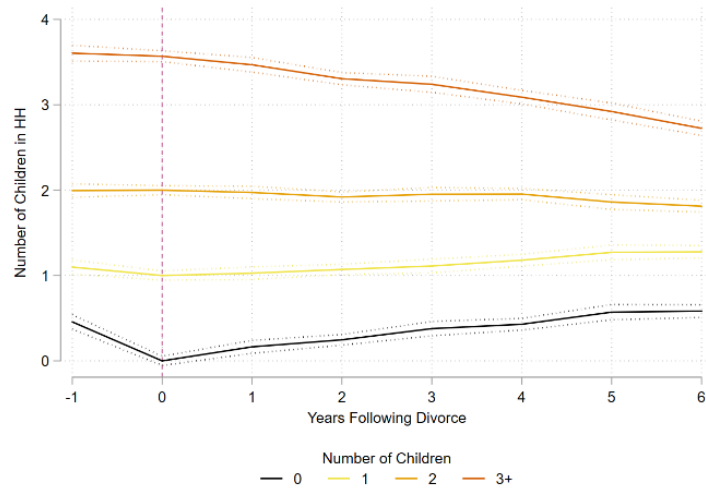
Changes in the composition of households by family size are displayed in panels b, c, and d of Figure 1. Per definition, childless households had zero resident children in the year of divorce. The number of children was stable in households with one or two children in the year of divorce, it declined in households with three or more children upon divorce, and it increased in households with no children upon divorce. The age of the youngest child remained relatively constant around 10 for women with children in the household in the year of divorce. For women without children upon divorce, it remained under 5 in the six years following divorce. Note that these results were robust to the definition and inclusion of women without children in the household (see the additional analyses section below).

Figure 1: Change in Selected Indicators of the Divorce Sample Prior and Following Divorce by Family Size

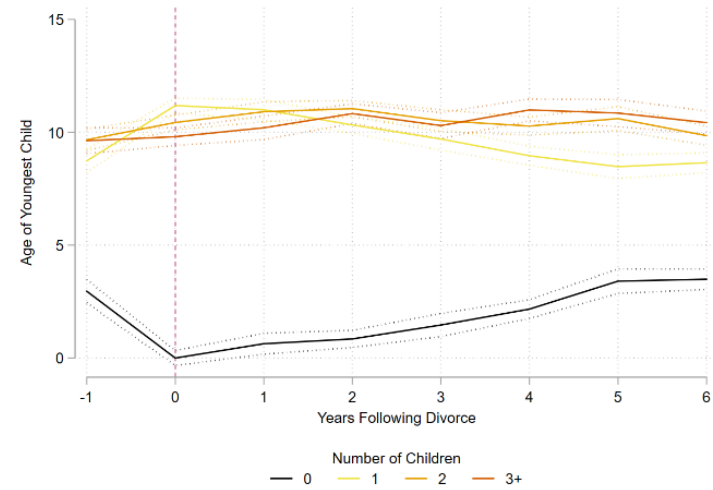
a) Relative Poverty



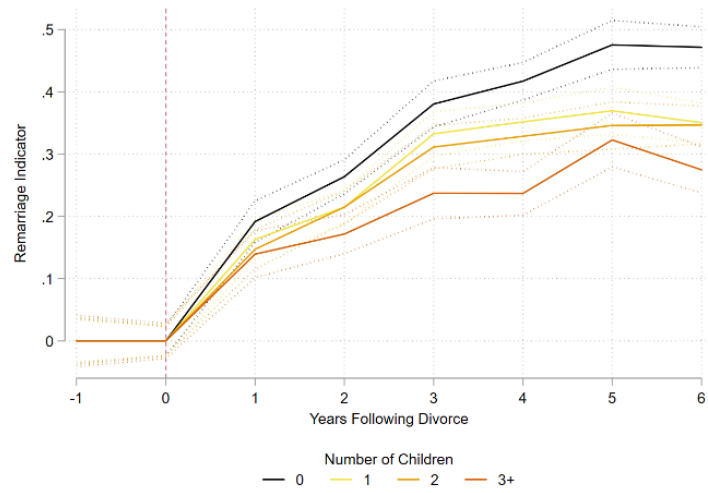
b) Number of Children



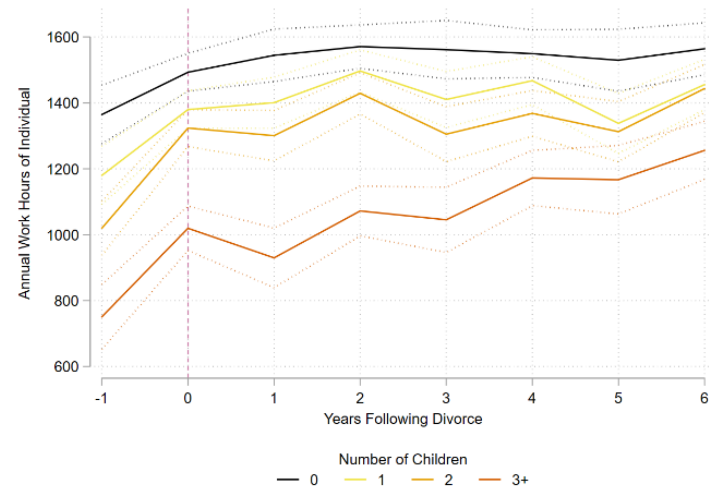
c) Age of the Youngest Child



d) Remarriage



e) Annual Working Hours



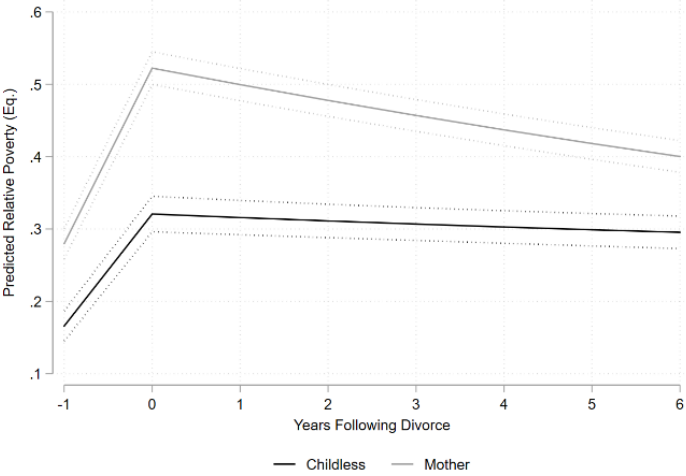
For remarriage, panel d of Figure 1 shows a clear family size gradient. In the first year, those differences were small, ranging between 20 percent for women without children in the household in the year of divorce to 15 percent for women with children. Six years after divorce, nearly 50 percent of childless women in the divorce sample remarried, compared to roughly 35 percent of women with one or two children and under 30 percent of women with three or more children. Panel e of Figure 1 shows that there was also a clear family size gradient in the women's annual work hours. These differences were largest before divorce, diminished upon divorce, and further narrowed across subsequent years. For example, the difference in annual working hours between childless women and women with three or more children narrowed from 600 hours before divorce to approximately 450 hours in the year of divorce and 300 hours 6 years later. In sum, women without children at divorce were more likely to enter parenthood and remarry in the years following divorce, whereas women with children, especially those with three or more children, increased their labor market participation.

Results from Between-Within Random Effects Regression for Childless Women & Mothers

In the first step of our multivariate analysis, we compared mothers to women who were childless upon divorce. Results from between-within random effects regressions are displayed in Figure 2 (see Table A2 in the manuscript appendix). Panel a of Figure 2 shows predicted probabilities for childless women and mothers one year prior to divorce and six years after it; panel b shows the estimated change in relative poverty.

Figure 2: Predicted Probability and Coefficients of Relative Poverty for Childless Women and Mothers

a)



b)

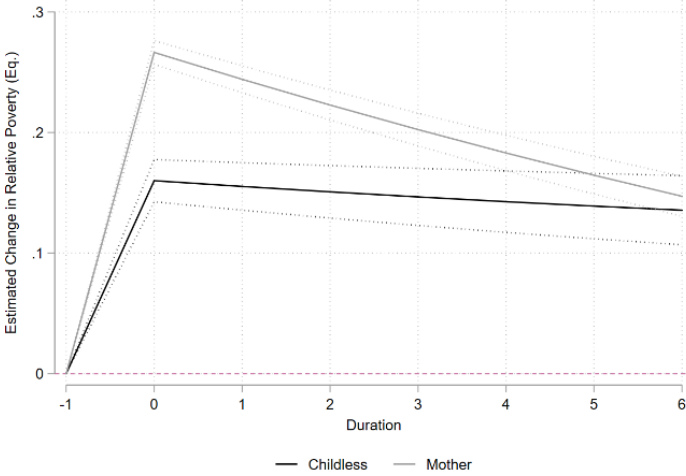
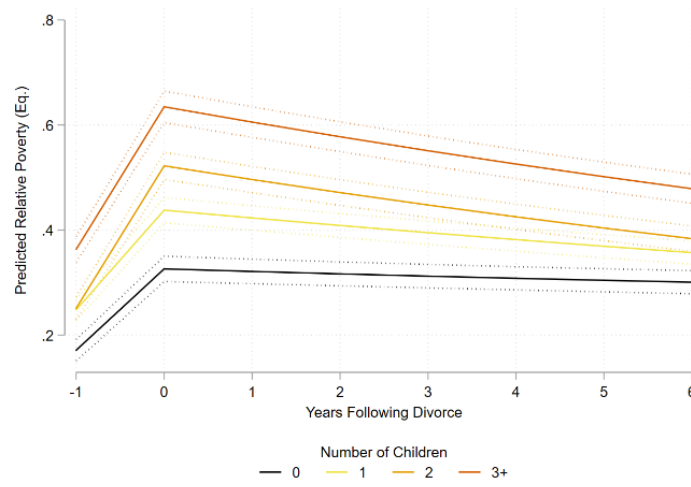
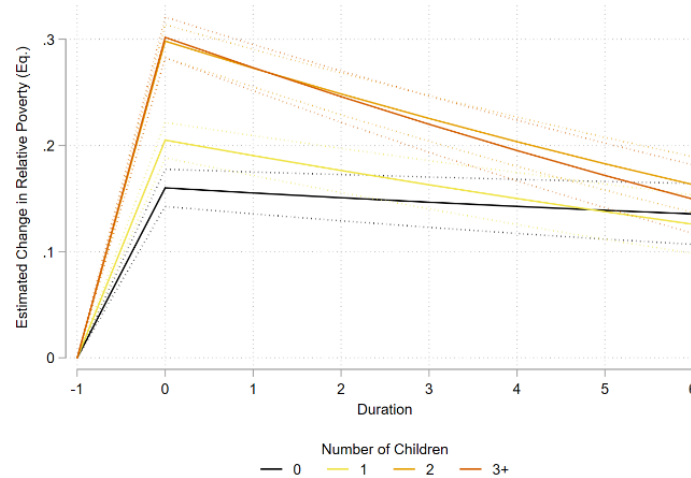


Figure 3: Predicted Probability and Coefficients of Relative Poverty by Family Size

a)



b)



As can be seen in panel a of Figure 2, the predicted probability of living in relative poverty was consistently higher for women with children in the household in the year of divorce compared to women without children. Prior to divorce, women without children had an estimated probability of just under 20 percent to live in relative poverty compared to a 30 percent probability for women with children in the household. In the following year, the year of divorce, the probability of relative poverty increased by nearly 15 percentage points for childless women and over 25 percentage points for women with children in the household. In the year of divorce, just over 50 percent of mothers and just over 30 percent of childless women were at risk of relative poverty. After this initial widening from a 10 percentage-point gap to a 20 percentage-point gap, differences between mothers and childless women narrowed, returning to pre-divorce levels after 6 years. These results supported hypothesis H1a stating that the negative short-term effects of divorce and poverty are larger for mothers. However, results did not support hypothesis H1b stating that the speed of

recovery in the medium-term was faster for childless women compared to mothers. Empirically, the opposite was true.

Results from Between-Within Random Effects Regression by Family Size

In the second step, we turn to the regression results on women's probability of relative poverty by family size. These results are displayed in Figure 2 (see Table A3 in the manuscript appendix). Panel a of Figure 2 shows predicted probabilities for childless women as well as mothers with one, two, and three or more children one year prior to divorce and six years after it. The estimated changes in relative poverty are depicted in panel b.

In the year of divorce, the predicted probability of living in relative poverty increased with the number of children in the household. In the year of divorce, the poverty risk of women with two children and women with three or more children grew by approximately 30 percentage points to roughly 50 and 65 percent. In contrast, the increase for women with one child was less pronounced, albeit still amounting to 20 percentage points. Similar to the previous findings, these disproportionate increases in larger families did not persist, as shown in panel b of Figure 3. The association between divorce and poverty for women with one child decreased to the level of childless women within four years. The association between divorce and poverty for women with two children and women with three or more children took longer, at least six years, to reach the level of women with one child. In sum, reflecting our findings above, the results supported H2a but not H2b.

Cross-National Results

In Figure 4 and Figure 5, we put these findings in comparative perspective. These figures correspond to Figure 2 and 3, respectively and show results separately by motherhood status (Figure 4) and family size (Figure 5) for Germany (upper-left plots), Switzerland (upper-right plots), the UK (lower-left plots), and Australia (lower-right plots) (see Table A1 in the manuscript appendix).

Overall, the results for Germany, Switzerland, the UK, and Australia were similar to those for the US. In all countries, mothers had a higher probability of living in relative poverty compared to women without children in the year of divorce. The pre-divorce probability of poverty for mothers was around 25 percent for Switzerland and the UK, and 20 percent for Germany and Australia. The increase was also considerably larger for mothers in all countries. While the probability of relative poverty for childless women grew by roughly 10 percentage points in all study countries, the increase for mothers was nearly 35 percentage points in Germany, 30 percentage points in Switzerland and the UK, and 20 percentage points in Australia. In addition, the association between divorce and relative poverty remained relatively stable in all countries, while the association for mothers declined and reached levels of childless women within three years in Australia, and four years in Switzerland and the UK. In Germany, the association between divorce and poverty for mothers approached but did not reach the level of childless women within six years.

Figure 4: Predicted Probability and Coefficients of Relative Poverty for Childless Women and Mothers across Countries

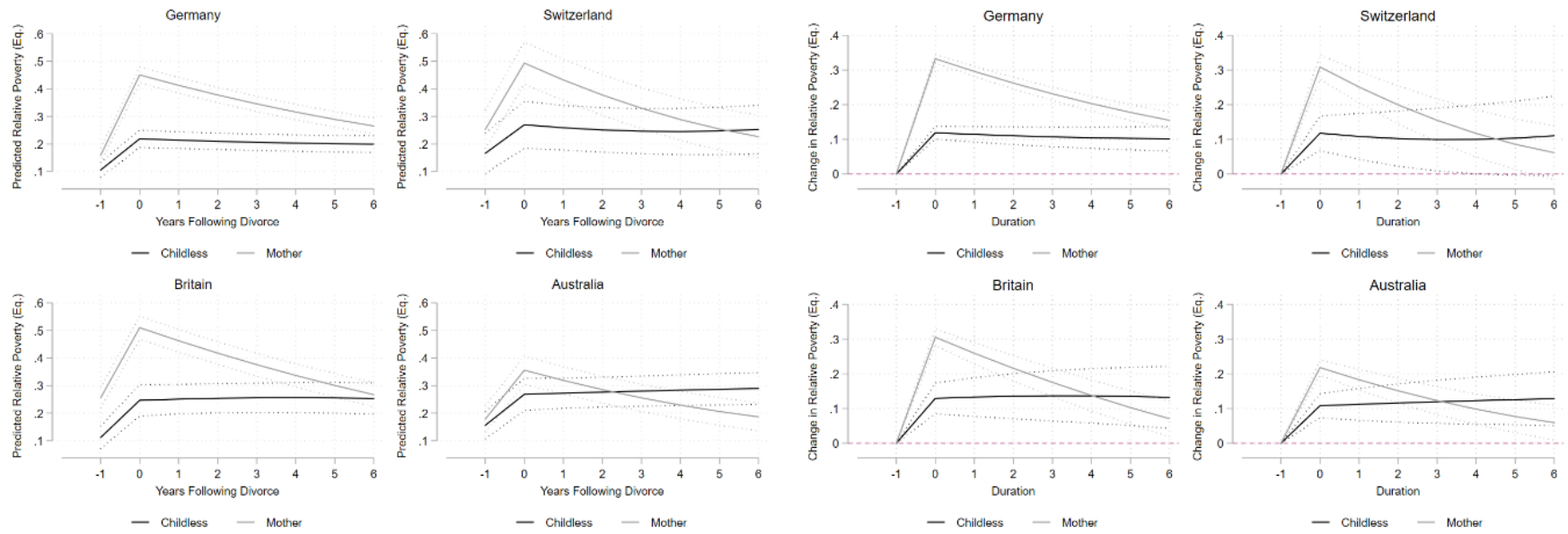
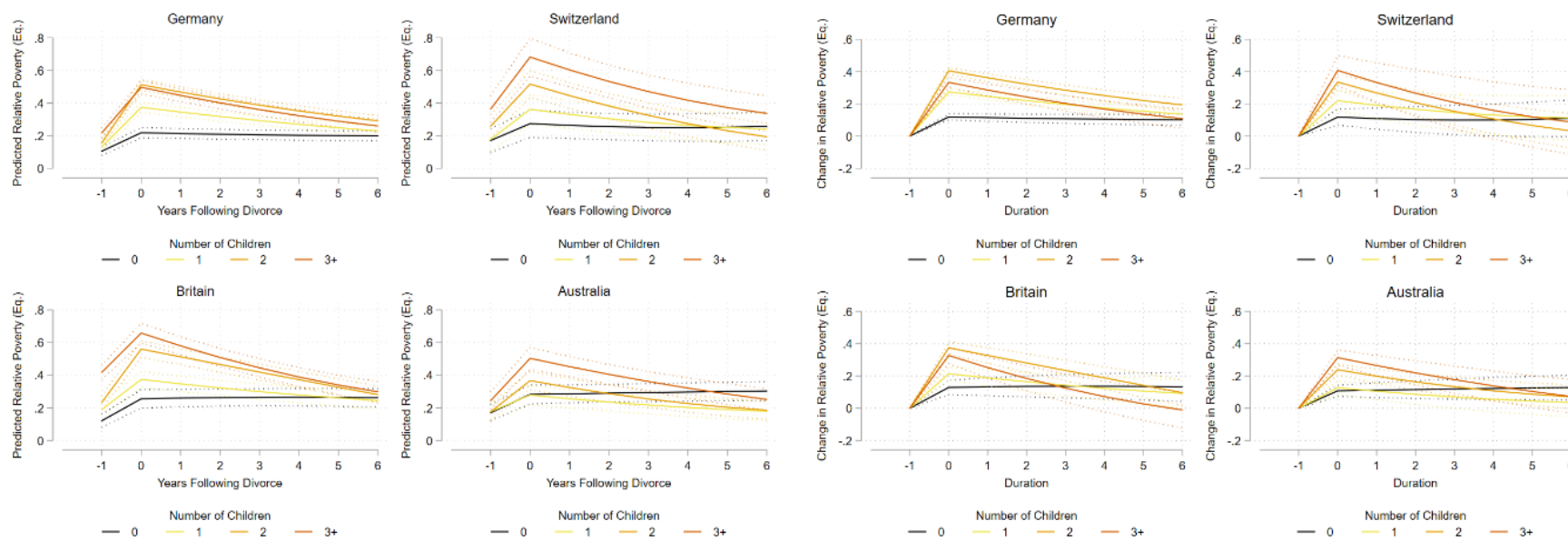


Figure 5: Predicted Probability and Coefficients of Relative Poverty by Family Size across Countries



The results by family size in our other study countries were also similar to those from the US. Pre-divorce levels of poverty hovered around 20 percent for all family sizes in Germany and Australia but were stratified to a greater extent in Switzerland and the UK. In the year of divorce, the probability of relative poverty increased most sharply for women with two and women with three or more children: 25 and 30 percentage points in Australia, roughly 35 and 40 percentage points in Germany, Switzerland, and the UK. Again, in almost all countries the association between divorce and relative poverty for women with children reached the levels experienced by childless women within four years or less, Germany being the only exception.

Additional Analyses

An important issue in identifying the role of family size was to address potential confounding and mediation with educational attainment, the age of the youngest child in the household, the number of children in the household, annual work hours, and remarriage. For example, if family size was larger and divorce consequences more severe among the lower educated, we might incorrectly attribute socioeconomic differences in the impact of divorce to differences in family size. Similarly, if the age of the youngest child was lower and the consequences of divorce more severe with the presence of a younger child, we might have incorrectly attributed child age differences in the impact of divorce to family size differences.

To examine these possibilities, we estimated models that included more complex and higher-order interactions between the divorce indicators, family size, and the five characteristics mentioned above. Specifically, we included main effects of each of these variables along with two-way interactions with the divorce indicators, two-way interactions with family size, and three-way interactions with the divorce indicators and family size. Note that the number of estimated parameters increases exponentially with each factor included in our models due to the complex and higher-order interactions. Therefore, we only estimated models that included each characteristic individually. This strategy nonetheless allowed us to gain leverage on the sensitivity of our models to additional covariates.

As an additional sensitivity test, we addressed the potential problem of sample attrition. Although we found no evidence of selective panel attrition by family size following divorce, we nonetheless estimated our models using longitudinal weights that accounted for attrition. As the results of these analyses were consistent with those presented above, we present the more parsimonious models in the manuscript. In addition, we gaged the sensitivity of our analyses to different specifications: analyses with a continuous family size indicator, excluding childless women, and on a sample of non-Black and non-Hispanic women. The results of all these analyses are available from the authors upon request and were similar to those shown above leading to the same substantive conclusions.

Finally, recent literature analyzed whether the economic consequences of marital and cohabitation dissolutions were similar. Using data from the 1979 National Longitudinal Survey of Youth, Allevar and Smock (2005) showed that formerly married women experienced a steeper decline in household incomes than formerly cohabiting women (58 percent compared to 33 percent). More recently, Tach and Eads (2015) demonstrated using data from the US Survey of

Income and Program Participation that in contrast to marital dissolutions, the economic consequences of cohabitation dissolution have grown more severe over time. In this study, we concentrated on divorce. Nonetheless, we performed additional analyses on a sample of cohabiting couples that experienced a separation and a control sample of continuously cohabiting couples (available from authors upon request). Our results indicate that the short-term and medium-term associations between separation and relative poverty were relatively similar for childless women and mothers with smaller and larger family sizes. However, the baseline poverty risk of cohabiting mothers was considerably higher than the baseline risk for childless women and this difference increased with the number of children.

Discussion

In this article, we addressed two research questions: how does women's economic wellbeing change in the years following divorce and how do these changes vary by family size? Our main contribution to the literature on the economic consequences of divorce is to study the role of family size as a moderating factor. Conceptualizing family size within Amato's (2000) divorce-stress-adjustment perspective, we expected that the absence of children in the household shields childless women from the short-term stressors that associate divorce with lower economic wellbeing, such as lost resource pooling, disproportionate income loss, and human capital deficits. The economic needs of households with children are greater (Bianchi, Subaiya, and Kahn 1999) and mothers find it more difficult to find gainful employment following divorce (van Damme, Kalmijn, and Uunk 2009). Moreover, the economic stress of divorce may be exacerbated for women with larger families if they exited the labor market longer and more often during marriage (Angrist and Evans 1996; Cools, Markussen, and Strøm 2017) and if government and child support payments do not compensate for disproportionate income loss following divorce and the needs of the household (Bartfeld 2000).

Based on these considerations, we hypothesized that the negative short-term effects of divorce on poverty are larger for mothers compared to childless women (H1a) and that the speed of recovery in the medium-term is faster for childless women compared to mothers (H1b). Further, we hypothesized that the negative short-term effect of divorce on poverty increases with the number of resident children (H2a) and that the speed of recovery in the medium term decreases with the number of resident children (H2b). Although we concentrated on the US, we examined four additional countries – Australia, Germany, Switzerland, and the UK – to broaden the scope of our results and to gain initial insight into the role of institutional context in reinforcing or ameliorating the negative consequences of divorce for women with different family sizes. We used between-within random effects models to estimate changes in the probability of relative poverty following divorce.

Our results provide additional evidence that divorce is related to a substantial initial drop in economic wellbeing followed by continuous but incomplete recovery (Leopold 2018; de Vaus et

al. 2017; Andreß et al. 2006; Andreß 2003; Smock 1994; 1993; Peterson 1996). However, our main contribution to the literature was to show how motherhood status and family size moderated the short-term and medium-term association between divorce and women's economic wellbeing following divorce. Our findings on the role of motherhood status and family size only partially supported our hypotheses. In line with expectations, we found that the short-term negative effects of divorce on the risk of poverty increased with family size. In contrast to expectations, however, these differences vanished in the medium term.

The finding of faster economic recovery in larger family is surprising, but our results also pointed towards potential explanations in terms of different barriers to women's employment and remarriage following divorce. Women with children at the time of divorce increase their work intensity substantially in the years following divorce. Further, as children begin to leave the parental home, the economic needs of the household decrease. In contrast, women without children at the time of divorce are more likely to remarry and enter parenthood, which both increases the economic needs of the household and creates barriers for their future employment. In sum, although women with children are less likely to recuperate by means of remarriage, they are more likely to recuperate by reducing the needs of the household and increasing their labor market intensity.

Although countries differ with regard to the size of the initial association between divorce and economic wellbeing as well as the rate of recovery, cross-national similarities in family size differences are striking. In all countries, women without children did not recover from the economic losses associated with divorce, whereas women with children tended to partially recover in the medium term. The initial association between divorce and poverty was strongest and most stratified by family size in Germany and smallest and least stratified by family size in Australia. Women with children fully recovered in Australia, Switzerland, and the UK. Our results indicate that divorce is a chronic strain for childless women in these three countries, whereas it is better conceived as a medium term crisis for women with children. In Germany and the US, the impact of divorce for women with children reached the level of women without children towards the end of the observation window. In these countries, however, a chronic economic strain in terms of substantial losses in economic wellbeing persisted for all family sizes.

It was out of the scope of this study to directly assess the role of institutional factors and adjudicate between different policy packages that target the core associations between divorce, family size, and economic wellbeing. Our results nevertheless invite us to speculate on important factors that might affect the association between divorce and women's economic wellbeing and mitigate family size differences. Our results are generally consistent with Uunk's (2004) argument that income-related policies reduce the negative effects of divorce on mothers' economic wellbeing. Public spending on cash benefits for families in Australia and the UK is twice as high as in Germany and Switzerland (Thévenon 2011). Further, while there are no unconditional child allowances in the US, child allowances are considerable in Australia and to a lesser extent in the UK and Germany (see Gauthier and Monna 2004). However, other explanations are plausible, such as differential selection into marriage and divorce across countries. Future research should broaden the comparative scope along these lines and include other national contexts, in particular Nordic welfare states, and different time periods.

Children who experience divorce and the economic consequences following divorce often suffer from problems, such as deviance and health problems, reduced educational and occupational attainment, and barriers to social mobility (Amato 2000; 2010; Furstenberg 1990; Chetty et al. 2018). Therefore, the presence of children turns divorced women's economic hardship into a major social problem. As we have shown, larger families are more vulnerable to the short-term economic consequences of divorce in terms of falling into poverty, which in turn means that more children are exposed to these consequences in larger families. Regarding family size as a moderator of divorce effects, our study contributes an analysis of objective economic outcomes to previous findings on divorce and subjective measures of wellbeing (Leopold and Kalmijn 2016), depression (Williams and Dunne-Bryant 2006; Kalmijn and Monden 2006; R. Liu and Chen 2006), psychological distress (Mandemakers, Monden, and Kalmijn 2010; Strohschein et al. 2005), and self-rated health (H. Liu and Umberson 2008; Williams 2003). Taken together, this line of research suggests that the number of children in the household intensifies the negative consequences of divorce in various domains of life. However, this conclusion is more strongly supported for short-term (crisis) effects than for medium-term effects. In this regard, our findings suggest that the presence of children contributes to economic recovery following divorce. This unexpected finding and potential underlying mechanisms warrant further investigation in future research.

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Appendix

Table A1: Summary Statistics - PSID

	Childless		1 Child		2 Children		3+ Children	
	Divorced	Control	Divorced	Control	Divorced	Control	Divorced	Control
Relative Poverty (Eq.)	0.24 (0.43)	0.14 (0.35)	0.34 (0.47)	0.13 (0.34)	0.37 (0.48)	0.12 (0.32)	0.53 (0.50)	0.22 (0.41)
Number of Children in HH	0.76 (1.11)	0.00 (0.00)	1.16 (1.01)	0.53 (0.50)	1.55 (1.10)	1.14 (0.86)	2.35 (1.68)	1.98 (1.57)
Number of Years of Education	12.75 (2.20)	12.70 (2.92)	12.61 (1.95)	12.73 (2.47)	12.52 (2.01)	13.19 (2.36)	11.82 (2.21)	12.25 (2.62)
Age of Youngest Child	4.32 (6.24)	0.00 (0.00)	8.03 (6.52)	5.68 (6.64)	8.06 (6.47)	7.14 (6.63)	8.01 (6.47)	7.74 (6.54)
Remarriage Indicator	0.28 (0.45)	0.00 (0.00)	0.24 (0.43)	0.00 (0.00)	0.20 (0.40)	0.00 (0.00)	0.19 (0.39)	0.00 (0.00)
Annual Work Hours of Individual	1393.27 (908.17)	1175.09 (951.74)	1316.49 (900.51)	1183.84 (911.13)	1274.83 (911.70)	1159.90 (898.15)	1077.49 (956.06)	943.17 (900.28)
Age in years	37.01 (10.65)	44.52 (13.96)	35.82 (10.36)	39.85 (12.44)	35.89 (10.18)	38.23 (11.30)	37.46 (10.39)	40.32 (11.31)
Year of Divorce	1993.77 (12.38)		1993.60 (12.32)		1993.55 (12.53)		1992.26 (13.46)	
Age at Divorce	33.02 (9.22)		32.08 (8.63)		32.24 (7.09)		33.07 (6.38)	
Year of Birth	1960.70 (13.35)	1952.53 (23.93)	1961.48 (12.38)	1958.69 (18.60)	1961.26 (13.25)	1959.64 (16.56)	1959.14 (14.89)	1955.40 (17.71)
N - Subjects	921	2,305	942	1,881	973	2,804	671	2,811
N - Observations	12,498	12,019	12,950	14,449	14,265	32,793	9,379	38,189

Table A2: Regression Results for Childless Women and Mothers

	PSID	Germany	Switzerland	UK	Australia
Divorce					
<i>Between</i>	0.086+ (0.036)	-0.029 (0.037)	-0.187 (0.123)	0.104+ (0.052)	0.026 (0.092)
<i>Within</i>	0.160** (0.009)	0.119** (0.010)	0.118** (0.025)	0.129** (0.023)	0.108** (0.018)
Duration					
<i>Between</i>	-0.008 (0.007)	-0.000 (0.010)	0.076 (0.047)	-0.032 (0.023)	-0.006 (0.038)
<i>Within</i>	-0.005** (0.001)	-0.005* (0.002)	-0.013 (0.010)	0.005 (0.007)	0.004 (0.007)
Duration²					
<i>Between</i>	0.000 (0.000)	-0.000 (0.001)	-0.011 (0.006)	0.002 (0.003)	0.000 (0.005)
<i>Within</i>	0.000** (0.000)	0.000** (0.000)	0.002 (0.001)	-0.001 (0.001)	-0.000 (0.001)
Motherhood (ref. Childless)					
Mother	0.098** (0.008)	0.035** (0.005)	0.074** (0.008)	0.075** (0.008)	0.047** (0.006)
Divorce*Motherhood					
<i>Between</i>	0.061 (0.038)	0.065 (0.038)	0.347* (0.131)	0.055 (0.057)	0.093 (0.098)
<i>Within</i>	0.106** (0.010)	0.213** (0.011)	0.191** (0.031)	0.176** (0.026)	0.110** (0.021)
Duration*Motherhood					
<i>Between</i>	0.007 (0.008)	-0.015 (0.012)	-0.097 (0.061)	0.017 (0.028)	-0.008 (0.046)
<i>Within</i>	-0.018** (0.001)	-0.034** (0.002)	-0.052** (0.012)	-0.054** (0.008)	-0.043** (0.008)
Duration²*Motherhood					
<i>Between</i>	0.000 (0.000)	0.001 (0.001)	0.010 (0.008)	0.001 (0.004)	-0.000 (0.006)
<i>Within</i>	0.000** (0.000)	0.001** (0.000)	0.002 (0.001)	0.002* (0.001)	0.002* (0.001)
Sample (ref. Control)					
Divorce	0.027 (0.014)	0.024 (0.015)	0.039 (0.038)	0.031 (0.021)	0.024 (0.026)
Age					
<i>Between</i>	-0.009** (0.000)	-0.007** (0.000)	-0.005** (0.001)	-0.006** (0.000)	-0.004** (0.000)
<i>Within</i>	-0.002** (0.000)	-0.000 (0.000)	-0.002** (0.000)	-0.002** (0.000)	0.002** (0.000)

Age ²					
<i>Between</i>	0.001**	0.000**	0.000**	0.000**	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
<i>Within</i>	0.000**	0.000**	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Year	0.000	0.002**	-0.004**	-0.000	-0.003**
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Constant	0.074**	0.075**	0.057**	0.076**	0.027**
	(0.009)	(0.005)	(0.008)	(0.011)	(0.007)
<i>Random Effects</i>					
Constant	0.078**	0.040**	0.049**	0.054**	0.046**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Residual	0.090**	-0.048**	0.065**	0.071**	0.062**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
N – Subjects	13,394	19,347	7,161	7,954	8,942
N – Observations	148,779	138,264	41,991	49,484	60,694

Note: Unstandardized regression coefficients and standard errors in parentheses displayed. Stat. sig.: + $p < 0.05$, * $p < 0.01$, ** $p < 0.001$. Data not weighted.

Table A3: Regression Results by Family Size

	PSID	Germany	Switzerland	UK	Australia
Divorce					
<i>Between</i>	0.065	-0.024	-0.183	0.104+	0.002
	(0.035)	(0.037)	(0.122)	(0.051)	(0.091)
<i>Within</i>	0.160**	0.119**	0.118**	0.129**	0.108**
	(0.009)	(0.010)	(0.025)	(0.023)	(0.018)
Duration					
<i>Between</i>	-0.006	-0.001	0.075	-0.033	-0.004
	(0.007)	(0.010)	(0.047)	(0.022)	(0.038)
<i>Within</i>	-0.005**	-0.005*	-0.013	0.005	0.004
	(0.001)	(0.002)	(0.010)	(0.007)	(0.007)
Duration ²					
<i>Between</i>	0.000	-0.000	-0.011	0.002	0.001
	(0.000)	(0.001)	(0.006)	(0.003)	(0.005)
<i>Within</i>	0.000**	0.000**	0.002	-0.001	-0.000

	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Family Size (ref. Childless)					
1 Child	0.045** (0.010)	0.018* (0.006)	0.022+ (0.010)	0.021+ (0.010)	0.027** (0.008)
2 Children	0.056** (0.009)	0.028** (0.006)	0.072** (0.009)	0.061** (0.009)	0.036** (0.008)
3+ Children	0.183** (0.009)	0.081** (0.006)	0.176** (0.011)	0.197** (0.011)	0.094** (0.009)
Divorce*Family Size					
<i>Between</i>					
1 Child	0.026 (0.045)	0.074 (0.043)	0.380+ (0.175)	0.062 (0.071)	0.098 (0.122)
2 Children	0.043 (0.046)	0.047 (0.049)	0.469* (0.149)	-0.043 (0.070)	0.002 (0.128)
3+ Children	0.263** (0.053)	0.142+ (0.058)	0.154 (0.427)	0.204+ (0.083)	0.168 (0.143)
<i>Within</i>					
1 Child	0.045** (0.012)	0.155** (0.013)	0.102+ (0.040)	0.085* (0.030)	0.019 (0.027)
2 Children	0.138** (0.012)	0.286** (0.014)	0.217** (0.035)	0.245** (0.030)	0.130** (0.024)
3+ Children	0.142** (0.013)	0.214** (0.018)	0.289** (0.054)	0.198** (0.034)	0.206** (0.030)
Duration*Family Size					
<i>Between</i>					
1 Child	0.008 (0.010)	-0.011 (0.014)	-0.109 (0.088)	0.020 (0.035)	0.000 (0.058)
2 Children	0.015 (0.010)	-0.012 (0.016)	-0.124 (0.069)	0.031 (0.034)	-0.001 (0.057)
3+ Children	-0.022 (0.012)	-0.046+ (0.021)	-0.116 (0.164)	-0.017 (0.041)	0.008 (0.067)
<i>Within</i>					
1 Child	-0.010** (0.002)	-0.025** (0.003)	-0.021 (0.015)	-0.033** (0.010)	-0.028* (0.010)
2 Children	-0.022** (0.002)	-0.041** (0.003)	-0.061** (0.013)	-0.052** (0.010)	-0.049** (0.010)
3+ Children	-0.025** (0.002)	-0.046** (0.004)	-0.071** (0.020)	-0.087** (0.012)	-0.057** (0.011)
Duration ² *Family Size					
<i>Between</i>					
1 Child	0.000 (0.001)	0.001 (0.001)	0.010 (0.012)	0.000 (0.005)	-0.000 (0.008)
2 Children	-0.000 (0.001)	0.001 (0.001)	0.014 (0.009)	0.001 (0.005)	-0.000 (0.008)

3+ Children	0.001 (0.001)	0.004+ (0.002)	0.017 (0.021)	0.004 (0.006)	-0.005 (0.009)
<i>Within</i>					
1 Child	0.000+ (0.000)	0.001** (0.000)	0.001 (0.001)	0.002+ (0.001)	0.001 (0.001)
2 Children	0.000** (0.000)	0.001** (0.000)	0.002 (0.001)	0.001 (0.001)	0.003* (0.001)
3+ Children	0.000** (0.000)	0.002** (0.000)	0.003 (0.002)	0.004** (0.001)	0.002 (0.001)
Sample (ref. Control)					
Divorce	0.042* (0.014)	0.024 (0.015)	0.044 (0.037)	0.042+ (0.021)	0.039 (0.026)
Age					
<i>Between</i>	-0.010** (0.000)	-0.007** (0.000)	-0.005** (0.001)	-0.006** (0.000)	-0.004** (0.000)
<i>Within</i>	-0.002** (0.000)	-0.000 (0.000)	-0.002** (0.000)	-0.002** (0.000)	0.002** (0.000)
Age ²					
<i>Between</i>	0.001** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)
<i>Within</i>	0.000** (0.000)	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Year	0.000 (0.000)	0.002** (0.000)	-0.003** (0.001)	0.000 (0.001)	-0.003** (0.001)
Constant	0.069** (0.009)	0.070** (0.005)	0.049** (0.008)	0.070** (0.011)	0.023** (0.007)
<i>Random Effects</i>					
Constant	0.074** (0.001)	0.040** (0.001)	0.048** (0.001)	0.050** (0.001)	0.045** (0.001)
Residual	0.090** (0.000)	0.048** (0.000)	0.065** (0.000)	0.071** (0.000)	0.063** (0.000)

N – Subjects 13,394 19,347 7,161 7,954 8,942
N – Observations 148,779 13,8264 41,991 49,484 60,694

Note: Unstandardized regression coefficients and standard errors in parentheses displayed. Stat. sig.: + $p < 0.05$, * $p < 0.01$, ** $p < 0.001$. Data not weighted.