# Reassessing Chronic Strain: A Research Note on Women's Income Dynamics After Divorce and Separation

# Thomas Leopold and Matthijs Kalmijn

**ABSTRACT** The economic consequences of divorce and separation for women are commonly associated with the chronic strain model, according to which women's losses are large and persistent. This research note shifts the focus to a crisis model highlighting women's potential of, and routes to, recovery from initial losses. Drawing on German Socio-Economic Panel data (1984–2021) on women in marital and cohabiting unions  $(N\sim27,000 \text{ women}, N\sim3,400 \text{ divorces})$  and separations), we use fixed-effects regression models and event-history models to analyze changes in equivalized monthly household income and poverty risk across the process of divorce and separation. Results show that most women recovered from their initial economic declines. Although initial losses were common and often sizable, large fractions of women eventually returned to or exceeded the household income expected in the absence of divorce and separation. Recovery was facilitated by the "traditional" route of repartnering and the "modern" route of women mobilizing their productive skills. Both routes appeared more important than the absence of barriers, such as children in the household. We conclude that for the majority of women, the economic consequences of divorce and separation are better described as a temporary crisis than as a chronic strain.

**KEYWORDS** Divorce • Separation • Income • Poverty • Life course

# Introduction

The economic consequences of divorce and separation are heavier for women than for men. Women lose more household income, more often fall into poverty, and experience larger declines in their standard of living (Andreß et al. 2006; Andreß and Hummelsheim 2009; Bayaz-Ozturk et al. 2018; Fisher and Low 2016; Mortelmans 2020; Thielemans and Mortelmans 2022; Uunk 2004). The unequal impact of divorce and separation has long been recognized as a social problem emerging with the declines in union stability across the second demographic transition (McLanahan 2004). With high rates of divorce and separation, the differential economic impact of union dissolution is an important source of gender inequality in modern societies (England 2000). Gender differences in the economic consequences of divorce mirror gender inequality in marriage (Catlett and McKenry 1996) and have posed questions for policy: how to protect divorced women's income position and, more fundamentally,

what role the institution of marriage should play in policy design (Kahn 2021). Moreover, for children—who reside predominantly with their mother following parental breakup—growing up in poverty explains part of the adverse consequences for schooling outcomes and can lead to a cumulation of problems during their early life course (McLanahan 2009).

Research on the consequences of divorce and separation for women and men has distinguished between the "chronic strain model" and the "crisis model" (Amato 2000; Booth and Amato 1991; Johnson and Wu 2002). The crisis model stresses that pronounced negative effects around the time of divorce and separation are followed by gradual recovery in the years after. The chronic strain model stresses that negative effects persist. This model does not rule out some adjustment, a trend shown in virtually all studies on women's economic outcomes, but highlights that recovery remains incomplete. Past and current evidence supports this tenet of the chronic strain model, as women's average levels of economic well-being do not recover to levels found before, or in the absence of, divorce and separation (Leopold 2018; Leopold and Kalmijn 2016). In line with this evidence, a recent review has suggested that the crisis model is more applicable to psychological outcomes, such as depressive symptoms and happiness, whereas the chronic strain model is more applicable to (women's) economic outcomes (Raley and Sweeney 2020). Research on change in the economic consequences of divorce and separation shows that women do not fare much better today than a few decades ago (Bröckel and Andreß 2015; Mortelmans 2020; Smock 1993). In the United States, some evidence suggests that the negative effects of marital dissolution on women's economic outcomes have declined, whereas those of cohabitation breakups have worsened (Tach and Eads 2015).

This research note challenges the view that the chronic strain model best describes the economic consequences of divorce and separation for women. We shift the focus from loss and deprivation to women's capacity to recover from the economic consequences of divorce and separation. Our approach improves on conventional models that are overwhelmingly focused on within-person changes in the mean of economic outcomes—primarily household income but also related outcomes, both objective and subjective—across the process of divorce and separation. By construction, these conventional models are geared toward average losses, and estimates for changes in the mean are strongly influenced by the large losses that some but not all women incur.

Consequently, extant models for the mean mask heterogeneity in the effects of divorce and separation on women's economic outcomes. Although the evidence is clear regarding the substantial average losses that women incur upon and after divorce and separation, findings are based on models that do not recognize the potentially large fractions of women who lose only a little, lose nothing, or even gain. Similarly, findings on women's limited economic recovery in the years following divorce and separation are strongly influenced by those women who do not recover or decline even further. Yet, considerable fractions of women may recover in the meantime, and these changes are missed by estimates for the mean. Accordingly, the crisis model may be more widely applicable than the chronic strain model to describe the economic consequences of divorce and separation for women.

A dynamic perspective on loss and recovery also leads to new questions about the economic effects of divorce and separation. When the focus is on loss, a woman's

income during marriage is an obvious reference point, and changes vis-à-vis this reference point constitute the study focus. Less obvious is what this relative loss means for individual economic well-being. Relative losses, even if substantial, do not imply difficulties in making ends meet or falling into poverty. Higher educated women typically come from a household with higher levels of pre-separation income—as a result of assortative mating on education—and therefore have more to lose after divorce. At the same time, higher levels of human capital protect them from deprivation or poverty after divorce. In an absolute sense, these women may be better off than their lower educated counterparts, whereas they may appear to be worse off if evaluated relative to their pre-separation economic status (Fisher and Low 2016). The present study on the economic consequences of divorce and separation focuses on both aspects: loss with respect to pre-separation income on the one hand, and deprivation in terms of the likelihood of falling into poverty on the other. A similar distinction is made for the chances of recovering from income losses and escaping from poverty, respectively.

Our analysis is based on long-running annual data (1984–2021) from the German Socio-Economic Panel (SOEP), a widely used dataset in research on the consequences of life events and known for the detailed assessment of partnership status and economic outcomes (Goebel et al. 2019). We develop our study in three steps. First, we replicate the standard approach of modeling changes in the mean of women's household income and their risk of falling into poverty. Next, we examine the distribution of changes after divorce and separation and offer model-based predictions of losing more or less. Finally, we look at trajectories and predictors of recovery using survival models for the (cumulative) chance of recovery to levels predicted in the absence of divorce and separation. We consider a recovery period of up to five years following divorce and separation. The analysis covers the dissolution of marriage as well as cohabiting unions and uses control samples of continuously married and cohabiting women.

#### **Data and Methods**

#### Data

Our analytic sample was drawn from all waves (1984–2021) and samples of the SOEP (version 38). From the original sample of 104,777 men and women, we selected women aged 20–65 with valid data on income (N=44,659; see the online appendix). Missing and outlier data for income were rare (2.2%). We further selected women who were observed at least twice (N=35,686) and who had relevant marital status episodes (N=27,001). Episodes predating the first observation with a partner in the household (including permanently single women) and observations in widowhood were excluded. Union dissolutions (N=3,424) were defined as divorce (N=1,807) or separation (N=1,617) on the basis of the marital status of the observation preceding the event. Repeated dissolution events were included. Robustness checks on a sample comprising only the first divorce or separation for each woman showed a similar pattern of results.

#### Measures of Outcome Variables

#### Income

Income was defined as after-tax income contributed by all household members in the month before the interview, including public transfers and private transfers such as alimony. Incomes were adjusted for inflation (reference year 2016) and equivalized using the square root scale (Borah et al. 2019). Equivalized household income represents a woman's individual income position considering the number of household members and economies of scale.

#### **Poverty**

We defined the poverty line using the full SOEP sample of men and women aged 20-65 (N=89,579) as 60% of the median equivalized income of each wave. This threshold represents the definition of poverty in the European Union.

# Recovery

Three levels of income recovery were defined, each reached in the earliest year following divorce or separation in which a woman's income equaled or exceeded a fraction of her reference income: 60%, 80%, or 100%. The reference income was defined for the last pre-event observation and corrected for age profiles. After this correction, the reference income represented a measure of the income that a woman would have had at each age in the absence of divorce or separation. The correction was based on age—income profiles estimated with fixed-effects models for all observations of women in marriage or cohabitation. The functional specification of age—income profiles was based on a flexible form using dummy variables for every age in the range 21 to 65 (reference age = 20). Recovery from poverty was defined without age adjustment as the earliest post-event year in which a woman's income exceeded the poverty line. Indicators for recovery from income loss and from poverty were conditioned on initial income loss and poverty, respectively. The indicators did not capture more complex patterns, such as delayed income loss, delayed falls into poverty, or post-recovery recurrence of income loss or poverty.

# Measures of Independent Variables

Descriptive statistics of all independent variables, broken down by marital status and the presence and ages of children, are presented in Table 1.

# Divorce and Separation

Union dissolutions were defined as changes of household partner identifiers between subsequent calendar years, including changes to no or to different resident partners.

Table 1 Descriptive statistics of key variables by child status for women after divorce or separation

			Child a	Child and Marital Status				
~ Z	Divorced, No Children	Divorced, Children ≤13	Divorced, Children 14–18	Separated, No Children	Separated, Children ≤13	Separated, Children 14–18	Total	N
Age Category								
20–34	16.4	36.2	1.7	62.4	57.4	0.6	39.6	5,647
35–44	19.2	50.2	45.7	15.0	34.1	53.6	31.9	4,537
45–54	41.1	12.6	49.3	14.8	8.0	34.3	21.3	3,040
55–64	23.3	1.0	3.2	7.8	0.5	3.1	7.2	1,019
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	14,243
N	2,639	3,787	1,145	3,925	2,327	420	14,243	
Education								
Lower	13.0	21.7	13.8	10.0	20.5	12.4	15.8	2,248
Middle	57.9	56.9	61.0	58.3	60.4	64.3	58.6	8,346
Higher	29.1	21.3	25.2	31.7	19.0	23.3	25.6	3,649
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	14,243
N	2,639	3,787	1,145	3,925	2,327	420	14,243	
Employment								
Not employed	24.4	44.3	21.9	21.8	50.8	27.4	33.2	4,727
Part-time	55.9	22.3	44.8	67.3	24.3	49.5	43.8	6,245
Full-time	19.7	33.4	33.3	10.9	24.9	23.1	23.0	3,271
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	14,243
N	2,639	3,787	1,145	3,925	2,327	420	14,243	
Repartnered								
Single	75.1	73.8	83.1	73.5	66.2	79.8	73.6	10,485
New partner	24.9	26.2	16.9	26.5	33.8	20.2	26.4	3,758
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	14,243
N	2,639	3,787	1,145	3,925	2,327	420	14,243	

Notes: The sample comprises women aged 20-65 in SOEP 1984–2021. Children 14–18 indicates all children aged 14–18. Children ≤13 indicates at least one child 13 or younger. Ns are based on person-period file. Values shown are percentages.

**CORRECTED PROOFS** 

Up to four dissolution events per woman were included. Marital status information from the last year before a dissolution was used to distinguish between divorce of a marital union and separation of a cohabiting union. Women who did not participate in the SOEP for one or more years before their initial observation following the event of divorce or separation were excluded because the timing of the event could not be assessed with accuracy.

#### Time

If a woman changed her status from living with a partner to living without a partner or with a new partner across consecutive panel waves, the dissolution date was defined as the midpoint between the calendar years of both waves. The calendar year of the last wave before dissolution was denoted as the "year before" divorce or separation, and the calendar year of the first wave after separation as the "year of" divorce or separation. We considered up to five more "years after" divorce or separation.

# Other Independent Variables

Repartnering was captured by an indicator variable for whether a woman was living with a new partner in the household. Using unique partner identifiers, repartnering was recorded even if it occurred across consecutive waves. The *education* measure distinguished between three groups: (1) elementary or lower, (2) middle vocational, and (3) higher vocational and university. For *employment*, we distinguished between full-time employment and regular part-time employment. All other activities were combined in the reference category. We used two variables for the presence of younger children (at least one household member aged 0–13) and older children (aged 14–18). For *marital status* in the event-history models, we used an indicator variable for whether the dissolving union was cohabiting (reference = marital).

# Analyses of Mean Changes

In the first step, we assessed changes in the mean of women's income and their risk of falling into poverty. For these models, we included a control sample of women who continuously lived with the same partner. This control sample contributed to the estimation of age profiles on income and disentangling age-related changes in income from the effects of divorce and separation. The model was estimated with fixed effects (i.e., reduced to within-person changes) and a flexible step impact function for time after divorce and separation (Ludwig and Brüderl 2021). Because our income measure referred to the month before the interview, with divorce and separation occurring in between consecutive interview years, the post-event income measure was on average six months after a dissolution event. All person-years from the control sample were included in the reference category. Findings are presented in Figure 1, separately for married women who divorced and cohabiting women who separated.

# Analyses of Heterogeneity in Initial Income Loss

In a second step, we examined women's income position in the first year after divorce or separation. We estimated two ordinary least-squares (OLS) regression models to study heterogeneity: (1) a linear regression model for relative income loss in the first year after divorce or separation, expressed in percentages ranging from 0 (no loss) to 100 (complete loss), and (2) a linear probability model (LPM) for the probability of being poor in the first year after divorce or separation. In both models, the independent variables were static and referred to the year before divorce or separation. Positive effects imply detrimental financial outcomes (i.e., increases in income loss and poverty risk) in the first year after divorce or separation. Descriptive information is presented in the top panel of Figure 2, which shows the distribution of the income ratio comparing the year before to the year after divorce and separation. For a descriptive assessment of longer term changes, this distribution is overlaid with an additional distribution of women's income ratio comparing the year before to the fifth year after divorce and separation.

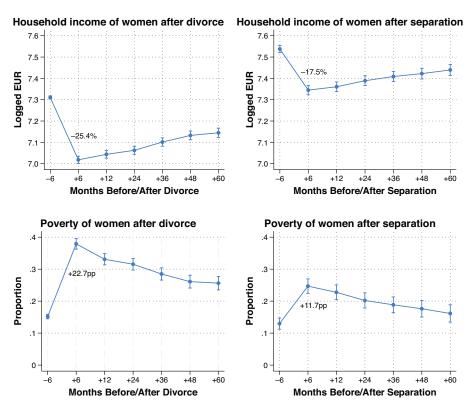
## **Analyses of Recovery**

To analyze recovery, we estimated event-history models specified as discrete-time logit models for the odds of income recovery (to at least 60%, 80%, or 100% of the reference income) and the odds of recovery from poverty (see Table 4). All models were conditional on initial income loss and poverty, respectively. The risk period ended in the year of a recovery event, the fifth year following the year of divorce or separation, or the last interview. Logit coefficients of all recovery models were transformed into marginal effects (i.e., effects on the annual conditional probability of recovery). The models did not consider post-recovery declines in income or post-recovery drops back into poverty.

#### Results

#### Mean Changes in Income and Poverty

In line with previous findings, women's equivalized income dropped substantially in the year of divorce and separation (Figure 1, top panel). Compared with income at the last pre-event observation, relative losses amounted to 25.4% for divorce and 17.5% for separation. In the years that followed, age-adjusted incomes increased gradually but remained below pre-event levels. Poverty levels (Figure 1, bottom panel) increased substantially by about 22.7 percentage points in the year of divorce, and again less dramatically for the year of separation (11.7 percentage points). After this initial surge, subsequent years showed improvements but no return to pre-event levels. Overall, these findings resemble previous results on mean-level changes and seemingly support the chronic strain model for women's economic well-being following divorce and separation (de Vaus et al. 2017; Thielemans and Mortelmans 2022).



**Fig. 1** Changes in monthly income and poverty of married women who divorced and cohabiting women who separated. The sample comprises women aged 20–65 from the SOEP 1984–2021. Estimates are based on fixed-effects regression models with control groups and controls for age and period fixed at overall means of women at divorce/separation events. Control groups are observations of married or cohabiting women, respectively. Change in income is relative change in percent. Change in poverty is absolute change in percentage points estimated with linear probability models. EUR = euro.

#### **Heterogeneity and Recovery**

The results in Table 2 and Figure 2 (top panel) demonstrate that heterogeneity in initial income loss was substantial. Approximately one in four divorcing women and one in three separating women did not lose any income (Table 2). For the remainder who did, we first examined overall chances of recovery to three different levels (60%, 80%, 100%) across an observation span of up to five years after divorce or separation (Figure 2, middle panel). Estimates for partial thresholds show rapid (60% threshold) and gradual (80% threshold) recovery of large fractions of women who had initially lost income. Full income recovery (100% threshold) was substantially slower but also showed a pronounced positive trend: two years after a union dissolved, 22% of divorced women and 31% of separated women had recovered; five years after, these estimated fractions increased to 43% and 51%, respectively. Adding the fractions of women who did not lose after divorce (Table 2), these results demonstrate that two years after divorce, 41% (24% + 22% × (1 – .24)) of all divorced women and 54% of all separated women had fully recovered. Five years later, these fractions increased to

Initial Income Loss	Married/Divorced	Cohabiting/Separated	Total	N
No Initial Loss	24.1	32.4	28.0	960
Loss <20%	20.3	21.2	20.7	709
Loss 20-40%	29.3	27.8	28.6	979
Loss 40-60%	19.2	13.9	16.7	571
Loss 60-80%	6.4	4.5	5.5	188
Loss >80%	0.7	0.3	0.5	17
Total	100.0	100.0	100.0	3,424
N	1,807	1,617	3,424	ĺ

Table 2 Initial income loss of divorced and separated women

*Notes:* The sample comprises women aged 20–65 in SOEP 1984–2021. The income situation applies to approximately six months after divorce/separation. Values shown are percentages.

56% and 67%, respectively. Overall, these results show that not only income losses but also full recovery from these losses were common.

For the subsample of women who dropped below the poverty line in the year of divorce or separation, recovery was also pronounced (Figure 2, bottom panel). Almost half of divorced and separated women were no longer in poverty after two years; after five years, these fractions approached or exceeded 80%.

# Predictors of Income Loss, Poverty, and Recovery

In Table 3, we examine how income loss and poverty in the year after divorce or separation were related to characteristics in the year before divorce or separation (except for repartnering, which referred to the year of divorce or separation). In Table 4, we examine how the odds of recovery from income loss and poverty in a given year were related to (time-varying) characteristics observed in each year during the post-event period. Positive effects in the models shown in Table 3 indicate larger losses; positive effects in the models for recovery shown in Table 4 indicate a higher probability of recovery.

Repartnering stands out as a key factor in all models. Immediate repartnering reduced the relative initial income loss by 10 percentage points and the risk of poverty by 18 percentage points (Table 3). Moreover, subsequent repartnering boosted recovery in case one or both of these risks materialized (Table 4). The effects were substantial and showed a dose–response pattern of increasing magnitude at lower income recovery thresholds and at the poverty threshold. Marginal effects showed that repartnering was associated with an increase of 31 percentage points in the annual probability of income recovery to the 60% threshold, of 25 and 16 percentage points to the 80% and 100% thresholds, respectively, and an increase of 26 percentage points in the annual probability of leaving poverty.

For educational attainment, the pattern of findings was more complex. As expected, education was strongly protective against initial drops into poverty (Table 3), and if these occurred, education helped women leave poverty (Table 4). For relative income loss, results showed inconsistent and insignificant estimates for initial loss. Higher educated women showed a tendency of slower recovery to the 60% threshold, suggesting a "more to lose" mechanism.

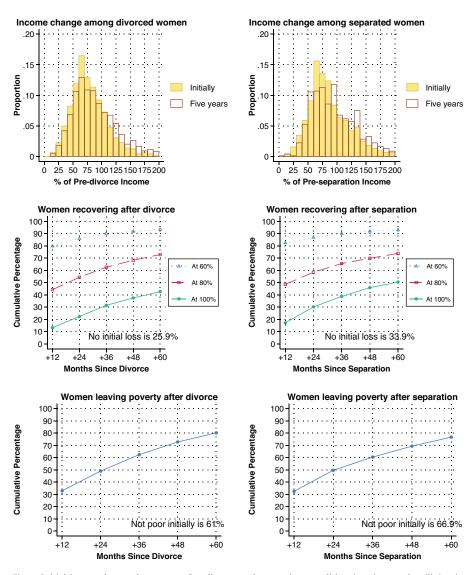


Fig. 2 Initial income loss and recovery after divorce and separation, conditional on income loss/living in poverty in the year of divorce/separation

Employment effects were substantial and mostly consistent with expectations. Employment was especially protective against poverty and indicative of a lower dependency on a male earner. Full-time employed women had a 38-percentage-point-lower probability of being poor after separation compared with nonworking women. Employment also generally promoted recovery, both from income loss and from poverty. The effects of employment on recovery followed a clear pattern, whereby effects declined with higher thresholds. In terms of magnitude, the positive effects of repartnering on recovery generally exceeded those of employment.

**Table 3** Models of women's income loss and poverty in the year after divorce or separation

	Income Loss	Poverty (LPM)
Separated (ref. = divorced)	-4.199**	.012
,	(.000)	(.456)
Repartnered (ref. = single)	-9.591**	179**
	(.000)	(.000)
Intermediate Education Before (ref. = lower)	1.053	107**
	(.297)	(.000)
Higher Education Before (ref. = lower)	-0.739	223**
•	(.549)	(.000)
Full-time Employment Before (ref. = not employed)	1.068	375**
	(.241)	(.000)
Part-time Employment Before (ref. = not employed)	4.188**	206**
	(.000)	(.000)
Older Children Before (ref. = no children)	-1.392	.012
· · · · · · · · · · · · · · · · · · ·	(.145)	(.539)
Younger Children Before (ref. = no children)	1.159	.141**
,	(.162)	(.000)
Controls	, , ,	. ,
Year of separation	-0.262**	002*
•	(.000)	(.012)
East German	-1.112	.132**
	(.180)	(.000)
Foreign national	-1.614	.101**
	(.172)	(.000)
Age at separation	0.006	002*
	(.890)	(.011)
Constant	24.972**	.639**
	(.000)	(.000)
$R^2$	.046	.264
Number of Persons	3,424	3,424

*Notes:* The sample comprises women aged 20–65 in SOEP 1984–2020. All independent variables except repartnering refer to the last observation before separation. Repartnering refers to the year of separation. p values are shown in parentheses. Both models are estimated by OLS (ordinary least squares). LPM = linear probability model.

A mixed pattern of effects emerged for the presence of children in the household. The presence of younger or older children was not a statistically significant predictor of initial income losses (Table 3). The risk of falling into poverty, however, was 14 percentage points higher for women who had younger children before divorce or separation. In the analyses of recovery, the estimates for younger children pointed in the expected negative direction but were small and statistically significant only for full income recovery. Taken together, these findings suggest that the impact of younger children appeared mainly concentrated in the risk of initial drops into poverty. It is important to note, however, that these estimates for the effects of children are net of employment and repartnering and may therefore understate the total effects of children on women's income and poverty risk.

For the contrast between divorced and separated women, the results in Tables 3 and 4 showed few differences except for a 4-percentage-point-smaller initial income

<sup>\*</sup>p<.05; \*\*p<.01

 Table 4
 Event-history models of women's income recovery and leaving poverty after divorce or separation

	Probability of Recovery at 60%	Probability of Recovery at 80%	Probability of Recovery at 100%	Probability of Leaving Poverty
Separated (ref. = divorced)	0803**	0169	.0108	0190
	(.003)	(.214)	(.240)	(.312)
Repartnered (ref. $=$ single)	.3127**	.2492**	.1594**	.2579**
	(.000)	(.000)	(.000.)	(000.)
Middle Education (ref. = lower)	0486	0100	$0209^{\dagger}$	.0321
	(.153)	(.572)	(.073)	(.131)
Higher Education (ref. = lower)	1209**	0215	0209	.1320**
	(.002)	(.309)	(.132)	(.000)
Full-time Employment (ref. = not				
employed)	.1739**	.0982**	.0442**	.3125**
	(.000.)	(.000.)	(.000)	(.000)
Part-time Employment (ref. = not				
employed)	.1040**	.0505**	.0250*	.1693**
• • /	(.000.)	(.003)	(.037)	(.000)
Older Children (ref. = no children)	.0175	.0093	0017	0099
	(.522)	(.541)	(.875)	(.642)
Younger Children (ref. = no children)	.0087	0047	0169 <sup>†</sup>	0276
,	(.729)	(.737)	(.071)	(.147)
Controls				
Year of separation	.0006	.0007	.0003	0002
•	(.667)	(.356)	(.613)	(.846)
East German	0075	.0015	.0114	0753**
	(.790)	(.917)	(.232)	(.000)
Foreign national	.0769*	.0490*	.0437**	0205
	(.050)	(.011)	(.002)	(.426)
Age at separation	0012	0016*	0017**	0004
	(.423)	(.045)	(.002)	(.750)
24 Months (ref. = 12 months)	1173**	0611**	0241*	0594**
	(.000.)	(.000.)	(.016)	(.005)
36 Months (ref. = 12 months)	1436**	0788**	0374**	0597*
	(.000.)	(.000.)	(.001)	(.013)
48 Months (ref. = 12 months)	2664**	1290**	0692**	0592*
` '	(.000)	(.000)	(.000.)	(.036)
60 Months (ref. = 12 months)	2439**	1392**	0883**	0248
,	(.000)	(.000)	(.000.)	(.474)
Chi-Square	188.9	411.7	430.3	346.2
Number of Person-Years	1,504	4,126	6,427	2,432

Notes: The sample comprises women aged 20–65 in SOEP 1984–2020. Estimates are conditional on loss or poverty after divorce/separation. p values are shown in parentheses.

loss (Table 3) and an 8-percentage-point-lower chance of recovery to the 60% threshold (Table 4) of previously cohabiting women. Note, however, that these effects were adjusted for differences between married and cohabiting couples with respect to all predictor and control variables. The dummy variables for time since divorce or separation showed a declining conditional probability of recovery from income loss

 $<sup>^{\</sup>dagger}p < .10; *p < .05; **p < .01$ 

(reference category = 12 months after), suggesting decreases in the marginal chances of recovery for every additional year of nonrecovery.

# Pathways to Recovery

To further illustrate heterogeneity in recovery chances, we present four scenarios moving from high to low economic vulnerability to divorce and separation. Four types of women were defined, using information on all observations after divorce or separation:

- 1. the most vulnerable group was defined as women who did not work, did not repartner, and had children aged 0–13 living at home (ca. 8% of women in the sample);
- 2. the "traditional" recovery route was defined as women who had a new partner at least half of the time and no full-time employment after divorce or separation (ca. 10%);
- 3. the "modern" recovery route was defined as women who had no new partner but worked full-time at least half of the time (ca. 26%); and
- 4. the least vulnerable group was defined as women who worked full-time at least half of the time, had a new partner at least half of the time, and had no young children after divorce or separation (ca. 8%).

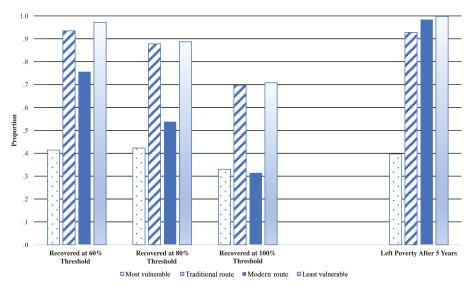
These ideal types, covering only a subset of women in the sample, are used to illustrate heterogeneity in the chances of economic recovery. The routes differ by marital status, as shown in Table 5. The most vulnerable group was more common among married women, whereas the least vulnerable group was more common among separated women. Similarly, divorced women more often took the traditional recovery route, whereas separated women more often took the modern route. Differences by event cohort should be interpreted with caution given age differences and right-censoring (i.e., later divorce and separation cohorts are increasingly composed of "early" events). In Figure 3, we summarize results for the four scenarios in terms of income recovery after five years (at three levels) as well as leaving poverty. Because the typology was based on behaviors and conditions occurring in the entire post-separation period, we abstained from estimating initial loss and poverty using the typology.

In the most vulnerable group, only one third had experienced full income recovery and only 40% had left poverty after five years. This group's economic status after divorce and separation was consistent with the substantial and persistent setbacks associated with the chronic strain model. Among women in the traditional (repartnering) route, recovery chances were substantial, with almost 70% recovering fully from income loss and more than 90% leaving poverty. Women in the modern (employment) route had even better chances of leaving poverty but their chances of income recovery were lower. The gap between the traditional and modern routes increased with the income threshold, and full relative recovery via the modern route was only a minority experience. In other words, employment mainly promoted chances of partial recovery whereas a new partner promoted chances of full recovery. The least vulnerable group had the best prospects. Of these women—with employment, a new partner, and no

 Table 5
 Prevalence of illustrative recovery routes among divorced and separated women

	Most Vulnerable	Traditional Route (repartnering)	Modern Route (employment)	Least Vulnerable	N
Marital Status					
Married	.102	.115	.240	.051	1,807
Separated	.061	.083	.285	.112	1,617
Total	.082	.100	.261	.080	3,424
Divorce/Separation Cohort					
Before 2000	.047	.113	.269	.114	866
2000-2009	.062	.096	.246	.098	1,080
2010-2020	.118	.095	.267	.046	1,478
Total	.082	.100	.261	.080	3,424

*Notes:* The sample comprises women aged 20–65 in SOEP 1984–2020. Proportions refer to individual women after divorce or separation. See text for definition of routes.



**Fig. 3** Expected recovery levels for four illustrative recovery routes. The situation after five years was estimated from discrete-time event-history models as shown in Table 3. See the text for the definition of the routes. In the event-history models, controls were used for the year of separation, East Germany/West Germany, education, migrant status, and marital status. These variables were fixed at their overall sample means.

young children—70% fully recovered from income loss and all left poverty. In sum, these findings suggest that although employment protected against poverty and large income losses, full economic recovery remained strongly associated with repartnering.

#### Discussion

The main conclusion of this research note is that the prevailing chronic strain model does not adequately describe the economic consequences of divorce and separation

for women. Instead, a substantial minority—one quarter—of women did not experience any losses at all. Moreover, among those women who did, about one in three fully recovered within two years and about one in two within five years. Instead of chronic loss, the modal pattern was full economic recovery—in terms of not dropping below, returning to, or exceeding the reference income expected in the absence of divorce and separation. This conclusion does not trivialize women's disproportionate losses: these losses were present and substantial, as indicated by women's large mean income loss and high risk of falling into poverty after divorce and separation. Nonetheless, our findings emphasize how women's agency and the resources mobilized promoted recovery from the economic impact of divorce and separation (Catlett and McKenry 1996).

Key among these resources were the "traditional" route of repartnering and the "modern" route of women mobilizing their productive skills. For women's economic recovery, both routes appeared more important than the absence of barriers, such as having younger or older children in the household. While both routes promoted recovery from large losses and poverty, the traditional route was considerably more important than the modern route for achieving full income recovery.

In general, the factors associated with fewer losses and faster recovery were more often in place for women who dissolved cohabiting unions, in line with earlier studies focusing on the distinction between marriage and cohabitation (Avellar and Smock 2005; Fisher and Low 2015). More importantly, recovery was also common after marital dissolutions. Overall, the high prevalence of recovery through either or both recovery routes indicates that for the majority of women, the economic consequences of divorce and separation are better described by the crisis model than by the chronic strain model of divorce and separation.

Again, it is important to consider the other side of the coin. Our findings showed that women who did not work before divorce and separation, and in particular those who lived as single mothers of young children afterward, often dropped into and remained in poverty. For this group of vulnerable women, the chronic strain model still applies, and this group constitutes the obvious target for social policy designed to alleviate the economic consequences of divorce and separation.

Our data were drawn from the German context, which is characterized by a lasting legacy of the male-breadwinner/female-homemaker model and hence limited economic independence of women in unions. Female labor force participation remains relatively low in Germany, especially among mothers, and childcare coverage is still lagging behind that of other modern societies (Gottschall and Bird 2003; Hook 2015). In cross-national comparison, German women can therefore be considered as particularly vulnerable to the economic consequences of divorce and separation. We recommend that future research extends our study focus on recovery to other societies to situate our findings on the German context within a larger cross-national picture. Given that full economic recovery emerged as the modal pattern even in the German context, we expect even clearer evidence in other national contexts. In light of our findings, we predict that the conventional story of loss and chronic strain will soon be revised into a contemporary story of loss and recovery.

Acknowledgments A replication package to this article is available at http://www.thomasleopold.eu/. This research was funded by the European Union (ERC, KINMATRIX, Grant Agreement 848861). The views and opinions expressed are, however, those of the authors and do not necessarily reflect those of the European Union or the European Research Council Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

This study forms part of the CRITEVENTS project, which is financially supported by the NORFACE Joint Research Programme on the Dynamics of Inequality Across the Life-course, which in turn is cofunded by the European Commission through Horizon 2020 under Grant Agreement 724363.

This study was funded by the Deutsche Forschungsgemeinschaft in the framework of the German Excellence Strategy-EXC2126/1-390838866.

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Thomas Leopold (corresponding author) t.leopold@wiso.uni-koeln.de

Leopold • Institute of Sociology and Social Psychology (ISS), University of Cologne, Köln, Germany; https://orcid.org/0000-0001-5554-3254

*Kalmijn* • Netherlands Interdisciplinary Demographic Institute (NIDI)–KNAW/University of Groningen, The Hague, the Netherlands; https://orcid.org/0000-0001-5217-1897