The consequences of the Great Recession: Contextual and individual unemployment and the educational effect on union dissolution

Introduction

What was the effect of the Great recession on the probability of partnership dissolution? Who was hit the hardest by the economic crisis? In this paper, we investigate *the consequences of the Great Recession for union dissolution in Europe, paying particular attention to the interaction of several macro and micro indicators of the Great Recession with educational attainment*. After more than ten years since the start of the Great Recession we now have a sufficiently long-time perspective to gauge its socio-demographic impact. In this extended abstract, we will only consider the impact of unemployment on the macro-and micro-level, but in our paper, we will also look into other indicators of the recession (e.g. consumer confidence index, housing costs). Separation might be linked to individual-level male unemployment because of several reasons (economic hardship, her dissatisfaction with the division of labor, less social contacts, more interaction time between the spouses than they were used to (Fischer & Liefbroer, 2006; Gonalons-Pons & Gangl, 2018; Killewald & Gough, 2013)), but we think that it mainly is related to economic insecurity and a threat to his identity as a male breadwinner, which may in turn cause lower mental health. Women's unemployment is not expected to be associated with union dissolution. Macro-level arguments also have to do with increasing stress of couples (due to economic hardship and insecurity when unemployed, but also the employed might be affected by the fear to lose their job). Such an economically more insecure situation may be related to lower well-being, more stress, more conflict in the couple, lower relationship quality, and hence, a higher dissolution risk. On the other hand, however, higher costs of divorce in an economic downturn (Amato & Beattie, 2011), or an enhancing of bonds between spouses in insecure times (Cohen, 2014) may counter affect dissolution. Which of these mechanisms is stronger, remains to be seen. There may even be a null-effect, in case the different mechanisms work in an opposite direction.

In addition, we expect that these 'crisis effects' might differ between educational groups. The crisis made unemployment rates rise and it is likely that the lower educated were more affected by such rising unemployment rates than the higher educated as the labor market position of the lower educated is on average more precarious and their labor market perspectives are worse. More specifically, their costs of on-the-job search are higher, search efficiency (acquiring and processing job search information) is lower, and intensive search for more skilled vacancies is higher both for workers and for firms (Mincer, 1991). Also, the lower educated may have less economic buffers against economic shocks (Schneider & Hastings, 2015).

Most importantly, we expect to find gender differences in the interaction between unemployment and education. Men will be more confronted with a normative conflict than women, touching upon their identity as the main income provider of the household and thereby affecting their mental health negatively. Because low educated men next to the normative conflict, also have to deal with more economic hardship and insecurity, we expect that both micro- and macro-level unemployment will be affecting low educated men more than highly educated men. For women, we expect something different: low educated women might be under more (financial) strain than mid and highly educated women, but for highly educated women, the work norm might be more important. Mid educated women experience both sources of stress (due to economic hardship, insecurity, and a normative conflict because norms are not in line with behavior) and will therefore be the most likely to experience break-up.

A final important issue that we take into account is selection into union formation. Individuals with certain traits or personalities may be more likely to be unstable in their relationships. Hence, they may be more often in a union, but also more often dissolve their union. Hence, we expect to find a positive correlation (rho) between the equation to be in a union and the equation to dissolve a union (Amato & Beattie, 2011). Another reason of why there may be selection is – especially for men – a lack of resources. For such disadvantaged men it might be difficult to form a union and thus we expect to find a negative correlation between the union equation and the dissolution equation.

Hypotheses

Based on the previous arguments, we formulate the following hypotheses:

1. Individual-level *unemployment* will be positively related to dissolution
2. Unclear relationship between the *unemployment rate* and (wo)men's likelihood to break up: a mixture of different mechanisms may even lead to a null effect.
3. *Men* will be hit harder by *individual level and contextual level unemployment* than *women*
4a. *Mid and high educed women* will be hit harder by unemployment than low educated women (especially in liberal egalitarian countries)
4b. *Low educed men* will be hit harder by unemployment than mid and highly educated men (especially in traditional/essentialist countries)
5. *Selection into union formation*: because we control for men having fewer resources, we expect to find a positive correlation between union formation and dissolution (both for men and for women)

Data and Method

We use the European Union Statistics on Income and Living Conditions (EU-SILC) for the period 2005-2015, covering 22 European countries[1] and 1,451,998 women and 1,405,444 men (age 16-50). Singleness, marriage, cohabitation, and dissolution can be assessed, but we do have a left censoring problem, meaning that we do not know how long individuals are in a certain state (be it married, cohabiting, single, or dissolved). We assume that those cases that are censored behave in the same way as those that are not censored.

In our paper, later on, we will include several macro-level measures to capture the economic situation, such as the unemployment rate, the consumer confidence index, and the housing costs overburden rate. We control for the extent of traditionalism/essentialism in gender norms in a country. This gender norms scale is a continuous measure of the group size of traditional and essentialist people in a country (based on Van Damme & Pavlopoulos, 2019).

Individual level control variables are age, age squared, type of contract, duration not in education anymore, health in general, suffer from chronic illness, and the age of the youngest child, being enrolled in education. In the union dissolution equation, we also take into account cohabiting vs married, while being enrolled in education is excluded from this equation.

We estimated simultaneous hazard models with two dependent variables (union formation and union dissolution) using aML. In this way, we tackle the problem of unobserved heterogeneity (certain people are more prone to marry and commit themselves to a union and less prone to dissolve a union, whereas others are more 'flexible' and move more between the different states). We use age and the age of the youngest child as proxies for union duration. However, it turned out that - although (as expected) the correlation between the equations of union formation and dissolution is quite high and positive[2] (varying from 0.82 to 0.63) -, the coefficients of the union dissolution model were hardly affected. Therefore, we chose to continue with analyses in STATA, uncontrolled for selection.

Preliminary results

These preliminary Tables contain the results of logistic regression analyses in STATA, uncontrolled for selection into union formation. The following findings can be derived: 1) aggregate unemployment is positively related to union dissolution for both women and men and this positive relationship levels off with an increasing unemployment rate (an inverted U-shaped relationship). After taking individual-level employment status into account and other individual-level characteristics, this relationship hardly changes (not presented here). 2) Looking at the individual level variables, we find that unemployed men are more likely to break-up than men who are full time employed (OR 1,63). For women the unemployment effect is small (OR 1,06). 3) Effects of women's partner's employment status are in line with those of men as respondent and effects of men's employment status are in line of those of

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[1] We could not include the following countries in our analytical sample due to missing values on the macro-level indicators: Russia, Croatia, Romania, Cyprus, Bulgaria, and Malta. Sweden, Norway, Ireland not included due to large sample size fluctuations. For Greece, Luxembourg, and Austria there are no gender norms available in the European Values Study 2008.

[2] i.e. more 'flexible'/ 'unstable' people experience both more union formation and dissolution

women as respondent. 4) Education is negatively related to separation (as expected). 5) Being unemployed matters more for mid educated women (as expected) and high educated men (unexpected). 6) Additional analyses checking the importance of gender norms: see Figures 1, 2: educational differences in the individual level unemployment effect are more pronounced in the liberal egalitarian countries (score below median) than in the traditional/essentialist countries (score above median). See Figures 3, 4: for educational differences in the macro-level unemployment effect it is the other way around; they are more pronounced in traditional/essential countries.

Tables

Table 1. Logistic regression (logit coefficients) of the probability to dissolve a union (conditional on being in a union).

	(1) Women	(2) Women	(1) Men	(2) Men
Unemployment rate (centered)	0.007*	0.007*	0.007*	0.007*
Unemployment rate squared (centered)	-0.001*	-0.001*	-0.001**	-0.001**
Ft employed	ref	ref	ref	ref
Pt employed	-0.070**	0.120*	0.089*	0.278**
Unemployed	0.061**	0.006	0.489***	0.422***
Inactive	-0.181***	-0.179***	0.428***	0.404***
Partner Ft employed	ref	ref	ref	ref
Partner Pt employed	0.198***	0.501***	-0.038	0.087
Partner Unemployed	0.519***	0.499***	0.101***	0.025
Partner Inactive	0.571***	0.624***	-0.065***	-0.095**
Low education	ref	ref	ref	ref
Mid education	-0.129***	-0.115***	-0.068**	-0.093***
High education	-0.316***	-0.291***	-0.202***	-0.222***
Mid educ# ft employed		ref		ref
Mid educ# pt employed		-0.195**		-0.304**
Mid educ# unemployed		0.108*		0.073
Mid educ# inactive		-0.015		0.010
High educ# ft employed		ref		ref
High educ# pt employed		-0.339***		-0.160
High educ# unemployed		0.030		0.303***
High educ# inactive		0.049		0.124
N	808467	808467	715658	715658

* p<0.10, ** p<0.02, *** p<0.002. Controlled for age, age squared, missing education, relative education (compared to partner), health, chronic illness, being enrolled in education, duration since education, age of the youngest child, and cohabiting vs married. Model 2 also controls for interaction education*partner's employment status.

Fig.1.-2 a.b Predicted probabilities of union dissolution by education and employment status: liberal egalitarian (score below median) and traditional/essentialist countries (score above median)
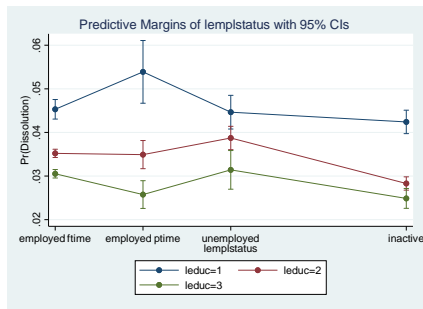

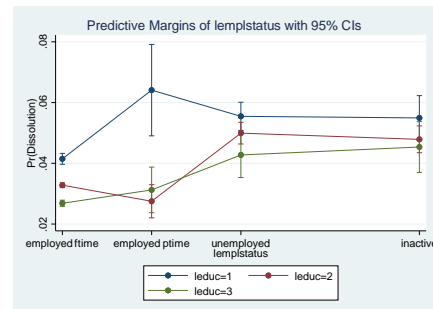Fig.1.a liberal egalitarian countries (women)
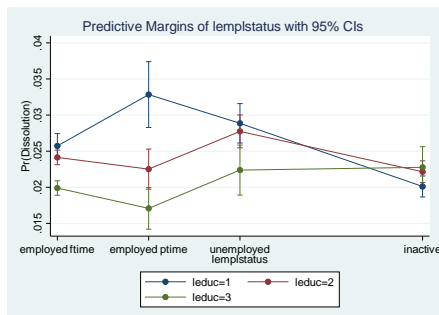

Fig.2.a liberal egalitarian countries (men)

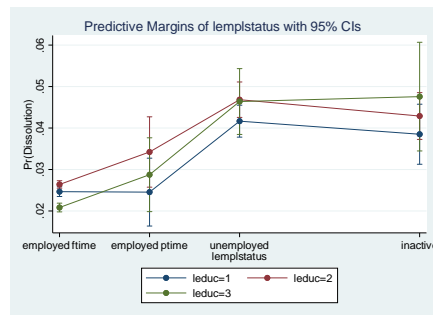

Fig.1.b traditional/essentialist countries (women)

Fig.2.b traditional/essentialist countries (men)

Fig.3.-4 a.b Predicted probabilities of union dissolution by education and lagged unemployment rate: liberal egalitarian countries and trad/ess countries
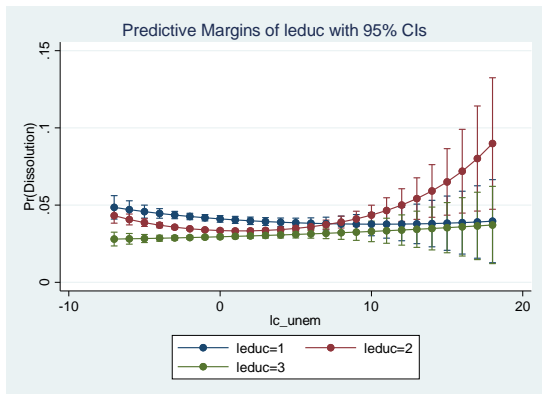

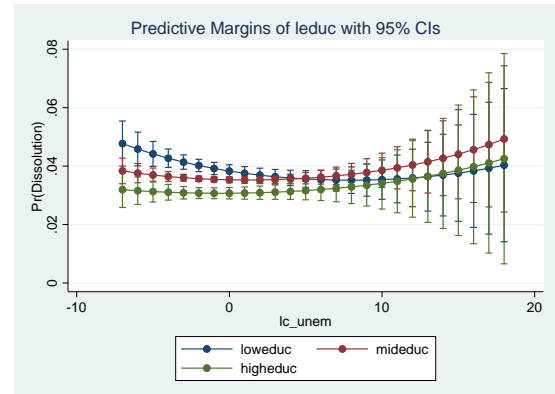Fig.3.a liberal egalitarian countries (women)
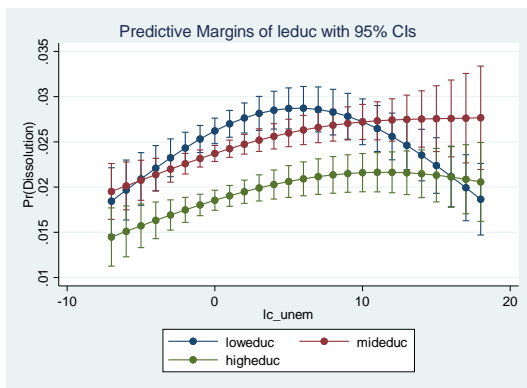

Fig.4.a liberal egalitarian countries (men)

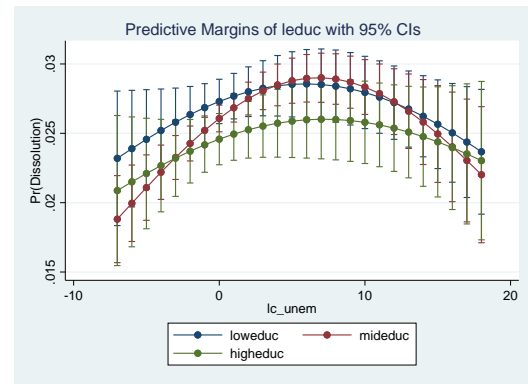Fig.3.b traditional/essentialist countries (women)

Fig.4.b traditional/essentialist countries (men)

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